

# **MONACO GP™**

## **STAND MODEL**

MANUFACTURED BY

**Gremlin®/SEGA®**

**MANUAL PART NO. 420-0445**

## **OWNER'S MANUAL**

# **MONACO GP**

## **Stand Model**



### MONACO GP Game Description:

When the coins are deposited, the player's red car appears in the lower right corner of the screen. Drive the car using the steering wheel and accelerator pedal, avoiding collisions with the computer cars. Game time is set to a count of 90.

Player goes into extended play when he reaches a score of 2000 points. In extended play, the player wins an extra car; and, one extra car is awarded after every additional 2000 points. The game becomes more difficult after a score of 6000 points. The player's car speeds up and, at 8000 points, the computer cars speed up.

The game's front panel displays your score and the top 5 high scores. Also, each player is given a ranking out of the total numbers of players to date.

### Adjustments and Options:

There are 2 game options, located on the #96577A main logic board:

1. VR1- trim pot- adjusts game time
2. SW1- slide switch- selects either 1 or 2 plays per coin.

NOTE: On the sound board (#96598) there are 7 trim pots: These are for adjusting the FANFARE sound. They are pre-set by the factory.

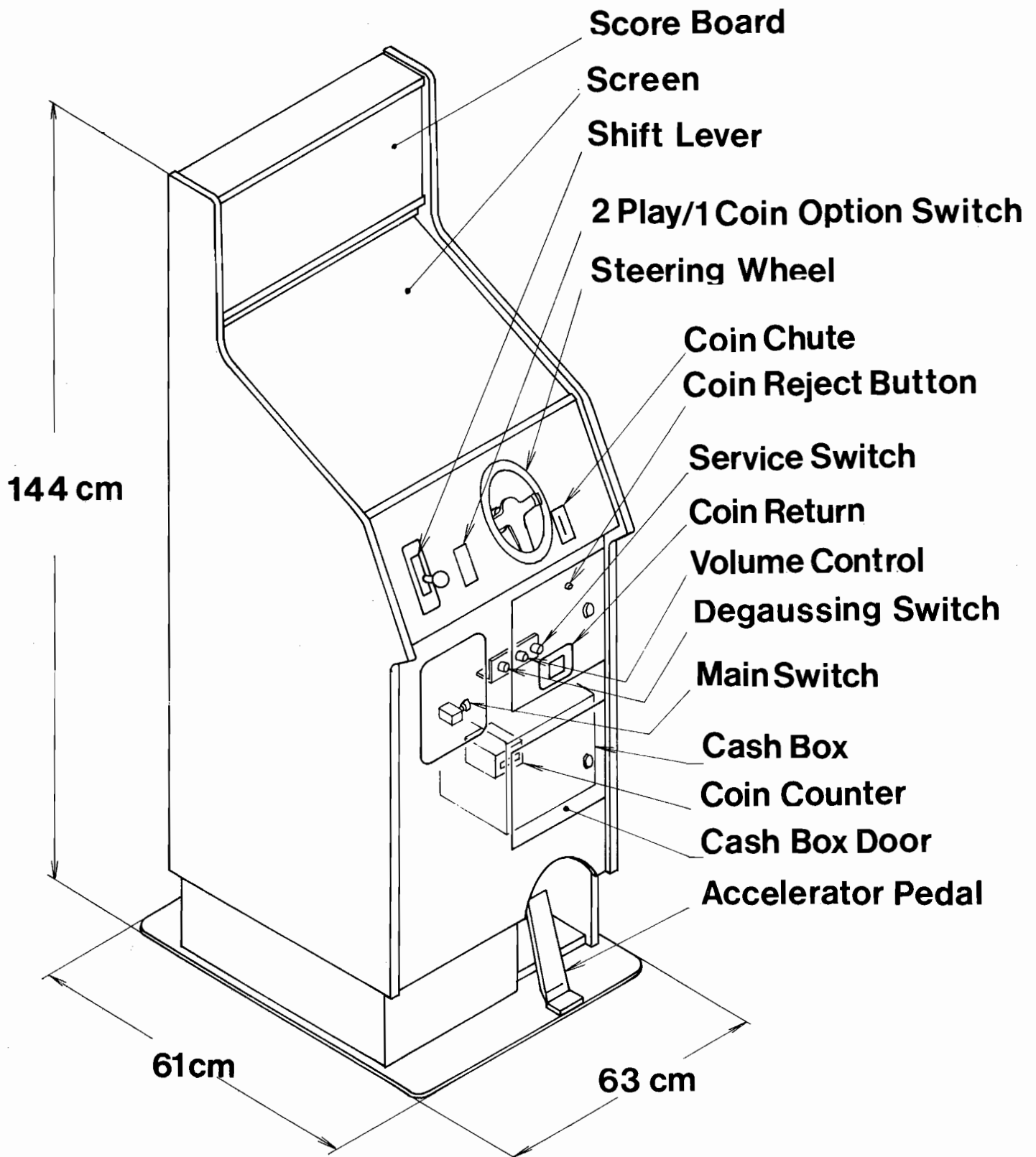
Also on this board are 2 switches, SW1 and SW2. SW1 should be set so that positions 1,2, and 3 are OFF. Position 4 should be ON.

Switch SW2 should be set to positions 1 and 2 OFF.

Descriptions and Part Numbers of MONACO GP logic boards:

| <u>Logic board</u>   | <u>Part Number Stamped on Board</u> |
|----------------------|-------------------------------------|
| Main logic, A        | 96577-P                             |
| Main logic, B        | 96578-P                             |
| Sound (Oscillator)   | 96598-P                             |
| Display board        | 96597-P                             |
| Display board        | M0-4202                             |
| Accelerator board    | 96599-P                             |
| Edge connector board | 96620-P                             |
| Edge connector board | 96624-P                             |

# BASIC CONTROLS & DIMENSIONS



## HELPFUL HINTS

### DEGAUSSING THE CRT

Sometimes changing the location, or direction of the machine will cause a color change in the CRT. If this occurs, depress the DEGAUSSING SWITCH to correct.

### DISASSEMBLING THE POWER UNIT

The power unit, located on the bottom of the unit, can be removed by unscrewing the three (3) butterfly (M5) bolts; and, disconnecting it from the rail before lifting out.

### DISASSEMBLING THE STEERING UNIT

Remove the connecting plug and unhook the side hooks on each side of the unit. The steering unit will come out with the front panel.

### REMOVING THE TV MONITOR

Remove the front panel and front glass. Loosen the four (4) mounting screws and remove all connections very carefully. The monitor is ready to pull out.

### RESETTING THE SYSTEM

Occasionally, the signals will not reset when powering up. If this occurs, turn the power on/off a few times to reset the signal to the monitor.

### FUSE REPLACEMENT

Always replace any fuse with the proper replacement of the same identical value.

### 2 PLAY/1 COIN OPTION

Remove the Front Panel Cover Plate and replace Panel Switch with M0-0019 (Instruction & Switch Assy).

Reconnect harness following wiring diagram.

Drill a 1.5mm hole **over** the old hole on the Denominational Plate. Add new plate

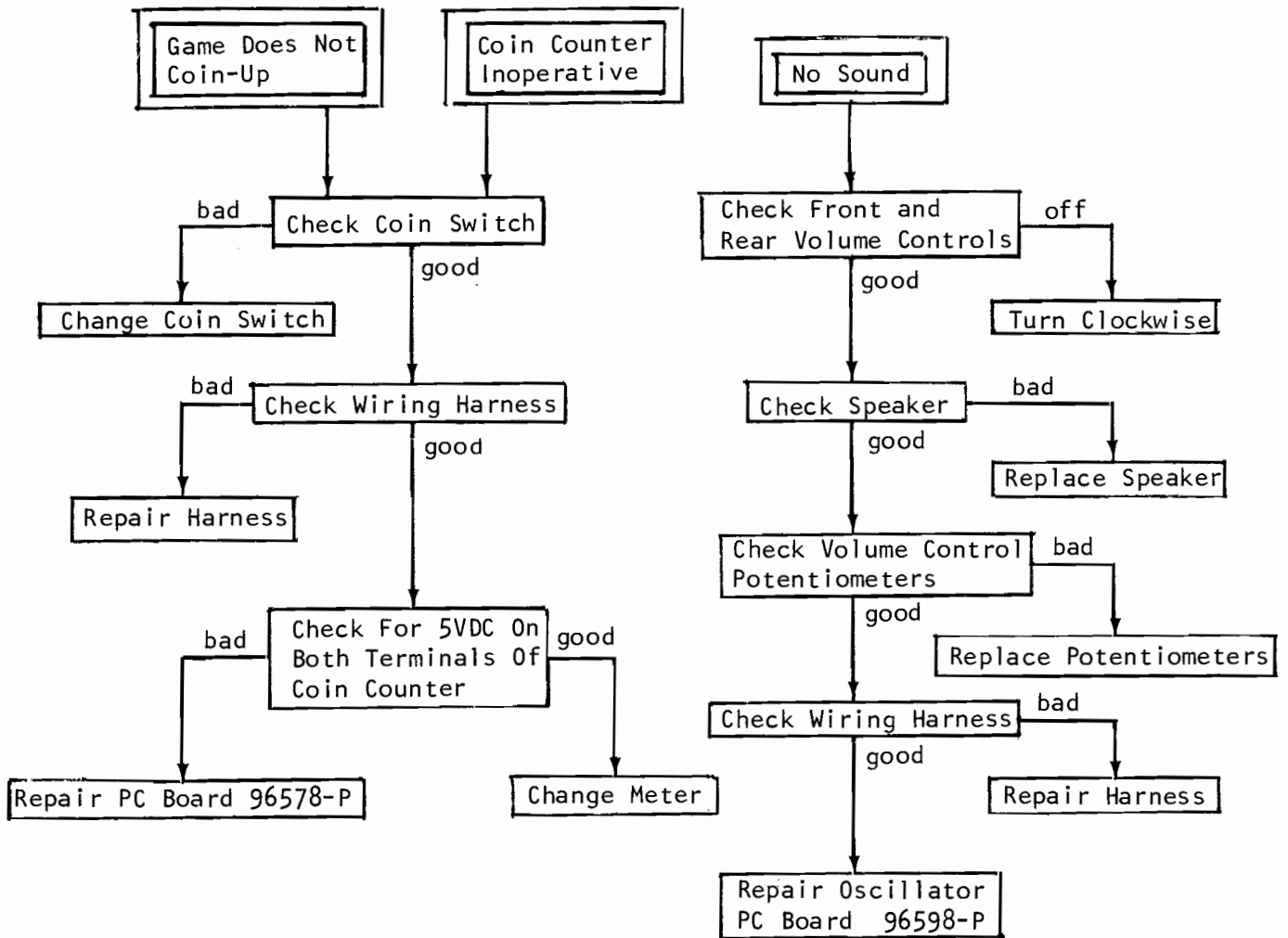
HELPFUL HINTS (cont.)

2 PLAY/1 COIN OPTION (cont.)

(177-013) with Parker Screws 1.5 x 4.5,  
as supplied.

Set switch position to 2 PLAY on main  
PCB 96577-P.

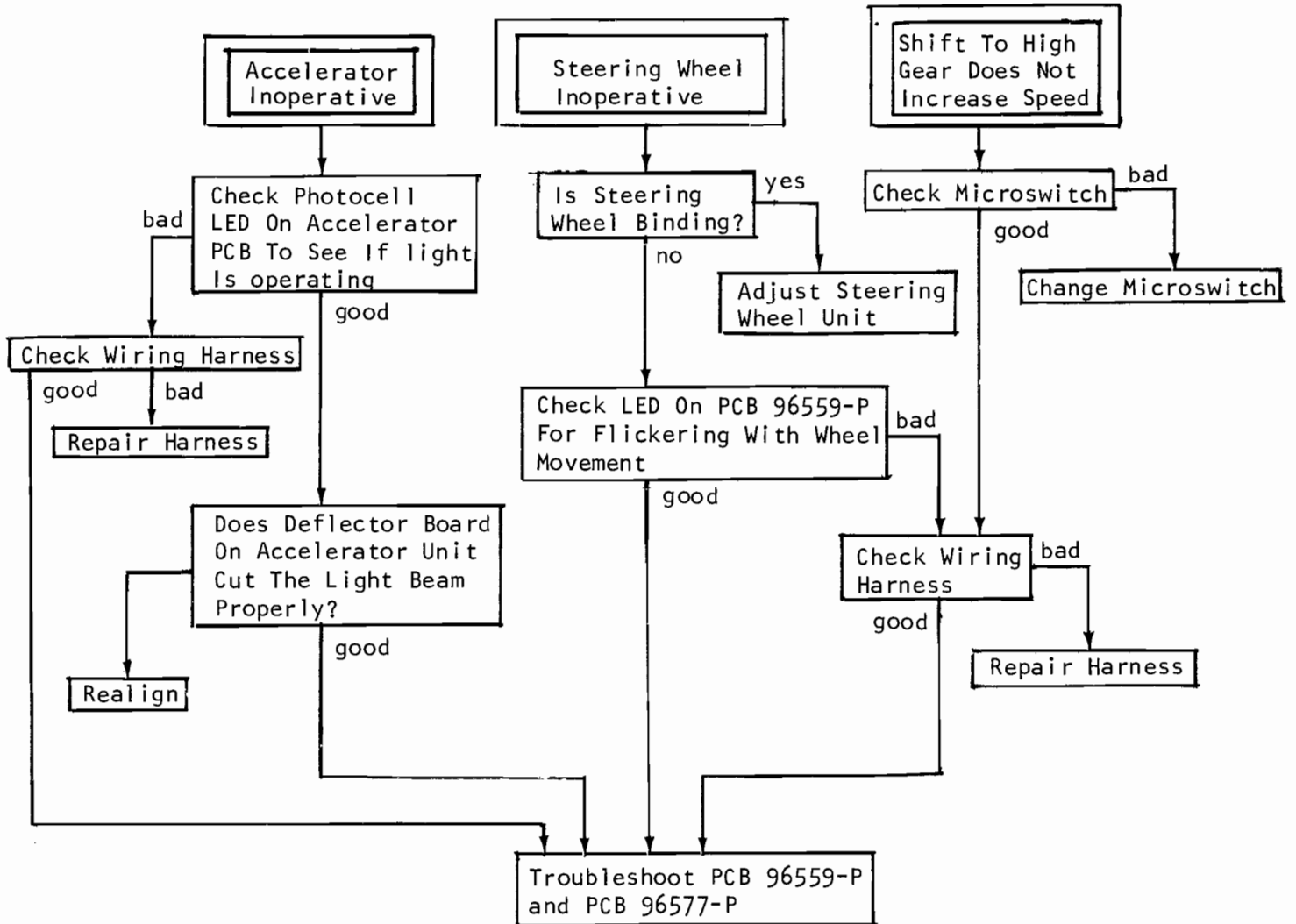
TROUBLESHOOTING  
CHART 1



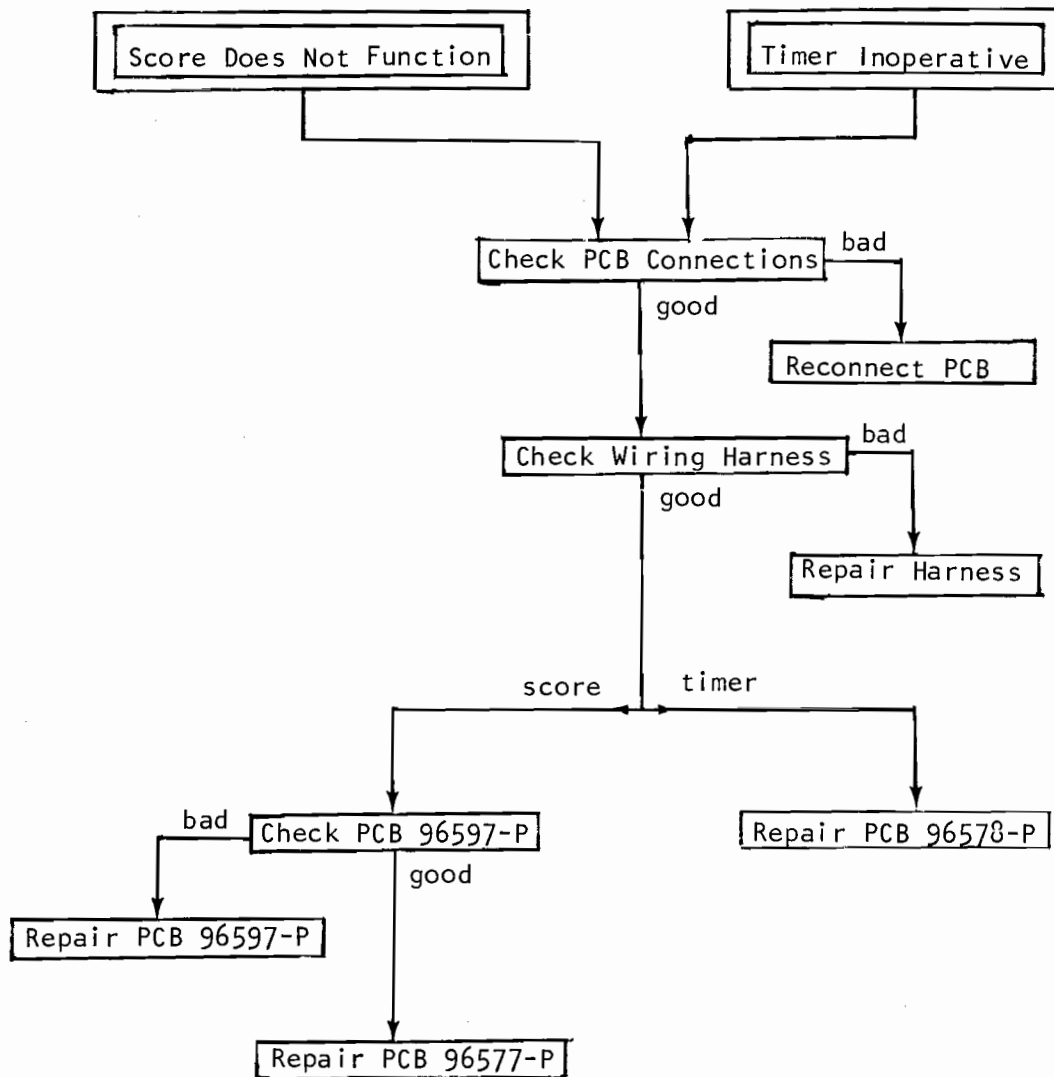


# TROUBLESHOOTING

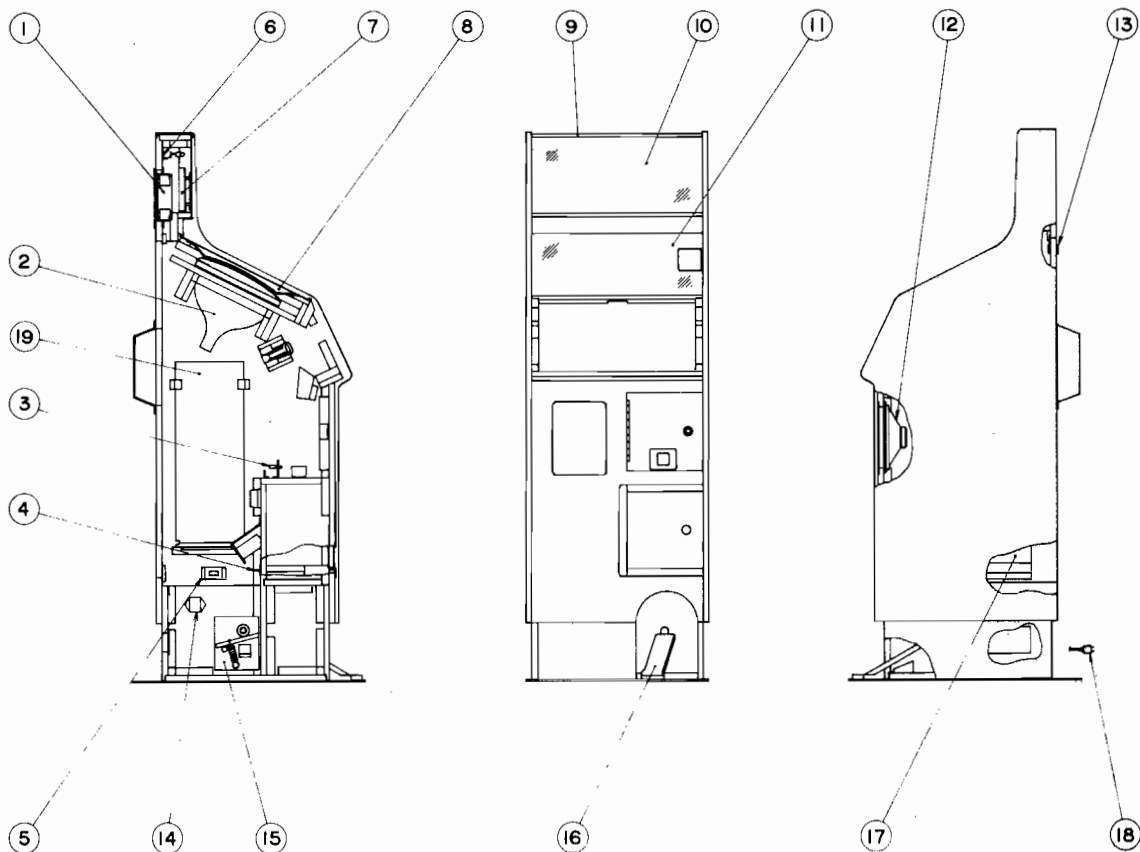
## CHART 2



TROUBLESHOOTING  
CHART 3

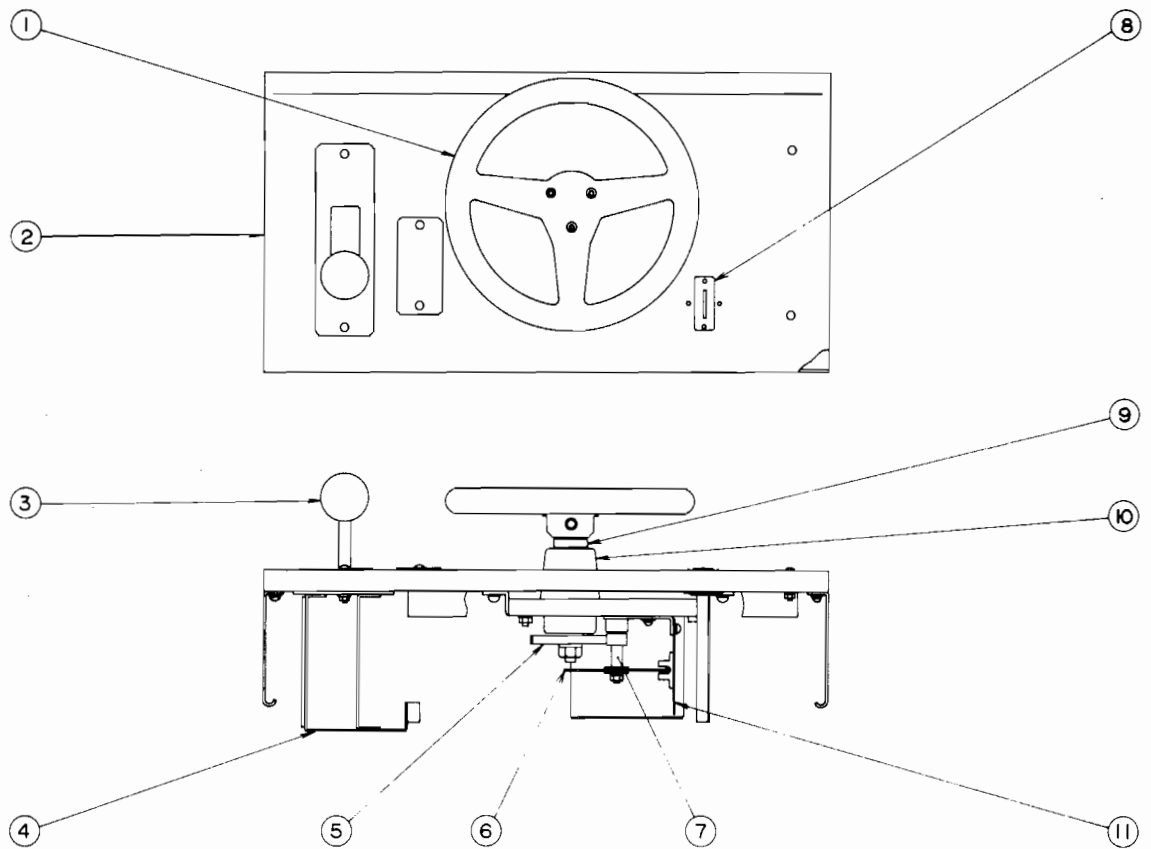


## CABINET ACCESSORY ASSY



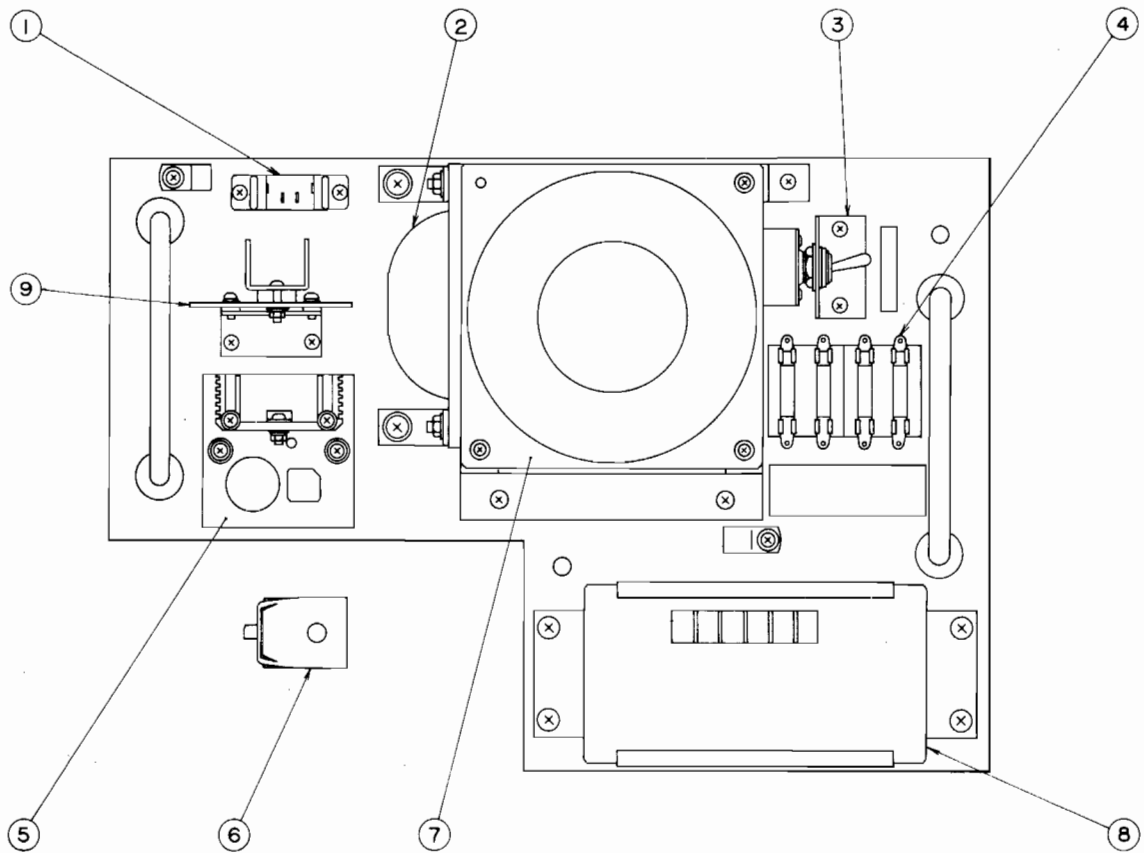
| Item | Part No. | Description                           |
|------|----------|---------------------------------------|
| 1    | S-96626  | Axial Flow Fan, AC100V                |
| 2    | CI-20006 | Color Display Assy, 14H, 90           |
| 3    | S-96477  | Push Button Switch, 2T.               |
| 4    | S-93157  | Volume Control, B-25K $\Omega$        |
| 5    | S-91654  | Rectifier, Silicon Diode              |
| 6    | S-90834  | Switch, Push Button Type              |
| 7    | S-94428  | Bulb, 6.3V, 0.25A                     |
| 8    | MO-42001 | Score Board Assy                      |
|      | S-96600  | L.E.D., Numeric Display, Red          |
|      | S-96679  | L.E.D., Numeric Display, 2 Digit, Red |
| 9    | DO-1021  | Color TV Mask, 14                     |
| 10   | MO-1032  | Ornament Frame                        |
| 11   | MO-1033  | Top Glass                             |
| 12   | MO-1064  | Front Glass                           |
| 13   | MO-1060  | Play Instructions Plate               |
| 14   | S-91359X | Speaker, 187x130mm, 8 $\Omega$        |
| 15   | LS-1064  | Ace Cylinder Lock, L.S. Type          |
| 16   | S-96634  | Noise Filter, AC 250V, 4A             |
| 17   | MO-1016  | Accelerator Pedal Assy                |
|      | PC-1206  | Photocoupler Unit, A                  |
|      | PC-1207  | Photocoupler Unit, B                  |
|      | SG-1112  | Accelerator Pedal Shaft               |
|      | GP-1040  | Shoulder Screw                        |
|      | GP-1042  | Extension Spring                      |
|      | FL-3031  | Extension Spring                      |
|      | DH-3318  | Shoulder Screw                        |
| 18   | S-80807  | Accelerator Pedal                     |
| 19   | 96577-P  | IC Board Assy, Monaco GP, A           |
|      | 96578-P  | IC Board Assy, Monaco GP, B           |
|      | 96598-P  | Oscillator, Monaco GP                 |
|      | 90759X   | Cable & Plug Assy                     |
|      | 96597-P  | Score Display IC Board Assy           |

## CONTROL PANEL ASSY



| Item | Part No. | Description                 |
|------|----------|-----------------------------|
| 1    | MO-2021  | Steering Handle             |
| 2    | MO-2018  | Front Panel                 |
| 3    | MP-1025  | Handle Ball, Red            |
| 4    | MO-2023  | Transmission Assy           |
|      | RR-1012  | Handle Assy                 |
|      | SH-3022  | Cam Assy                    |
|      | 2P-11600 | Rubber Bumper               |
|      | 2P-11601 | Rubber Retainer             |
|      | FC-2541  | Compression Spring          |
|      | S-80216  | Steel Ball, 10.3188ø        |
|      | S-91421  | Switch, Micro Type          |
| 5    | MO-2009  | Spur Gear, 60T              |
| 6    | MO-2007  | Disc                        |
| 7    | MO-2008  | Spur Gear, 14T              |
| 8    | PT-0212  | Coin Entry Plate, ¥100      |
| 9    | MO-2020  | Steering Wheel Shaft        |
| 10   | MO-2004  | Housing                     |
| 11   | 96599-P  | IC Board Assy, Monaco GP, C |

## POWER SUPPLY ASSY



| Item | Part No. | Description                                  |
|------|----------|--|
| 1    | S-94441  | Rectifier, Silicon Diode                     |
| 2    | 96627    | Power Transformer, 7V, 11V, 16V, 100-120V    |
| 3    | S-96395  | Switch Toggle, SP-DT, 15A                    |
| 4    | S-90644  | Fuse, 2A                                     |
|      | S-91941  | Fuse, 4A                                     |
|      | S-91151  | Fuse, 8A                                     |
| 5    | MO-4002  | Regulator Unit, DC12V, 20V                   |
| 6    | S-96262  | AC Cord, Connector Body, Flat Type, 125V-15A |
| 7    | S-96626  | Axial Flow Fan, AC100V                       |
| 8    | S-96638  | Switching Regulator, AC100V, 5V, 15A         |
| 9    | BC-4603X | Power Amplifier, 5W                          |

## TV MONITOR ADJUSTMENTS

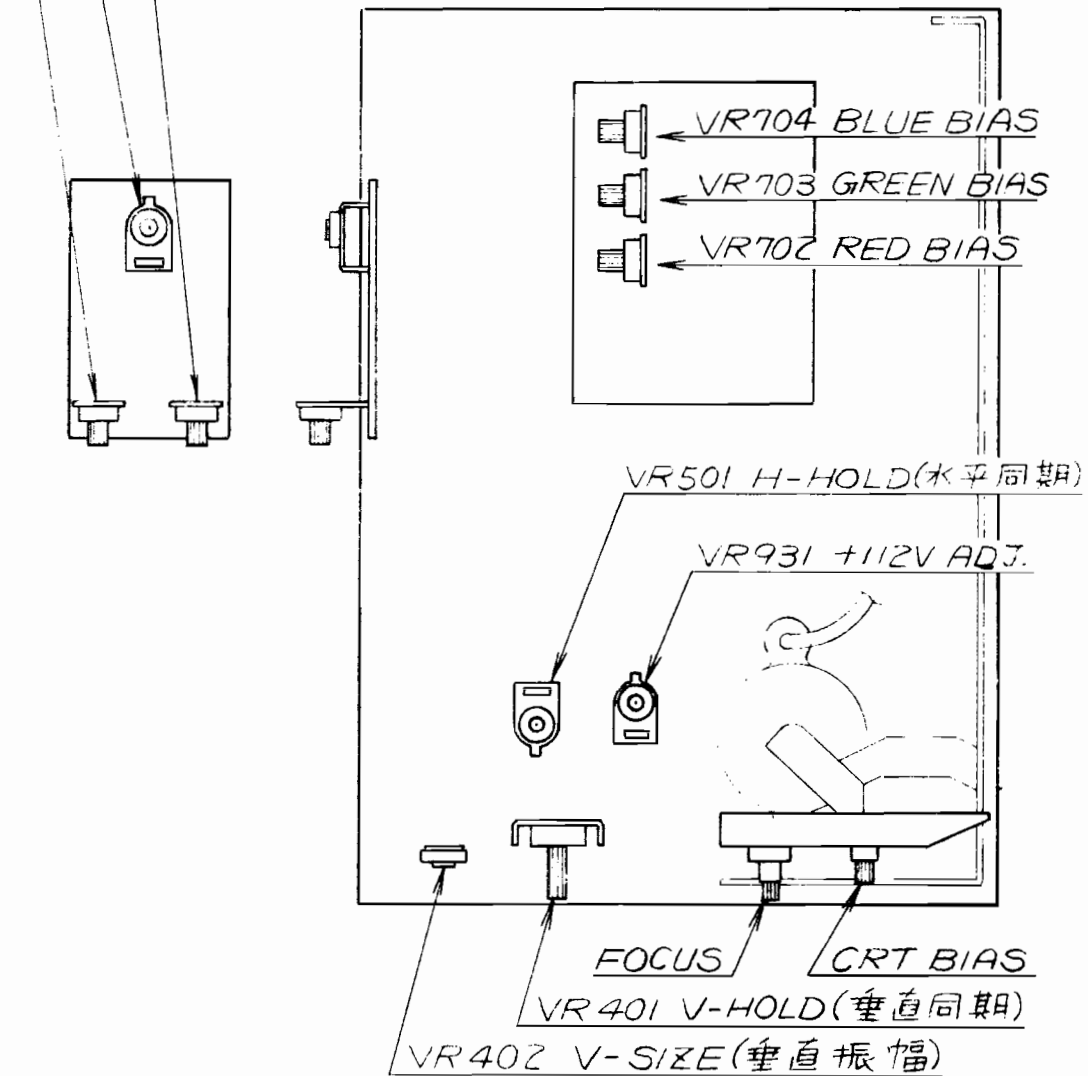
|               |            |   |
|---------------|------------|---|
| SUB-BRIGHT    | R408       | Monitor brightness  |
| HORIZ WIDTH   | L601 (CRT) |   |
| VERT WIDTH    | R517 (CRT) |   |
| VERT POSITION | K502       | Moves center to right   |
|               | K501       | Center  |
|               | K503       | Moves center to left  |
| VERT HOLD     | R515 (CRT) |   |
| HORIZ HOLD    | R616 (CRT) |   |
| B+            | R707       | Adjustable from 90v to 105v   |
| RED DRIVE     | R807       |   |
| BLUE DRIVE    | R809       |   |
| RED BIAS      | R813       | These three adjustments interact to balance white and set halftones and gray balance. Red and Blue Drive controls interact also.                          |
| GREEN BIAS    | R814       |   |
| BLUE BIAS     | R815       |   |
| SCREEN ADJUST | R824       | Increases brightness and interacts with white balance. After white balance adjustments, the beam current setting (R301 dc voltage) must not exceed -7.0v. |
| FOCUS         |            | Adjust each time brightness is altered.   |

カラー モニターの調整  
TV VOLUME ADJUSTMENT INSTRUCTIONS

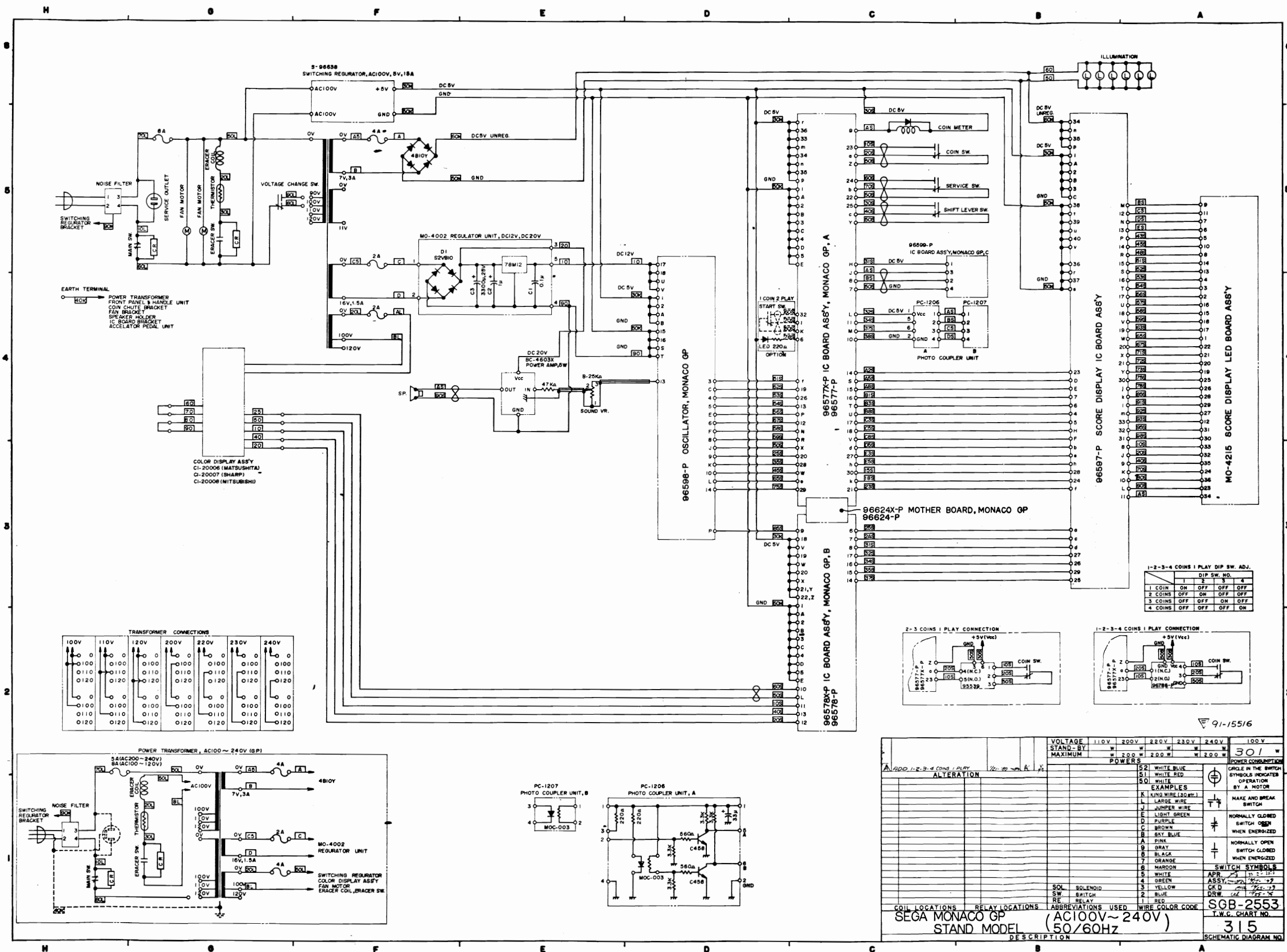
VR463 UPPER PINCUSHION CONTROL (上側系巻歪補正)

VR461 BOTH SIDE PINCUSHION CONTROL (両側系巻歪補正)

VR462 LOWER PINCUSHION CONTROL (下側系巻歪補正)

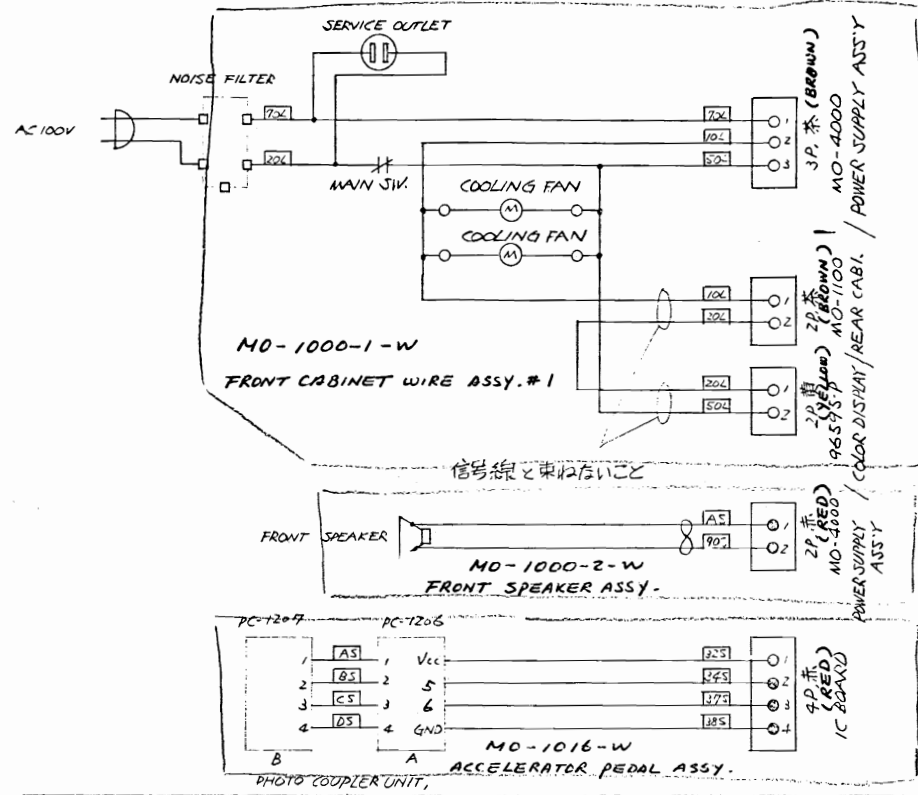


S-9659Z-P COLOR DISPLAY, 14H TYPE  
(MITSUBISHI 919C049-3)

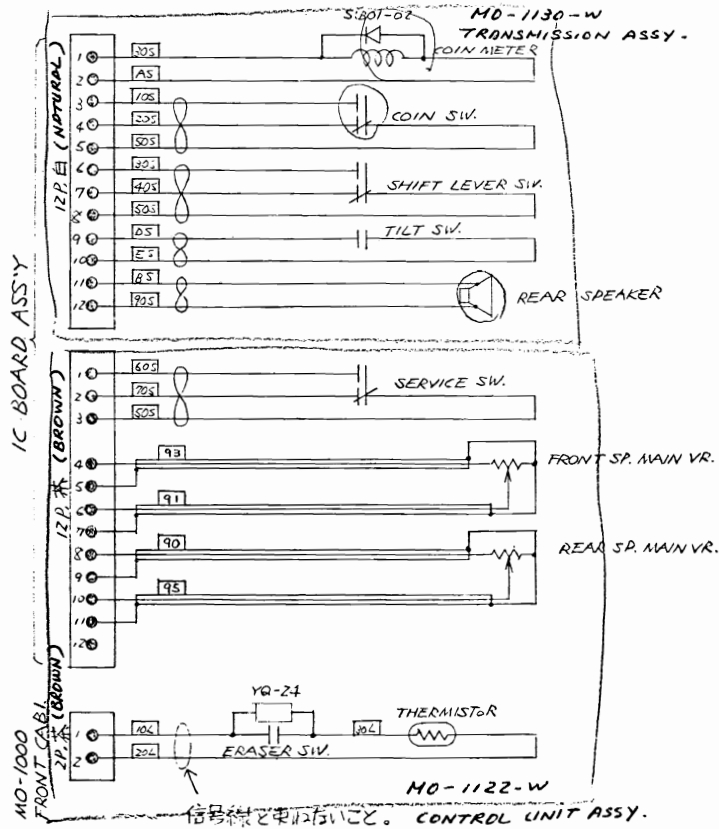




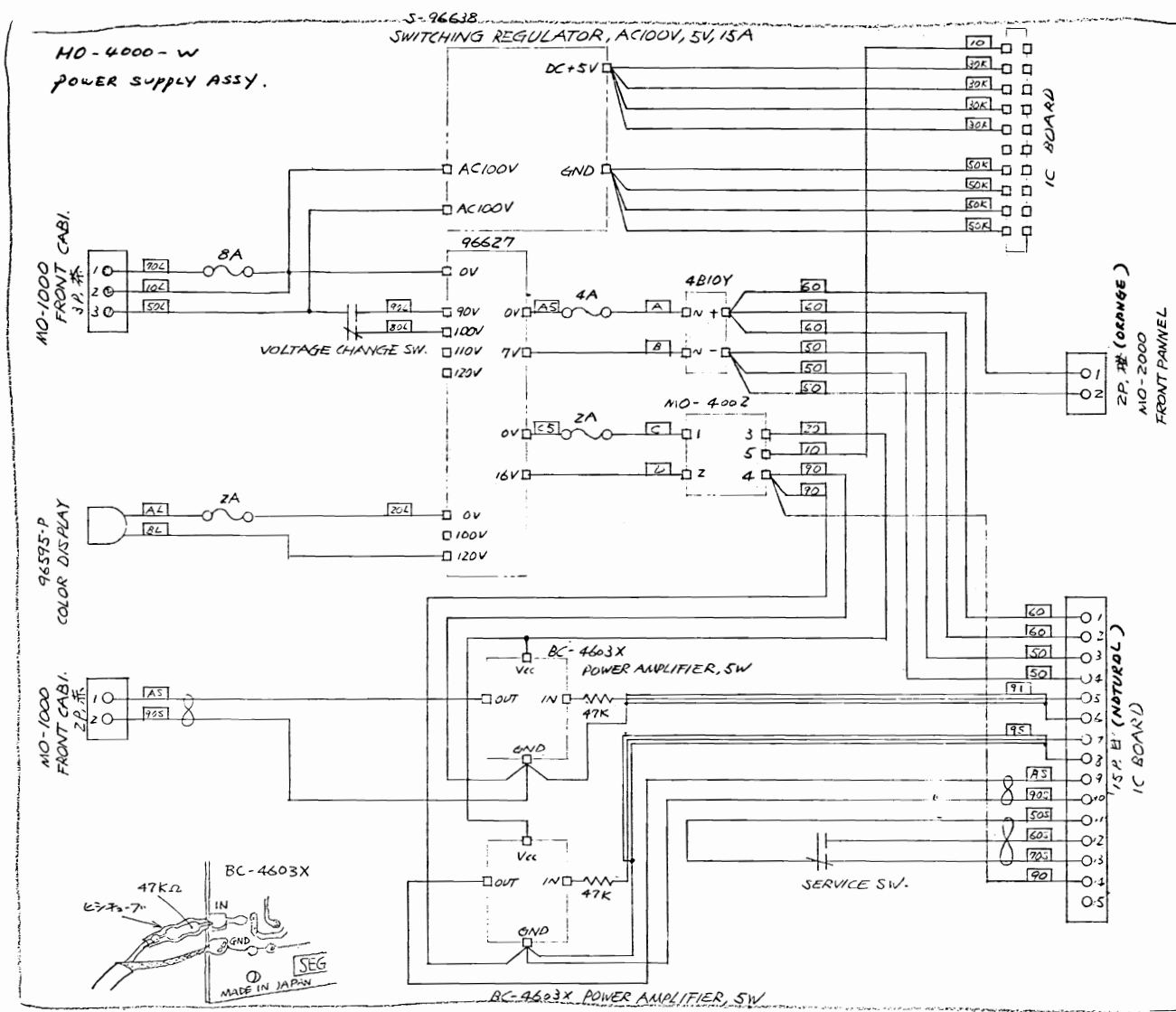
MO-1000 FRONT CABINET ACCESSORY ASS'Y



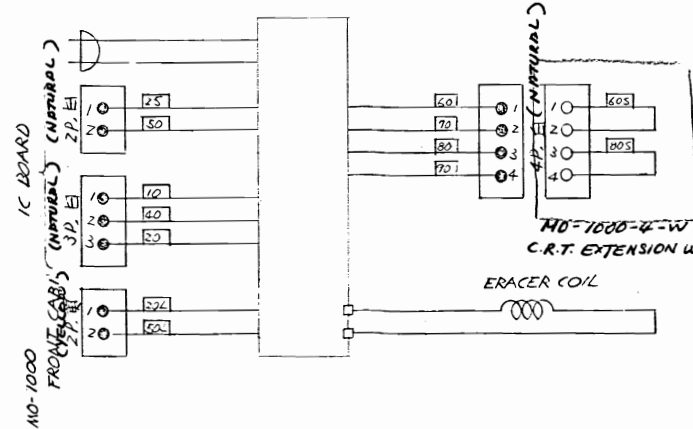
MO-1100 REAR CABINET ACCESSORY ASS'Y



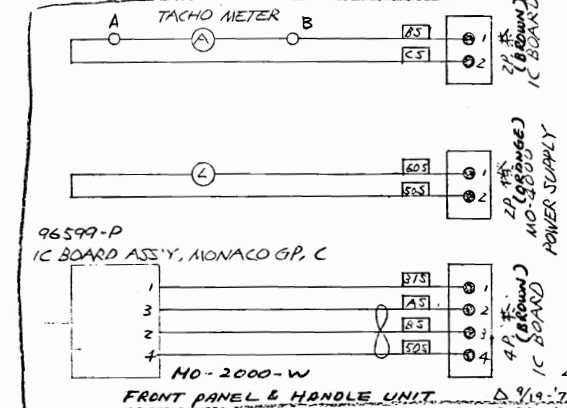
MO-4000 POWER SUPPLY ASS'Y



96595-P  
COLOR DISPLAY ASS'Y



MO-2000 FRONT PANNEL & HANDLE ASS'Y

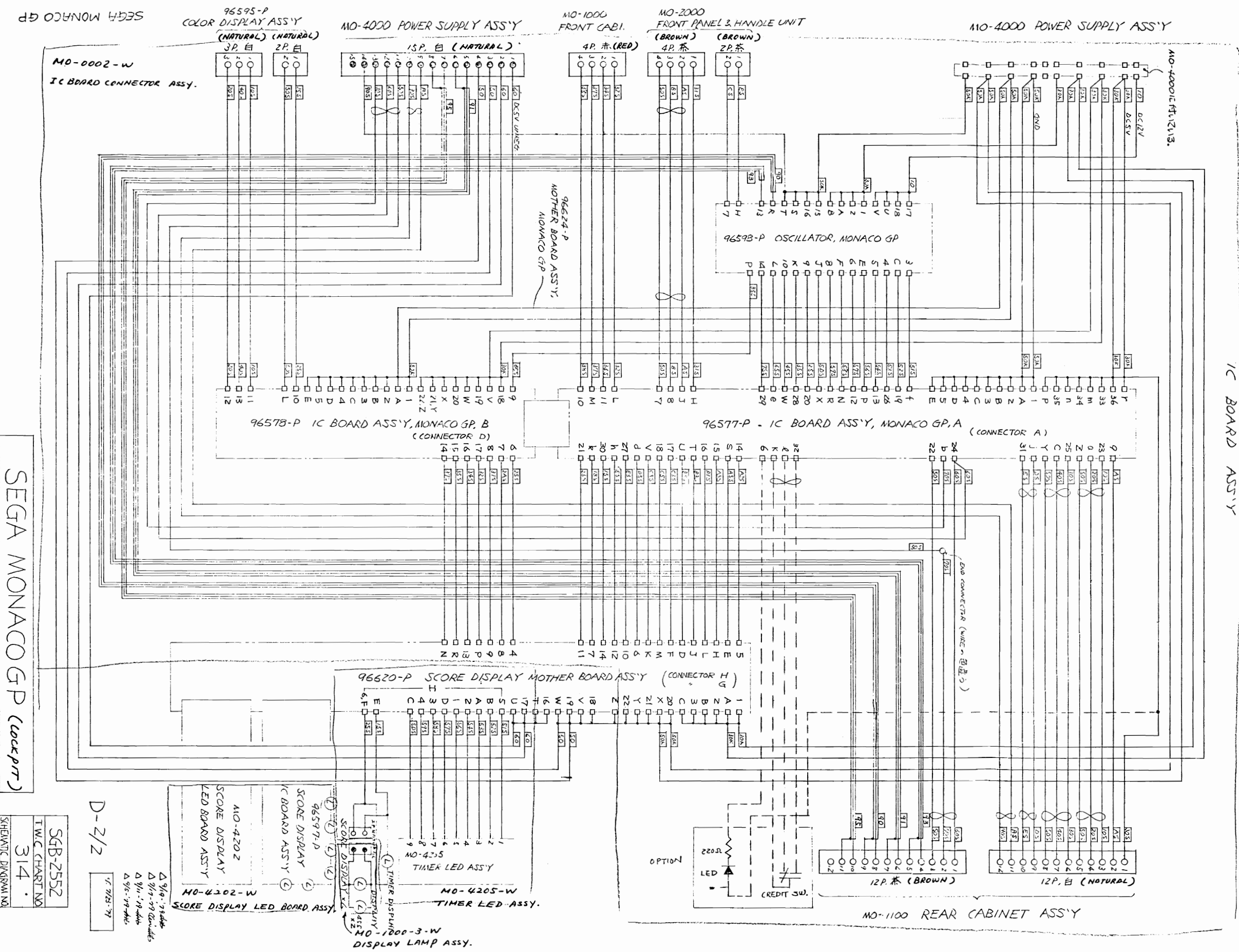


D-1/2

SEGA MONACO GP (COCKPIT)

|                       |
|-----------------------|
| SGB-2552              |
| T.W.C. CHART NO.      |
| 314                   |
| SCHEMATIC DIAGRAM NO. |

$\Delta 9/17 - 79$   
 $\Delta 4/10 - 72$   
 $\Delta 7/1 - 12$   
 $\Delta 7/23 - 77$



SEGA MONACO GP (cockpit)

SGB-2552  
T.W.C. CHART NO.  
314  
SCHEMATIC DIAGRAM NO.

D-2/2

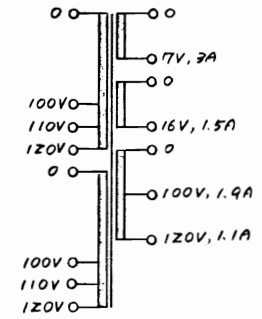
Δ 9/10-78 dkk  
Δ 9/11-79 dkk  
Δ 9/11-79 dkk  
Δ 9/11-79 dkk

IC BOARD ASS'Y

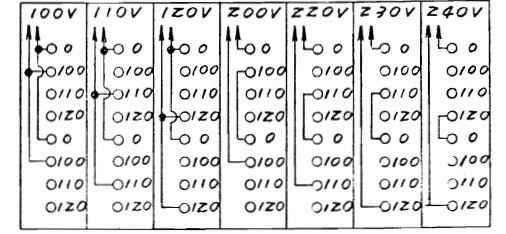
| MACHINE     | SUB-ASS'Y  |
|-------------|------------|
|             | LIST-B1502 |
| ALTERATIONS |            |
| REMODEL     |            |

註1 本図面の寸法はISO規格による

結線図



結線方法

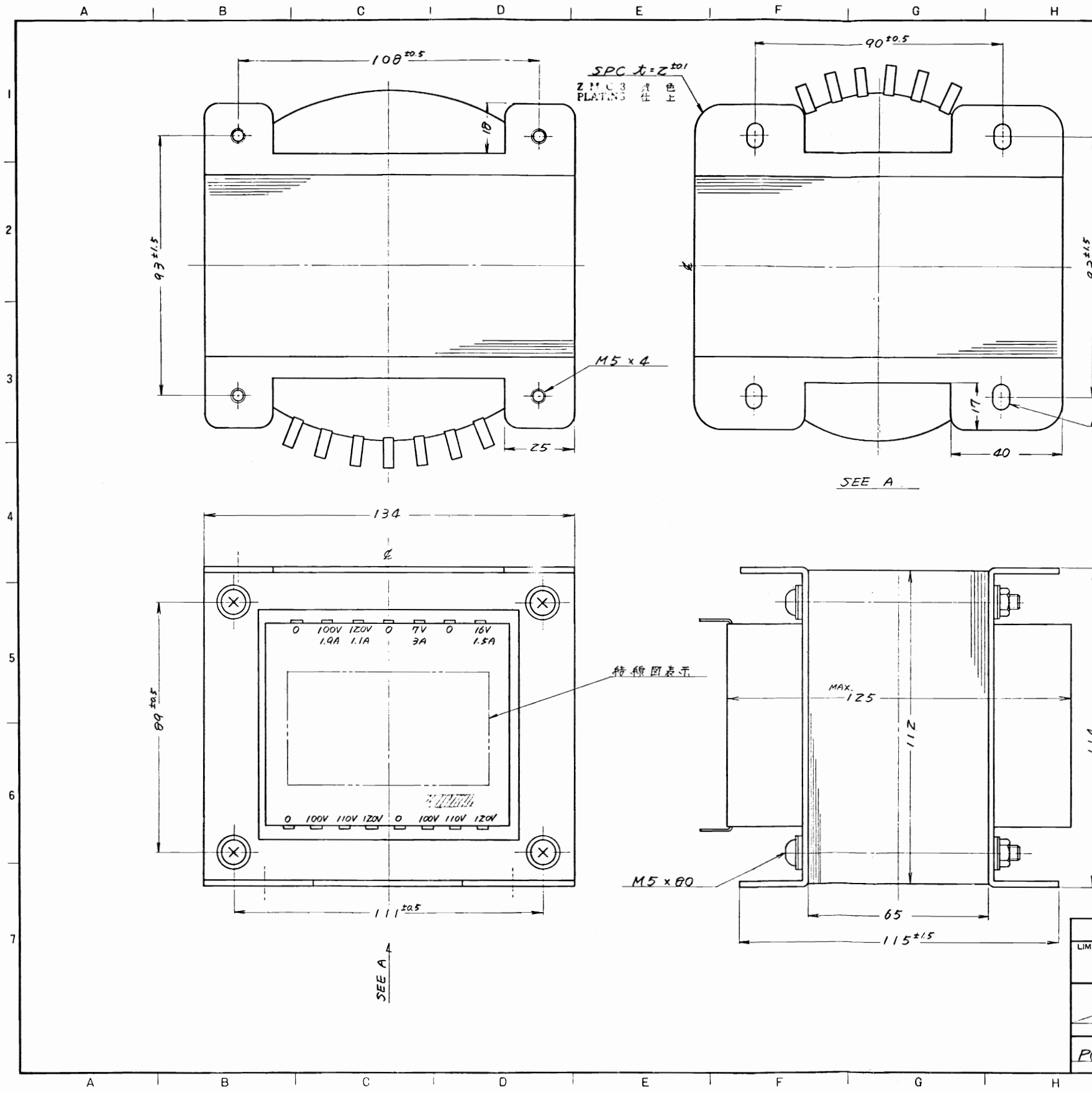


仕様

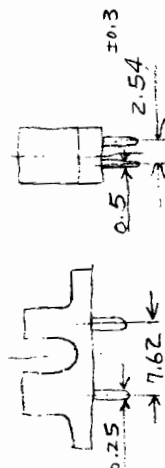
- 1 種 单相乾式自冷型
- 2 出力容量 367VA
- 3 定格一次電圧 100, 110, 120, 200, 220, 230, 240V
- 4 定格二次電圧 7, 16, 100, 120V
- 5 周波数 50-60Hz
- 6 時間定格 連続
- 7 絶縁種類 A 種
- 8 絶縁抵抗 DC500V×11=100MΩ以上
- 9 絶縁耐力 AC1500V=1分間耐エルト
- 10 温度上昇 抵抗法=120℃以下
- 11 電圧変動 無負荷 7.35V以下 全負荷 3A 7V以上
- 12 安全規格 電気用品取締法に適合する

SEGA ENTERPRISES LTD. 日本セガ株式会社

|                                   |             |   |     |                 |               |
|-----------------------------------|-------------|---|-----|-----------------|---------------|
| SEGA® enterprises LTD.            |             | THIS DRAWING WILL IN NO WAY BE COPIED.<br>TO BE RETURNED ON DEMAND. |     | 許可なく複製<br>複製等厳禁 |               |
| LIMITS UNLESS OTHERWISE SPECIFIED |             | 3RD QUAT. PROJ. DRAWING   |     | APR.            | 20.7.1.1979   |
| ±1                                |             | SCALE   | 1/1 | ASSY            | 12.1.1981.129 |
|                                   |             | DIM. IN   | mm  | CKD             | 12.1.1981.129 |
|                                   |             |   |     | DRW.            | 12.1.1981.129 |
| MATERIAL                          | HEAT TREAT. | FINISH  |     | REMARK          |               |
| POWER TRANSFORMER, 100-240V (GP)  |             |   |     | 96741           |               |
| DESCRIPTION                       |             |   |     | PART NO         |               |



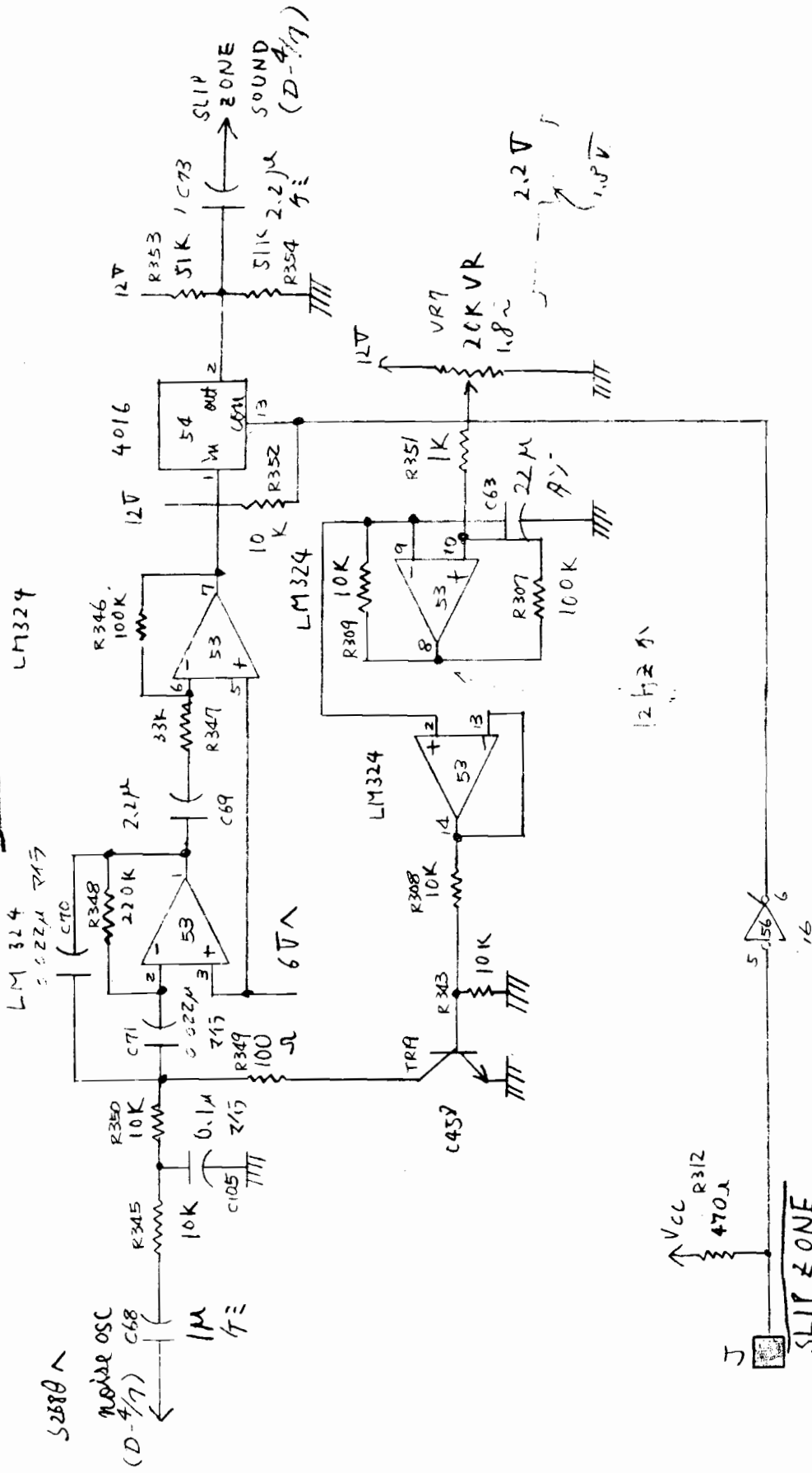
(ACCELERATOR BOARD)



EE-SG3-B

PHOTO-MICRO SENSOR

# SLIP ZONE SOUND

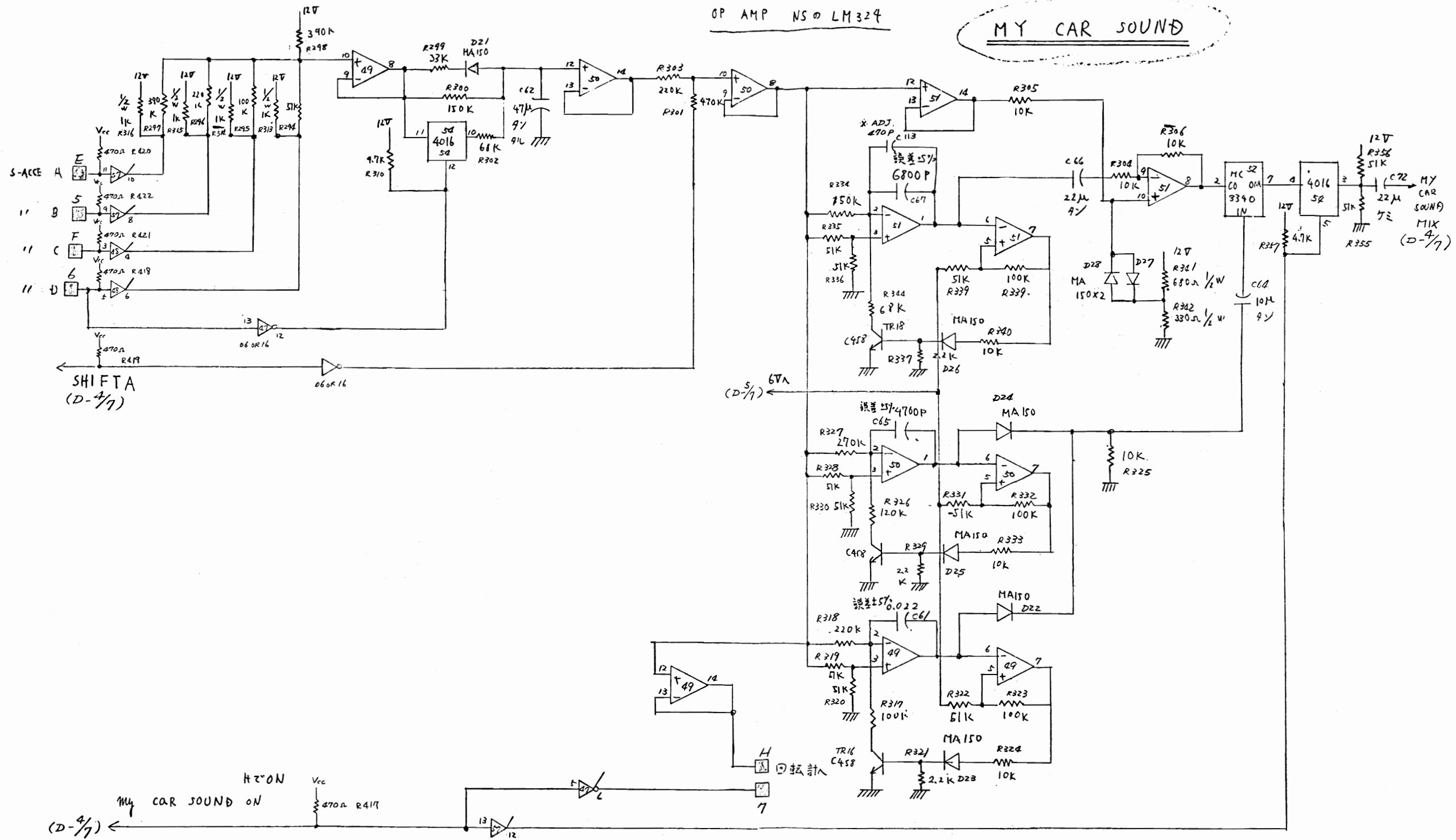


LM324

96598-P (D-1/7) OSCILLATOR




S MONACO GP



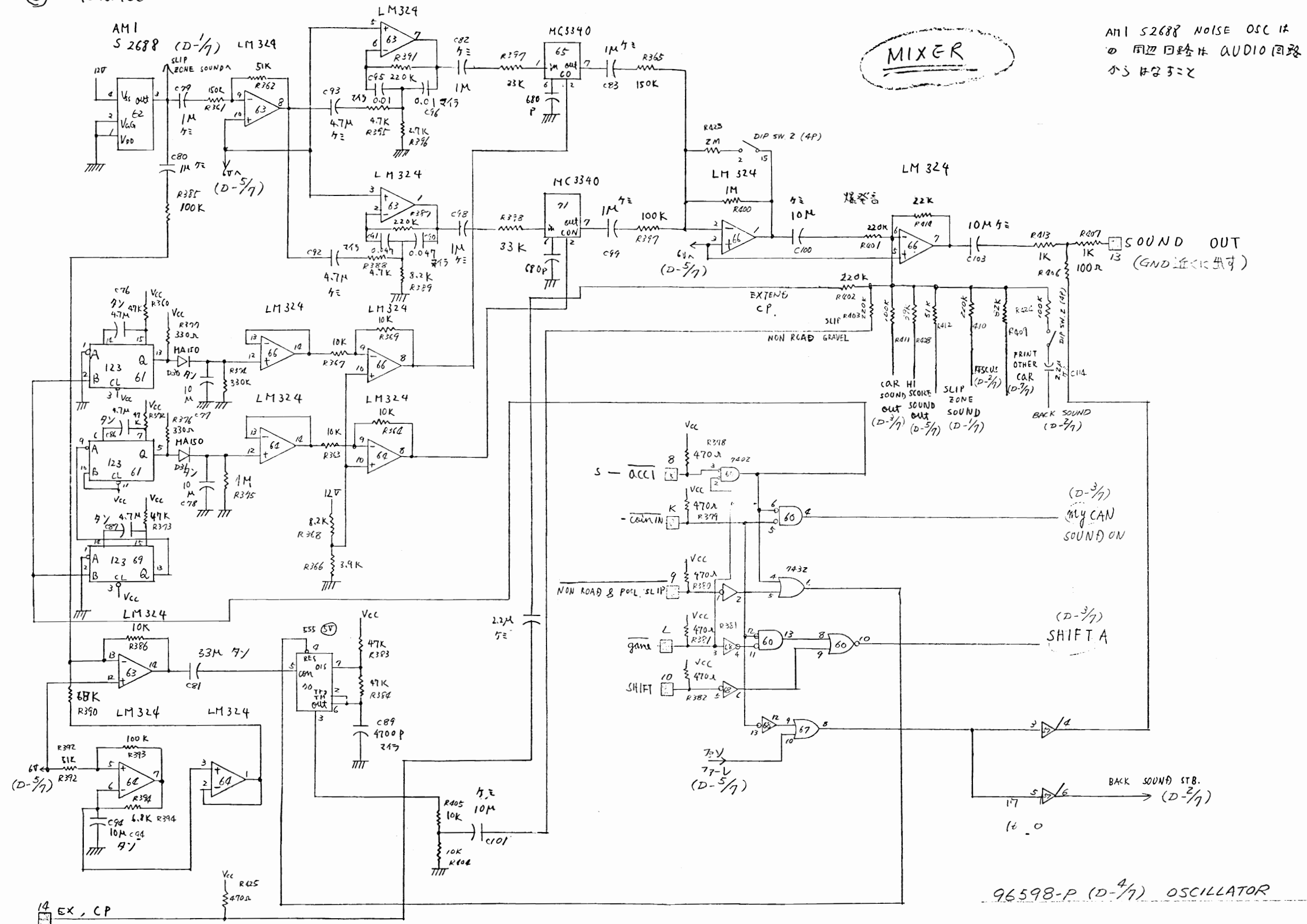
LM 324 x 3  
04 x 1  
07 x 2  
3340 x 1

96598-P (D-<sup>3</sup>/7) OSCILLATOR

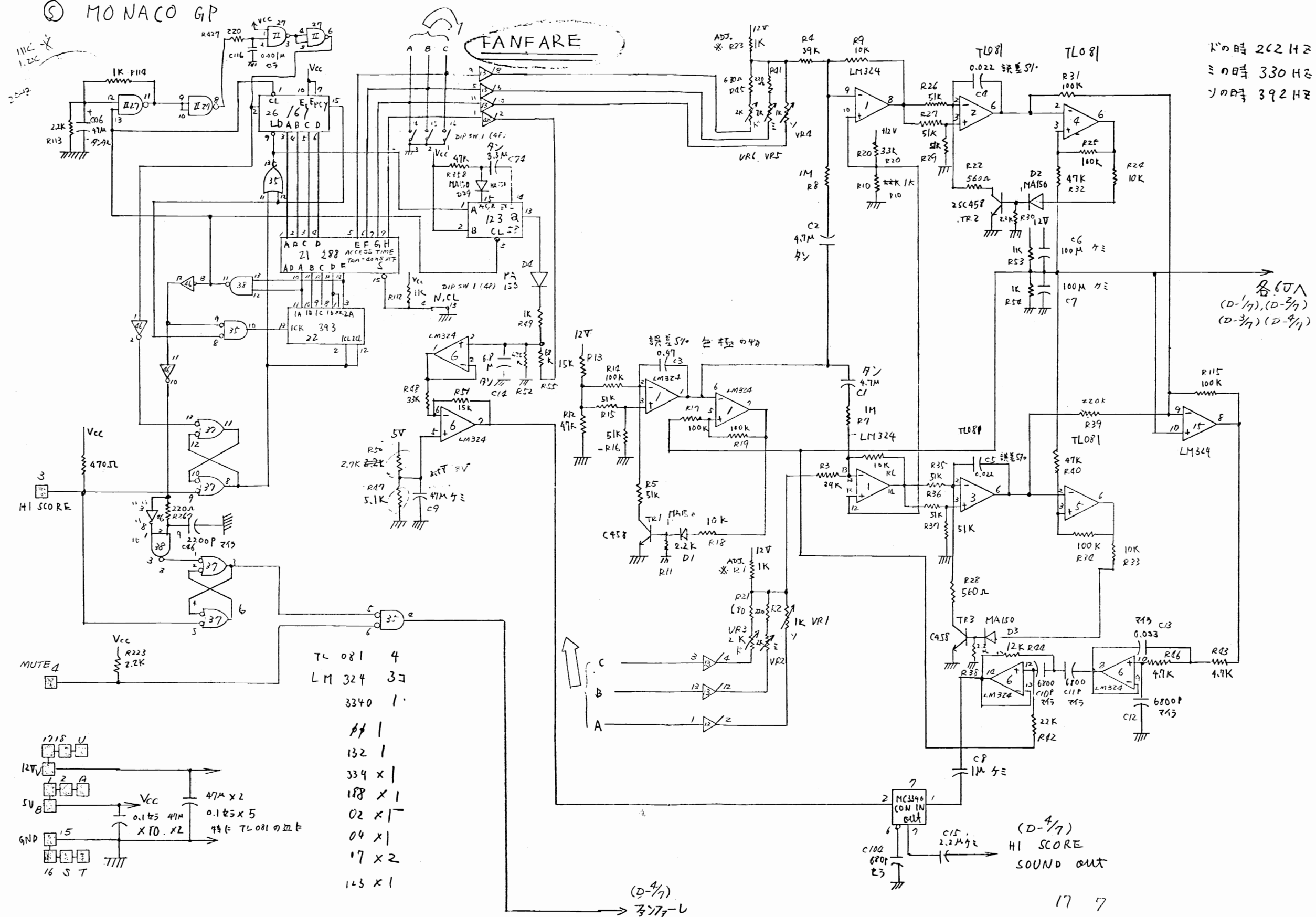
回転計 内部      メーター類のランプ  
は12V AC また DC



⑤ - MONACO GP

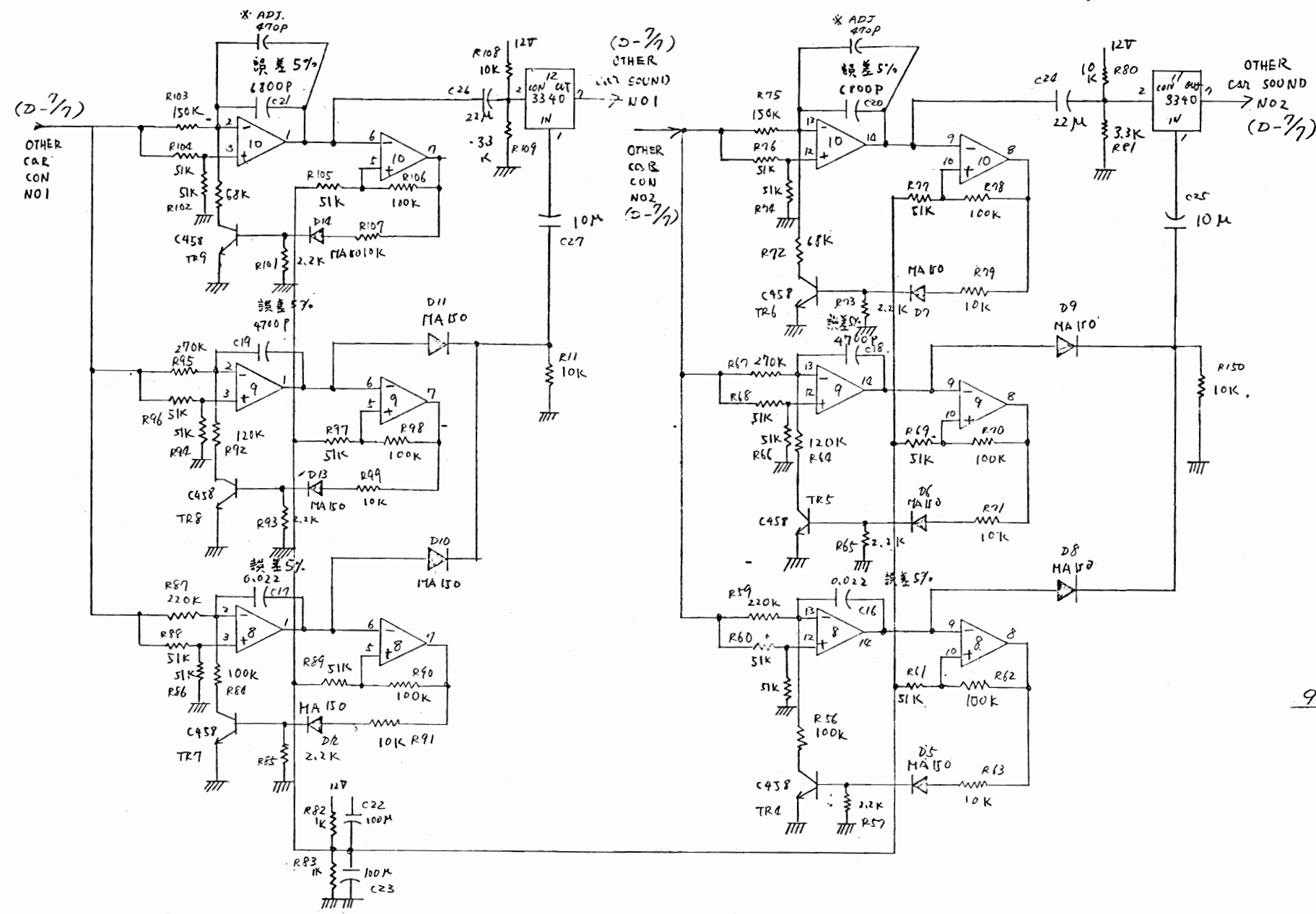




[illegible]

96598-P (D-<sup>5</sup>/7) OSCILLATOR

⑤ - MONACO GP



OTHER CAR SOUND

96598-P (D-6/7) OSCILLATOR

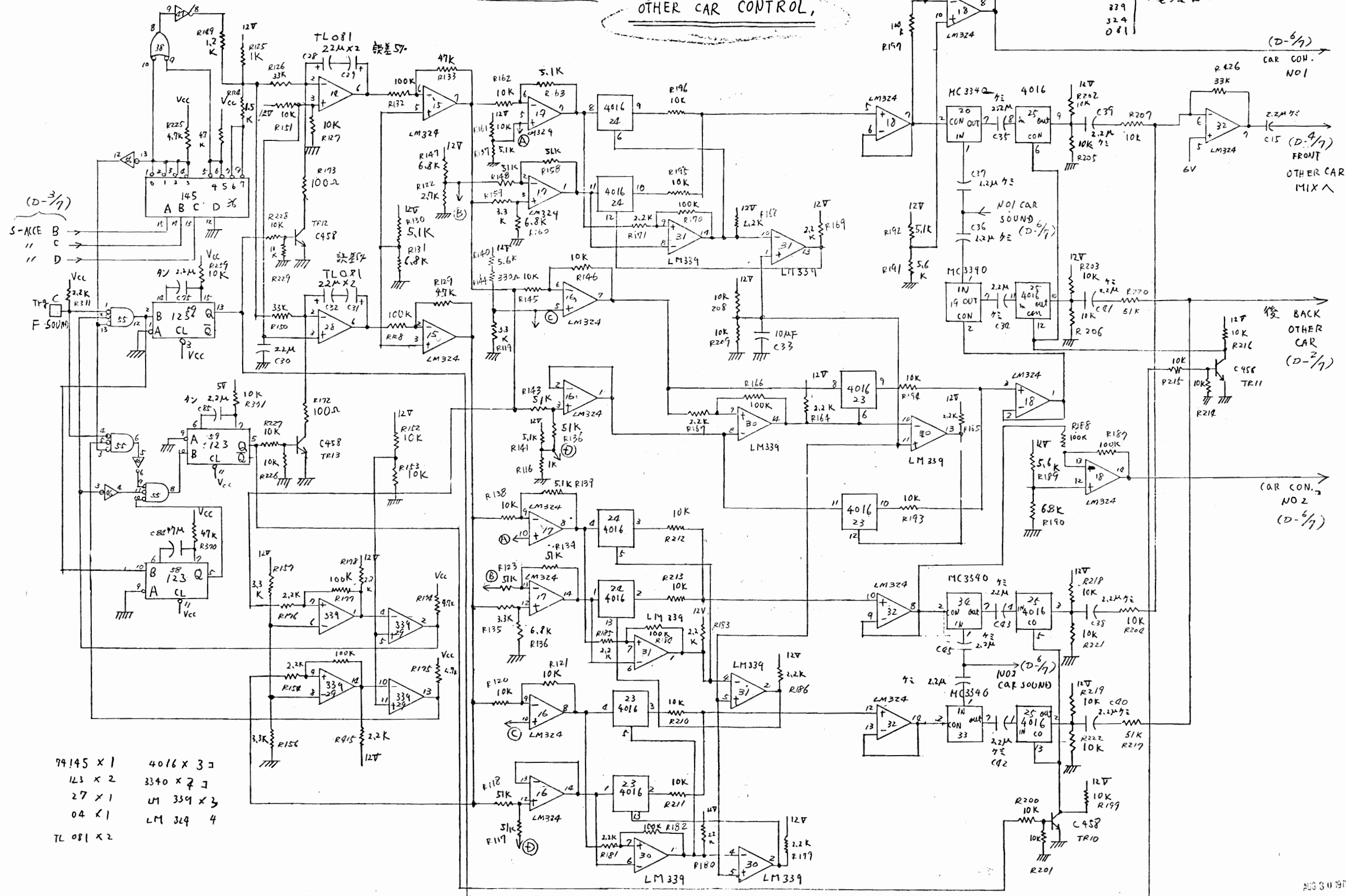
LM 324 X3  
MC 3340 X2

⑤ MONACO GP

96598-P (D-7/7) OSCILLATOR

OTHER CAR CONTROL,

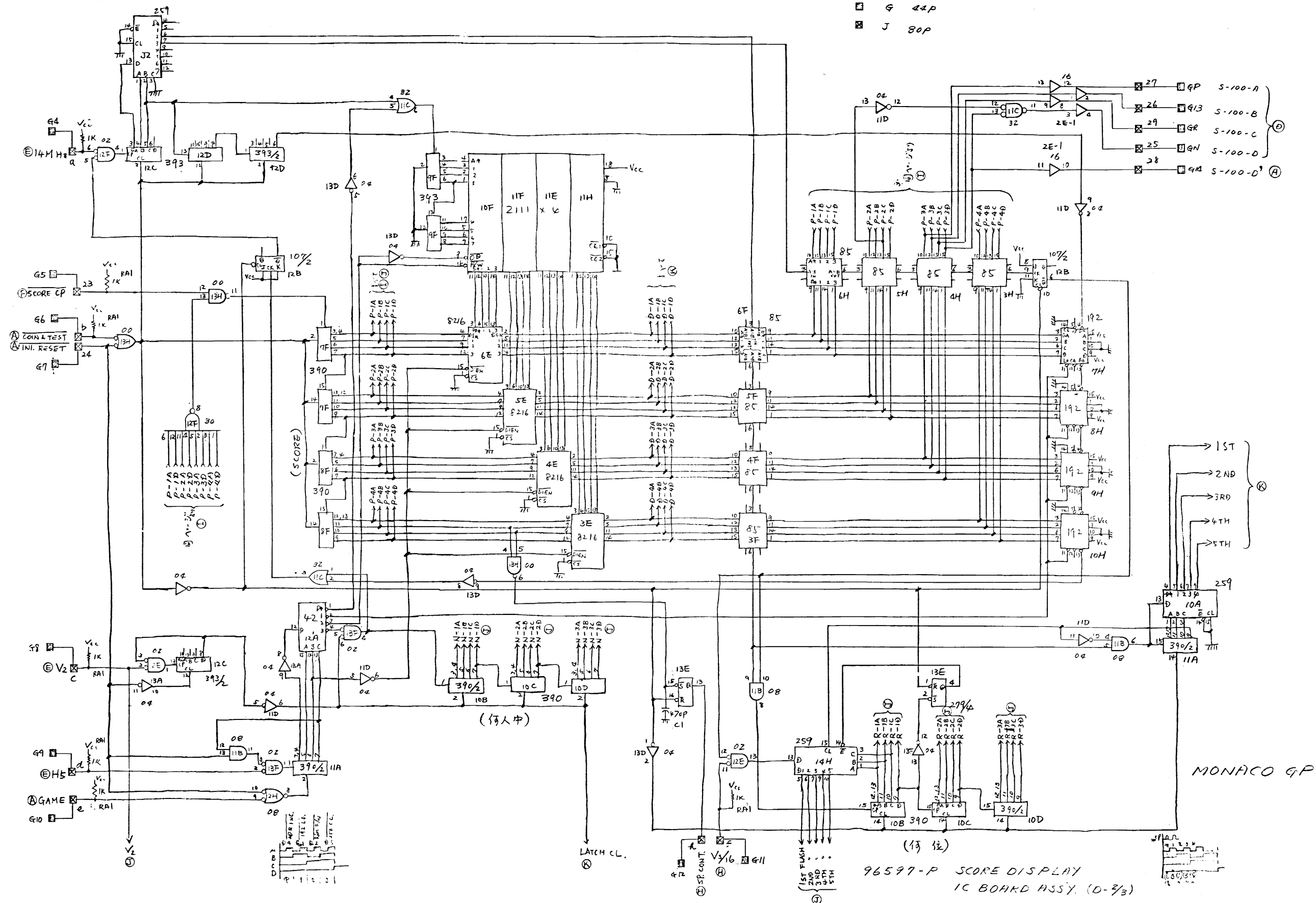
4016  
3340  
339  
324  
081  
電源 12V



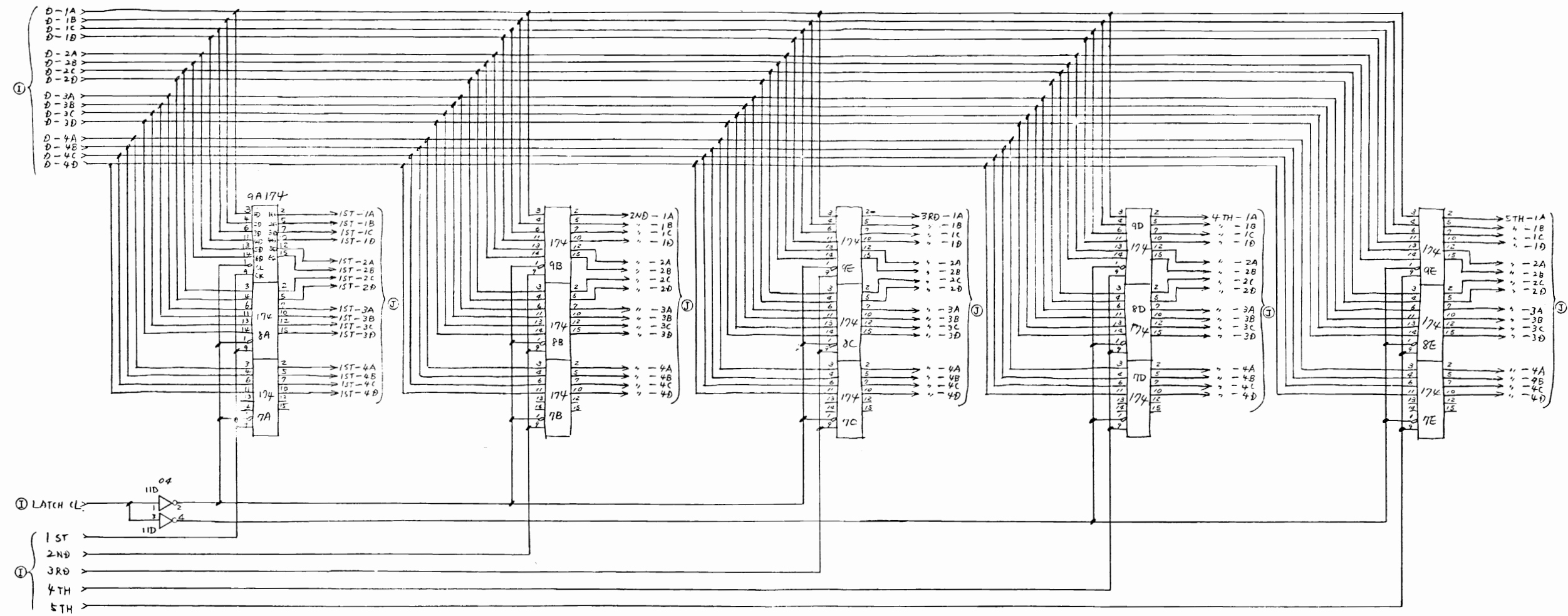
74145 x 1  
123 x 2  
27 x 1  
04 x 1  
TL 081 x 2  
4016 x 3  
3340 x 7  
LM 339 x 3  
LM 324 x 4

CONNECTOR 記号及 P 数

☒ G 44p  
☒ J 80p

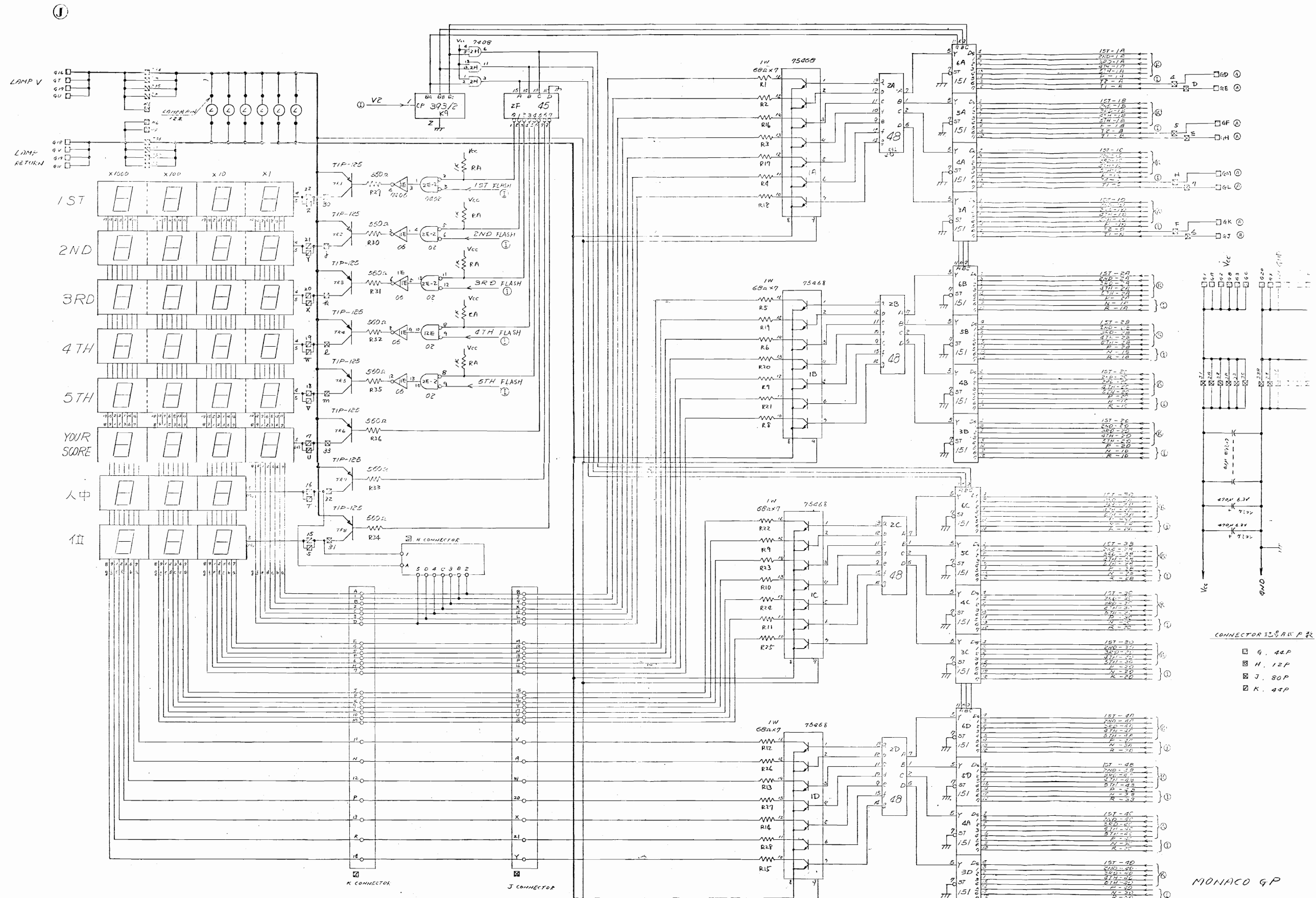


K



96597-P SCORE DISPLAY IC BOARD ASS'Y. (D-3/3)

MONACO GP



MO-4202  
SCORE DISPLAY LED BOARD ASS'Y.

96620-P  
SCORE DISPLAY  
MOTHER BOARD ASS'Y.

96597-P SCORE DISPLAY IC BOARD ASS'Y. (D-1/3)

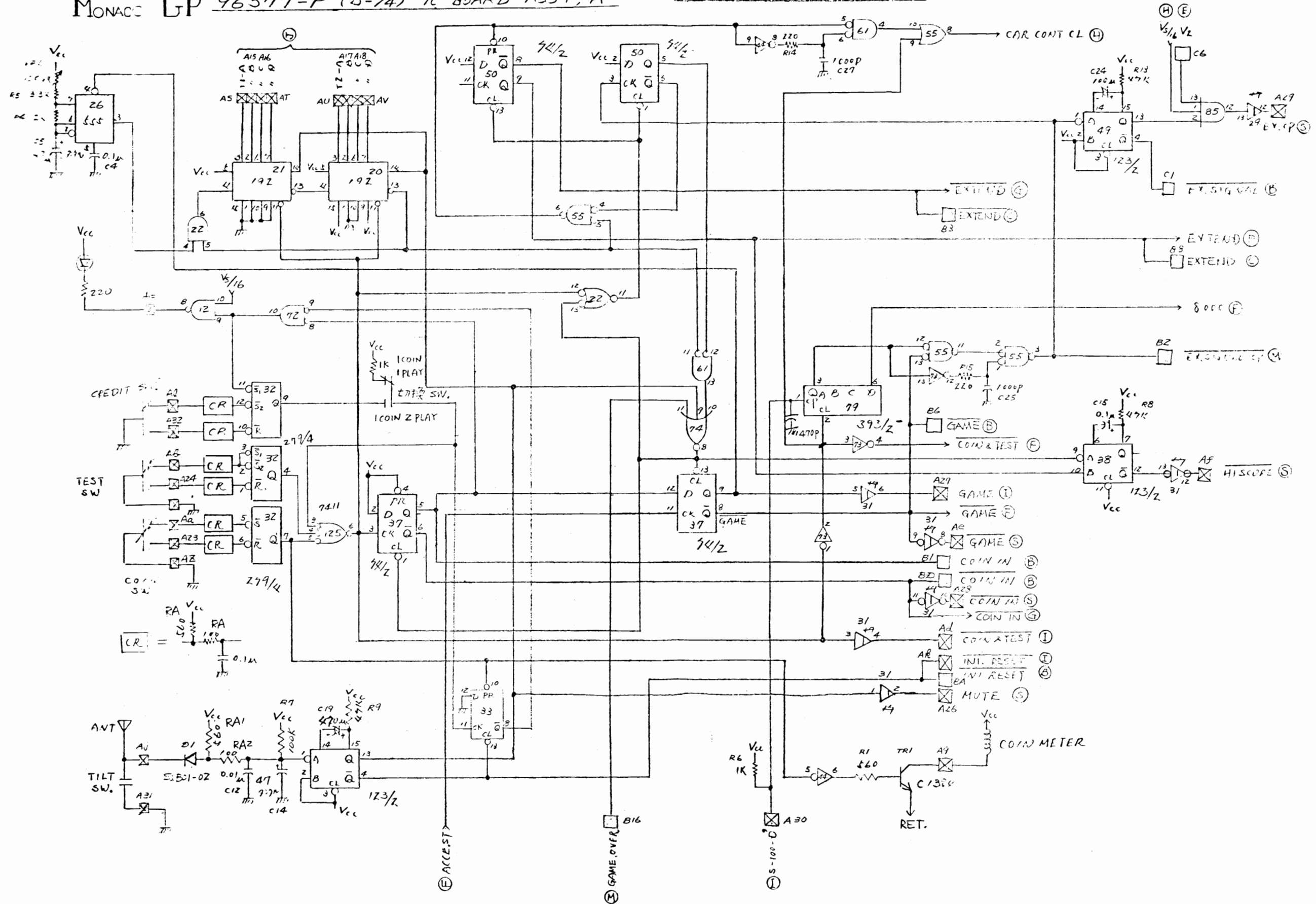
- CONNECTOR 30-PIN P.F.
- G. 44P
  - H. 12P
  - J. 80P
  - K. 45P

MONACO GP



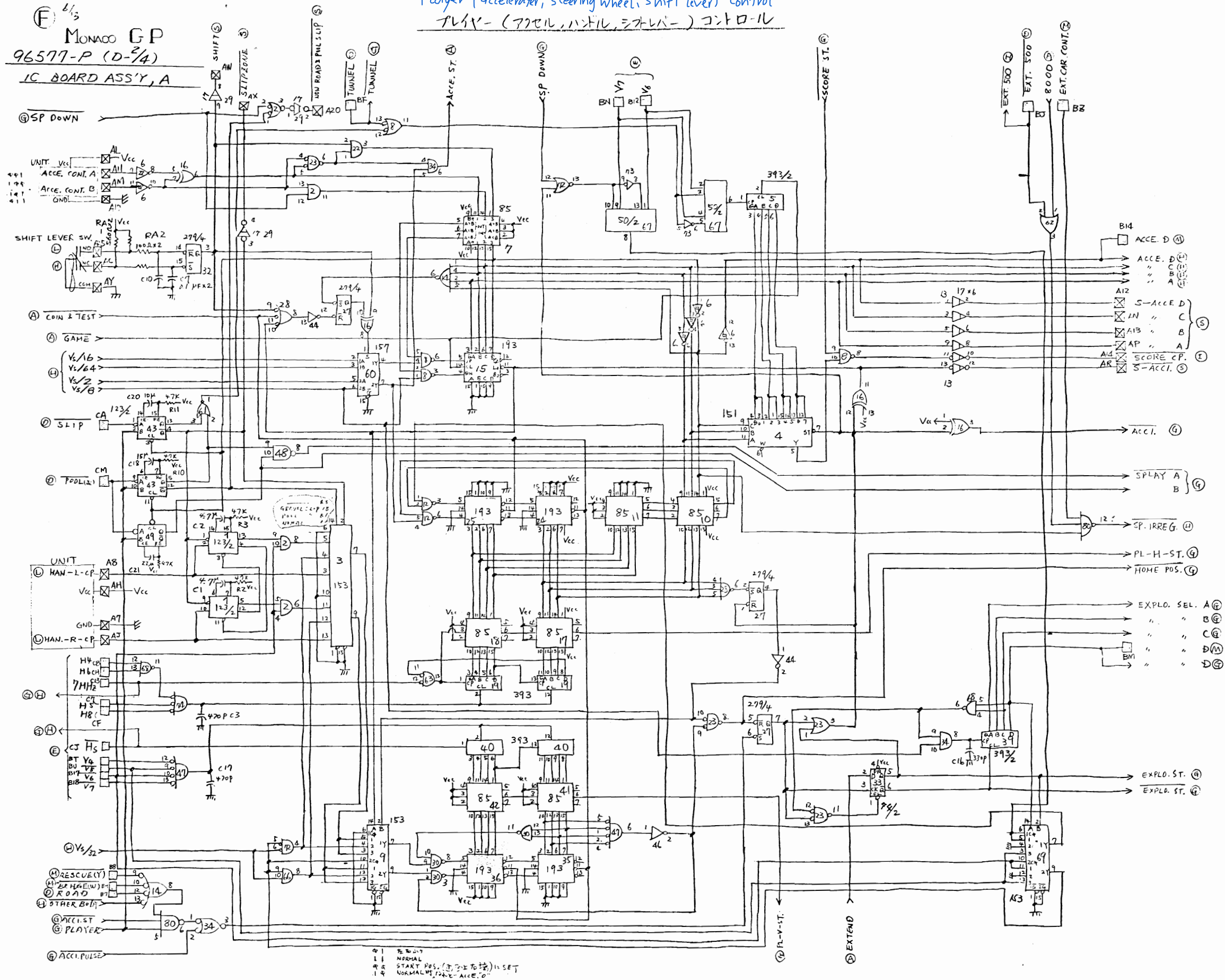
スグ-上, スグ-コントロール

MONACO GP 96577-P (D-1/4) IC BOARD ASSY, A



⑦ <sup>6 1/2</sup>  
MONACO GP  
96577-P (D-2/4)  
IC BOARD ASS'Y, A

Player (accelerator, steering wheel, shift lever) control  
プレイヤー (アクセル, ハンドル, シフトレバー) コントロール

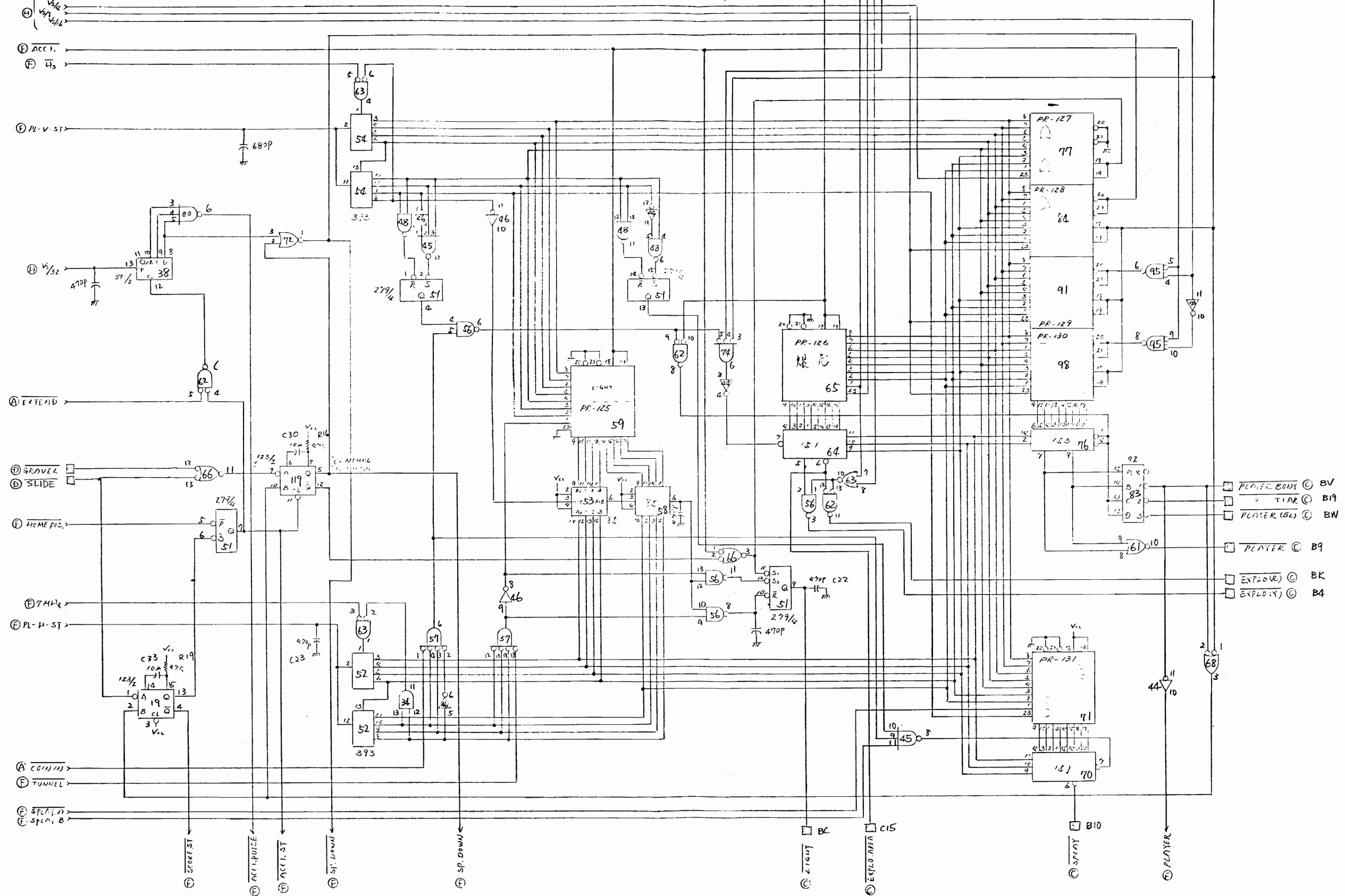




⑥ 1/13

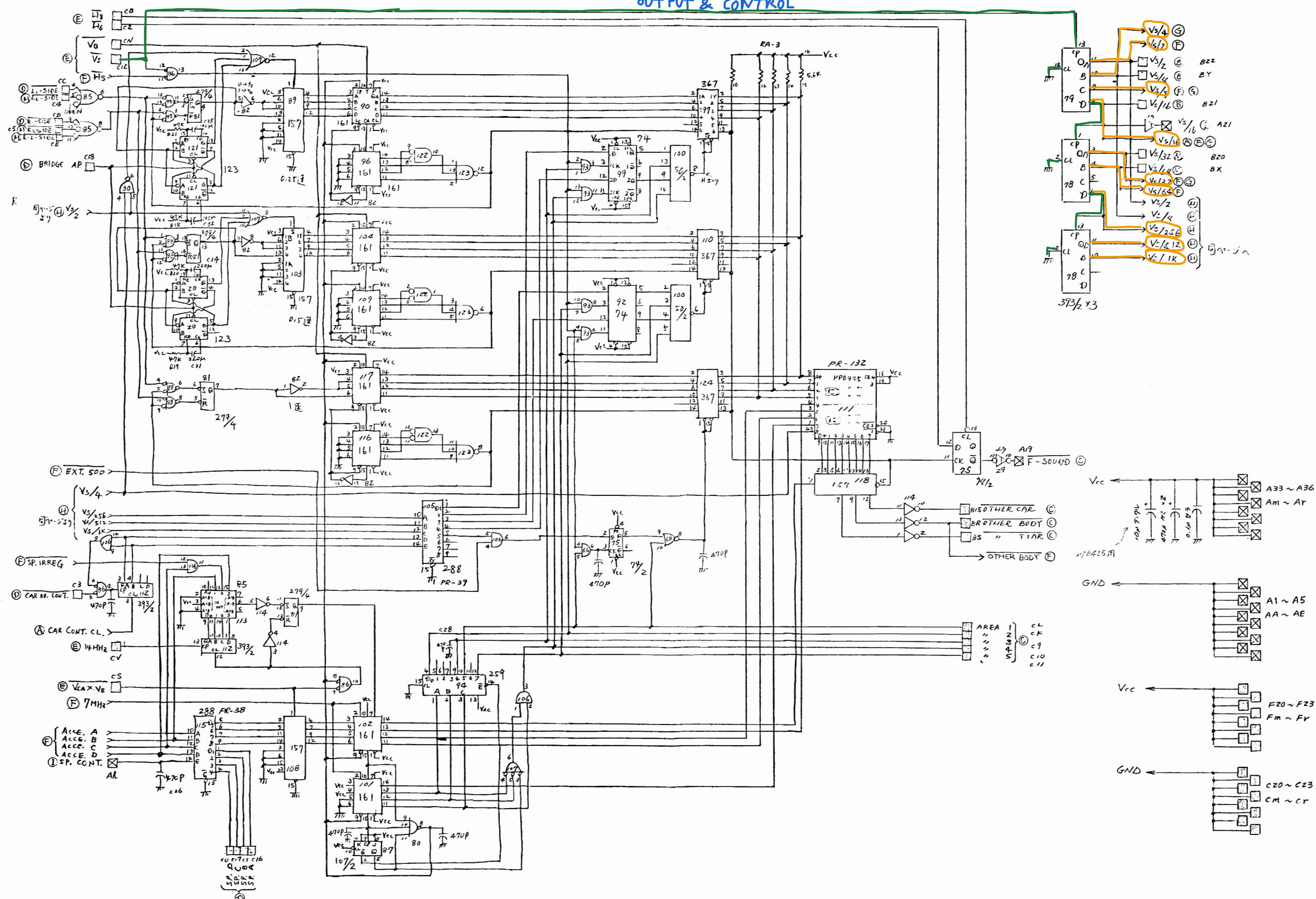
MONACO GP 96577-P (Δ-3/4) IC BOARD ASSY, A

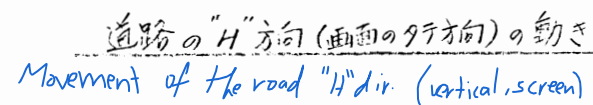
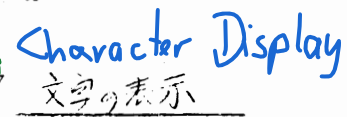
マイカ、ヘッドライト、爆発、水たまりスリッパ絵出し  
Output for Player Car, Headlights, Explosion, Puddle Slip



H 13  
MONADO GP 96577-P (D-4A) IC BOARD ASSY, A

OTHER CAR 9 信号とコントロール  
OUTPUT & CONTROL



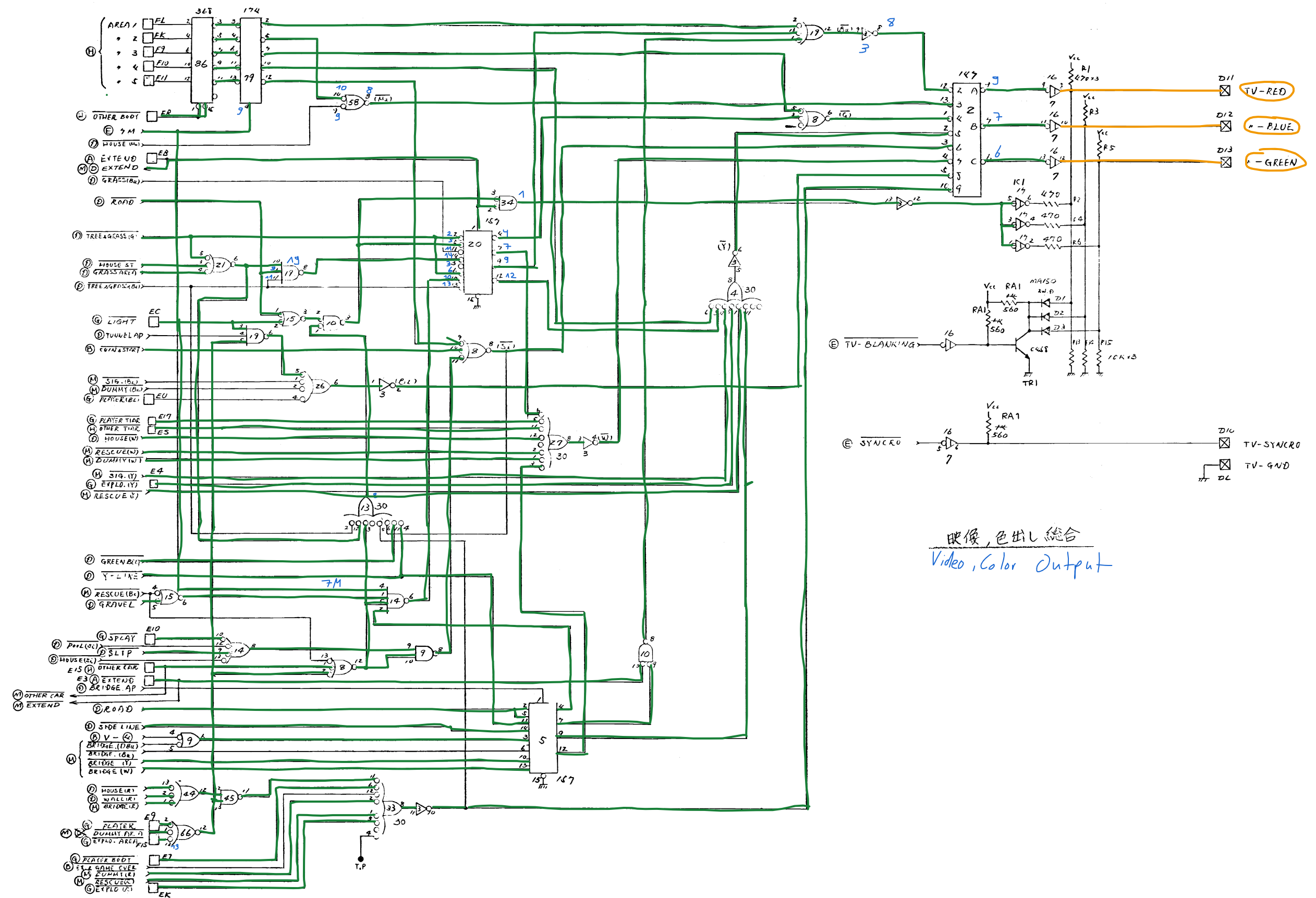


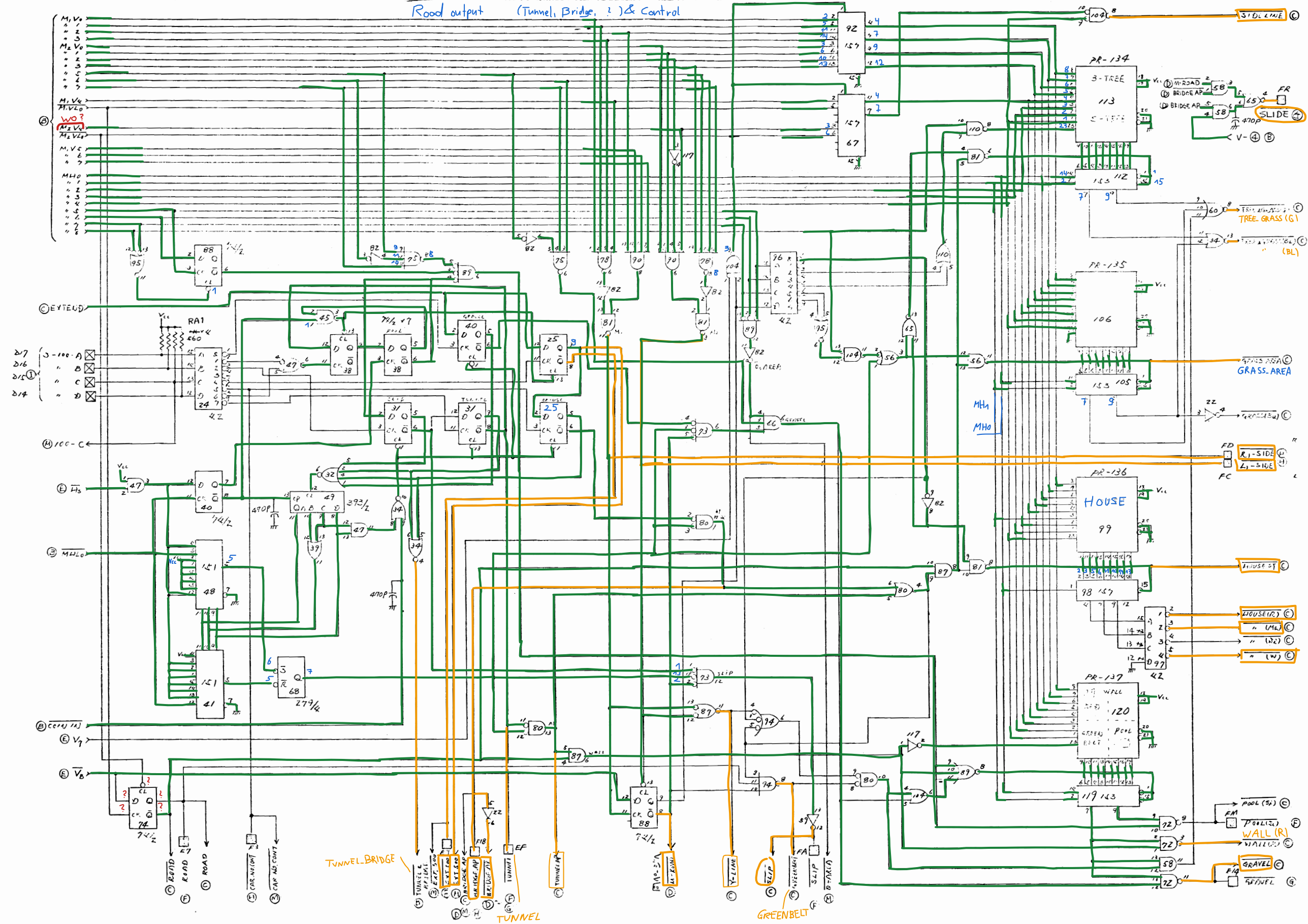
右側  
Right side

左側  
left



① 3/4  
MONACO GP 96578-P (D-1/5) IC BOARD ASSY, B

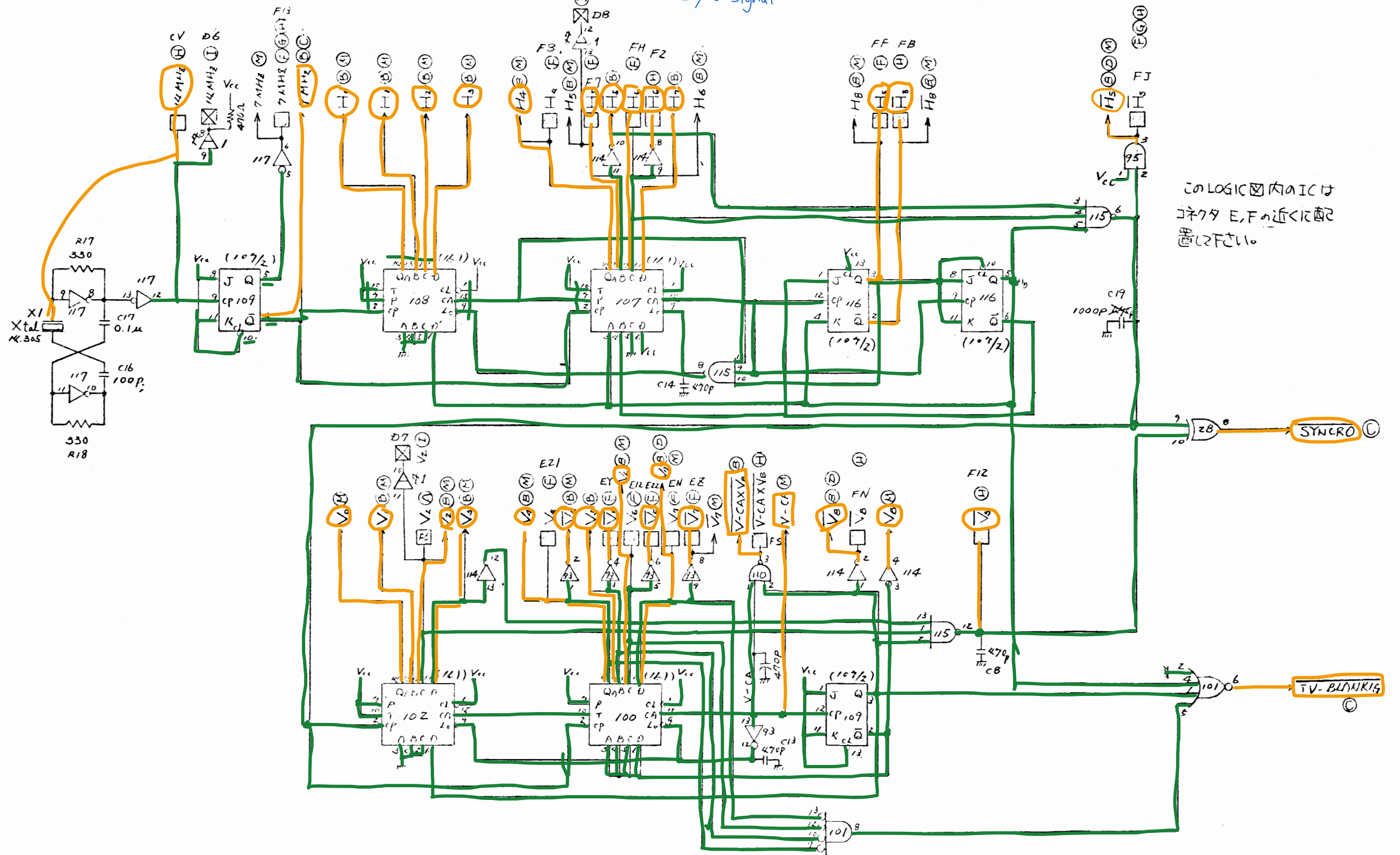




⑤ 1/3

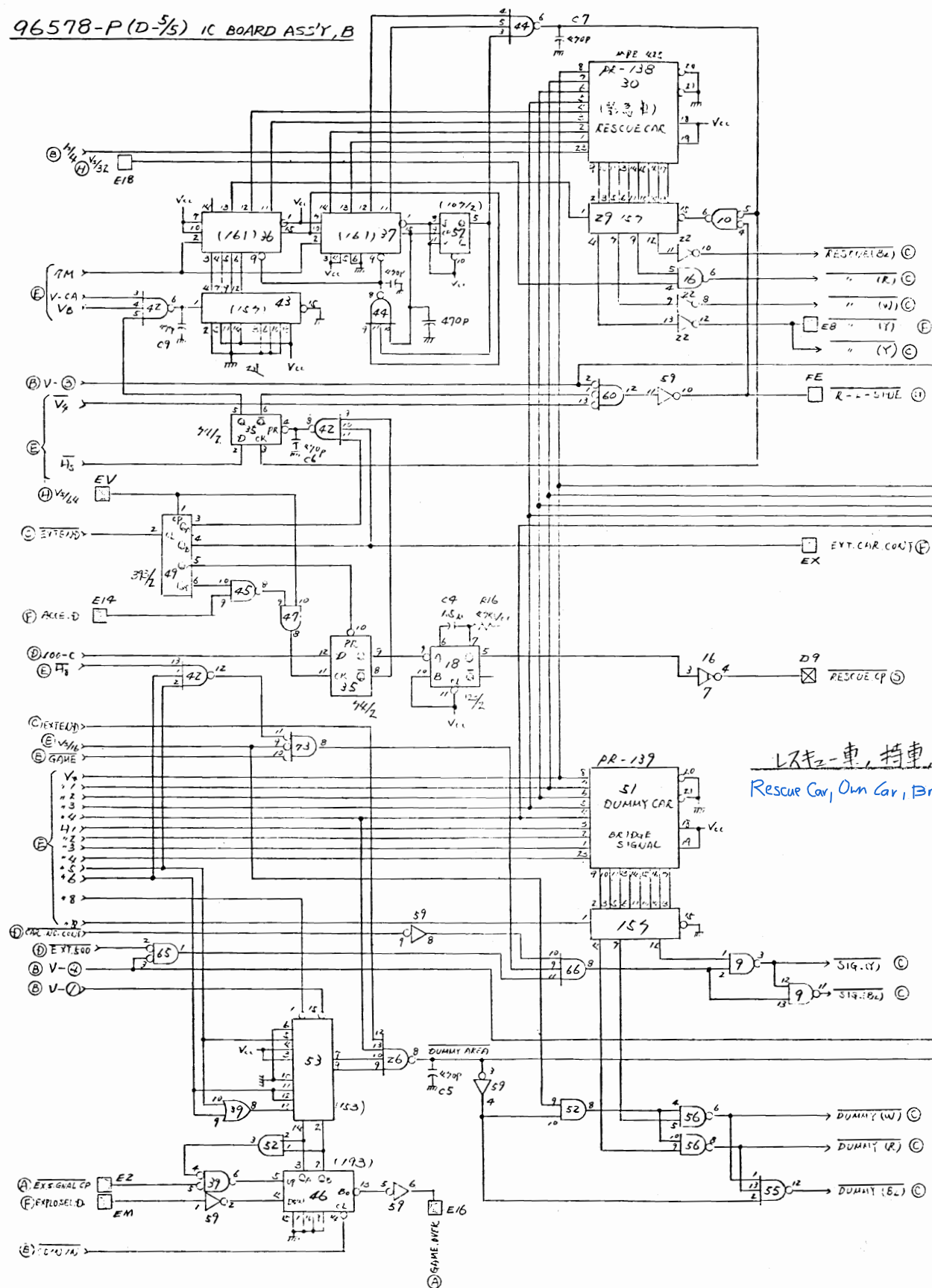
MONACO GP 96578-P (D-4/5) IC BOARD ASS'Y, B

同期信号  
Sync Signal

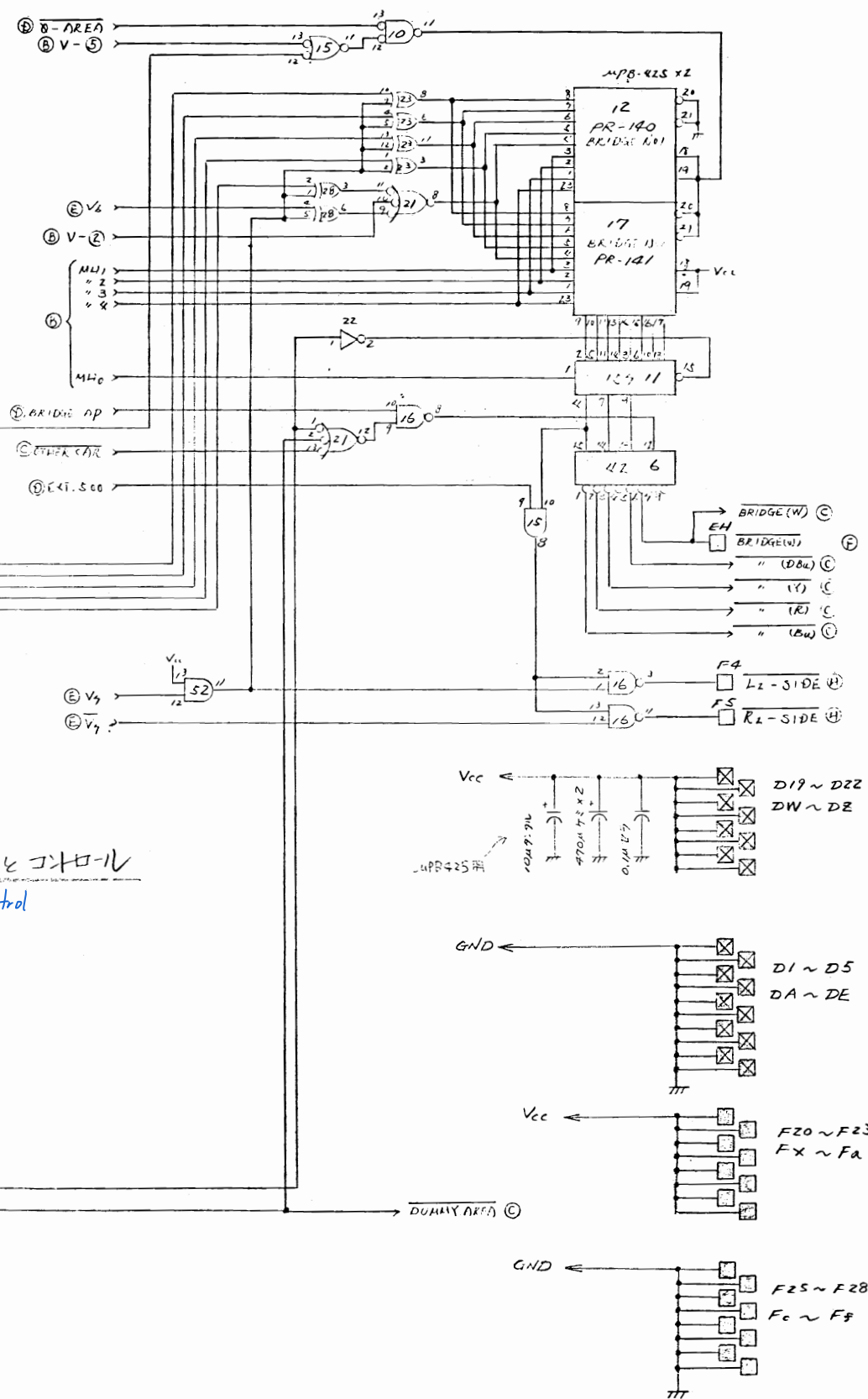




96578-P(D-5/5) IC BOARD ASS'Y, B



レスキュー車、持車、橋の給出しとコントロール  
Rescue Car, Own Car, Bridge End & Control



⑤ 1/3

MONACO GP 96578-P (D-4/5) IC BOARD ASS'Y, B

同期信号

