



INSTRUCTION MANUAL

TABLE OF CONTENTS

	Page		Page
Conversion Kit Contents	Inside Cover	56 Pin Wiring Harness Color Code	6
Introduction	1	36 Pin Wiring Harness Color Code	7
Graphics	2	Wiring Diagram	8
Monitor Specifications	3	Dip Switch Setting	9
Monitor Information	4	User Information Warning	Back Cover
Stereo/Mono Sound Installation	5		

CONVERSION KIT CONTENTS:

- MAIN PRINTED CIRCUIT BOARD
- P.C.B. CAGE (FCC REQUIRED)
- CONNECTING WIRING HARNESS
- 6 SETS — BUTTON ASSEMBLIES
- TWO 8-WAY JOYSTICKS
- MARQUEE (HEADER)
(1/8" acrylic sheet)
- ONE SET SIDE PANEL GRAPHICS (left & right)
- CONTROL PANEL OVERLAY
- CONTROL PANEL DECALS
instruction decals/button decals (2 sets)
- MANUAL
- REGISTRATION CARD

REPLACEMENT ACCESSORIES ARE AVAILABLE THROUGH YOUR DISTRIBUTOR.

THIS KIT USABLE IN AN UPRIGHT WITH A VERTICAL MONITOR.

*THIS KIT NOT INTENDED FOR COCKTAIL MODEL CABINETS.

TOP GUNNER: INTRODUCTION

KONAMI CONVERSION KITS are the most complete conversion kits available today. Every detail has been carefully considered, designed and packaged to provide you the means of easily producing a professional conversion.

These kits have all the accessories to easily convert your UPRIGHT video game.

We strongly urge you to FULLY STUDY this instruction manual BEFORE you begin your conversion. It contains step-by-step instructions, schematic diagrams and suggestions on how to install your Konami Conversion Kit and maximize your profits.

TOP GUNNER can be installed in any vertically mounted raster scan monitor game.

Everything you will need to construct your new game is provided in this kit. All accessory parts—wiring harness, joystick, etc. are custom made for TOP GUNNER by top engineers experienced in the coin-op industry. An 8-way joystick with rotary switch (as provided) MUST be used.

The Player Instruction and Button Control decals are made of a non-destructible acrylic material specifically to keep the player from peeling them off. Should you convert a cocktail table game, TOP GUNNER is supplied with 2 sets of button decals.

★ ★ ★ IMPORTANT NOTICE ★ ★ ★

The Japanese Amusement Machine Manufacturers Association (JAMMA) has introduced a new standard in video game P.C.B.'s. It was decided that all new products from any JAMMA member will use the same pin print-out on the edge connector. The edge connector will have 56 pin outs, 28 per side.

Konami Inc. will offer a 56 to 36 pin adaptor P.C.B. available through your distributor. This new adaptor P.C.B. will enable the new 56 pin out to adapt to Konami's old standard 36 pin out.

★ ★ ★ STEREO SOUND ★ ★ ★

TOP GUNNER offers stereo sound in this kit.
Please see page 5 for proper installation.

PUTTING YOUR BEST GAME FORWARD

PREPARATION:

For best results, all old graphics should be removed completely from the cabinet. "Stick-on" graphics can be removed by using a hairdryer or hot air device. The heat from the dryer will loosen the adhesive, allowing you to easily peel them off — any adhesive residue can be cleaned off with acetone and a soft dry cloth. (DO NOT USE ACETONE ON SURFACES PAINTED WITH FLAT PAINT.)

TOOLS YOU NEED:

1. Foaming Aerosol (such as "Windex").
2. Soft Squeegee.
3. X-Acto Knife.

SIDE PANEL DECALS

1. Spray area of cabinet where Side Panel decals are to be applied with foaming aerosol or a mild soap solution.
2. Remove protective backing from decals.
3. Position decals into place.
4. With a soft squeegee, beginning from the center of the decal, slowly and evenly press out excess foam until you achieve a smooth finish.
5. Allow to set approximately 2 to 3 hours before handling. Maximum adherence is achieved in 48 to 72 hours.

6. Trim side decal to fit your cabinet.

CONTROL PANEL OVERLAY:

1. Refer to Recommended Control Panel Layout on page 1.
2. Drill any new holes needed.
3. Plug any holes that will not be used. (A permanent epoxy filler works well for this step.)
4. Pre-position the overlay prior to removing the backing.
5. Slowly apply the overlay — inch by inch on the control panel, removing the backing as you apply it.
6. Once it's in place, by using an X-Acto knife, cut around the button and joystick placements.

INSTRUCTION/BUTTON DECALS:

Apply the Player Instruction, Button and 1 Player/2 Player decals in their respective positions. Apply pressure liberally. Allow to set as long as possible before putting game on location.

NOTE: Maximum adherence is achieved in 48 to 72 hours.

FCC WARNING LABEL:

FCC Warning Label must be applied to the outside of the cabinet near the line cord entry.

MARQUEE

(WEAR PROTECTIVE GLASSES WHILE TRIMMING MARQUEE)

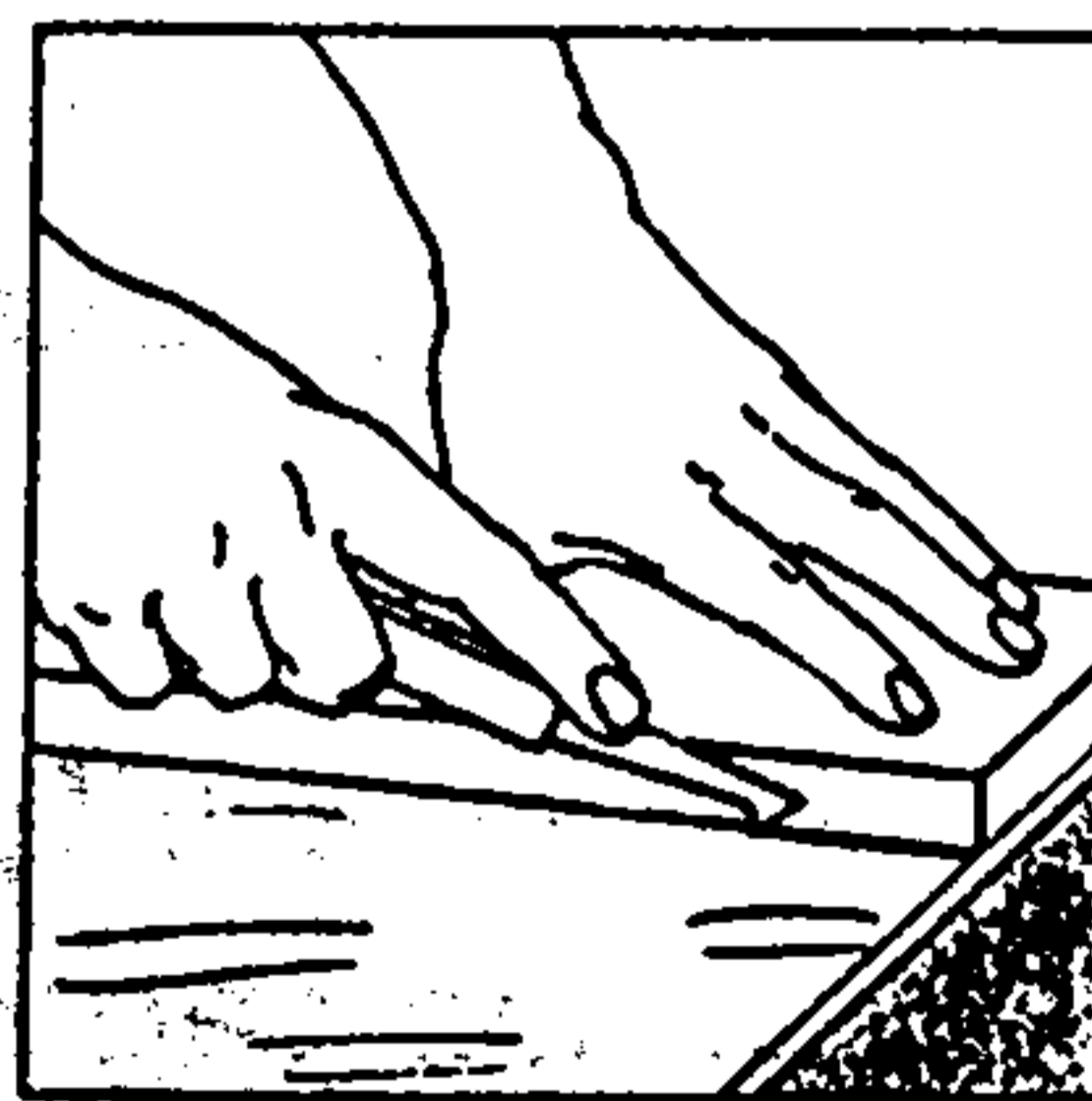
1/8" Acrylic Marquee should be cut to fit your game. DO NOT remove protective mask until this is done.

One way of cutting your Marquee is as follows: (Be sure to protect painted side of Marquee from any surface which may scratch or mar finish).

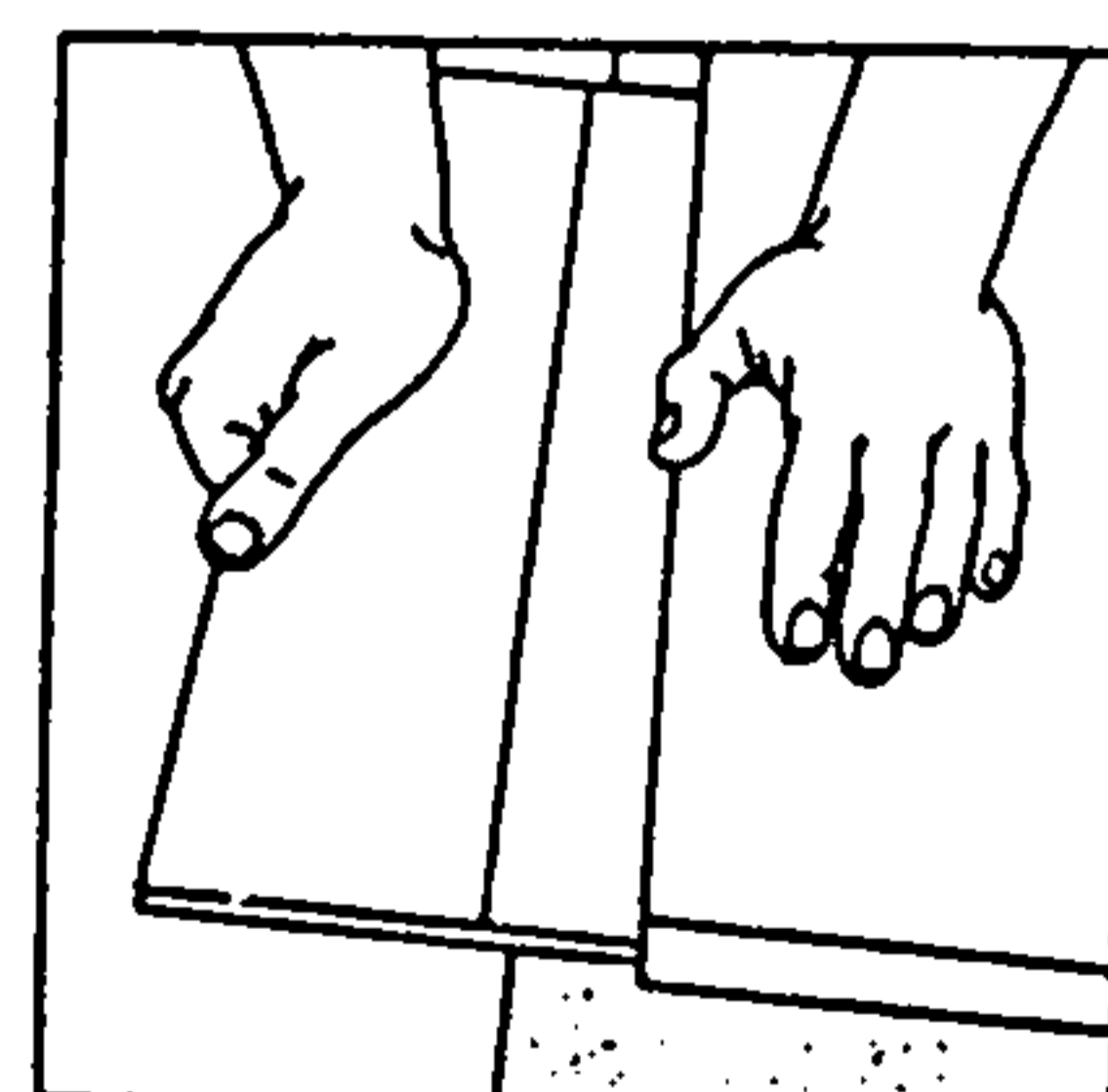
CUTTING WITH A KNIFE OR SCRIBER

Acrylic sheet up to 3/16" thick may be cut by a method similar to that used for cutting window glass. Use a scribe of some kind — a scribing knife such as the one pictured, a metal scribe, an awl, or even a sturdy craft knife — to score the sheet. Draw the scribe several times (7 or 8 times for a 3/16" thick piece) along a straight edge held firmly in place. It is best not to remove the protective masking. Make the cuts carefully using firm, even pressure. For best results make each stroke cleanly off the edge of the sheet.

Then clamp the acrylic sheet or hold it rigidly under a straight edge with the scribe mark hanging just over the edge of a table. Protect your hands with a cloth, and apply a sharp downward pressure to the other side of the sheet. It will break along the scratch. Scrape the edges to smooth any sharp corners. This method is not recommended for long breaks or thick material.



Always draw the scribing knife along a straight edge.



Break sheet over edge of table after scribing.

P.C.B. CAGE INSTALLATION

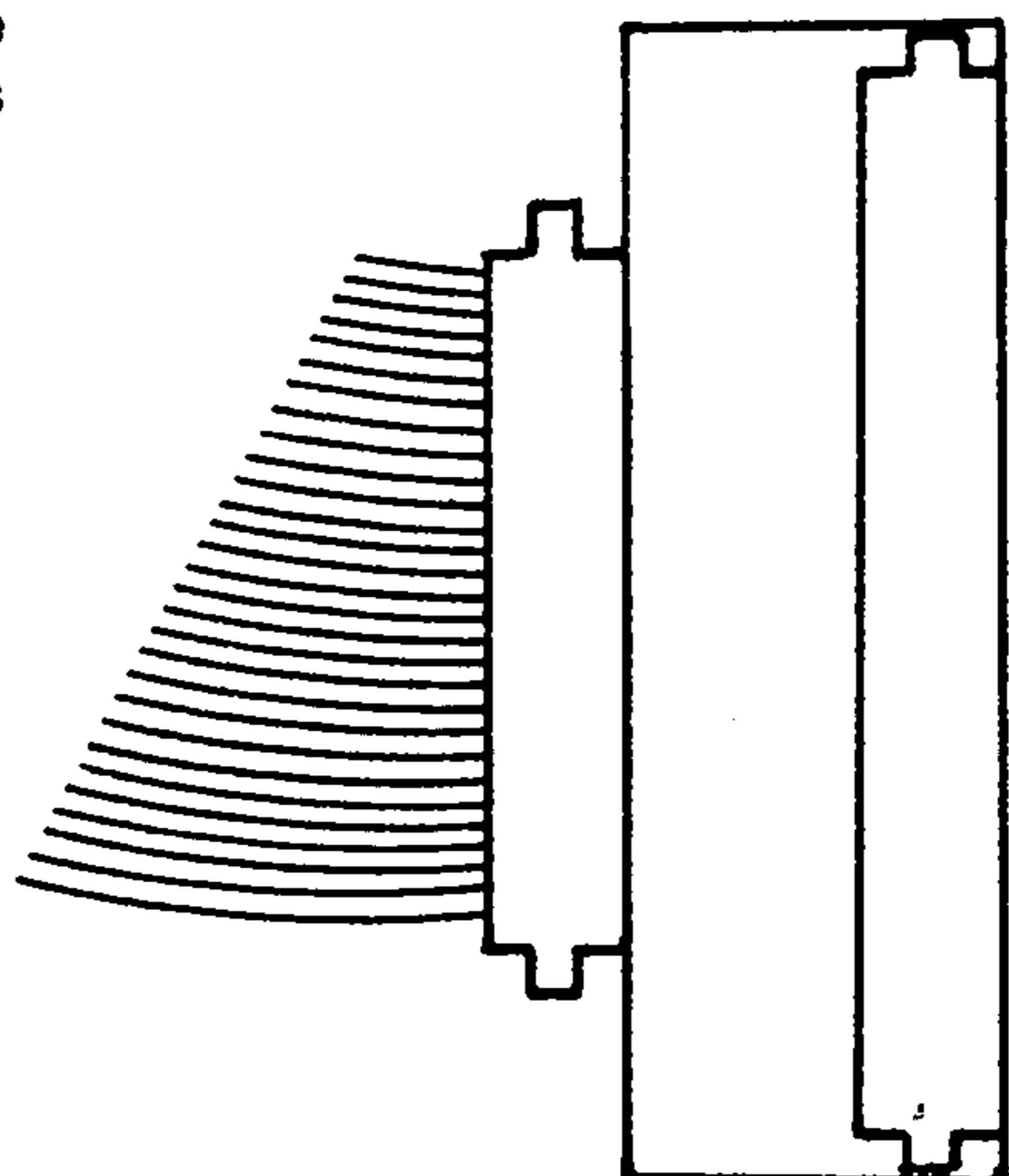
Konami, Inc. now supplies a new style P.C.B. cage which is superior to old style cages because of ease of installation. The cage is made of a 32 point stem-stock which is fire retardant.

TO INSTALL THE CAGE:

1. Open cage bottom and secure to desired P.C.B. position.
2. Install printed circuit board inside cage using wood screws, screwed through the cage bottom into cabinet side.
3. Close the cage over printed circuit board and secure with latch on cage.

TOP GUNNER: 36 PIN WIRING HARNESS

36 Pin Wire
Harness



36 to 56 Pin
Adaptor Card

Supplied in TOP GUNNER you will find a 36 to 56 pin card connector. This connector enables the operator to convert his Konami wired video cabinet from the old 36 pin harness to the new JAMMA standard 56 pin connector without major rewiring.

If this kit is to be installed in a non-Konami wired cabinet a wiring harness is supplied.

Solder Side ←

→ Parts Side

WIRE COLOR KEY:

WHITE/GREEN	(NOT USED)	A	1	+ 12V DC	ORANGE
RED/GREEN	*(Mono Speaker Output)	B	2	*(Mono Speaker Output)	ORANGE/GREEN
YELLOW/RED	2P GUN	C	3	2P MISSILE	ORANGE/YELLOW
BROWN/YELLOW	2P LEFT	D	4	2P RIGHT	BLUE/YELLOW
VIOLET/WHITE	1P START	E	5	2P START	VIOLET/YELLOW
ORANGE/WHITE	1P MISSILE	F	6	2P UP	BLACK/YELLOW
RED/WHITE	1P GUN	H	7	(NOT USED)	ORANGE/GRAY
BLUE/WHITE	1P RIGHT	J	8	1P LEFT	BROWN/WHITE
BLACK/WHITE	1P UP	K	9	2P DOWN	GRAY/YELLOW
RED/GRAY	COIN 1	L	10	COIN 2	BLUE/GRAY
GRAY/WHITE	1P DOWN	M	11	COIN COUNTER 1	GREEN/GRAY
PINK/WHITE	(NOT USED)	N	12	COIN COUNTER 2	YELLOW/GRAY
GREEN/BROWN	VIDEO GREEN	P	13	VIDEO BLUE	BLUE/BROWN
RED/BROWN	VIDEO RED	R	14	VIDEO SYNC	WHITE/BROWN
WHITE/BLACK	(NOT USED)	S	15		PINK/YELLOW
BLACK	GROUND	T	16	GROUND	BLACK
BLACK	GROUND	U	17	GROUND	BLACK
RED	+ 5V DC	V	18	+ 5V DC	RED

(BASE COLOR/LINE COLOR)

*SEE PG. 5 FOR SPEAKER WIRING

TOP GUNNER: 56 PIN WIRING HARNESS

WIRE COLOR KEY:

Solder Side ←

→ Parts Side

Solder Side					Parts Side	
BLACK	GND	A	1	GND		BLACK
BLACK	GND	B	2	GND		BLACK
RED	+ 5V DC	C	3	+ 5V DC		RED
RED	+ 5V DC	D	4	+ 5V DC		RED
	(NOT USED)	E	5	(NOT USED)		
ORANGE	+ 12V DC	F	6	+ 12V DC		ORANGE
	KEY	H	7	KEY		
WHITE/RED	COIN COUNTER 2	J	8	COIN COUNTER 1		WHITE/BLACK
	(EMPTY)	K	9	(EMPTY)		
WHITE/GREEN	(Mono Speaker Output)	L	10	(Mono Speaker Output)		WHITE/BLUE
	(EMPTY)	M	11	(EMPTY)		
GREEN/WHITE	VIDEO GREEN	N	12	VIDEO RED		RED/WHITE
WHITE	VIDEO SYNC	P	13	VIDEO BLUE		BLUE/WHITE
YELLOW/BLACK	SERVICE SW	R	14	VIDEO GROUND		BLACK
	(EMPTY)	S	15	(EMPTY)		
YELLOW/RED	COIN 2	T	16	COIN 1		YELLOW/BLUE
WHITE/VIOLET	2P START	U	17	1P START <i>yellow white</i>		ORANGE/BLACK
WHITE/BROWN	2P UP	V	18	1P UP		WHITE/GRAY
ORANGE/WHITE	2P DOWN	W	19	1P DOWN		YELLOW/GRAY
ORANGE/RED <i>white</i>	2P LEFT	X	20	1P LEFT		YELLOW/GREEN
ORANGE/GRAY <i>white black</i>	2P RIGHT	Y	21	1P RIGHT		ORANGE/BLUE
GRAY/RED <i>white blk</i>	2P SHOOT	Z	22	1P SHOOT		GRAY/BLACK <i>white</i>
GRAY/GREEN <i>white</i>	2P SHOOT 2	a	23	1P SHOOT 2		GRAY/BLUE <i>white</i>
	NOT USED	b	24	NOT USED		
	NOT USED	c	25	NOT USED		
	NOT USED	d	26	NOT USED		
BLACK	GND	e	27	GND		BLACK
BLACK	GND	f	28	GND		BLACK

(BASE COLOR/LINE COLOR)

DIP SWITCH SETTINGS

DIP SW No. 1 Settings

Coin 1 Switch Set

SW	4	3	2	1	COIN	PLAY
•	OFF	OFF	OFF	OFF	1	1
			OFF	ON	1	2
			ON	OFF	1	3
			ON	ON	1	4
	OFF	ON	OFF	OFF	1	5
			OFF	ON	1	6
			ON	OFF	1	7
			ON	ON	2	1
	ON	OFF	OFF	OFF	2	3
			OFF	ON	2	5
			ON	OFF	3	1
			ON	ON	3	2
	ON	ON	OFF	OFF	3	4
			OFF	ON	4	1
			ON	OFF	4	3
			ON	ON	FREE PLAY	

Coin 2 Switch Set

SW	8	7	6	5	COIN	PLAY
•	OFF	OFF	OFF	OFF	1	1
			OFF	ON	1	2
			ON	OFF	1	3
			ON	ON	1	4
	OFF	ON	OFF	OFF	1	5
			OFF	ON	1	6
			ON	OFF	1	7
			ON	ON	2	1
	ON	OFF	OFF	OFF	2	3
			OFF	ON	2	5
			ON	OFF	3	1
			ON	ON	3	2
	ON	ON	OFF	OFF	3	4
			OFF	ON	4	1
			ON	OFF	4	3
			ON	ON	INVALIDITY	

DIP SWITCH NO. 2 SETTINGS

THE NUMBER OF PLAYER'S LIFE

SW	1	2	NUMBER
•	OFF	OFF	2
	ON	OFF	3
	OFF	ON	4
	ON	ON	7

SOUND IN ATTRACT MODE

SW	8	SOUND
•	OFF	OFF
	ON	ON

*SW 3 NOT USED

NOT USED

SW	3
	OFF
	ON

BONUS SET

SW	4	5	FIRST	SECOND
•	OFF	OFF	30,000	150,000
	ON	OFF	50,000	250,000
	OFF	ON	30,000	N/A
	ON	ON	50,000	N/A

DIP SWITCH NO. 3 SETTINGS

VIDEO SCREEN FLIP

SW	1	
•	OFF	NORMAL
	ON	UPSIDE DOWN

*SW 2, SW 3, & SW 4: NOT USED

DIFFICULTY OF THE GAME

SW	6	7	DIFFICULTY
•	OFF	OFF	EASY
	ON	OFF	NORMAL
	OFF	ON	DIFFICULT
	ON	ON	VERY DIFFICULT

• SHOWS NORMAL SETTING

TOP GUNNER: MONITOR INFORMATION

SERVICE INSTRUCTIONS

NOTE: All monitors are equipped with automatic degaussing coils (L701) which demagnetize the picture tube every time the monitor is turned on after being off for a minimum of 5 minutes. Should any part of the chassis become magnetized it will be necessary to degauss the affected area with a manual degaussing coil. Move the coil slowly around the CRT face and all surrounding metal parts. Then slowly withdraw for a distance of 6 feet before turning off.

1.0 BLACK LEVEL CONTROL ADJUSTMENT

This control has been set at the factory and should not need further attention, however, when the game is connected a slight adjustment of VR201 may be necessary to obtain the proper black level (the black portion of the picture just extinguished).

2.0 VERTICAL SIZE (HEIGHT)

Location of this control is shown in Fig. 1. This control must be adjusted slowly, if necessary, until the picture or test pattern attains the correct vertical proportions.

3.0 CIRCUIT PROTECTION

A 4.0A pigtail fuse, mounted on the Main Board has been provided to protect the Power Output Circuit.

4.0 FOCUS

Adjust the focus control, located on the HV unit (T352), for maximum over-all definition and fine picture detail.

5.0 HORIZONTAL HOLD CONTROL ADJUSTMENT, VR351 (See Fig. 1)

A warm-up period of at least five minutes should be allowed before alignment is carried out. With the monitor being driven from the game signal, short TP601 to TP31. Adjust VR351 until the picture stops sliding horizontally. Remove the short.

6.0 HORIZONTAL VIDEO POSITION

If the video is off center on the raster some compensation can be made by adjusting this control.

7.0 VERTICAL RASTER POSITION ADJUSTMENT

If the video is off center vertically, (short dimension of picture tube) some compensation can be made by moving the vertical raster position adjustment jumper to either positions "U" or "D".

8.0 HORIZONTAL RASTER POSITION ADJUSTMENT

If the video is off center horizontally (long dimension of the picture tube) some compensation can be made by moving the horizontal raster position adjustment jumper to either positions "R" or "L".

9.0 HORIZONTAL WIDTH ADJUSTMENT

The horizontal width coil is a hexagonal tuning tool adjustment. This control must be adjusted slowly, if necessary, until the picture or test pattern attains the correct horizontal proportions.

* KONAMI GAMES ARE ALL NEGATIVE COMPOSITE SYNC. USE THE THREE PIN CONNECTOR ON THE MONITOR.

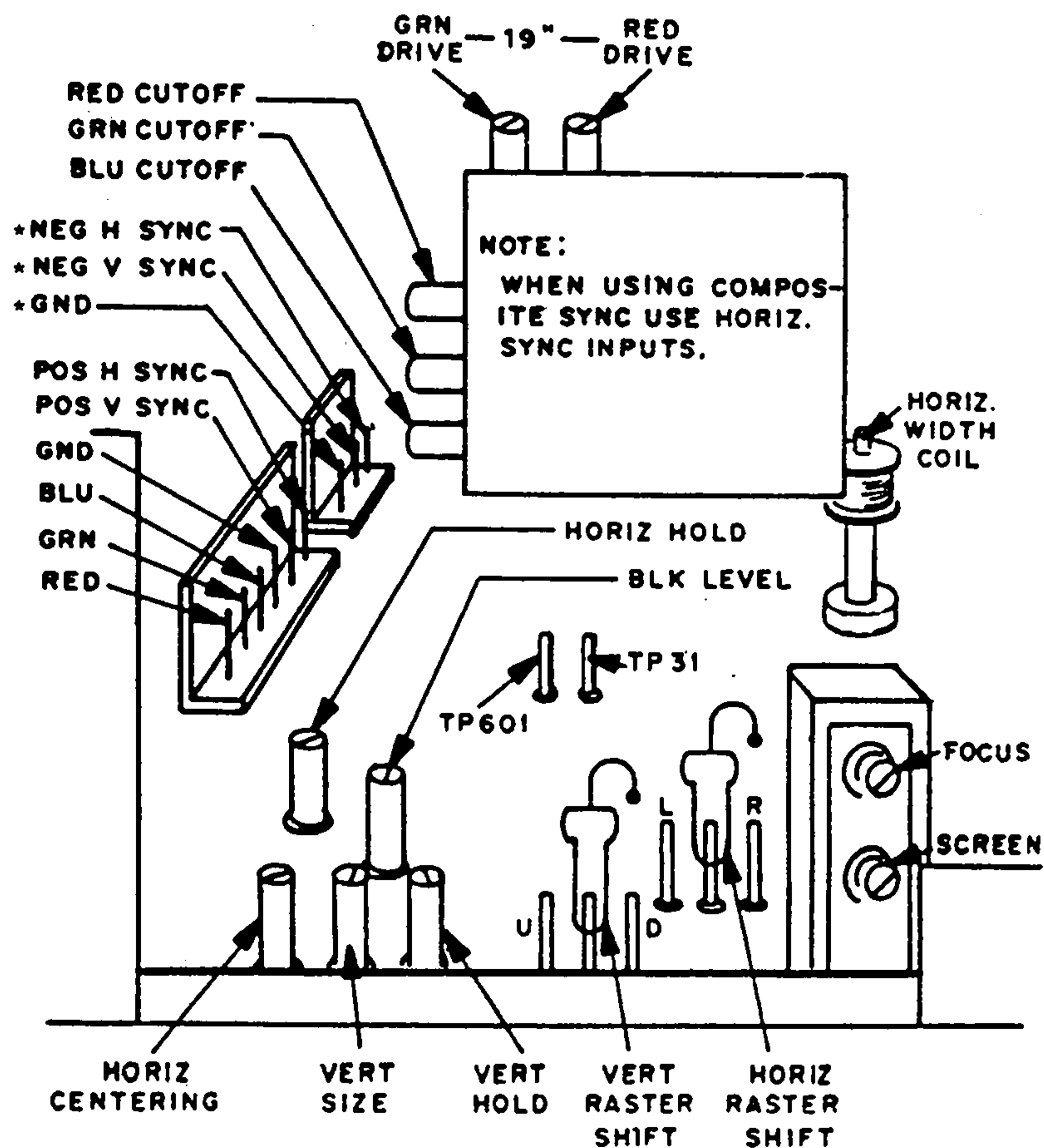


FIGURE 1

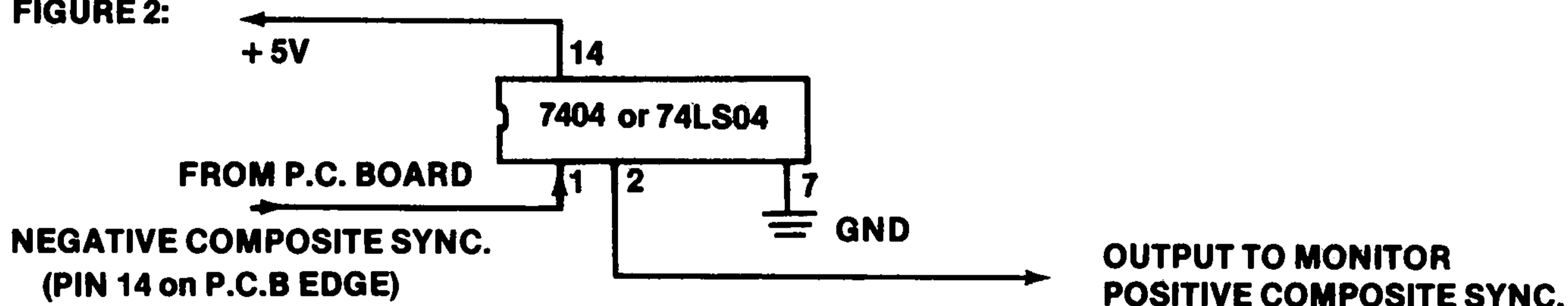
TOP GUNNER: MONITOR SPECIFICATIONS

TOP GUNNER requires a vertically mounted monitor. It also generates composite negative sync. If your monitor is composite positive sync, you will have to change to composite negative sync.

- (1) To alternate composite positive sync to composite negative sync, use 7404 IC or 74LS04 IC. The signal on the output pin from the P.C.B. is a combination of H-sync and V-sync.

NOTE: Please refer to Figure 2.

FIGURE 2:

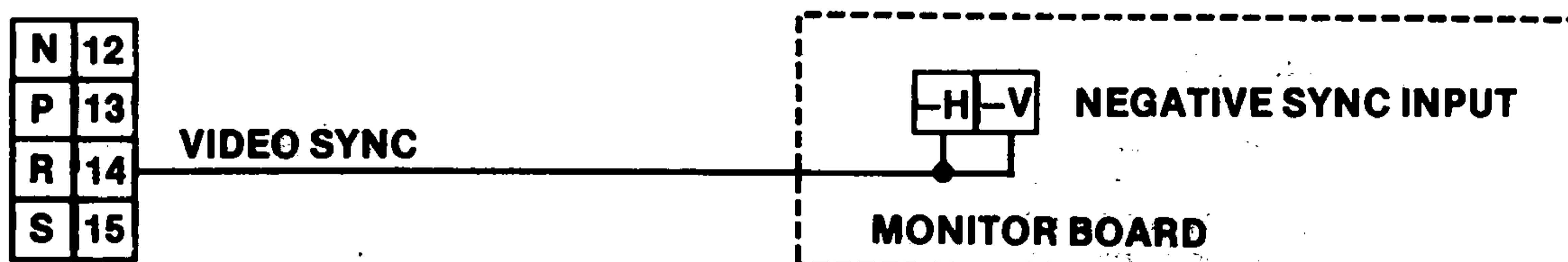


(+ 5V and GND should be taken out of the P.C. Board.)

- (2) Separate Sync modification for TOP GUNNER if your monitor has "Separate Sync" input. (For example "Electrohome brand" and "Wells-Gardner brand.")

Step 1

WIRING HARNESS

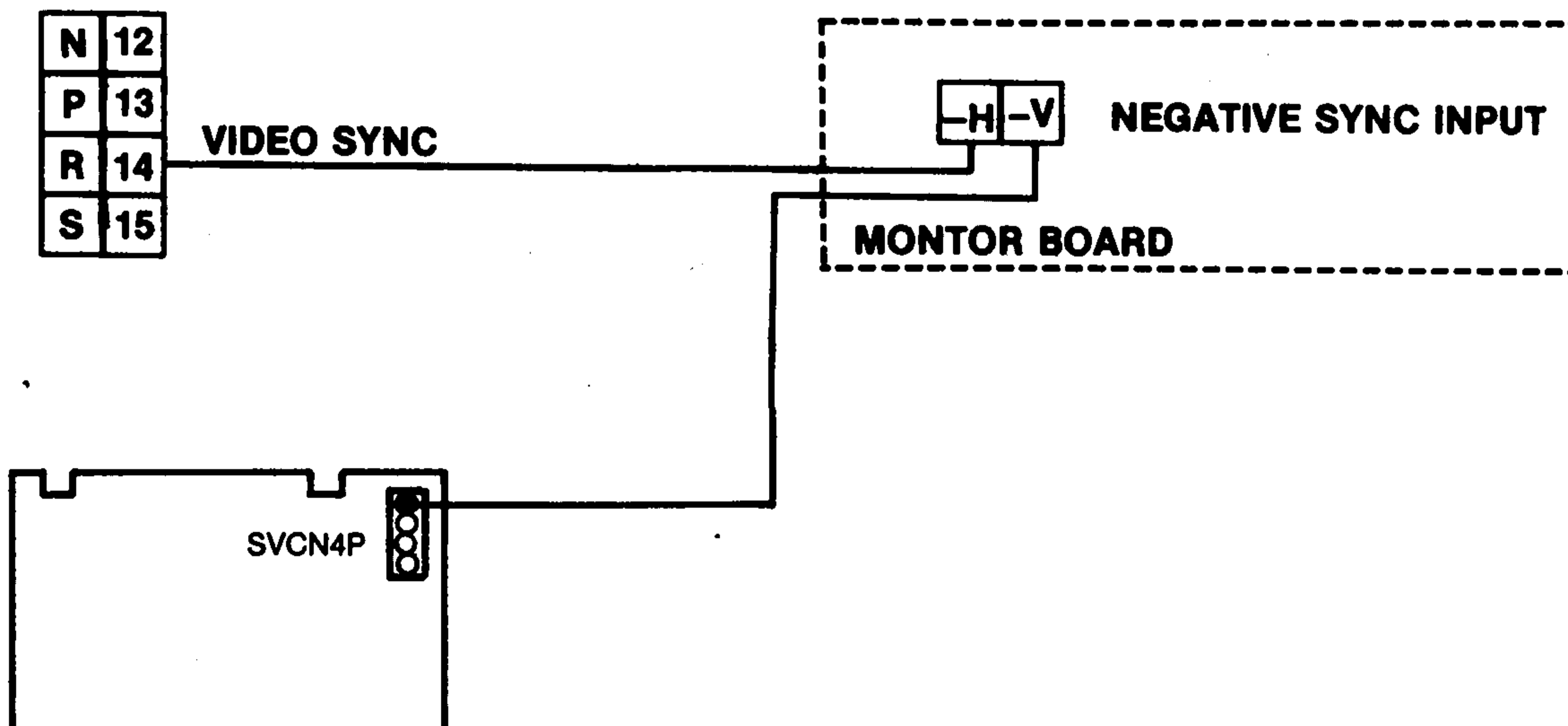


If the picture is still not stable...

Step 2

Prepare Hook-up wire to separate -H and -V sync. signals.

WIRING HARNESS



A

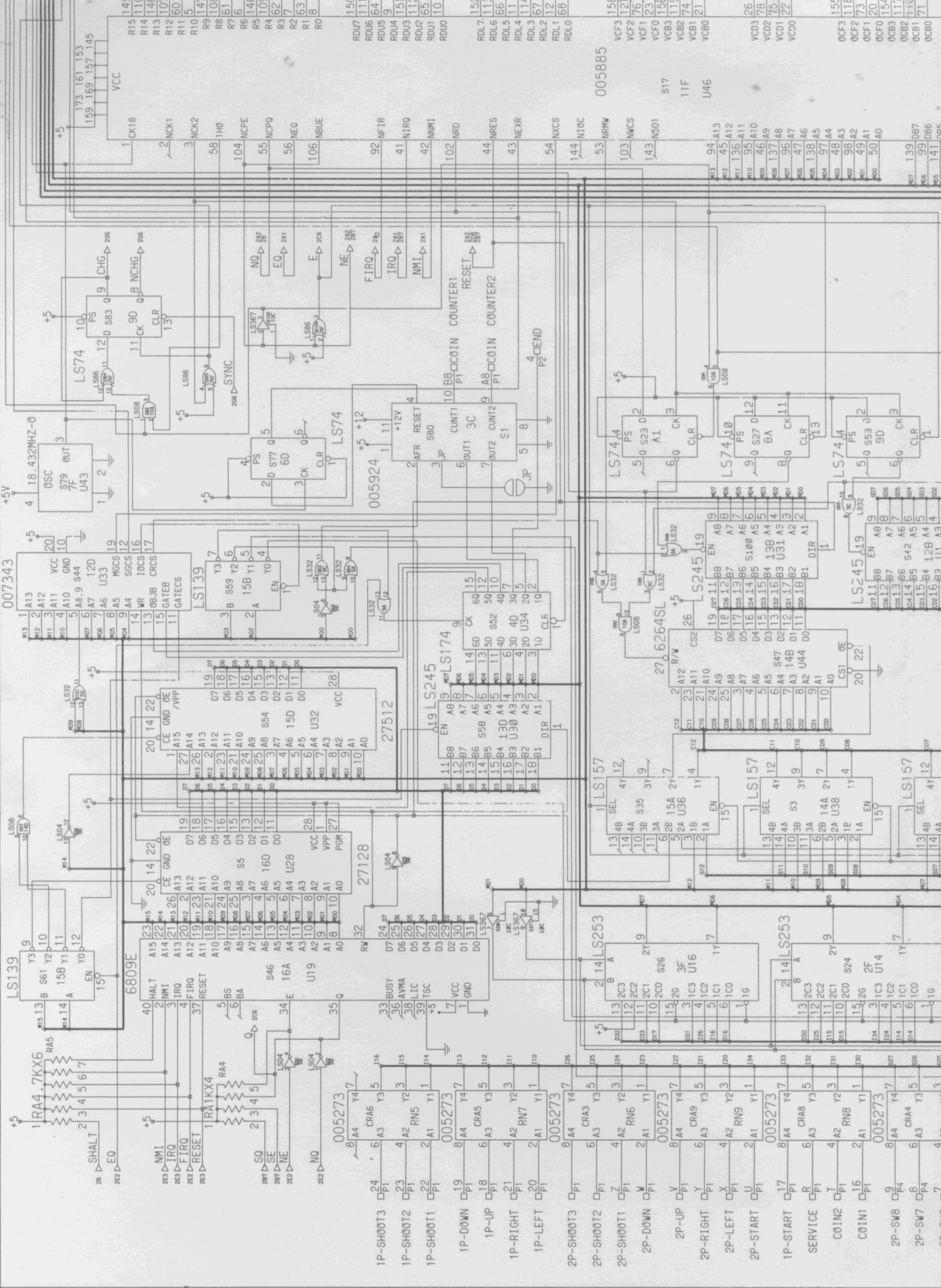
B

C

D

E

F



1

2

3

4

5

005885

S17

11F

U46

R15 R14 R13 R12 R11 R10 R9 R8 R7 R6 R5 R4 R3 R2 R1 R0
 RDU7 RDU6 RDU5 RDU4 RDU3 RDU2 RDU1 RDU0
 ROL7 ROL6 ROL5 ROL4 ROL3 ROL2 ROL1 ROL0
 VCF3 VCF2 VCF1 VCF0 VCB3 VCB2 VCB1 VCB0
 VC03 VC02 VC01 VC00
 0CF3 0CF2 0CF1 0CF0
 0CB3 0CB2 0CB1 0CB0

1 CK18
 2 NCK1
 3 NCK2
 58 1H0
 104 NCPE
 55 NCPO
 56 NEO
 106 NBUE
 92 NFIR
 41 NIRO
 42 NNMI
 102 NRD
 44 NRES
 43 NEXR
 54 NXCS
 144 NI0C
 53 NRWM
 103 NWCS
 143 N501
 94 A13
 45 A12
 111 136 A11
 110 95 A10
 109 46 A9
 108 137 A8
 107 96 A7
 106 47 A6
 105 138 A5
 104 97 A4
 103 48 A3
 102 98 A2
 101 49 A1
 100 50 A0
 139 DB7
 99 DB6
 141 DB5

007343
 A13 A12 A11 A10 GND 10
 A8.9 S44
 A7 U33
 A6 MGCS
 A5 SGCS
 A4 I0CS
 A3 I0CS
 A2 I0CS
 A1 I0CS
 13 OBJB
 12 CRCS
 11 GATECS
 7 Y3
 6 S59 Y2
 5 15B Y1
 4 A
 3 EN
 2 S04
 1 LS32
 11 GA
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300

005273 8 A4 Y4 7
 CRA6 Y3 5
 A2 RN5 Y2 3
 A1 Y1 1
 005273 8 A4 Y4 7
 CRA5 Y3 5
 A2 RN7 Y2 3
 A1 Y1 1
 005273 8 A4 Y4 7
 CRA3 Y3 5
 A2 RN6 Y2 3
 A1 Y1 1
 005273 8 A4 Y4 7
 CRA9 Y3 5
 A2 RN9 Y2 3
 A1 Y1 1
 005273 8 A4 Y4 7
 CRA8 Y3 5
 A2 RN8 Y2 3
 A1 Y1 1
 005273 8 A4 Y4 7
 CRA4 Y3 5
 A2 RN4 Y2 3
 A1 Y1 1

A

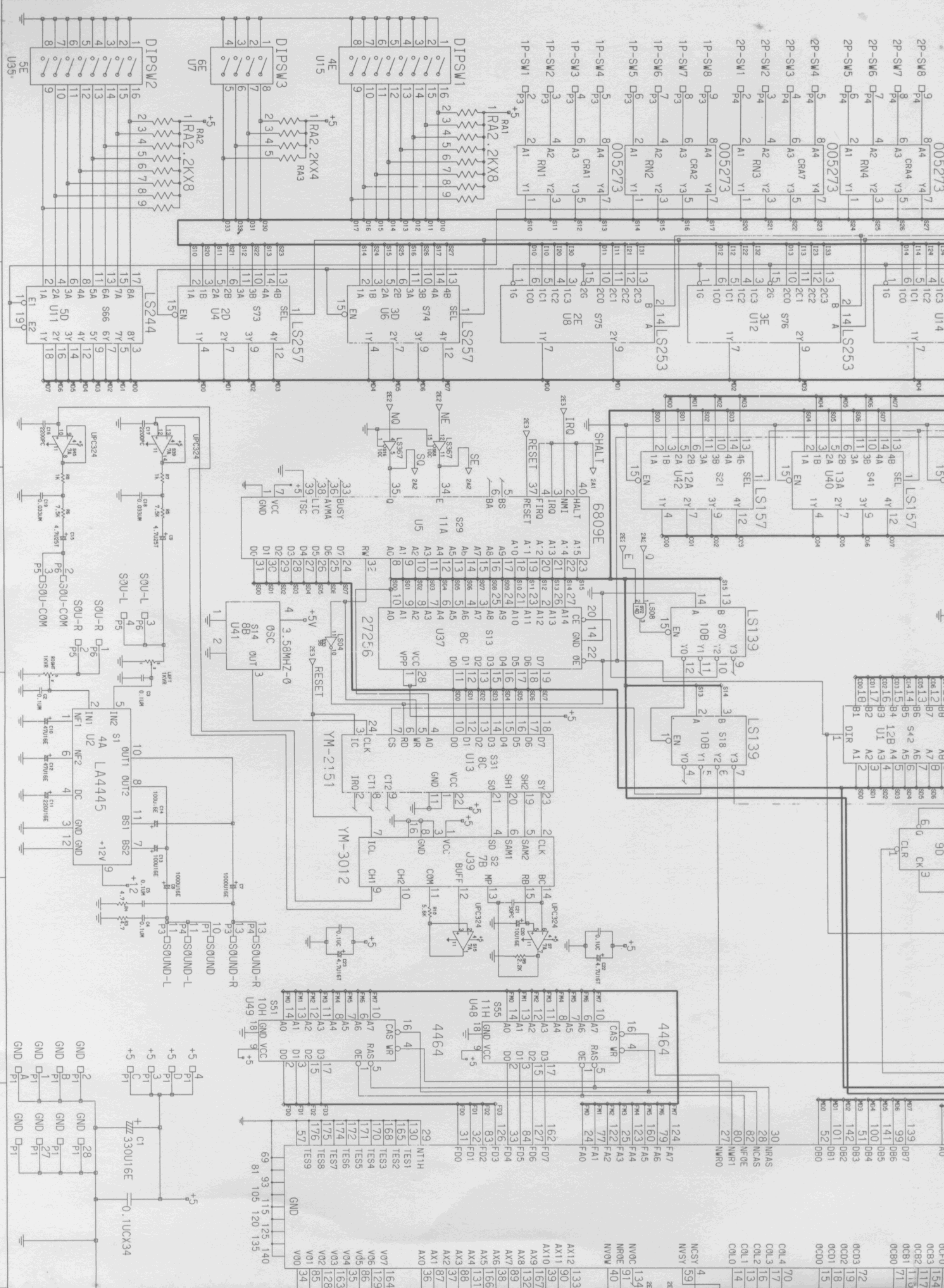
B

C

D

E

F



G

H

I

J

K

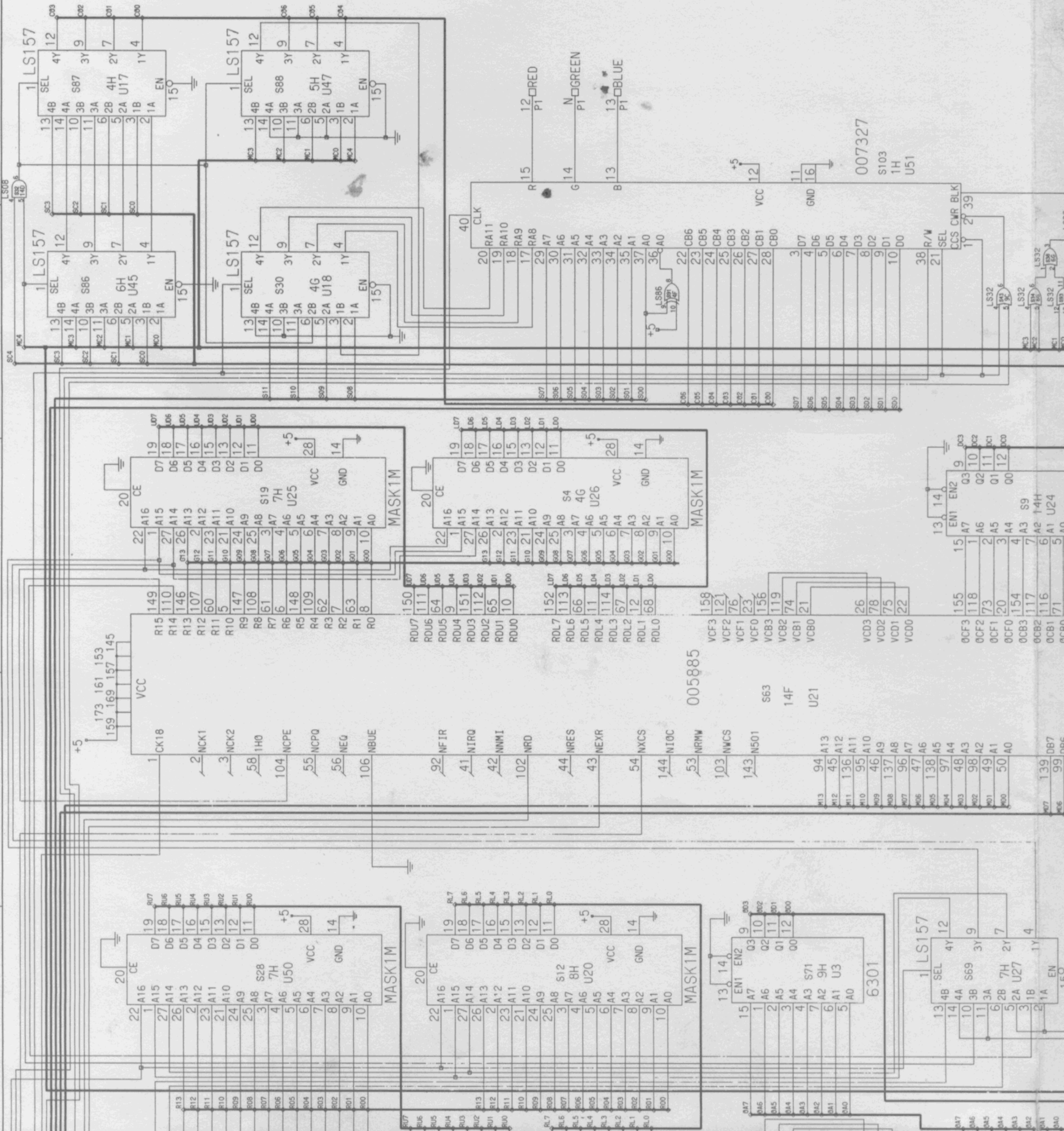
1

2

3

4

5



007327

S103
1H
U51

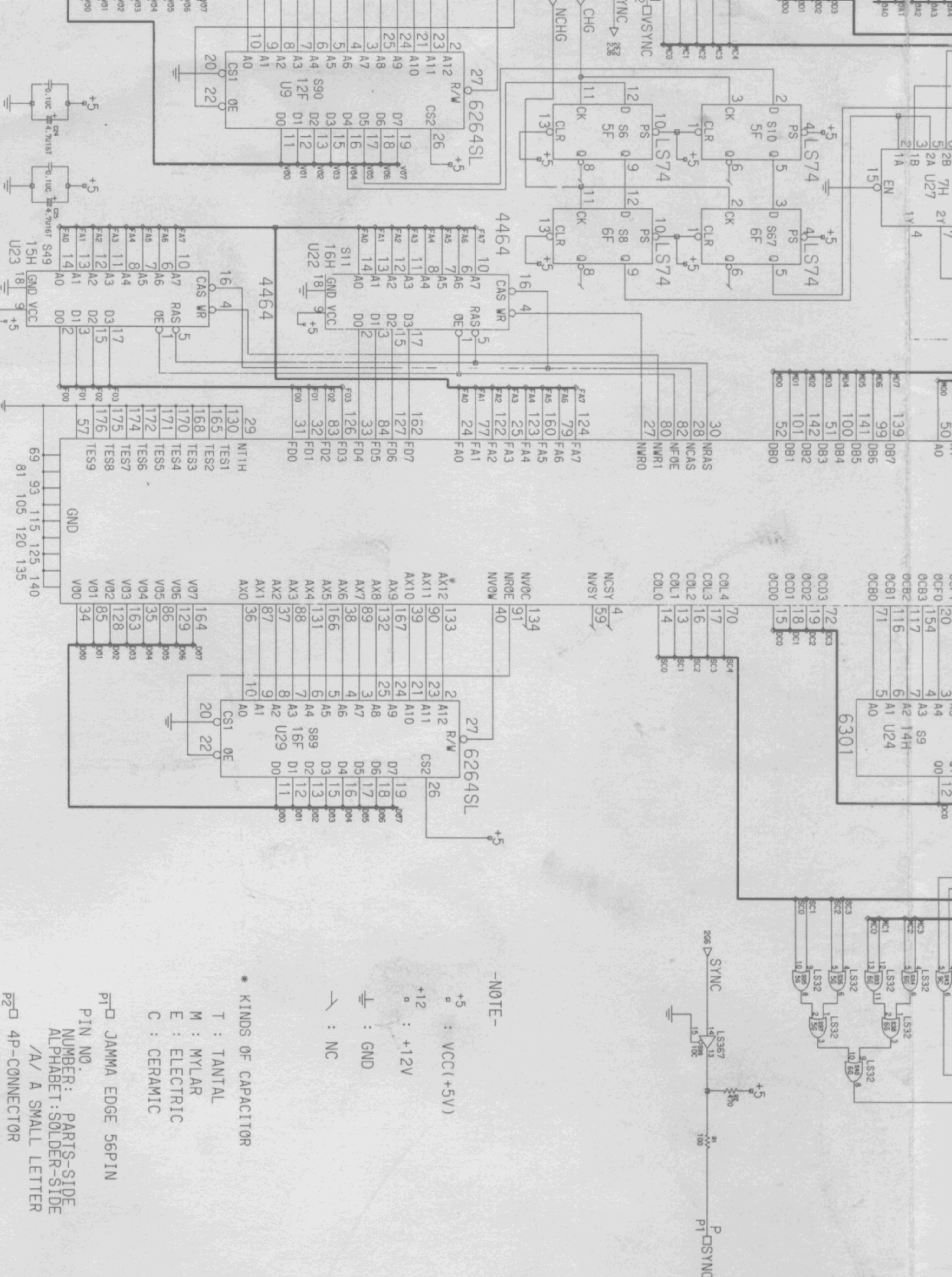
005885

S63

14F

U21

6301



-NOTE-

- +5 : VCC(+5V)
- +12 : +12V
- ⊥ : GND
- : NC

* KINDS OF CAPACITOR

- T : TANTAL
 - M : MYLAR
 - E : ELECTRIC
 - C : CERAMIC
- P1 □ JAMMA EDGE 56PIN
 PIN NO.
 NUMBER: PARTS-SIDE
 ALPHABET: SOLDER-SIDE
 /A/ A SMALL LETTER
- P2 □ 4P-CONNECTOR
 - P3 □ 13P-CONNECTOR
 - P4 □ 1P ROTARY SW. SOUND
 - P5 □ 2P ROTARY SW. SOUND
 - P6 □ 4P-CONNECTOR

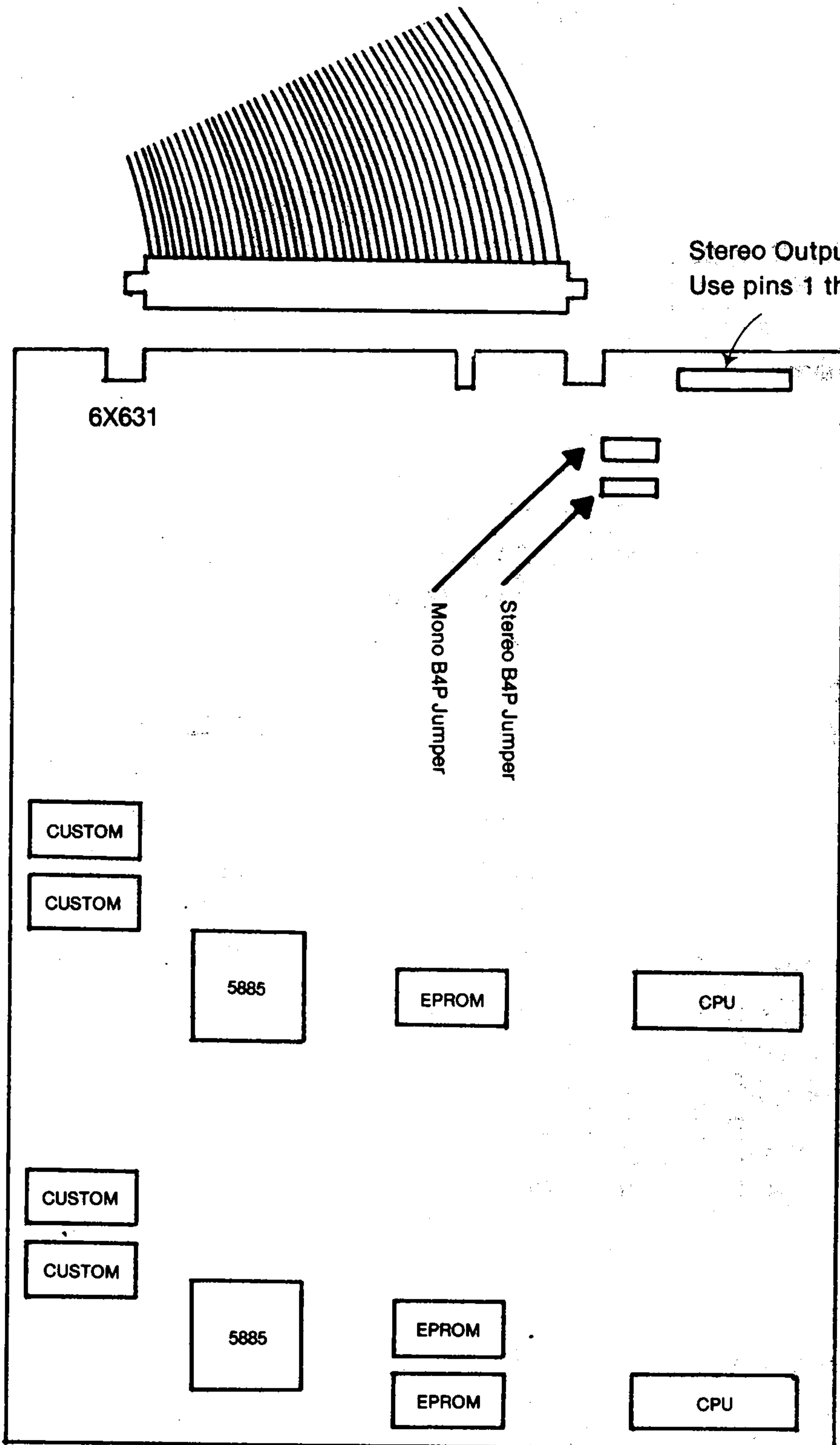
Konami		KONAMI INDUSTRY CO., LTD.		REG. TYPE	SCHEMATIC DIAGRAM
		DESIGN	DRAW	CHECK	APPROVE
M.	M.	IDAKA	IDAKA	SCALE	RELEASE DATE
				86.6.27	TOLERANCE
				A1	CODE NO.
				101006	

G H I J K L

TOP GUNNER: STEREO/MONO SOUND INSTALLATION

Konami introduces stereo sound.

Please read instructions carefully. If your video cabinet doesn't utilize two speakers, follow instructions for mono output.



HOW TO CHANGE TO MONAURAL/STEREO

*Note: Mono & Stereo sound *cannot* operate simultaneously.

For Mono Sound

Use pin #10 and Pin L of the 56 pin edge connector to the speaker contacts.

Also connect Jumper connector to mono B4P.

Use left hand volume control to adjust sound level.

For Stereo Sound

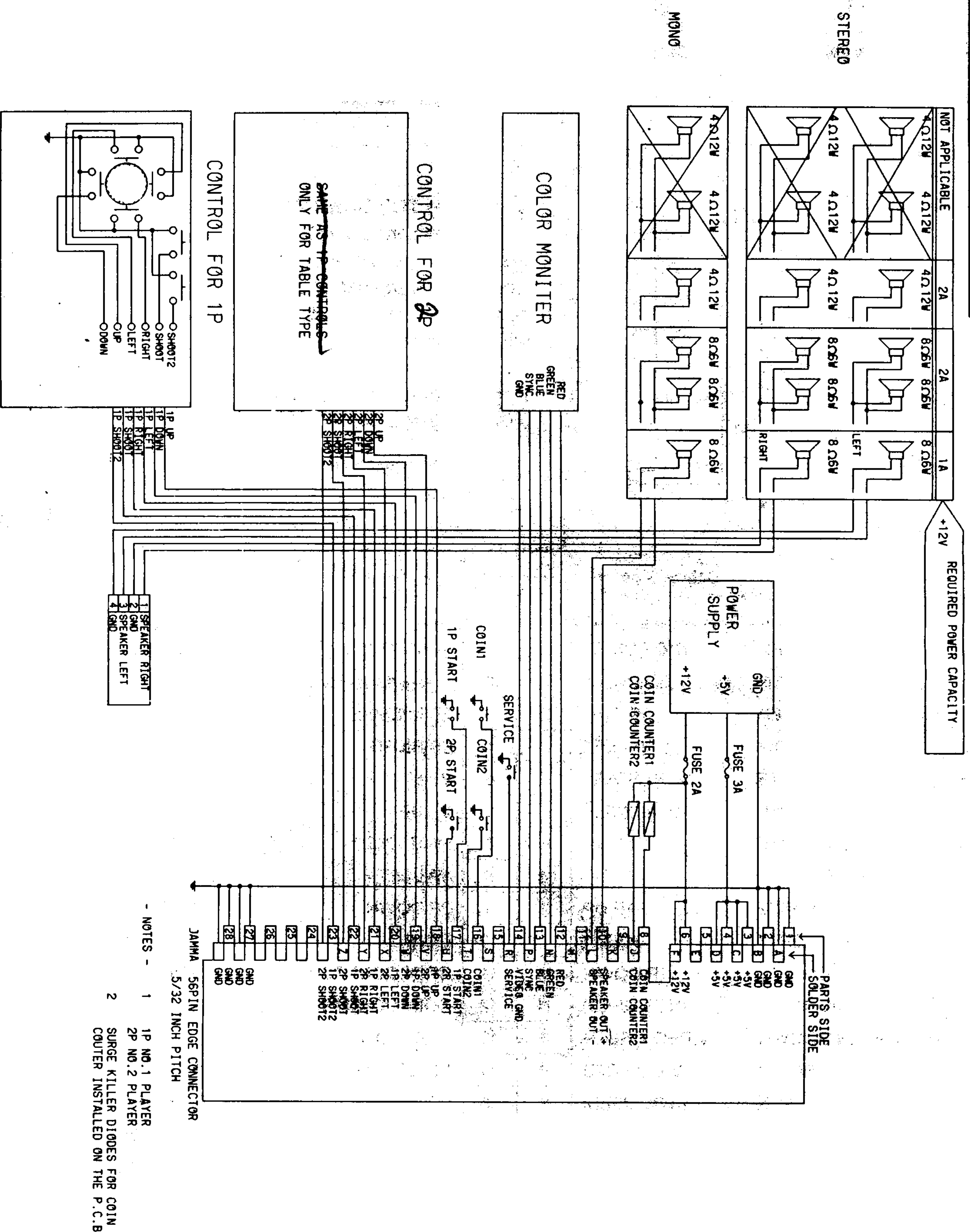
Use pin 1 and 2 of connector B13 for right speaker.

Use pin 3 and 4 of connector B13 for left speaker.

Change jumper connector to stereo B4P.

TOP GUNNER

WIRING DIAGRAM



+12V REQUIRED POWER CAPACITY

STEREO
MONO

COLOR MONITOR
RED
GREEN
BLUE
SYNC
GND

CONTROL FOR 2P
~~SAME AS 1P CONTROLS~~
ONLY FOR TABLE TYPE

CONTROL FOR 1P
SHOOT
UP
DOWN
LEFT
RIGHT
SHOOT
UP
DOWN

1 SPEAKER RIGHT
2 GND
3 SPEAKER LEFT
4 GND

PARTS SIDE
SOLDER SIDE

1 GND
2 GND
3 +5V
4 +5V
5 +5V
6 +12V
7 +12V
8 COIN COUNTER1
9 COIN COUNTER2
10
11
12 RED
13 GREEN
14 BLUE
15 SYNC
16 VIDEO GND
17 SERVICE
18 SERVICE
19 COIN1
20 COIN2
21 1P START
22 2P START
23 1P UP
24 1P DOWN
25 1P LEFT
26 1P RIGHT
27 2P SHOOT
28 2P SHOOT
29 2P SHOOT
30 2P SHOOT
31 2P SHOOT
32 2P SHOOT
33 2P SHOOT
34 2P SHOOT
35 2P SHOOT
36 2P SHOOT
37 2P SHOOT
38 2P SHOOT
39 2P SHOOT
40 2P SHOOT
41 2P SHOOT
42 2P SHOOT
43 2P SHOOT
44 2P SHOOT
45 2P SHOOT
46 2P SHOOT
47 2P SHOOT
48 2P SHOOT
49 2P SHOOT
50 2P SHOOT
51 2P SHOOT
52 2P SHOOT
53 2P SHOOT
54 2P SHOOT
55 2P SHOOT
56 2P SHOOT

- NOTES -
- 1P NO. 1 PLAYER
 - 2P NO. 2 PLAYER
 - SURGE KILLER DIODES FOR COIN COUNTER INSTALLED ON THE P.C.B

JAMMA 56PIN EDGE CONNECTOR
5/32 INCH PITCH

USER INFORMATION
WARNING
F.C.C. REGULATION COMPLIANCE

THIS KIT IS INTENDED FOR USE ONLY ON COIN-OPERATED VIDEO GAMES MANUFACTURED AFTER OCTOBER 1, 1983 WHICH HAVE BEEN VERIFIED FOR COMPLIANCE WITH REQUIREMENTS IN PART 15 OF F.C.C. RULES FOR A CLASS A COMPUTING DEVICE.

IMPROPER CONNECTION OF THIS KIT OR CONNECTION TO ANY OTHER GAME NOT SO MANUFACTURED OR VERIFIED FOR COMPLIANCE MAY CAUSE UNACCEPTABLE INTERFERENCE TO RADIO AND T.V. RECEPTION, REQUIRING THE OPERATOR TO TAKE WHATEVER STEPS ARE NECESSARY TO CORRECT THE INTERFERENCE.

THE P.C. BOARD CAGE SUPPLIED WITH THIS CONVERSION KIT MUST BE UTILIZED AND TERMINATED TO GROUND AT THE TIME OF INSTALLATION.



815 Mittel Drive, Wood Dale, Illinois 60191
Telephone: (312) 595-1443, Telex: 6871385 KONAM UW, Fax: (312) 595-2973
For Technical Assistance Call Toll Free (800) 222-6181 (Outside Illinois)