

Service Manual

Portable Stereo CD System

Radio Cassette
RX-ED55

COMPACT
disc
DIGITAL AUDIO

MASH *
multi-stage noise shaping



Colour
(S) Silver Type

Area
(EG) Europe.
(EB) Great Britain.

* MASH is a trademark of NTT

Tape Deck: AR2 Mechanism Series
Traverse Deck: RAE0152Z Series

Specifications

Radio

Frequency Range :	
FM ;	87.5 – 108.00 MHz
AM ;	522 – 1611 kHz
Intermediate Frequency :	
FM ;	10.7 MHz
AM ;	459 kHz
Sensitivity :	
FM ;	3.1 μ V/ 50 mW output (Max.)
AM ;	224 μ V/ m/ 50 mW output (Max.)

CD player

Sampling frequency :	44.1 kHz
Decoding :	16 bit linear
Beam source :	Semiconductor laser (wavelength 780 nm)
No. of channels :	2 channel, stereo
Wow and flutter :	Less than possible measurement data
D/A converter :	MASH (1 bit DAC)

Notes:

1. Weight and dimensions shown are approximate.
2. Design and specifications are subject to change without notice.

Tape Recorder

Track System :	4 track, 2 channel, stereo
Monitor System :	Variable sound monitor
Recording System :	AC bias
Erasing System :	AC erase
Frequency Range :	
Normal position ;	50 – 12000 Hz
High position ;	50 – 13000 Hz
Tape Speed :	4.8 cm/s

General

Power output :	4 W \times 2 (RMS 10 % DIST.)
Speakers :	8 cm, 3 Ω \times 2
Jacks :	
Output ;	PHONES : 3.5 mm stereo (32 Ω)
Power Requirement :	
AC ;	230 – 240 V, 50 Hz Power Consumption ; 32 W
Battery ;	12 V [Eight R20/LR20 (D, UM-1) batteries] (Do not use rechargeable type batteries)
Memory back-up ;	6 V [Four R6/LR6 (AA, UM-3) batteries] (Do not use rechargeable type batteries)
Dimensions (W \times H \times D):	470 \times 143 \times 270 mm
Weight:	4.1 kg without batteries

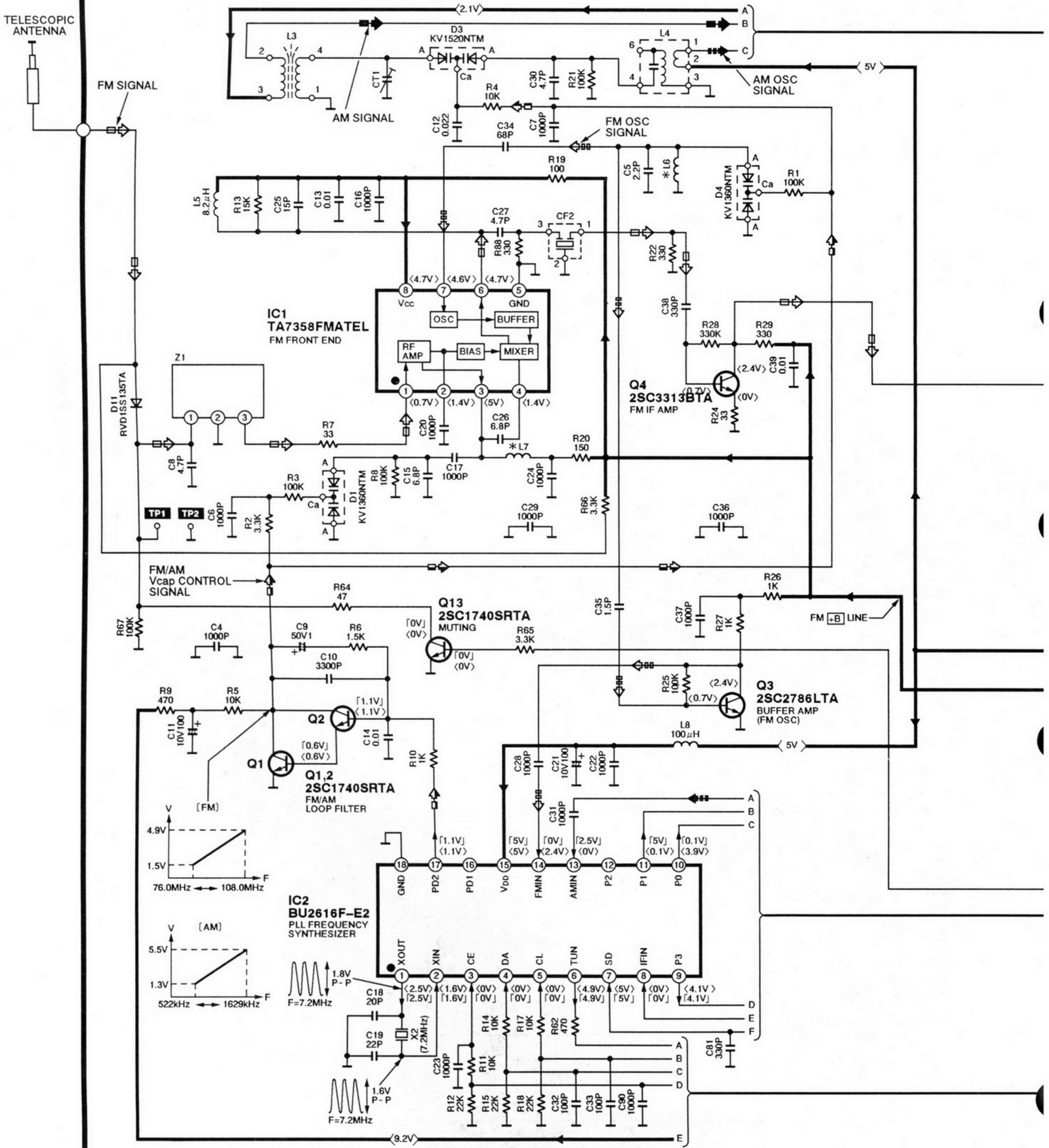
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

© 1998 Matsushita Electric Industrial Co., Ltd.
All rights reserved. Unauthorized copying
and distribution is a violation of law.

B MAIN(TUNER) CIRCUIT (P.C.Board: on pages 34,35)



Schematic Diagram

	Page		Page
A CD circuit	22, 23	E Loading motor circuit	28
B Main (Tuner) circuit	24, 25	F Lamp circuit	28
B Main (Deck) circuit	26, 27	G Operation circuit	28
B Main (Power Amp.) circuit	28 - 31	H Power supply circuit	31
C Mechanism (DECK 2) circuit	27	I Battery terminal circuit	31
D Mechanism (DECK 1) circuit	27		

Notes :

- S701 : Rest switch.
- S790 : Disc tray open detect switch.
- S791 : Disc tray close detect switch.
- S861 : Power switch. (POWER)
- S862 : Deck 1 eject switch. (▲ DECK 1)
- S863 : Volume down switch. (-)
- S864 : Volume up switch. (+)
- S865 : Deck 1/2 select switch. (DECK 1/2)
- S866 : Tape play/Direction switch. (TAPE ◀▶)
- S867 : Tuner/band select switch. (TUNER/BAND)
- S868 : CD play/pause switch. (CD ▶/||)
- S869 : CD and tape Stop/clear switch. (■/Clear)
- S870 : Rewind/Skip/TPS switch. (REW I◀◀/▶▶/TPS)
- S871 : Disc tray open/close switch. (▲ CD OPEN/CLOSE)
- S881 : Record/Rec pause switch. (●/●|| REC/REC PAUSE)
- S882 : CD recording mode select switch. (CD REC MODE)
- S883 : Tape edit switch. (TAPE EDIT)
- S884 : Sound virtualizer switch. (SOUND VIRTUALIZER)
- S885 : Timer switch. (TIMER ●PLAY/●●REC)
- S886 : Seep timer switch. (SLEEP)
- S887 : Timer fader switch. (TIMER FADER)
- S888 : FF/Skip/TPS switch. (FF ▶▶/▶▶/TPS)
- S889 : Clock/Timer adjust switch. (CLOCK ADJUST/TIMER ADJUST)
- S890 : Tuning mode select switch. (TUNE MODE)
- S891 : Deck 2 eject switch. (▲ DECK 2)
- S901 : AC/DC select switch.
- S951 : Deck 1 mode detect switch.
- S952 : Deck 1 cassette tape detect switch.
- S953 : Deck 1 high position detect switch.
- S971 : Deck 2 mode detect switch.
- S972 : Deck 2 cassette tape detect switch.
- S973 : Deck 2 high position detect switch.
- S974 : Deck 2 Reverse side record prevention tab detect switch.
- S975 : Deck 2 Forward side record prevention tab detect switch.

- Battery current:

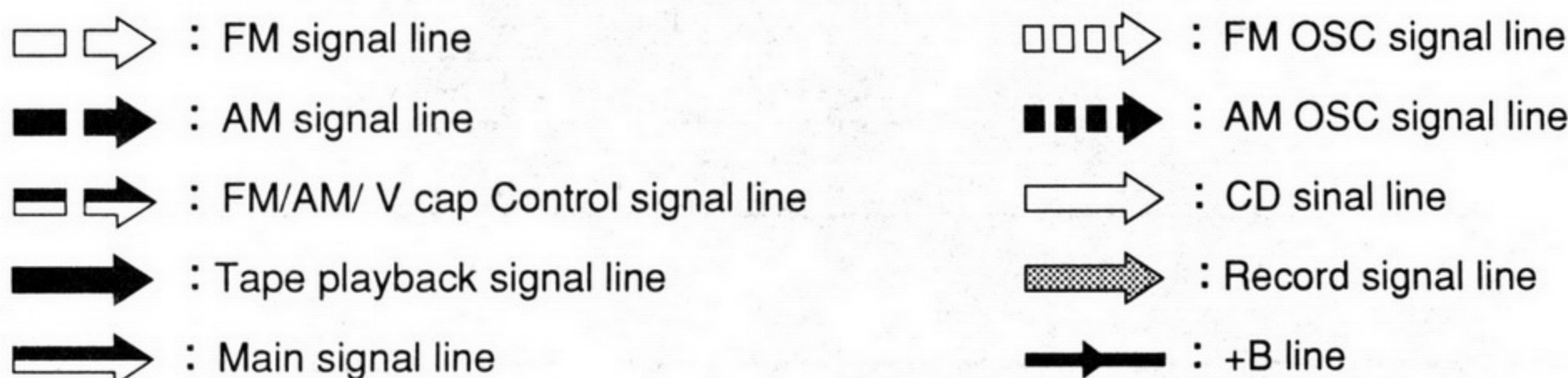
Vol. min...412 mA (FM)	Vol. max...860 mA (FM)
392 mA (AM)	656 mA (AM)
489 mA (TAPE)	1050 mA (TAPE)
545 mA (CD)	1656 mA (CD)

Measurement instruction

AM:	74 dB/m, 30% Mod.
FM:	60 dB, 30% Mod.
TAPE:	315 Hz, 0 dB
CD:	1 kHz, 0 dB

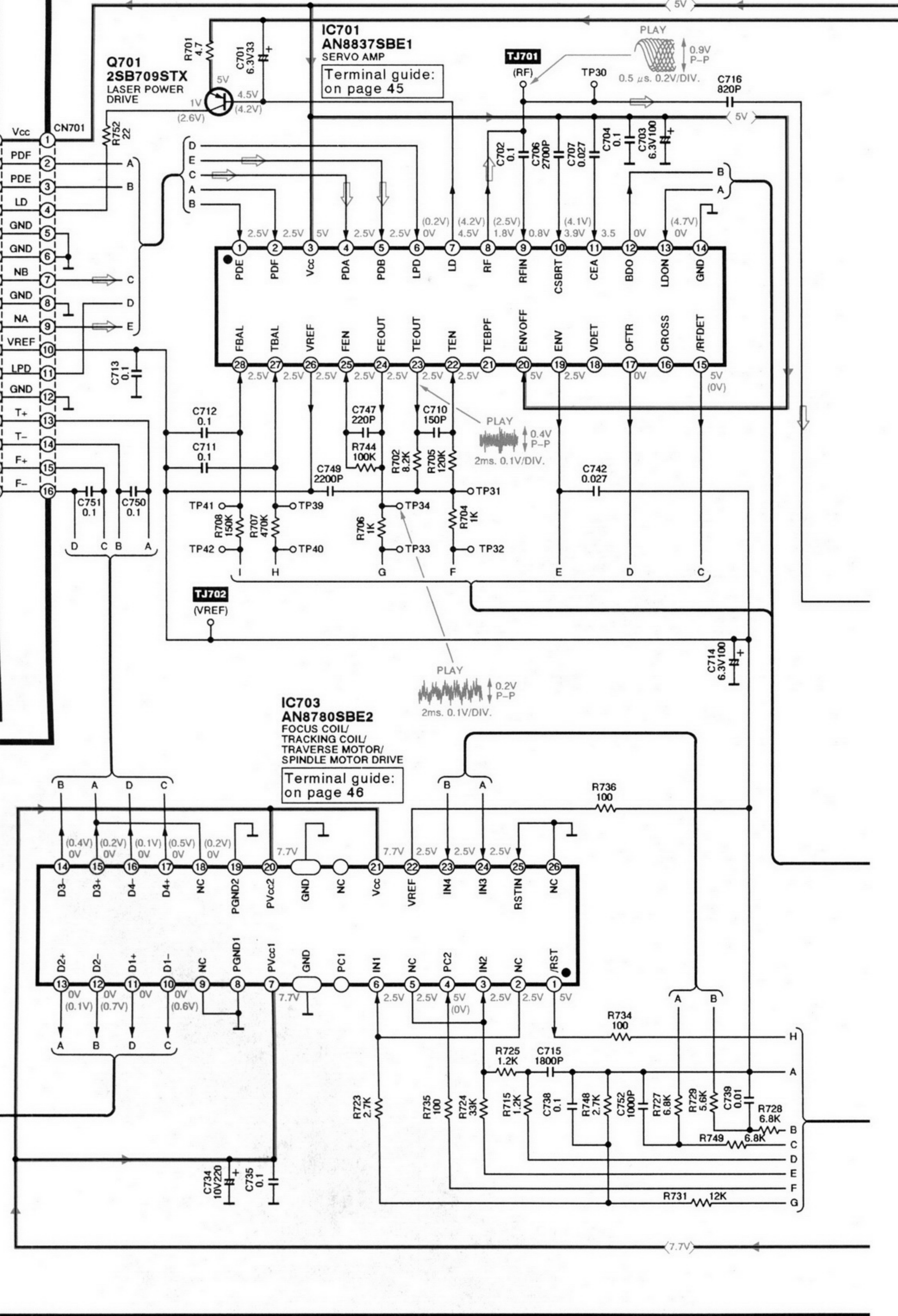
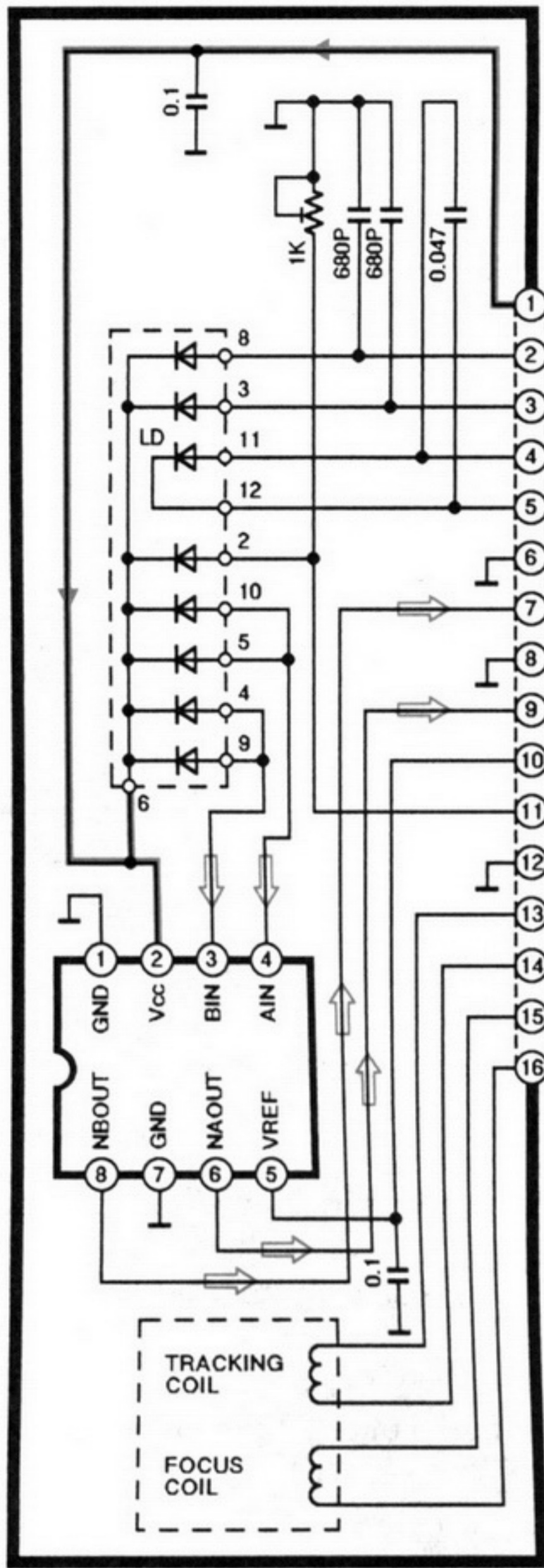
- DC voltage measurements are taken with electronics voltmeter. The negative terminal of the battery provides negative meter connection point.

No mark ... CD (Stop)	() ... CD (Playback)
< > ... FM	[] ... AM
[] ... Tape (Playback)	(()) ... Tape (Record)
- 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.
- **This schematic diagram may be modified at any time with the development of new technology.**



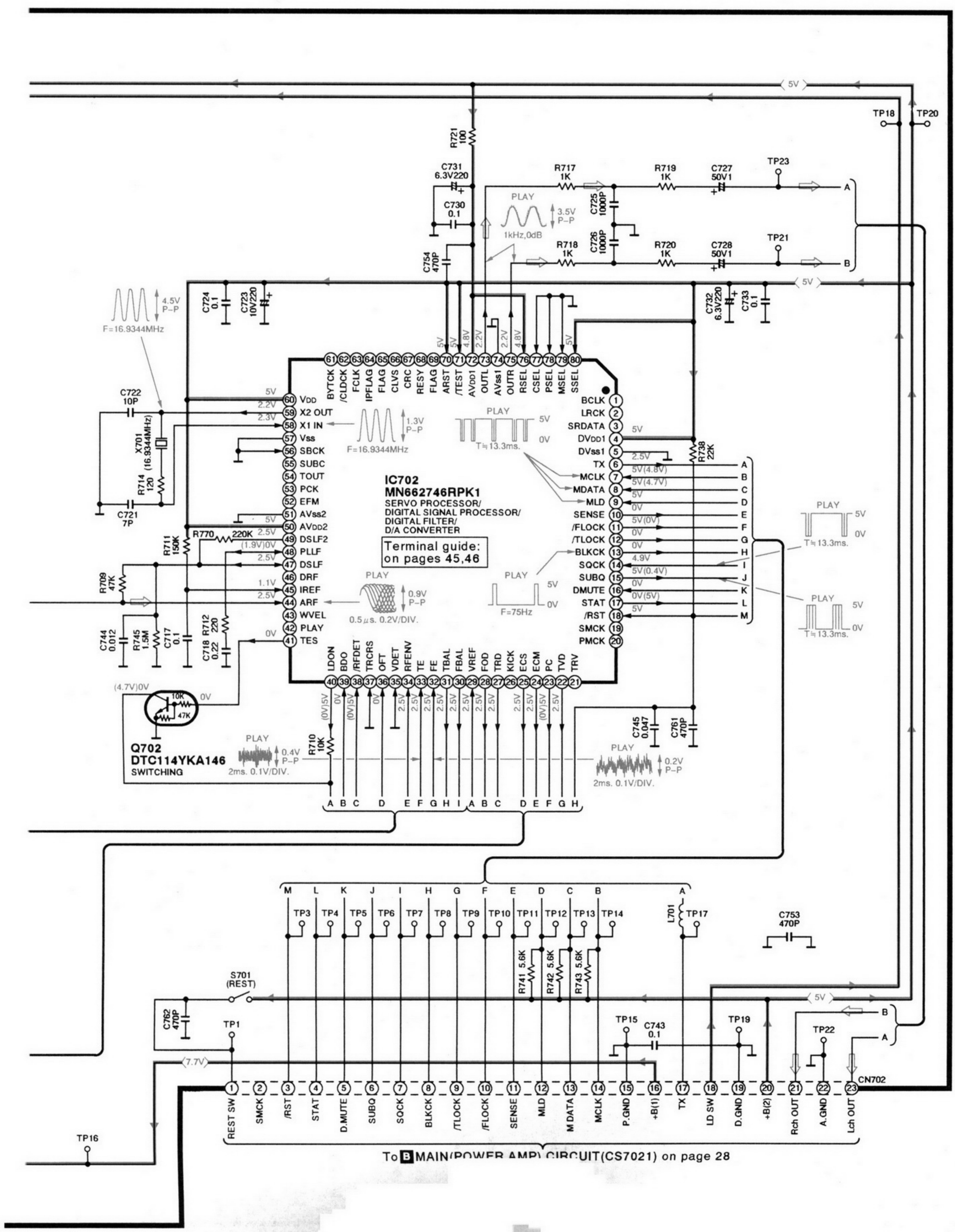
A CD SERVO CIRCUIT (P.C.Board: on page 32)

Δ OPTICAL PICKUP

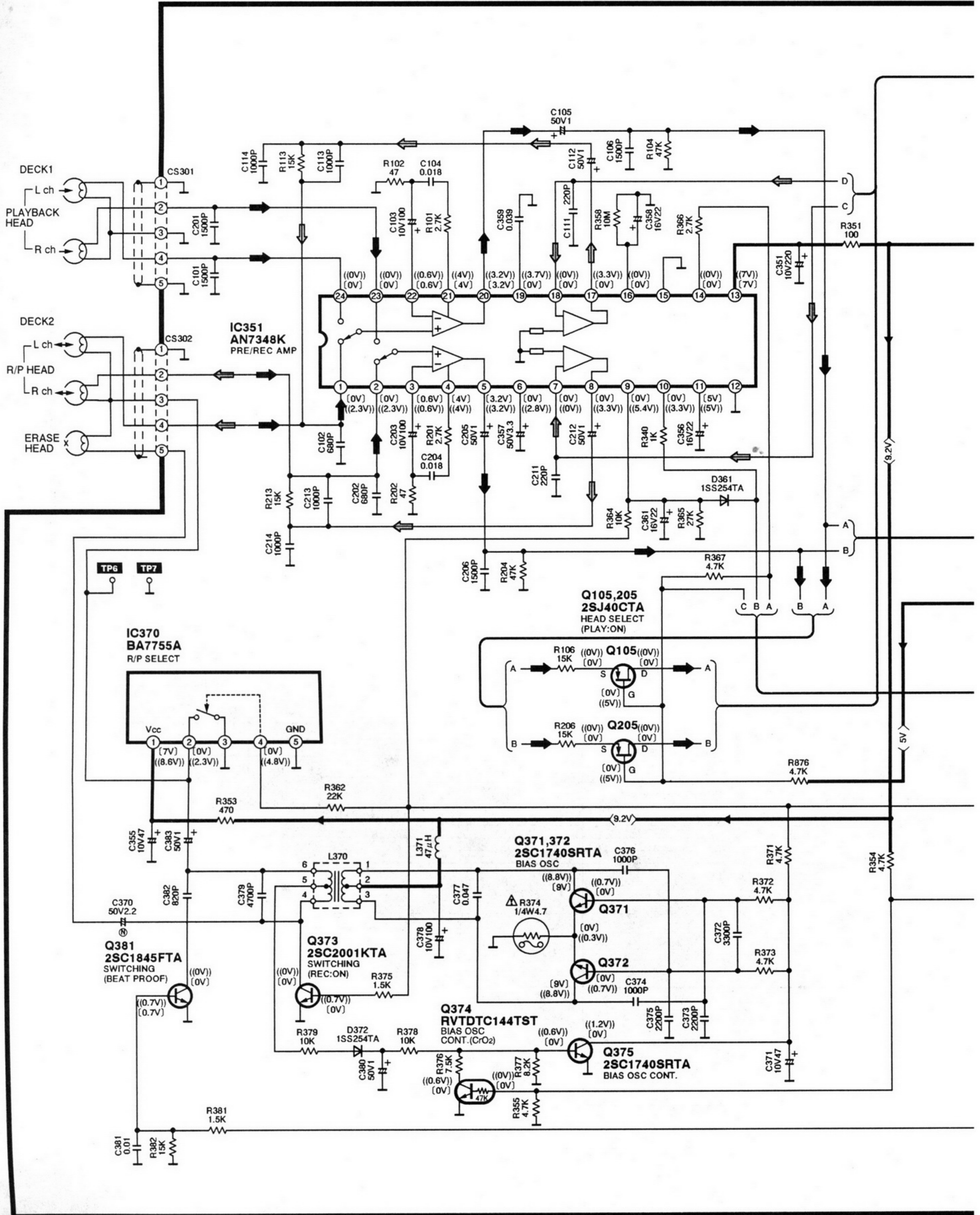


→ : CD sinal line

→ : +B line



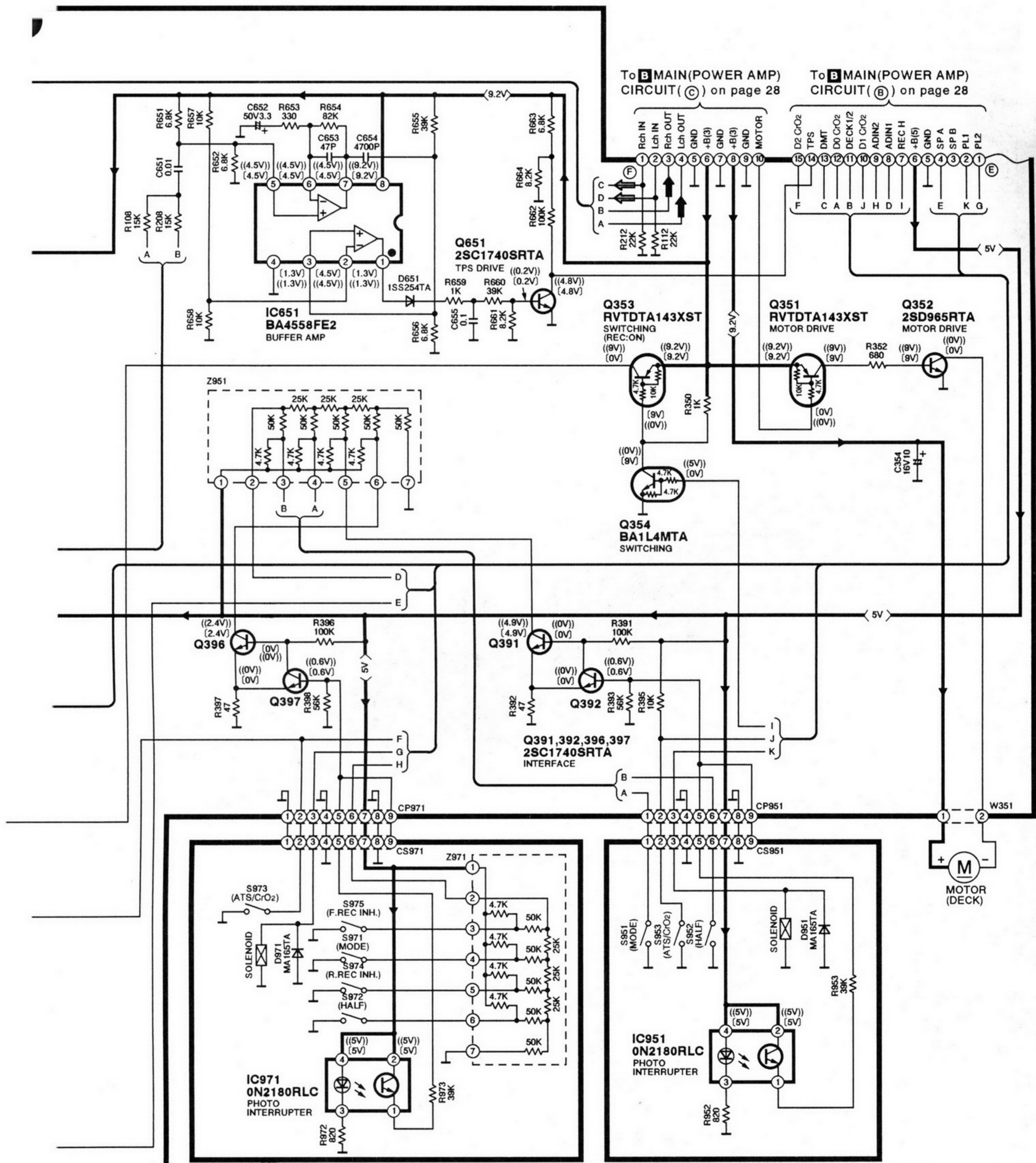
B MAIN(DECK) CIRCUIT (P.C.Board: on pages 34,35)



➔ : Tape playback signal line

➔ : Record signal line

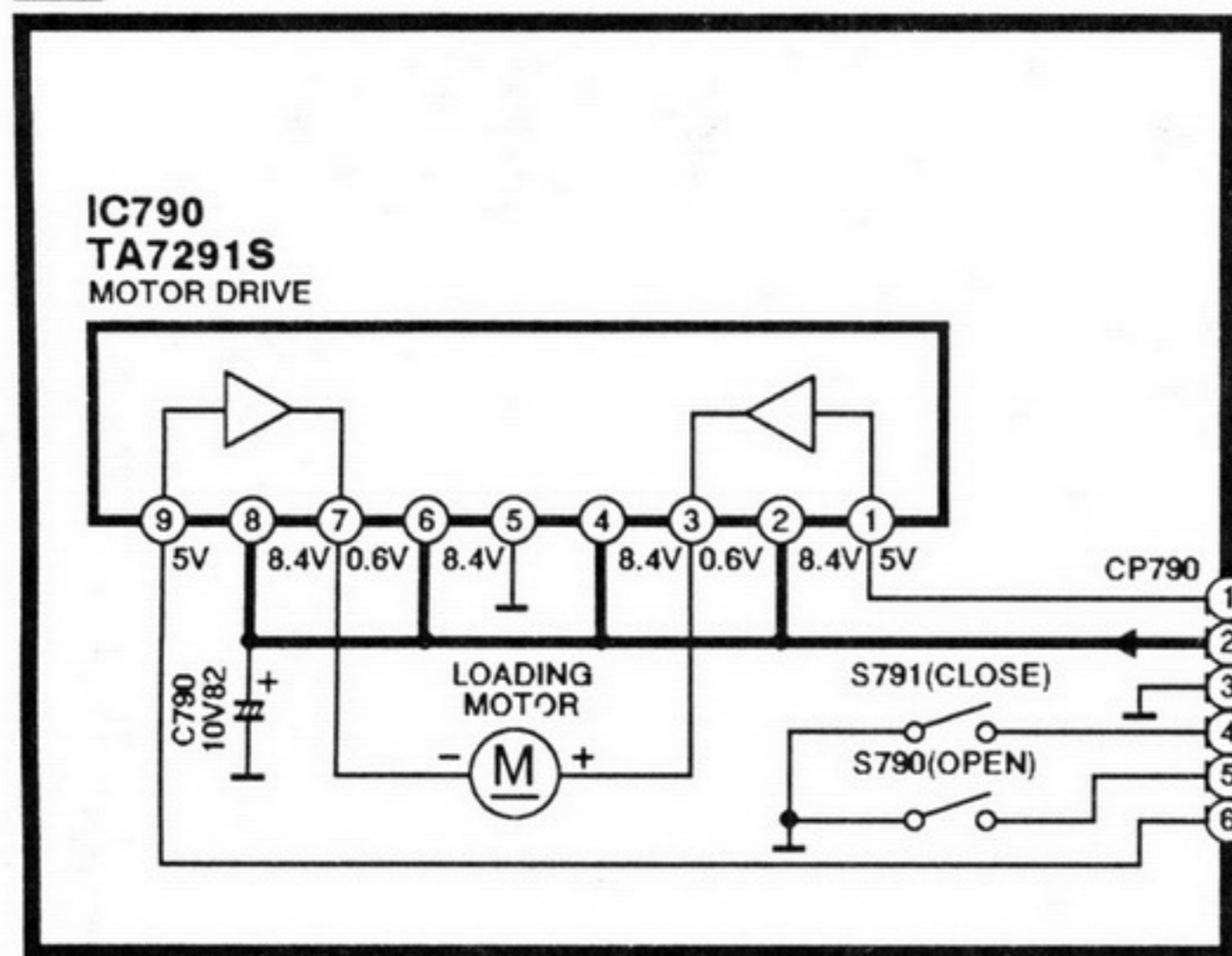
➔ : +B line



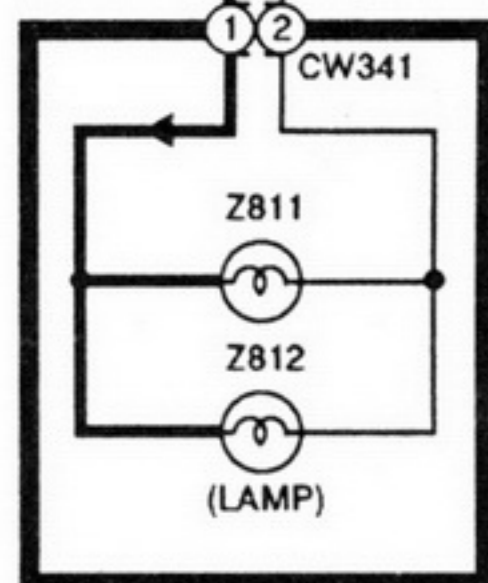
C MECHANISM(DECK2) CIRCUIT (P.C.Board: on page 32)

D MECHANISM(DECK1) CIRCUIT (P.C.Board: on page 32)

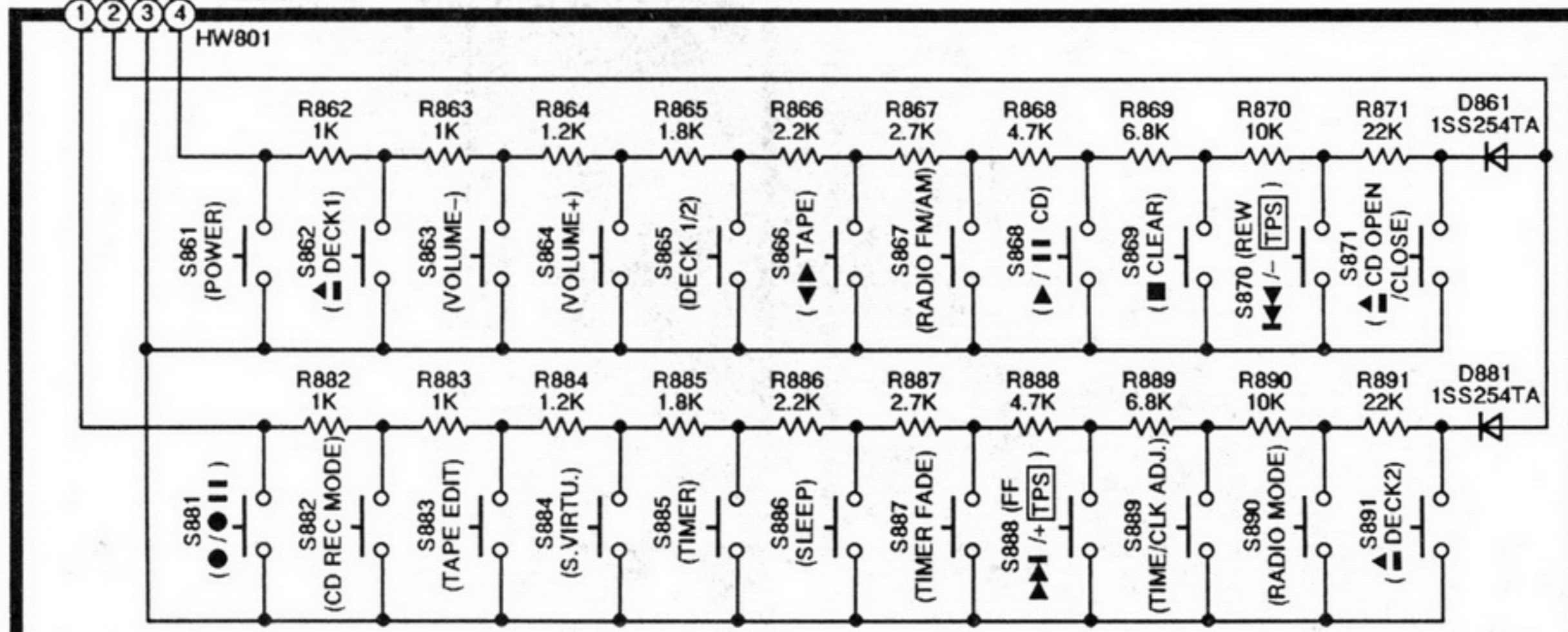
E LOADING MOTOR CIRCUIT (P.C.Board: on page 33)



To **A** CD SERVO CIRCUIT (CN702) on page 23

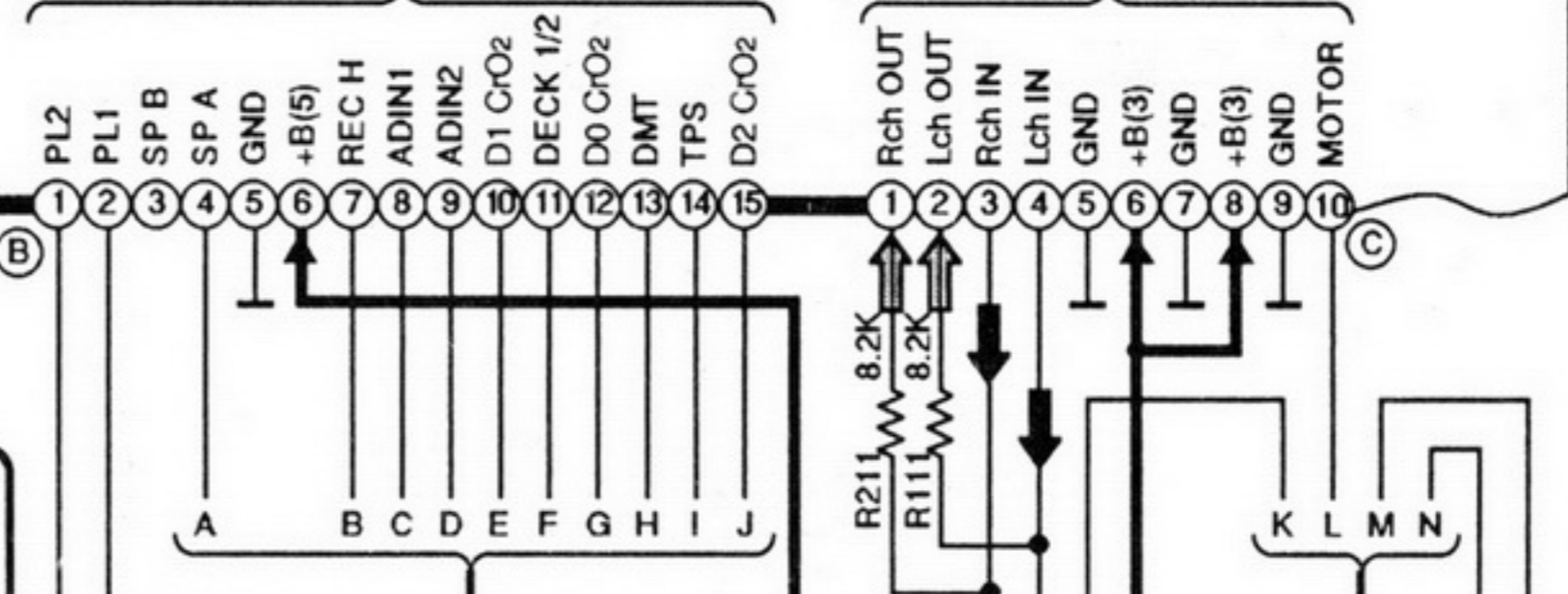


G OPERATION CIRCUIT (P.C.Board: on page 35)

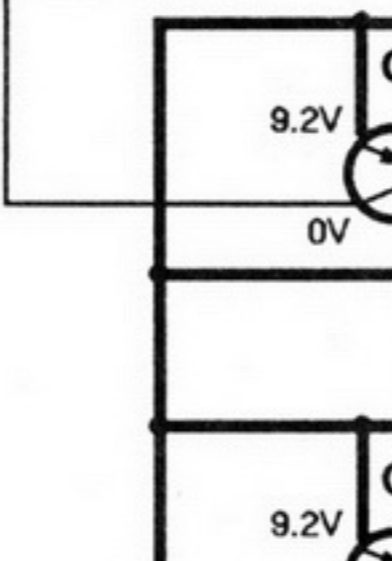


To **B** MAIN(DECK) CIRCUIT (E) on page 27

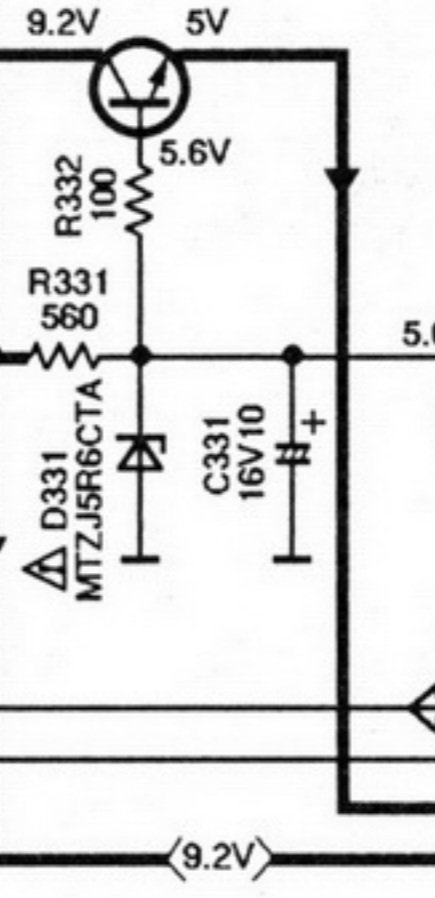
To **B** MAIN(DECK) CIRCUIT (F) on page 27

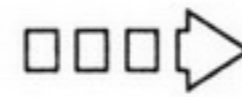




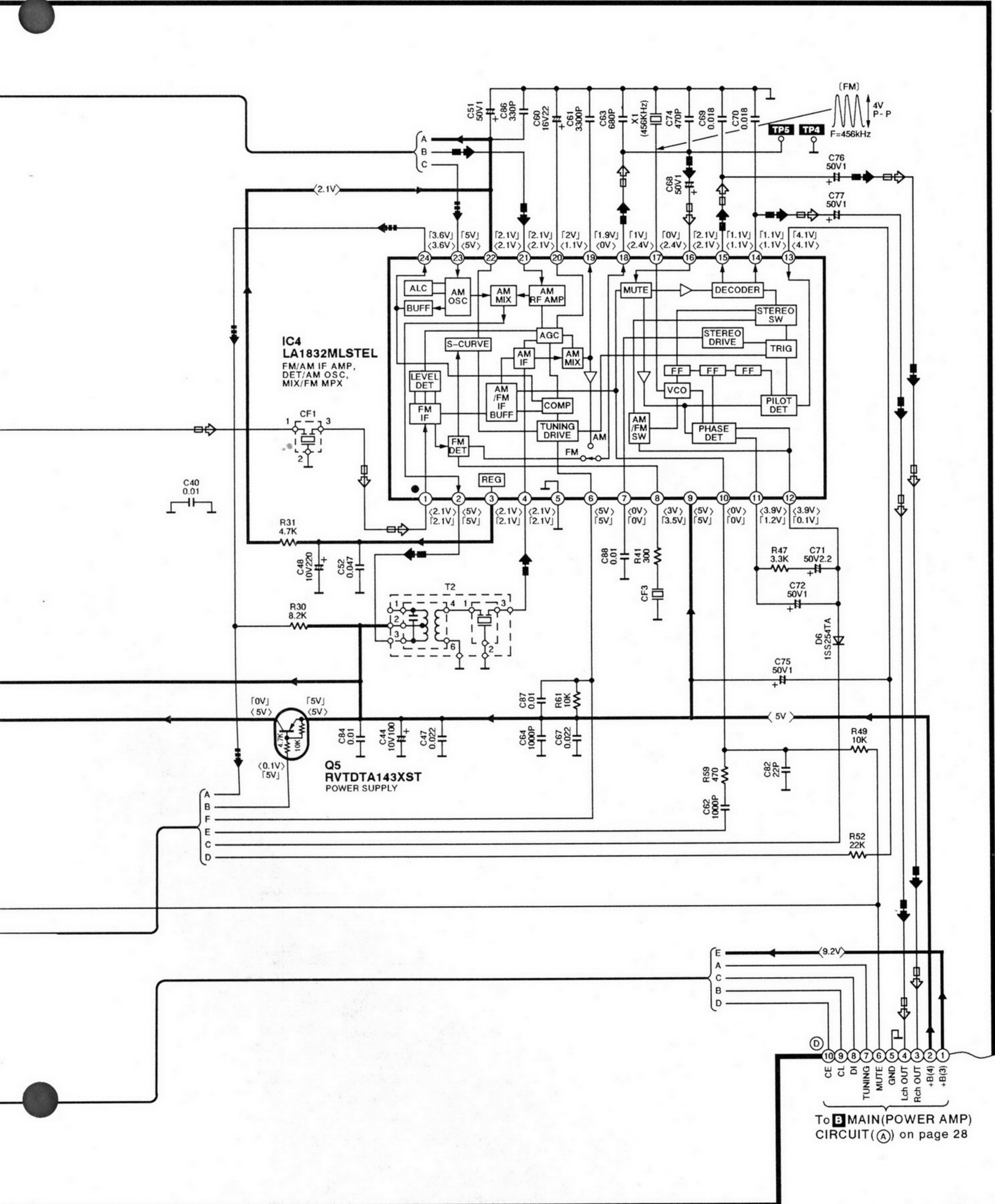
Q631,641 2SB1030RTA SOLENOID

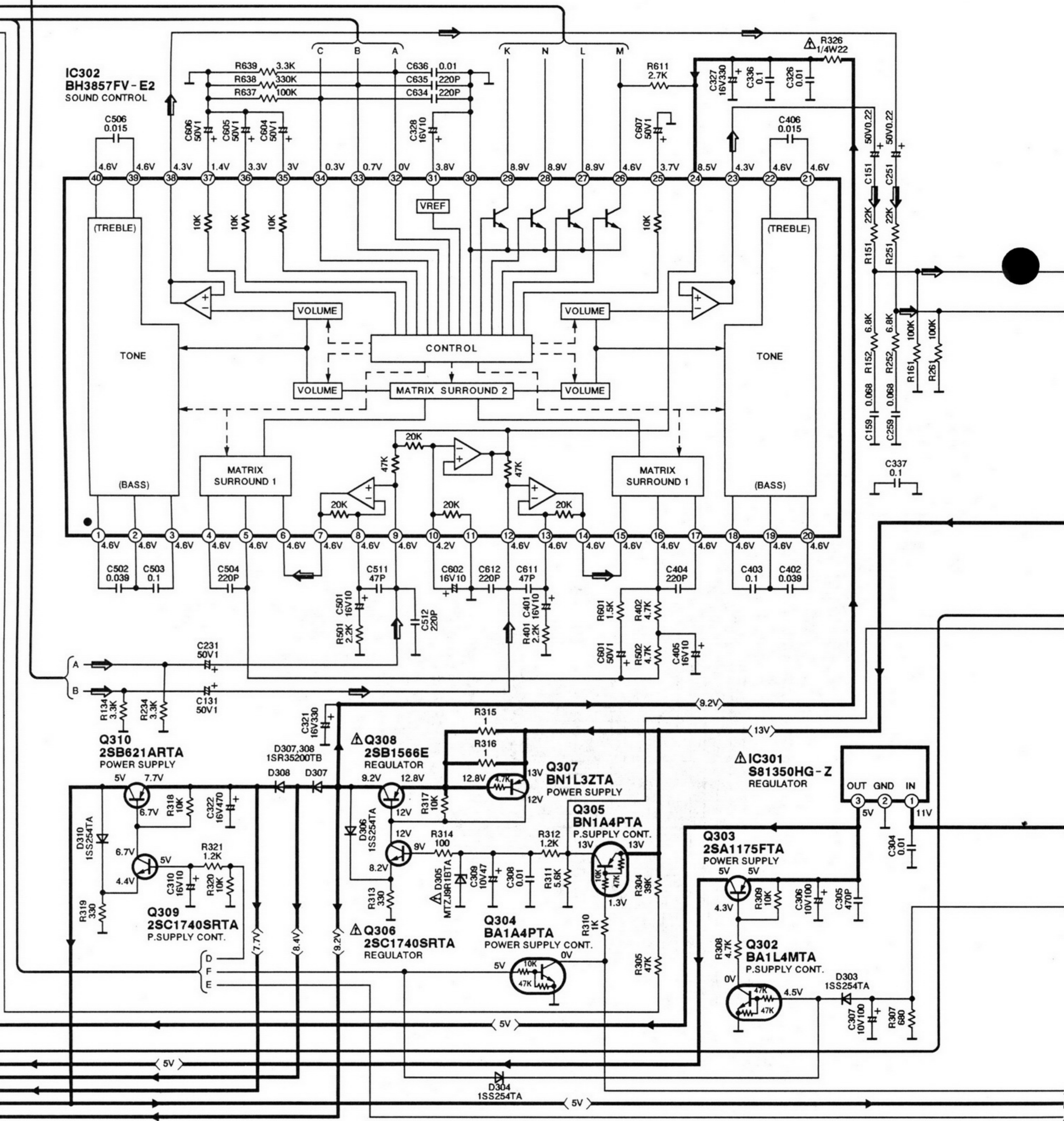


Q331 2SC1740SRTA REGULATOR



-  : FM signal line
-  : AM signal line
-  : FM/AM/ V cap Control signal line
-  : FM OSC signal line
-  : AM OSC signal line
-  : +B line





➔ : Main signal line

➔ : +B line

B MAIN(POWER AMP) CIRCUIT (P.C.Board: on pages 34,35)

