

Service Manual

COMPACT
disc
DIGITAL AUDIO

MASH*
multi-stage noise shaping

CD Stereo System
SA-CH34



Remote Control Transmitter SB-CH34 SA-CH34 SB-CH34

Colour

(K) ... Black Type

Area

Suffix for Model No.	Area	Colour
(P)	U.S.A.	(K)
(PC)	Canada	

* MASH is a trademark of NTT.

TAPE SECTION : SG20W MECHANISM SERIES
CD SECTION : RAE0150Z TRAVERSE DECK SERIES

Specifications

Amplifier Section

Rated minimum sine wave FTC power output	
90 Hz – 20 kHz both channels driven	
1% total harmonic distortion	2 x 20 W (4 Ω)
1 kHz continuous power output, both channels driven	
1% total harmonic distortion (DIN POWER)	2 x 22 W (4 Ω)
Total harmonic distortion	
Half power at 1 kHz	0.1 % (4 Ω)
Frequency response	
CD	45 Hz - 20 kHz (-3 dB)
Input sensitivity	
AUX	250 mV
Input impedance	
AUX	47 kΩ
Load impedance	4 Ω

FM Tuner Section

Frequency range	87.9 – 107.9 MHz (200 kHz steps)
	87.5 – 108.0 MHz (100 kHz steps)
Sensitivity	23.3 dBf (4.0 μV, IHF '58)
Total harmonic distortion	
MONO	0.3 %
STEREO	0.5 %
S/N (MONO)	65 dB
Frequency response	50 Hz – 15 kHz, (+0.5 dB, -2 dB)
Image rejection at 98.1 MHz	46 dB
Stereo separation at 1 kHz	35 dB
Antenna terminal(s)	75 Ω (unbalanced)

AM Tuner Section

Frequency range	520 – 1710 kHz
Sensitivity	
(for 500 mW)	280 μV/m
(S/N 20dB)	500 μV/m
Image rejection at 1000 kHz	40 dB

Notes :

- Specifications are subject to change without notice.
Weight and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

System	Music Center	Speaker
SC-CH34 (P)	SA-CH34 (P)	SB-CH34 (P)
SC-CH34 (PC)	SA-CH34 (PC)	

Cassette Deck Section

Track system	4 track, 2 channel
Heads	
Playback	Solid permalloy head
Record/playback	Solid permalloy head
Erasure	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/sec (1 7/8 ips)
Frequency response	
NORMAL	30 Hz - 14 kHz (+2 dB, -5 dB)
S/N (NORMAL TYPE)	52 dB (A weighted)
Wow and flutter	0.1 % (WRMS)
Fast forward and rewind times	Approx. 110 seconds with C-60 cassette tape

CD Section

Sampling frequency	44.1 kHz
Decoding	16 bit linear
Beam source/wave length	Semiconductor laser / 780 nm
No. of channels	Stereo
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)

General

Power consumption	77 W
Power supply	AC 120 V, 60 Hz
Dimensions (W x H x D)	270 x 320 x 322 mm
	(10 ⁵ / ₈ " x 12 ¹⁹ / ₃₂ " x 12 ¹¹ / ₁₆ ")
Weight	6.4 kg (14.1 lb.)

Panasonic[®]

Terminal Guide of ICs, Transistors and Diodes

<p>AN8389SE1</p>	<p>BH3854AFS-E2</p>	<p>LA1832A LC7218</p>	<p>AN7345K</p>	<p>AN8835SBE1(28P) BU2090F-E2(16P) BU4052BCF-E2(16P)</p>	<p>BA6418N</p>
<p>BA4558FDXE2</p>	<p>AN78M05</p>	<p>BA7755A</p>	<p>RSN35H1</p>	<p>M38197MA133(100P) MN662741RPA(80P)</p>	<p>2SB709S</p>
<p>2SB1185E 2SD1762E</p>	<p>2SB1357ETA 2SD2037ETA</p>	<p>2SJ40CDTA 2SK381CTA</p>	<p>2SK301QTA</p>	<p>2SK544F-AC</p>	<p>2SA933SSTA 2SC1740SRTA RVTDTA143XST</p>
<p>2SC2784FTA 2SD1450STA BA1L4LTA BA1L4ZTA BN1A4MTA</p>	<p>2SC1685RTA 2SC2001KTA 2SC2001L1TA 2SD965RTA</p>	<p>2SC2785FETA 2SC2785FTA 2SC2786MTA 2SC2787FL1TA 2SC2787LTA BA1F4MTA BA1L3ZTA</p>	<p>BN1L3NTA BN1L4MTA</p>		
<p>1SS291TA MA29WATA RVD1SR35TR RVD1SS133TA</p>	<p>SLR505DCT31</p>	<p>MTZJ12BTA MTZJ15BTA MTZJ15CTA MTZJ5R1CTA MTZJ6R2CTA MTZJ6R8BTA</p>	<p>MTZJ8R2BTA RVDMTZ10BTA RVDMTZ11BTA RVDMTZ13BTA RVDMTZ4R7BTA RVDMTZ5R6BTA</p>		
<p>SVC211SPA-AL</p>	<p>1D3E 1N5402BM21</p>				

CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE 2 A 125V FUSE.

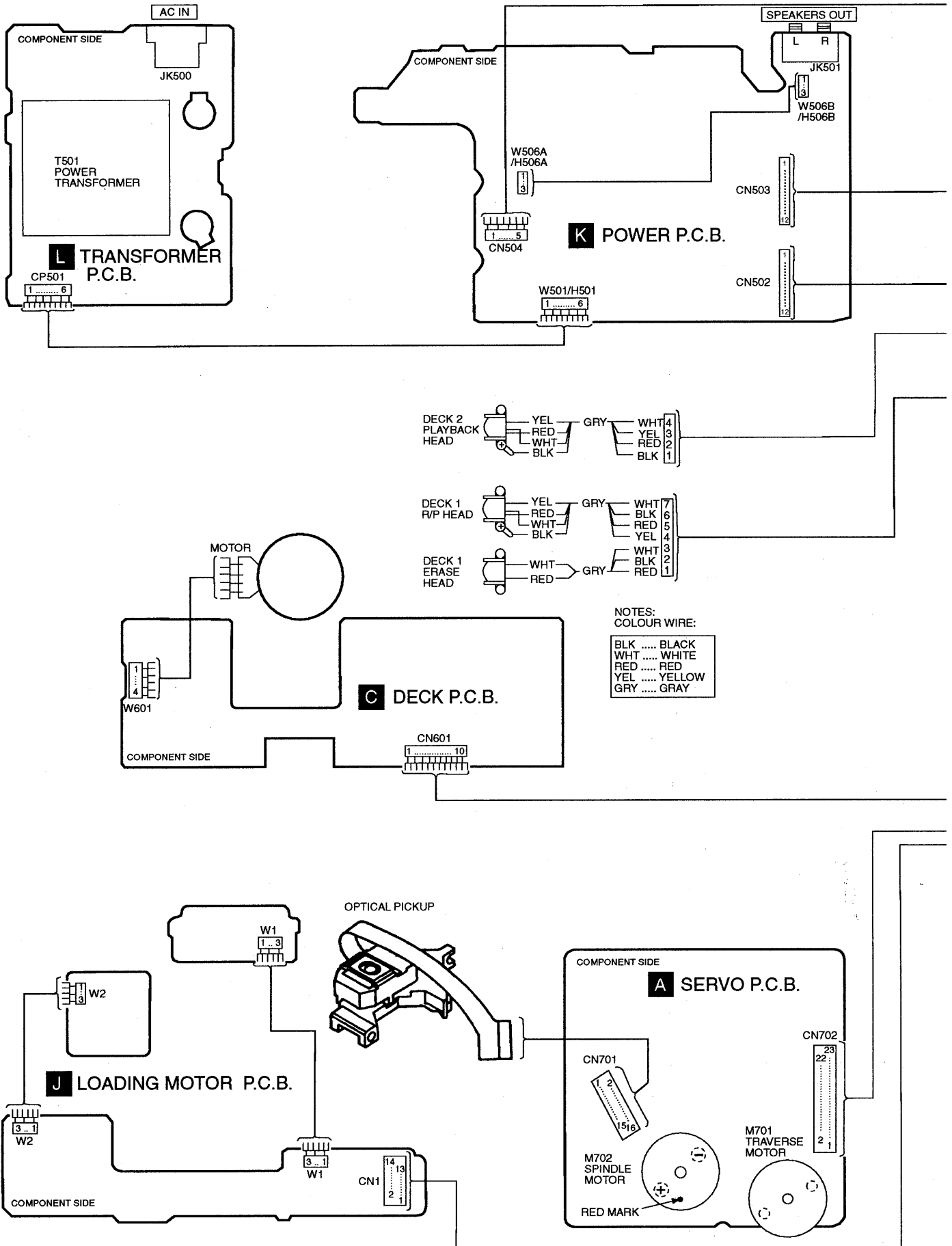
RISK OF FIRE-REPLACE FUSE AS MARKED.

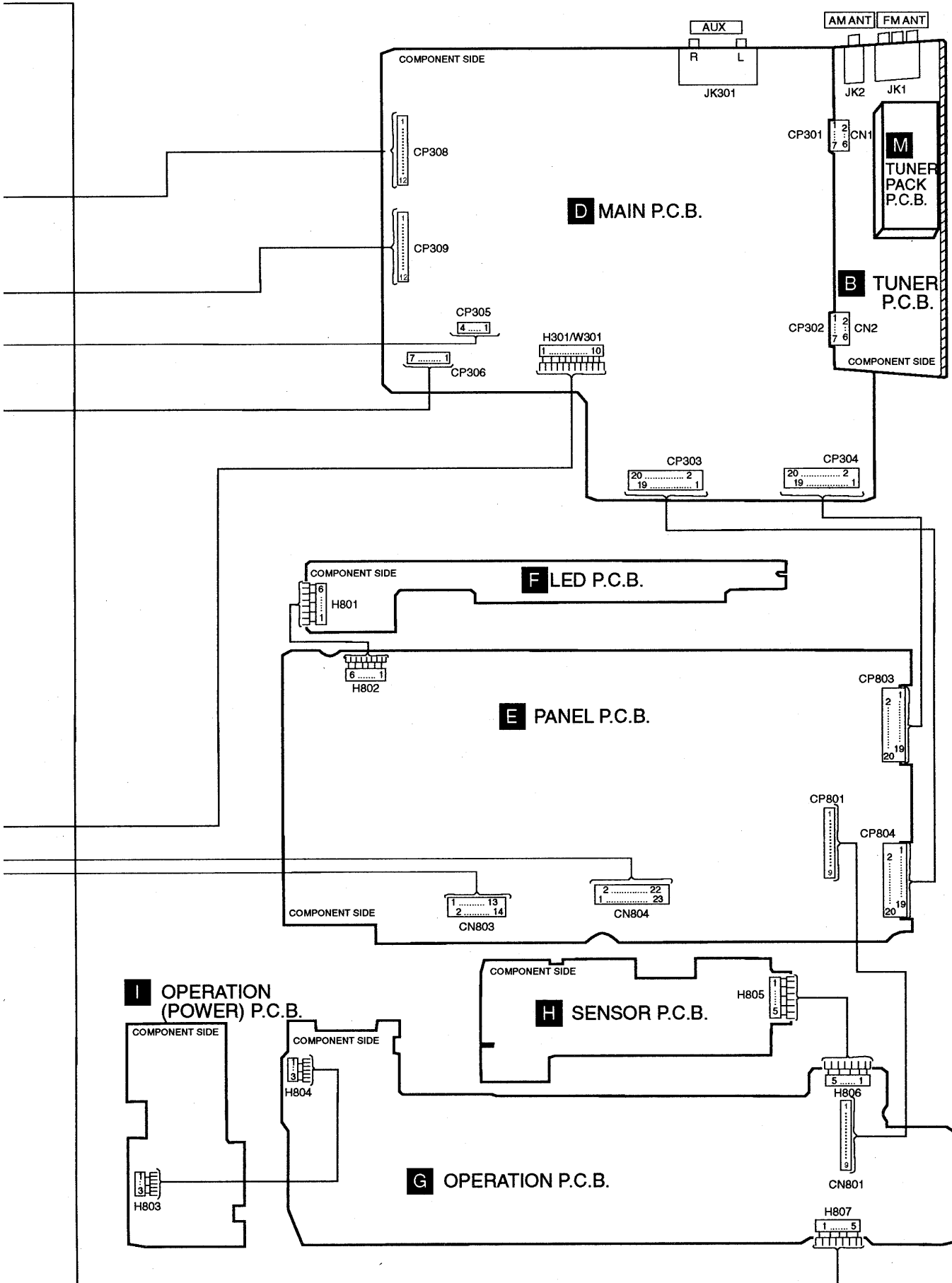
FUSE CAUTION

These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

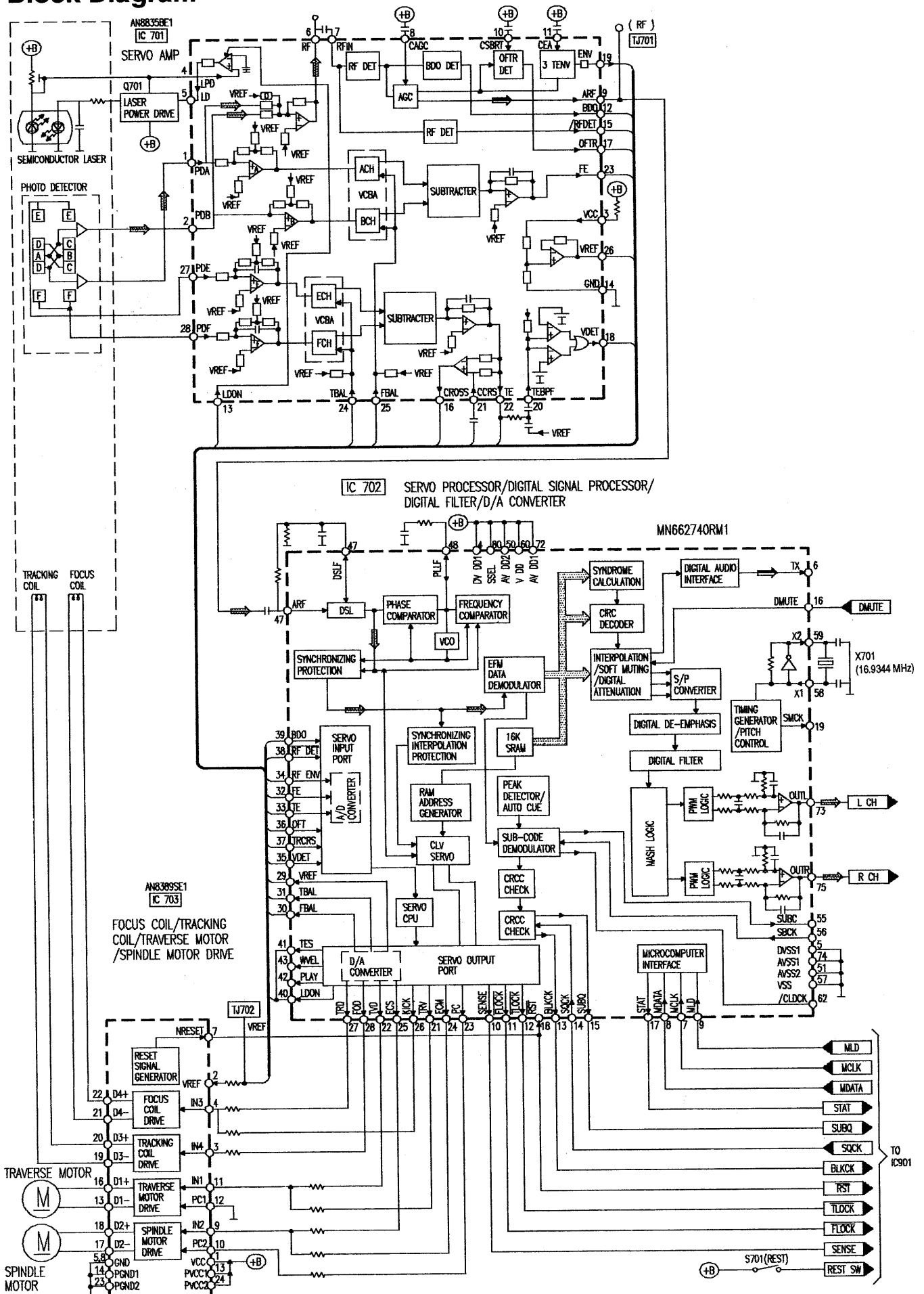
Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là où le présent symbole est apposé.

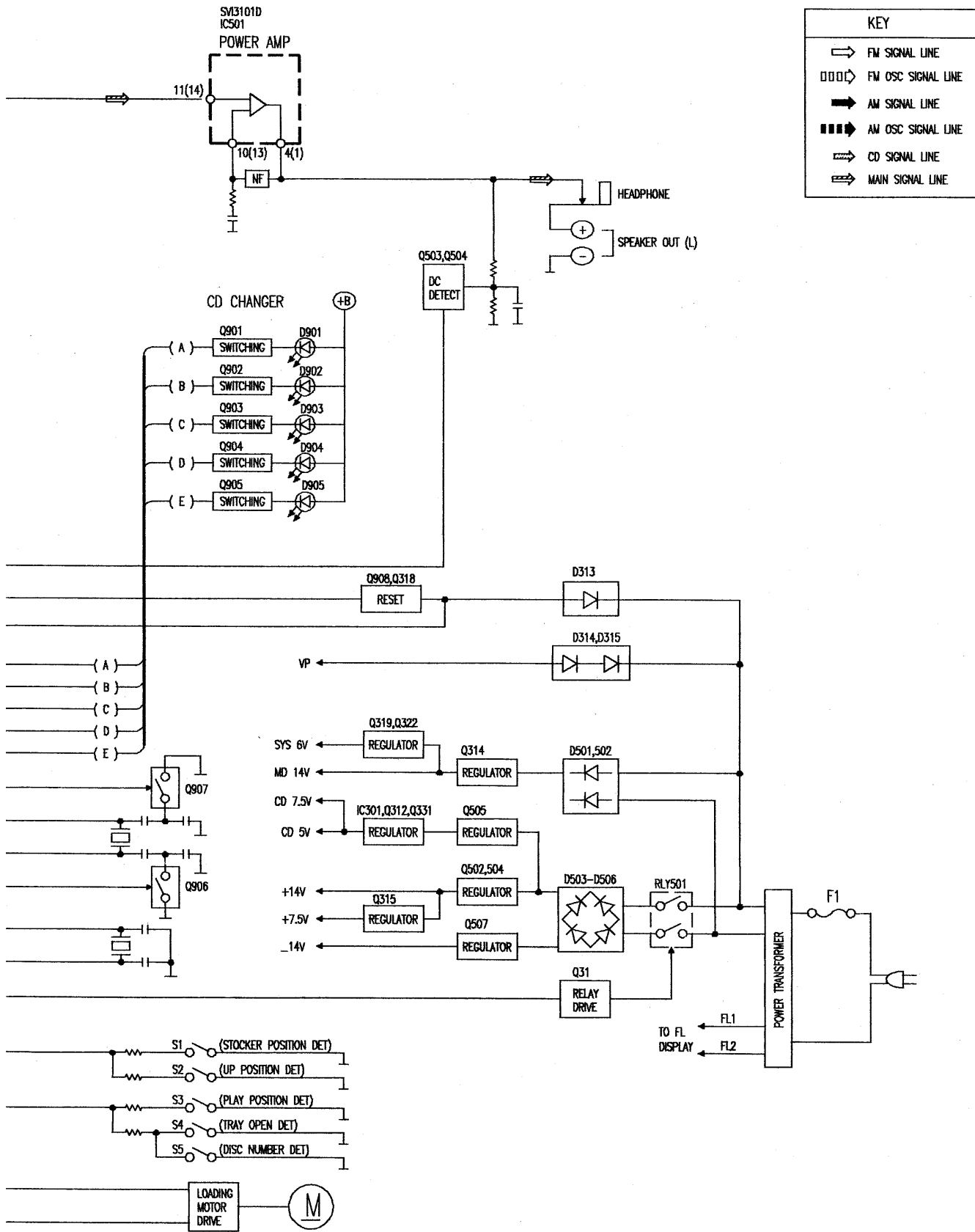
Wiring Connection Diagram





Block Diagram

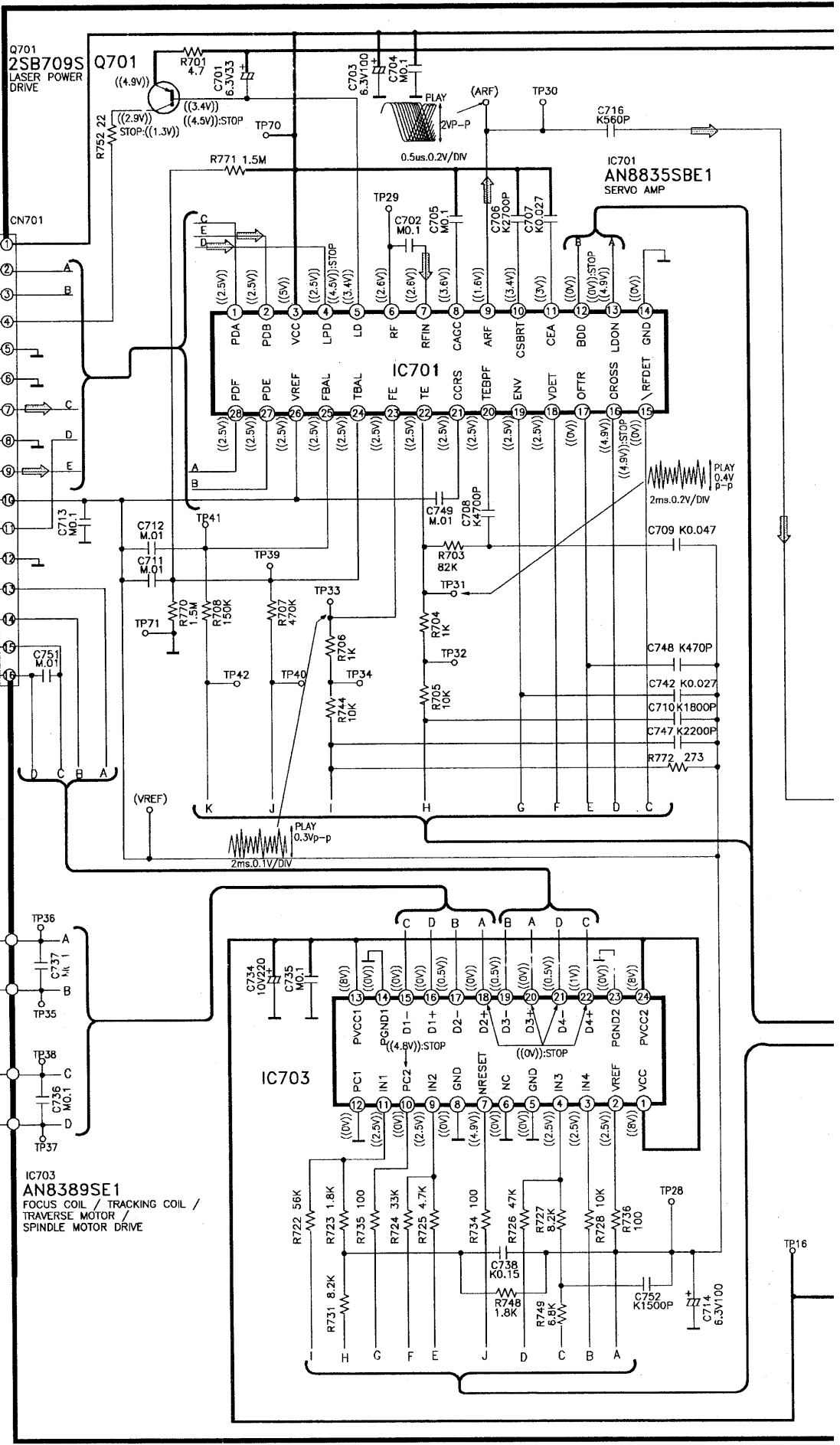
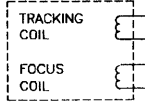
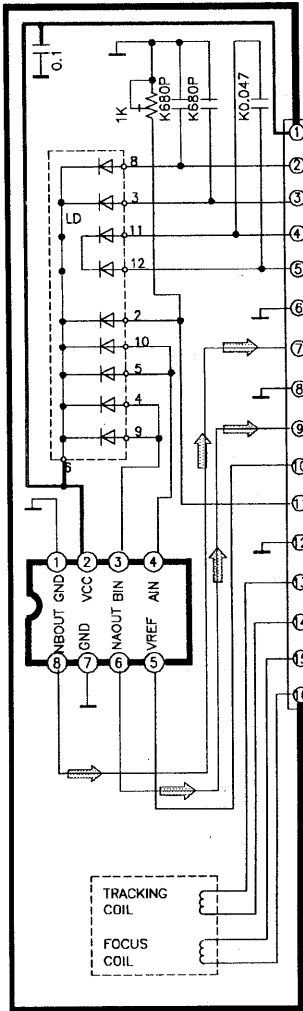


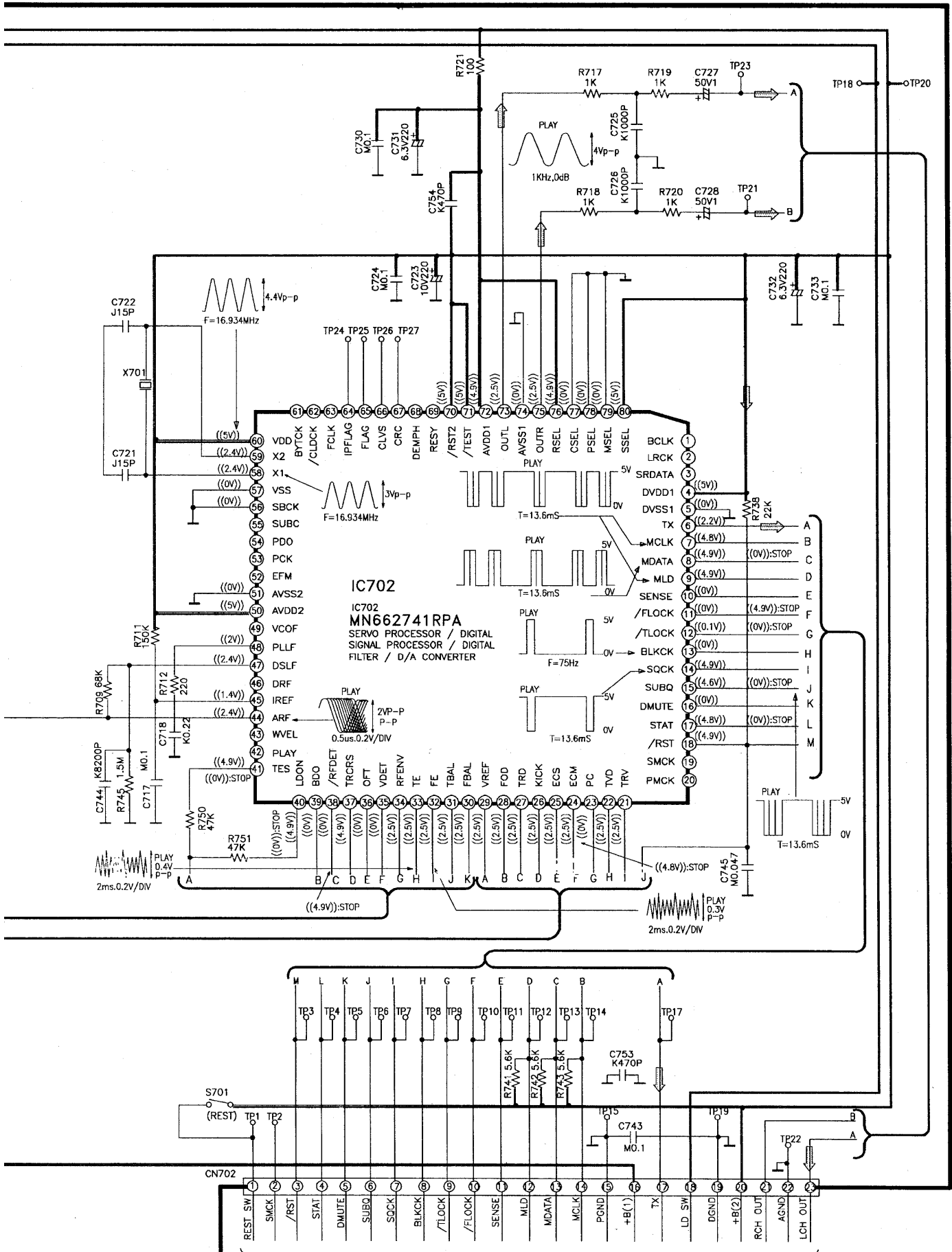


Schematic Diagram

A SERVO CIRCUIT

OPTICAL PICKUP

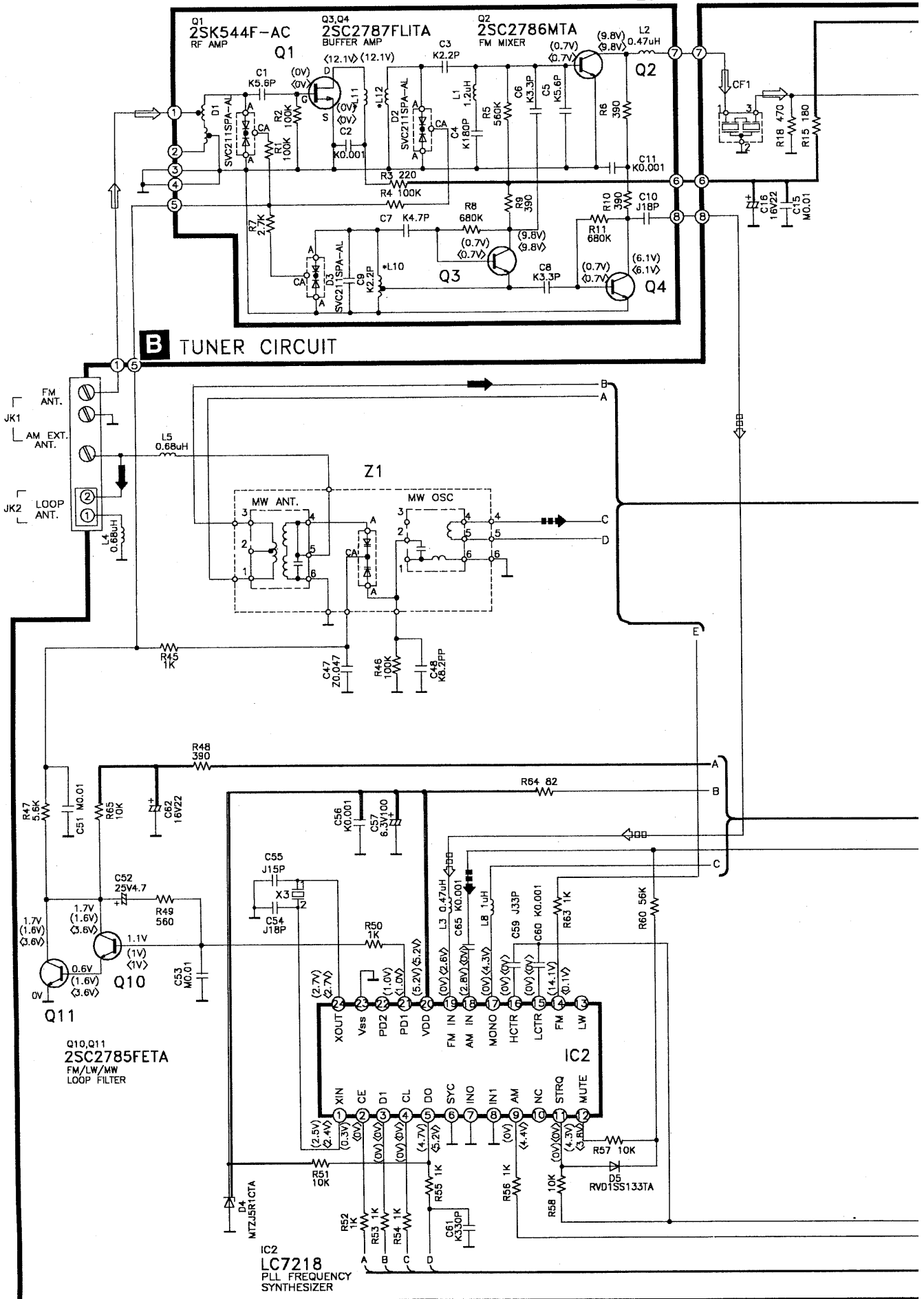


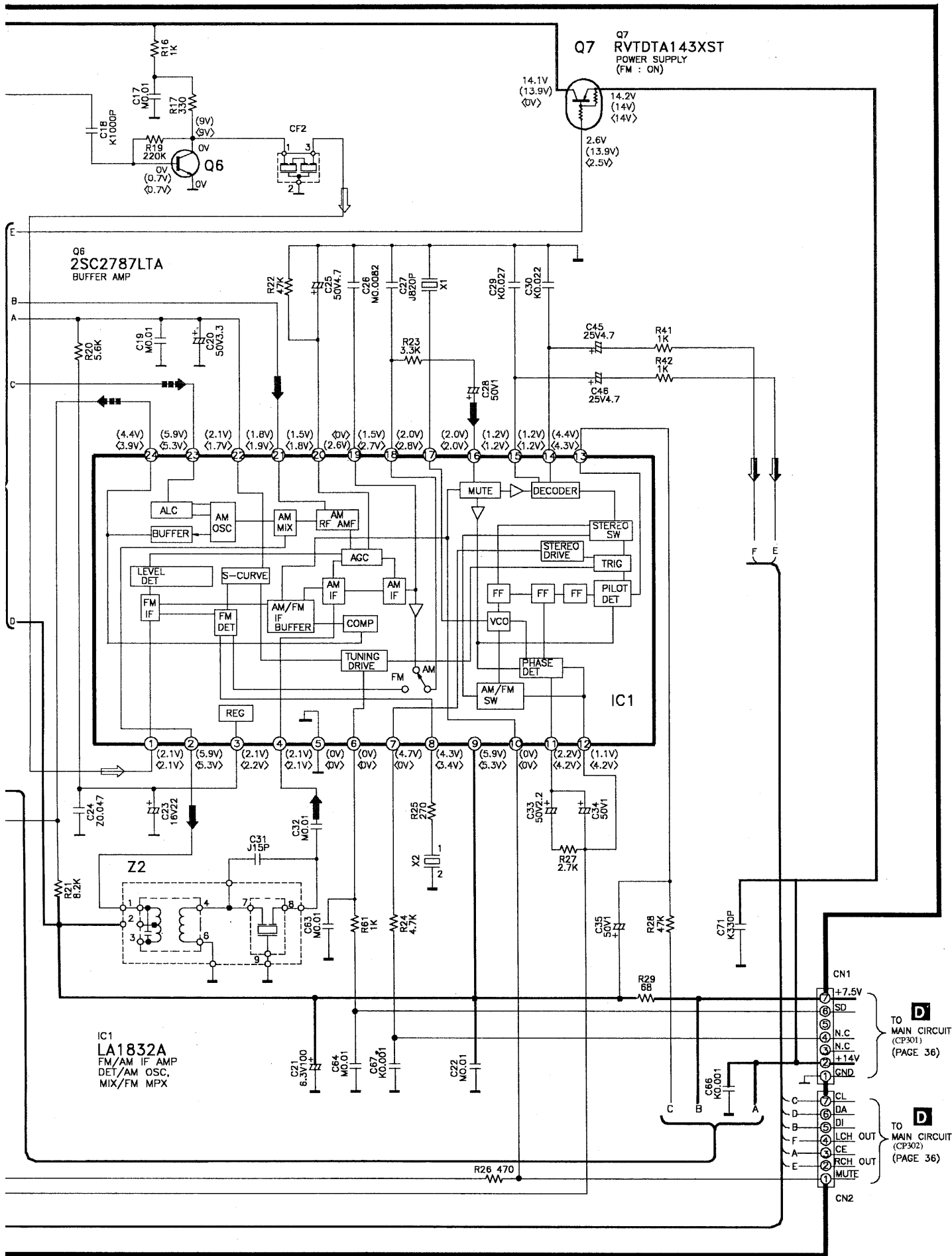


TO E PANEL CIRCUIT (CN804) (PAGE 40)

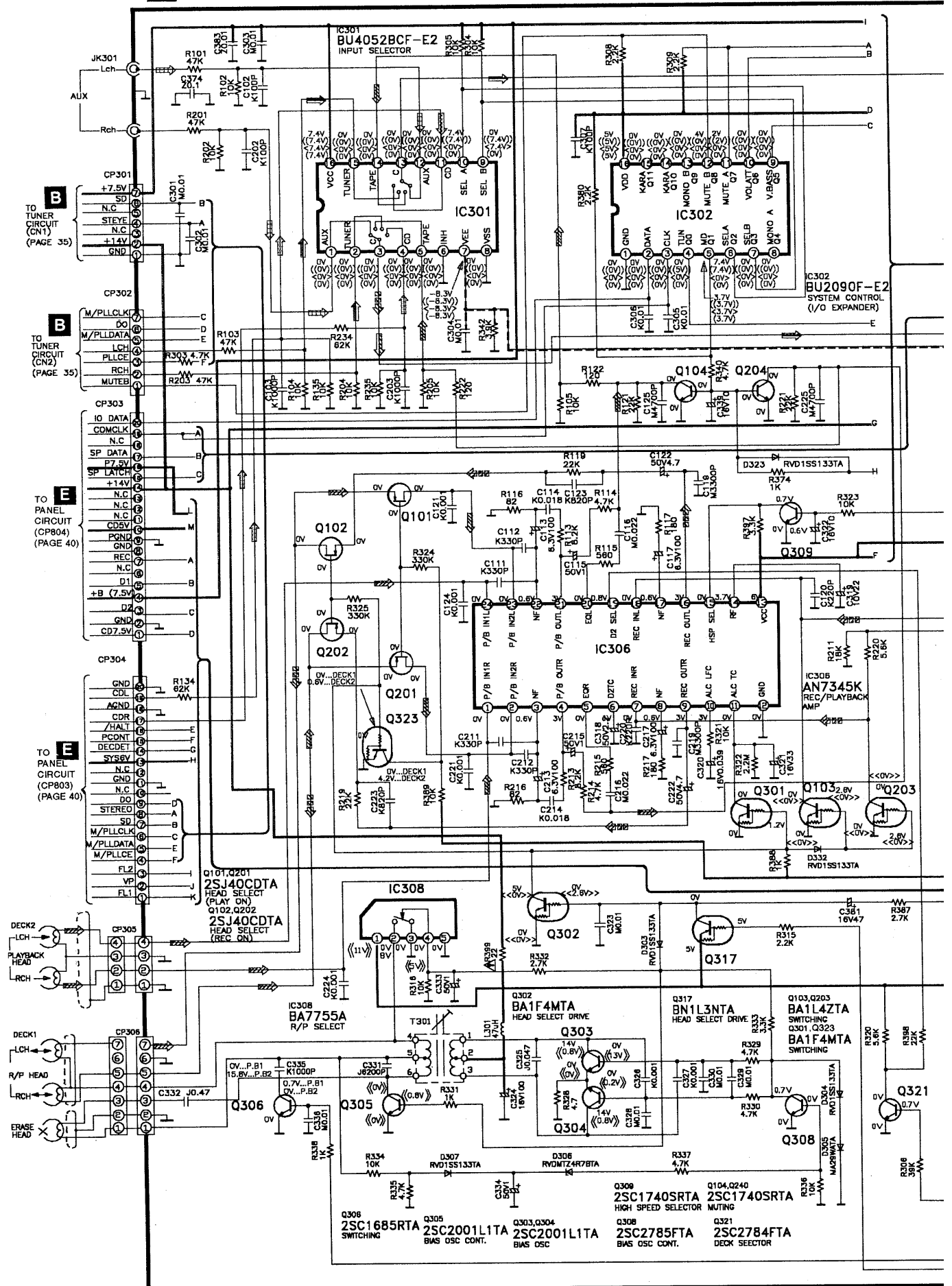
M TUNER PACK CIRCUIT

Z3

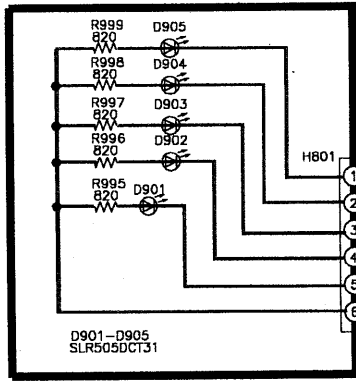




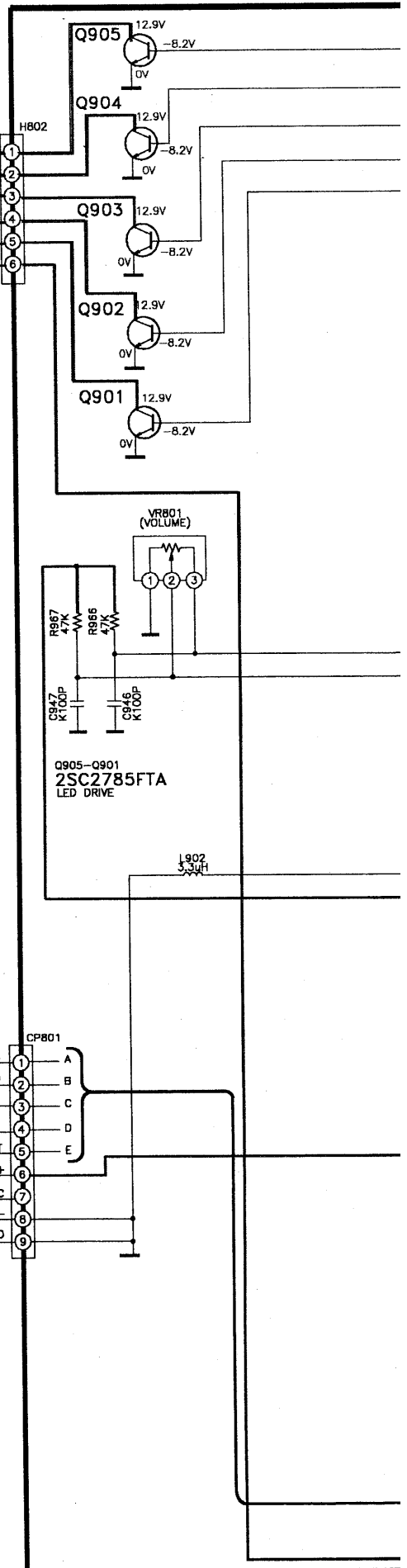
D MAIN CIRCUIT



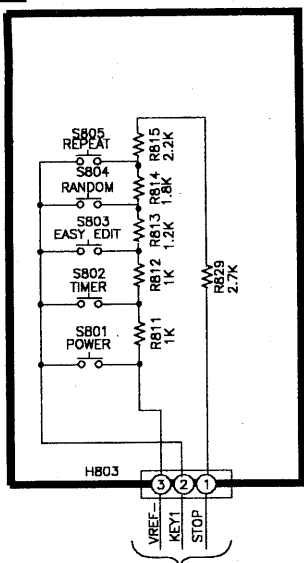
F LED CIRCUIT



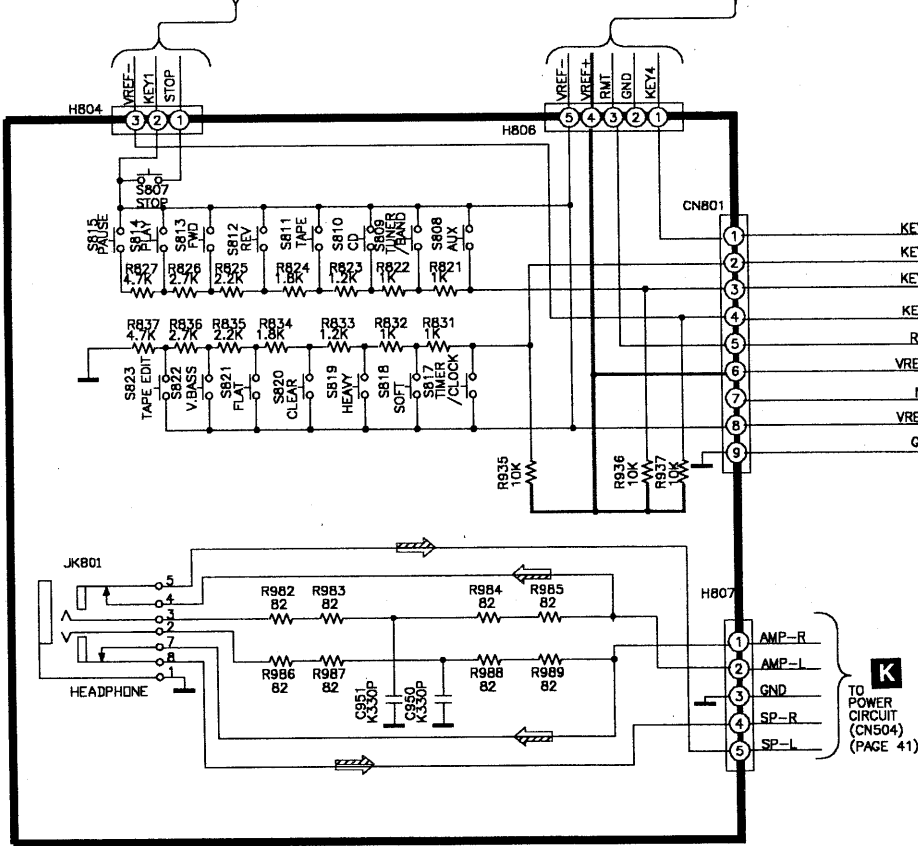
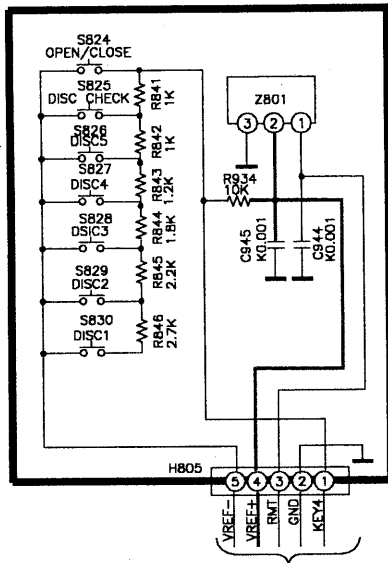
E PANEL CIRCUIT



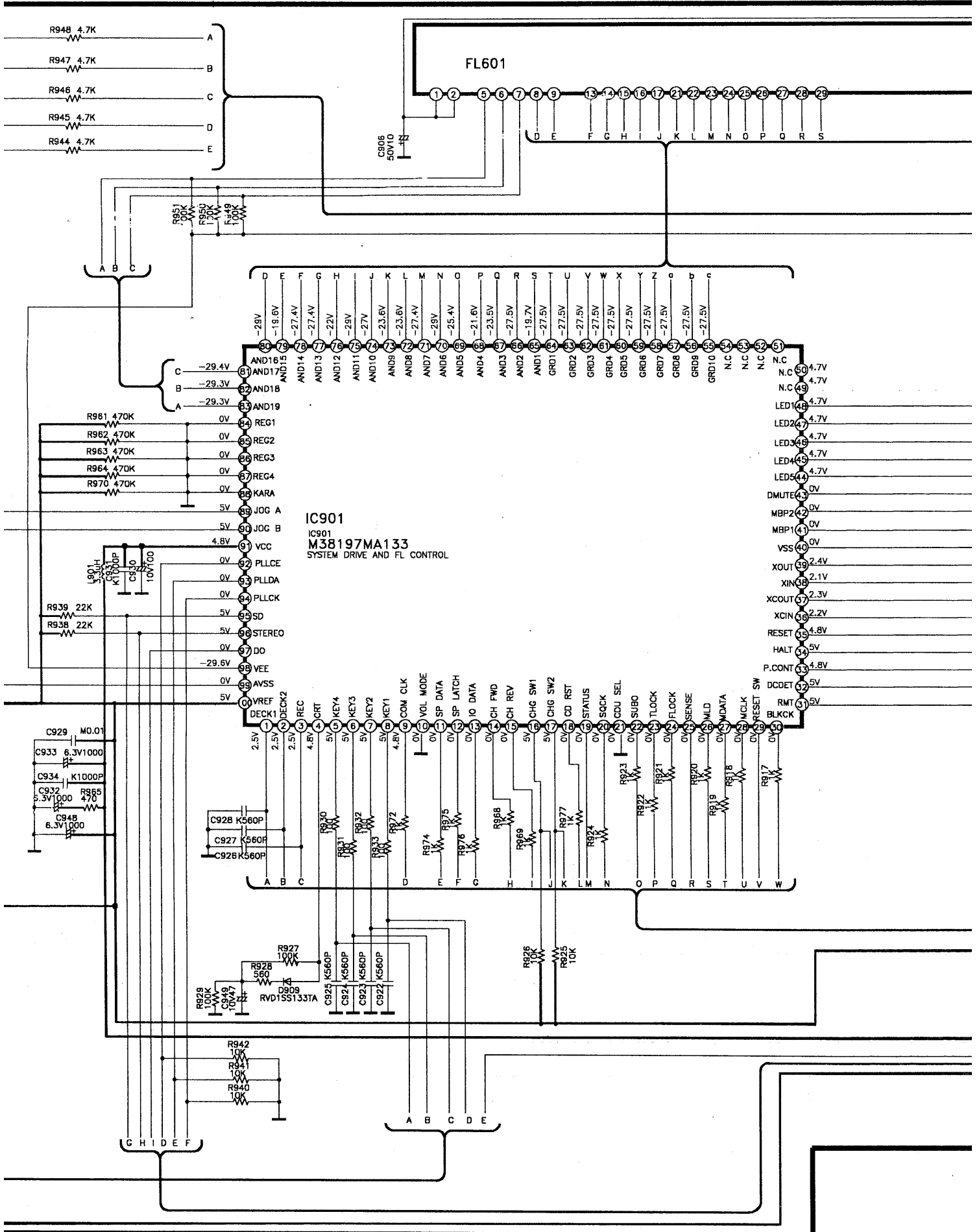
I OPERATION (POWER) CIRCUIT

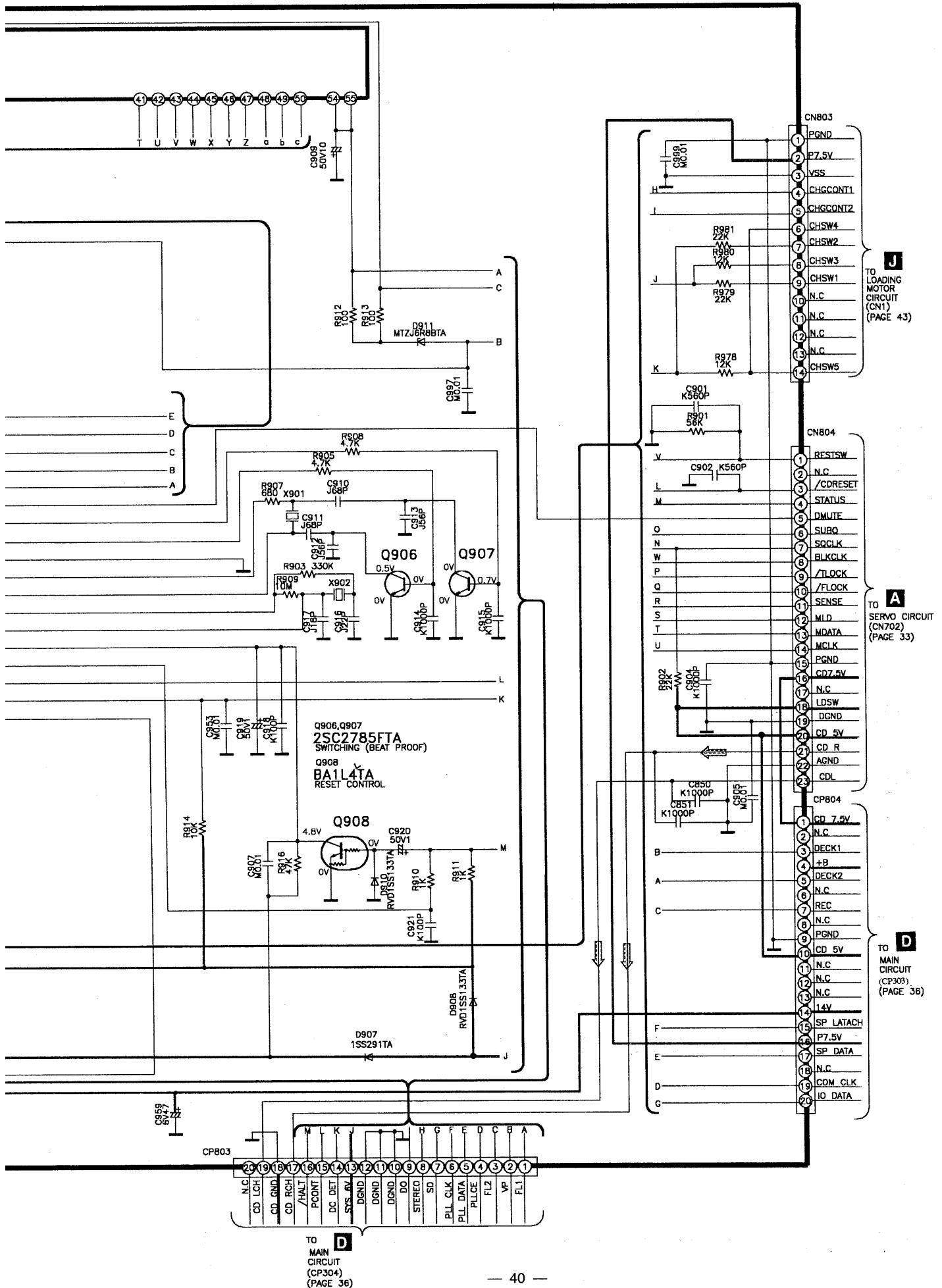


H SENSOR CIRCUIT

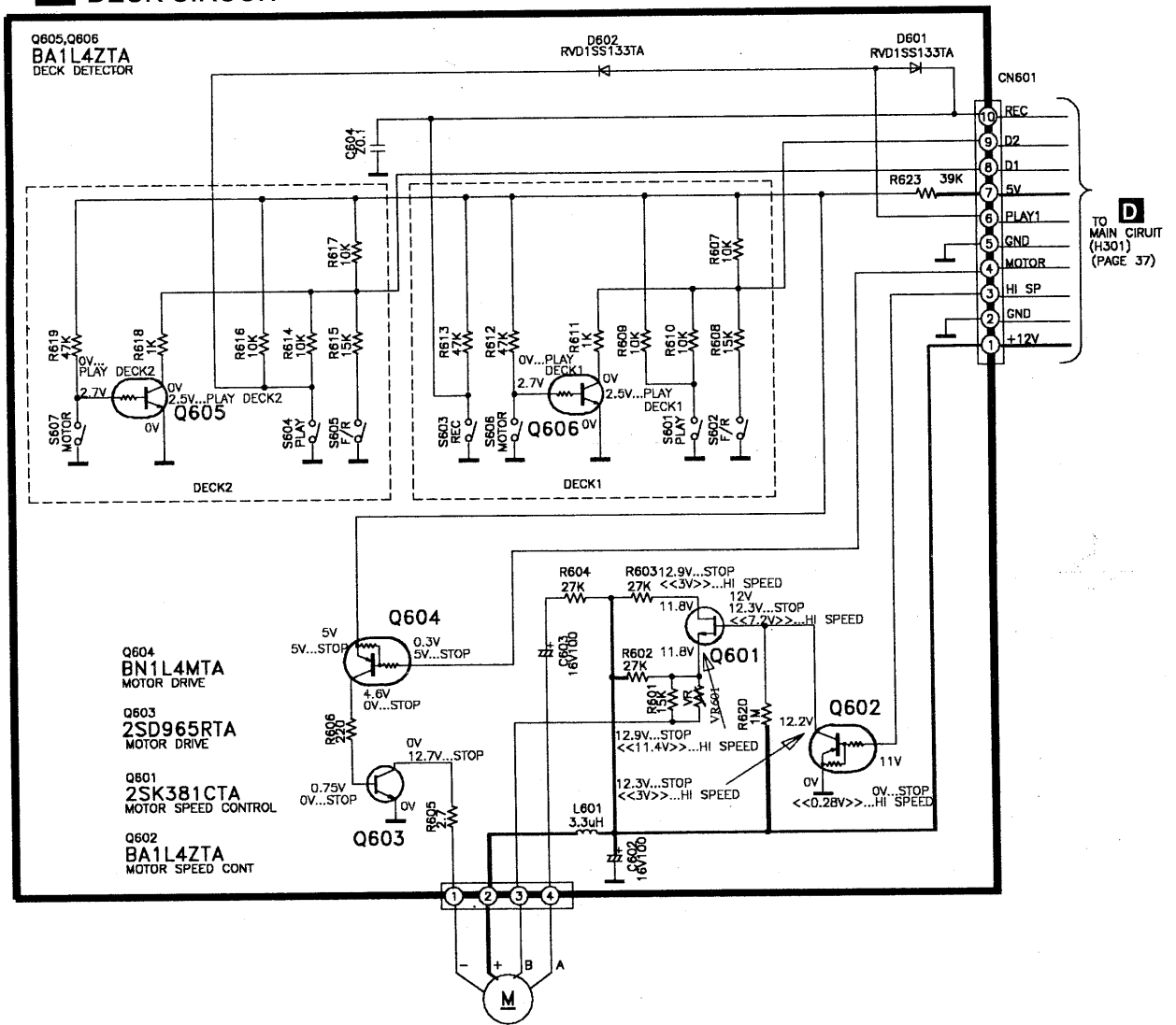


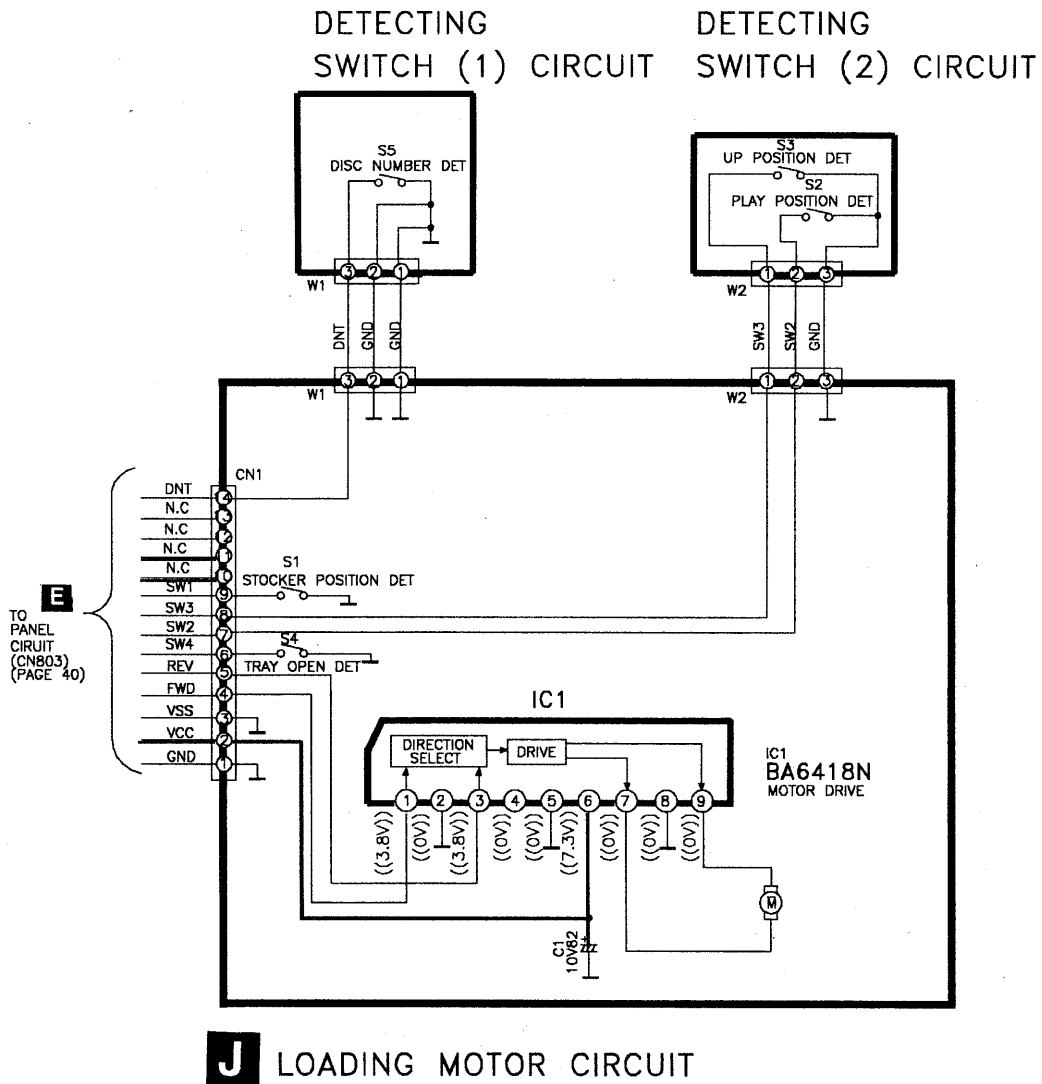
G OPERATION CIRCUIT





C DECK CIRCUIT





Mechanism Parts Location (RAA0910)

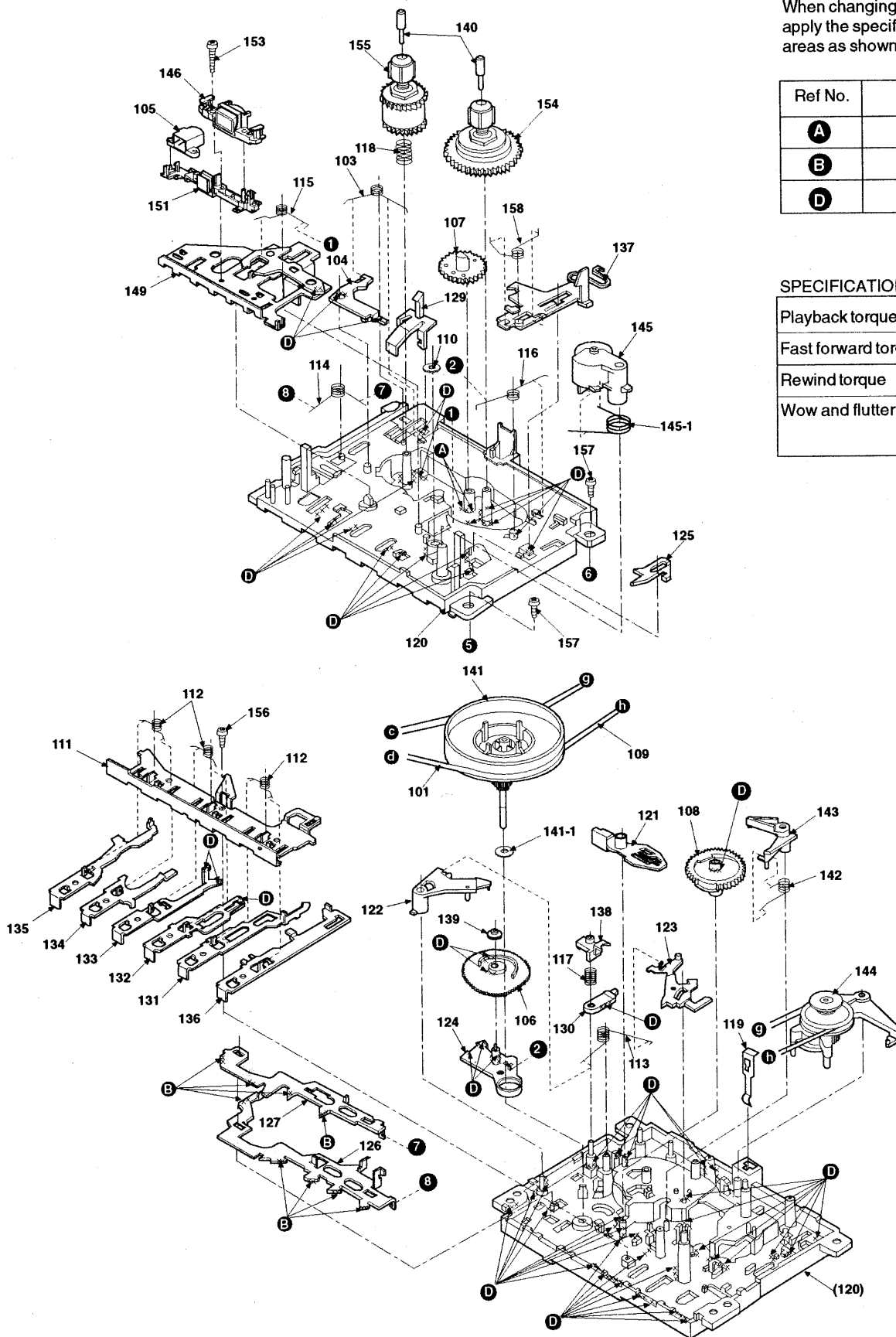
DECK 1 (For recording and playback)

Note:
When changing mechanism parts, apply the specified arrow indicated areas as shown in the drawing.

Ref No.	Part Name
A	SZZ0L25
B	SZZ0L06
D	SZZ0L30

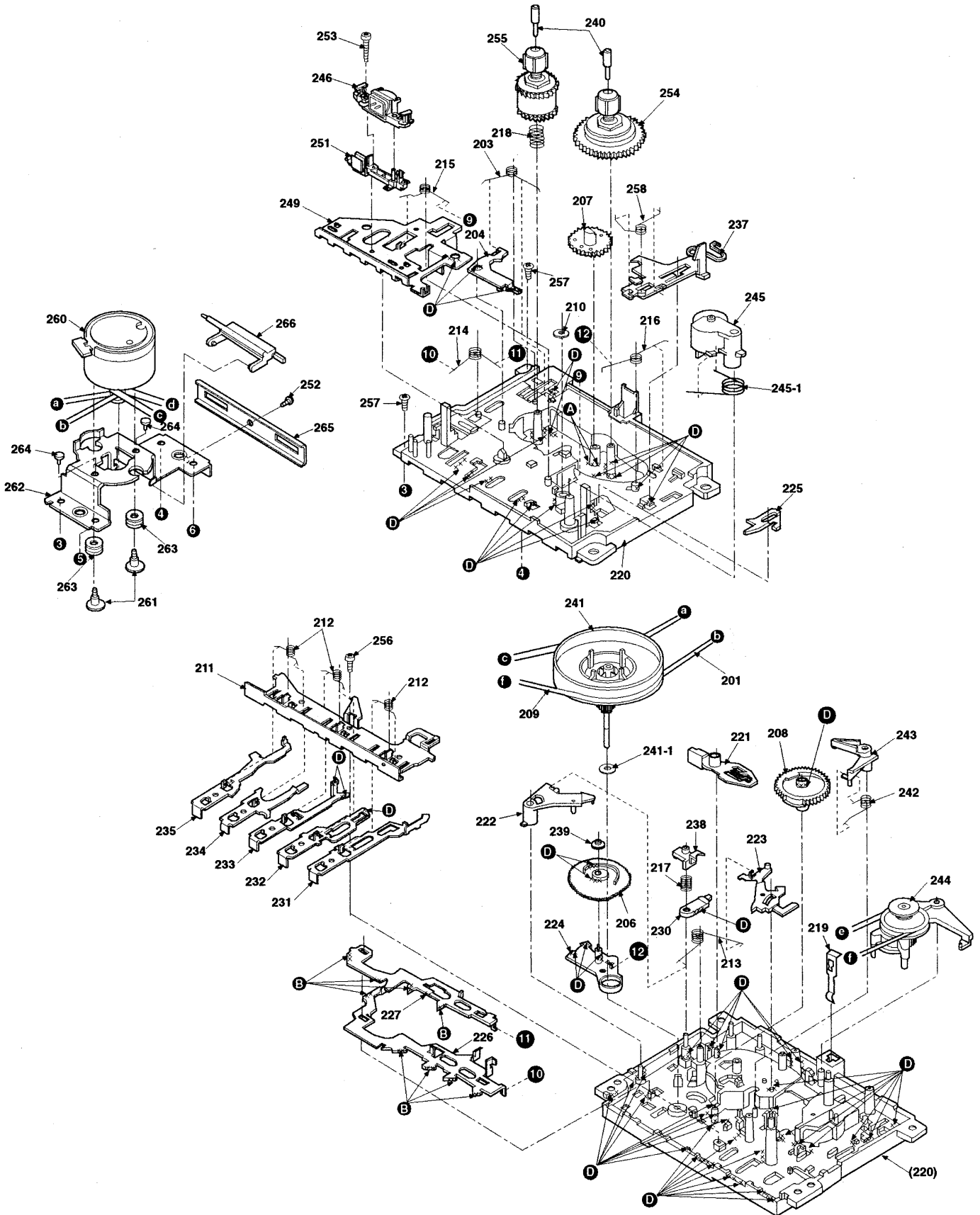
SPECIFICATION

Playback torque	25~50 g.m
Fast forward torque	65~130 g.m
Rewind torque	65~130 g.m
Wow and flutter	Less than 0.25%(WRMS)

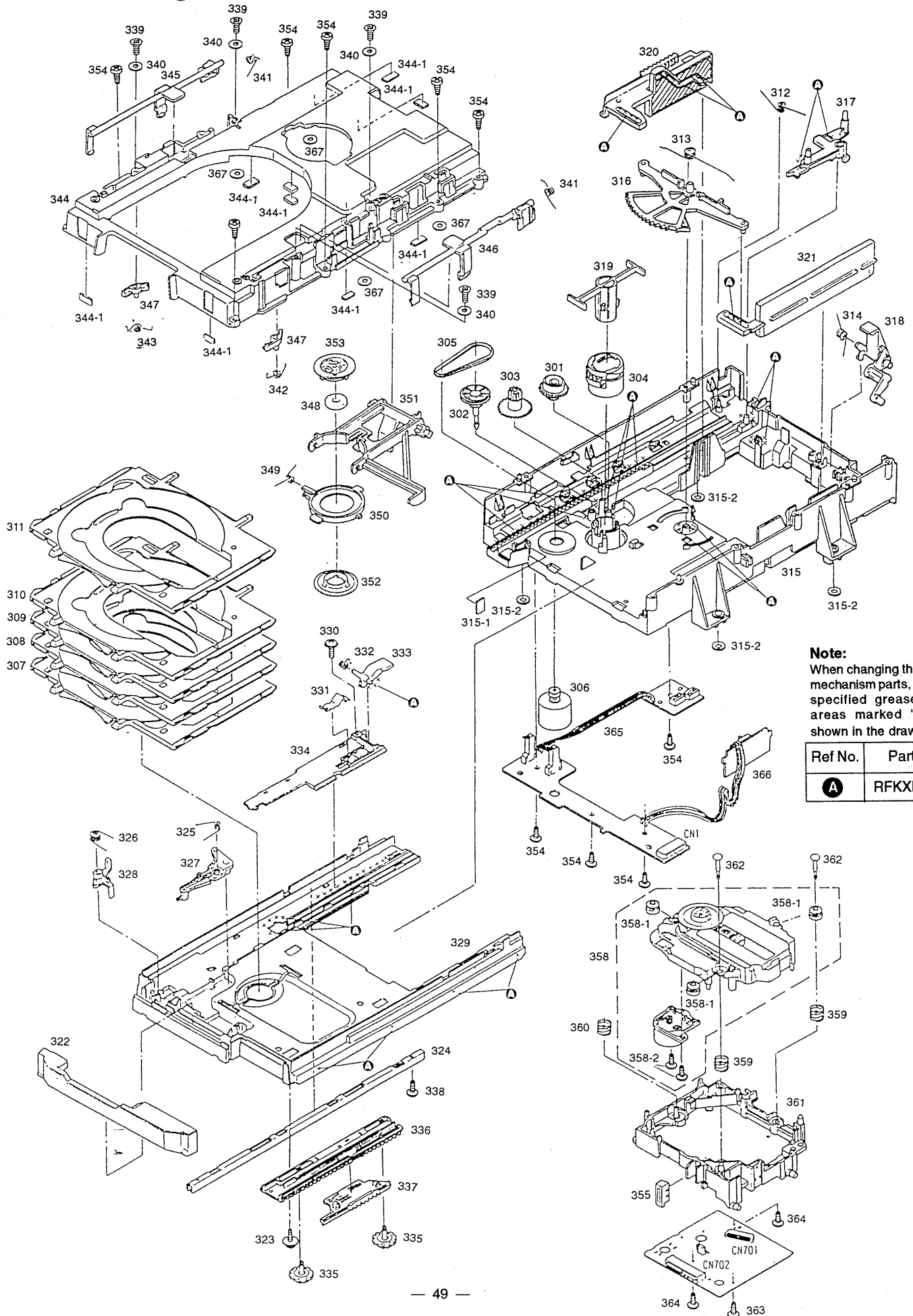


■ Mechanism Parts Location (RAA0910)

DECK 2 (For playback only)



CD Loading Unit Parts Location



Note:
When changing the loading mechanism parts, apply the specified grease to the areas marked "xxx" as shown in the drawing.

Ref No.	Part No.
A	RFKXPG671

■ Cabinet Parts Location

