

SEGA

FONZ

**OPERATION
and
SERVICE INFORMATION**

SEGA

THE QUARTERMASTER

Sega of America

2550 Santa Fe Avenue, Redondo Beach
California 90278 Tel. (213) 772-0833
TWX: 910-325-6228 Cable: Segastar

CONTENTS

1. Introduction
2. Installation Instructions
and Specification's Logic Board
3. Trouble Shooting Guide
4. Adjustments on Logic Board
5. Logic Board
6. Details of Logic Board Adjustments
7. Block Diagram

INTRODUCTION

Authentic looking racing bikes on a constantly changing race course are displayed on the CRT in an attract mode.

After insertion of a coin the previous score and the timer are reset. At this point the play mode starts and the object of the game is maintain as fast a speed as possible without skidding off the race course or hitting the other racing bikes.

Turn the handlebars and the motorcycle image corners and banks like that of a real racing bike.

Twist the hand throttle and you accelerate to the top of the screen with authentic racing sound.

Collide with another bike, or skid off the road and the handle bars vibrate, and a reverse image appears on the CRT.

Scoring is displayed on a 4 digit readout panel and is computed at 10 points per second at slow speed, 10 points per 1/2 second at full speed and a 3 second delay after a crack-up.

A score above 1000 lights the extended play lamp and the timer resets for an additional 30 seconds.

To increase the player appeal and make the Fonz more challenging, the operator has the option to reduce the difficulty of play by reducing the size of both the player and opponent's bike. The swing of the road can also be reduced both in magnitude and frequency. (See page #4 Logic Board Adjustments)

INSTALLATION INSTRUCTIONS

Before plugging machine in, check for any damage which may have occurred during shipping.

With the machine unplugged open front and back door and check for any internal shipping damage.

Check all connectors to Logic Board and T.V. Monitor that they are firmly seated.

Inspect tape deck cartridge that it is seated in place.

Plug in the machine and defeat the interlock switches by pulling out the actuator shaft. At this point a constantly changing race course with racing bikes should be displayed on the CRT. It should be a sharp picture and exhibit the proper levels of brightness and contrast.

Start the game by inserting a coin and the players bike will appear on the CRT. Twist the accelerator to move the bike up the screen, at the same time you should have motorcycle audio. Check that the timer and scoring panels are functioning properly.

FONZ SPECIFICATIONS

<u>Power Requirement</u>	— 120 volts — 60 hertz
<u>Dimensions</u>	— height — 65½” width — 27½” depth — 39”
<u>Net Weight</u>	— 300 lbs.
<u>Number of Players</u>	— 1 player at 25 cents
<u>Game Time</u>	— pre-set at 70 seconds; can be adjusted from 45 to 100 seconds
<u>Fuses</u>	— 4 amp — line fuse 1 amp — 15.5 volt 1.5 amp — 110 volts 0.5 amp — 117 volts
<u>Lamps</u>	20 watt flourescent — FS-2 starter
TV-Motorola Type XM 701-10A	

TROUBLE SHOOTING GUIDE

No Power	—	Check line cable on OFF switch door interlock switch line fuse.
Game will not start	—	Check coin acceptor and coin switch. Check harness and connection to PCB.
Game shuts off (Loss of Audio and Players Bike)	—	Check anti-slam switch located on coin door.
No Audio (Loss of Audio and Players Bike)	—	Check volume control. Check speaker and connections. Check tape deck and cartridge. Check 1.5 amp fuse.
No. T.V. Picture	—	Check for no power. Check T.V. connector and fuse. and fuse.
T.V. Raster only	—	Check the PCB connector and refer to T.V. monitor trouble shooting.
Rolling Picture	—	Adjust the vertical hold.
Wavy Picture	—	Adjust the horizontal hold.
Broken Picture into Diagonal lines	—	Adjust the horizontal hold.

T.V. MONITOR TROUBLE SHOOTING

T.V. circuit problems can be solved by using standard trouble shooting techniques.

Typical problems are raster only, distorted display or no video at all.

If you do have a raster, you must determine why there are no video signals displayed on the CRT.

Check the lamp fuse in the 5 volt supply. Check the power supply to determine if the T.V. is getting power through the Logic PCB where the signals are generated.

If you have a distorted display, check all of your T.V. monitor adjustments.

If you have no video at all and have determined the monitor is powered, you may have a defective CRT.

ADJUSTMENTS ON LOGIC BOARD

CAUTION: Adjust only the controls in **bold** type. The other controls have been factory adjusted to their optimum setting.

Opponents motorcycle size — VR-1

All motorcycles size — VR-2

(Game becomes more difficult by increasing motorcycle size.)

Road shape at the time of a crash — VR-3

Swing width — VR-4

Swing frequency of the road — VR-5

Road width — VR-6

Left road shoulder size — VR-7

Right road shoulder size — VR-8

Players motorcycle size — VR-9

Game time — VR-10 — VR-10

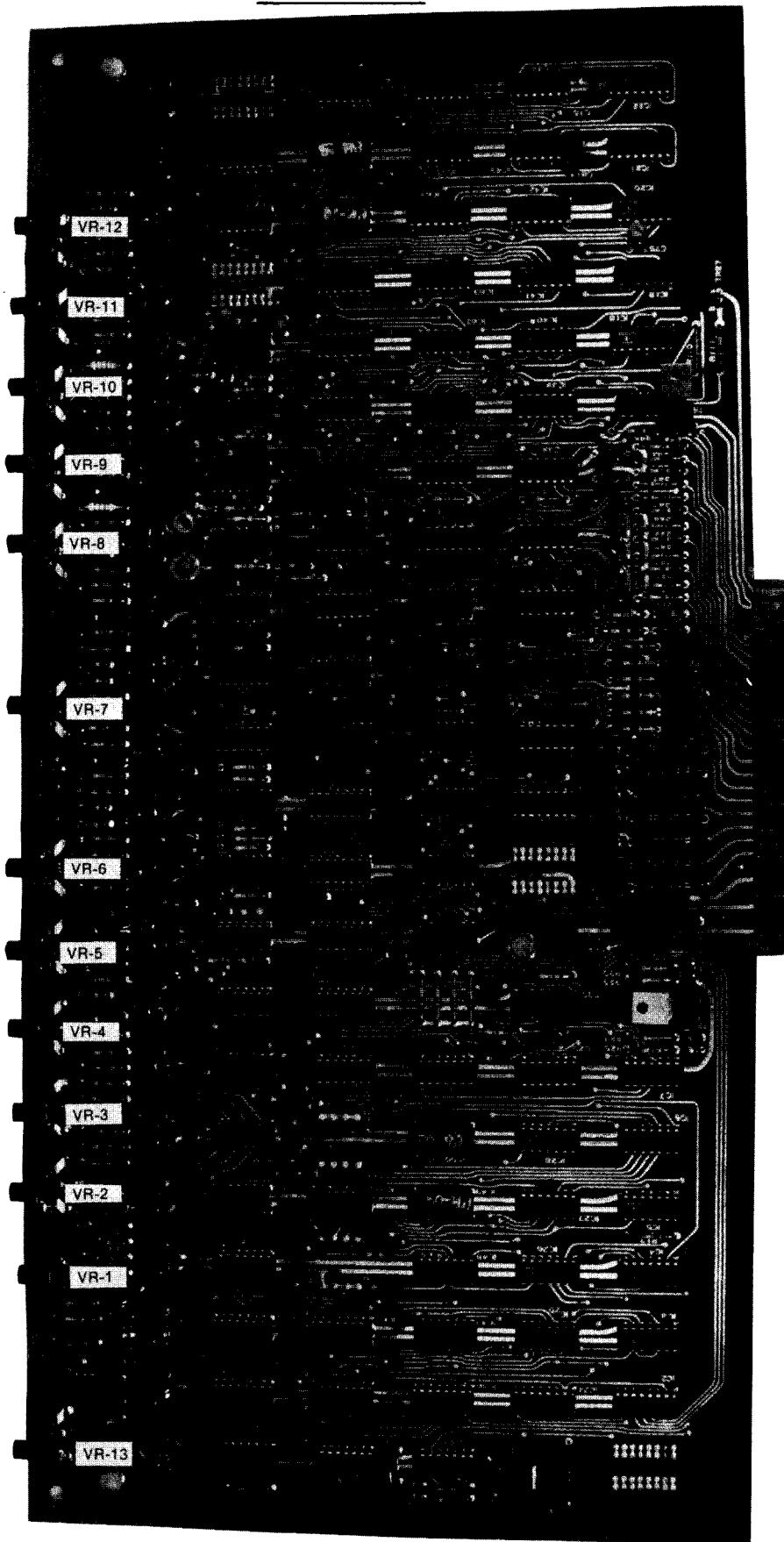
(Increase by turning counterclockwise)

Vertical adjustment of player's motorcycle:

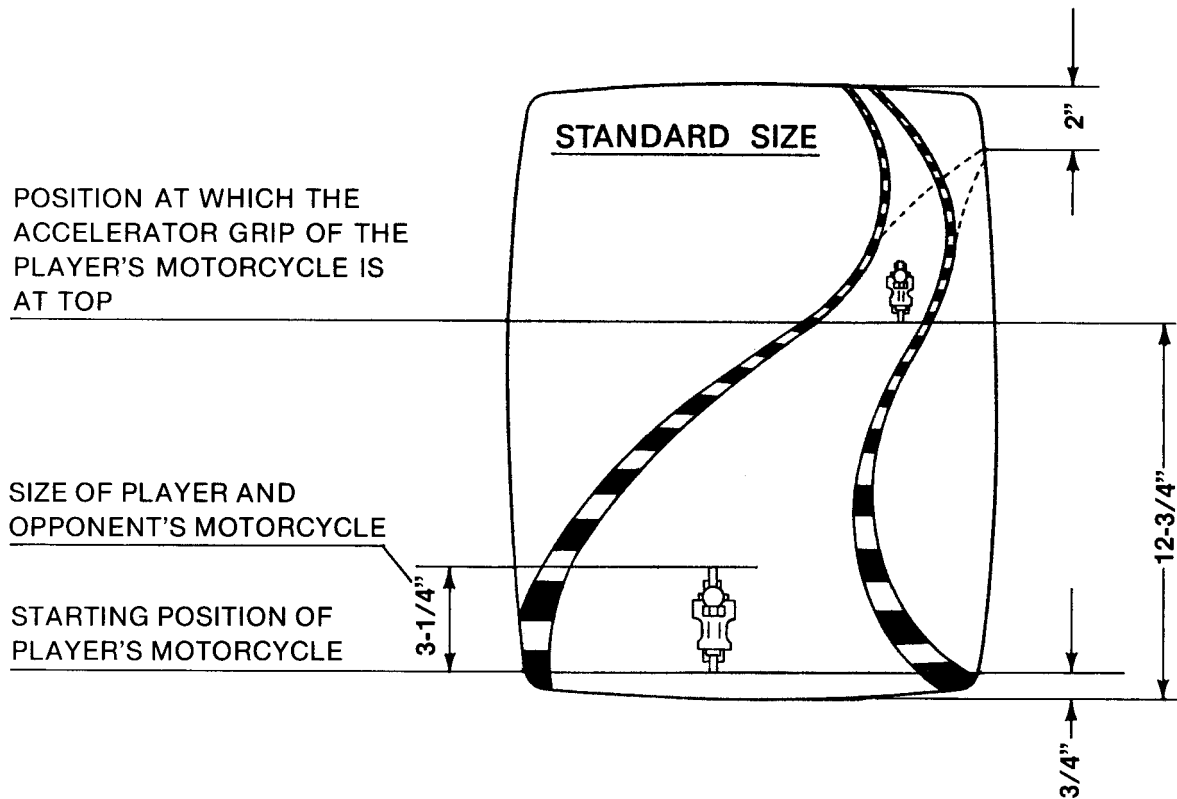
Upper limit — VR-11

Lower limit — VR-12

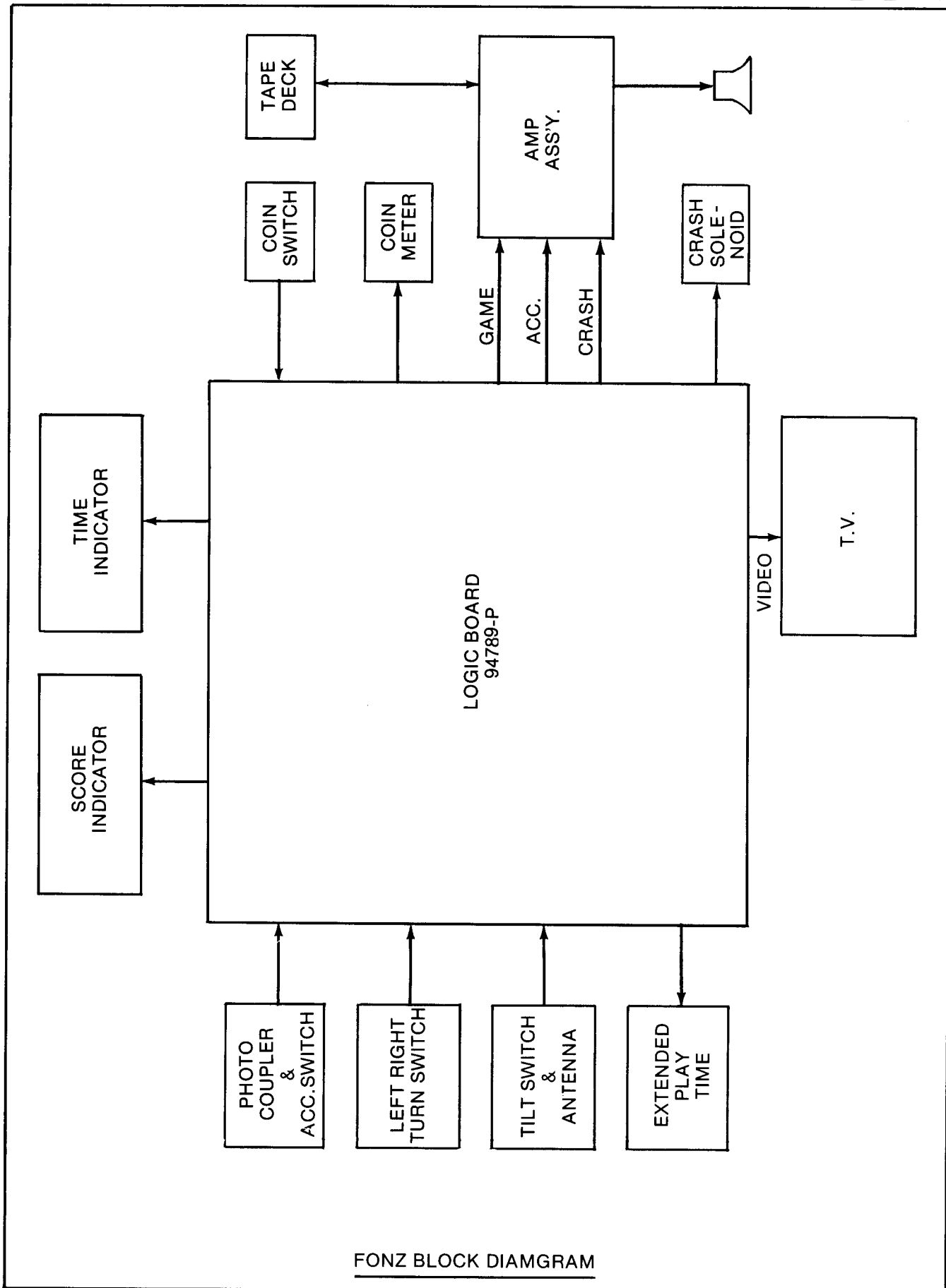
LOGIC BOARD



DETAILS OF LOGIC BOARD ADJUSTMENTS



1. Adjusting size of all motorcycles:
The standard sizes are as shown in the above diagram. If VR-2 is turned to the left, the motorcycles will become larger and the game more difficult. If turned to the right, the motorcycles will become smaller but movement will become unstable so care is required when making this adjustment.
2. Adjustment of the side-swing frequency of the road:
Turning VR-5 clockwise increases frequency and makes game more difficult.
3. Adjustment of swing width:
The standard setting is approximately midway on VR-4. Turning VR-4 Counterclockwise will increase swing width and make game more difficult.
4. When desiring to change the size of independent motorcycles adjustments may be made with VR-1 and VR-9 but refrain from making readjustments when once set as they are interrelated to a certain degree.
5. Adjustment of game time (VR-10):
Standard setting is approximately 70 seconds but adjustments are possible from 45 to 100 seconds.



FONZ BLOCK DIAGRAM

SEGA

FONZ

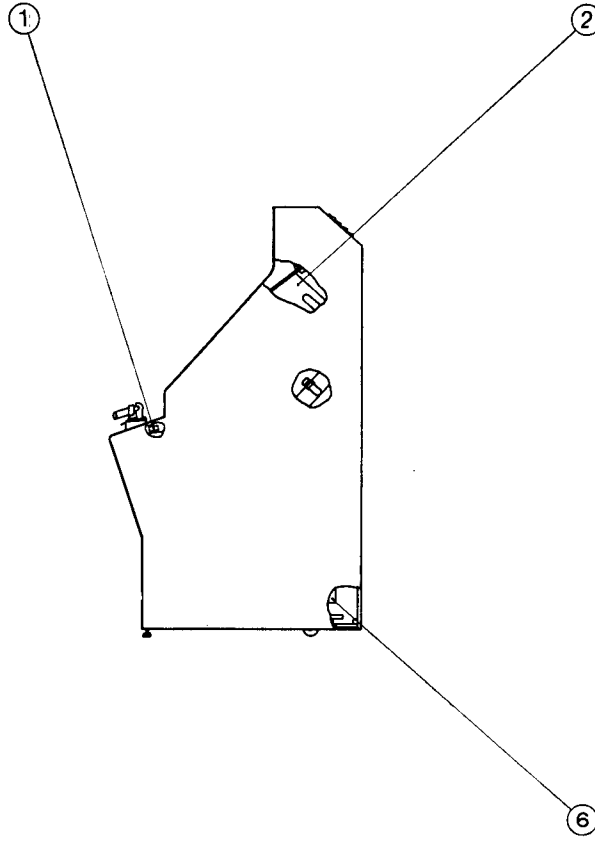
PARTS CATALOG

SEGA

THE QUARTERMASTER

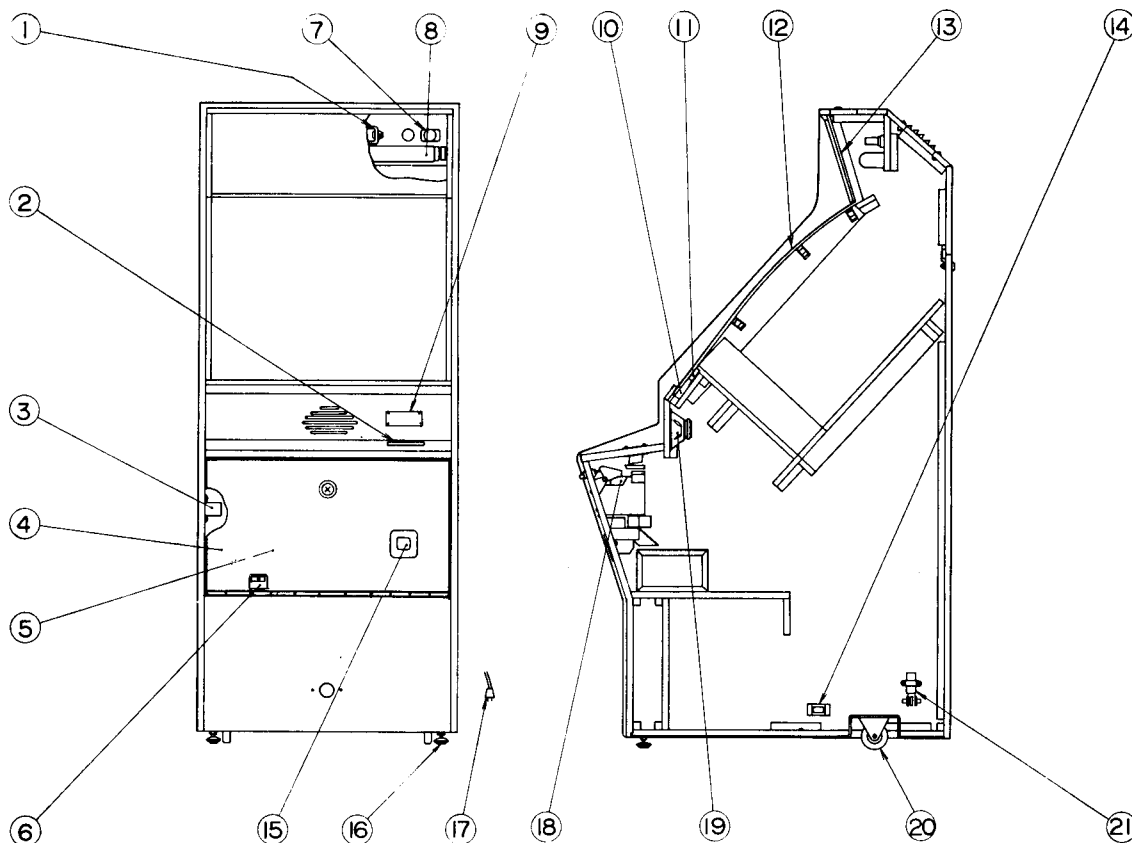
Sega of America

2550 Santa Fe Avenue, Redondo Beach
California 90278 Tel. (213) 772-0833
TWX: 910-325-6228 Cable: Segastar

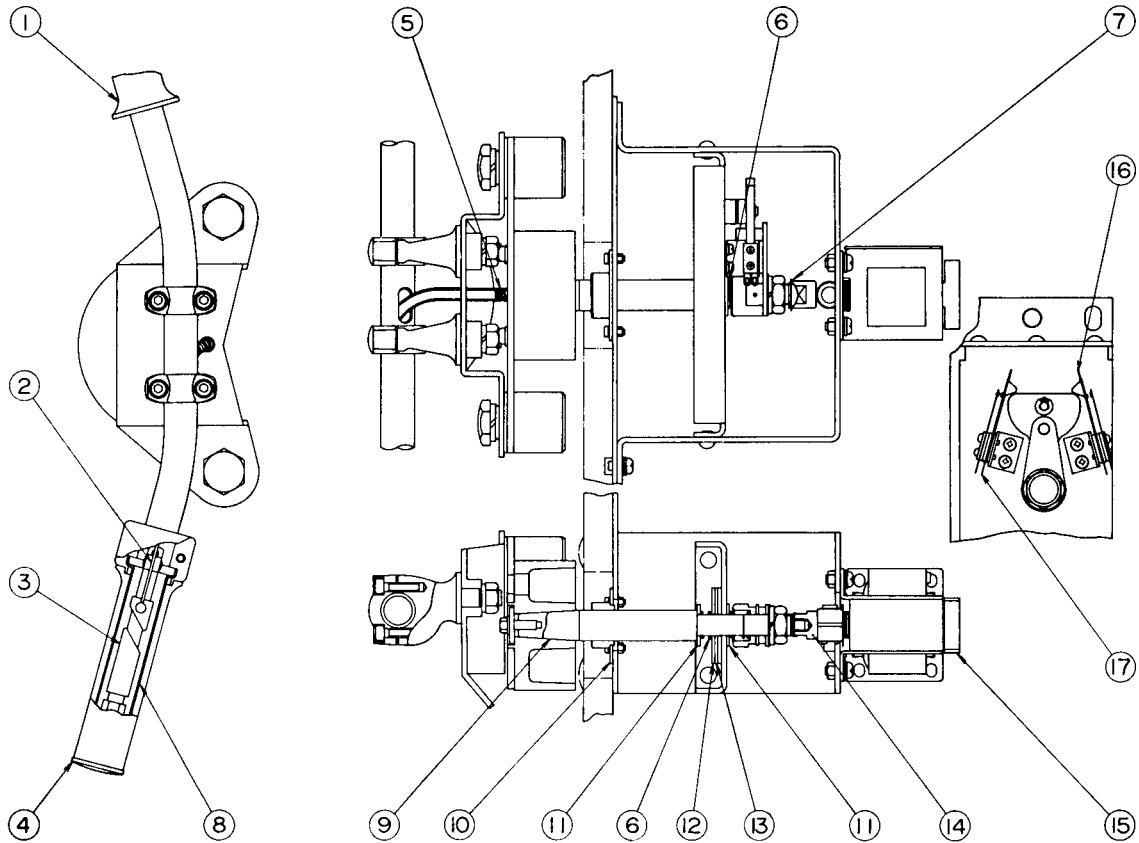


Item	Part No.	Description
------	----------	-------------

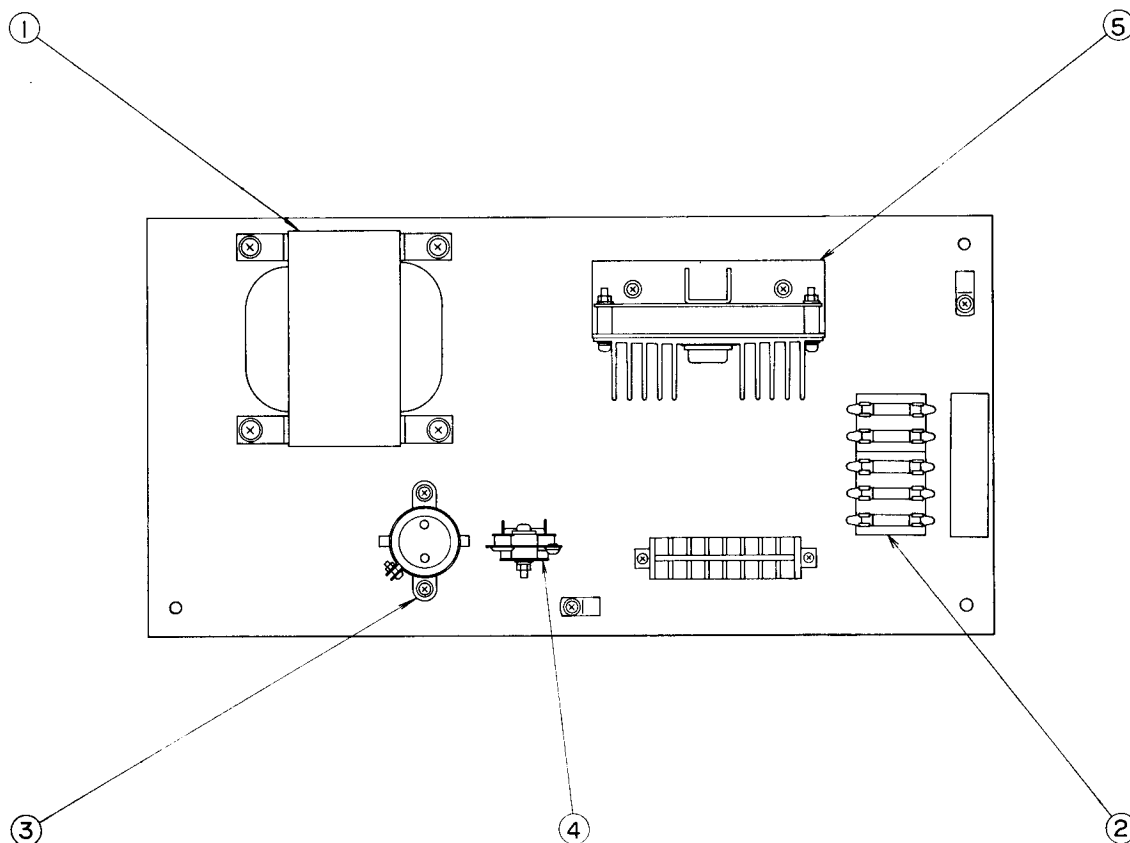
- | | | |
|---|-----------|-------------------|
| 1 | MT-0002 | Handle Stopper |
| 2 | RR-0001-P | TV & Cabinet Assy |
| 3 | 94789-P | 1C Board Assy |



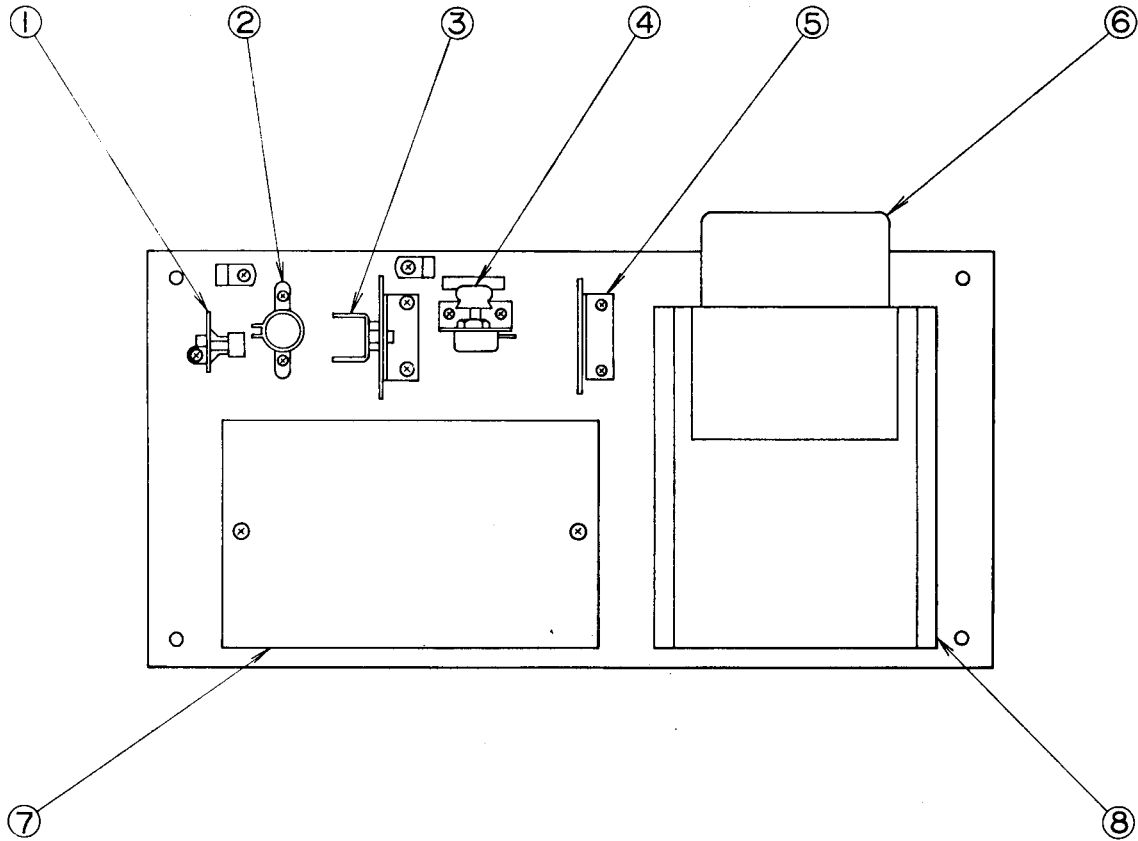
Item	Part No.	Description
1	S-91868	Ballast Coil, 100V, 20W
2	81150	Denomination Plate
	FC-1032	Coin Entry Plate
3	90303X-6-P	Total Play Meter, 6VDC
	S-91654	Rectifier, Silicon Diode
4	SG-1114	Photocoupler Unit
	MT-1037	Wire Tube Holder
	S-91834	Switch, Micro Type
	S-94362	Condenser, 4.7 μ F, 10WV
5	TT-1002	Front Door
6	S-94339	Switch, Micro Type
7	S-90244	Starter, FG-1P
8	S-90202	Fluorescent Light, 20W
9	TT-1008	Play Instruction Plate
10	S-91002	Bulb, 6-8V, #44
11	TT-1007	Score Indicator
	RR-1034	Game Timer Indicator
12	TT-1003	Window Plastic Plate
13	TT-1004	Display Plate
14	S-90834	Switch, Push Button Type
15	RR-1042	Flap Door
16	M-163-4(L)	Leg Adjuster
17	90998X	Cable & Plug Assy
18	CC-2100	Coin Chute, Rejector Type
19	S-91359X	Speaker, 187x130mm, 8 Ω
20	S-81159	Caster
21	S-94493	Noise Suppressor, AC250V, 6A



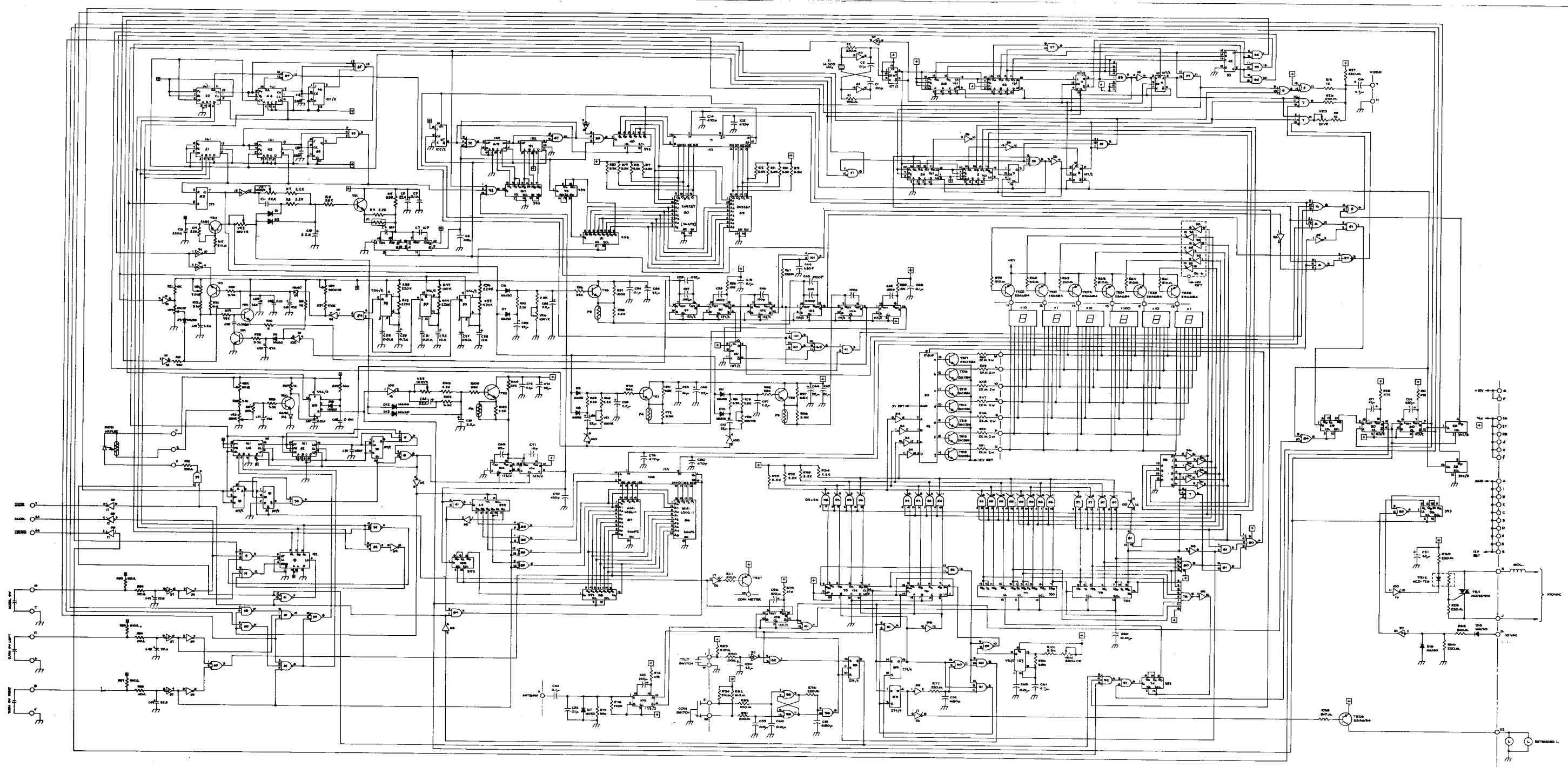
Item	Part No.	Description
1	S-81852	Left Handle Grip
2	TT-2004	Accelerator Wire Assy, Special
	S-93128	Butt Connector, 1.D.4.5
3	MT-2011	Grip Stopper
4	S-81851	Right Handle Grip
5	MT-2012	Wire Protector
6	SK-4125	Compression Spring
7	GP-2029	Stopper Washer
8	S-81857	Slot Grip Pipe
9	TT-2001	Handle Shaft
10	MT-2005X	Handle Plate, w/Bushing
11	GP-2010	Nylon Washer, 14.1-28X2
12	TT-2002	Clutch Retainer Disc
13	TT-2003	Leather Clutch Disc
14	GP-2024	Cap Nut
15	94803	Solenoid, AC 100V, 5Kg
16	93370	Switch & Bracket Assy, 1M.1C.
17	93369	Switch & Bracket Assy, 1M.1C.



Item	Part No.	Description
1	94804	Power Transformer, 90-120V, 6V, 9.5V, 117V
2	S-91498	Fuse, 0.5A
	S-90645	Fuse, 1A
	S-91663	Fuse, 1.5A
	S-91941	Fuse, 4A
3	S-93629	Condenser, 10000 μ F, 16WV
4	S-94128	Rectifier, Silicon Diode
5	S-94268	Transistor, 2SA627
	RR-4003	Regulator Unit



Item	Part No.	Description
1	S-94438	Rectifier, Silicon Diode
2	S-94316	Condenser, 2200 μ F, 35WV
3	BC-4603	Power Amplifier, 5W
4	S-93157	Volume Control, B-25K Ω
5	TT-4602	Pre Amplifier
6	S-94802	Cartridge Recording Tape
7	94777-P	Control Amplifier
8	S-93806	Tape Deck, 8 Track, AC117V



FONZ SCHEMATIC



TV'S HOTTEST NAME. YOUR HOTTEST GAME.

TV has made FONZ one of the best known names in America today. Now SEGA has made it possible for those 42 million FONZ fans to spend a quarter and literally *become* their motorcycle hero in an action-packed race.

Ride with FONZ and you'll know why this game will be your hottest attraction. Because the player experiences all of the sensations and risks of riding a *real* bike in *real* competition. Even the sounds are authentic.

The object is to maintain as high a speed as possible without hitting the other racing bikes on the screen

or skidding off the edge of the road. Turn the handlebars, and you corner and bank with startling realism. Twist the hand throttle open, and you accelerate along with the rising scream of your high compression engine. Collide with another bike—the handlebars vibrate and the TV screen flashes a reverse image.

Scoring with FONZ is beautifully simple: 10 points per second at the slowest speed; 10 points every half-second at top speed. A crack-up costs 3 seconds of no-score. If the total score goes above 1000 kilometers, the extended

play lamp goes on—and so does the player.

To increase the challenge, the size of the bikes can be regulated by the operator. Game time is adjustable from 45 to 100 seconds.

What about reliability? You'll rarely have to futz with FONZ. It's made in America by SEGA, the people who design games that can take it as well as dish it out.

Ask your SEGA Distributor about FONZ. You'll love the answers.

Or contact us direct: SEGA OF AMERICA, 2550 Santa Fe Avenue, Redondo Beach, CA 90278, (213) 772-0833.

"FONZ" by SEGA



SEGA

The Quartermasters

More facts about the "FONZ".



- **Realistic imagery.** Both road and bikes are seen in true perspective so that objects nearest the bottom of the screen (closest to player) are larger than those on the horizon or top of screen.
- **Handlebars function** identically to those of a real motorcycle.
- **Full range speaker produces** all racing sounds with realistic impact.
- **Play time is adjustable** from 45 to 100 seconds.
- **SEGA-built solid state electronics** assure maximum reliability and ease of servicing.
- **Ruggedly constructed cabinet** is styled for customer appeal and high trade-in.

Dimensions:

65½" high
27½" wide
39" deep
300 lbs.

Call your SEGA Distributor about FONZ now.
Every day you delay is costing you money.

SEGA OF AMERICA 2550 Santa Fe Avenue, Redondo Beach, CA 90278

SEGA®
The Quartermasters