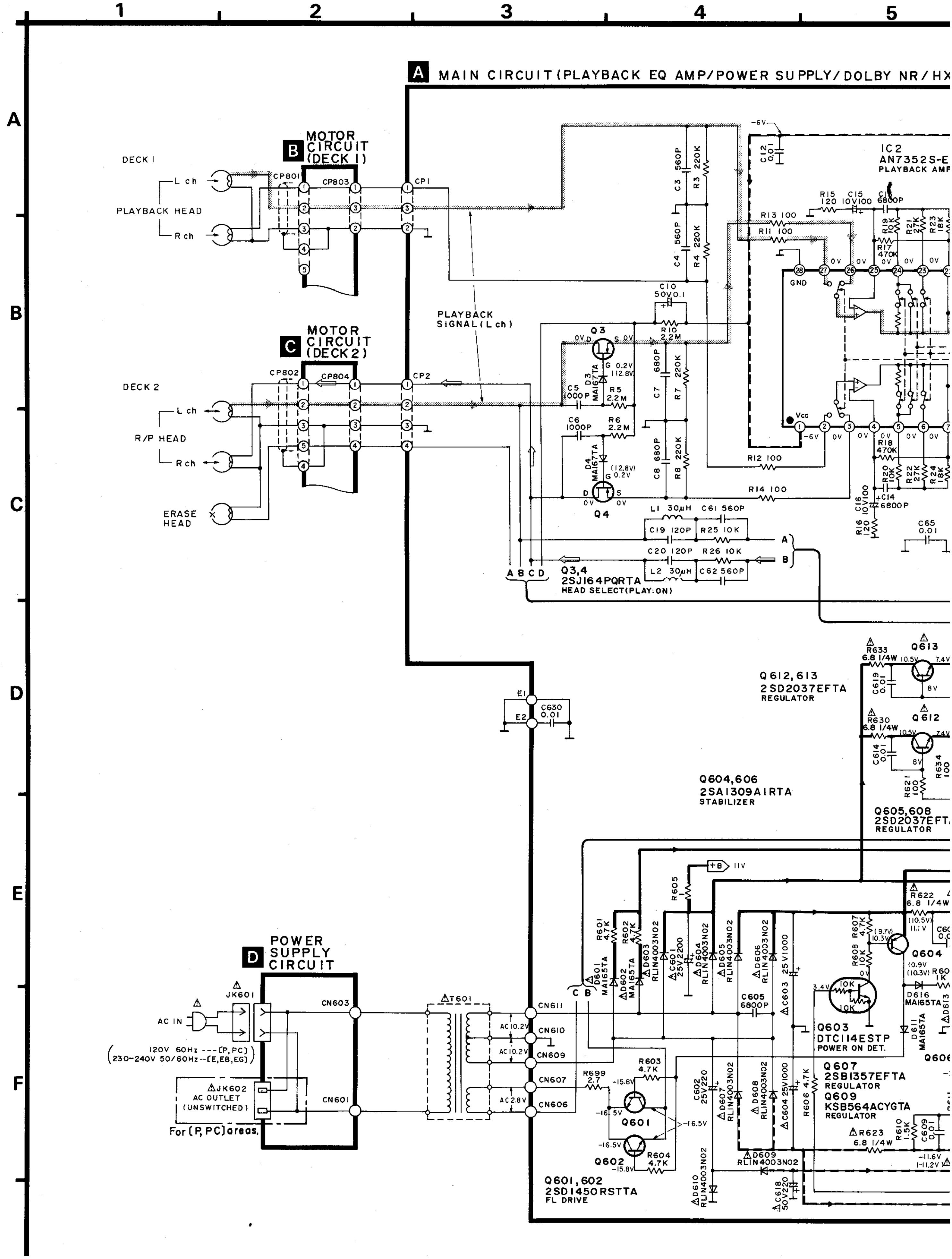
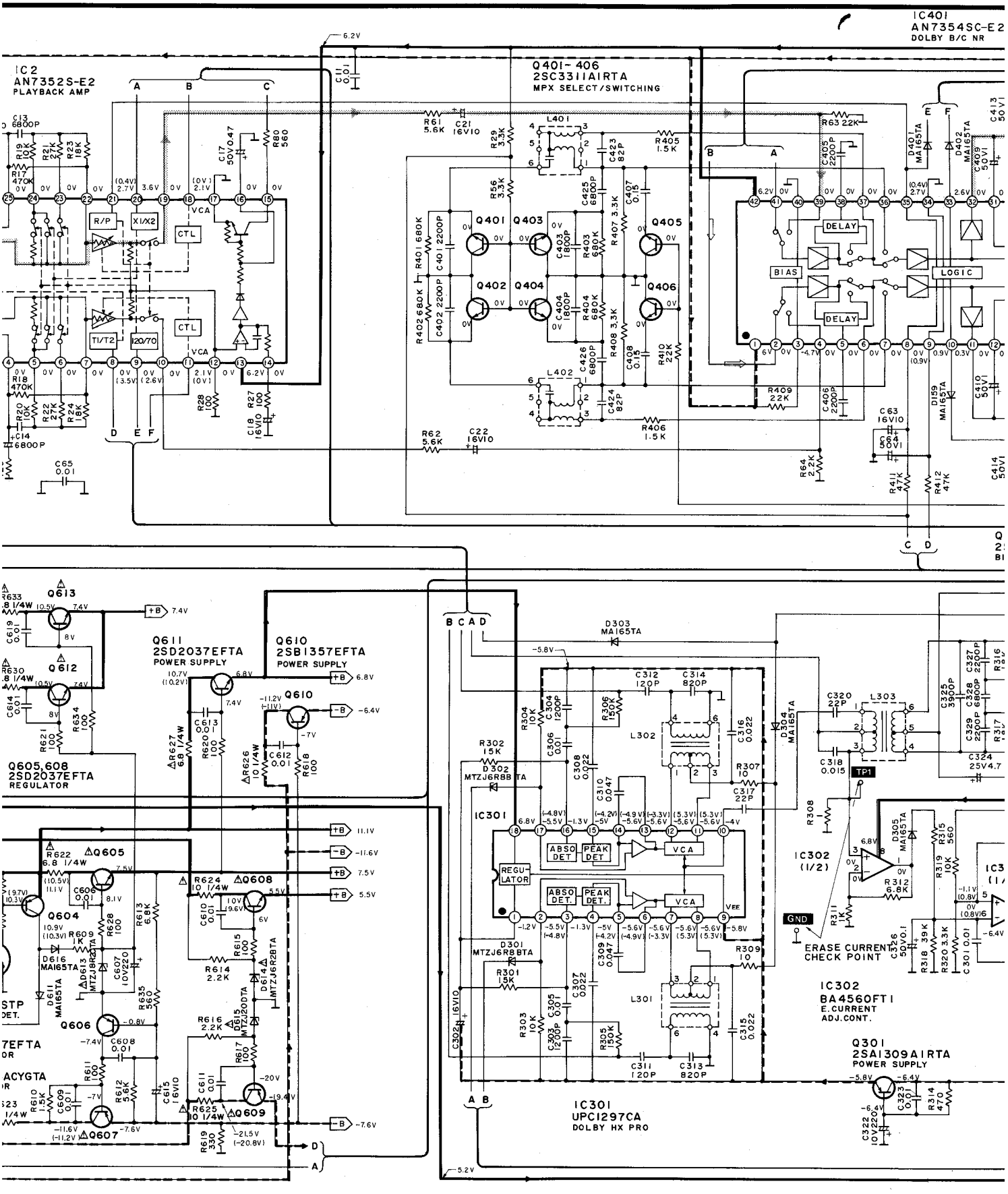
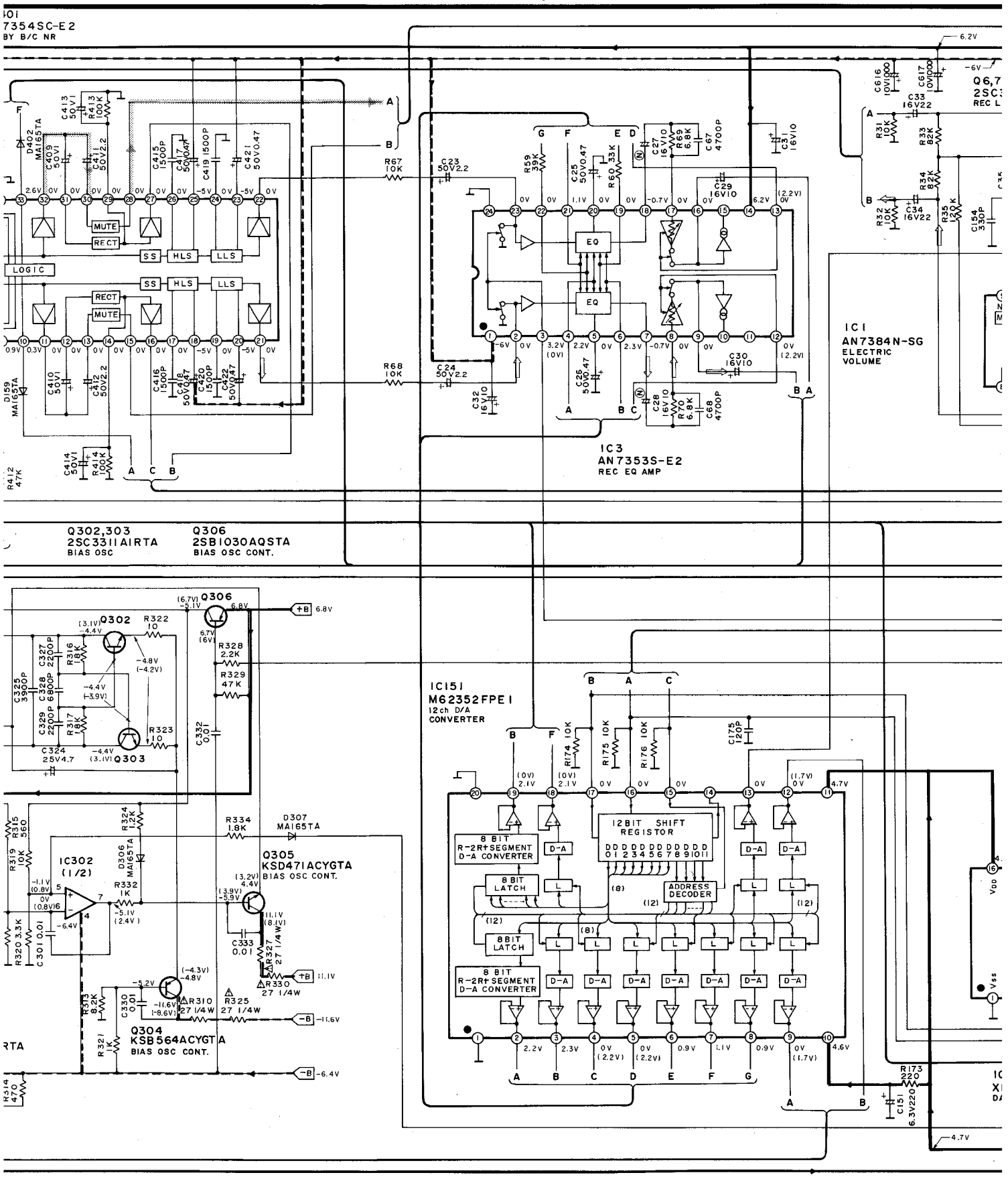

A MAIN CIRCUIT (PLAYBACK EQ AMP/POWER SUPPLY/DOLBY NR/HX
B MOTOR CIRCUIT (DECK 1)
C MOTOR CIRCUIT (DECK 2)
D POWER SUPPLY CIRCUIT
DECK 1
L ch
PLAYBACK HEAD
R ch
DECK 2
R/P HEAD
ERASE HEAD
CP801
CP802
CP803
CP804
CP1
CP2
PLAYBACK SIGNAL (L ch)
IC2
AN7352S-E
PLAYBACK AMP
GND
Vcc
Q3,4
2SJ164PQRTA
HEAD SELECT (PLAY: ON)
Q612, 613
2SD2037EFTA
REGULATOR
Q604, 606
2SA1309A1RTA
STABILIZER
Q605, 608
2SD2037EFT
REGULATOR
Q603
DTC114ESTP
POWER ON DET.
Q607
2SB1357EFTA
REGULATOR
Q609
KSB564ACYGTA
REGULATOR
Q601, 602
2SD1450RSTTA
FL DRIVE
AC IN
JK601
120V 60Hz --- [P, PC]
(230-240V 50/60Hz -- [E, EB, EG])
JK602
AC OUTLET
(UNSWITCHED)
For [P, PC] areas.
CN603
CN601
T601
CN611
CN610
CN609
CN607
CN606
AC10.2V
AC10.2V
AC2.8V
+B 11V
E1
E2
C630 0.01

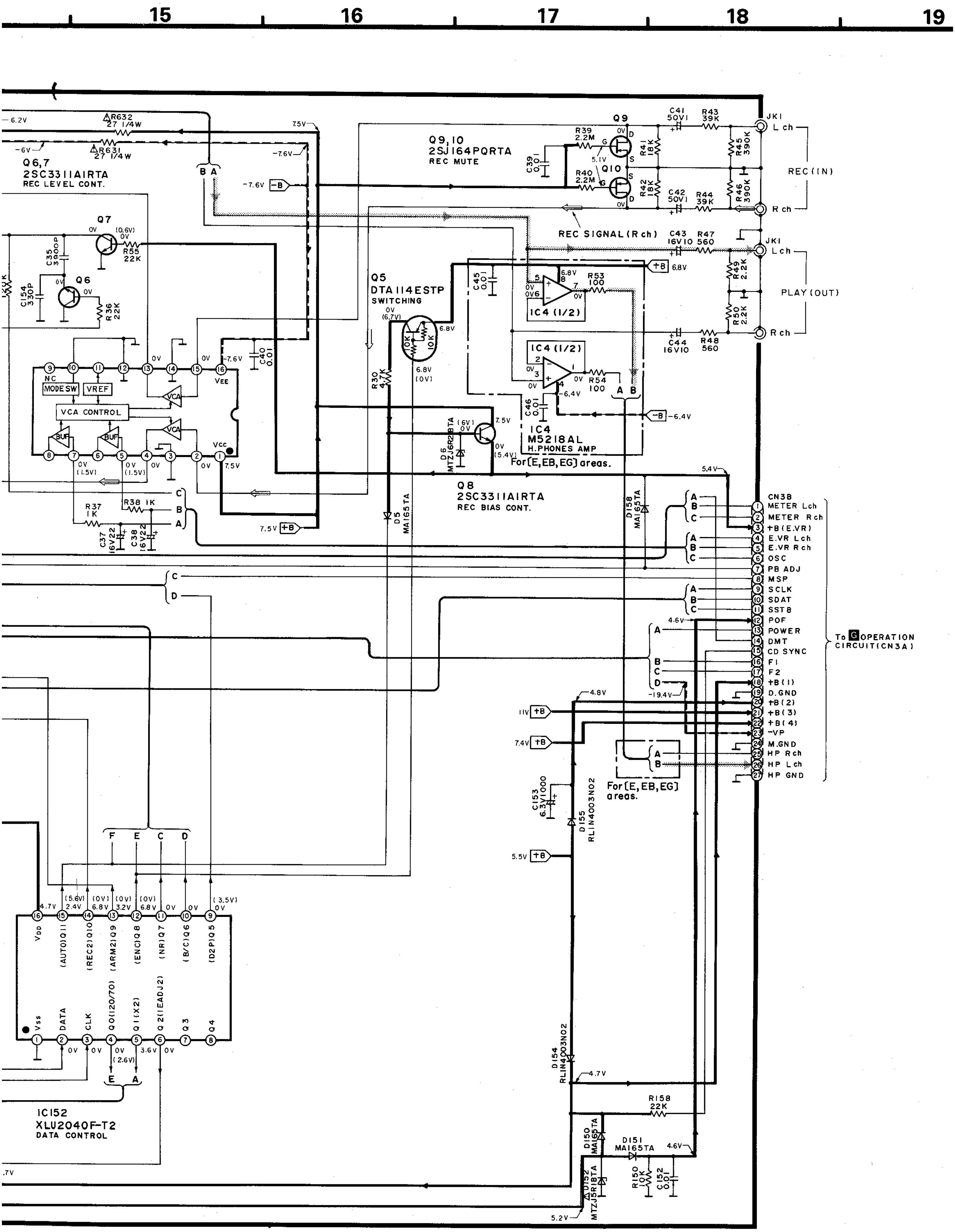
5 6 7 8 9

_BY NR/HX PRO/BIAS OSC/REC EQ AMP/CONTROL/ELECTRIC VOLUME)

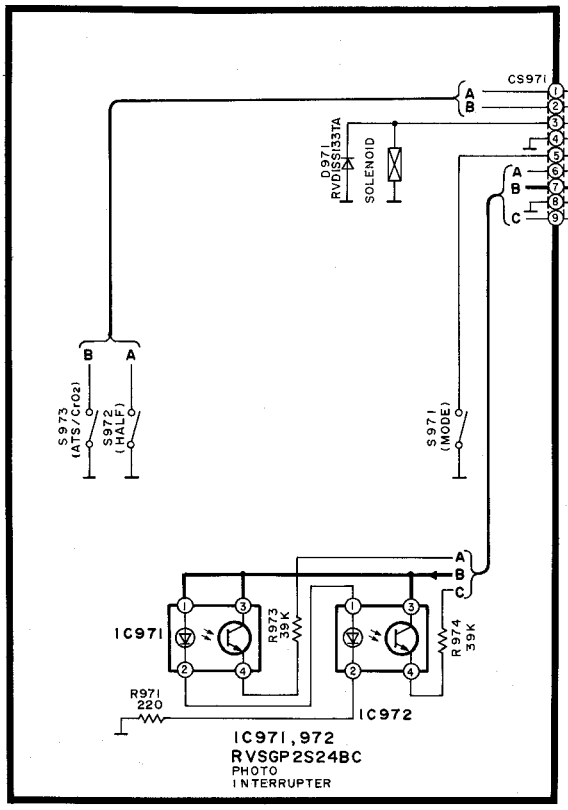


10 11 12 13 14

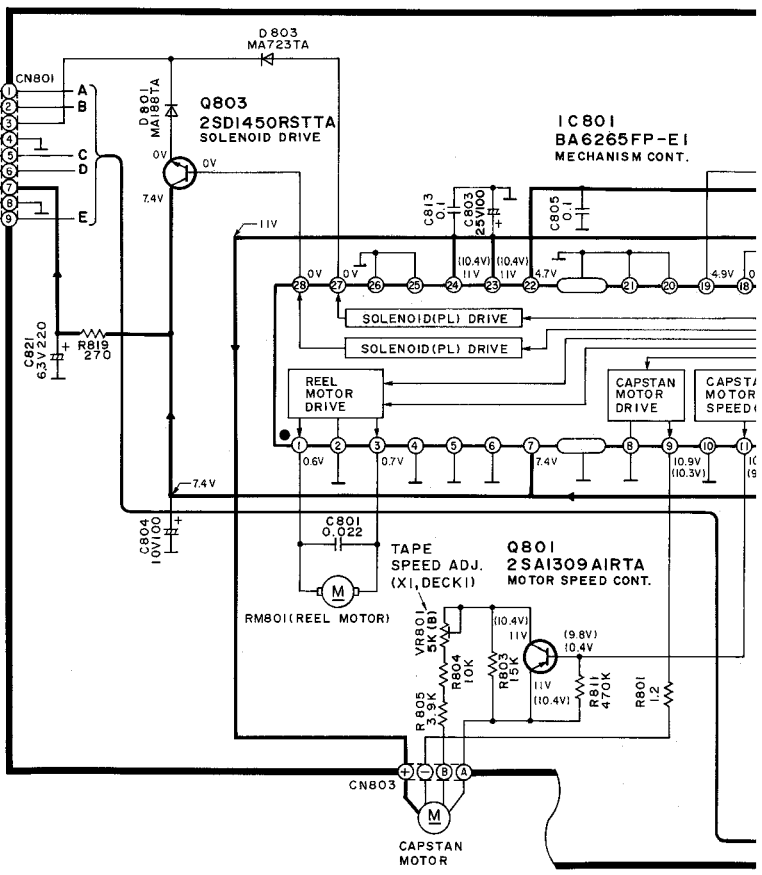

7354SC-E2
BY B/C NR
IC3
AN7353S-E2
REC EQ AMP
IC1
AN7384N-SG
ELECTRIC
VOLUME
Q302,303
2SC3311AIRTA
BIAS OSC
Q306
2SB1030AQSTA
BIAS OSC CONT.
IC151
M62352FPE1
12ch D/A
CONVERTER
IC302
(1/2)
Q305
KSD471ACYGTA
BIAS OSC CONT.
Q304
KSB564ACYGTA
BIAS OSC CONT.
8 BIT
R-2R+SEGMENT
D-A CONVERTER
8 BIT
LATCH
12BIT SHIFT
REGISTOR
ADDRESS
DECODER
LOGIC
MUTE
RECT
SS
HLS
LLS
EQ


15
16
17
18
19
Q6,7
2SC3311AIRTA
REC LEVEL CONT.
R632
27 1/4W
R631
27 1/4W
Q9,10
2SJ164PQRTA
REC MUTE
Q9
Q10
C41 50V1
R43 39K
C42 50V1
R44 39K
R39 2.2M
R40 2.2M
R41 18K
R42 18K
R45 390K
R46 390K
C39 0.01
JK1
L ch
R ch
REC (IN)
REC SIGNAL (R ch)
C43 16V10
R47 560
C44 16V10
R48 560
R49 2.2K
R50 2.2K
PLAY (OUT)
Q7
C35 3900P
R55 22K
Q6
C154 330P
R36 22K
Q5
DTA114ESTP
SWITCHING
C45 0.01
R53 100
R54 100
IC4 (1/2)
C46 0.01
IC4
M5218AL
H.PHONES AMP
For (E, EB, EG) areas.
R30 4.7K
D6 MTZJ6R2BTA
Q8
2SC3311AIRTA
REC BIAS CONT.
D5 MA165TA
D158 MA165TA
MODE SW
VREF
VCA CONTROL
VCA
BUF
NC
VEE
Vcc
C40 0.01
R37 1K
R38 1K
C37 16V22
C38 16V22
CN3B
METER Lch
METER Rch
+B (E.VR)
E.VR Lch
E.VR Rch
OSC
PB ADJ
MSP
SCLK
SDAT
SSTB
POF
POWER
DMT
CD SYNC
F1
F2
+B (1)
D.GND
+B (2)
+B (3)
+B (4)
-VP
M.GND
HP Rch
HP Lch
HP GND
To G OPERATION CIRCUIT (CN3A)
C153 6.3V1000
D155 RL1N4003N02
For (E, EB, EG) areas.
IC152
XLU2040F-T2
DATA CONTROL
VDD
(AUTO) Q11
(REC2) Q10
(ARM2) Q9
(ENC) Q8
(NR) Q7
(B/C) Q6
(D2P) Q5
Vss
DATA
CLK
Q0 (120/70)
Q1 (X2)
Q2 (EADJ2)
Q3
Q4
D154 RL1N4003N02
R158 22K
D150 MA165TA
D151 MA165TA
R150 10K
C152 0.01
D152 MTZJ5R1BTA

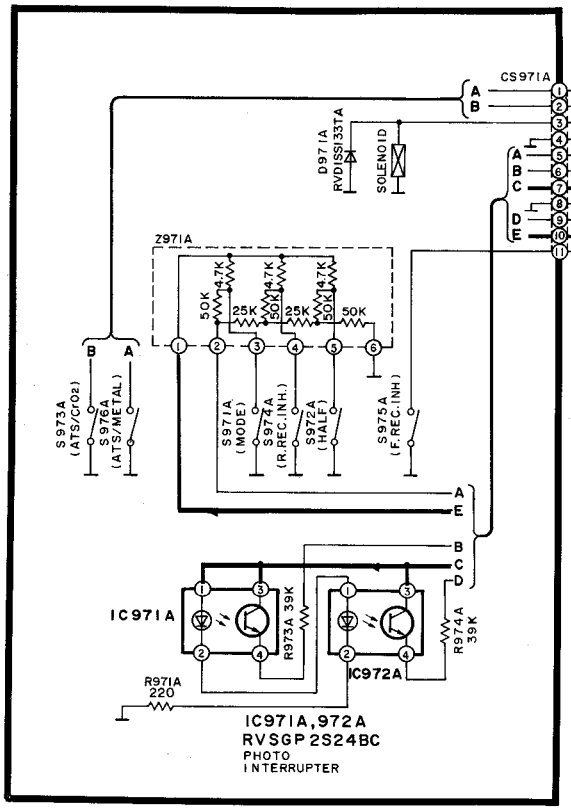
E MECHANISM CIRCUIT (DECK1)



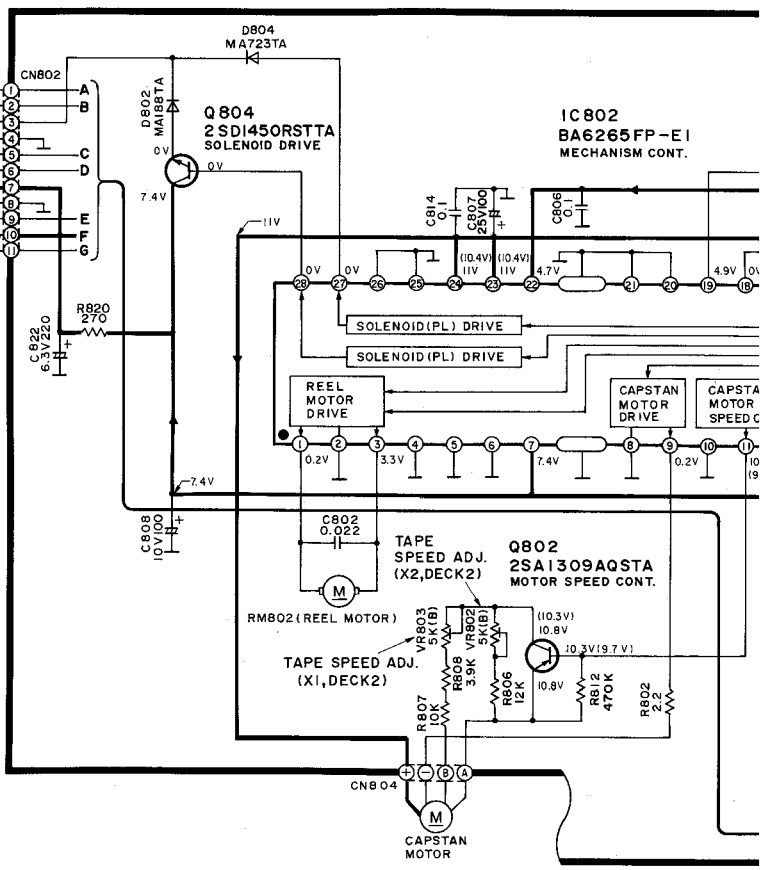
B MOTOR CIRCUIT (DECK1)



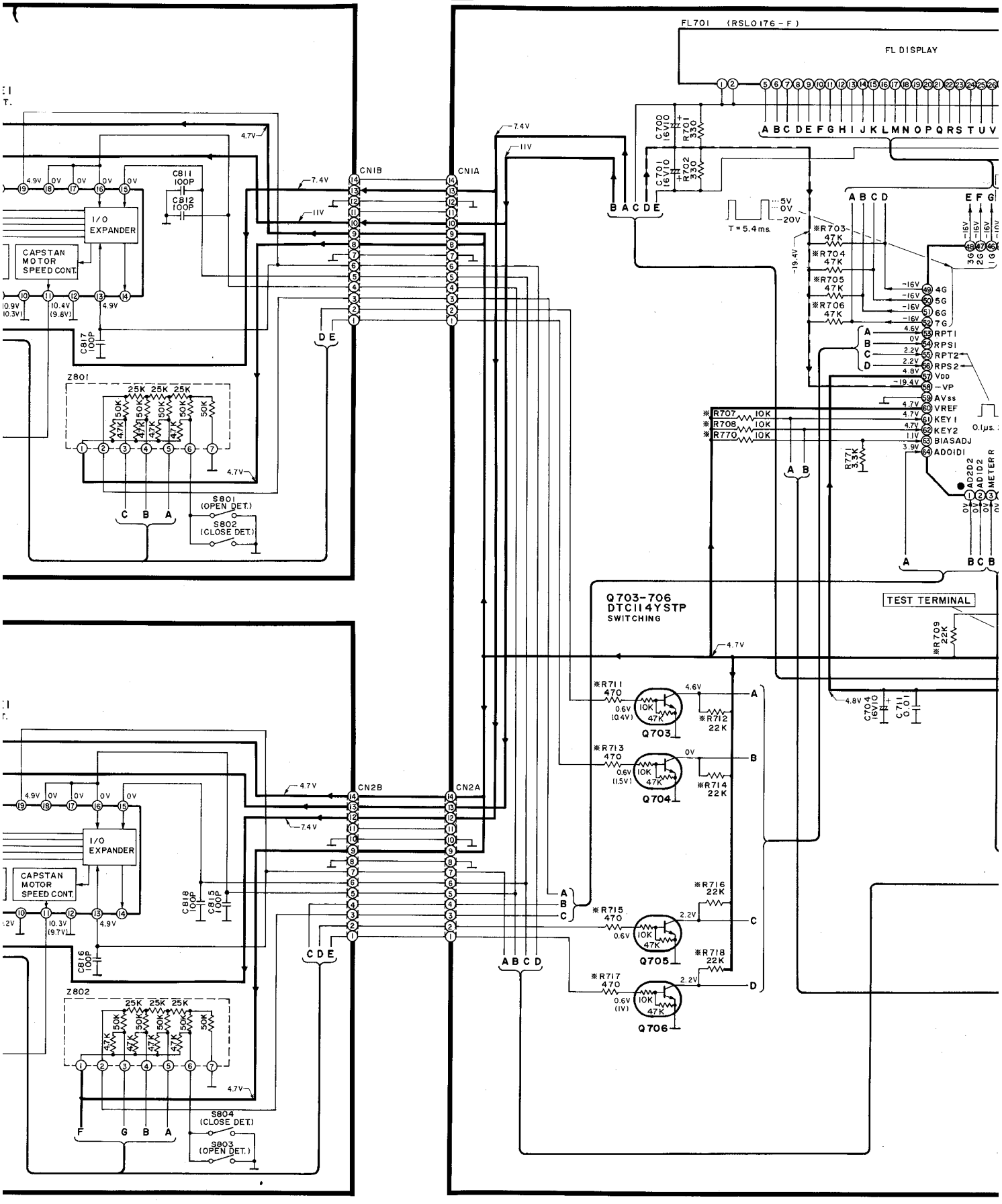
F MECHANISM CIRCUIT (DECK2)

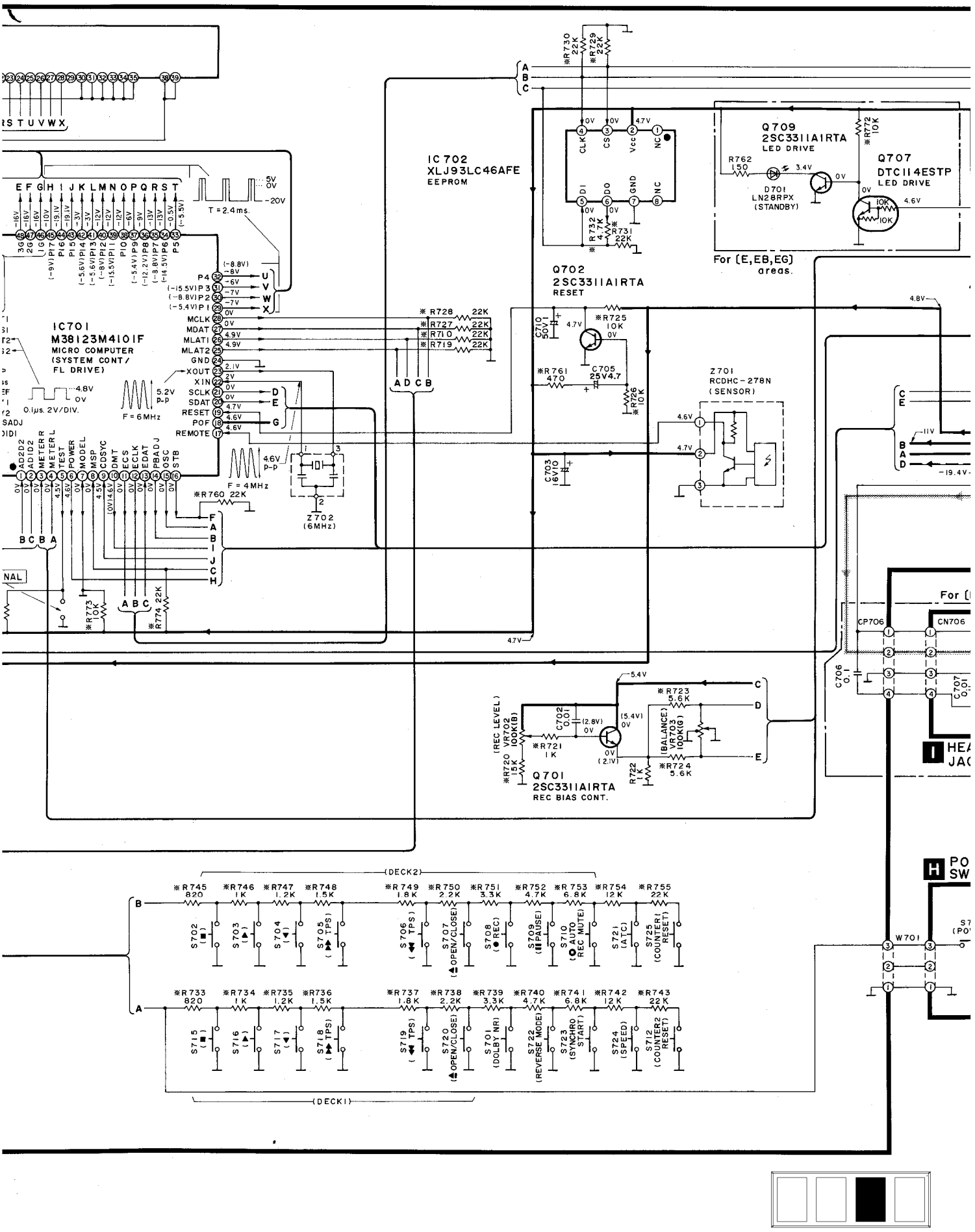


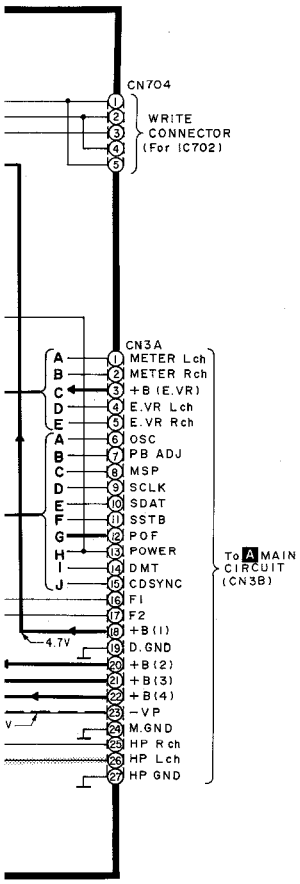
C MOTOR CIRCUIT (DECK2)



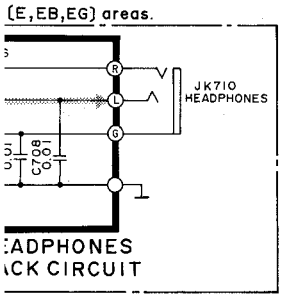
G OPERATION CIRCUIT




IC702
XLJ93LC46AFE
EEPROM
Q709
2SC3311AIRTA
LED DRIVE
Q707
DTC114ESTP
LED DRIVE
D701
LN28RPX
(STANDBY)
For (E,EB,EG) areas.
Q702
2SC3311AIRTA
RESET
IC701
M38123M4101F
MICRO COMPUTER
(SYSTEM CONT/
FL DRIVE)
Z701
RCDHC-278N
(SENSOR)
Z702
(6MHz)
Q701
2SC3311AIRTA
REC BIAS CONT.
(REC LEVEL)
(BALANCE)
(DECK2)
(DECK1)
T=2.4ms.
F=6MHz
F=4MHz
0.1μs. 2V/DIV.
CP706
CN706
W701

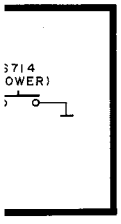


(E,EB,EG) areas.



EADPHONES
ACK CIRCUIT

OWER
WITCH CIRCUIT



■ SCHEMATIC DIAGRAM (Parts list on pages 57~60.)

(This schematic diagram may be modified at any time with the development of new technology.)

Note 1:

- S701 : Dolby noise-reduction switch (DOLBY NR; [B], [C]).
- S702 : DECK 2 Stop switch (■).
- S703 : DECK 2 Forward-side playback switch (▶).
- S704 : DECK 2 Reverse-side playback switch (◀).
- S705 : DECK 2 Fast-forward search switch (▶▶ TPS).
- S706 : DECK 2 Rewind search switch (◀◀ TPS).
- S707 : DECK 2 Open/close switch (▲ OPEN/CLOSE).
- S708 : DECK 2 Record switch (● REC).
- S709 : DECK 2 Pause switch (▮▮ PAUSE).
- S710 : DECK 2 Automatic-record-muting switch (◉ AUTO REC MUTE).
- S712 : DECK 2 Counter reset switch (COUNTER 2 RESET).
- S714 : Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON).
- S715 : DECK 1 Stop switch (■).
- S716 : DECK 1 Foware-side playback switch (▶).
- S717 : DECK 1 Reverse-side playback switch (◀).
- S718 : DECK 1 Fast-forward search switch (▶▶ TPS).
- S719 : DECK 1 Rewind search switch (◀◀ TPS).
- S720 : DECK 1 Open/close switch (▲ OPEN/CLOSE).
- S721 : Auto tape calibration switch (ATC).
- S722 : Reverse-mode select switch (REVERSE MODE).
- S723 : Synchro-start switch (SYNCHRO START).
- S724 : Tape-to-tape recording-speed switch (SPEED; X1, X2).
- S725 : DECK 1 Counter reset switch (COUNTER 1 RESET)
- S801 : DECK 1 Cassette holder open detection switch in "**off**" position.
- S802 : DECK 1 Cassette holder close detection switch in "**off**" position.
- S803 : DECK 2 Cassette holder open detection switch in "**off**" position.
- S804 : DECK 2 Cassette holder close detection switch in "**off**" position.
- S971 : DECK 1 Mode switch in "**off**" position.
- S971A : DECK 2 Mode switch in "**off**" position.
- S972 : DECK 1 Half switch in "**off**" position.
- S972A : DECK 2 Half switch in "**off**" position.
- S973 : DECK 1 ATS (CrO_2) switch in "**off**" position.
- S973A : DECK 2 ATS (CrO_2) switch in "**off**" position.
- S974A : DECK 2 Reverce rec. inhibit switch in "**off**" position.
- S975A : DECK 2 Forward rec. inhibit switch in "**off**" position.
- S976A : DECK 2 ATS (Metal) switch in "**off**" position.
- Resistance are in ohms (Ω), 1/4 watt unless specified otherwise.
  1K=1,000 (Ω), 1M=1,000k (Ω)
- Capacity are in micro-farads (μF) unless specified otherwise.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position otherwise specified.
  ( ) .....Voltage values at record mode.
  For measurement us EVM.
- Important safety notice
  Components identified by ⚠ mark have special characteristics important for safety.
  When replacing any of these components, use only manufacturer's specified parts.
- (▬▬<+B>▬▬) indicates +B (bias).
- (▬ ▬ ▬<−B>▬ ▬ ▬) indicates −B (bias).
- ( ) indicates the flow of the playback signal.
- ( ) indicates the flow of the record signal.
- The supply part number is described alone in the replacement parts list,

Ref. No.	Production Part No.	Supply Part No.
IC4	M5218AL	M5218L
IC152	XLU2040F-T2	XLU2040F-T1
IC302	BA4560FT1	SVIBA4560FT1

※ marks indicate printed resistor.

Caution!

IC and LSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.