

Service Manual

COMPACT
disc
DIGITAL AUDIO

MASH*¹
multi-stage noise shaping

*² **DOLBY B NR**

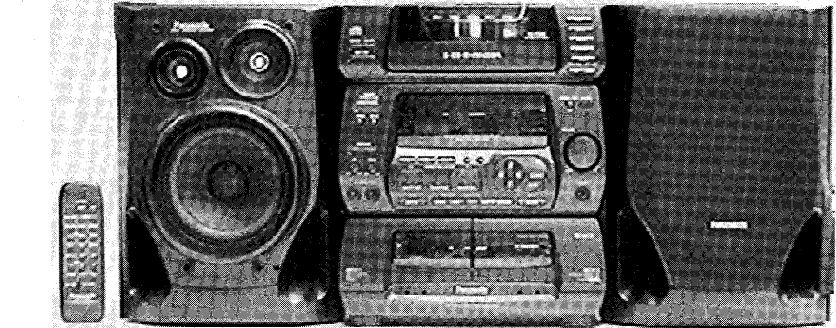
CD Stereo System
SA-CH74

Colour

(K) ... Black Type

Area

Suffix for Model No.	Area	Colour
(GC)	Asia, Latin America, Africa and Middle Near East	(K)
(GCS)	Singapore	
(GN)	Oceania	
(GT)	Taiwan	
(GH)	Hong Kong	



Remote Control
Transmitter

SB-CH430

SA-CH74

SB-CH430

TAPE SECTION : AR2 MECHANISM SERIES

CD SECTION : RAE0150Z TRAVERSE DECK SERIES

■ Specifications

■ Amplifier Section

1 kHz continuous power output	
Both channels driven	2 x 35W (THD 1%, 4Ω)
RMS	2 x 50W (THD 10%, 4Ω)
PMPO	800W (4Ω)
Total harmonic distortion	
Half power at 1 kHz	0.06 % (4 Ω)
Frequency response	
CD, AUX	60 Hz – 20 kHz (–3 dB)
Input sensitivity and impedance	
AUX	250 mV, 28 kΩ
MIC	0.6 mV, 680 Ω
Tone controls	
6 EQ SPACE	HEAVY, CLEAR, SOFT, DISCO, LIVE, HALL
V. BASS (volume at –30 dB)	63 Hz, 7 dB
Load impedance	4 Ω

■ CD Section

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source/wave length	Semiconductor laser / 780 nm
Number of channels	Stereo
Frequency response	20 Hz – 20 kHz (+1 dB, –2 dB)
S/N (CD UNIT OUT)	95 dB (JIS. A)
Wow and flutter	Below measurable limit
Digital filter	8 fs
D/A converter	MASH (1 bit DAC)

■ Cassette Deck Section

Track system	4 track, 2 channel
Heads	
Playback	Solid permalloy head (Rotary head)
Record/playback	Solid permalloy head (Rotary head)
Erase	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s (1 7/8 ips)
Frequency response [(+3 dB, –6 dB) at deck out]	
NORMAL	35 Hz – 14 kHz
CrO ₂	35 Hz – 14 kHz
S/N (CrO ₂ TYPE)	
Dolby NR off	50 dB (A weighted)
Dolby NR on	60 dB (CCIR)
Wow and flutter	0.18 % (WRMS)
Fast forward and rewind time	
	Approx. 120 seconds with C-60 cassette tape

■ FM Tuner Section

Frequency range	87.50 – 108.00 MHz
Sensitivity	23.3 dBf
Total harmonic distortion	
MONO	0.3 %
STEREO	0.5 %
S/N (MONO)	60 dB
Image rejection at 98 MHz	35 dB
Stereo separation at 1 kHz	35 dB
Antenna terminal(s)	75 Ω (unbalanced)

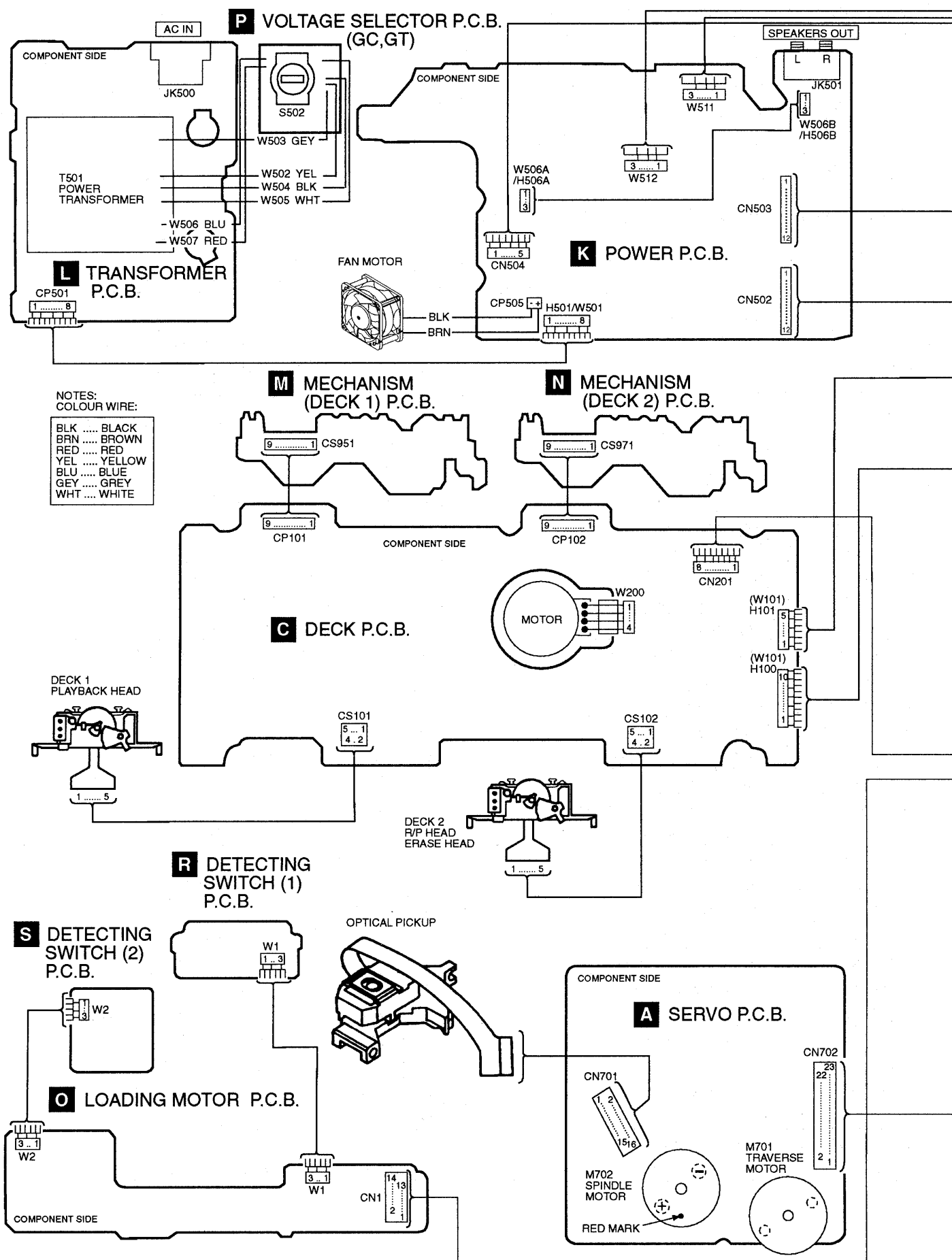
*² Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.

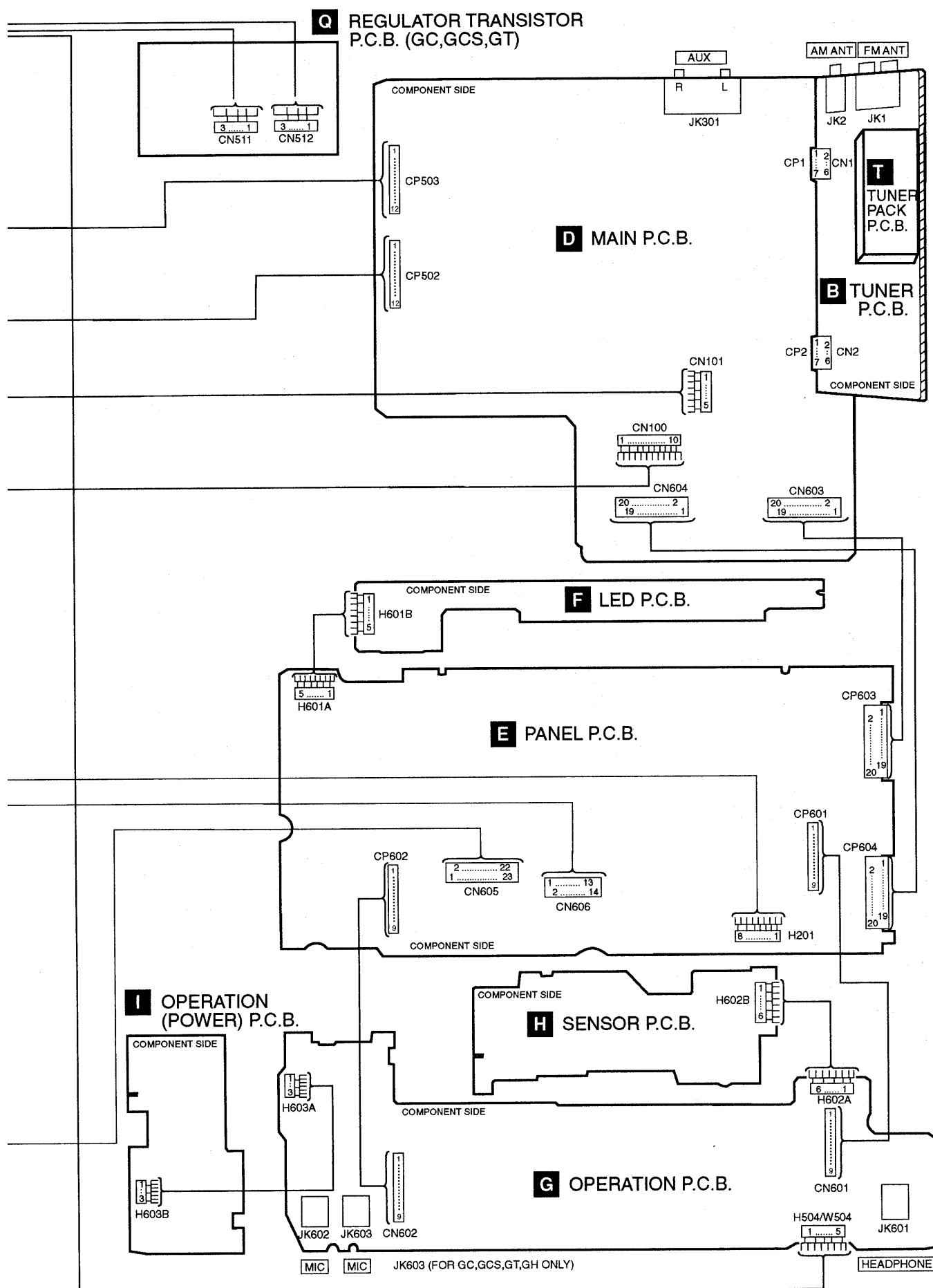
System	Music Center	Speaker
SC-CH74 (GC)	SA-CH74 (GC)	SB-CH430 (GC)
SC-CH74 (GCS)	SA-CH74 (GCS)	
SC-CH74 (GT)	SA-CH74 (GT)	
SC-CH74 (GN)	SA-CH74 (GN)	
SC-CH74 (GH)	SA-CH74 (GH)	

Panasonic[®]

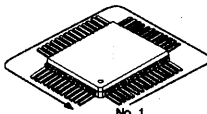
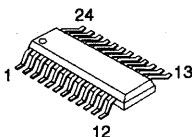
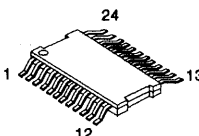
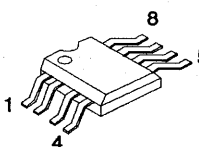
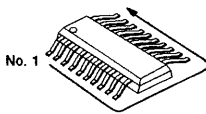
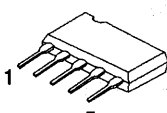
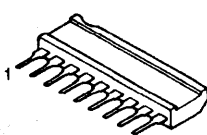
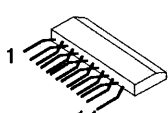
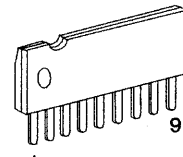
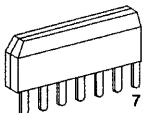
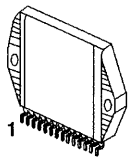
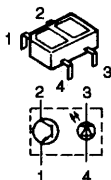
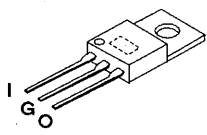
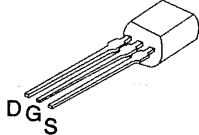
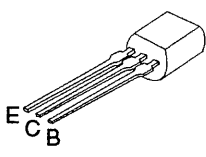
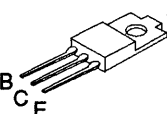
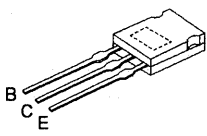
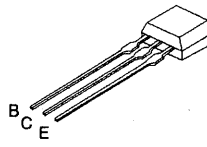
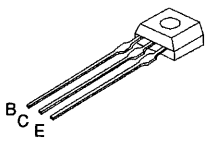
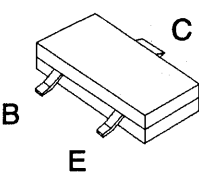
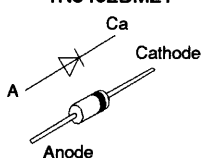
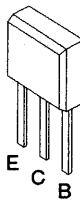
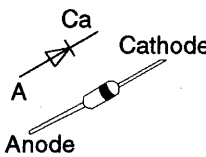
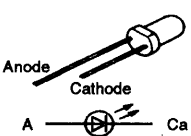
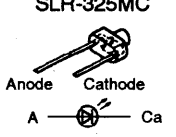
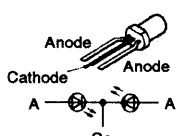
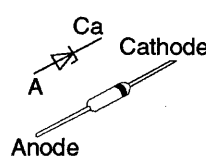
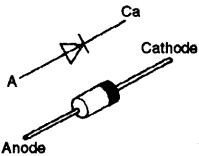
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Wiring Connection Diagram

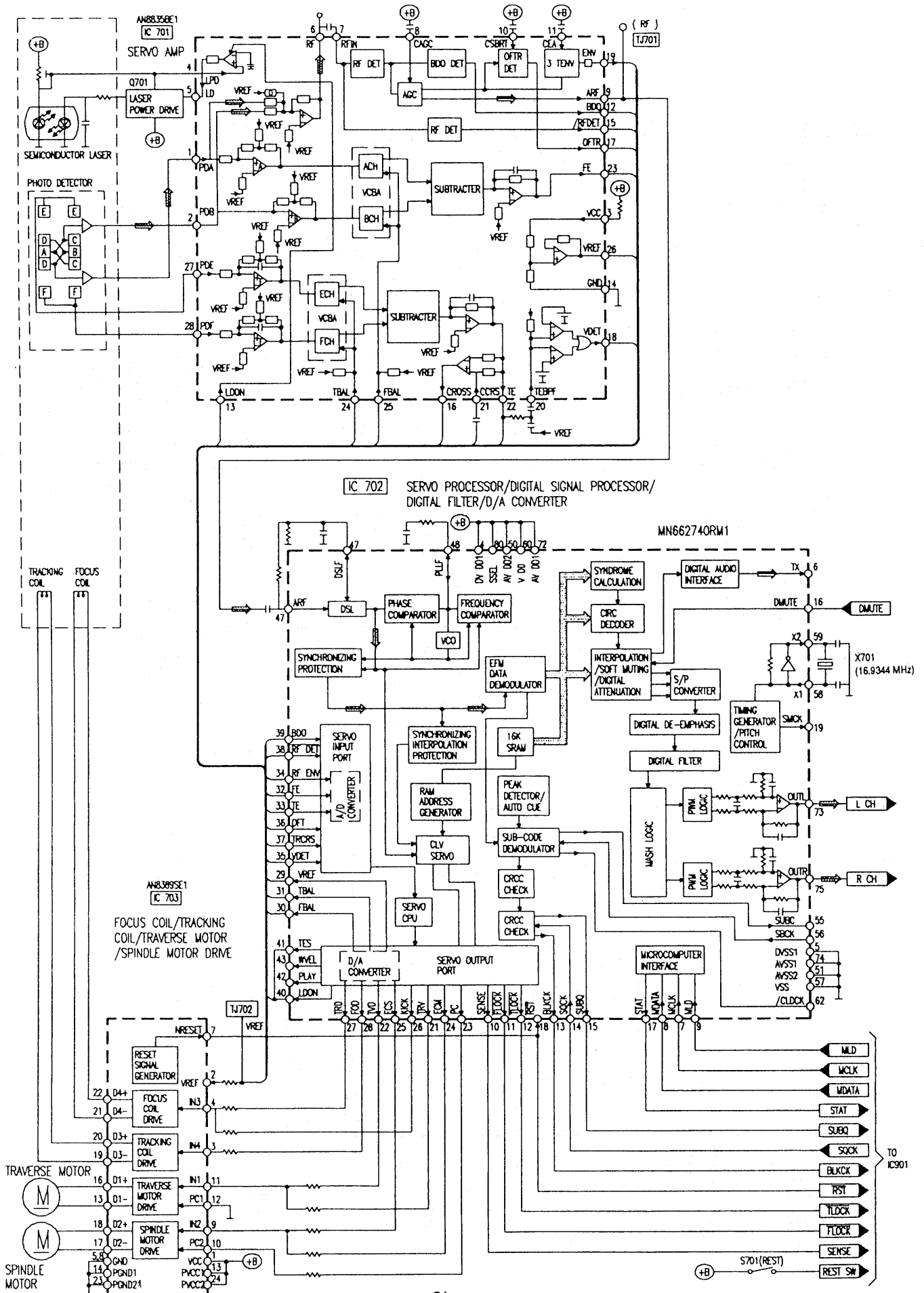


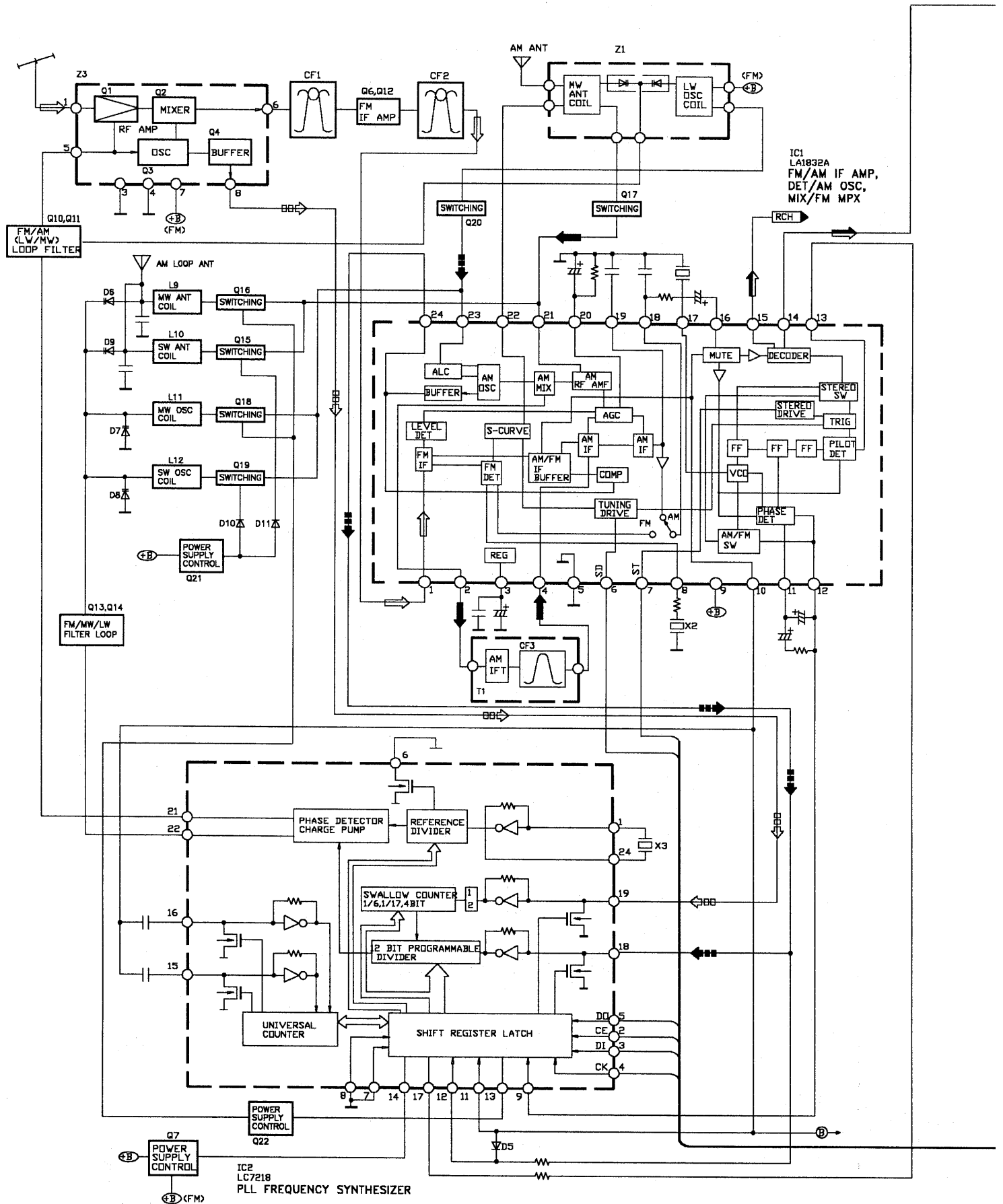


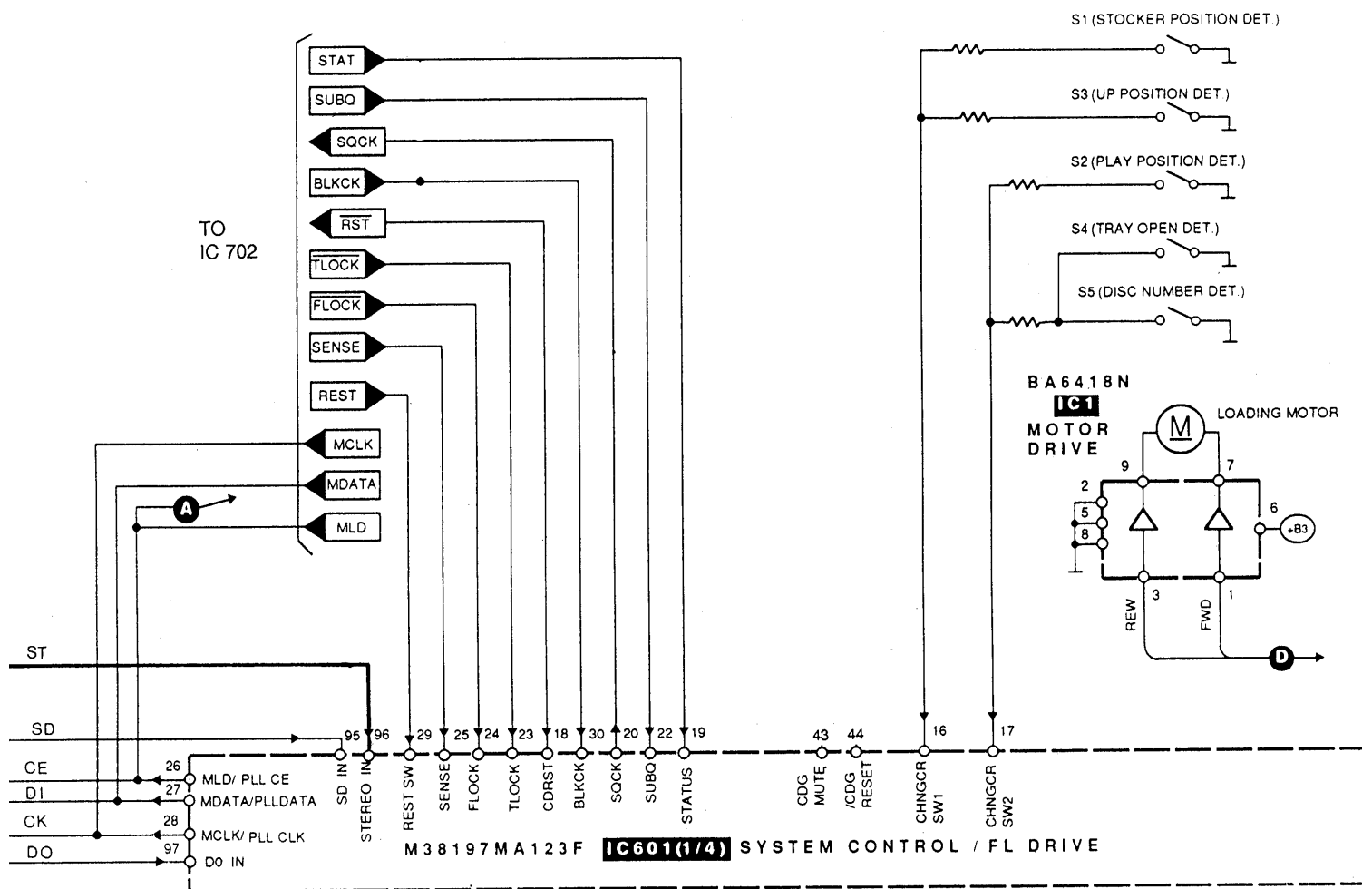
■ Terminal Guide of ICs, Transistors and Diodes

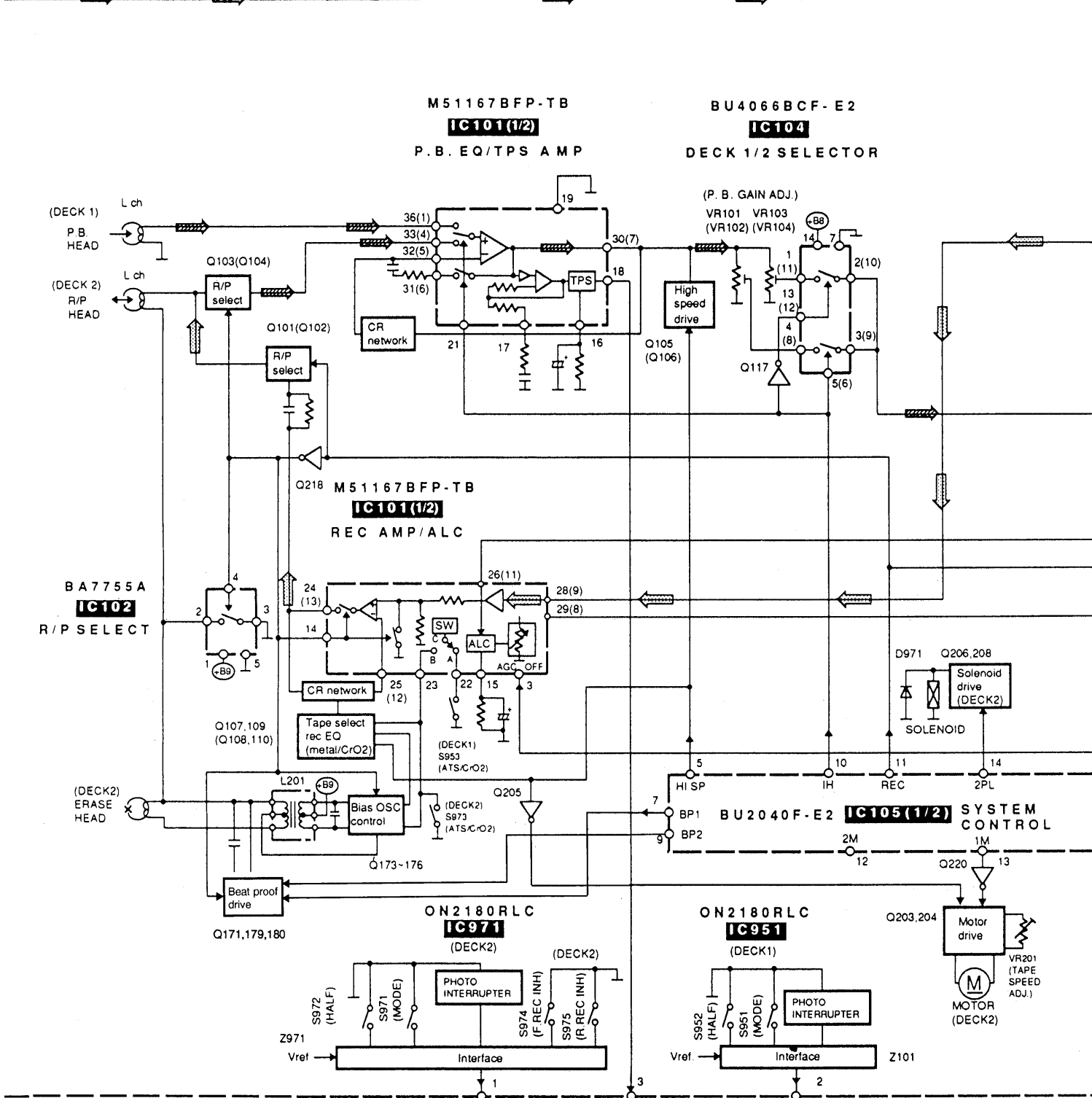
M38197MA136F(100P) MN662741RPA(80P) 	LA1832A LC7218 	AN8389SE1 	BA4558FDXE2 	AN8835SBE1 (28P) BU2040F-E2 (16P) BU2090F-E2 (16P) BU4052BCF-E2 (16P) BU4066BCF-E2 (14P) CXA1102M-T4 (16P) M51167BFP-E1 (36P) M62422FPE1 (42P) 	
BA7755A 	DAP803 	M51131L-702 	BA6418N 	TA2011S 	RSN3502 
ON2180RLC 	LM2940T5M 	2SJ164QRTA 	2SK301QTA 	2SB621ARTA 2SB621RTA 2SC2001KTA 2SD1302STA 2SD965RTA 	
2SB1185E 2SD1762E 	2SD2037ETA 	2SA933SSTA 2SC1740SLNET 2SC1740SSTA RVTDTA143XST 		2SC2785FETA 2SC2785FTA 2SC2787LTA 2SD1020HTA BA1A4ZTA BA1F4MTA BA1L3ZTA BN1L3NTA 	
2SB709S 	1D3E 1N5402BM21 	2SC2784FTA 2SD1450STA BA1L4MTA BA1L4ZTA BN1A4MTA 		1SS254TA 1SS291TA MA165TA MA167TA MA700ATA RVD1SS133TA 	
SLR325DCT31 	SLR342DCTB7 SLR342MCTB7 SLR-325MC 	SPR505MDTT 	MTZJ11CTA MTZJ12BTA MTZJ13ATA MTZJ15BTA MTZJ15CTA MTZJ20BTA MTZJ33CTA MTZJ3R6BTA	MTZJ4R7BTA MTZJ5R1CTA MTZJ5R6BTA MTZJ6R8BTA MTZJ6R8CTA MTZJ7R5CTA MTZJ8R2BTA MTZJ9R1ATA 	
RL1N4003N02 					

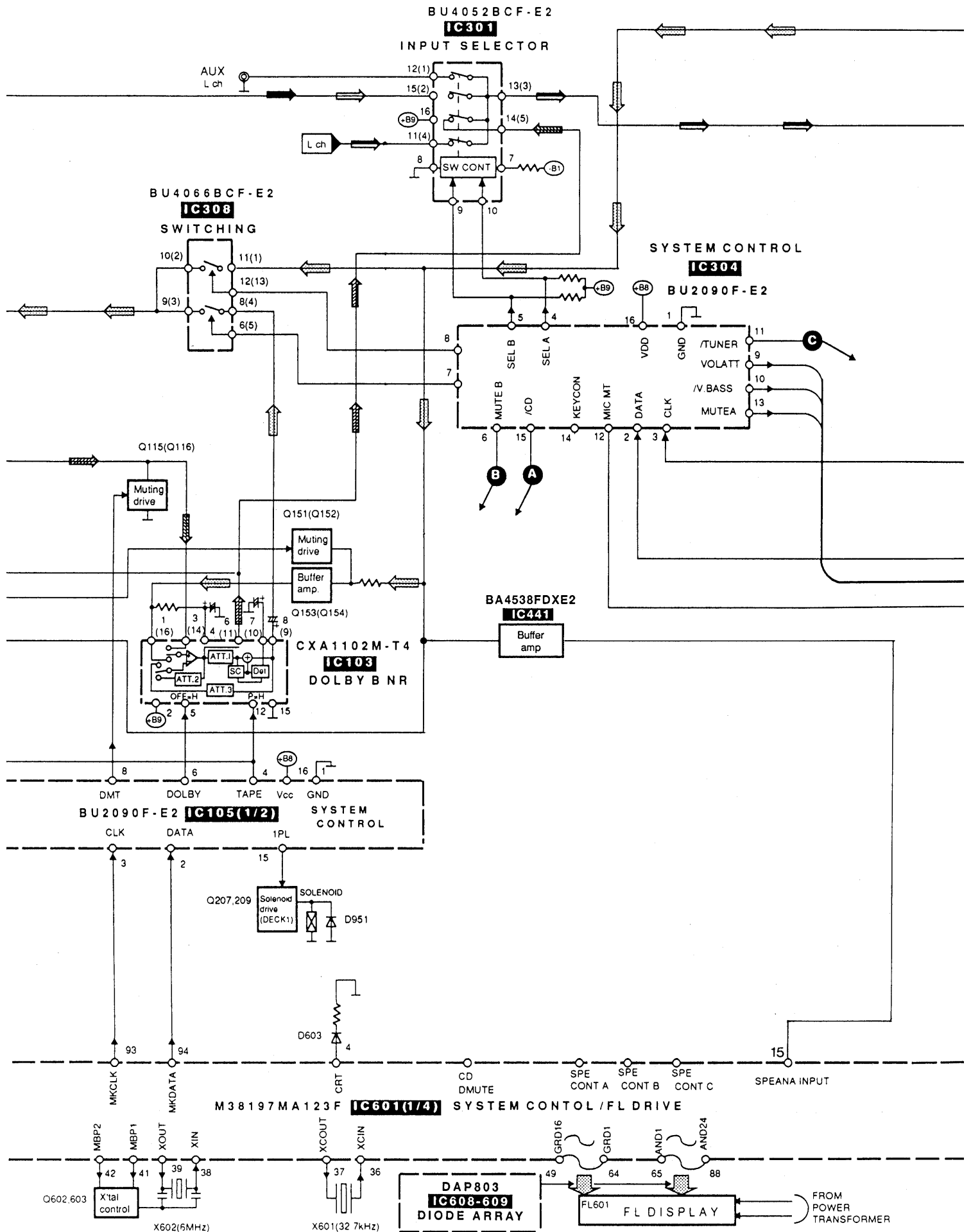
Block Diagram

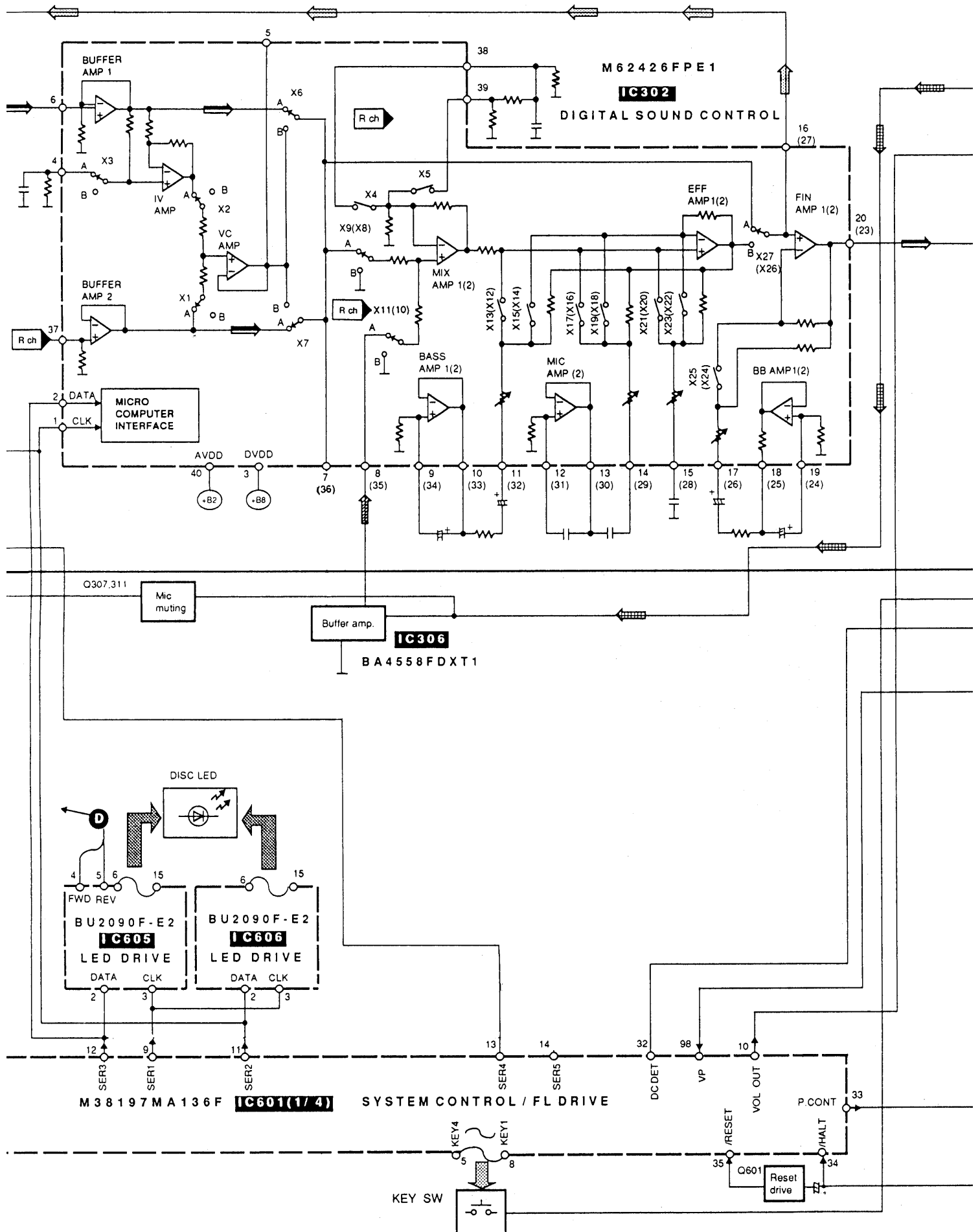


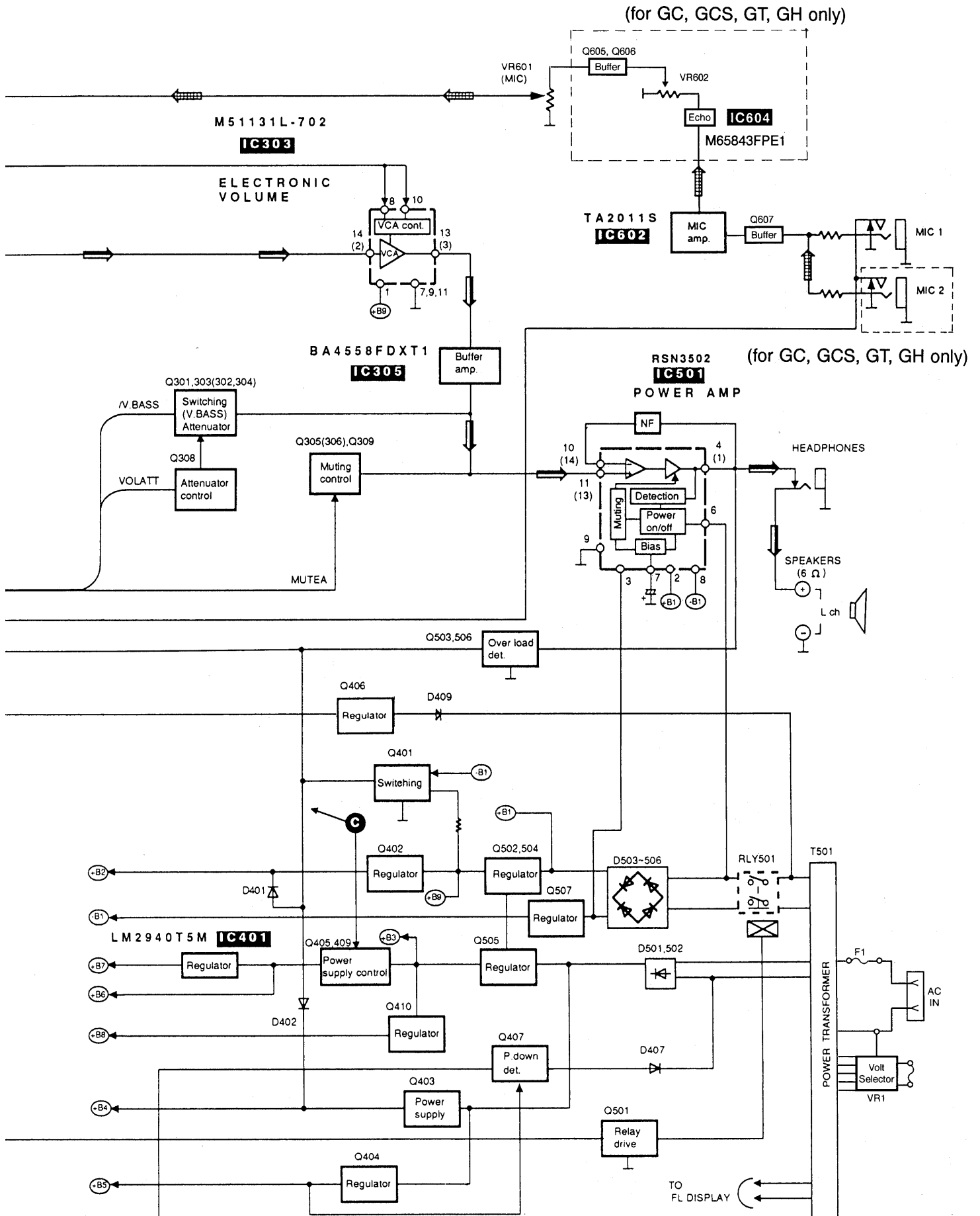


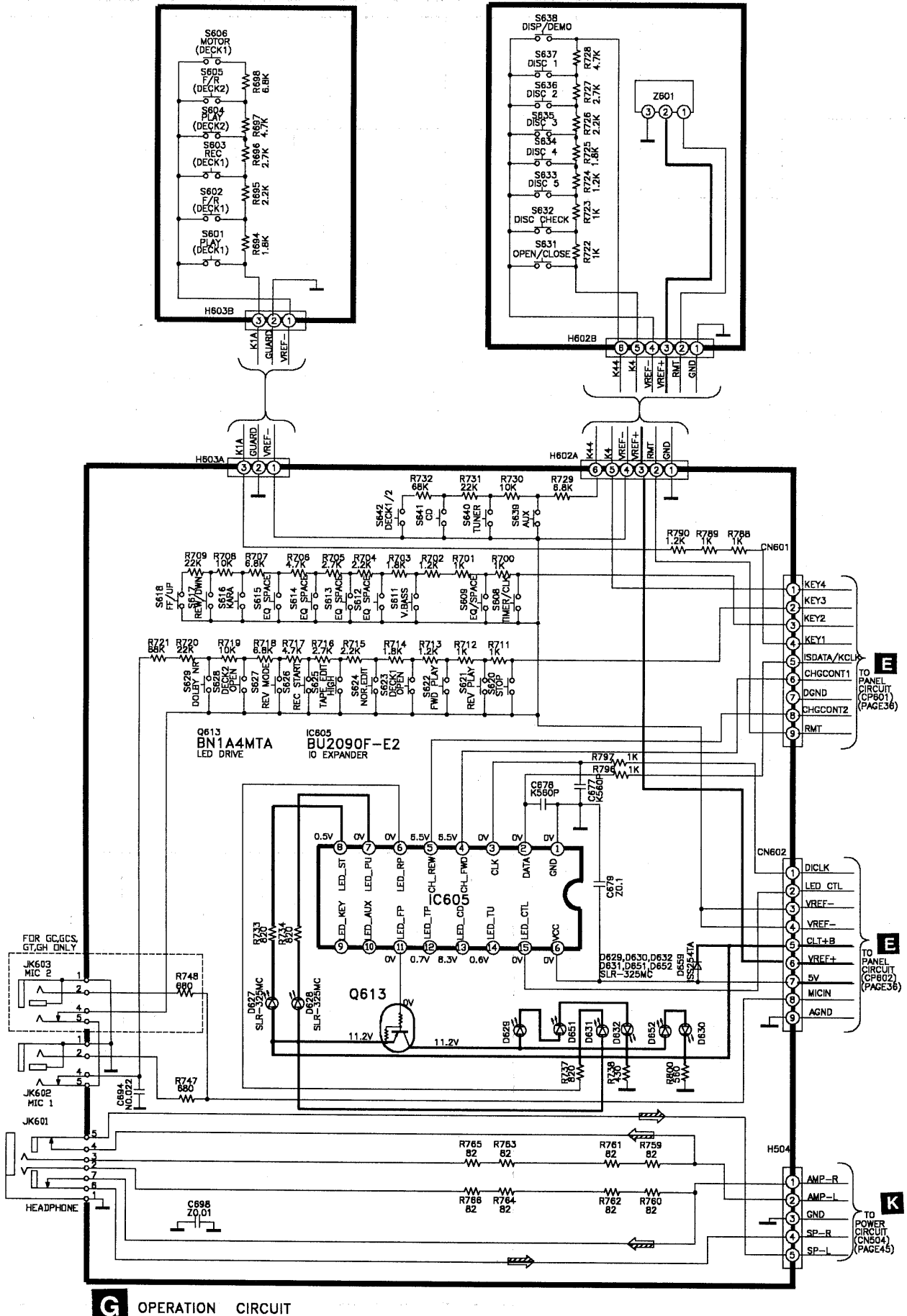






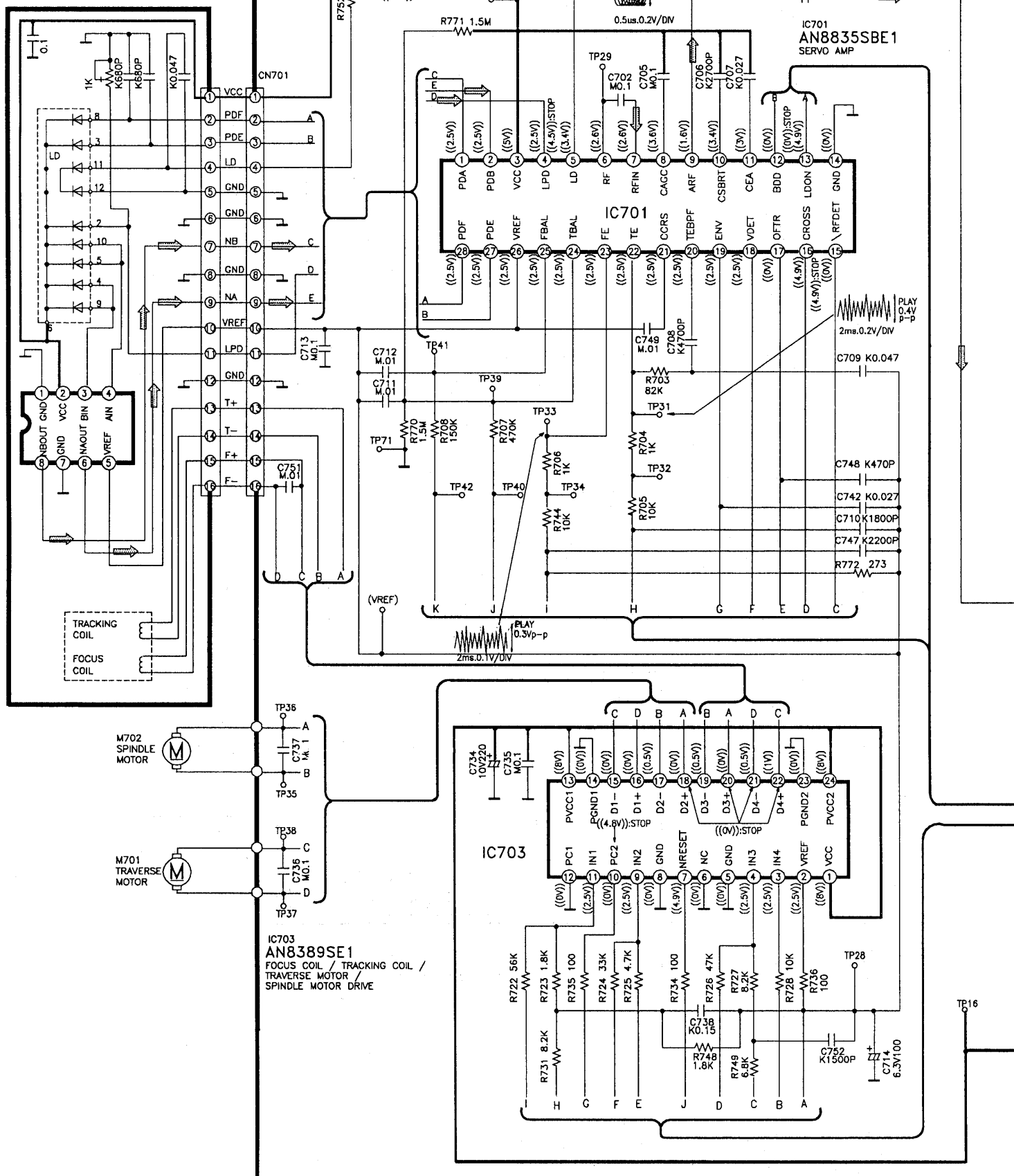


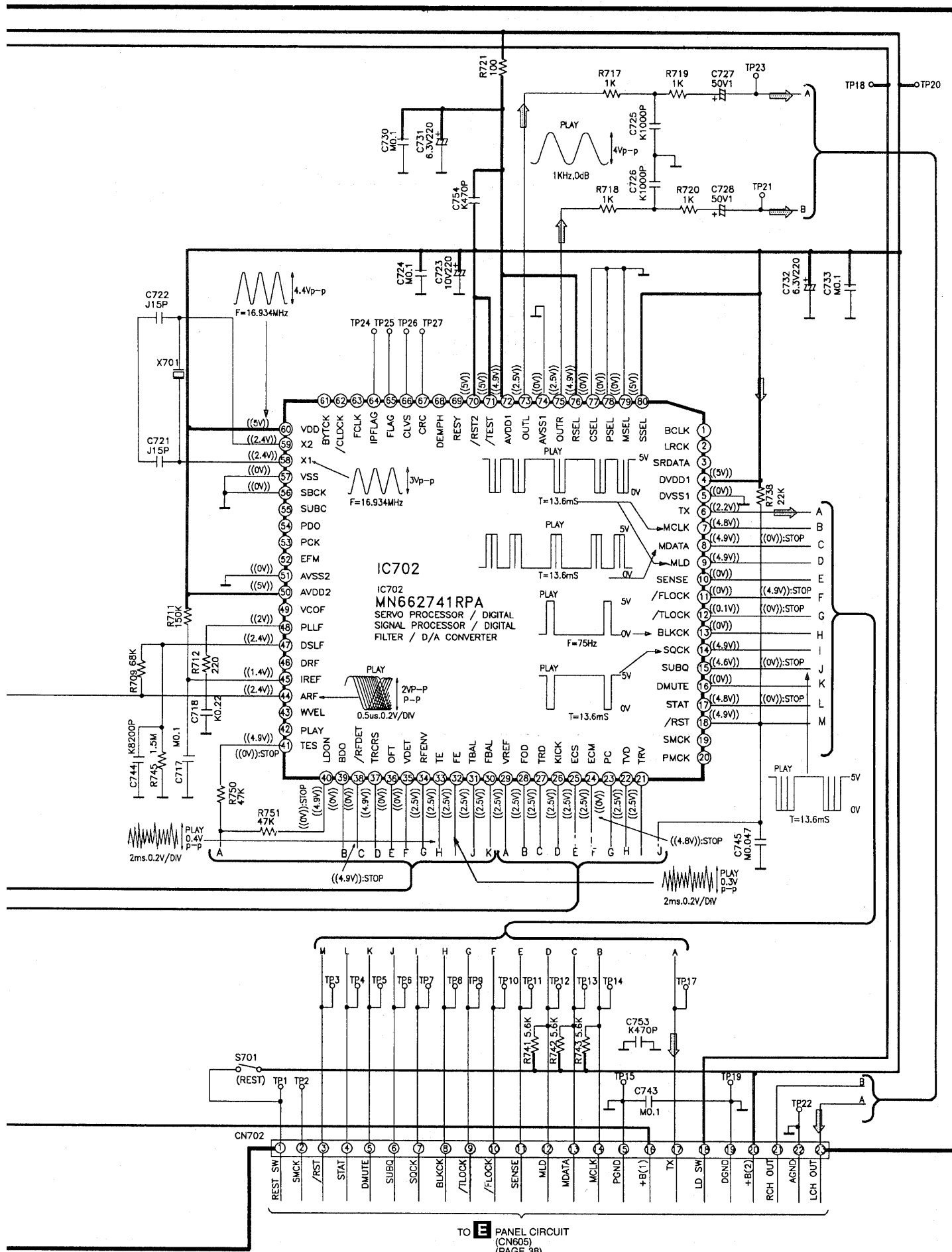


I OPERATION (POWER) CIRCUIT**H** SENSOR CIRCUIT

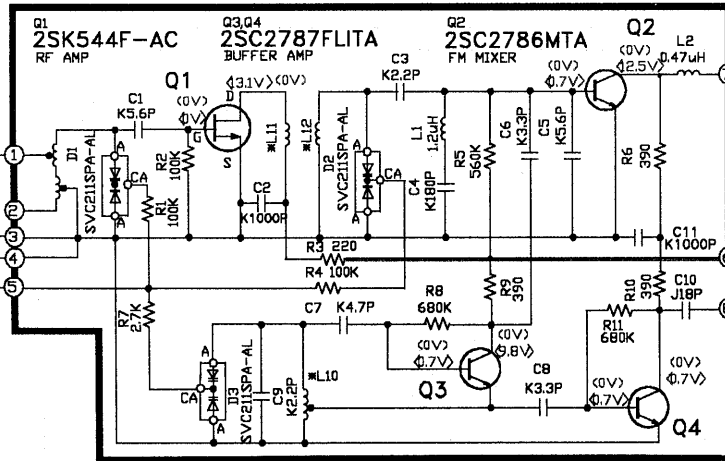
A SERVO CIRCUIT

OPTICAL PICKUP

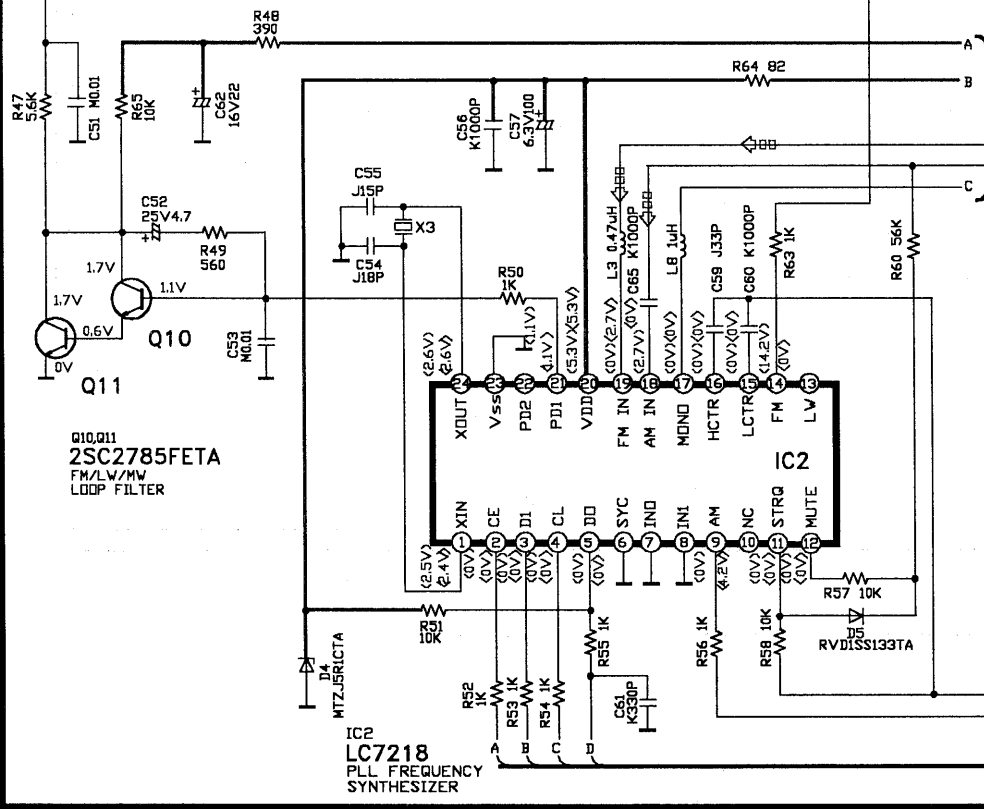
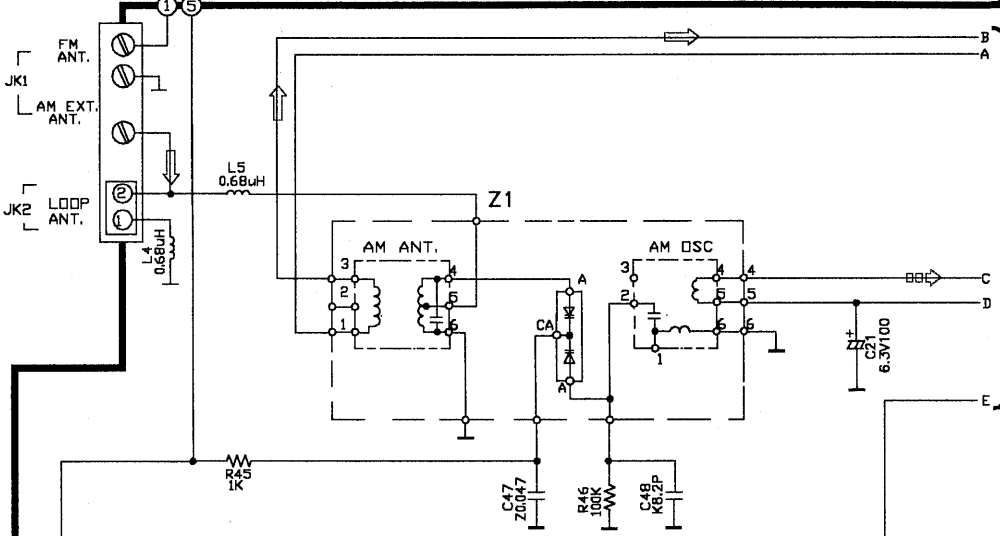


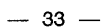


T TUNER PACK CIRCUIT

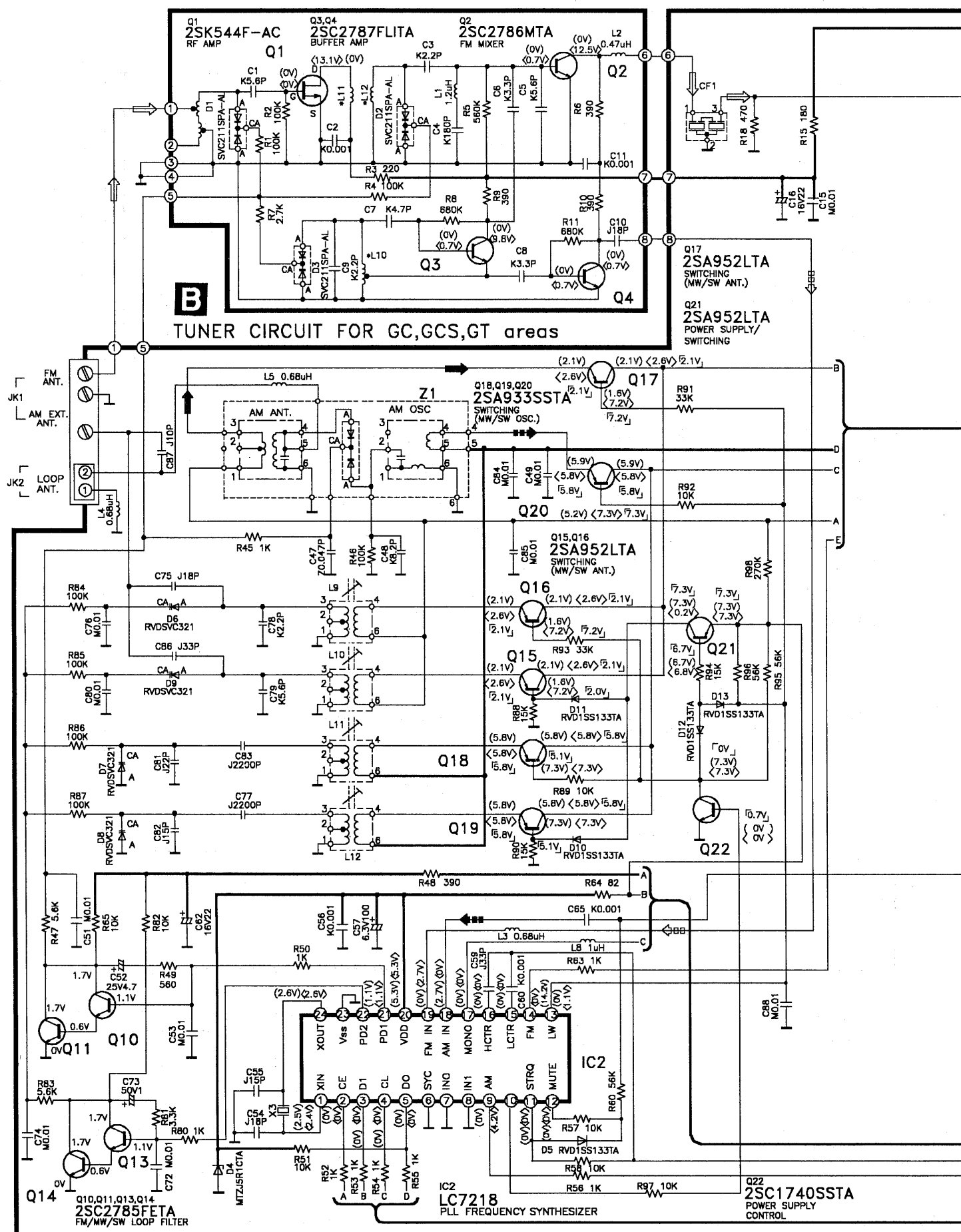


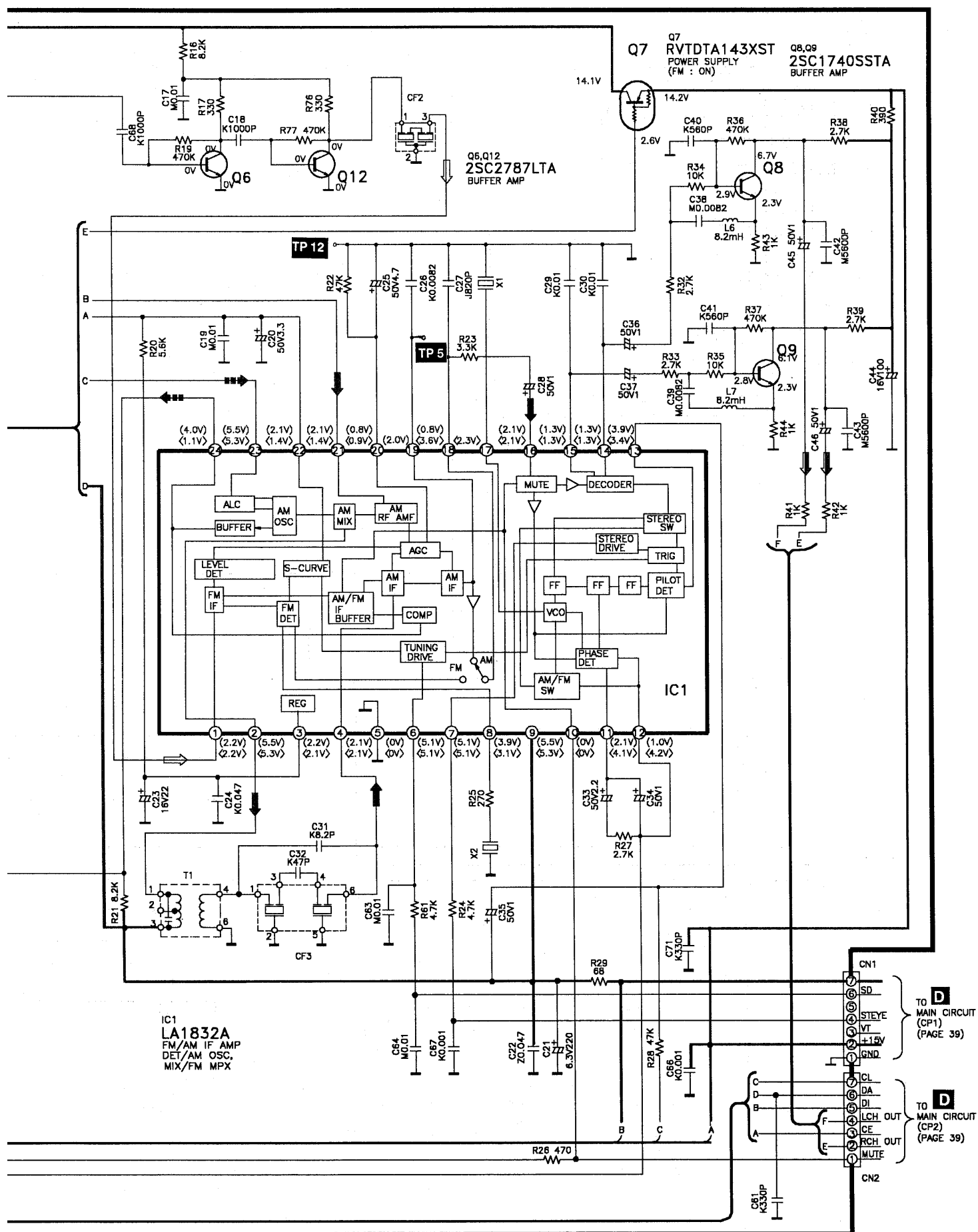
B TUNER CIRCUIT FOR GN,GH area



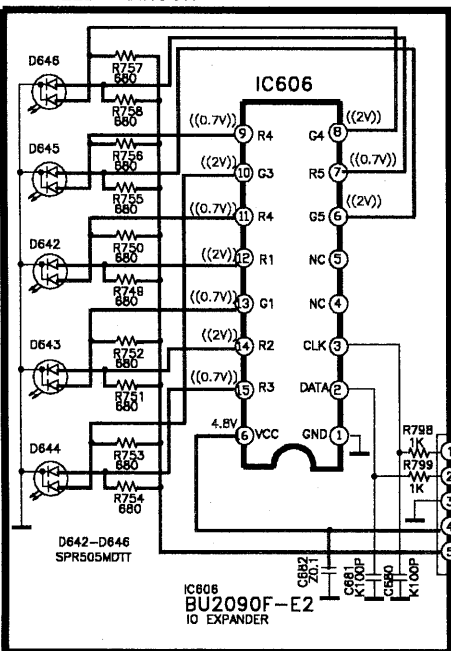


T TUNER PACK CIRCUIT

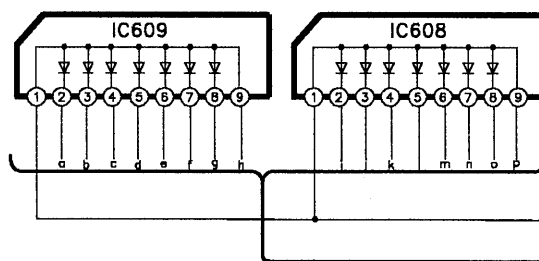




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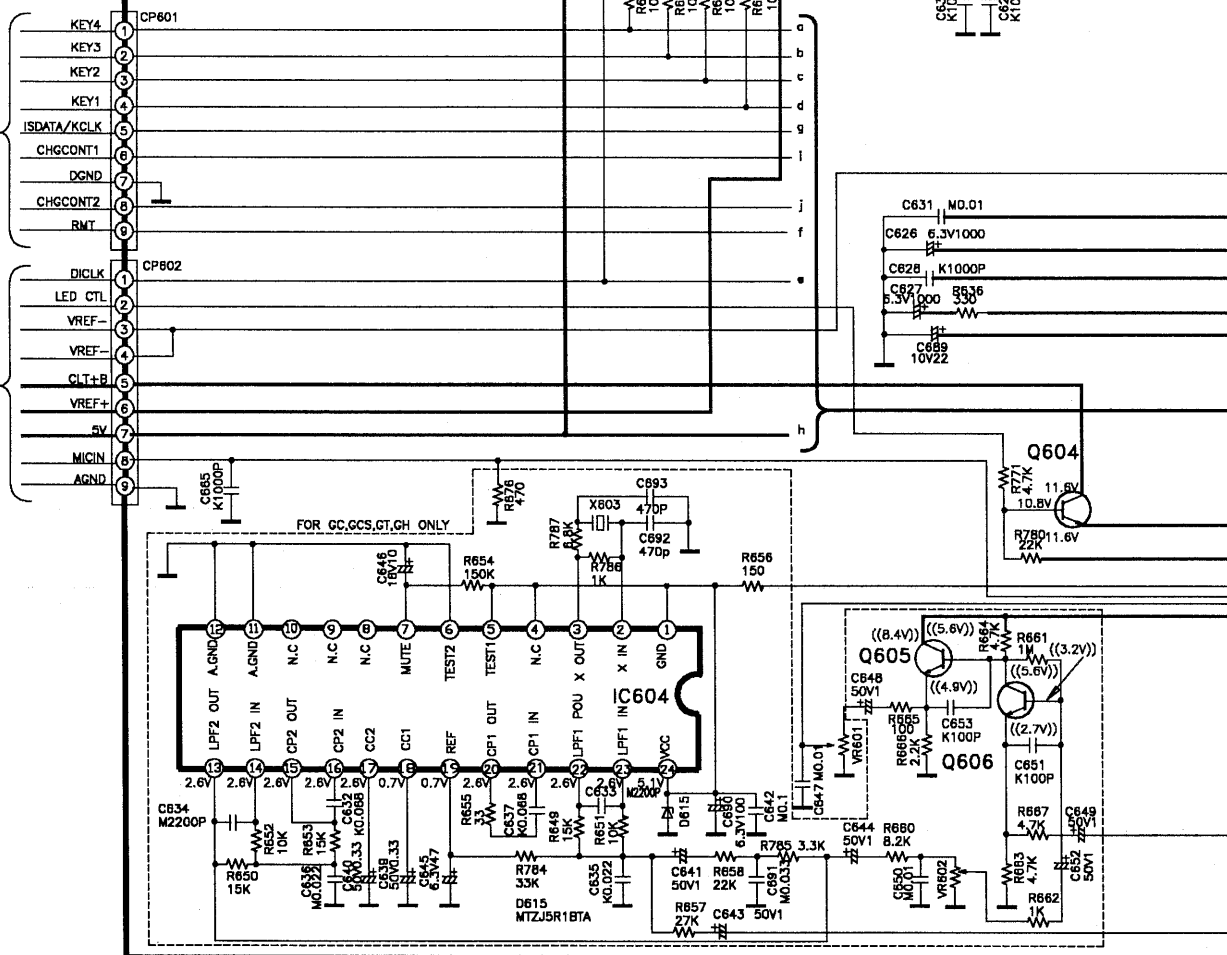
E



IC608,IC609
DAP803
SYSTEM DRIVE AND FL CONTROL

IC804
M65843FPE1
ECHO

Q605,Q606
2SC2785FTA
POWER SUPPLY



Q612
2SC2785FTA
SYSTEM DRIVE AND FL CONTROL

FL601

D611-D614
MA1677A

IC601
M38197MA136F
SYSTEM DRIVE AND FL CONTROL

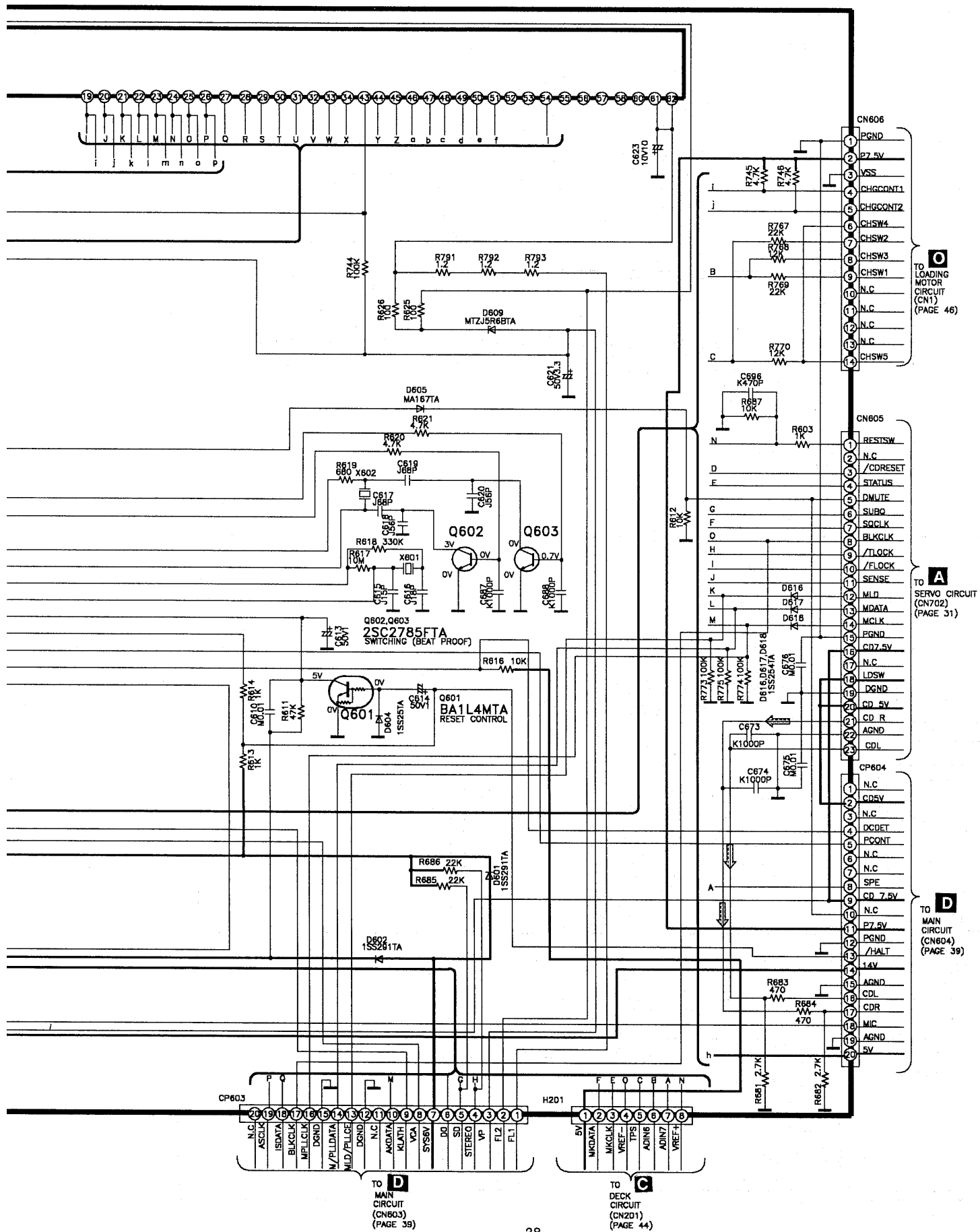
IC602
TA2011S
SYSTEM DRIVE AND FL CONTROL

Q604
2SB621RTA
POWER SUPPLY

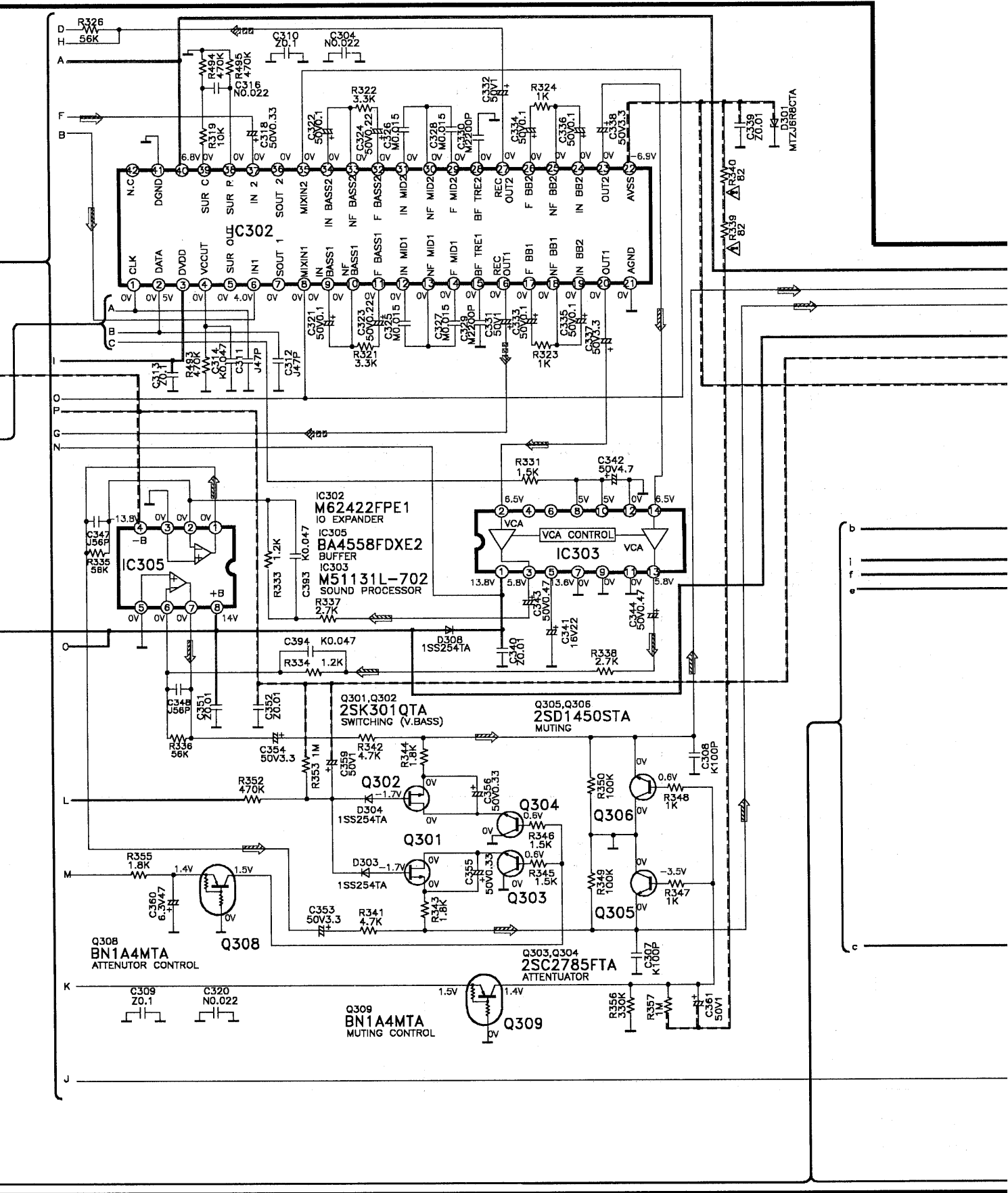
FOR GC, GCS, GT, GH ONLY

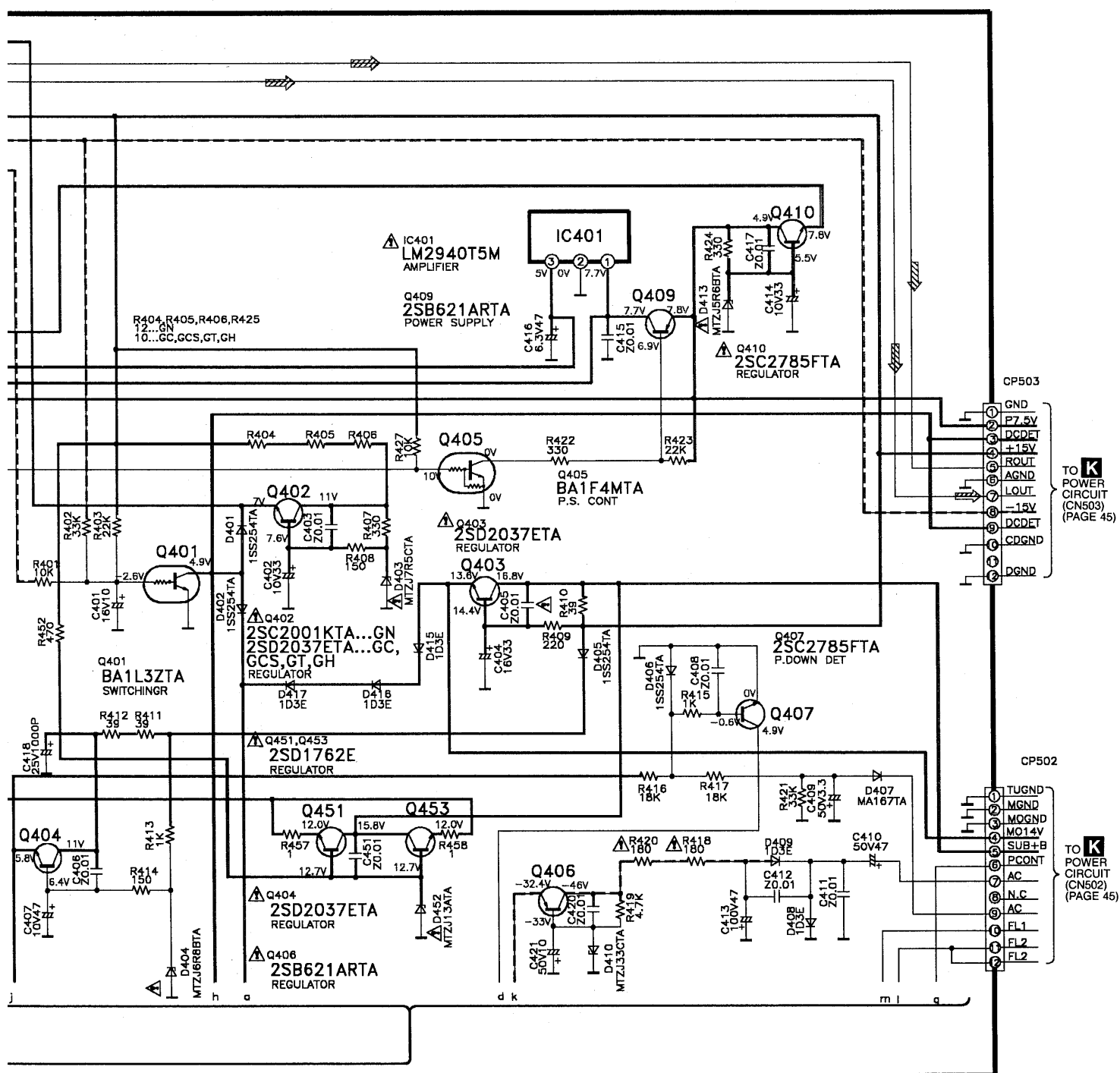
Q607
2SC2785FTA
POWER SUPPLY

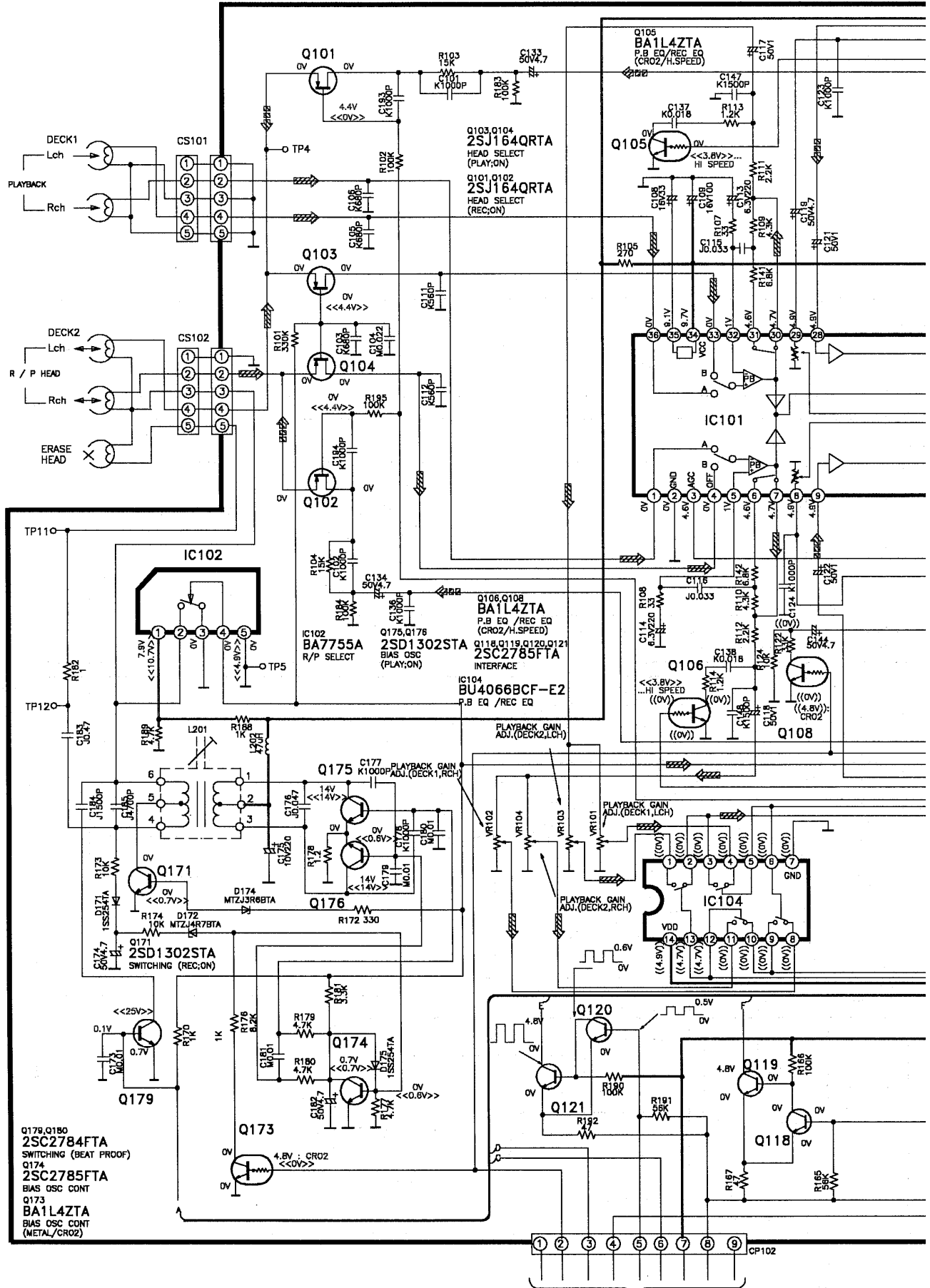
Q607

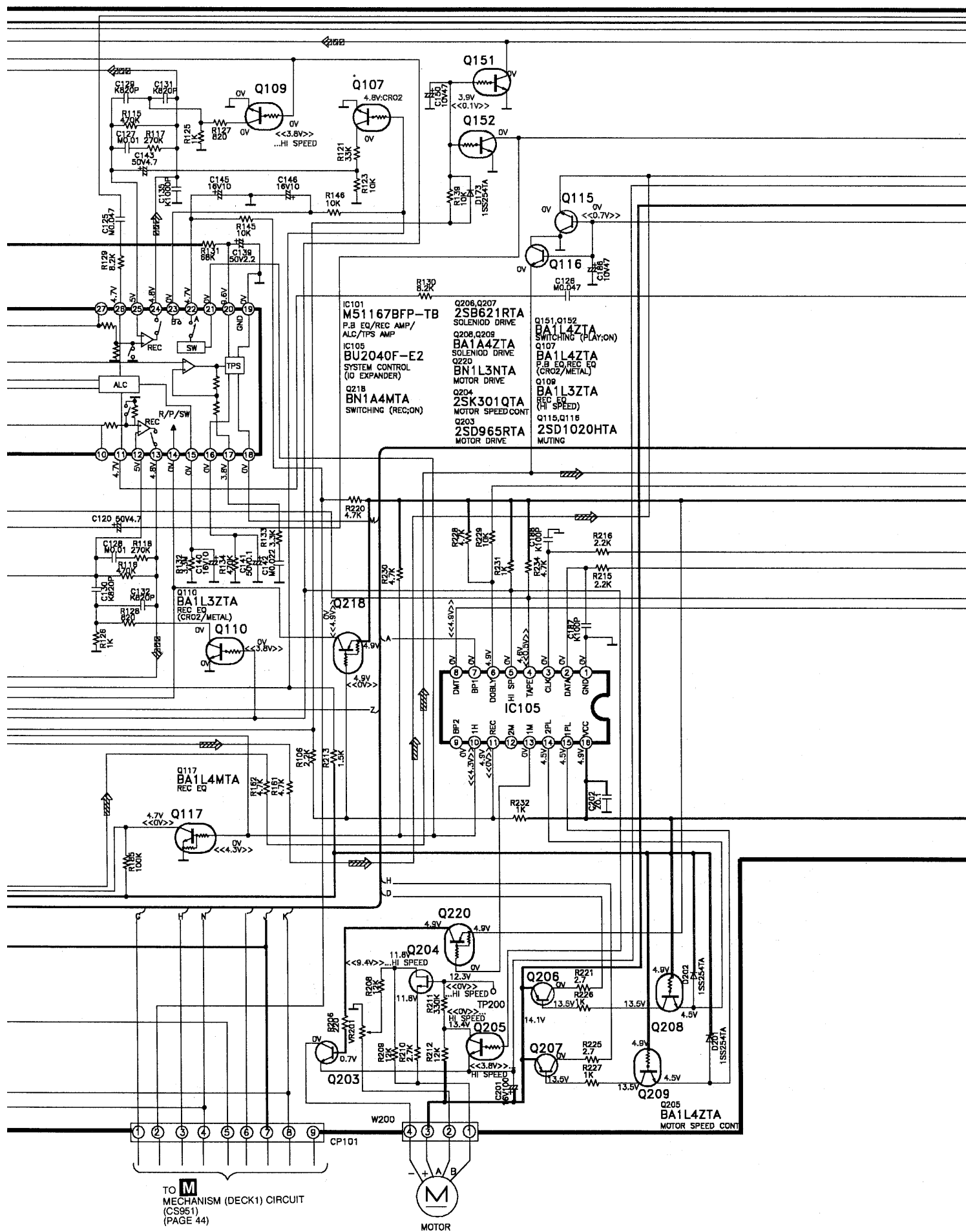


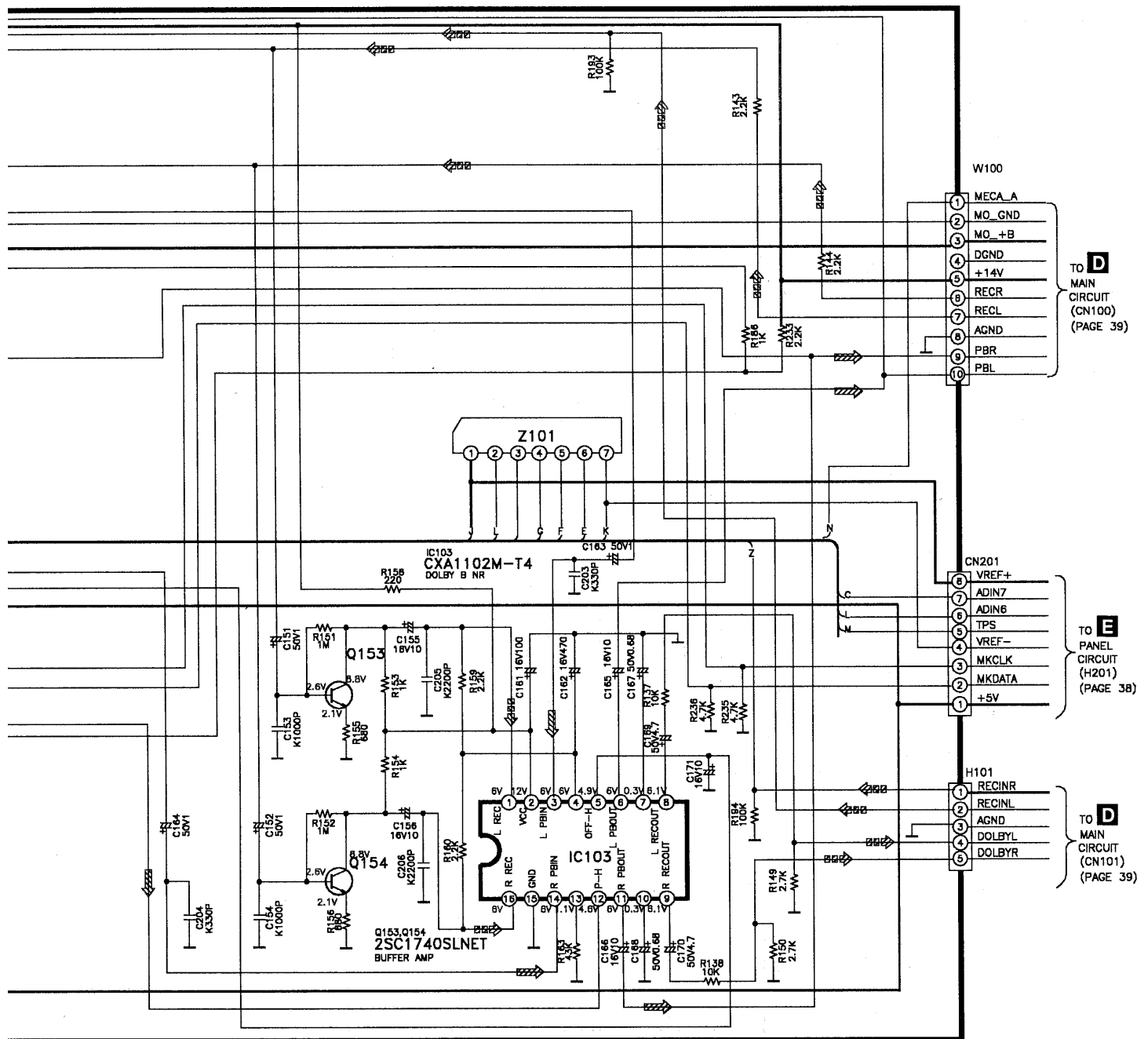




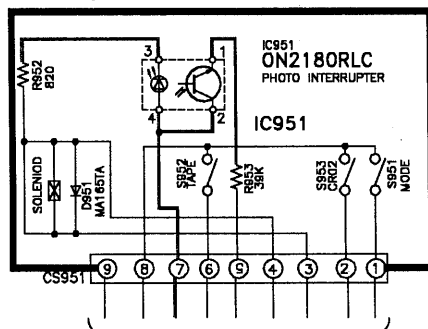


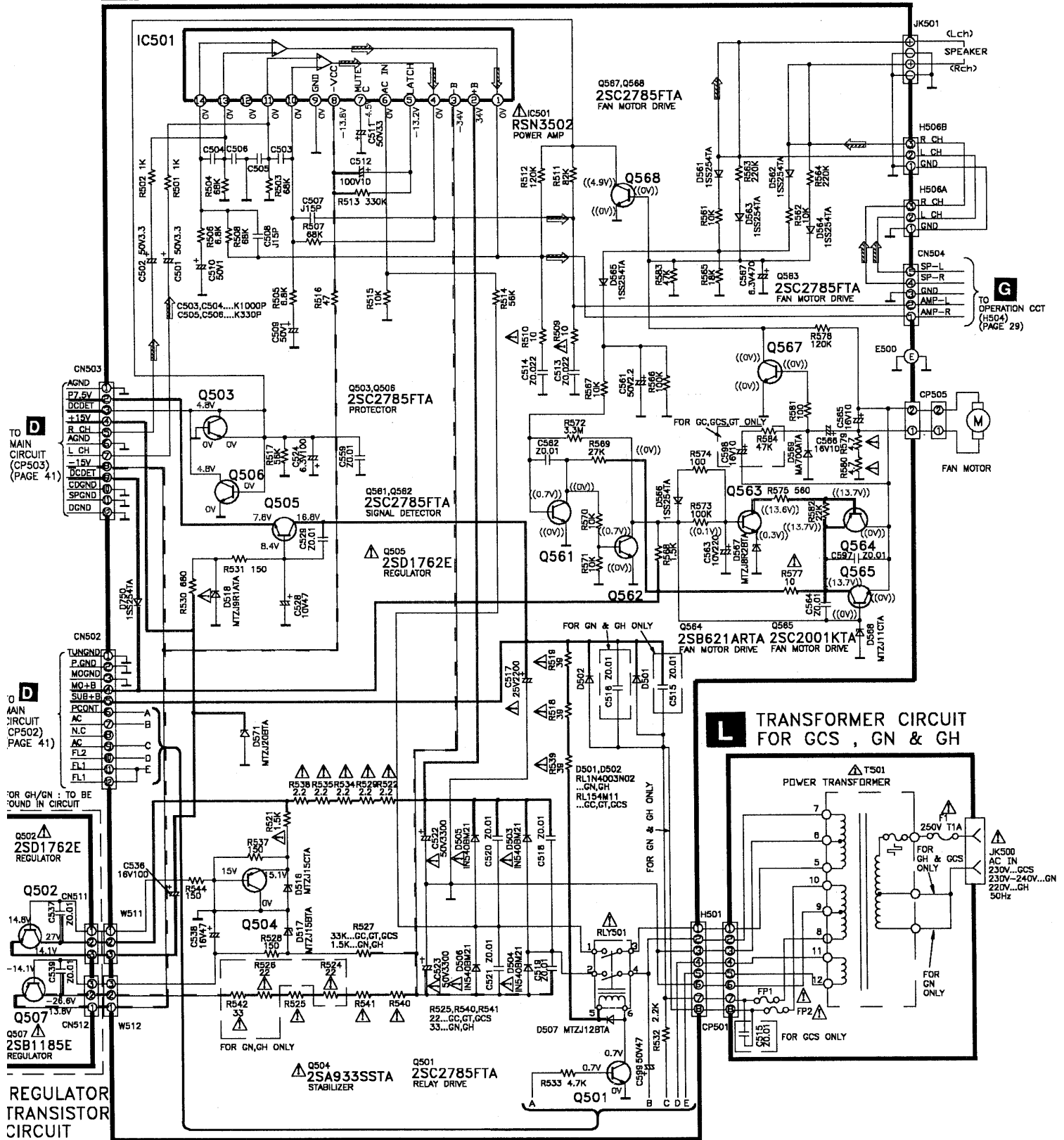
 DECK CIRCUIT






M MECHANISM (DECK 1) CIRCUIT

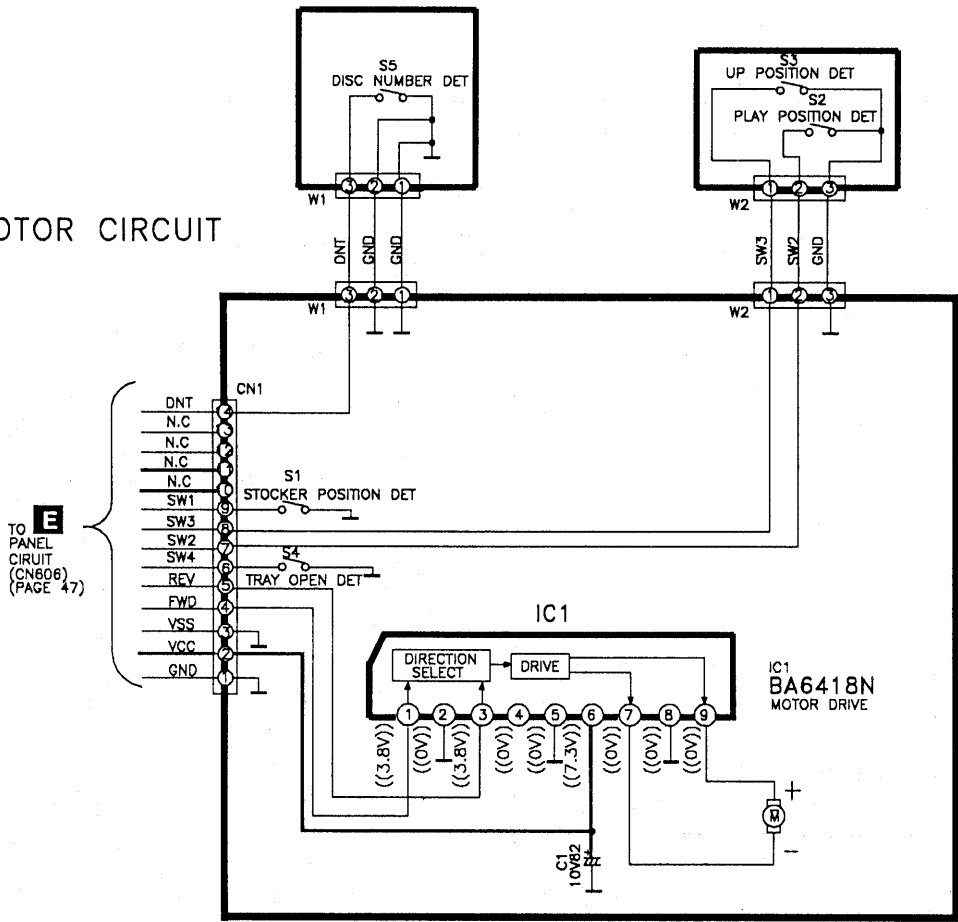


K POWER CIRCUIT


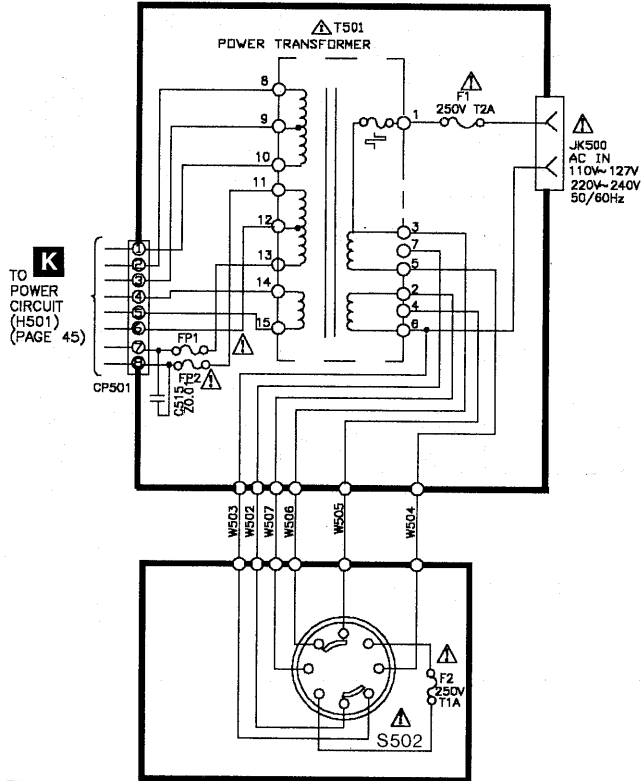
R DETECTING SWITCH (1) CIRCUIT

S DETECTING SWITCH (2) CIRCUIT

O LOADING MOTOR CIRCUIT



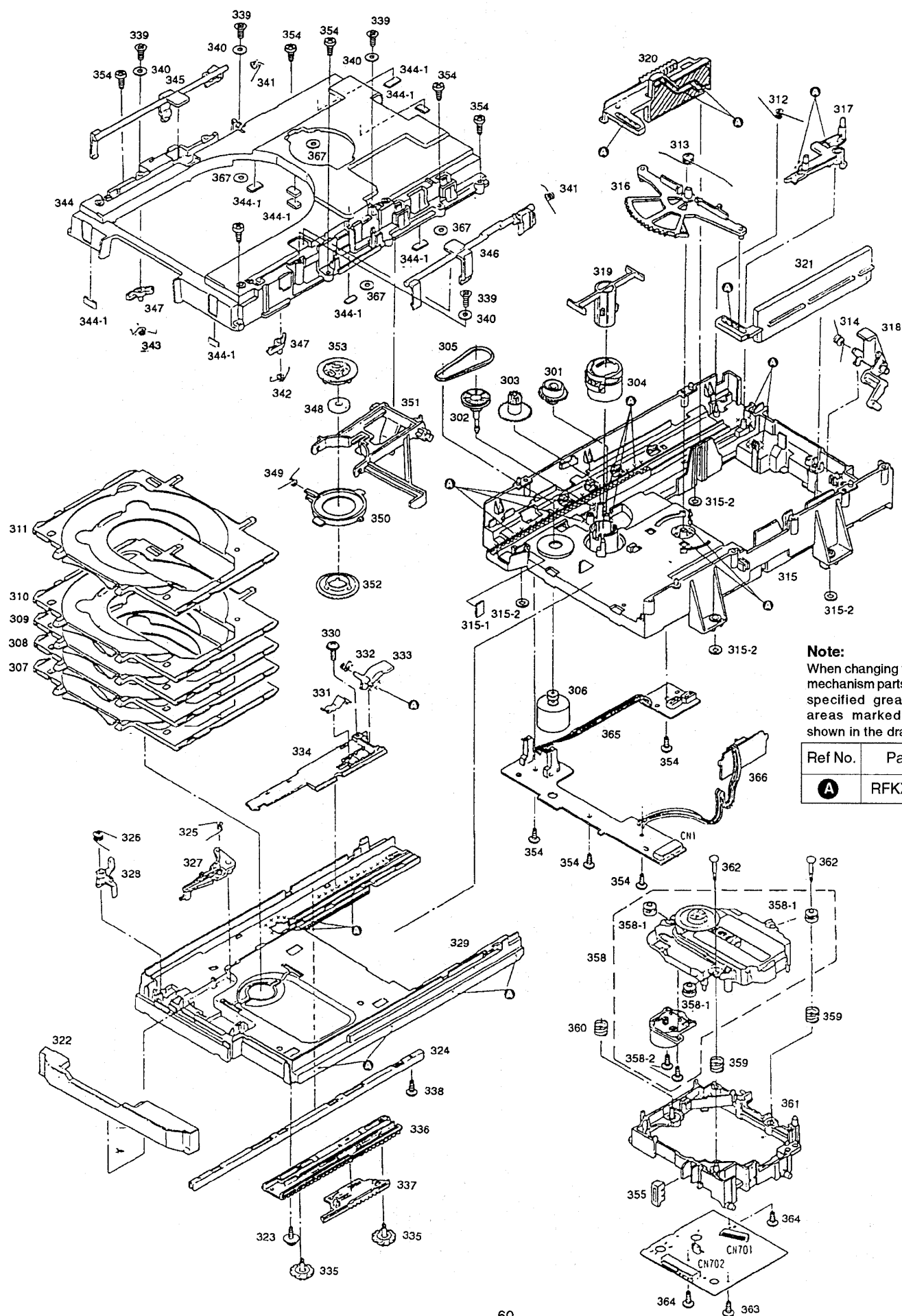
L TRANSFORMER CIRCUIT FOR GC & GT



P VOLTAGE SELECTOR CIRCUIT FOR GC & GT



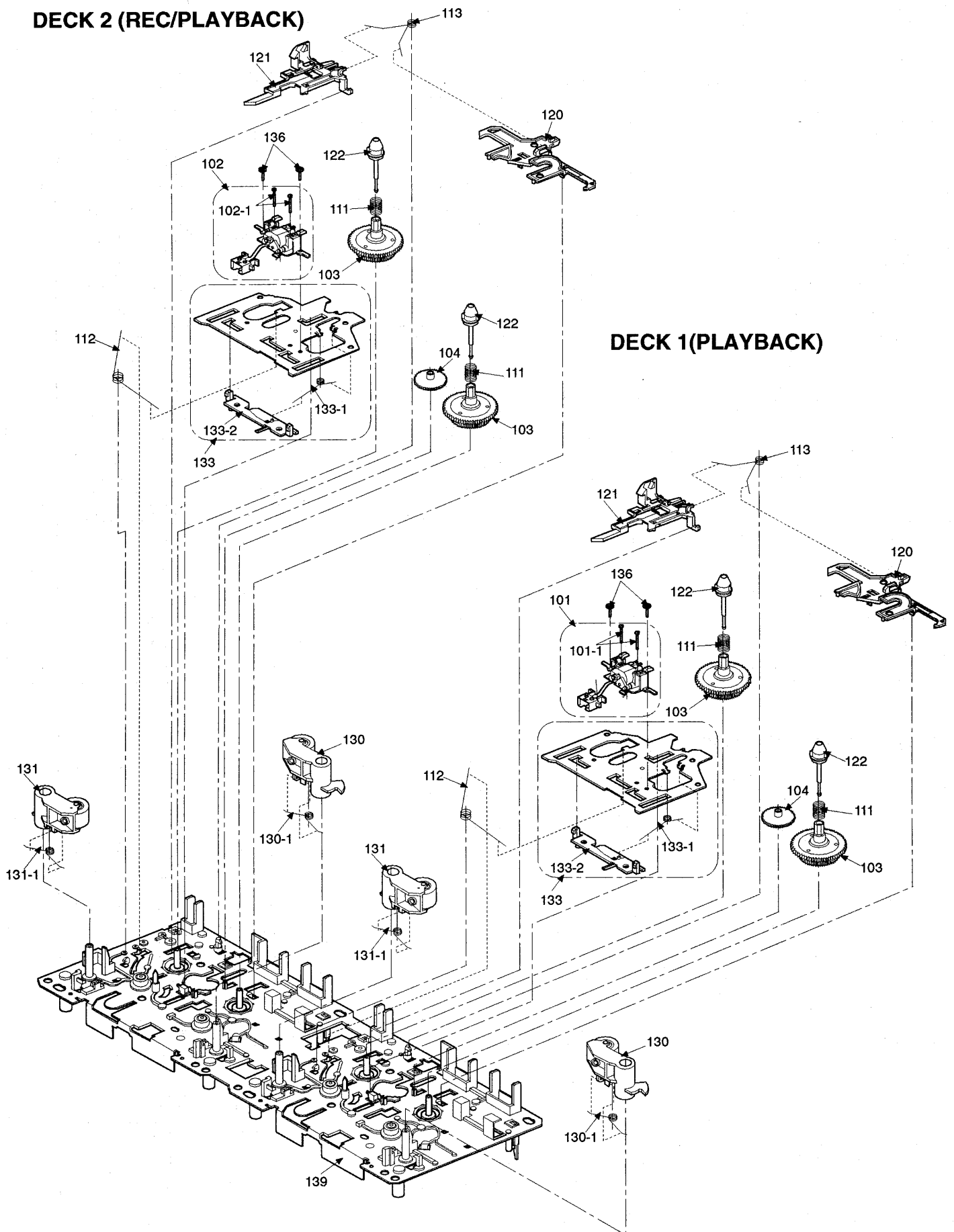
■ CD Loading Unit Parts Location

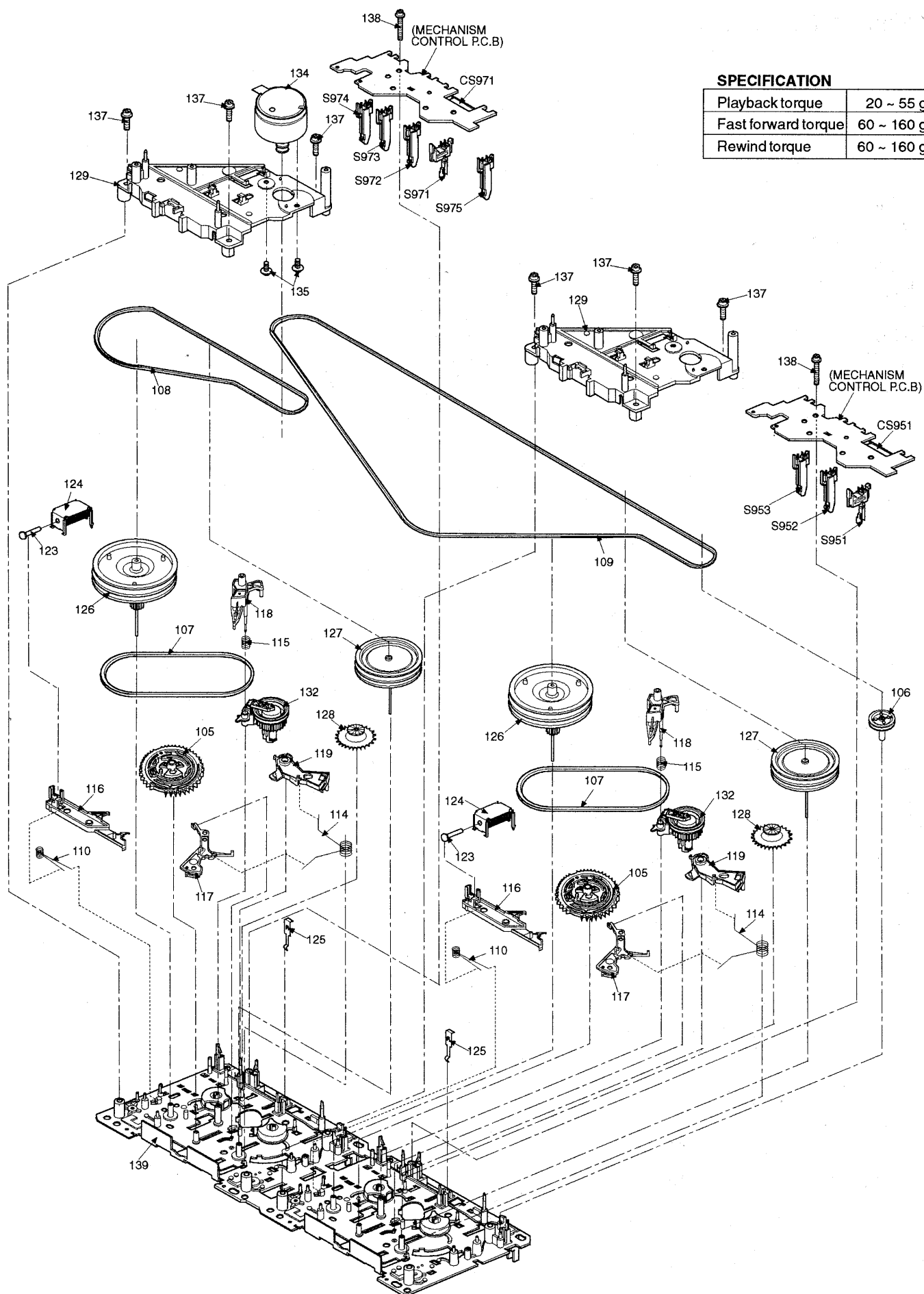


Mechanism Parts Location (RAA3404)

DECK 2 (REC/PLAYBACK)

DECK 1 (PLAYBACK)



**SPECIFICATION**

Playback torque	20 ~ 55 g•cm
Fast forward torque	60 ~ 160 g•cm
Rewind torque	60 ~ 160 g•cm

■ Cabinet Parts Location

