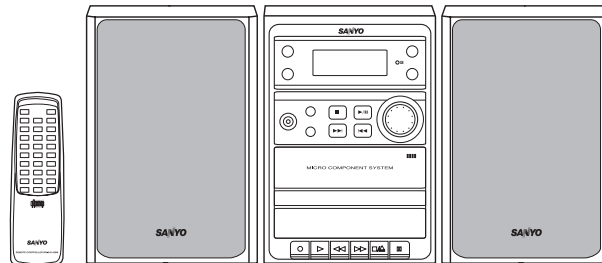


Service Manual

Micro Component System

DC-DA1400M (AU)



CONTENTS

PRODUCT CODE No.
129 716 01

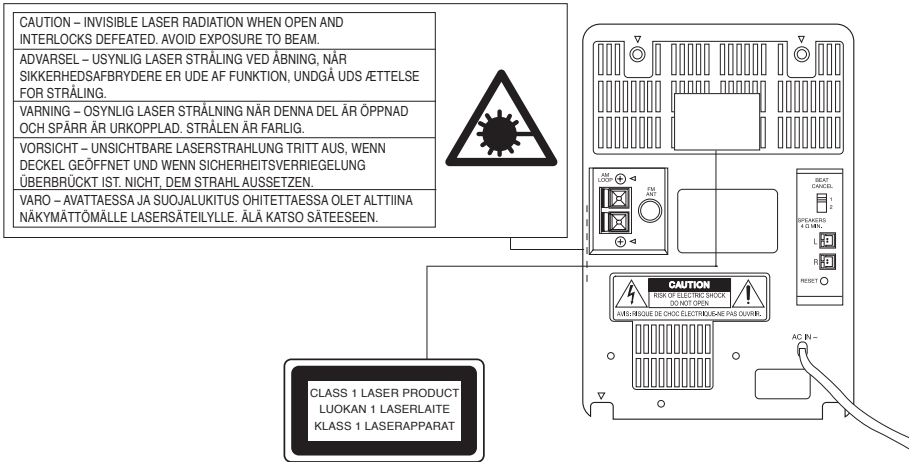
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LASER BEAM SAFETY PRECAUTION

- Pickup that emits a laser beam is used on this CD section.

CAUTION :
USE OF CONTROLS OR ADJUSTMENTS OR
PERFORMANCE OF PROCEDURES OTHER
THAN THOSE SPECIFIED HEREIN MAY RESULT
IN HAZARDOUS RADIATION EXPOSURE.

LASER OUTPUT 0.6 mW Max. (CW)
WAVE LENGTH 790 nm



TUNER ADJUSTMENTS

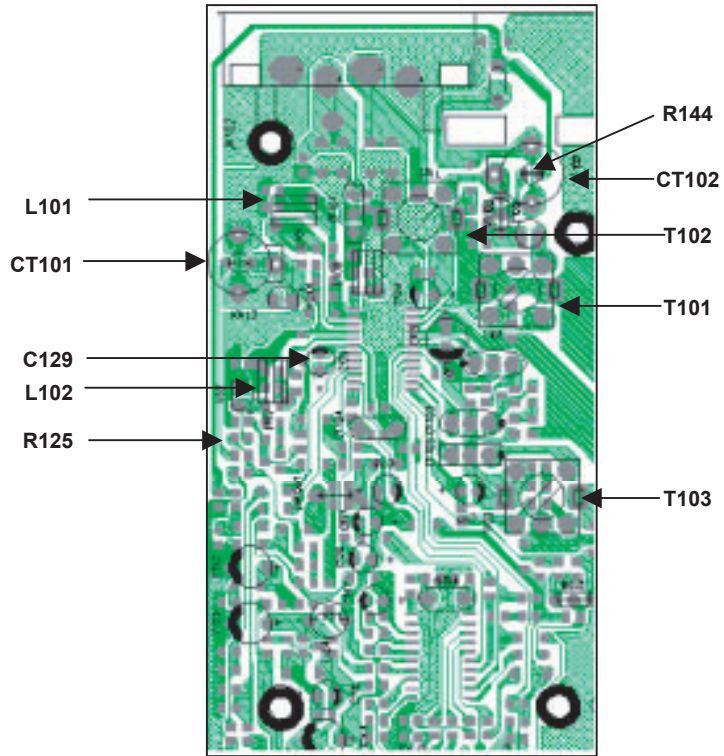
Use a plastic screw driver for adjustments.

Adjust the intermediate frequency of AM to the frequency of ceramic filter.

Set of unit

- Supply voltage : AC 230V
- speaker impedance : 4 ohms
- standard output : 50 mW
- Function select: : TUNER

a. Parts Location



a. AM Adjustment

Band :AM

Step	Adjusting Circuit	Connections		SG Frequency	Position of Tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	IF	Closed the output terminal by sweep generator, it place to AM ANT	Connect VTVM to C129(-)	450 KHz	522 KHz	T103	
2	Tuning cover range	Connect AM SG to test loop	Connect VTVM to R144	522 KHz	522 KHz	T101	VT: 1.4+/-0.1V
				1611 KHz	1611 KHz		VT: 7.2+/-0.5V
3	Tracking	Connect AM SG to test loop	Connect VTVM to speaker terminals.	603 KHz	603 KHz	T102	Max.
				1404 KHz	1404KHz	TC102	

b. FM Adjustment

Band :FM

FM Dummy antenna: 75 ohms unbalance

Step	Adjusting Circuit	Connection		SG Frequency	Position of Tuning dial	Adjustment	VTVM Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to C139	Connect VTVM to C129(-)	10.7 MHz	90.00 MHz		
2	Tuning cover range	Connect FM SG to D102(+) & D101(-)	Connect VTVM to R125	87.50 MHz	87.50 MHz	L102	VT: 1.8+/-0.1V
				108.00 MHz	108.00 MHz		VT: 7.2+/-0.5V
3	Tracking	Connect FM SG to D102(+) & D101(-)	Connect VTVM to speaker terminals.	90.00 MHz	90.00 MHz	L101	Max.
				106.00 MHz	106.00 MHz	TC101	

This is a basic tuner adjustment.

TAPE DECK ADJUSTMENTS

1. HEAD REPLACEMENT

After replacement, demagnetize. The heads by using a degausser.

Be sure to clean the heads before attempting to make any adjustments.

All wiring should be returned to the original position after work is completed.

2. HEAD AZIMUTH ADJUSTMENT

- (1) Load the test tape(STT-113CN,etc., 8KHz) for azimuth adjustment.
- (2) Press the PLAY button.
- (3) Use a cross-tip screwdriver to turn the screw for azimuth adjustment so that left and right output are maximized
- (4) Press the STOP button.
- (5) After completion of the adjustment, use thread lock (TB-1401B) to secure the azimuth-adjustment screw.

3. MOTOR REPLACEMENT

4. AC BIAS FREQUENCY ADJUSTMENTS

- (1) connect counter to T801(BS);
- (2) R/P swith in recording state;
- (3) Adjusting T801 use a plastic screw, AC bias frequency: 82KHz.

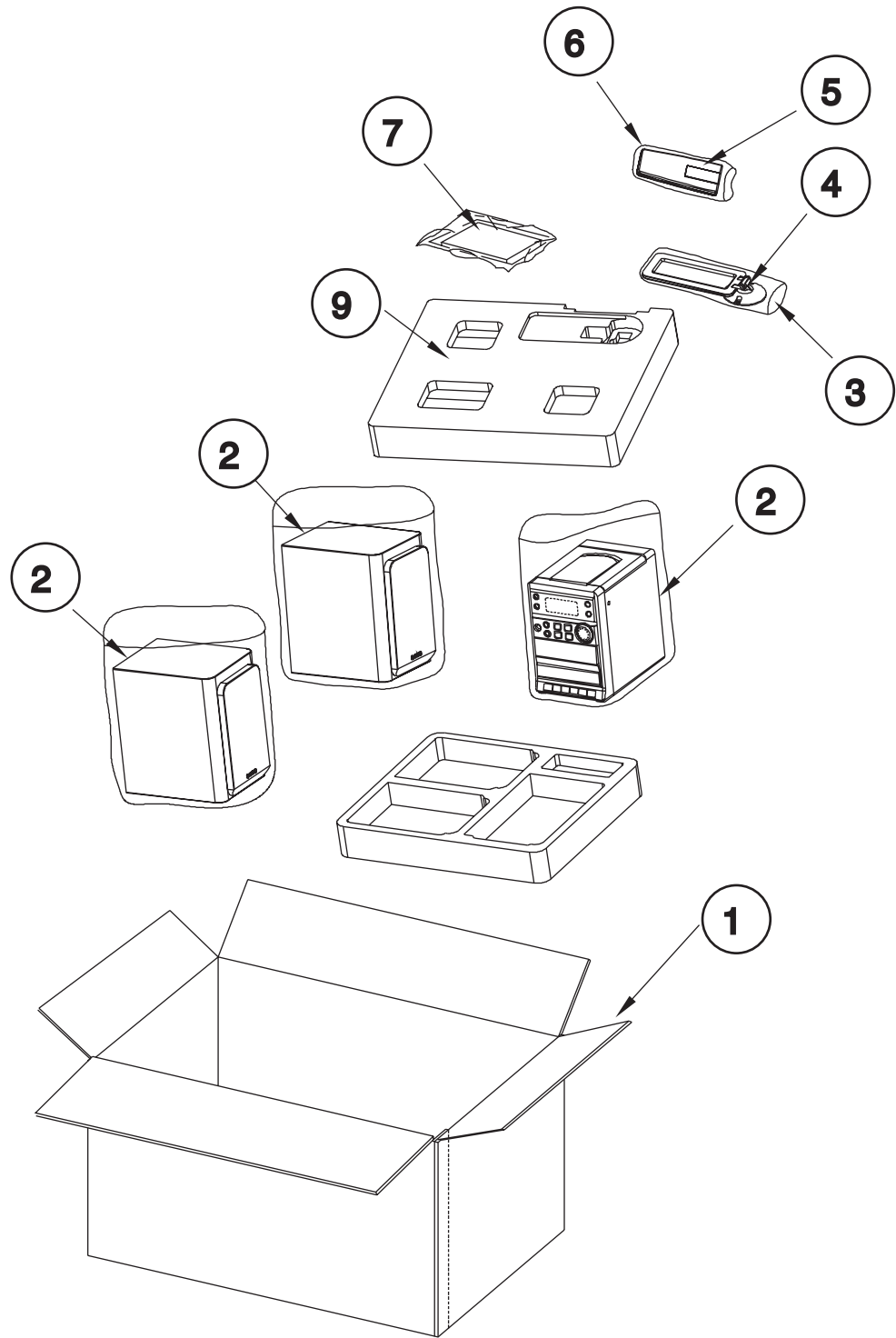
5. MOTOR SPEED ADJUSTMENT

- (1) Insert the test tape(MTT-111N,etc., 3,000 Hz)
- (2) Press the PLAY button.
- (3) Use a flat-tip screwdriver to turn the SVR(located inside the rear of the motor) to adjust SVR so that the frequency counter become 3,000 Hz .

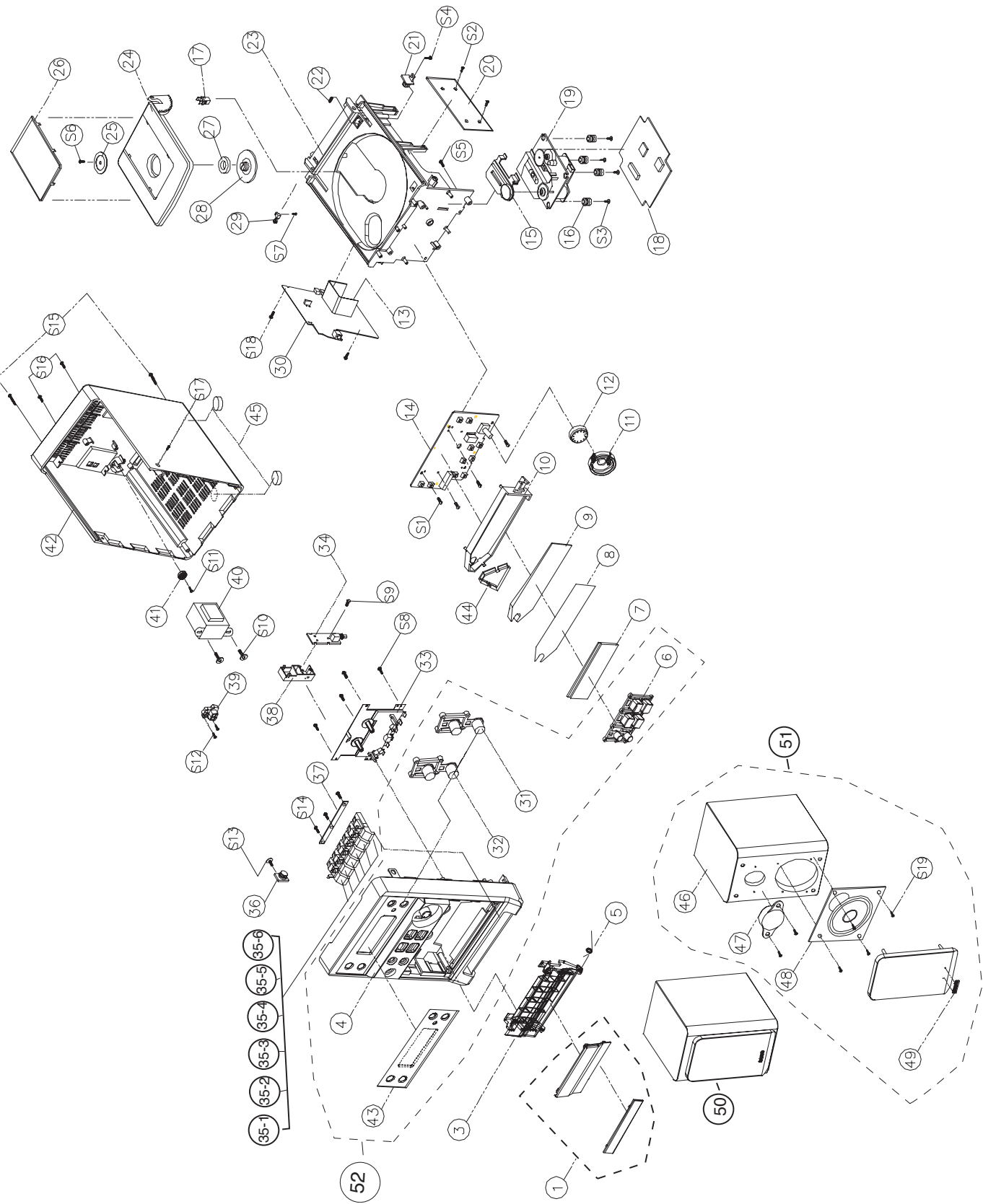
6. CHECKING THE MECHANISM TORQUSE AND TENSION

Measurement	Take-up torqe	Back tension	Tape tension
Cassette of measurement	PLAY:TW-2111A F.FWD/REW:TW-2231	PLAY:TW-2111A	Drive-power cassette TW-2412
PLAY	30-70 gf.cm	1.5 - 5 gf.cm	70 gf or more
F.FWD	55 gf or more	-----	-----
REW	55 gf or more	-----	-----

EXPLODED VIEW(Accessories & Packing)



EXPLODED VIEW(CABINET & CHASSIS)



PARTS LIST

PRODUCT SAFETY NOTICE

EACH PRECAUTION IN THIS MANUAL SHOULD BE FOLLOWED DURING SERVICING. COMPONENTS IDENTIFIED WITH THE IEC SYMBOL Δ IN THE PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATE COMPONENTS IN WHICH SAFETY CAN OF SPECIAL SIGNIFICANCE. WHEN REPLACING A COMPONENT IDENTIFIED, USE ONLY THE REPLACEMENT PARTS DESIGNATED, OR PARTS WITH THE SAME RATINGS OF RESISTANCE, WATTAGE OR VOLTAGE THAT ARE DESIGNATED IN THE PARTS LIST IN THIS MANUAL. LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS MUST BE MADE TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE PRODUCT TO THE CUSTOMER.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
 Regular type resistors are less than 1/4W carbon type and 0 ohm chip resistors.
 Regular type capacitors are less than 50V and less than 1000 μ F of Ceramic type and Electrolytic type.

PACKING & ACCESSORIES

REF.NO.	PART NO.	DESCRIPTION
1	645 084 2566	GIFT BOX
2	645 069 7357	POLY BAG,SPEAKER
3	645 027 2080	POLY BAG,AM LOOP ANT
4	645 061 6297	ANTENNA LOOP
5	645 080 5714	REMOTE CONTROL, RC29-X000S3-030
6	645 070 9296	POLY BAG,REMOTE CONTROL
7	645 081 5287	INSTRUCTION MANUAL
9	645 080 5516	POLY FOAM,KIT
	Δ 645 084 2078	POWER CORD,SAA
	645 080 5370	WIRE JOIN UL/CSA APPROVAL, AC CORD TO PWR TRAN

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
1	645 080 5691	ASSY CASS DOOR
3	645 080 5424	CASS DOOR BRACKET
4	645 080 5547	CABINET FRONT
5	645 042 1181	CASS DOOR SPRING
6	645 080 5660	CD CONTROL KNOB
7	645 080 4991	LCD DISPLAY
8	645 080 5394	PAPER BACK LIGHT
9	645 080 5462	LENS BACK LIGHT
10	645 080 5448	DISPLAY BEACKET
11	645 080 5479	VOLUME KNOB RING
12	645 080 5417	KNOB VOLUME
13	645 080 5363	HEAT SINK,FOR IC301
15	645 069 6961	CD MECKANISM COVER
16	645 033 3446	RUBBER SILICON,CD DECK
17	645 043 0145	CD DOOR LOCK
19	645 080 5356	CD DECK MECHANISM
21	645 033 0407	CD LID GEAR
22	645 080 5400	CD DOOR SPRING
23	645 080 5646	CD TRAY
24	645 080 5653	CD DOOR
25	645 033 3989	CD CHUCK A
26	645 080 5639	CD DOOR COVER
27	645 033 3972	CD MAGNET RING
28	645 033 3996	CD CHUCK M
29	645 069 6657	LEAF SWITCH
31	645 080 5684	FUNCTION.BAND KNOB,RIGHT
32	645 080 5677	FUNCTION.BAND KNOB,LEFT
33	645 080 4977	CASS DECK MECHANISM
35-1	645 080 5622	KNOB CASS RECORD
35-2	645 080 5615	KNOB CASS PLAY
35-3	645 080 5608	KNOB CASS REWIND
35-4	645 080 5592	KNOB CASS FFWD
35-5	645 080 5585	KNOB CASS STOP/EJECT
35-6	645 080 5578	KNOB CASS PAUSE
36	645 033 0407	CASS LID GEAR
37	645 080 5387	CASS KNOB PLATE
38	645 080 5493	RECORDING BD BRACKET
39	645 062 1161	ANTENNA JACK
41	645 076 1843	LINE CORD HOLDLE
42	645 080 5554	CABINET BACK
43	645 080 5486	DISPLAY LENS
44	645 080 5431	DISPLAY BEACKET COVER

REF.NO.	PART NO.	DESCRIPTION
45	645 035 0580	RUBBER FOOT, DIA. 2.,FOR UNIT
46	645 080 5509	SPEAKER BOX
47	645 080 4953	SPEAKER 1.5",SMALL
48	645 080 4960	SPEAKER 3.5",LARGE
49	645 076 1515	SANYO LOGO
50	645 080 5721	ASSY SPEAKER BOX L,LEFT
51	645 080 5738	ASSY SPEAKER BOX R,RIGHT
52	645 080 5707	ASSY CABINET FRONT

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
S1	645 023 6594	SCREW ST 3X8,CONTROL BD
S2	645 023 6594	SCREW ST 3X8,TUNER BD
S3	645 069 6770	SCREW 2.6X8,CD DECK
S4	645 023 6617	SCREW ST 3X10,CD DOOR GEAR
S5	645 023 6617	SCREW ST 3X10, BACK CAB TO CD TRAY
S6	645 069 6831	SCREW 2.6X6, CD CHUCK M TO CD CHUCK A
S7	645 069 6824	SCREW 2X6,LEAF SWITCH
S8	645 023 6617	SCREW ST 3X10,CASS DECK
S9	645 023 6594	SCREW ST 3X8, RECORDING BD BRACKET
S10	645 027 1182	SCR 3X20,POWER TRANSFORMER
S11	645 023 6594	SCREW ST 3X8, LINE CORD HOLDLE
S12	645 027 3841	SCR 3X2.5, BACK CAB TO FRONT CAB
S13	645 023 6617	SCREW ST 3X10, CASS DOOR GEAR
S14	645 023 6594	SCREW ST 3X8,CASS KNOB PLATE
S15	645 023 6617	SCREW ST 3X10,CD TRAY
S16	645 027 1144	SCR 2.8X12,ANT JACK
S17	645 035 0405	SCREW ST 3 X 8 MM KB, BACK CAB TO FRONT CAB
S18	645 023 6594	SCREW ST 3X8,AUDIO BD
S19	645 023 6617	SCREW ST 3X10,SPEAKER LARGE

ELECTRICAL-PARTS

REF.NO.	PART NO.	DESCRIPTION
40	Δ 645 080 4946	POWER TRANSFORMER,V1423FS
	645 080 5127	FFC CABLE 18P, CONTROL CN702 TO AUDIO C
	645 055 7255	16P FFC CABLE, CD BD CN902 TO CD DECK
	645 080 5110	FFC CABLE 10P, CONTROL CN701 TO CD BD C
	645 080 5097	HSG 4P, CASS DECK TO AUDIO CN401
	645 080 5103	HSG 2P,CD DOOR SW TO CN403
	645 073 8234	4P HSG, CN201 TO CASS DECK HEAD
	645 076 1034	CE 3.3U 50V,FOR SPEAKER SMALL
	645 080 5080	HSG 2P,TO SPEAKER
	645 055 7095	FERRITE BEAD, CN202 TO CN503 WIRE
	645 051 6474	FERRITE BEAD,CN401 WIRE
	645 080 5011	FERRITE BEAD,CW502 WIRE
	645 027 1328	SOLDERING SLUG,ANT

PARTS LIST

CONTROL P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
14	614 334 4285	ASSY,PWB CONTROL(Only initial)
C0744	645 055 6784	GOLD CAP DX-5R5H104
CN701	645 080 5042	10P FFC HEADER
CN702	645 080 5059	18P FFC HEADER
D0701	645 055 6821	DIODE 1N4148
D0706	645 055 6821	DIODE 1N4148
IC701	645 076 1454	IC LC877148A-54K14JK05
L0701	645 034 7160	INDUCTOR 10UH
L0702	645 034 7160	INDUCTOR 10UH
L0705	645 080 5349	INDUCTOR 47UH
LD701	645 080 4991	LCD DISPLAY,LCD701
LE701	645 062 0881	LED,LED701
Q0701	645 072 3162	TRANSISTOR 9014C
RM701	645 033 3477	DIODE RPM-6938-V4,REM701
SW702	645 042 0023	SW TACT,POWER
SW703	645 042 0023	SW TACT,TUNER/BAND
SW704	645 042 0023	SW TACT,SOUND
SW705	645 042 0023	SW TACT,MEMORY
SW706	645 042 0023	SW TACT,STOP
SW707	645 042 0023	SW TACT,REW/TUN DOWN
SW708	645 042 0023	SW TACT,PLAY/PAUSE
SW709	645 042 0023	SW TACT,FF/TUN UP
SW710	645 042 0023	SW TACT,SLEEP
SW711	645 042 0023	SW TACT,TAPE
VR701	645 055 7309	ROTARY ENCODER, EC12E24L104F7V
X0701	645 062 0911	CRYSTAL 32.768KHZ
X0702	645 076 1096	CRYSTAL 6MHZ
	645 080 5394	PAPER BACK LIGHT
	645 080 5462	LENS BACK LIGHT
	645 080 5431	DISPLAY BEACKET COVER
	645 080 5448	DISPLAY BEACKET

CD P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
18	614 334 4308	ASSY,PWB CD(Only initial)
CF901	645 052 4837	RESONATOR 16.934MHZ
CN901	645 076 1102	10P FFC HEADER
CN902	645 055 7163	16P FFC HEADER
CN903	645 054 0660	5P HEADER
IC901	645 076 1423	IC LC78646E
IC902	645 076 1430	IC LC78684E
IC903	645 076 1416	IC LA6548
IC904	645 076 1447	IC M12L16161A
L0906	645 042 0108	CHOKE COIL 26UH
Q0901	645 073 8579	TRANSISTOR 2SA812
Q0902	645 033 3514	TR 2SB764D
Q0903	645 072 3162	TRANSISTOR 9014C
SW901	645 069 6657	LEAF SWITCH
	645 070 9050	HEAT SINK,FOR IC903

TUNER P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
20	614 334 4261	ASSY,PWB TUNER(Only initial)
C0108	645 055 6791	POLY CAP 390PF
CF101	645 051 6467	BAND PASS FILTER
CF102	645 055 1130	CERAMIC FILTER
CF103	645 055 1130	CERAMIC FILTER
CF104	645 055 6906	CERAMIC FILTER
CF105	645 055 6920	CERAMIC FILTER
CN101	645 054 0653	4P HEADER
CN102	645 054 0660	5P HEADER
CT101	645 023 6310	TRIMMER 10PF
CT102	645 023 6310	TRIMMER 10PF
D0101	645 080 5288	DIODE 1N4148
D0102	645 080 5288	DIODE 1N4148
D0104	645 080 5288	DIODE 1N4148
D0105	645 080 5288	DIODE 1N4148
D0106	645 080 5288	DIODE 1N4148
IC101	645 080 5325	IC LA1823
IC102	645 080 5332	IC LC72131
JK101	645 062 1161	ANTENNA JACK
L0100	645 049 9913	FM COIL 4.5T

REF.NO.

L0101
L0102
L0104
Q0107
Q0108
Q0109
Q0110
T0101
T0102
T0103
VD101
VD102
VD103
X0101
ZD101

PART NO.

645 023 6297
645 023 6280
645 027 0352
645 080 5318
645 034 7078
645 080 5301
645 080 5318
645 055 6944
645 062 0775
645 033 3866
645 055 6807
645 055 6807
645 055 6814
645 062 0904
645 080 5295
645 042 0344

DESCRIPTION

VHF COIL
FM COIL
CHOKE COIL 100UH
TRANSISTOR 9018H
TR 2SC3330U
TRANSISTOR 8050C.D
TRANSISTOR 9018H
IFT,IFT OSC 1A612R
IFT,IFT OSC OA10-871104
AM COIL,IFT IF 2070
DIODE SVC201
DIODE SVC201
DIODE SVC348
CRYSTAL
ZENER 5.6V
CONTACT PIN

AUDIO P.W.BOARD ASSY

REF.NO.

30
C0308
C0309
C0310
C0311
C0312
C0423
C0509
C0510
C0511
C0512
C0513
C0514
C0523
C0524
C1105
CN301
CN302
CN401
CN403
CN503
CN505
D0403
D0405
D0406
D0407
D0702
D0703
D0704
D1101
D1102
D1103
D1104
D1105
FS1101
IC301
IC401
IC501
JK301
L0301
L0302
L0303
L0304
L0305
L0306
L0307
Q0301
Q0302
Q0401
Q0402
Q0403
Q0404
Q0405
Q0406
Q0407

PART NO.

614 334 4278
645 070 4642
645 073 8067
645 073 8067
645 080 4915
645 080 4915
645 080 4915
645 073 8067
645 073 8067
645 073 8067
645 073 8005
645 073 8005
645 073 7992
645 073 7992
645 080 4922
645 042 9545
645 042 9545
645 027 0611
645 034 6798
645 080 5073
645 080 5066
645 055 6821
645 055 6821
645 023 6112
645 023 6112
645 055 6821
645 055 6821
645 027 0932
645 027 0932
645 027 0932
645 027 0932
645 027 0932
645 023 6112
645 080 5035
645 080 4984
645 066 5790
645 055 7026
645 062 1147
645 080 5004
645 080 5004
645 080 5004
645 080 5028
645 062 0867
645 062 0867
645 062 0867
645 023 6129
645 023 6129
645 023 6129
645 055 6869
645 076 1058
645 023 6129
645 027 0420
645 055 6883
645 055 6869

DESCRIPTION

ASSY,PWB AUDIO(Only initial)
CE 1000U 25V
POLYESTER 0.15U 100V
POLYESTER 0.15U 100V
ELECT 1000U 16V
ELECT 1000U 16V
ELECT 1000U 16V
POLYESTER 0.15U 100V
POLYESTER 0.15U 100V
POLYESTER 0.15U 100V
POLYESTER 0.0022U 100V
POLYESTER 0.0022U 100V
POLYESTER 0.001U 100V
POLYESTER 0.001U 100V
ELECT 6800U 25V
HEADER 2PINS
HEADER 2PINS
WAFER 4P
HEADER 2PINS
9P HEADER
18P FFC HEADER
DIODE 1N4148
DIODE 1N4148
RECTIFIER 1N-4001
RECTIFIER 1N-4001
DIODE 1N4148
DIODE 1N4148
DIODE 1N4148
RECTIFIER 1N-5401
RECTIFIER 1N-5401
RECTIFIER 1N-5401
RECTIFIER 1N-5401
RECTIFIER 1N-4001
GLASS FUSE
IC LA4628
IC KA7808
IC LC75342
ST PHONEJACK
CHOKE COIL 15UH
CHOKE COIL 15UH
CHOKE COIL 15UH
CHOKE COIL 8UH
CHOKE COIL 10UH 2A
CHOKE COIL 10UH 2A
CHOKE COIL 10UH 2A
TR 9014C
TR 9014C
TR 9014C
TR 8550B C
TRANSISTOR KSB772Y
TR 9014C
TR 8050C
TR KSA928A
TR 8550B C

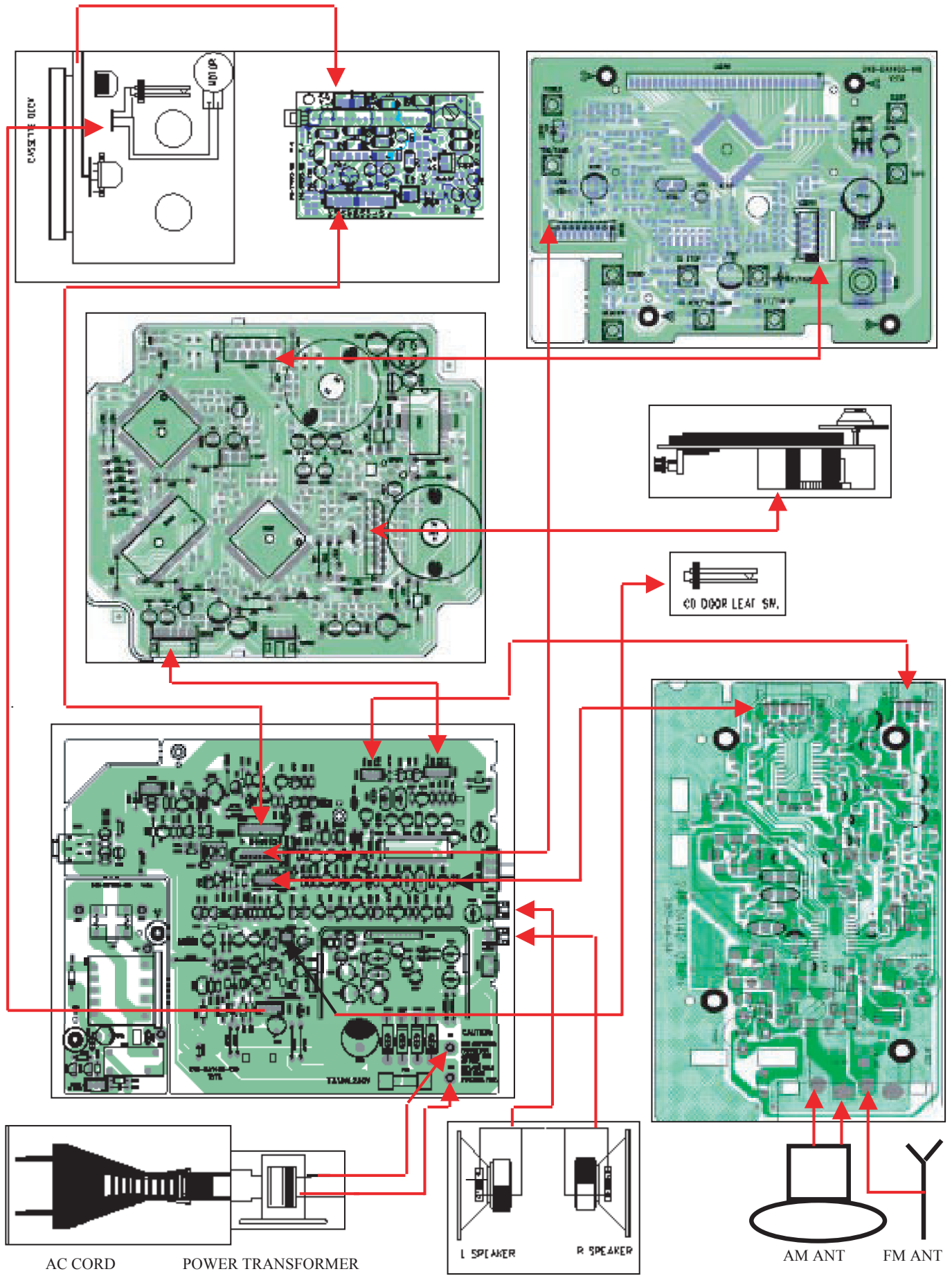
PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q0408	645 023 6129	TR 9014C
Q0409	645 023 6129	TR 9014C
Q0410	645 023 6129	TR 9014C
Q0411	645 055 6883	TR KSA928A
Q0412	645 027 0420	TR 8050C
Q0414	645 023 6129	TR 9014C
Q0601	645 023 6129	TR 9014C
Q0602	645 023 6129	TR 9014C
Q0603	645 055 6869	TR 8550B C
Q0702	645 032 9890	TR KTC-9015C
Q0703	645 032 9890	TR KTC-9015C
Q0704	645 023 6129	TR 9014C
Q0705	645 032 9890	TR KTC-9015C
R0725	645 080 4878	RESISTOR 220 OHM 1/8W
R0726	645 080 4847	RESISTOR 1K OHM 1/2W
SW201	645 024 1048	SW SLIDE SK22F03G6, BEAT CANCEL
SW701	645 055 7064	SW TACT,RESET
W101	645 076 1911	HOUSING 5P, CW502 TO CD BD CN903
W102	645 080 5158	5P HSG,CW504 TO TUNER CN102
W103	645 080 5141	4P HSG,CW501 TO TUNER CN101
ZD401	645 062 0737	ZENER 6.2V
ZD402	645 055 6838	ZENER 5.6V
ZD702	645 044 6924	ZENER DIODE 3.9V
ZD703	645 073 8135	ZENER 3V
	645 035 0511	FUSE HOLDER MW1010K,FS1101
	645 080 5363	HEAT SINK,FOR IC301

STDS RECORDING P.W.BOARD ASSY

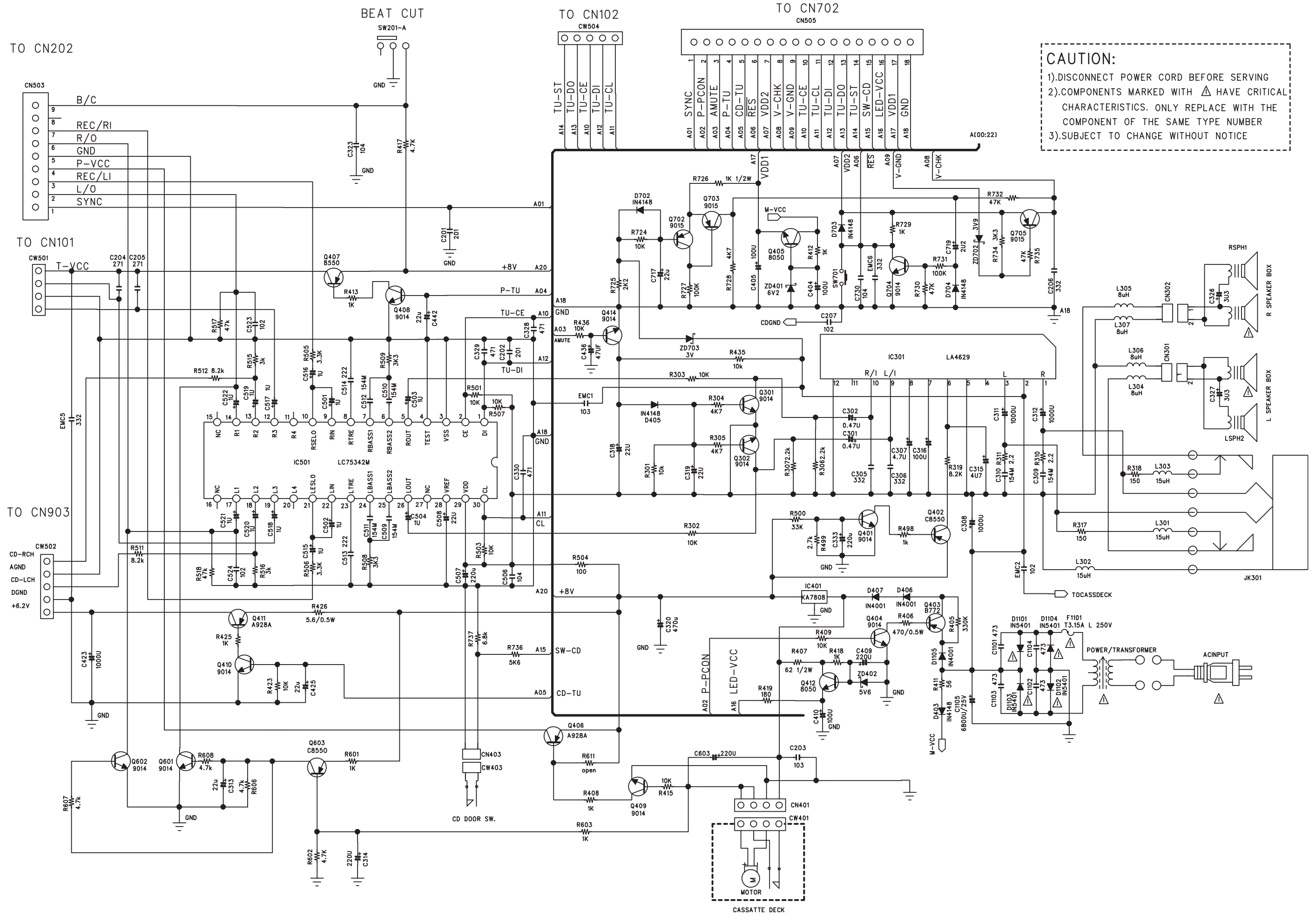
REF.NO.	PART NO.	DESCRIPTION
34	614 334 4292	ASSY, PWB STDS RECORDING(Only initial)
C0201	645 073 8005	POLYESTER 0.0022U 100V
C0202	645 073 7992	POLYESTER 0.001U 100V
C0208	645 073 8005	POLYESTER 0.0022U 100V
C0209	645 073 8005	POLYESTER 0.0022U 100V
C0210	645 073 8050	POLYESTER 0.033U 100V
C0211	645 073 8005	POLYESTER 0.0022U 100V
C0212	645 073 7992	POLYESTER 0.001U 100V
C0213	645 073 8050	POLYESTER 0.033U 100V
C0803	645 073 8012	POLYESTER 0.0033U 100V
C0804	645 073 8043	POLYESTER 0.022U 100V
C0806	645 073 8029	POLYESTER 0.01U 100V
IC201	645 032 9906	IC BA3308
L0201	645 079 6937	INDUCTOR 15UH
L0202	645 079 6937	INDUCTOR 15UH
L0203	645 079 6937	INDUCTOR 15UH
L0204	645 079 6937	INDUCTOR 15UH
Q0201	645 072 3162	TRANSISTOR 9014C
Q0202	645 072 3162	TRANSISTOR 9014C
Q0203	645 072 3162	TRANSISTOR 9014C
Q0801	645 072 3162	TRANSISTOR 9014C
Q0802	645 027 0420	TR 8050C
SW201	645 023 6327	SW RECORDING PS62D01-S(SH
T0801	645 027 0307	BIAS COIL,AC BIAS 3630
W104	645 073 8302	9P HSG,CN202 TO AUDIO CN305

WIRING CONNECTION



This is a basic wiring connection.

SCHEMATIC DIAGRAM (AUDIO)

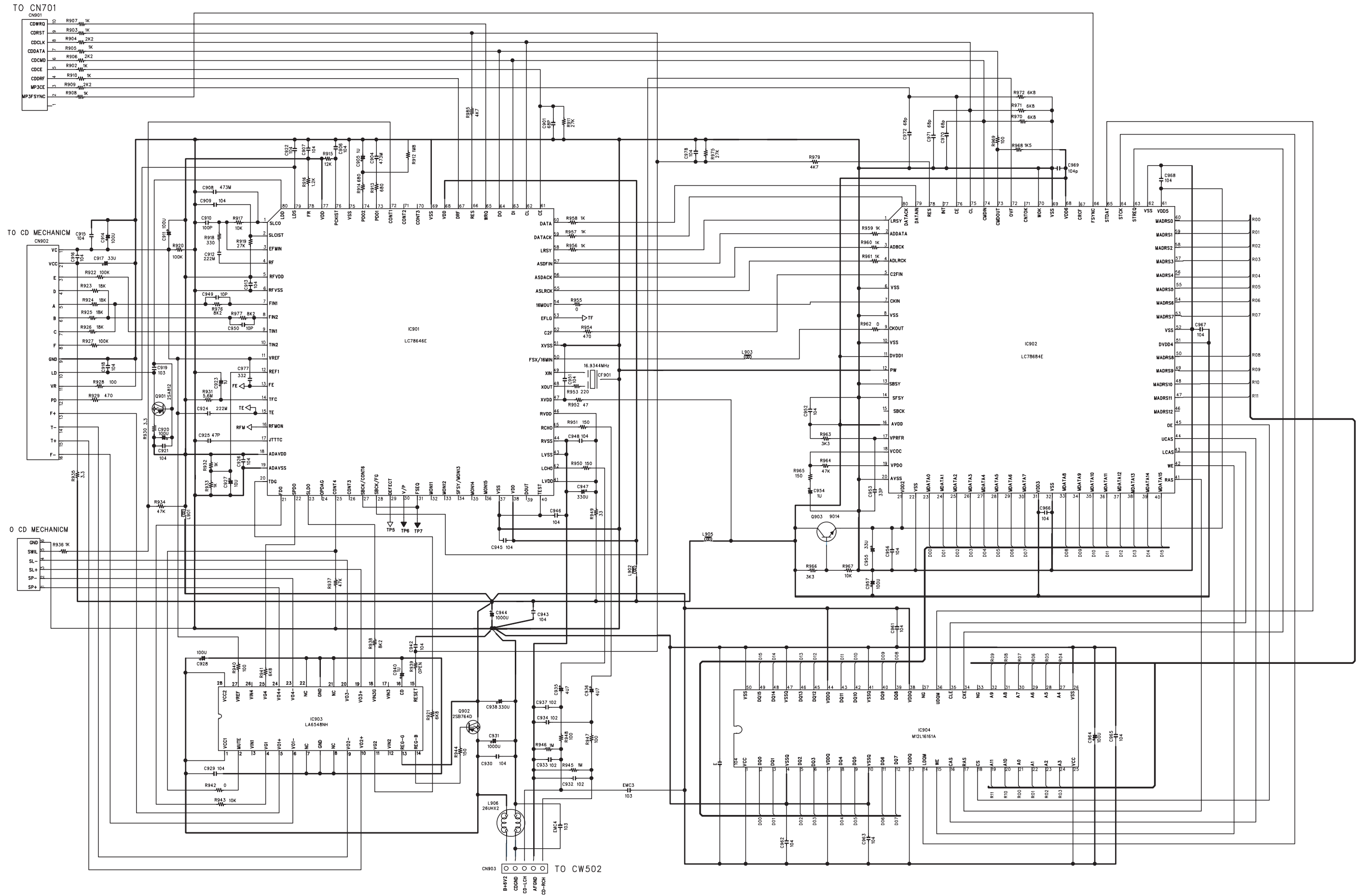


CAUTION:

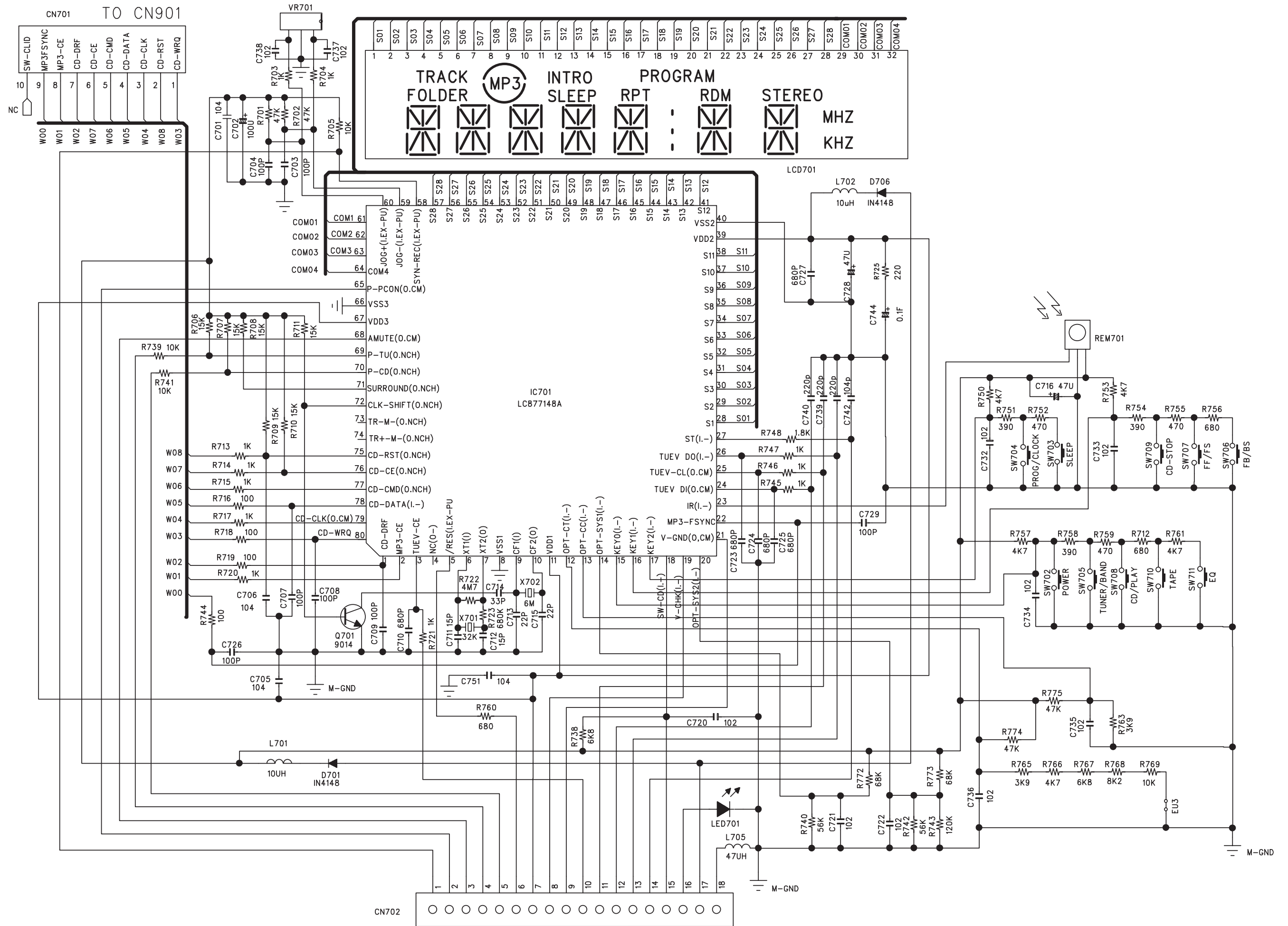
- 1).DISCONNECT POWER CORD BEFORE SERVING
- 2).COMPONENTS MARKED WITH Δ HAVE CRITICAL CHARACTERISTICS. ONLY REPLACE WITH THE COMPONENT OF THE SAME TYPE NUMBER
- 3).SUBJECT TO CHANGE WITHOUT NOTICE

This is a basic schematic diagram.

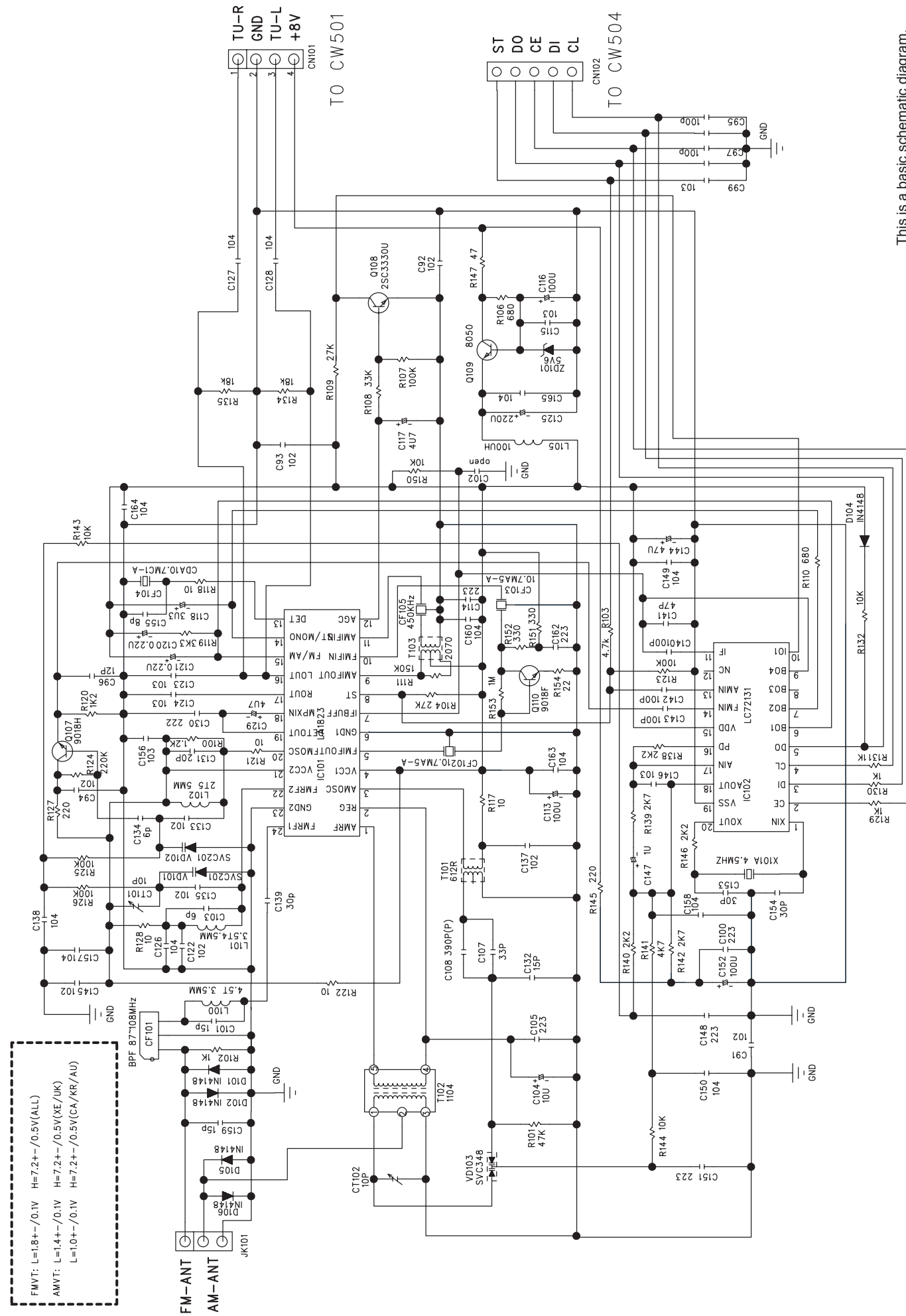
SCHEMATIC DIAGRAM (CD)



SCHEMATIC DIAGRAM (CONTROL)

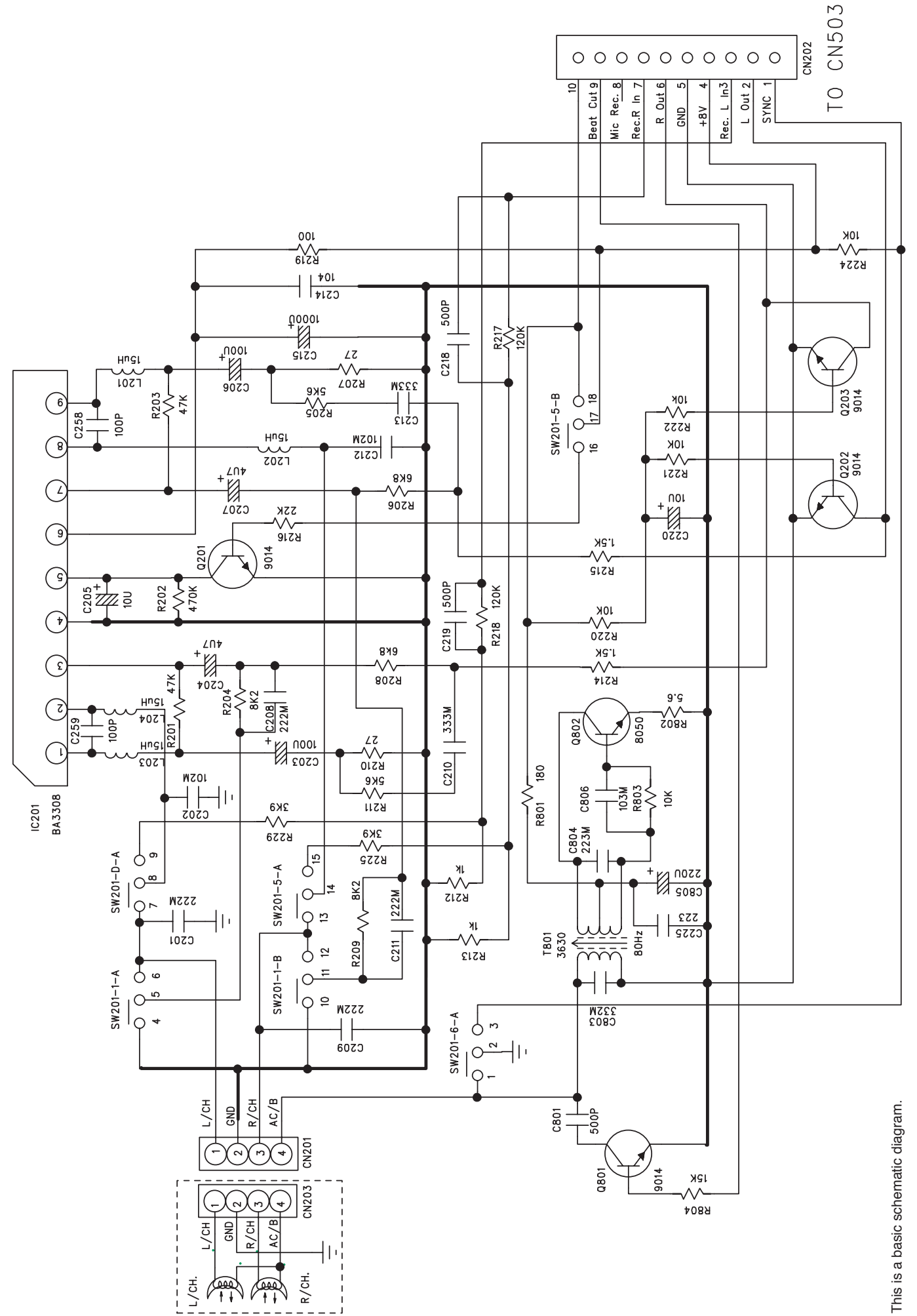


SCHEMATIC DIAGRAM (TUNER)

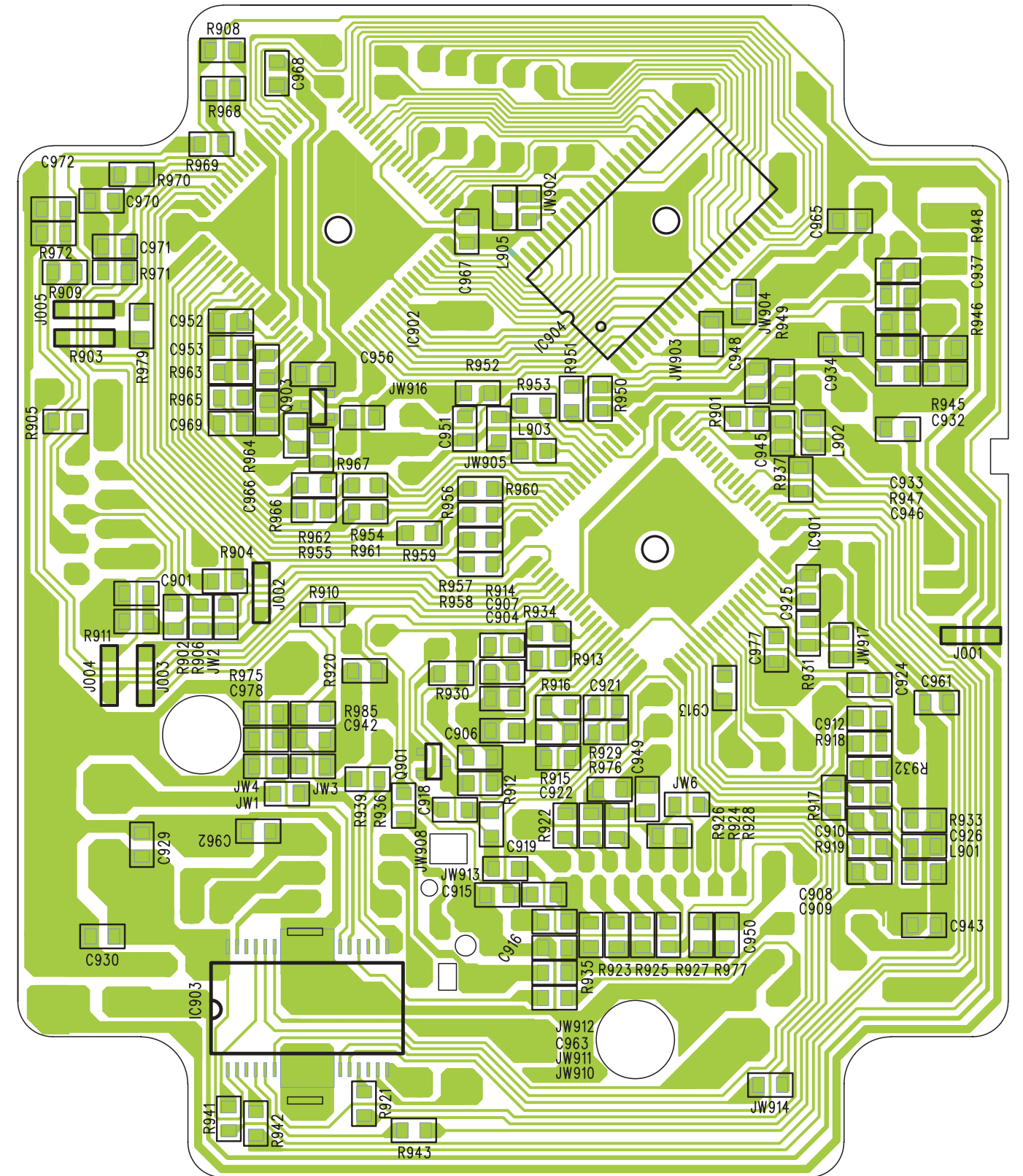
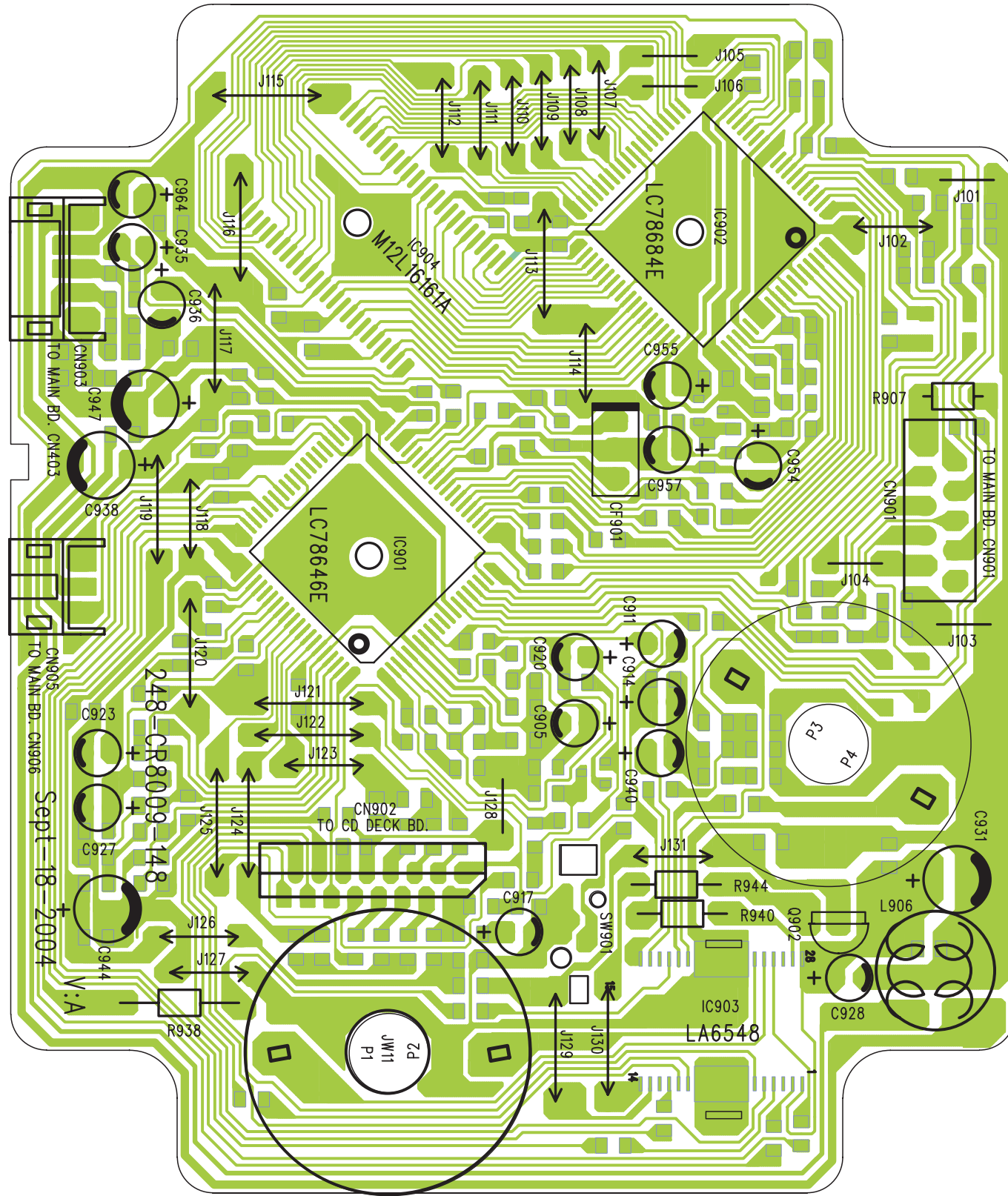


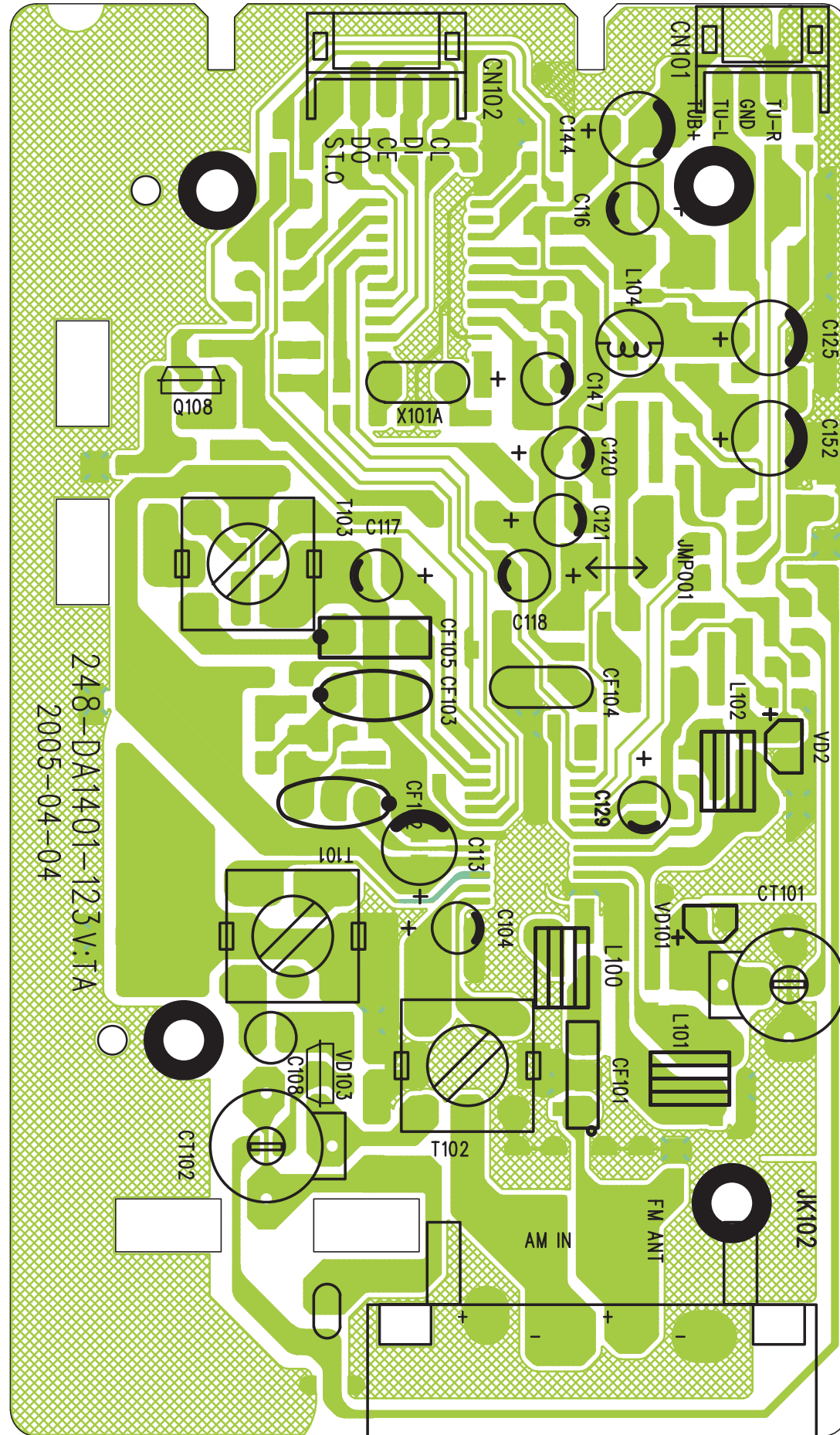
This is a basic schematic diagram.

SCHEMATIC DIAGRAM (STD RECORDING)



This is a basic schematic diagram.





248-DA1401-123 V.1A
2005-04-04

