
AKAI

MODEL GX-9

SCHEMATIC DIAGRAM AND PC BOARDS

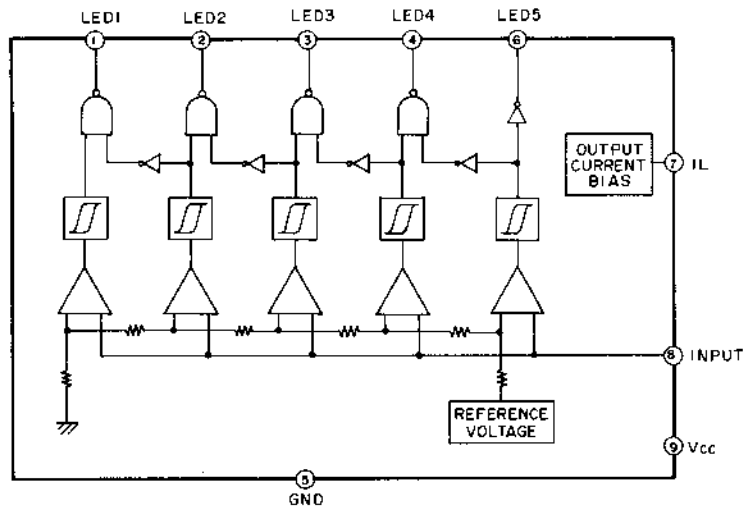
TABLE OF CONTENTS

| | |
|--|----|
| 1. SCHEMATIC DIAGRAM OF ICs | 2 |
| 2. MI-CON OUTPUT TIMING CHART (1)..... | 8 |
| 3. MI-CON OUTPUT TIMING CHART (2)..... | 9 |
| 4. MI-CON OUTPUT TIMING CHART (3)..... | 10 |
| 5. MI-CON OUTPUT TIMING CHART (4)..... | 11 |
| 6. CONNECTION DIAGRAM | 12 |
| 7. METER/OPERATION PC BOARD, POWER SWITCH PC BOARD, REMOTE CONTROL PC BOARD, MOTOR PC BOARD | 13 |
| 8. PRE AMP/POWER SCHEMATIC DIAGRAM | 14 |
| 9. PRE AMP/POWER PC BOARD, HEAD PHONE PC BOARD | 15 |
| 10. SYSCON/TUNING SCHEMATIC DIAGRAM..... | 16 |
| 11. SYSCON/TUNING PC BOARD..... | 17 |

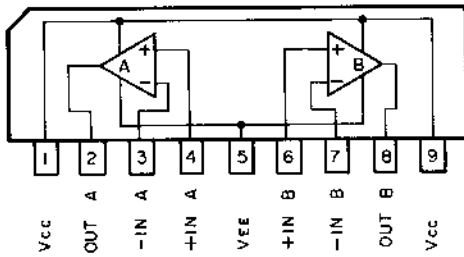
HD6805-X0A29 TERMINALS

| PIN | PORT | NAME | DESCRIPTION |
|-----|--------------------------|----------------|---|
| 1 | VSS | | GND |
| 2 | $\overline{\text{RES}}$ | | RESET input |
| 3 | $\overline{\text{INT}}$ | | +5V |
| 4 | $\overline{\text{STEY}}$ | | +5V |
| 5 | X'TAL | | Oscillator for CLOCK |
| 6 | EXTAL | | |
| 7 | NUM | | GND |
| 8 | TIMER | | +5V |
| 9 | A7 | | Music interval detect input |
| 10 | A6 | | Not used |
| 11 | A5 | PLAY | PLAY mode |
| 12 | A4 | STOP | STOP mode |
| 13 | A3 | SEARCH | SEARCH mode |
| 14 | A2 | FAST | FAST mode |
| 15 | A1 | FIX | FIX (STOP) mode |
| 16 | A0 | EJECT | EJECT mode |
| | | | } Comparator reference voltage output for CAM MOTOR. |
| 17 | B7 | C-STOP | CAM MOTOR rotation finished signal input |
| 18 | B6 | REEL (R) | REEL MOTOR reverse rotation output |
| 19 | B5 | REEL (F) | REEL MOTOR forward rotation output |
| 20 | B4 | VOLTAGE SELECT | Voltage select output for REEL MOTOR |
| 21 | B3 | SOURCE M | Source mute output (L: mute on, H: mute off) |
| 22 | B2 | OSC | Bias oscillator control output (L: oscillation, H: no oscillation) |
| 23 | B1 | REC MUTE | Mute release output in REC PLAY mode (L: mute on, H: mute off) |
| 24 | B0 | PB MUTE | Mute release output in PB mode (L: mute on, H: mute off) |
| 25 | C7 | | Not used (+5V) |
| 26 | C6 | LRSS | Left (supply) Reel Slit Sensor input |
| 27 | C5 | RRSS | Right (take up) Reel Slit Sensor input |
| 28 | C4 | DIGIT 4 | DIGIT output for Counter, Indicator STROBE output for input KEY select |
| 29 | C3 | DIGIT 3 | |
| 30 | C2 | DIGIT 2 | |
| 31 | C1 | DIGIT 1 | |
| 32 | C0 | DIGIT 0 | |
| 33 | VCC | | POWER SUPPLY (+5V) |

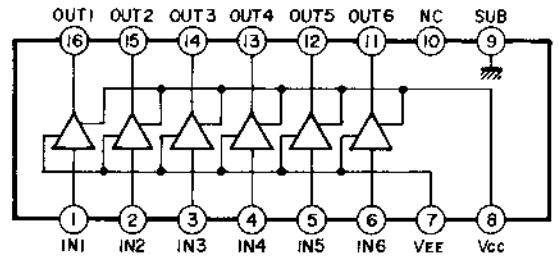
AN6876



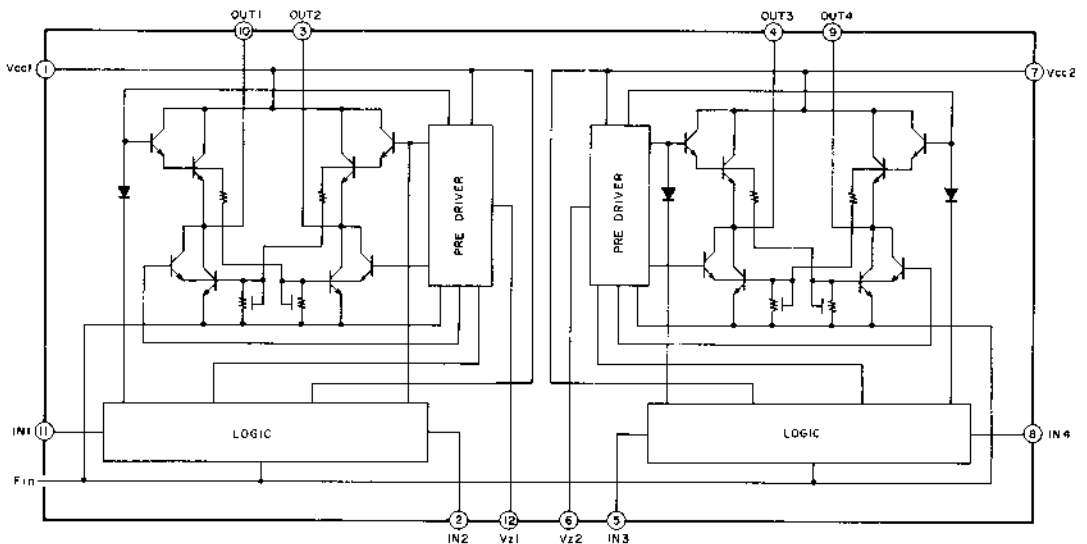
LA6458S/NJM4558S



LB1294

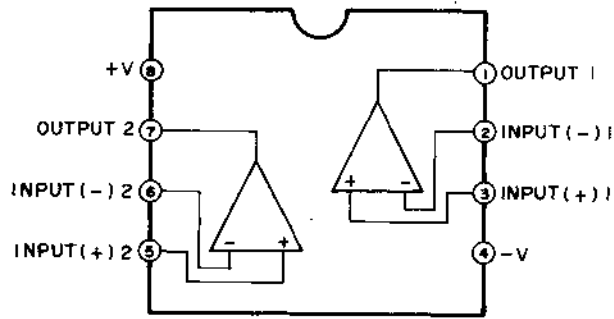


LB1649

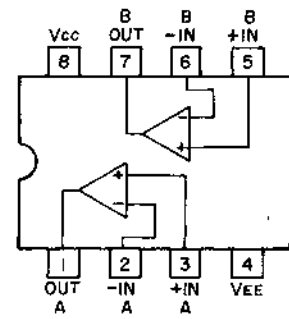


| PIN | PORT | NAME | DESCRIPTION |
|-----|------|----------------|--|
| 34 | D1 | | } Input for KEY |
| 35 | D2 | | |
| 36 | D3 | | |
| 37 | D4 | | |
| 38 | D5 | | |
| 39 | D6 | | |
| 40 | D7 | | |
| 41 | E0 | a | } Counter Segment drive Indicator drive |
| 42 | E1 | b | |
| 43 | E2 | c | |
| 44 | E3 | d | |
| 45 | E4 | e | |
| 46 | E5 | f | |
| 47 | E6 | g | |
| 48 | E7 | h | Min Sec drive |
| 49 | F0 | LEVEL DATA (1) | Control output for REC level |
| 50 | F1 | LEVEL DATA (2) | Reference value: 4 |
| 51 | F2 | LEVEL DATA (3) | Minimum 1 1 1 7 Maximum 0 0 0 0 |
| 52 | F3 | EQ DATA (1) | Control output for REC EQ |
| 53 | F4 | EQ DATA (2) | Reference value: 4 |
| 54 | F5 | EQ DATA (3) | Minimum 1 1 1 7 Maximum 0 0 0 0 |
| 55 | F6 | | SAMPLE HOLD RESET output |
| 56 | F7 | | MOL MML display output |
| 57 | G7 | | Input for A/D Converter output (Detect H → L) |
| 58 | G6 | | Control output for AUTO FADER |
| 59 | G5 | | Not used |
| 60 | G4 | | 10 kHz (square wave) output for tuning |
| 61 | G3 | | 1 kHz (square wave) output for tuning |
| 62 | G2 | D/A DATA (3) | } D/A Converter control output for A/D Converter |
| 63 | G1 | D/A DATA (2) | |
| 64 | G0 | D/A DATA (1) | |

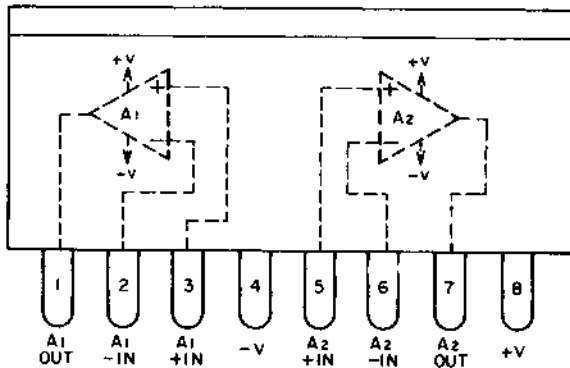
M5216P



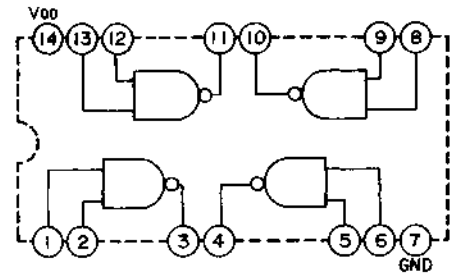
M5218P-21



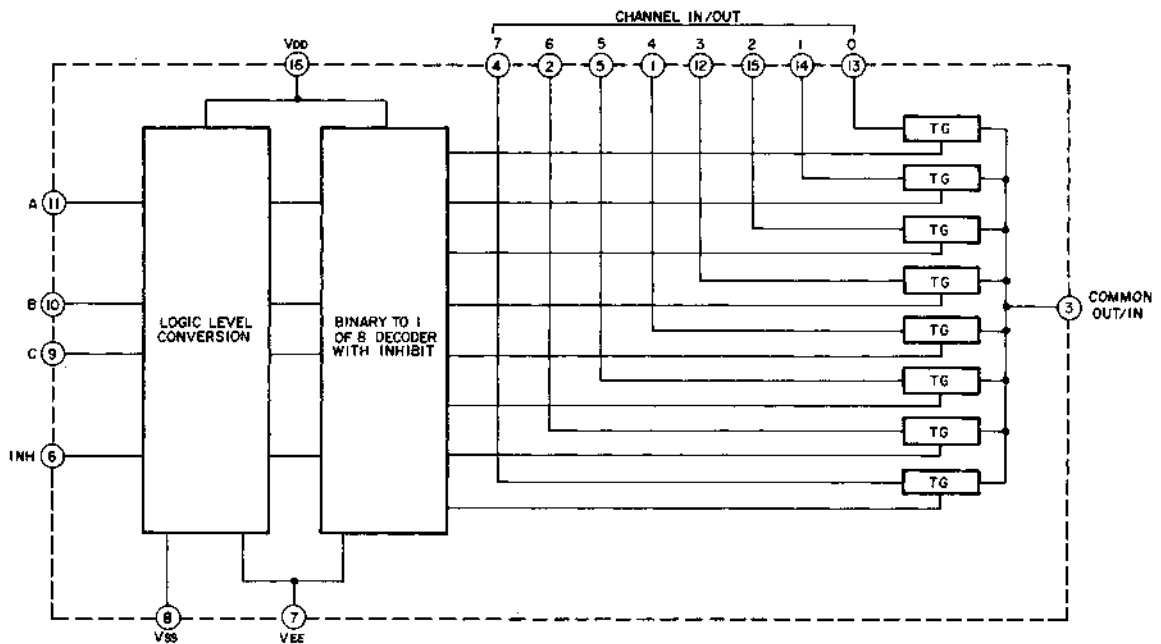
M5218LS



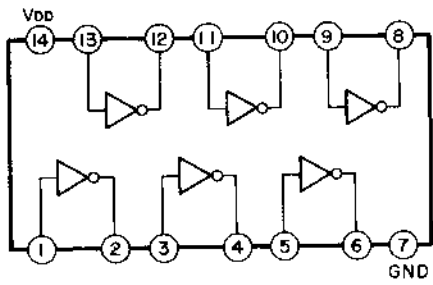
TC4011BP/LC4011B



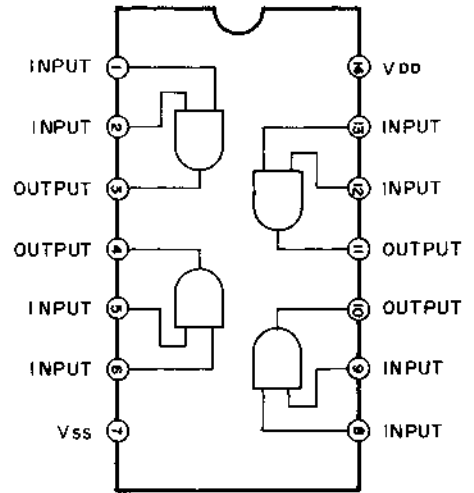
#PD4051



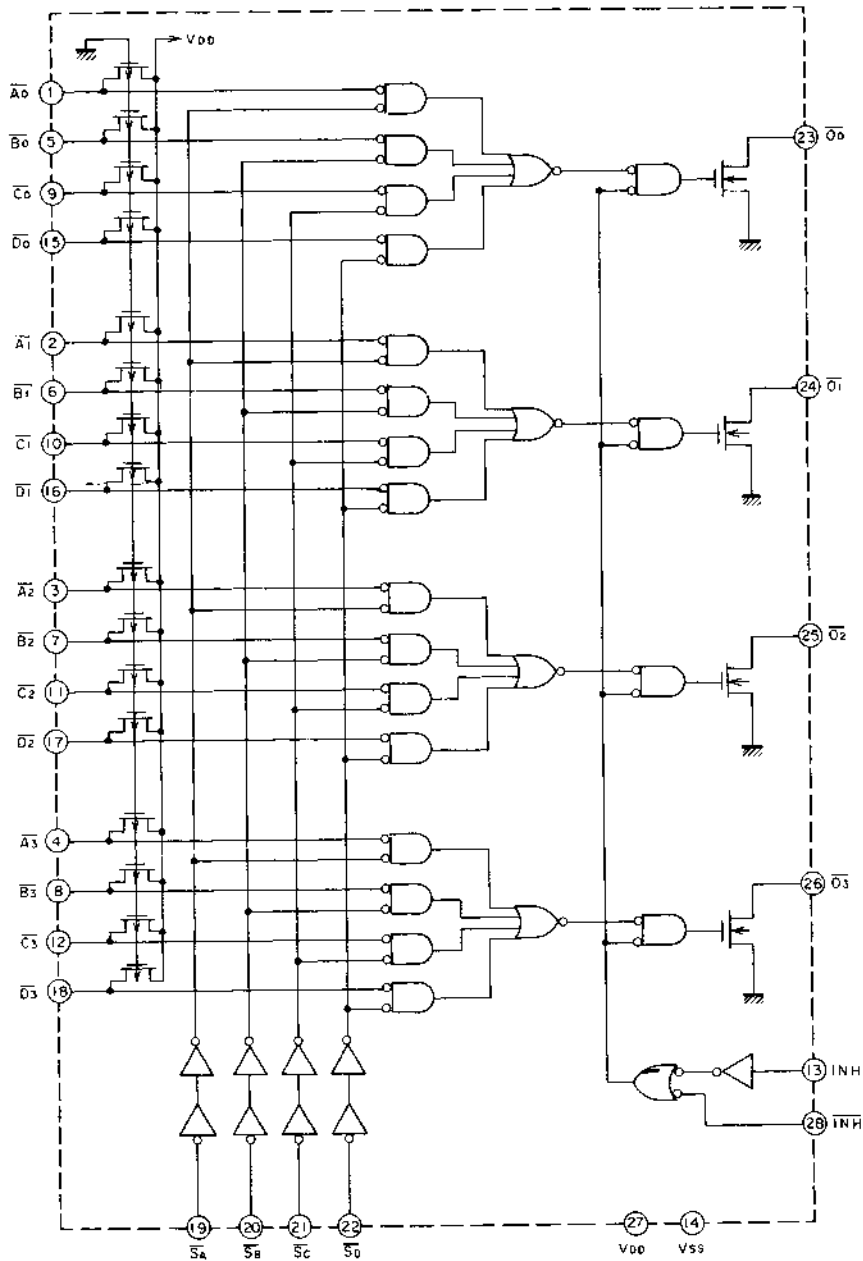
LC4069UB

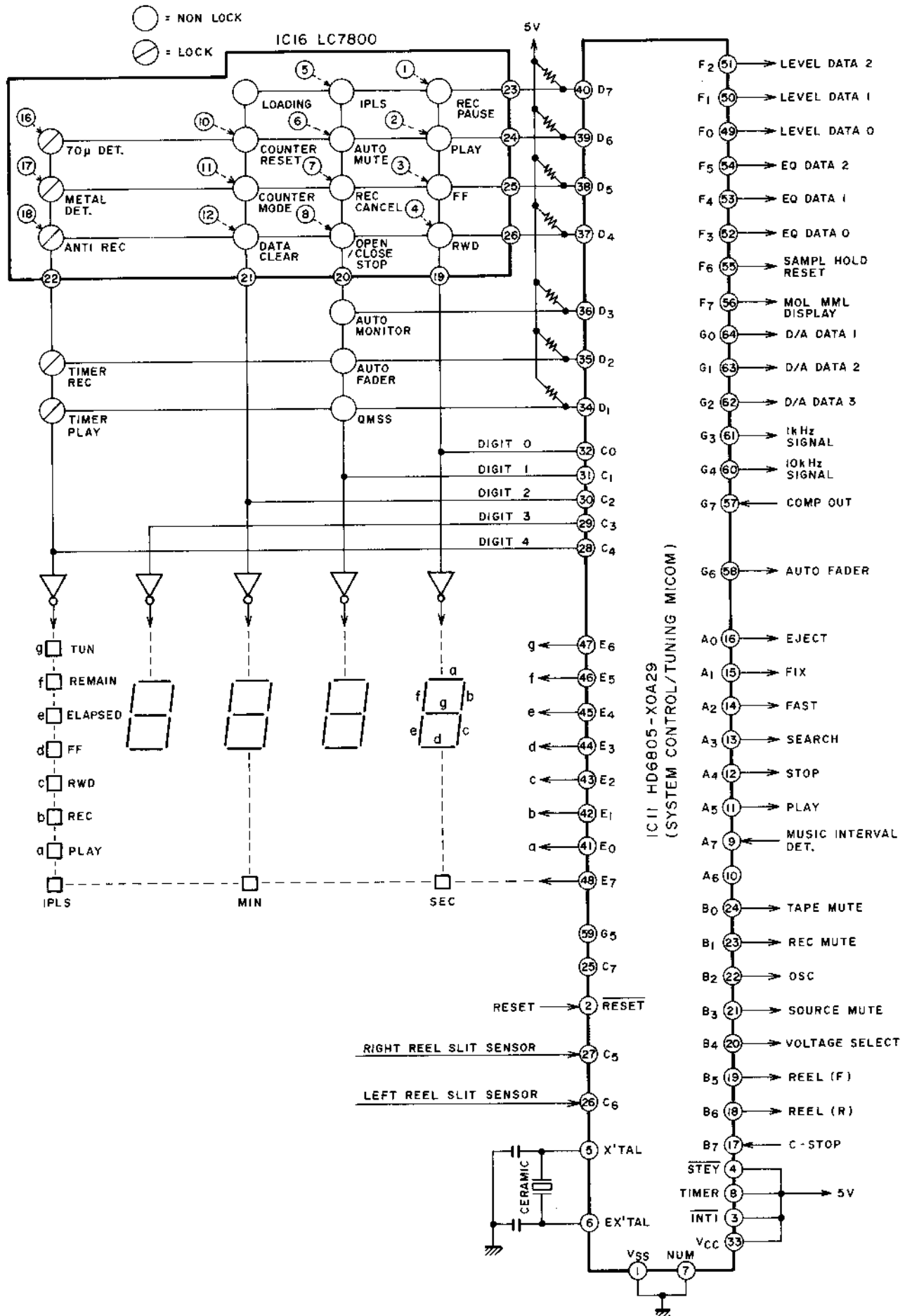


LC4081B



LC7800



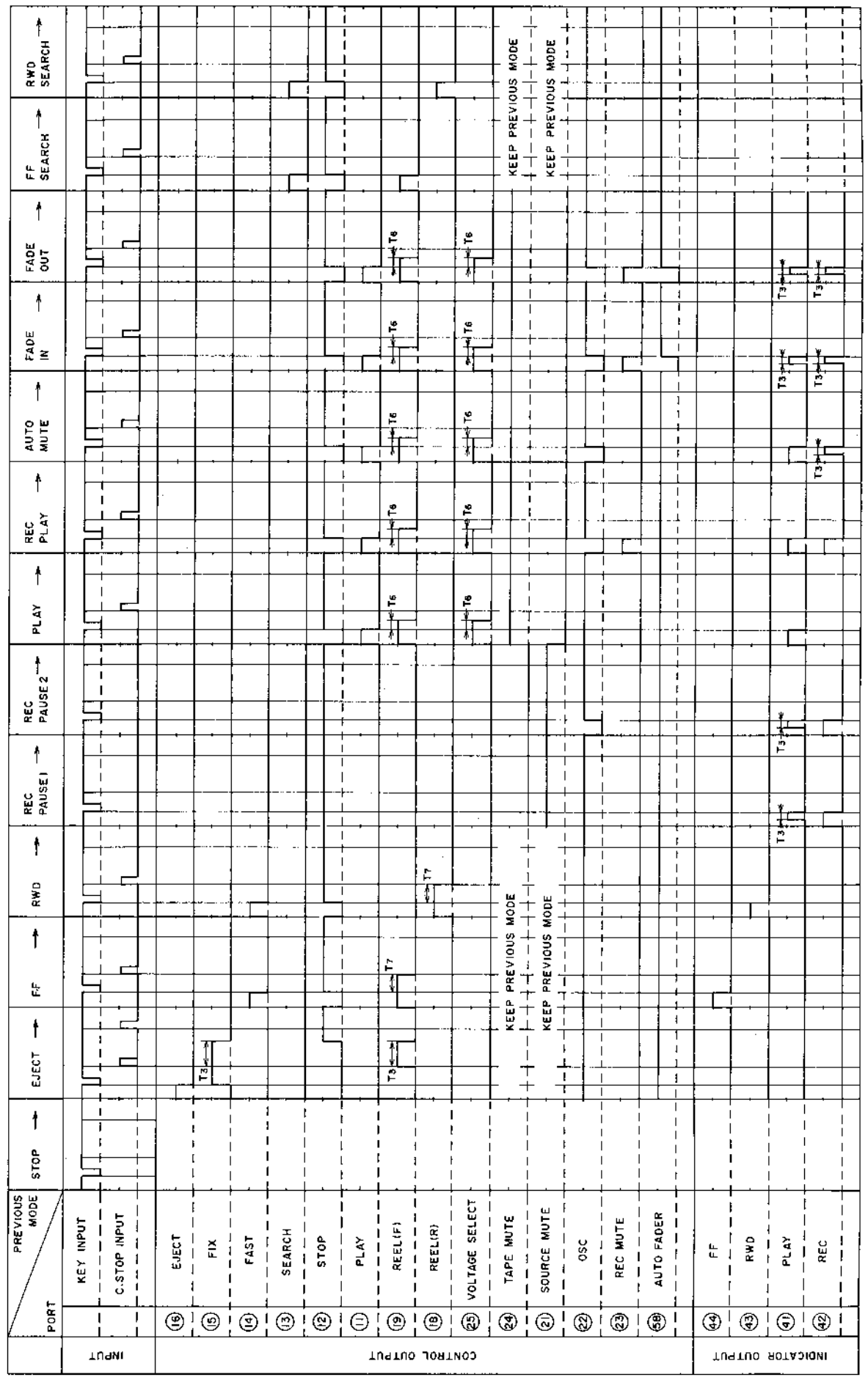


$T_0 = 1.0 \text{ sec}$ $T_4 = 0.15 \text{ sec}$
 $T_1 = 0.1 \text{ sec}$ $T_5 = 0.2 \text{ sec}$
 $T_2 = 0.05 \text{ sec}$ $T_6 = 0.03 \text{ sec}$
 $T_3 = 0.5 \text{ sec}$ $T_7 = 0.04 \text{ sec}$

REC PAUSE 1: STOP → REC PAUSE (OSC "OFF")
 REC PAUSE 2: REC PLAY → REC PAUSE (OSC "ON")

PREVIOUS MODE → STOP

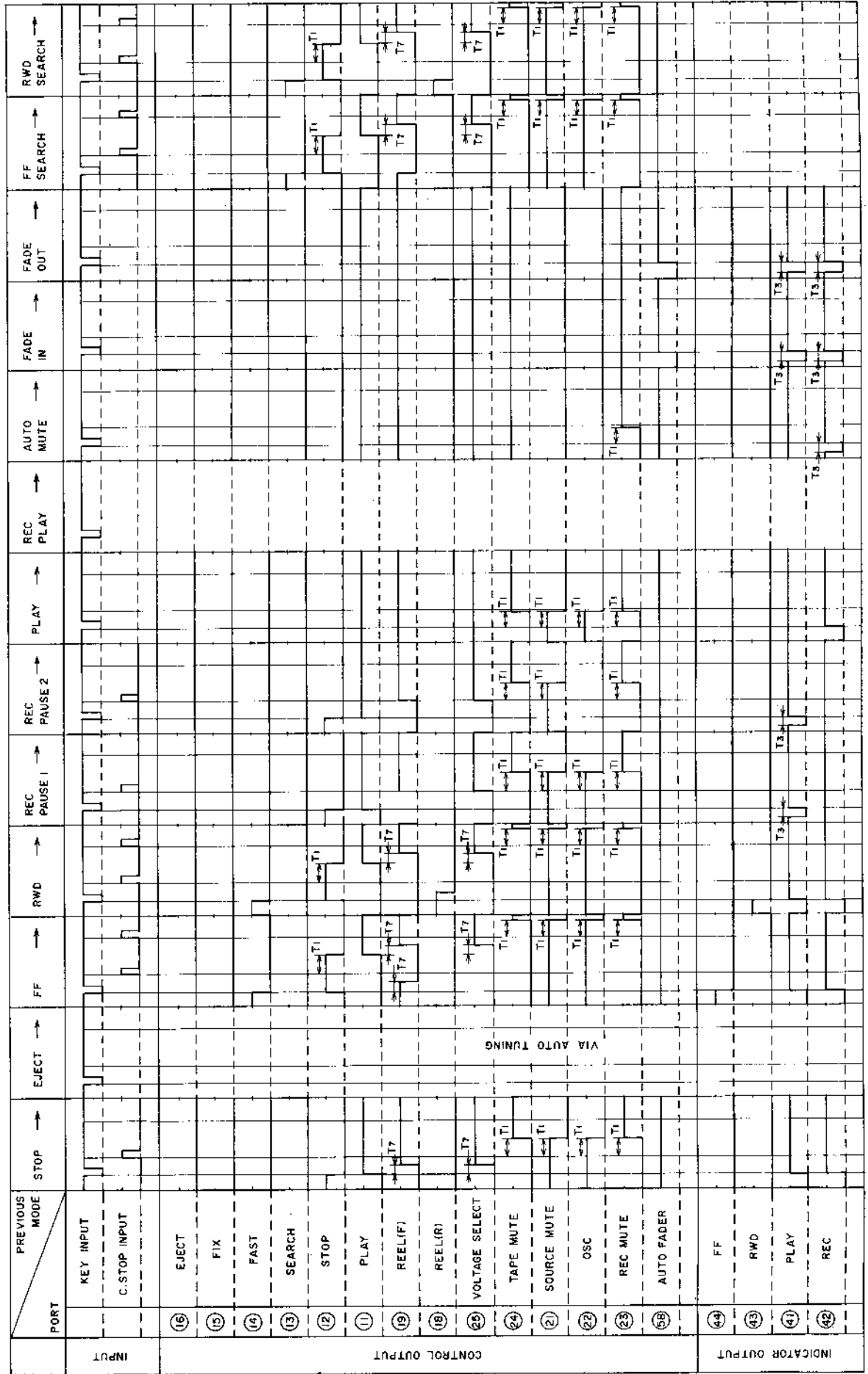
MI-COM OUTPUT TIMING CHART (1)



$T_0 = 1.0 \text{ sec}$ $T_4 = 0.15 \text{ sec}$
 $T_1 = 0.1 \text{ sec}$ $T_5 = 0.2 \text{ sec}$
 $T_2 = 0.05 \text{ sec}$ $T_6 = 0.03 \text{ sec}$
 $T_3 = 0.5 \text{ sec}$ $T_7 = 0.04 \text{ sec}$

PREVIOUS MODE → REC PLAY

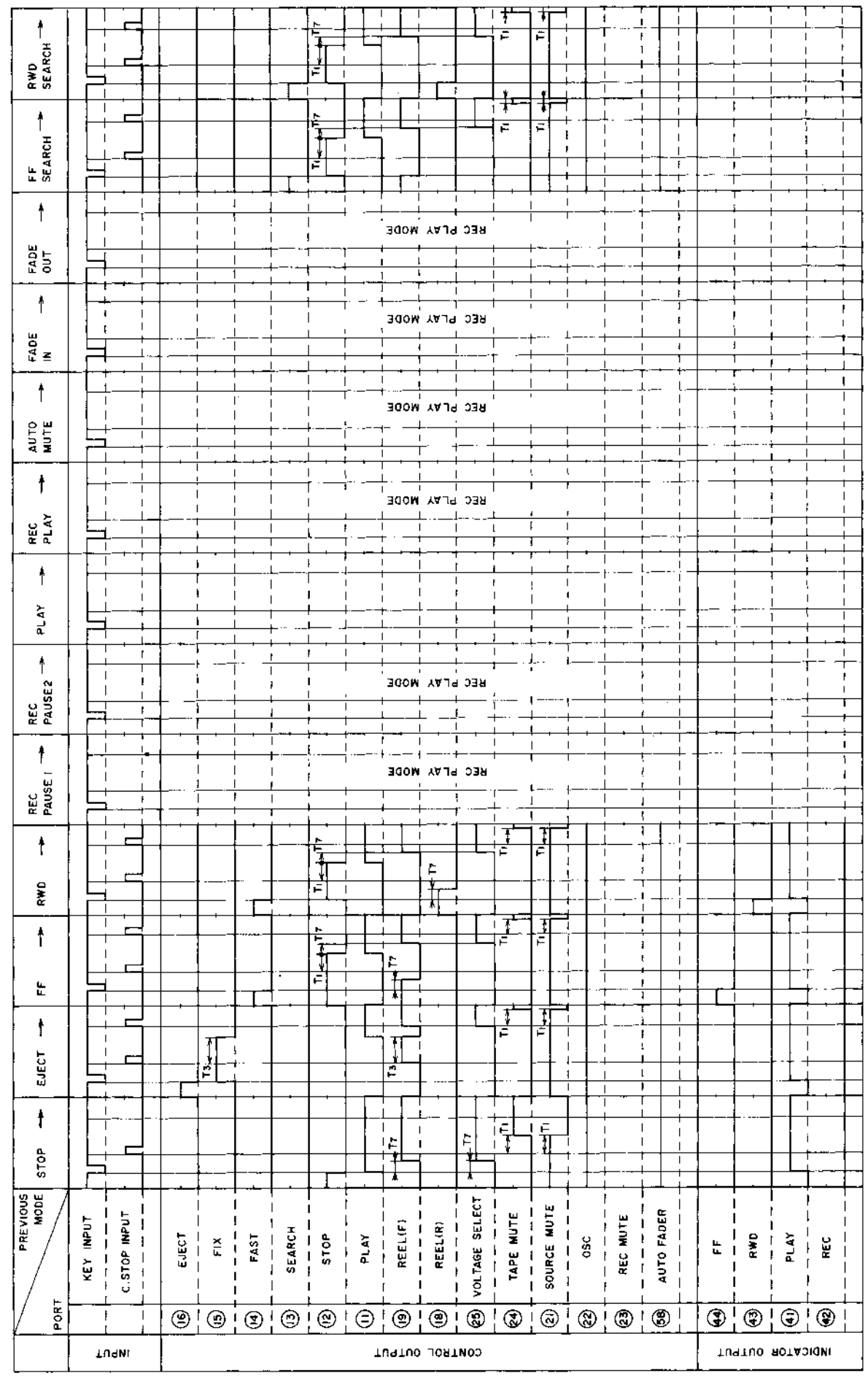
MI-COM OUTPUT TIMING CHART (3)



$T_0 = 1.0 \text{ sec}$ $T_4 = 0.15 \text{ sec}$
 $T_1 = 0.1 \text{ sec}$ $T_5 = 0.2 \text{ sec}$
 $T_2 = 0.05 \text{ sec}$ $T_6 = 0.03 \text{ sec}$
 $T_3 = 0.5 \text{ sec}$ $T_7 = 0.04 \text{ sec}$

PREVIOUS MODE → PLAY

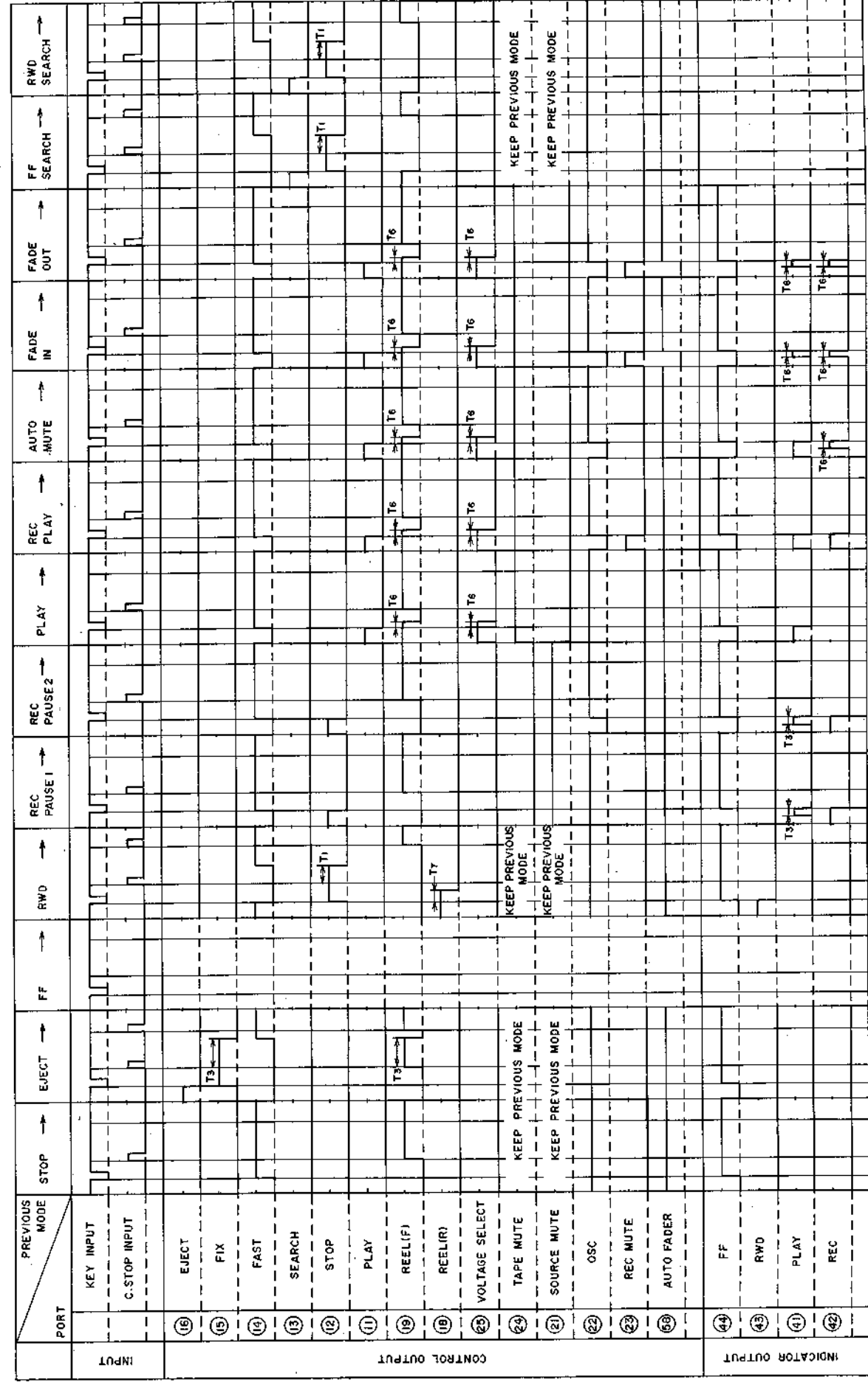
MI-COM OUTPUT TIMING CHART (2)

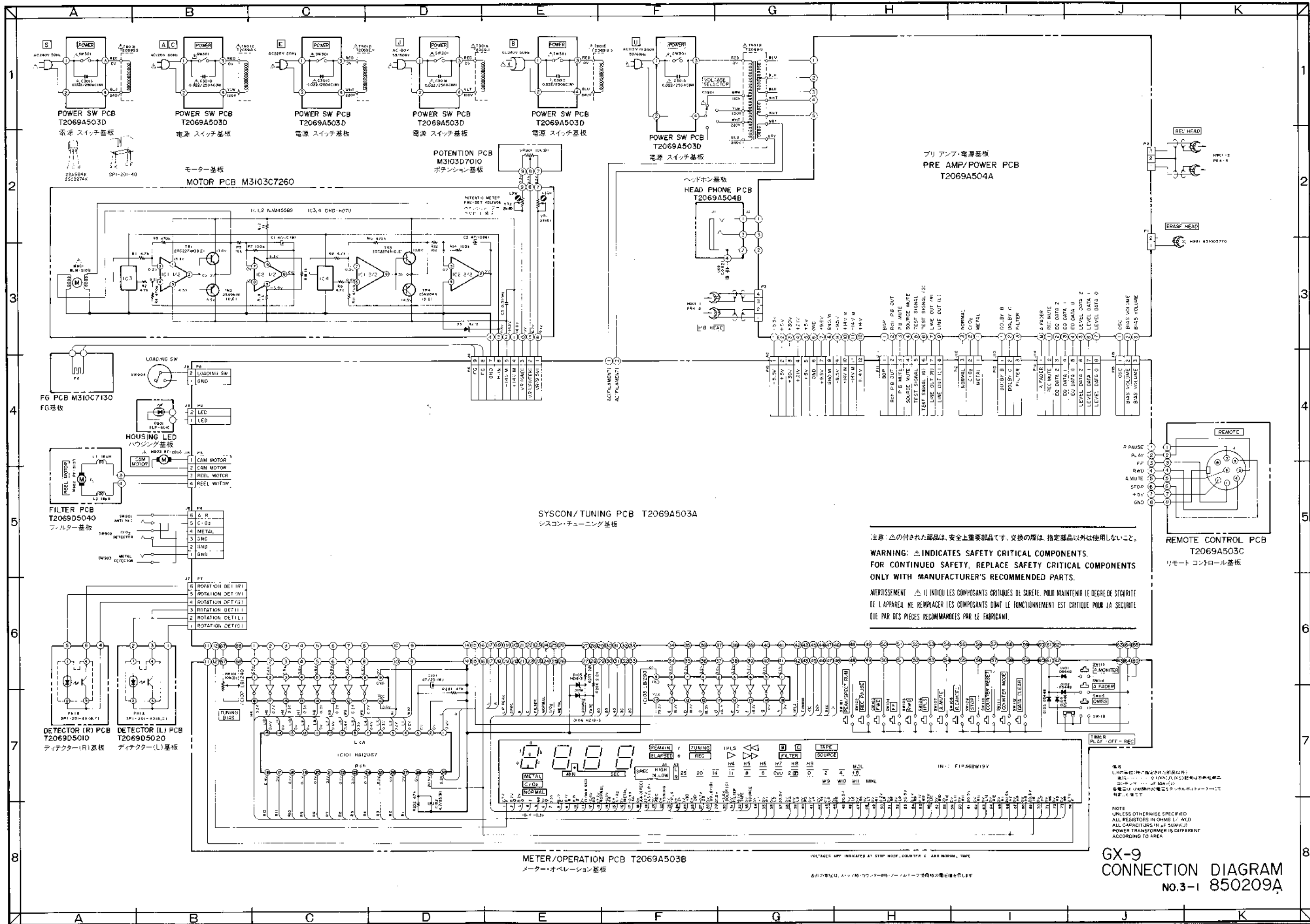


$T_0 = 1.0 \text{ sec}$ $T_4 = 0.15 \text{ sec}$
 $T_1 = 0.1 \text{ sec}$ $T_5 = 0.2 \text{ sec}$
 $T_2 = 0.05 \text{ sec}$ $T_6 = 0.03 \text{ sec}$
 $T_3 = 0.5 \text{ sec}$ $T_7 = 0.04 \text{ sec}$

PREVIOUS MODE → FF

MI-COM OUTPUT TIMING CHART(4)

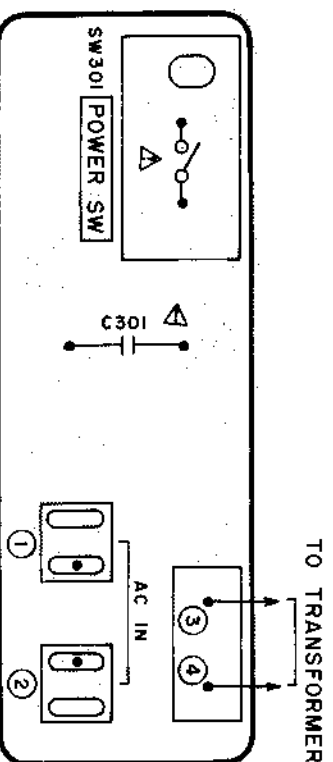




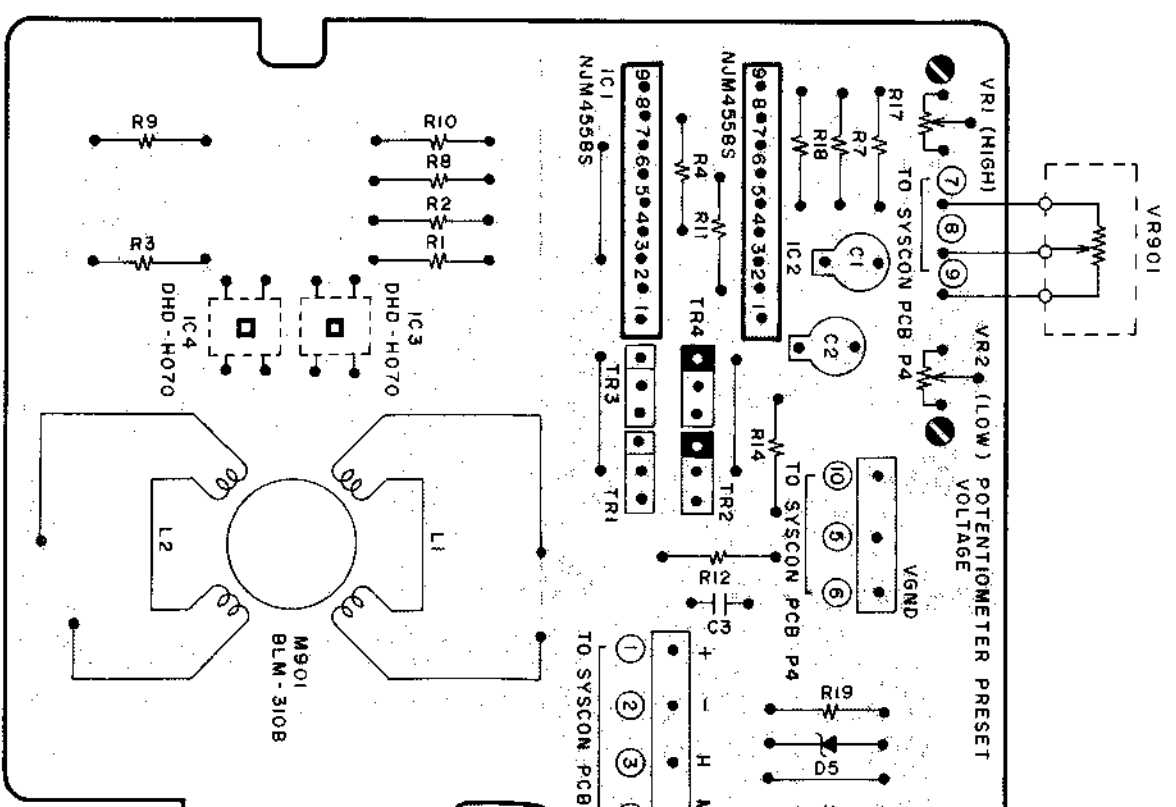
注意: △の付された部品は、安全上重要部品です。交換の際は、指定部品以外は使用しないこと。
WARNING: △ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
 Avertissement: △ IL INDIQUE LES COMPOSANTS CRITIQUES DE SURETE. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES COMPOSANTS OUI LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.

NOTE
 UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS IN OHMS (Ω, ΩΩ)
 ALL CAPACITORS IN μF (50WV)
 POWER TRANSFORMER IS DIFFERENT
 ACCORDING TO AREA.

GX-9
CONNECTION DIAGRAM
 No.3-1 850209A



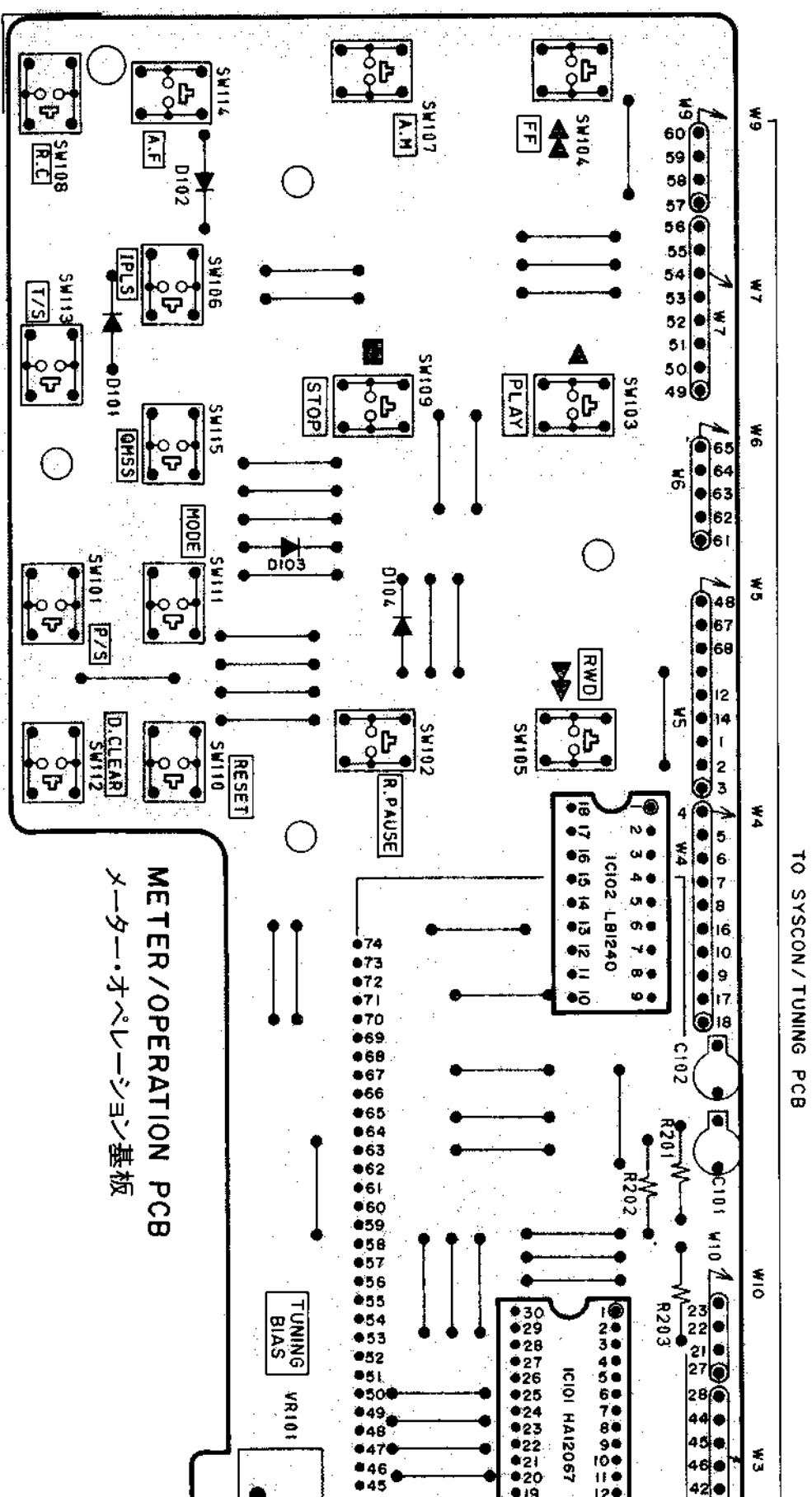
POWER SWITCH PCB
電源 SW基板



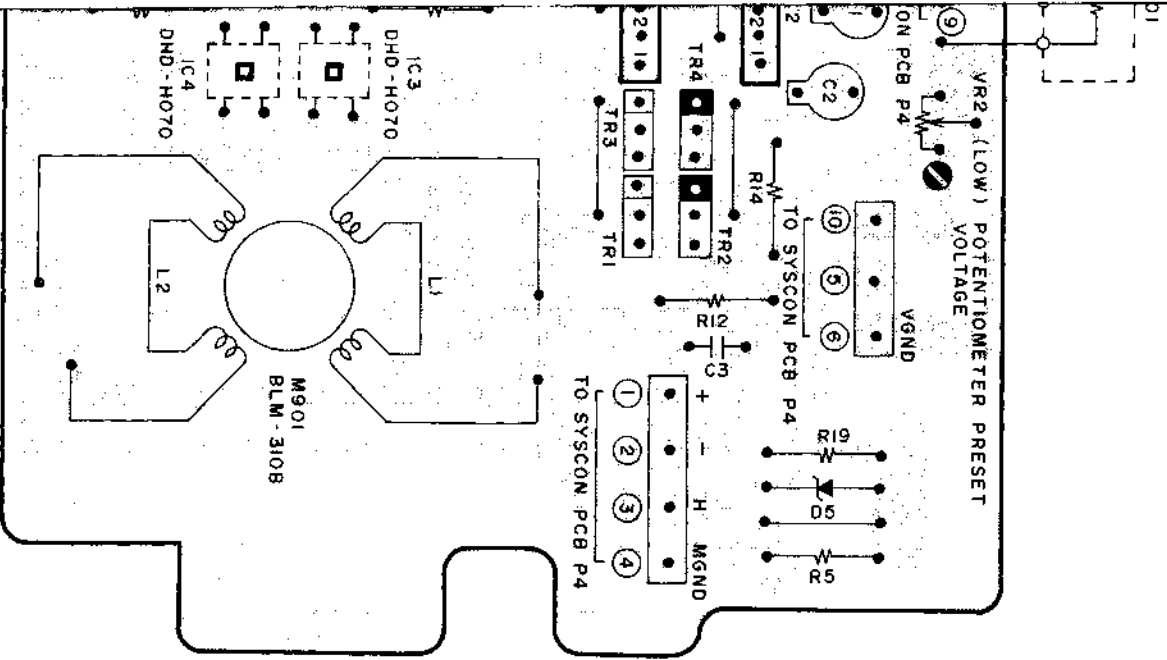
MOTOR PCB M3103C7260 (2ED)
モーター基板

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WARNING: △ INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
 Avertissement: △ Il indique les composants critiques de sécurité. Pour maintenir le degré de sécurité de l'appareil, ne remplacez les composants dont le fonctionnement est critique, pour la sécurité que par des pièces recommandées par le fabricant.

- = PNP TRANSISTOR
- B
- = NPN TRANSISTOR
- B
- TR1,3 --- 25C2274
- TR2,4 --- 2SA984



METER/OPERATION PCB
メーター・オペレーション基板



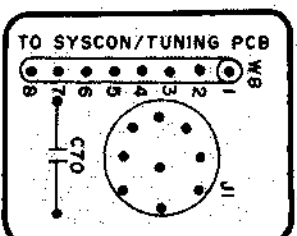
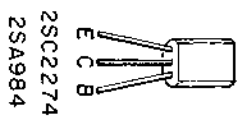
B M3103C7260 (2ED)

TRANSISTOR

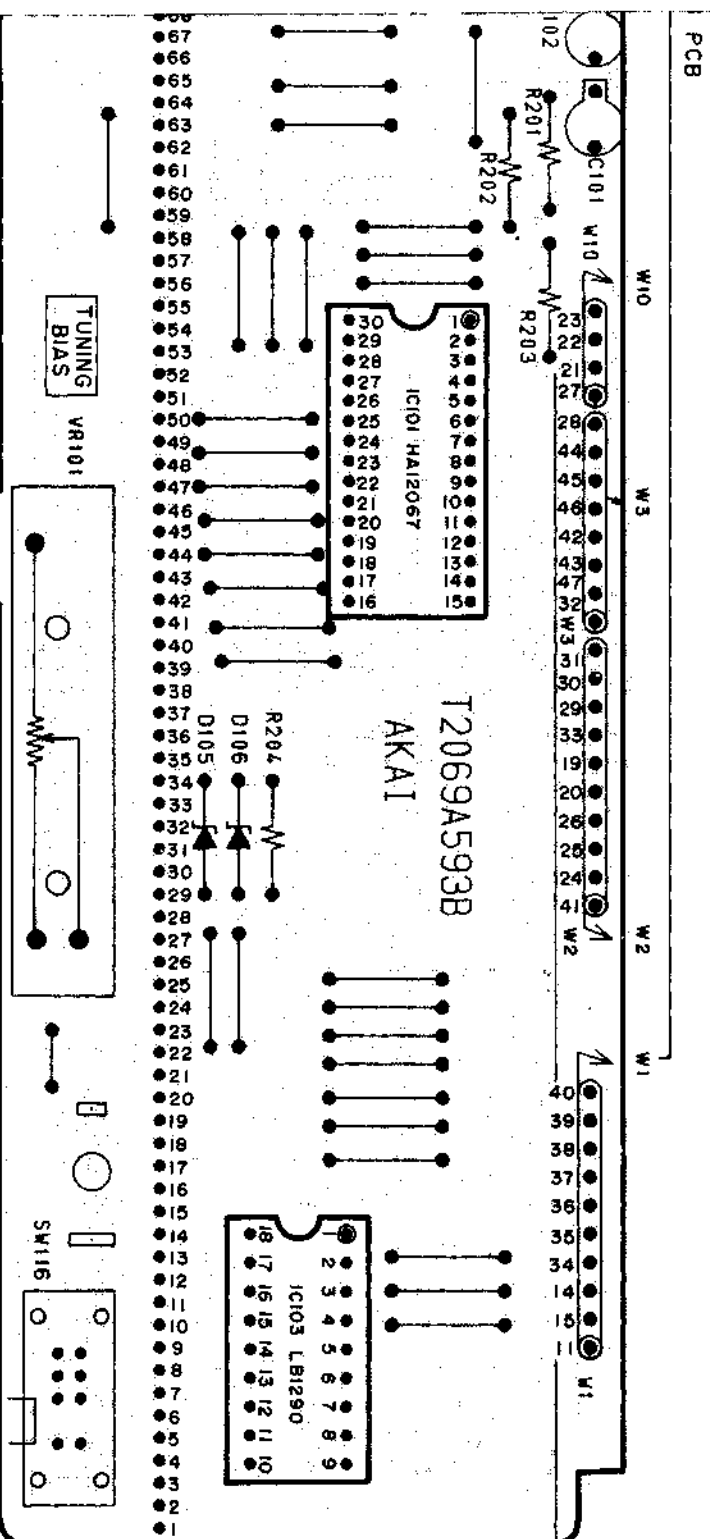
TRANSISTOR

IC2274

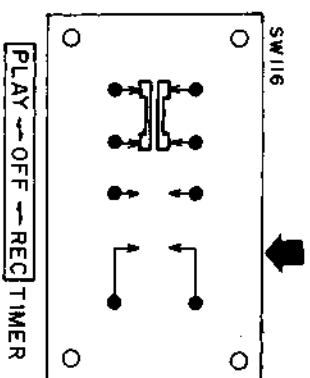
2SA984

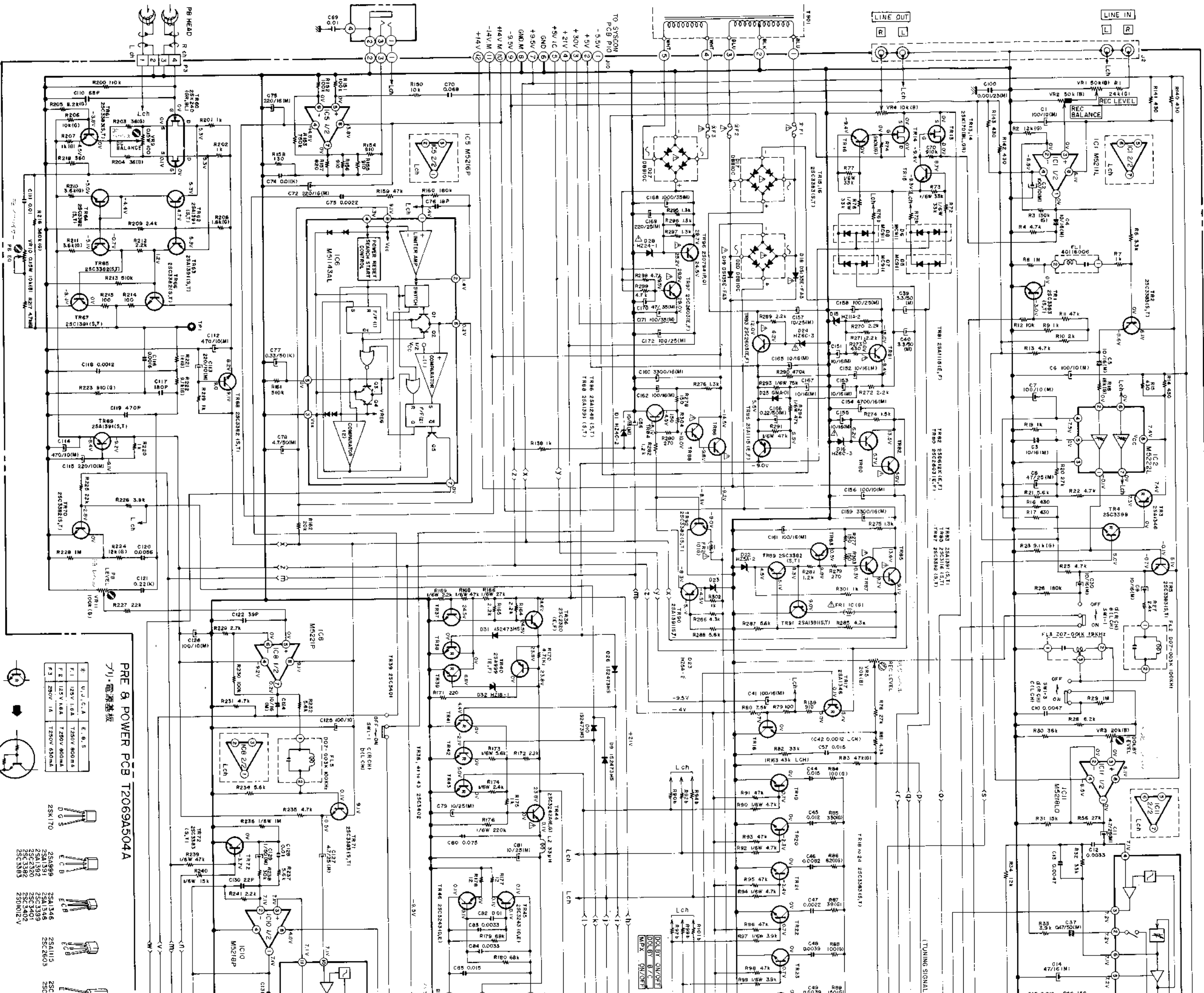


REMOTE CONTROL PCB
 リモート コントロール基板



TUNING PCB
 ション基板



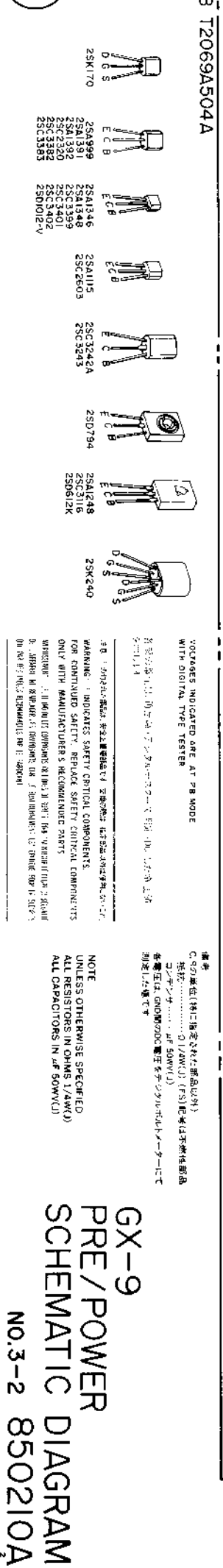
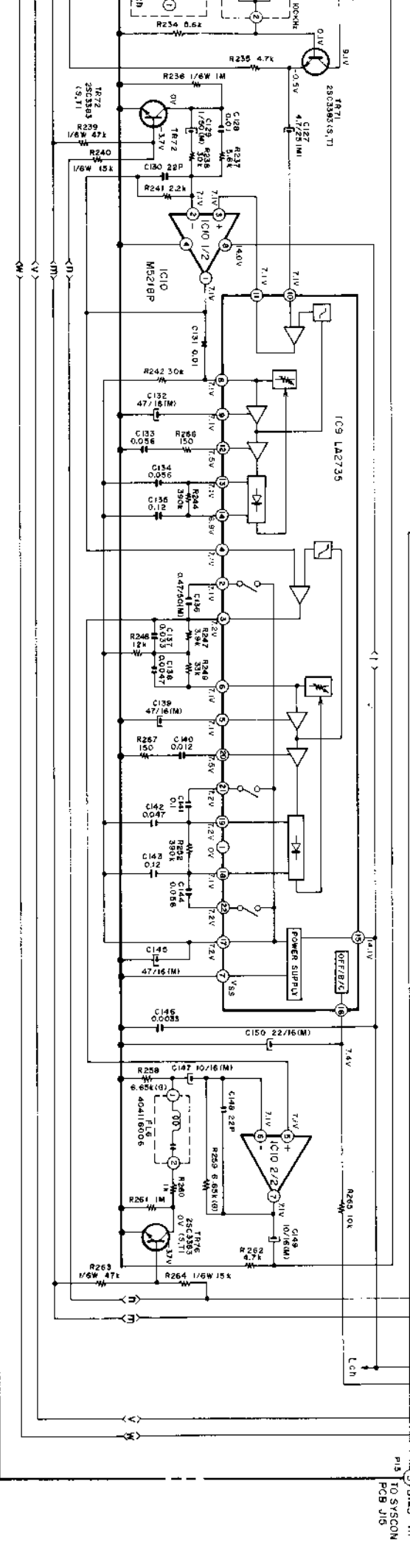
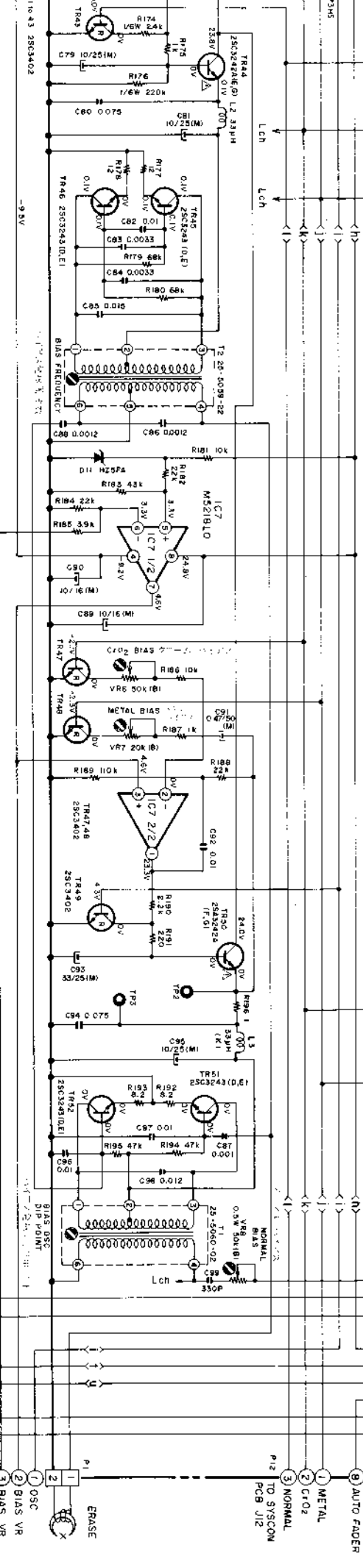
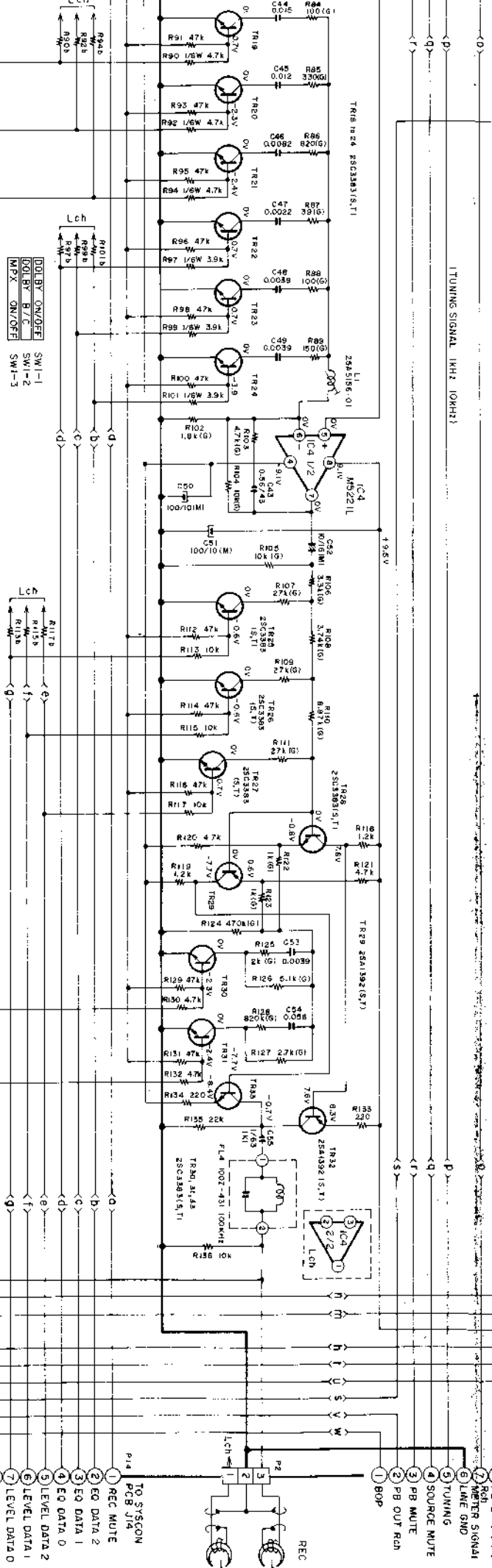
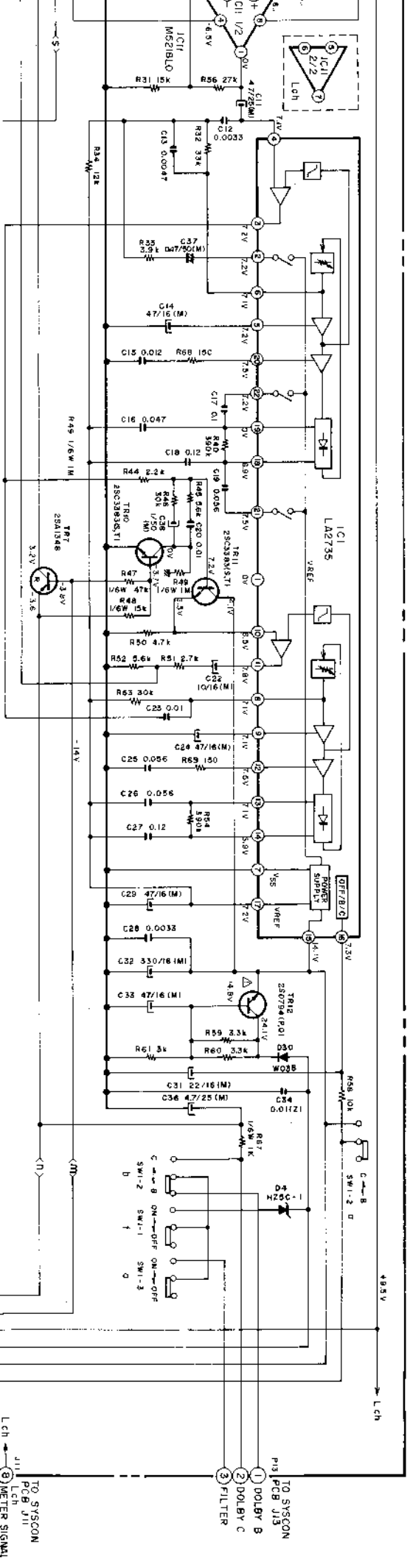


PRE 8 POWER PCB T2069A504A
7-1 電源基板

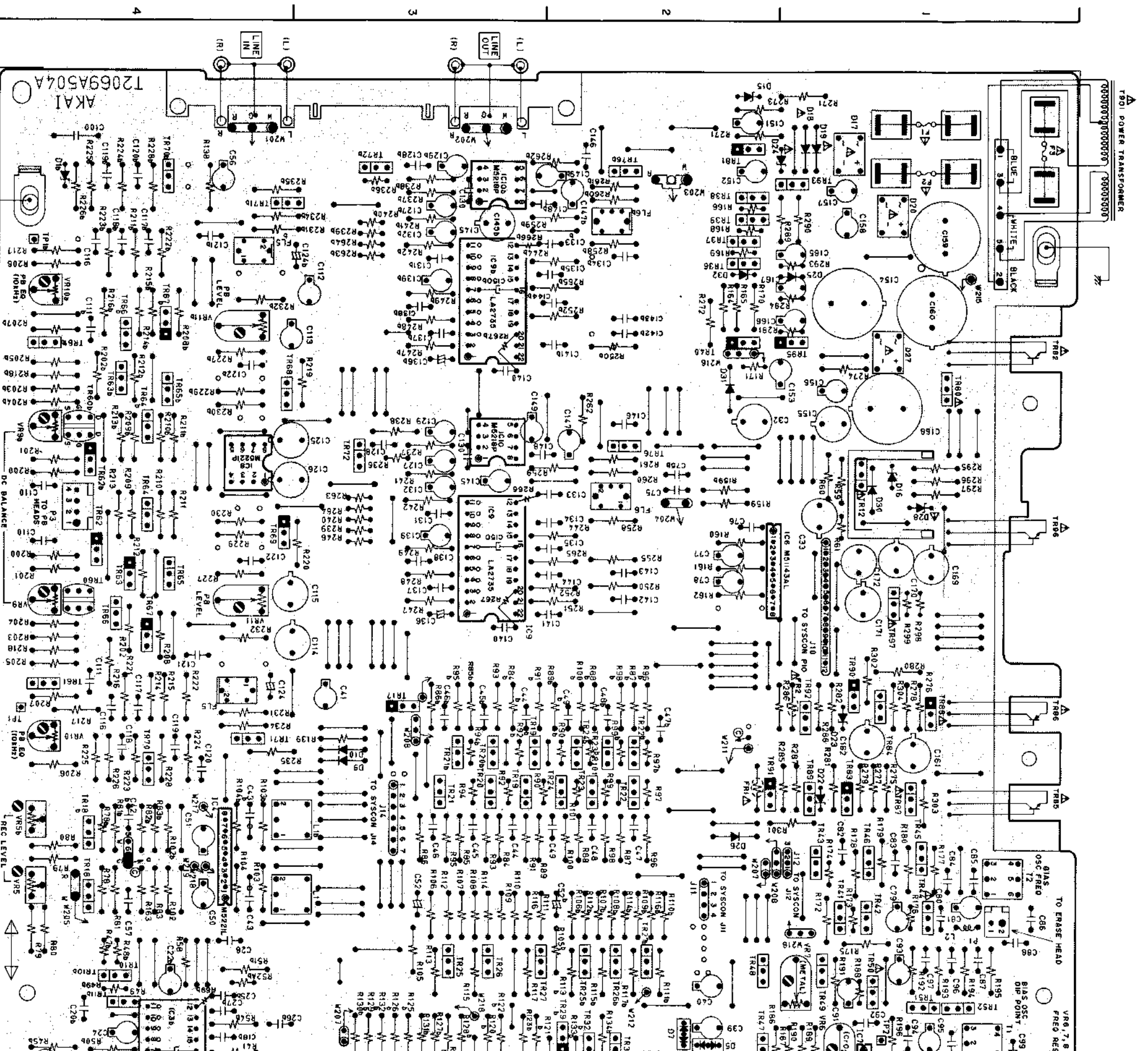
| 品番 | U.I.C.A. | E.B.S. |
|----|----------|------------|
| R1 | 12V 1.5A | T20V 600mA |
| R2 | 12V 1.5A | T20V 600mA |
| R3 | 250V 1A | T20V 600mA |

| 品番 | 部品名 | 規格 |
|---------|------|---------|
| 25A1399 | IC B | 25A1399 |
| 25A1391 | IC B | 25A1391 |
| 25A1392 | IC B | 25A1392 |
| 25A1393 | IC B | 25A1393 |
| 25A1394 | IC B | 25A1394 |
| 25A1395 | IC B | 25A1395 |
| 25A1396 | IC B | 25A1396 |
| 25A1397 | IC B | 25A1397 |
| 25A1398 | IC B | 25A1398 |
| 25A1399 | IC B | 25A1399 |
| 25A1400 | IC B | 25A1400 |
| 25A1401 | IC B | 25A1401 |
| 25A1402 | IC B | 25A1402 |

A B C D E F



GX-9
PRE/POWER
DIAGRAM
NO.3-2 850210A



- 25C3401
- 25C2603
- 25A1115
- 25D012
- 25A1346
- 25C3399
- 25C3402
- 25A1348

- 25D612
- 25C3116
- 25A1248

- 25K170

- 25A1392
- 25C2920
- 25A9999
- 25C3382
- 25A1391

- 25D794

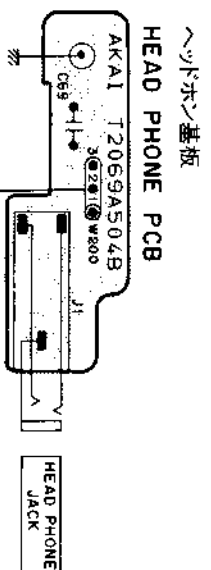
- 25C3242
- 25C3243

- 25K240

- TR1,2,5,10,11,14 TO 16,18 TO 28,30,31,33,71,72,76.....25K240
- TR3,17.....25C3383
- TR4.....25A1346
- TR7.....25A1348
- TR8.....25C3399
- TR12,96.....25D794
- TR13.....25K170
- TR29,32.....25A1392
- TR36.....25C2320
- TR37.....25D1012
- TR38,41 TO 43,47 TO 49.....25C3402
- TR39.....25C3401
- TR40.....25A9999
- TR44,50.....25C3242
- TR45,46,51,52.....25C3243

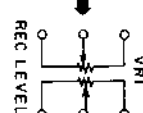
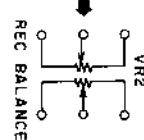
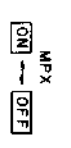
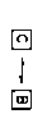
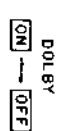
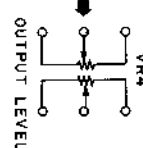
- TR60.....25K240
- TR61,64 TO 66,68,70,84,87,89,92.....25C3382
- TR62,63,67,69,83,88,90,91.....25A1391
- TR80,93,97.....25C2603
- TR81,95.....25A1115
- TR82.....25D612
- TR85.....25C3116
- TR86.....25A1248

= NPN TRANSISTOR
 = PNP TRANSISTOR



LOCATION OF COMPONENTS

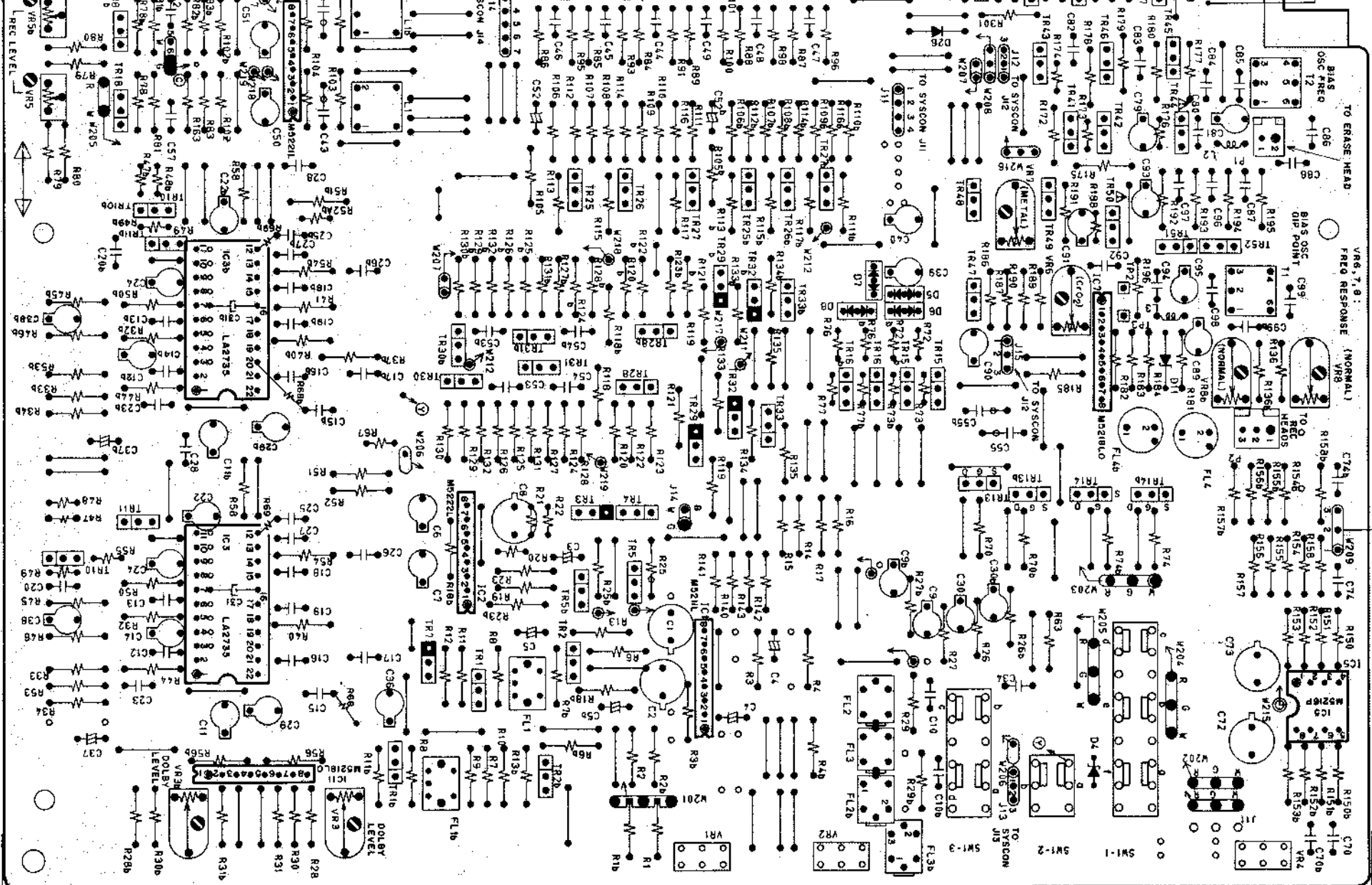
- ICs
IC1.....D3
IC2.....D3
IC3.....D4
IC3b.....D4
IC4.....C4
IC5.....D1
IC6.....B2
IC7.....C1
IC8.....B4
IC9.....B3
IC9b.....A3
IC10.....B3
IC10b.....A3
IC11.....D4



- TR23.....B2
TR23b.....B2
TR24.....B2
TR24b.....B2
TR25.....C3
TR25b.....C2
TR26.....C2
TR26b.....C2
TR27.....C3
TR27b.....C2
TR28.....C3
TR28b.....C3
TR29.....C3
TR29b.....C2
TR30.....C2
TR30b.....C3
TR31.....C3
TR31b.....C3
TR32.....C2
TR32b.....C2
TR33.....C2
TR33b.....C2
TR36.....A2
TR37.....A2
TR39.....A2
TR39b.....A2
TR40.....A2
TR41.....C1
TR43.....C1
TR44.....C1
TR45.....C1
TR46.....C1
TR47.....C2
TR48.....C2
TR49.....C1
TR50.....C1
TR51.....C1
TR52.....C1
TR60b.....B4

- TR61.....B4
TR61b.....B4
TR62.....B4
TR62b.....B4
TR63.....B4
TR63b.....B4
TR64.....B4
TR64b.....B4
TR65.....B4
TR65b.....B4
TR67.....B4
TR67b.....B4
TR68.....A4
TR68b.....A4
TR69.....B4
TR70.....B4
TR70b.....A4
TR72.....B3
TR72b.....B3
TR76.....B2
TR76b.....B2
TR77.....A2
TR80.....A1
TR81.....A2
TR82.....A1
TR83.....B1
TR84.....B1
TR85.....B1
TR86.....B1
TR87.....C1
TR88.....B1
TR89.....B1
TR90.....B1
TR91.....C2
TR92.....B1
TR93.....B1
TR94.....A1
TR95.....A1
TR96.....A1
TR97.....B1
TR97b.....B1

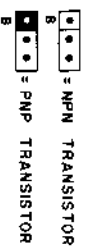
- TR60.....B4
TR60b.....B4

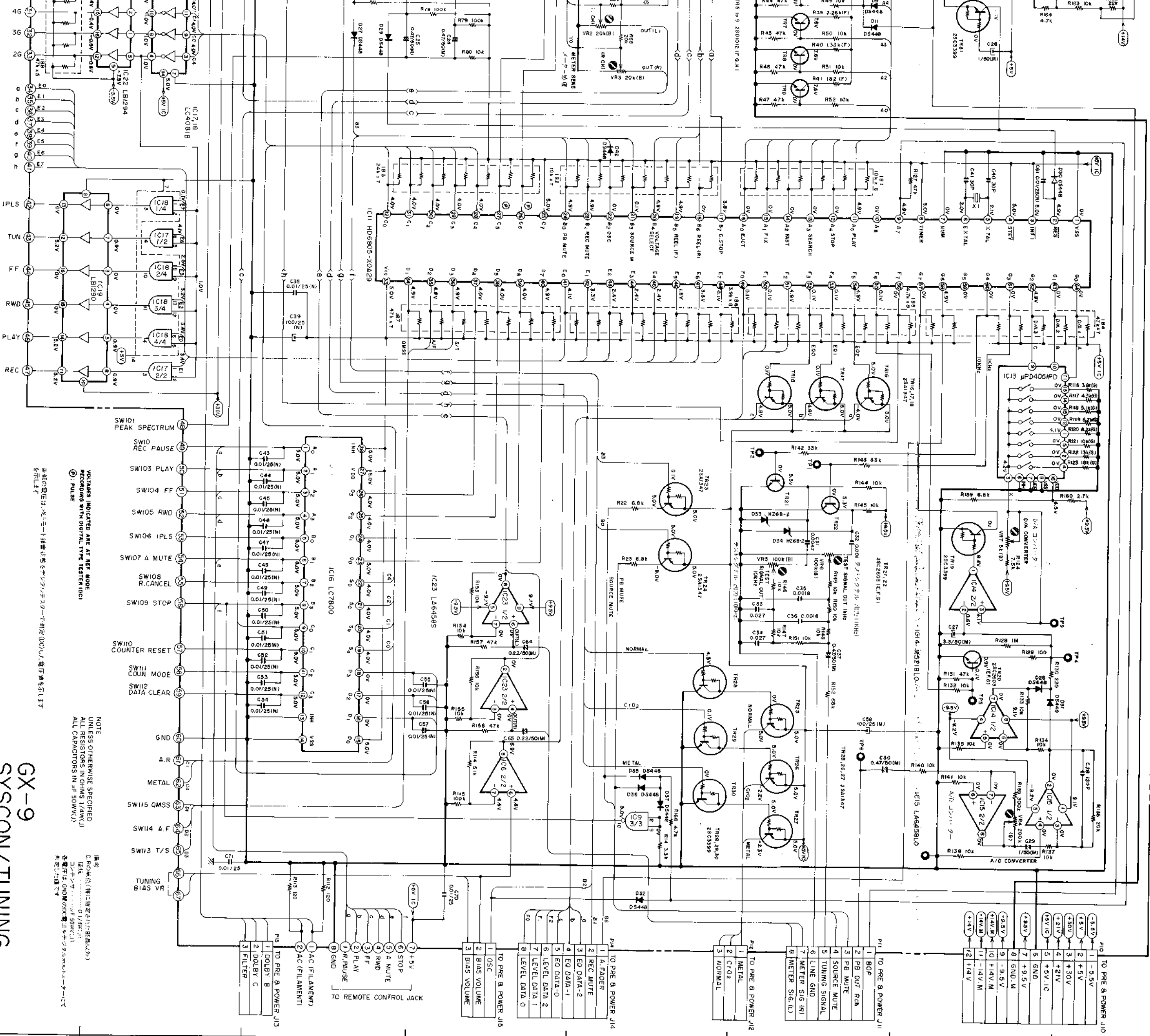


PRE AMP / POWER PCB T2069A504A
プリアンプ・電源基板

- TR60.....2SK240
TR61,64 to 66,68,70,
84,87,89,92.....2SC3382
TR62,63,67,69,83,88,
90,91.....2SA1391
TR80,93,97.....2SC2603
TR81,95.....2SA1115
TR82.....2SD612
TR85.....2SC3116
TR86.....2SA1248

注意: △の付かれた部品は、安全上重要部品です。交換の際は、指定部品以外は使用しないこと。
WARNING: △ INDICATES SAFETY CRITICAL COMPONENTS.
FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS
ONLY WITH MANUFACTURER'S RECOMMENDED PARTS.
ATTENTION: △ IN INDIQUE LES COMPOSANTS CRITIQUES DE SECURITE. NE MANIPULER LE MARQUE DE SECURITE
DE L'APPAREIL, NE REMPLACER LES COMPOSANTS QU'AVEC LE RECOMMANDATION EST DONNEE POUR LA SECURITE
QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT.





NOTES INDICATED ARE AT REF MODE
RESISTORS WITH DIGITAL TYPE TESTER (Ω)

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS (1/4W, 1%)
ALL CAPACITORS IN μF (50VDC)

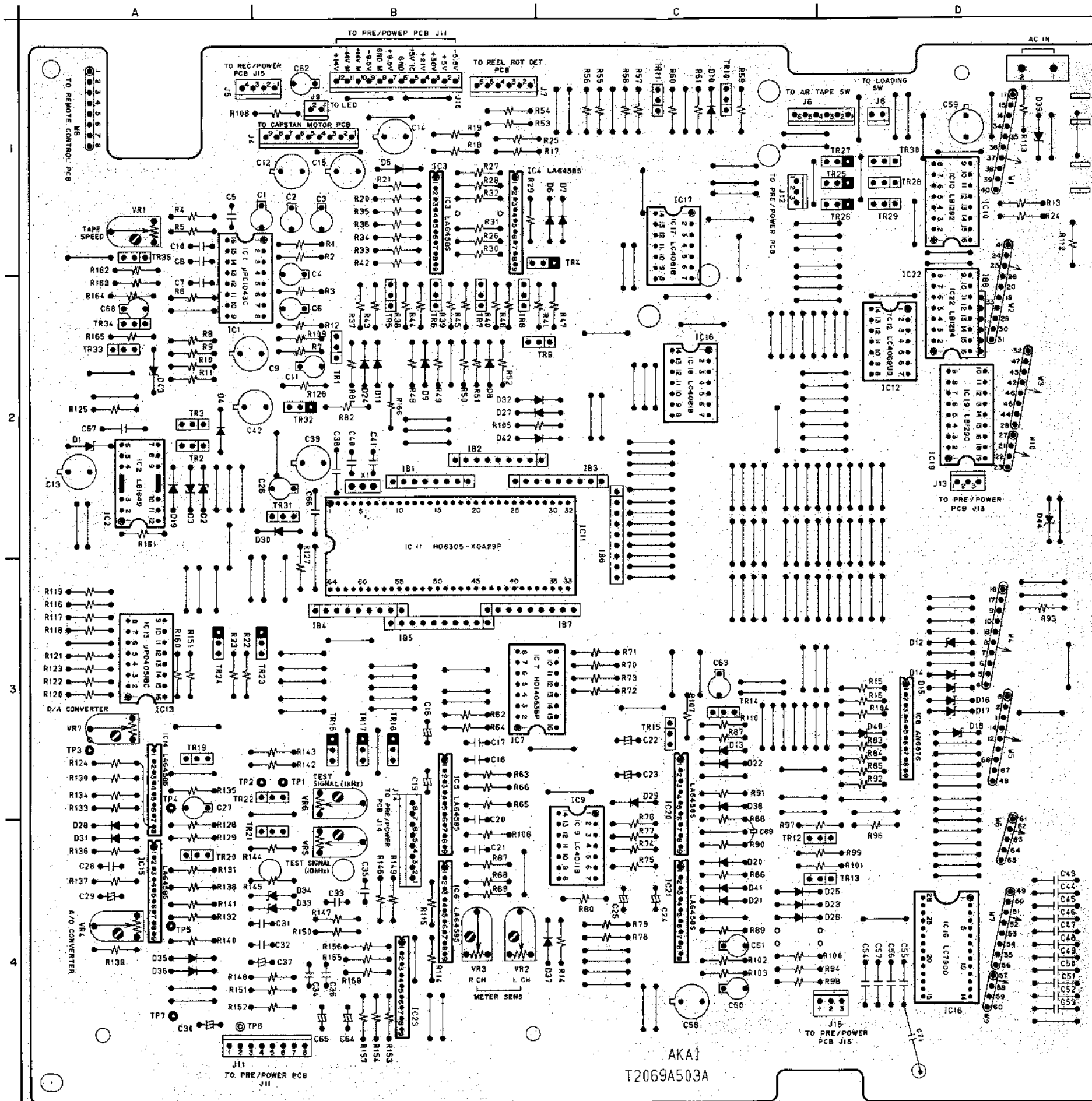
備考
C: 20% 誤差 (特記除く) (V: 電圧) (Ω: 抵抗)
注: 1) 1/4W, 1%
2) 1/4W, 1%
3) 1/4W, 1%
4) 1/4W, 1%
5) 1/4W, 1%
6) 1/4W, 1%
7) 1/4W, 1%
8) 1/4W, 1%
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48) 1/4W, 1%
49) 1/4W, 1%
50) 1/4W, 1%

GX-9
SYSCON/TUNING
SCHEMATIC DIAGRAM
NO.3-3 850211A

F G H J K

1 2 3 4 5 6 7 8

E

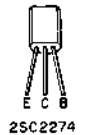


SYSCON/TUNING PCB T2069A503A
シスコ・チューニング基板

LOCATION OF COMPONENTS

- IC
- IC1.....A1
 - IC2.....A2
 - IC3,4.....B1
 - IC5.....B3
 - IC6.....B4
 - IC7.....B3
 - IC8.....D3
 - IC9.....C4
 - IC10.....D1
 - IC11.....B2
 - IC12.....D2
 - IC13,14.....A3
 - IC15.....A4
 - IC16.....D4
 - IC17.....C1
 - IC18.....C2
 - IC19.....D2
 - IC20.....C3
 - IC21.....C4
 - IC22.....D2
 - IC23.....B4

- TR
- TR1.....B2
 - TR2,3.....A2
 - TR4.....B1
 - TR5to9.....B2
 - TR10,11.....C1
 - TR12,13.....C4
 - TR14,15.....C3
 - TR16,17,18.....B3
 - TR19.....A3
 - TR20.....A4
 - TR21.....B4
 - TR22.....B3
 - TR23,24.....A3
 - TR25to30.....D1
 - TR31,32.....B2
 - TR33,34,35.....A2



- = NPN TRANSISTOR
- = PNP TRANSISTOR

- TR1, 10 to 14, 20, 21, 22, 34
----- 25C2603
- TR2, 3, 15, 19, 28 to 31, 35
----- 25C3399
- TR4, 16, 17, 18, 23 to 27
----- 25A1347
- TR5 to 9 ----- 25D1012
- TR32 ----- 25A1115
- TR33 ----- 25C2274