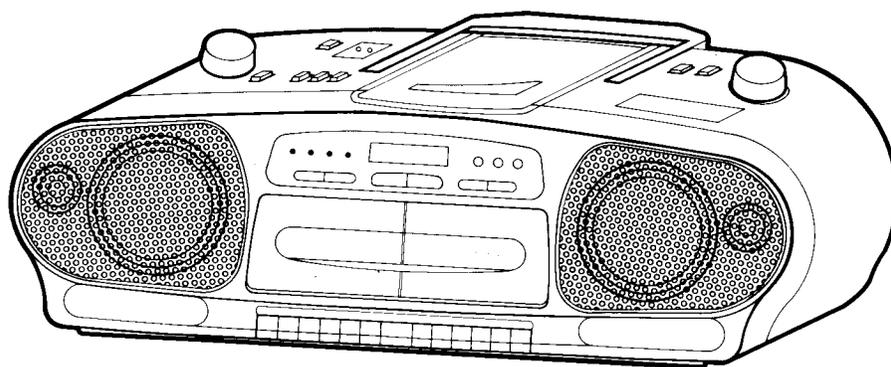


# DAEWOO

# ACD-4300

STEREO RADIO DOUBLE CASSETTE  
WITH CD PLAYER



*SERVICE MANUAL*

## SPECIFICATION

### Cassette Deck

Cassette tape used : Normal: C-30~C-90  
Tape speed : 4.8 cm/sec.  
Track system : Four-track  
two-channel stereo  
Recording system : AC bias  
Erasing system : Magnet erasing

### Compact Disc Player

Type : Compact disc player with  
optical pickup  
Quantization : 16-bit linear  
Channels : Two channels (stereo)  
Frequency response: 20 Hz to 18 kHz  
Total harmonic  
distortion : 0.1% (1 kHz)  
Wow and flutter : Below measurable limit  
Pickup : Semiconductor laser pickup

### Tuner

Receiving frequency: FM : 76 MHz to 108MHz  
MW: 515 kHz to 1650 KHz  
FM : 87.5-108MHz  
76-108MHz (JAPAN)  
MW: 530-1630kHz  
(530-1720kHz U.S.A)  
LW : 145-285 kHz  
SW : 6-18 MHz  
SW1: 2.3-7.5 MHz  
SW2: 7-22 MHz

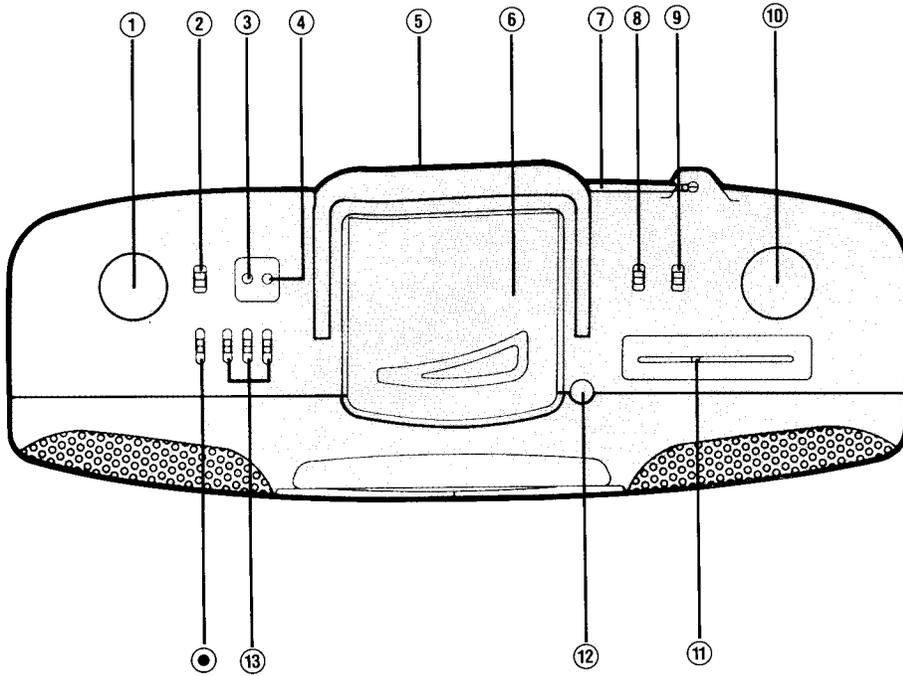
Intermediate frequency : FM : 10.7 MHz  
AM: 455 kHz  
FM, SW: Telescopic  
antenna  
LW, MW: Ferrite-core  
antenna

### General

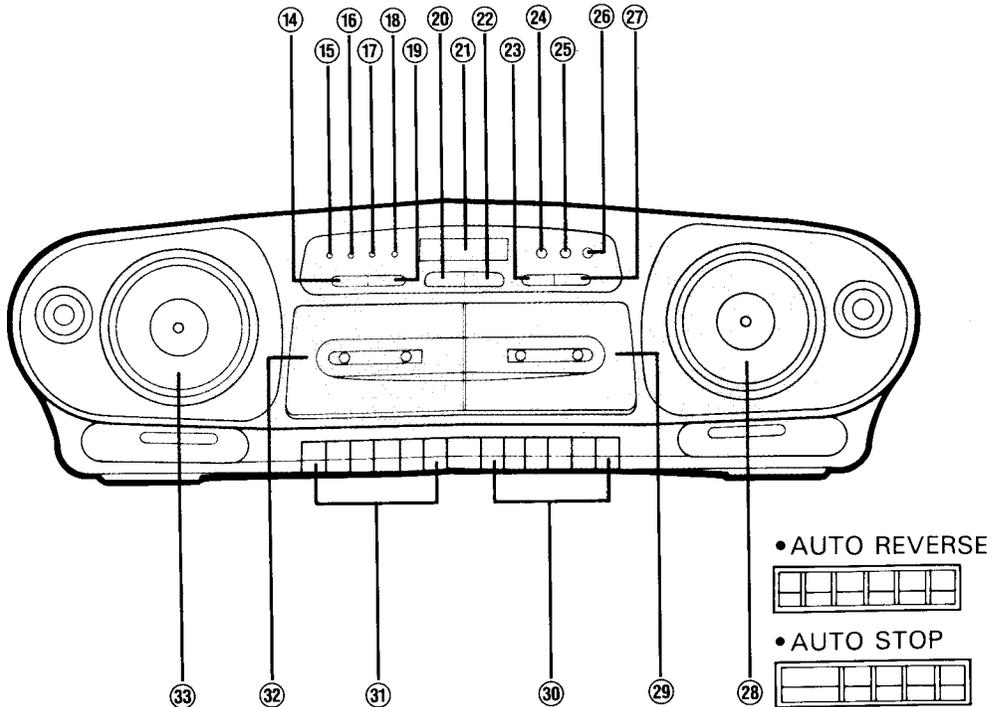
Speakers : 4 inch × 2  
Terminals : PHONES jack × 1  
MIC jack × 1  
CD OUT jack × 1  
Power supply : AC 100, 50/60Hz (JAPAN)  
120V 60Hz (USA)  
220V 50Hz (EUROPE)  
240V 50Hz,  
110/220V 50/60Hz  
DC 12V 1EC R20  
("D" cell) × 8  
Power consumption : 23W  
Dimensions (W × H × D): 653 × 208 × 230mm  
Weight : 5.1kg (without batteries)

# 1 CONTROL AND FUNCTION

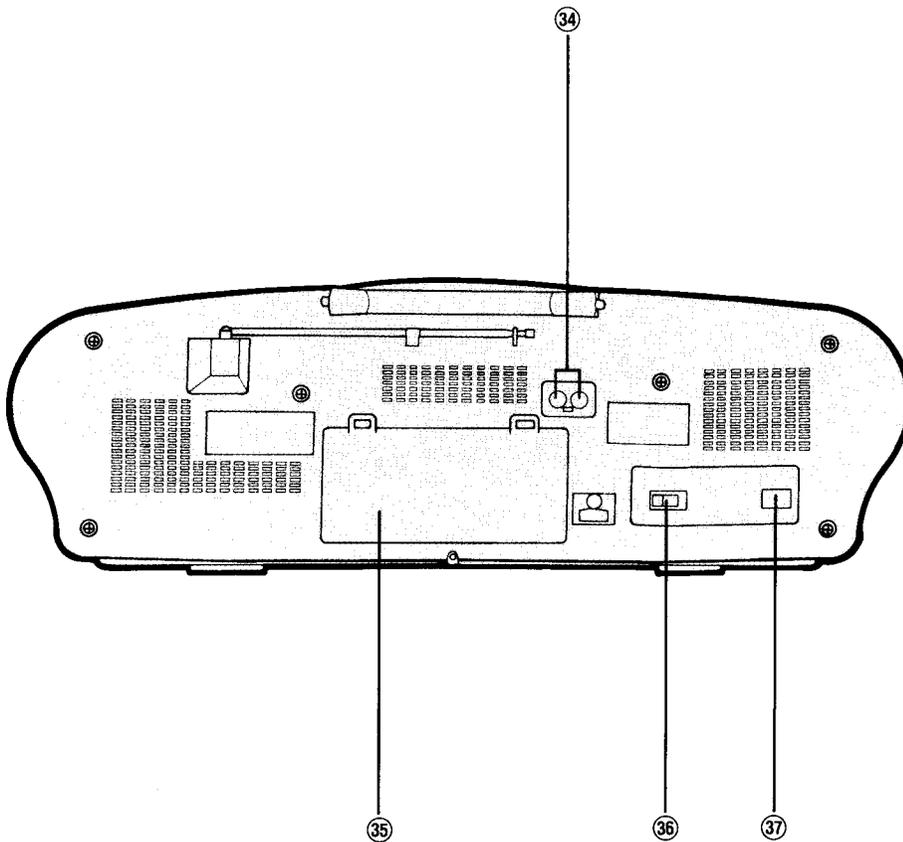
## 1) TOP VIEW



## 2) FRONT VIEW

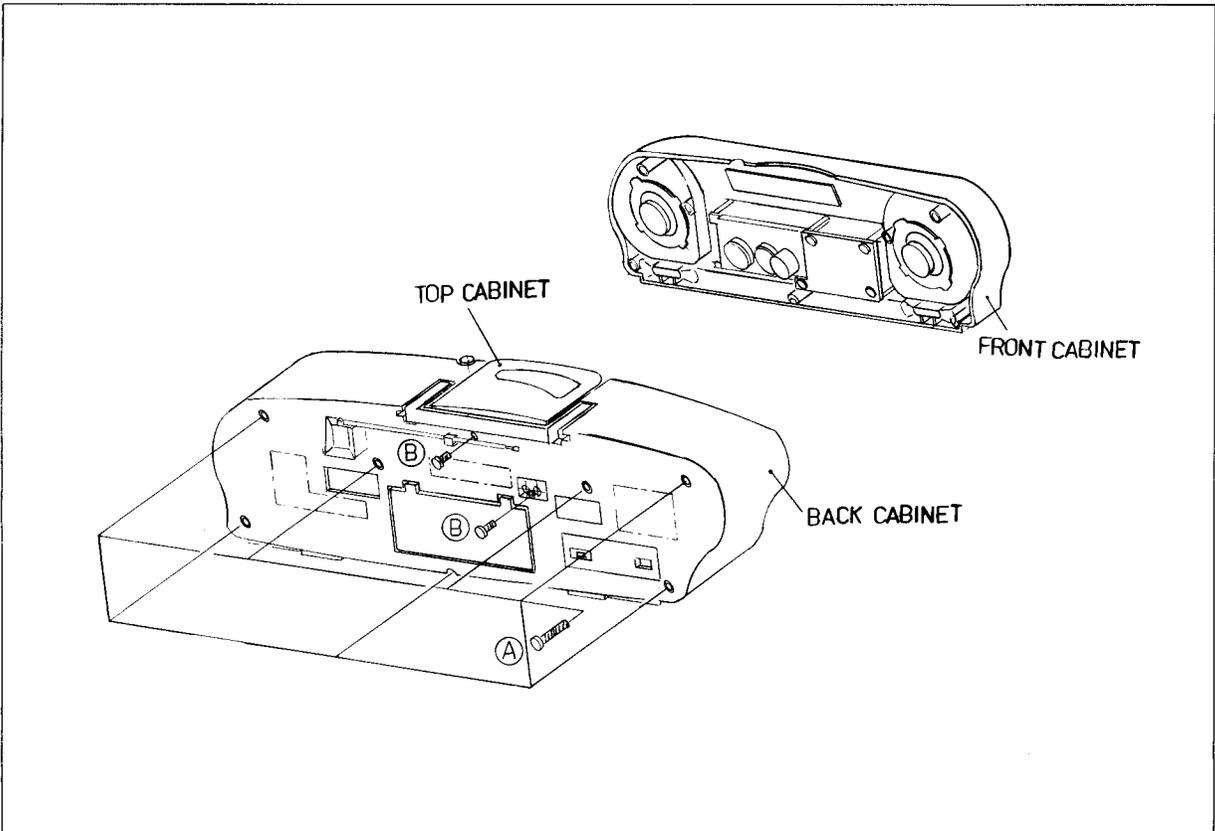


### 3) REAR VIEW



- |                                     |  |
|-------------------------------------|--|
| ● Balance control                   | (21) LCD display (CD)  |
| ① Volume control                    | (22) CD play/pause button  |
| ② Function selector switch          | (23) CD SKIP/search FR button  |
| ③ MIC jack                          | (24) CD Shuffle button   |
| ④ Headphone jack                    | (25) CD space button   |
| ⑤ Handle                            | (26) CD display button   |
| ⑥ CD compartment                    | (27) CD SKIP/search FF button  |
| ⑦ FM ANT                            | (28) R CH speaker  |
| ⑧ FM MODE button, BEAT CUT          | (29) A deck compartment  |
| ⑨ Band selector switch              | (30) A deck control button mode<br>Auto Reverse  |
| ⑩ Tuning control                    | (31) B deck control button<br>(MODE, PLAY, REW, FF, STOP, PROG)<br>Auto Stop (PLAY, REW, FF, ST/EJ, PAUSE) |
| ⑪ Dial scale                        | (32) B deck compartment  |
| ⑫ CD open button                    | (33) L CH speaker  |
| ⑬ G-EQ control (3 Band)             | (34) CD output jack  |
| ⑭ Repeat button (CD)                | (35) Battery compartment   |
| ⑮ Power LED                         | (36) Voltage select switch (DUAL VOLTAGE)  |
| ⑯ Stereo LED                        | (37) AC socket   |
| ⑰ Forward LED (TAPE) } AUTO REVERSE |  |
| ⑱ Reverse LED (TAPE) }              |  |
| ⑲ Memory button (CD)                |  |
| ⑳ CD stop button                    |  |

## 2. DISASSEMBLY INSTRUCTION



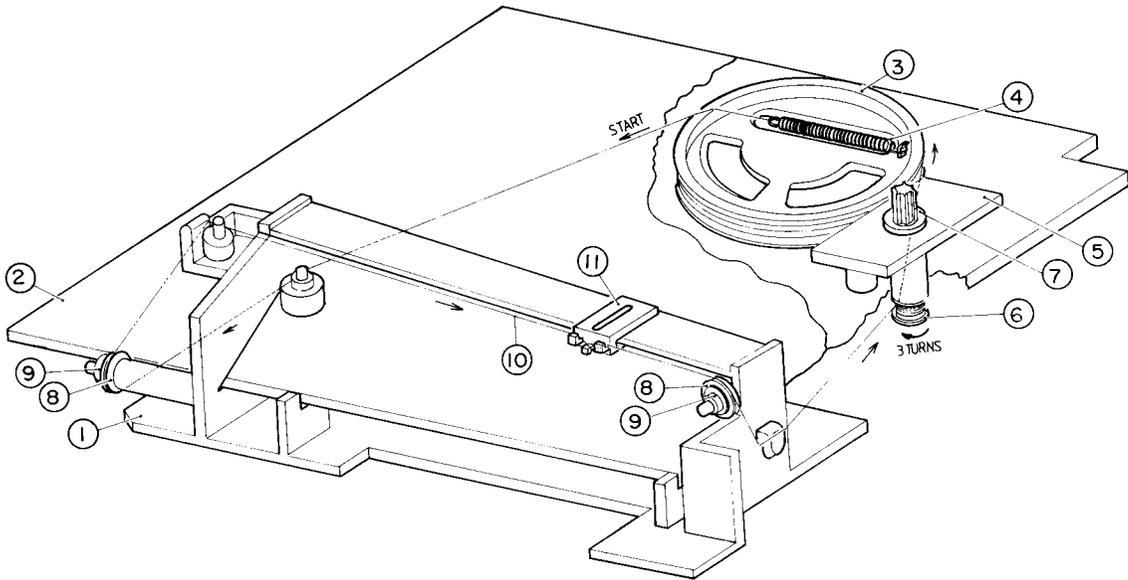
### ■ BACK CABINET

1. Remove seven screws A (TT2 BIN 3×25) in the back cabinet.
2. The back cabinet to front cabinet will be removed.
3. Remove the connectors

### ■ TOP CABINET

1. Remove two screws B (TT2 BIN 3×10 BK) in the back cabinet.
2. Remove the connectors
3. The top cabinet will be removed.

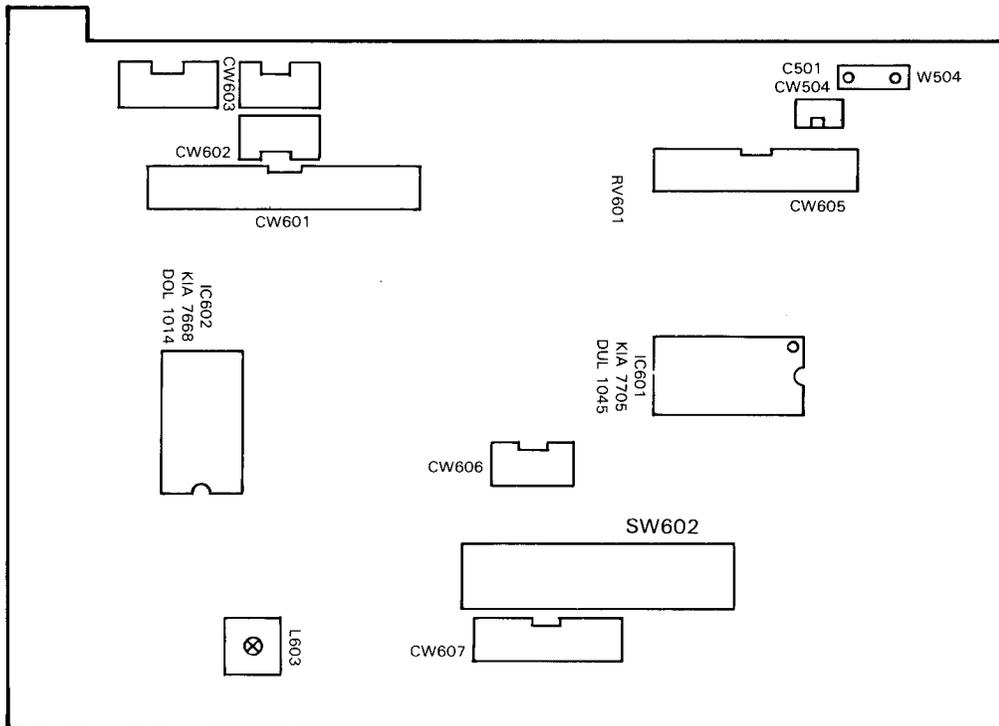
### 3. DIAL CORD RESTRING



NO.	CODE NO.	PART NAME	DESCRIPTION	Q'TY
1	9CD0602900	CHASSIS "R"	ABS	1
2	9CD6558701	PCB TUNER		1
3	9712905100	DRUM	ABS	1
4	9713005000	SPRING DRUM	PW-1	1
5	9CD2300400	HOLDER T/SHAFT	ABS	1
6	9713604200	SHAFT TUNING	ACETAL	1
7	9713602500	SHAFT STOPPER	ACETAL	1
8	973703300	PULLEY	PE	2
9	9714001400	BUSH	ACETAL	2
10	2242290001	CORD DIAL	0.8ME	0.8
11	9711704600	POINTER	ABS	1

## 4. ADJUSTMENTS

### ■ CASSETTE MECHANISM SECTION



### ■ TAPE SPEED ADJUSTMENT

#### TEST TAPE MTT-111

##### 1. PRELIMINARY WORK

- 1-1. Push the power switch ON.
- 1-2. Place the function switch in TAPE position.
- 1-3. Connect the output from the headphone jack to the frequency counter.
- 1-4. Load the decks TAPE A and B with MTT-111s. (Use A side only.)

##### 2. ADJUSTMENT PROCEDURES (Adjust in the steps below).

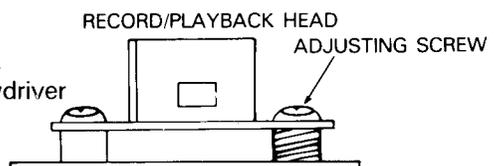
- 2-1. Press the play button of TAPE A and adjust RV601 to obtain  $3020 \text{ Hz} \pm 10 \text{ Hz}$ .
- 2-2. Press the play button of TAPE B and adjust RV601 for the frequency counter to read within  $3000 \text{ Hz} \sim 3020 \text{ Hz}$ .
- 2-3. After adjustment is completed, stop the deck.
- 2-4. Place the Dubbing switch in High speed position.
- 2-5. Press the PLAY button to TAPE A.
- 2-6. Press the REC button to TAPE B.
- 2-7. Be sure to obtain  $6000 \text{ Hz} \sim 6100 \text{ Hz}$ .

##### 3. RECORD/PLAYBACK HEAD ADJUSTMENT

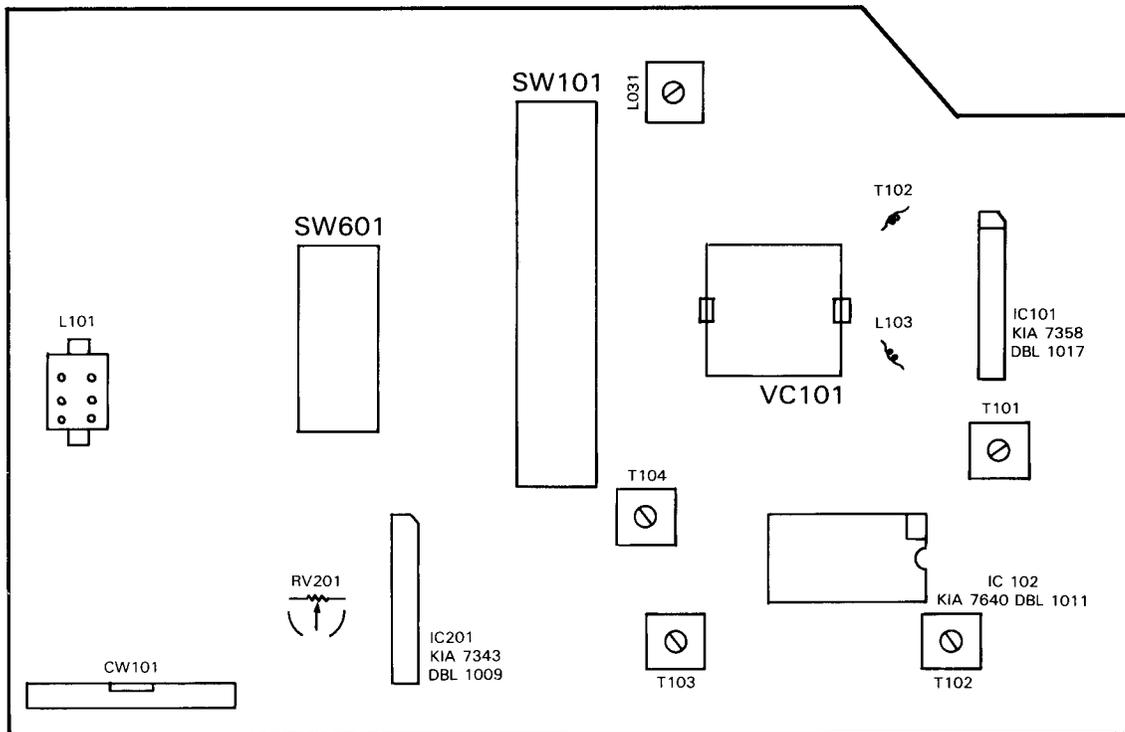
8 kHz test tape must be used for this adjustment. Connect to VTVM or an oscilloscope to the headphone jack or speaker terminal and adjust the azimuth by using a screwdriver to maintain the maximum output voltage.

#### CAUTION.

1. The test should be performed with the test tapes wound at the same position (diameter).
2. Proceed the adjustments with the set positioned vertically. If not, tape speed will lowers.
3. Stabilized power source DC 12V should be used.



## ■ TUNER SECTION



## ■ RADIO TUNER ADJUSTMENT

### TEST EQUIPMENT

1. Signal generator with a frequency range of at least from 450 kHz to 23 MHz AM.
2. Oscilloscope with a side amplifier of approximately 100 kHz.
3. Test loop-a coil of any size wire, one turn or more. (MW,LW)
4. A 30 ohm dummy antenna.
5. VTVM.

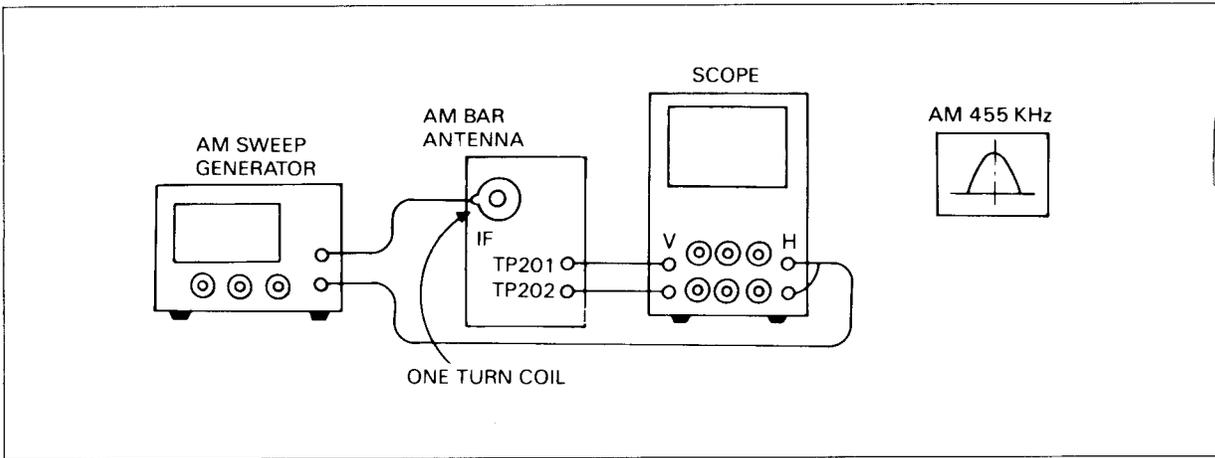
### AM ALIGNMENT

1. Turn on the AM signal generator and the VTVM allowing a fifteen-minute warm-up period.
2. Using the test loop across the output of the signal generator, inductively connect the signal generator to the radio.
3. Connect the VTVM across the headphone jack.
4. Set signal generator frequency as listed in ALIGNMENT CHART and maintain a sufficient output level to provide an indication on VTVM.

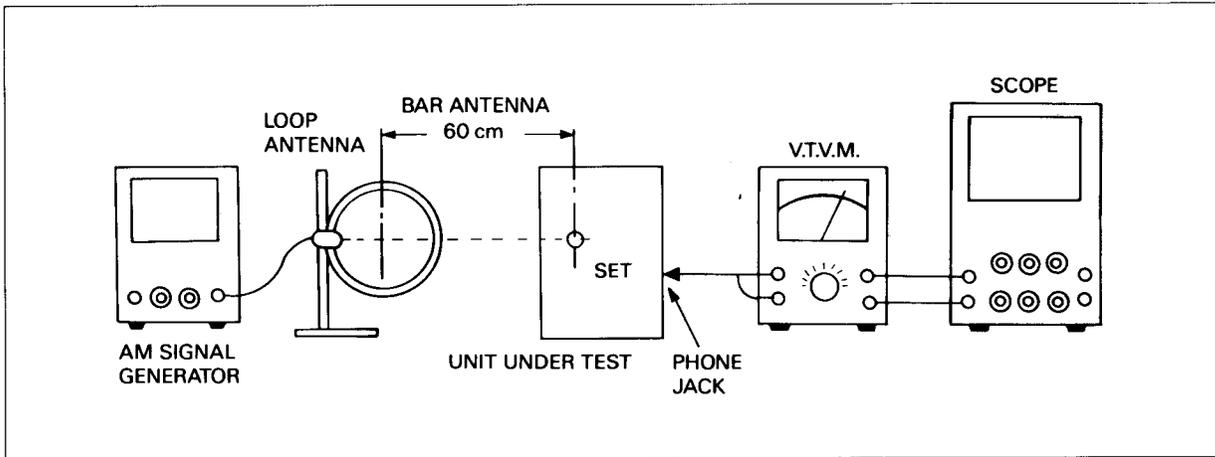
### Note:

1. Use a screwdriver with plastic grip for all adjustments.
2. Standard test frequency 400 Hz and modulation 30% for AM.
3. Standard test frequency 400 Hz and deviation 22.5 kHz for FM.

## ■ AM IF ALIGNMENT (MW, LW, SW1, SW2)



## ■ MW, LW ALIGNMENT



## ■ MW ALIGNMENT CHART

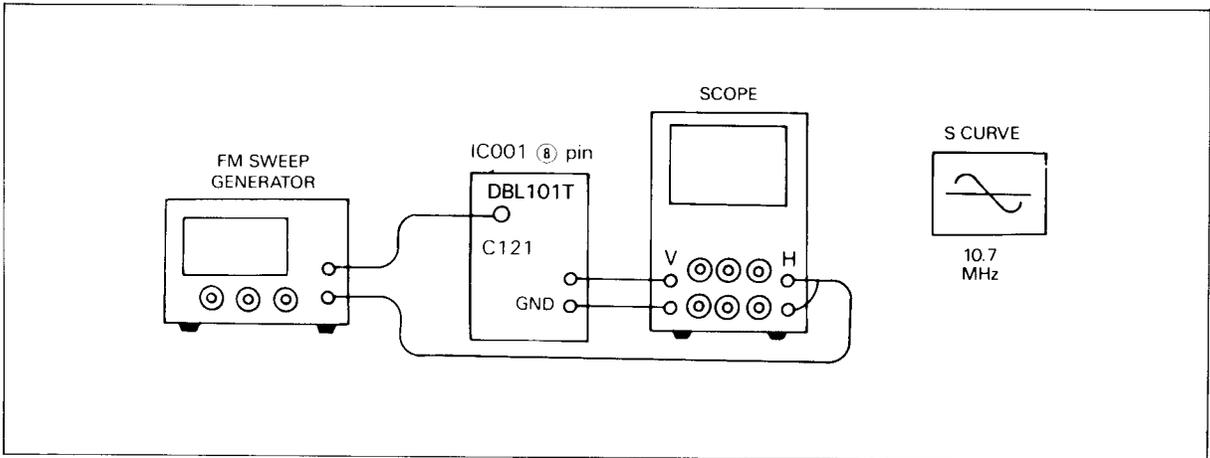
Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks	
IF	1	455kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	T102 T104	Adjust for maximum indication	
MW	2	515kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	Osc. Coil L031	Adjust for maximum indication.	
	3	1650kHz	Tuning Gang Fully Clockwise (Highest Frequency)	Osc. Trim. VC101 (C1) (TC032)	Adjust for maximum indication	
	4	Repeat steps 2 and 3 as required				
	5	600kHz	Tune to Signal	Ant. Coil L101	Adjust for maximum indication.	
	6	1400kHz	Tune to Signal.	Ant. Trim. VC101 (C2) (NO Adjust)	Adjust for maximum indication.	
	7	Repeat steps 5 and 6 as required.				

## ■ FM-IF ALIGNMENT

1. Set the select switch to FM position.
2. Turn on both sweep generator and oscilloscope, and allow a fifteen-minute warm-up period.

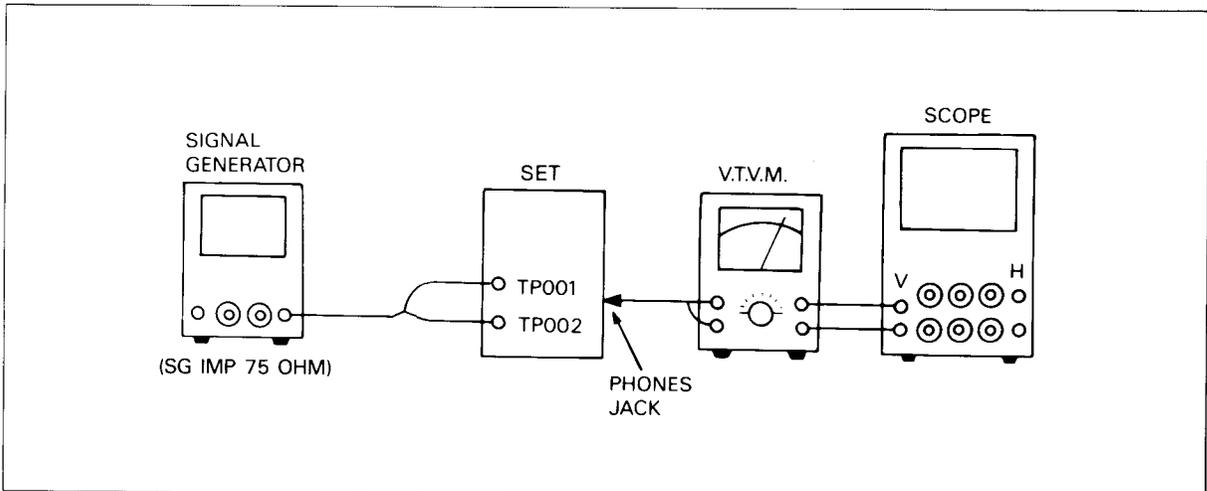
## ■ FM-IF ALIGNMENT CHART

Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
1	10.7MHz	Tuning Gang Fully Counter Clockwise (Lowest Frequency)	T101 T103	Adjust for maximum indication



## ■ FM-RF ALIGNMENT

1. Turn on the signal generator and the VTVM, and allow a fifteen-minute warm-up period.
2. Connect the signal generator output through a 75 ohm dummy antenna across FM ANT.
3. Connect the VTVM across the voice coil or the phones jack.
4. Set the volume control to mid-position.
5. Adjust the signal generator frequency as indicated in FM-RF ALIGNMENT CHART, and maintain a sufficient signal output level to provide a measurable indication.
6. Proceed as outlined in the FM-RF ALIGNMENT CHART.



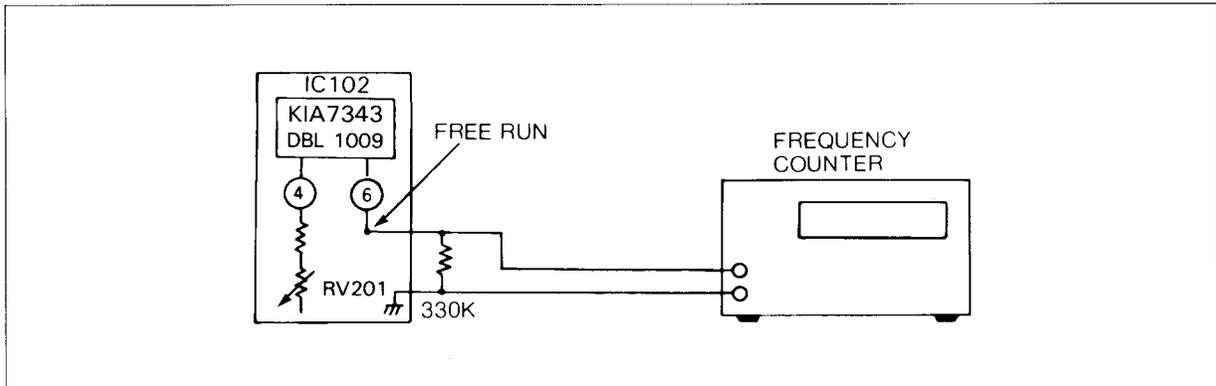
## ■ FM-RF ALIGNMENT CHART

Step	Signal Generator	Radio Dial Setting	Adjustment	Remarks
1	87.35MHz (76)	Tuning Gang Fully counter-clockwise (Lowest Frequency)	Osc. Coil L103	Adjust for maximum output indication
2	108.3MHz (108)	Tuning Gang Fully Counter-clockwise (Highest Frequency)	Osc. Trim. VC101 (FC2)	Adjust for maximum output indication.
3	Repeat steps 1 and 2 as required.			
4	90 (80) MHz	Tune to signal.	Ant. Coil L102	Adjust for maximum output indication.
5	106 (140) MHz		Ant. Trim.	
6	Repeat steps 4 and 5 as required.			

\* ( ) Japan Band Adjust.

## ■ FREE RUN FREQUENCY ALIGNMENT

Adjust RV101 under no signal condition so as to obtain 38 KHz + 75 Hz.



## ■ LW ALIGNMENT CHART

Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
IF	1	455kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	T102 T104	Adjust for maximum indication
LW	2	142kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	Osc. Coil L012	Adjust for maximum indication.
	3	283kHz	Tuning Gang Fully Clockwise (Highest Frequency)	Osc. Trim. VC101 (C1) (TC012)	Adjust for maximum indication
	4	Repeat steps 2 and 3 as required			
	5	160kHz	Tune to Signal	Ant. Coil L101	Adjust for maximum indication.
	6	260kHz	Tune to Signal.	Ant. Trim. VC101 (C2) (NO Adjust)	Adjust for maximum indication.
	7	Repeat steps 5 and 6 as required.			

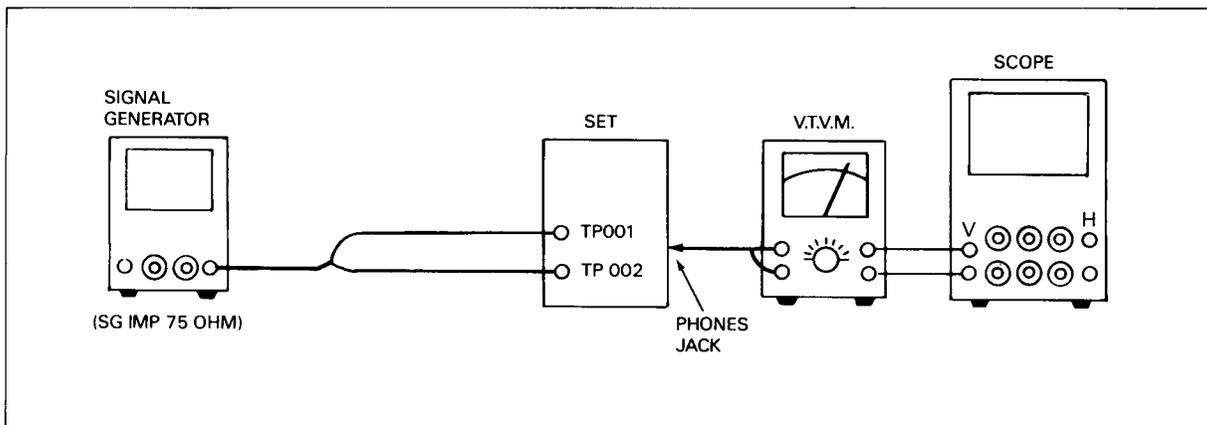
## ■ SW2 ALIGNMENT CHART

Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
IF	1	455kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	T102 T104	Adjust for maximum indication
SW2	2	7.35MHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	Osc. Coil L012	Adjust for maximum indication.
	3	22.5MHz	Tuning Gang Fully Clockwise (Highest Frequency)	VC101 (C1)	Adjust for maximum indication
	4	Repeat steps 2 and 3 as required			
	5	9MHz	Tune to Signal	Ant. Coil L021	Adjust for maximum indication.
	6	20MHz	Tune to Signal.	VC101 (C2)	Adjust for maximum indication.
	7	Repeat steps 5 and 6 as required.			

## ■ SW ALIGNMENT CHART

Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
IF	1	455kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	T102 T104	Adjust for maximum indication
SW	2	5.7MHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	Osc. Coil L022	Adjust for maximum indication.
	3	1.7kHz	Tuning Gang Fully Clockwise (Highest Frequency)	VC101 (C1)	Adjust for maximum indication
	4	Repeat steps 2 and 3 as required			
	5	6.5MHz	Tune to Signal	Ant. Coil L021	Adjust for maximum indication.
	6	14MHz	Tune to Signal.	VC101 (C2)	Adjust for maximum indication.
	7	Repeat steps 5 and 6 as required.			

## ■ SW ALIGNMENT



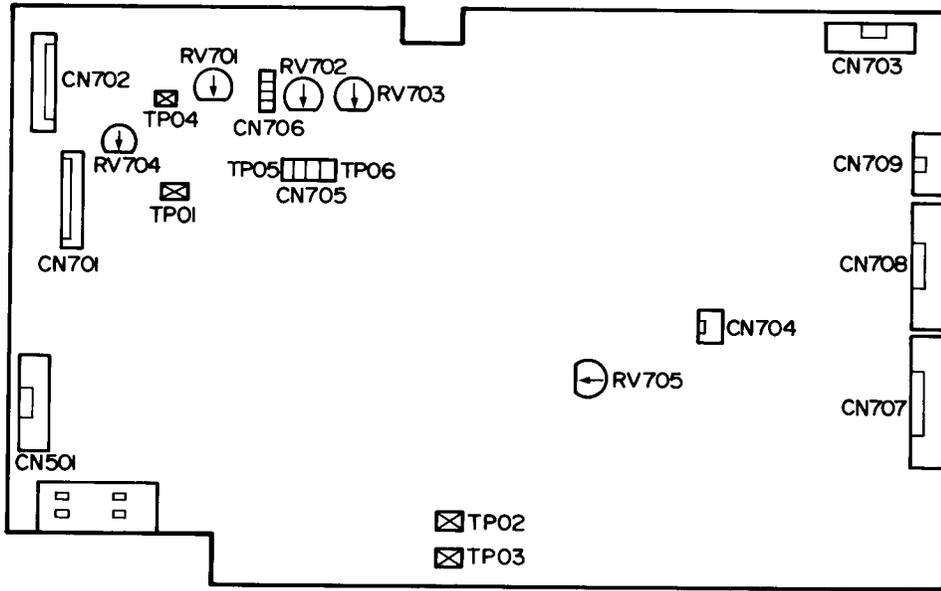
### ■ SW1 ALIGNMENT CHART

Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
IF	1	455kHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	T102 T104	Adjust for maximum indication
SW1	2	2.25MHz	Tuning Gang Fully Counter-clockwise (Lowest Frequency)	Osc. Coil L012	Adjust for maximum indication.
	3	7.7MHz	Tuning Gang Fully Clockwise (Highest Frequency)	Osc. Trim. VC101 (C1) (TC012)	Adjust for maximum indication
	4	Repeat steps 2 and 3 as required			
	5	3MHz	Tune to Signal	Ant. Coil L101	Adjust for maximum indication.
	6	260kHz	Tune to Signal.	Ant. Trim. L001 (NO ADJUST)	Adjust for maximum indication.

### ■ TAPE ALIGNMENT CHART

Item	Reference Value	Tape	Adjustment Point	Test Point	Note
1 Tape Speed Adjustment DECK A, Standard Speed	3000 ± 30 Hz	ATT-111	DECK A, RV201	SP-OUT	Adjust with frequency counter connected.
2 Bias Oscillator Frequency Adjustment	80kHz ± 0.5	AC-212	DECK B, L602	R808 GND	Mode switch: OFF Adjust with frequency counter connected.

■ CD SECTION



— Test point & volume location —

- RV701, Focus offset . . . . . TP01, TP04 (GND)
- RV702, Focus gain . . . . . TP05, TP04 (GND)
- RV703, Tracking gain . . . . . TP06, TP04 (GND)
- RV704, Tracking balance . . . TP06, TP04 (GND)
- RV705, PLL . . . . . TP02, TP03 (GND)

1. Checking point before adjustment.

- 1) 'Laser on' checking. (without disc)
- 2) 'Focus search' checking. (without disc)

2. Adjustment mode set

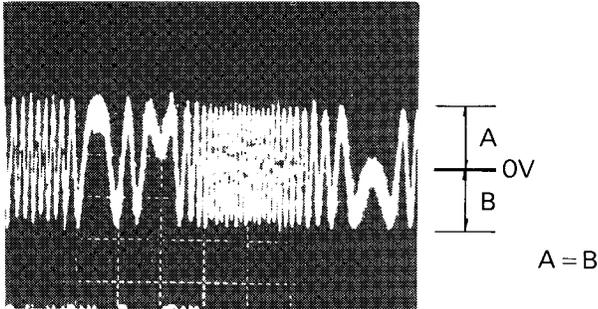
- 1) Set all of the adjustment volume to center position.
- 2) Use SRC4-4-002 disc (or YEDS-18) unless otherwise indicated.
- 3) Perform adjustment in the order given.

3. Adjustment

- 1) PLL adjustment
  - (1) Connect the frequency counter with TP02 and the ground of the frequency counter with TP03.
  - (2) Stop mode (CD).
  - (3) Adjust RV705 so that the frequency counter is  $5.15\text{MHz} \pm 50\text{KHz}$ .
- 2) Focus offset adjustment
  - (1) Connect the oscilloscope (more than 40MHz) with TP01 and the ground of the oscilloscope with TP04.
  - (2) Insert a disc and playback CD.
  - (3) Adjust RV701 so that the RF signal becomes to be maximum and definite waveform (0.2V/DIV,  $0.5\mu\text{sec}/\text{DIV}$ , AC).

3) Tracking balance adjustment

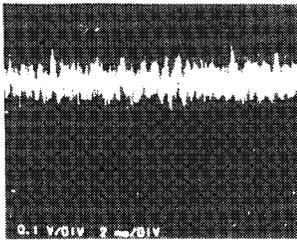
- (1) Connect the oscilloscope with TP06 and the ground of the oscilloscope with TP04 (0.5V/DIV, 5msec/DIV, DC).
- (2) Insert a disc and playback CD.
- (3) Turn the volume of RV703 to counterclockwise.
- (4) Adjust RV704 so that the waveform is symmetry above and below (A = B) relative the 0 volt.
- (5) Return RV703 to center position.



4) Focus gain adjustment

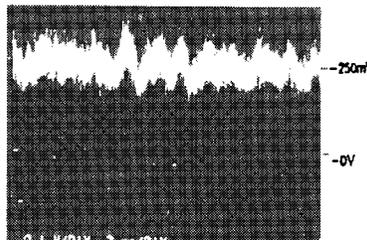
- (1) Connect the oscilloscope with TP05 and the ground of the oscilloscope with TP04.
- (2) Insert a disc and playback CD.
- (3) Adjust RV702 so that the center of waveform meets at the 100mv line as shown in the figure below (Normal waveform).

(NORMAL WAVEFORM)



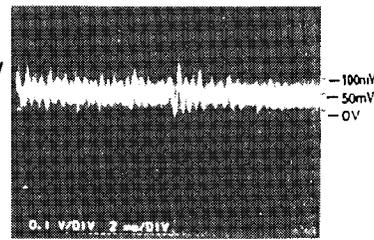
VOLT/DIV: 0.1V  
TIME/DIV: 2MS

(LOW FOCUS GAIN)



VOLT/DIV: 0.1V  
TIME/DIV: 2MS

(HIGH FOCUS GAIN)



VOLT/DIV: 0.1V  
TIME/DIV: 2MS

5) Tracking gain adjustment

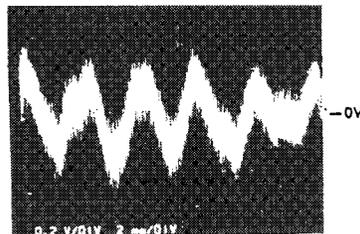
- (1) Connect the oscilloscope with TP06 and the ground of the oscilloscope with TP04.
- (2) Insert a disc and playback CD.
- (3) Adjust RV703 so that the waveform becomes the normal waveform as shown in the figure below.

(NORMAL WAVEFORM)



VOLT/DIV: 0.2V  
TIME/DIV: 2MS

(LOW TRACKING GAIN)



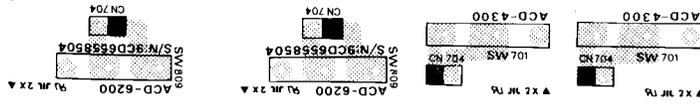
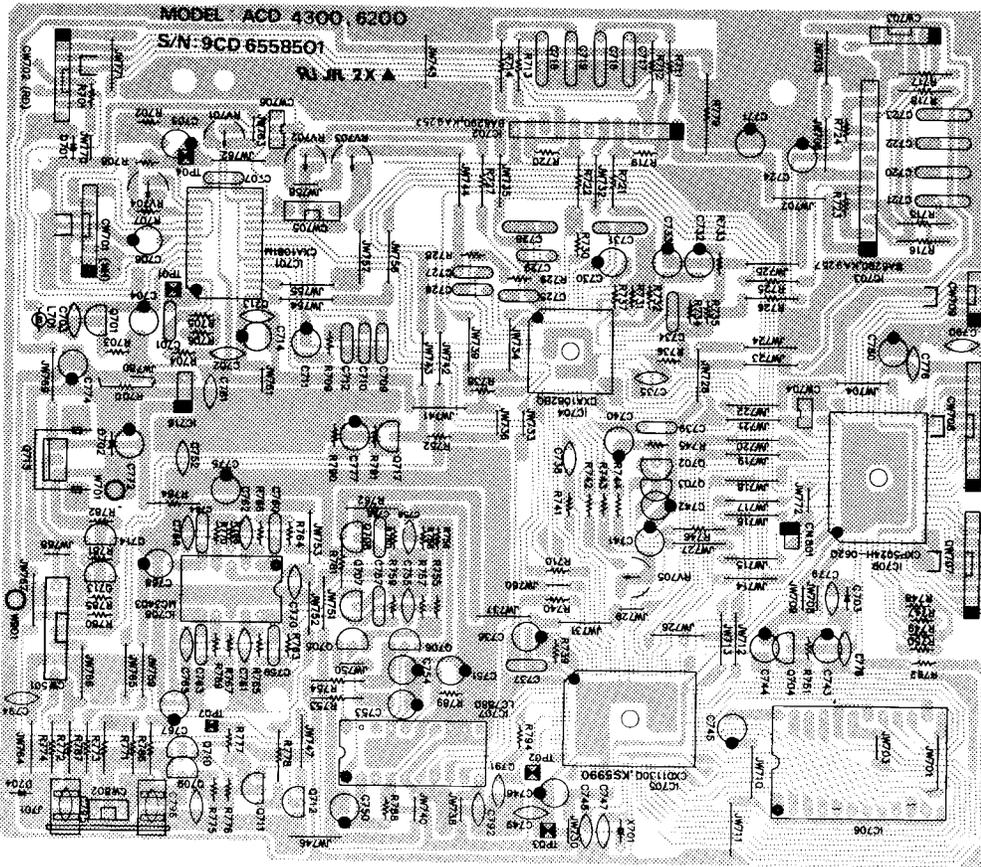
VOLT/DIV: 0.2V  
TIME/DIV: 2MS

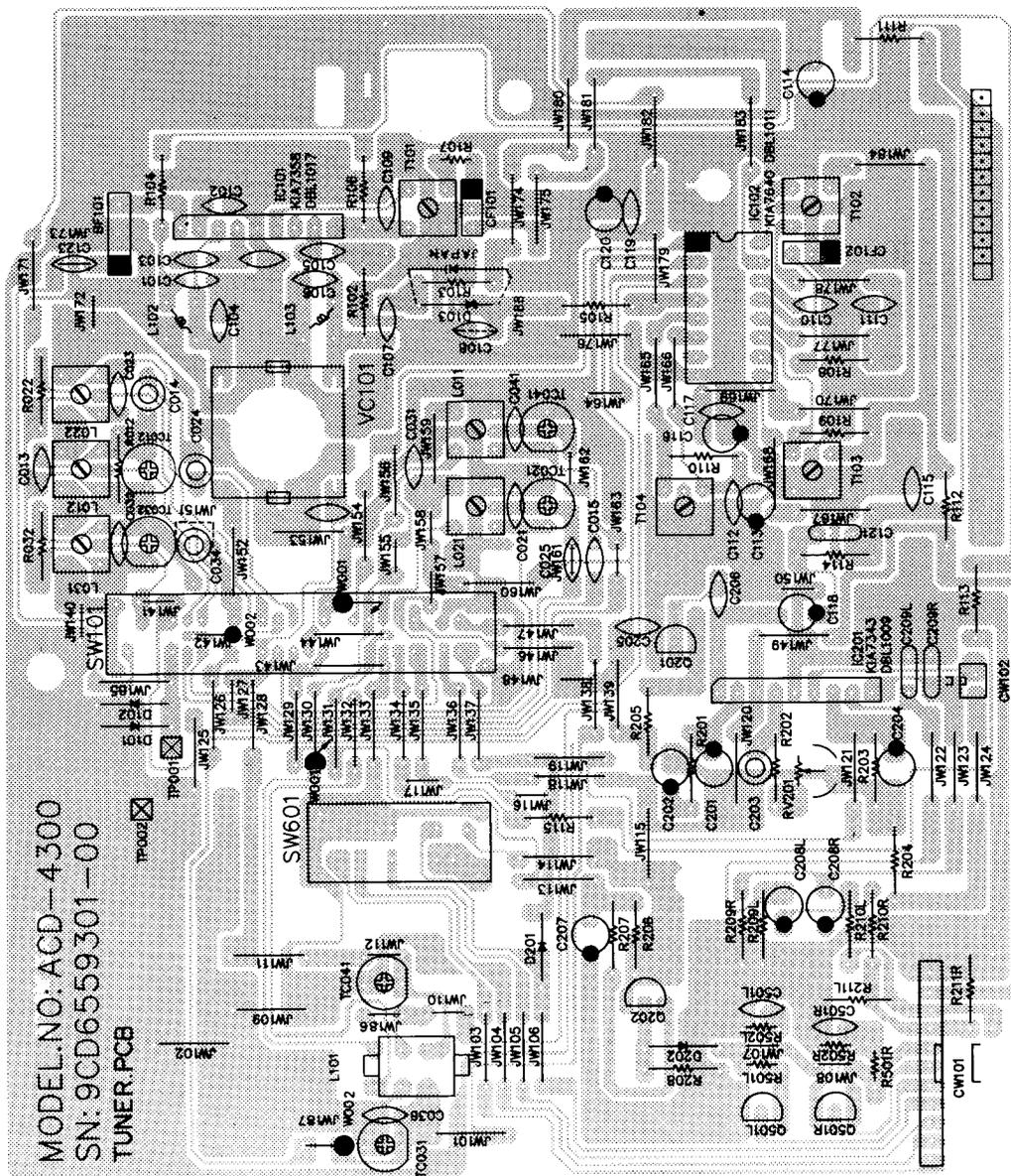
(HIGH TRACKING GAIN)



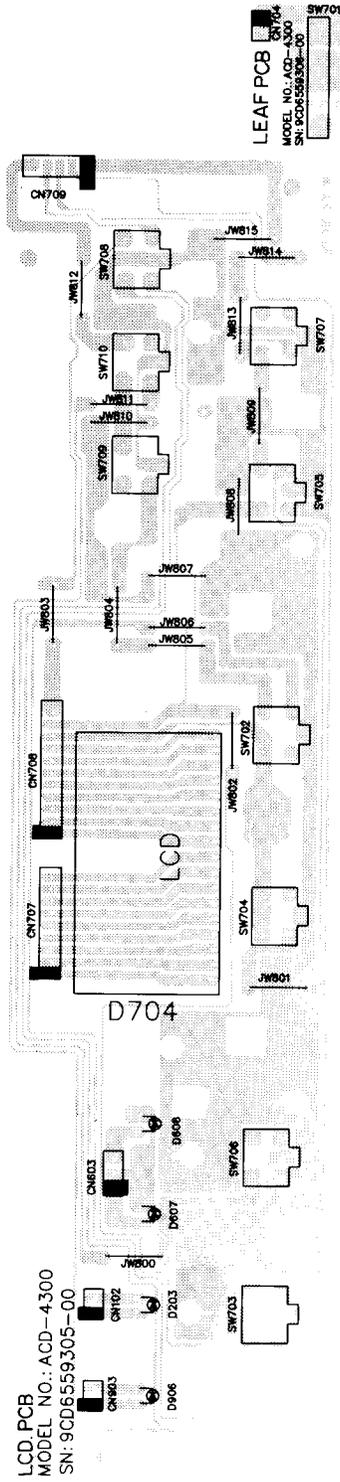
VOLT/DIV: 0.2V  
TIME/DIV: 2MS

1) CD MAIN PCB

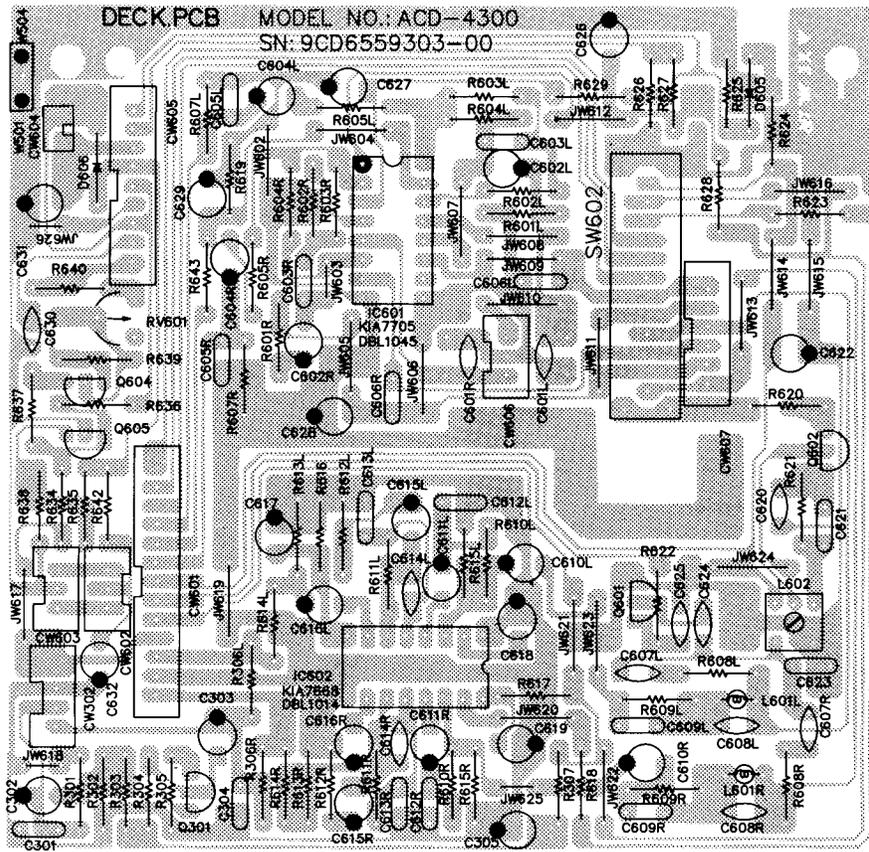




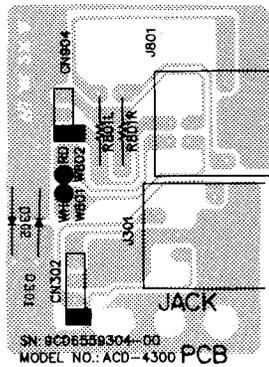
3) LCD PCB



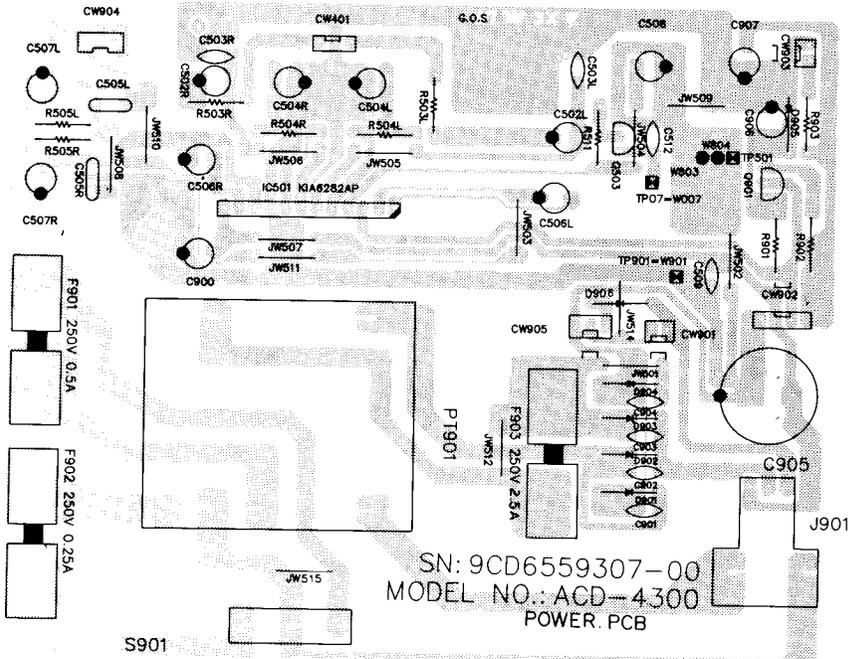
4) DECK PCB



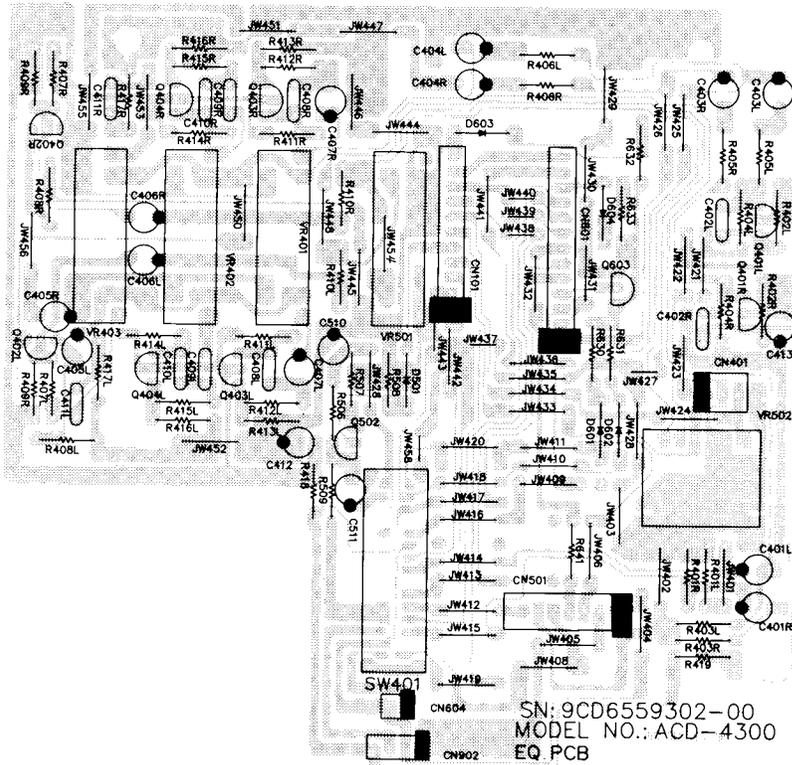
5) JACK PCB



6) POWER PCB

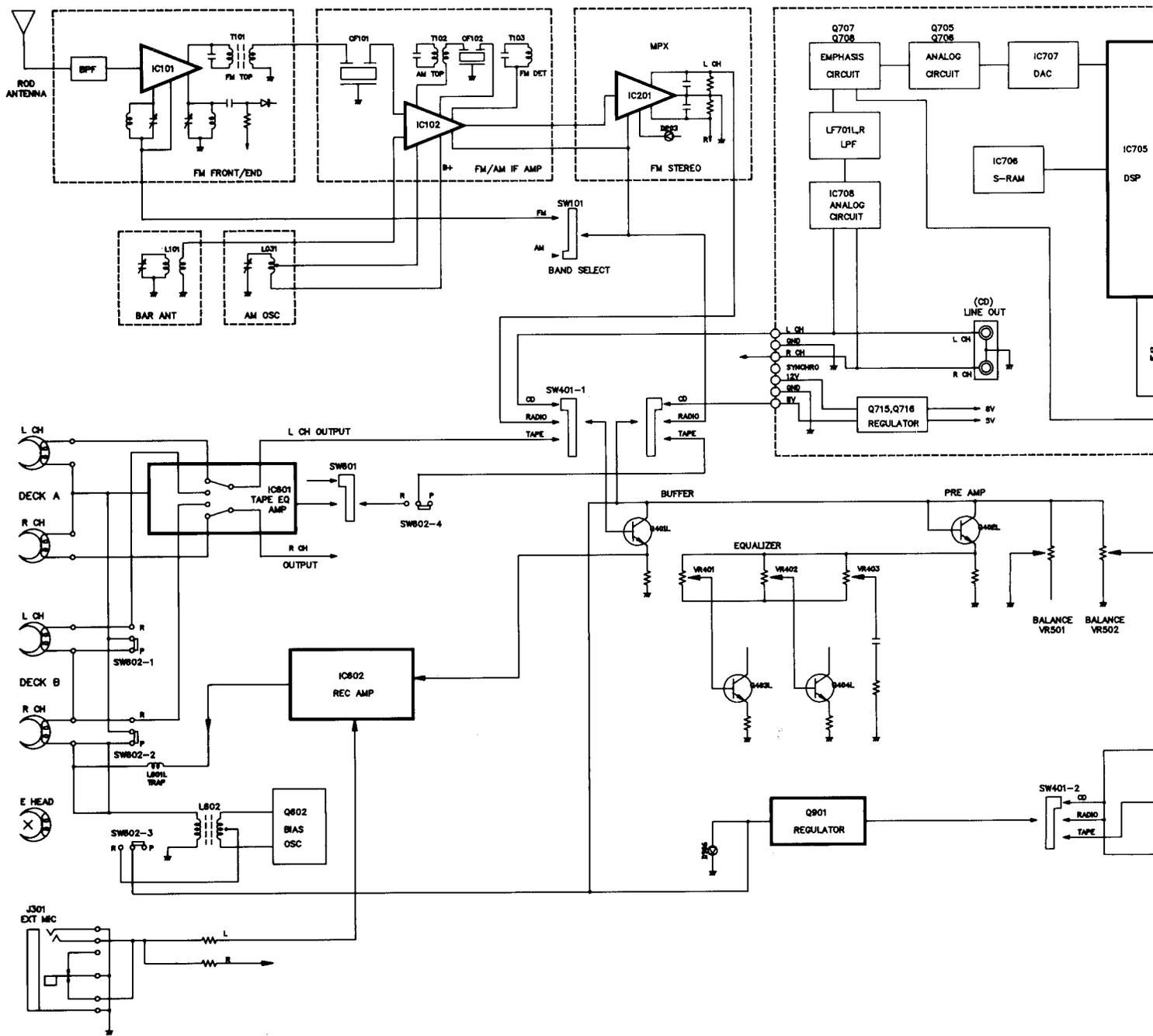


7) EQ PCB



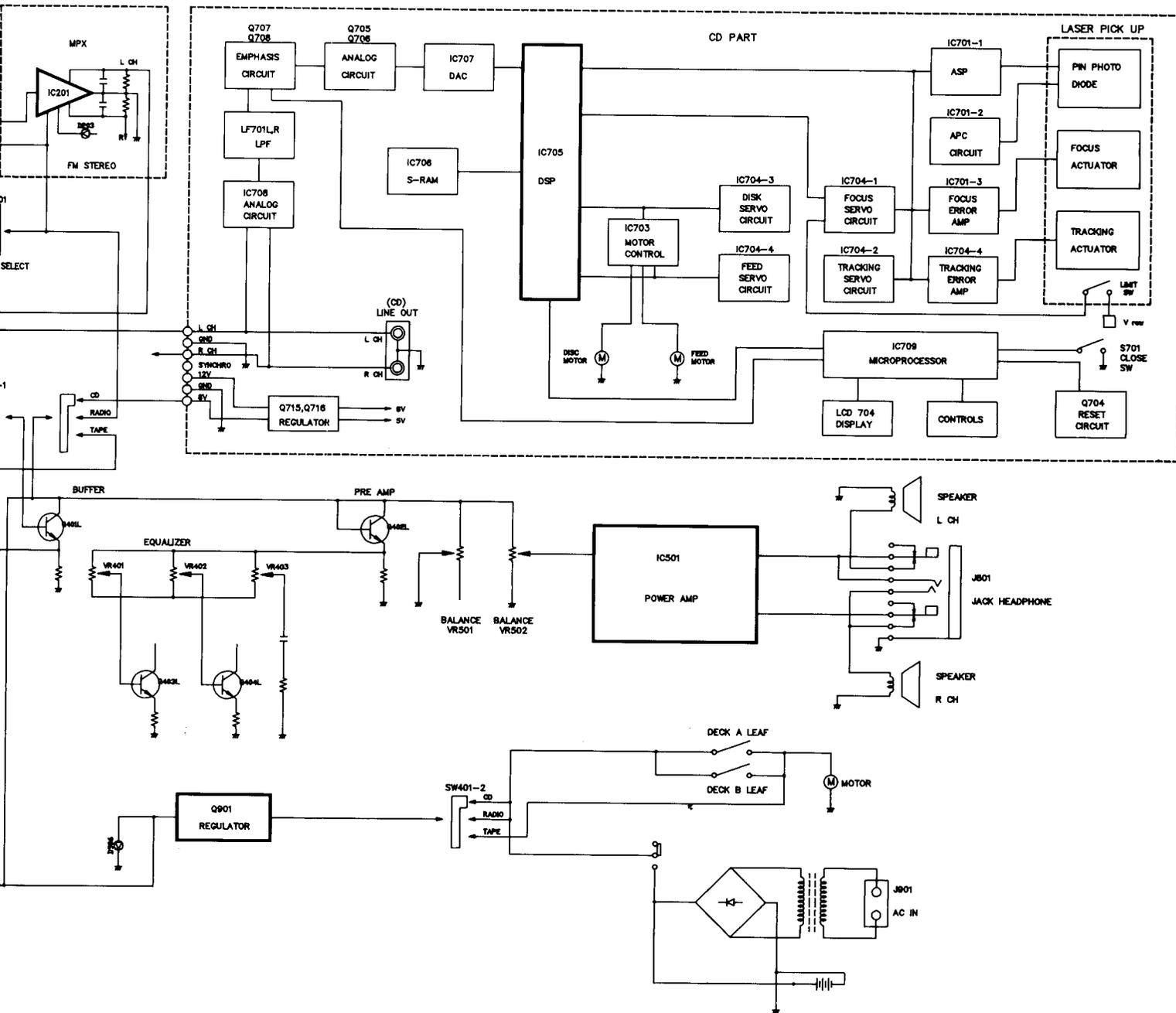
**BLOCK DIAGRAM**

# ACD-4315J BLOCK



315J

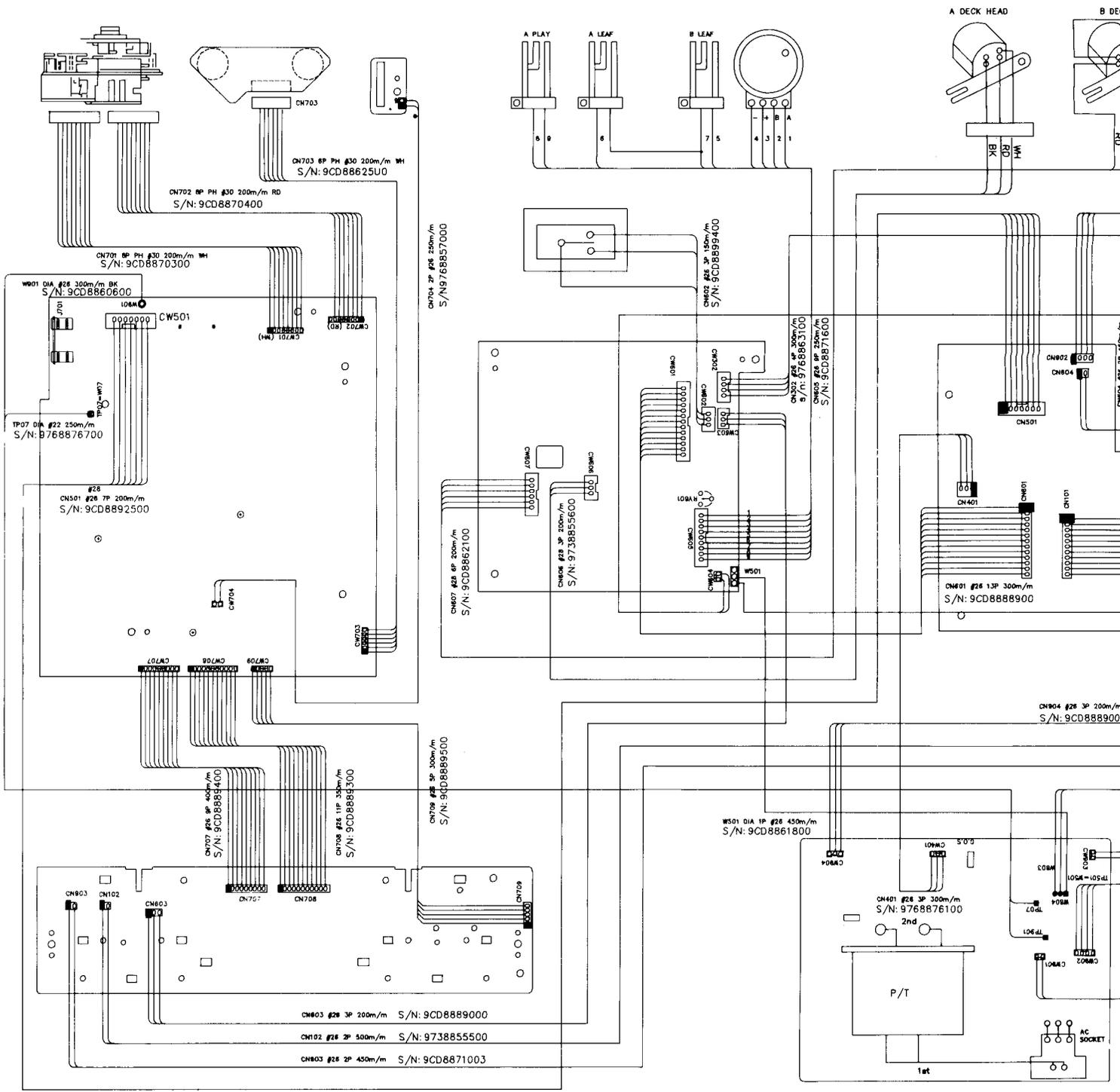
## BLOCK DIAGRAM



# WIRING DIAGRAM

• AUTO STOP

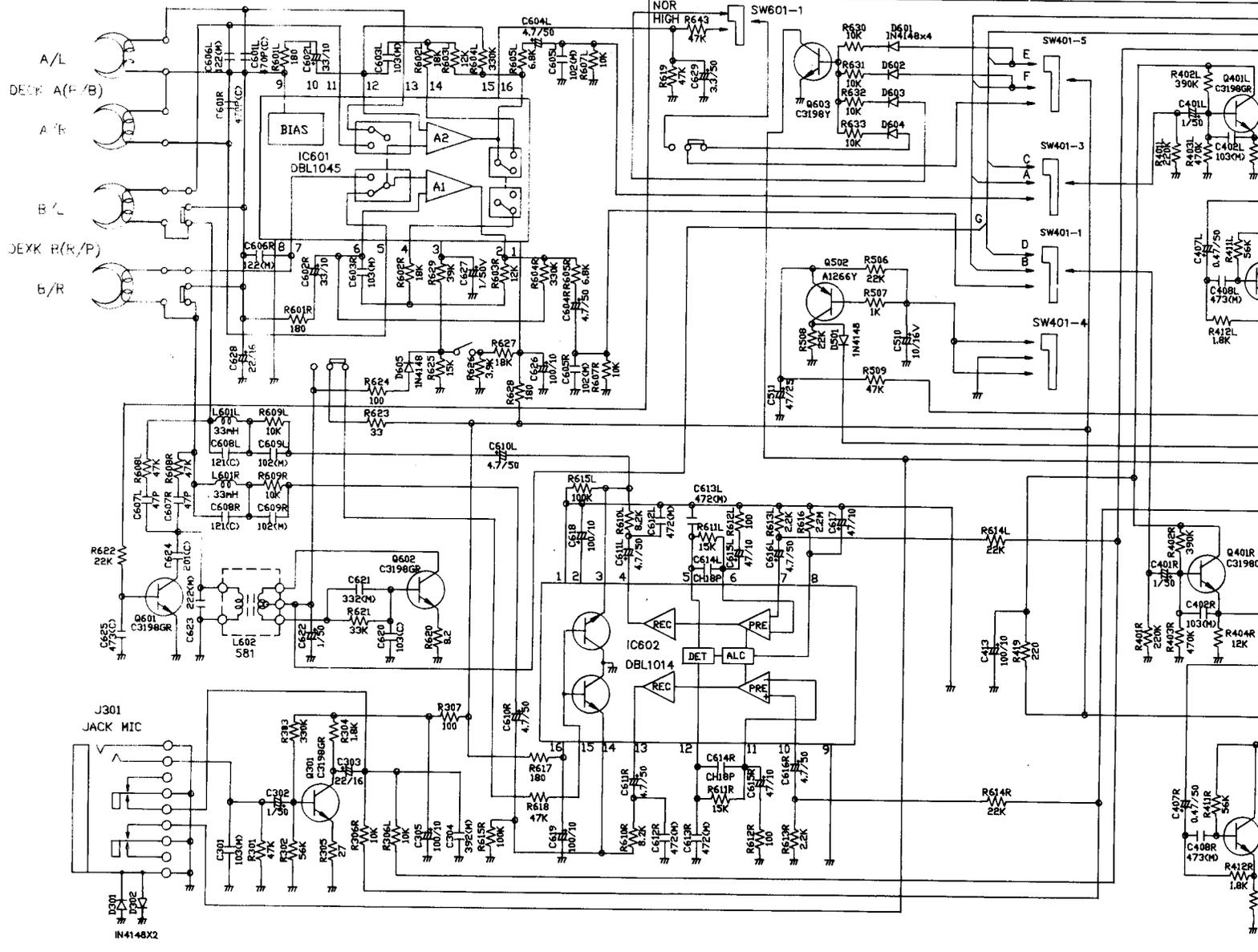
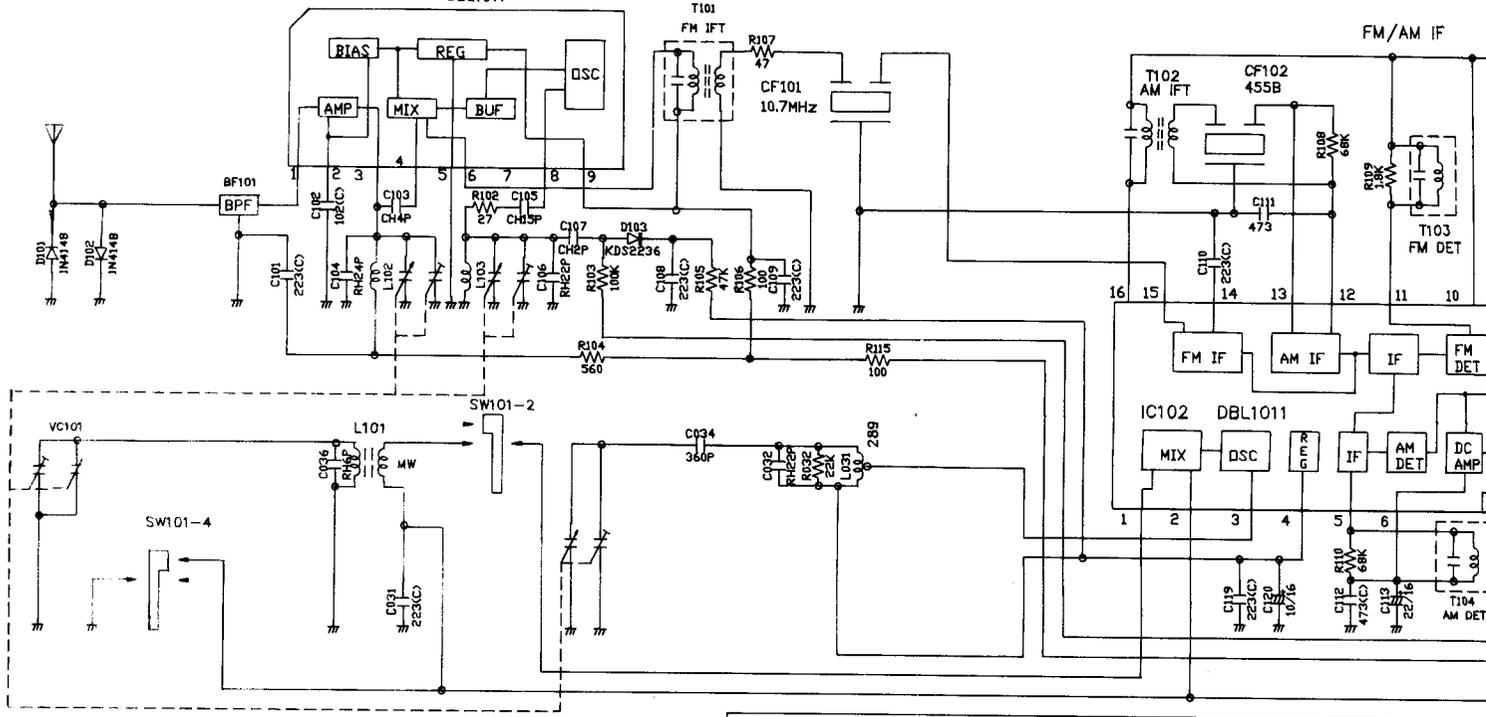
# ACD-4300 WIRING DIAG



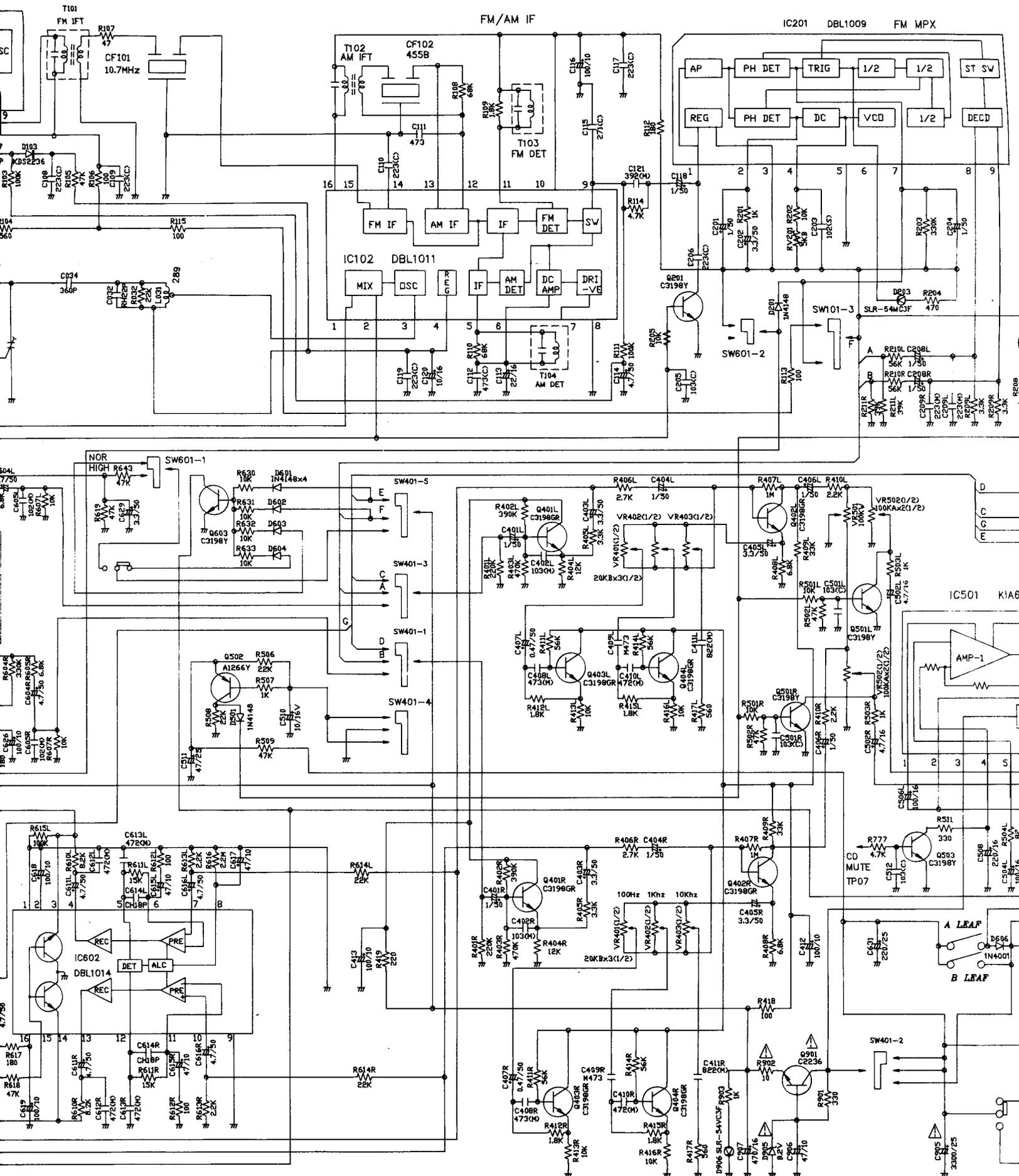


# ACD-4300U SCHEMATIC DI

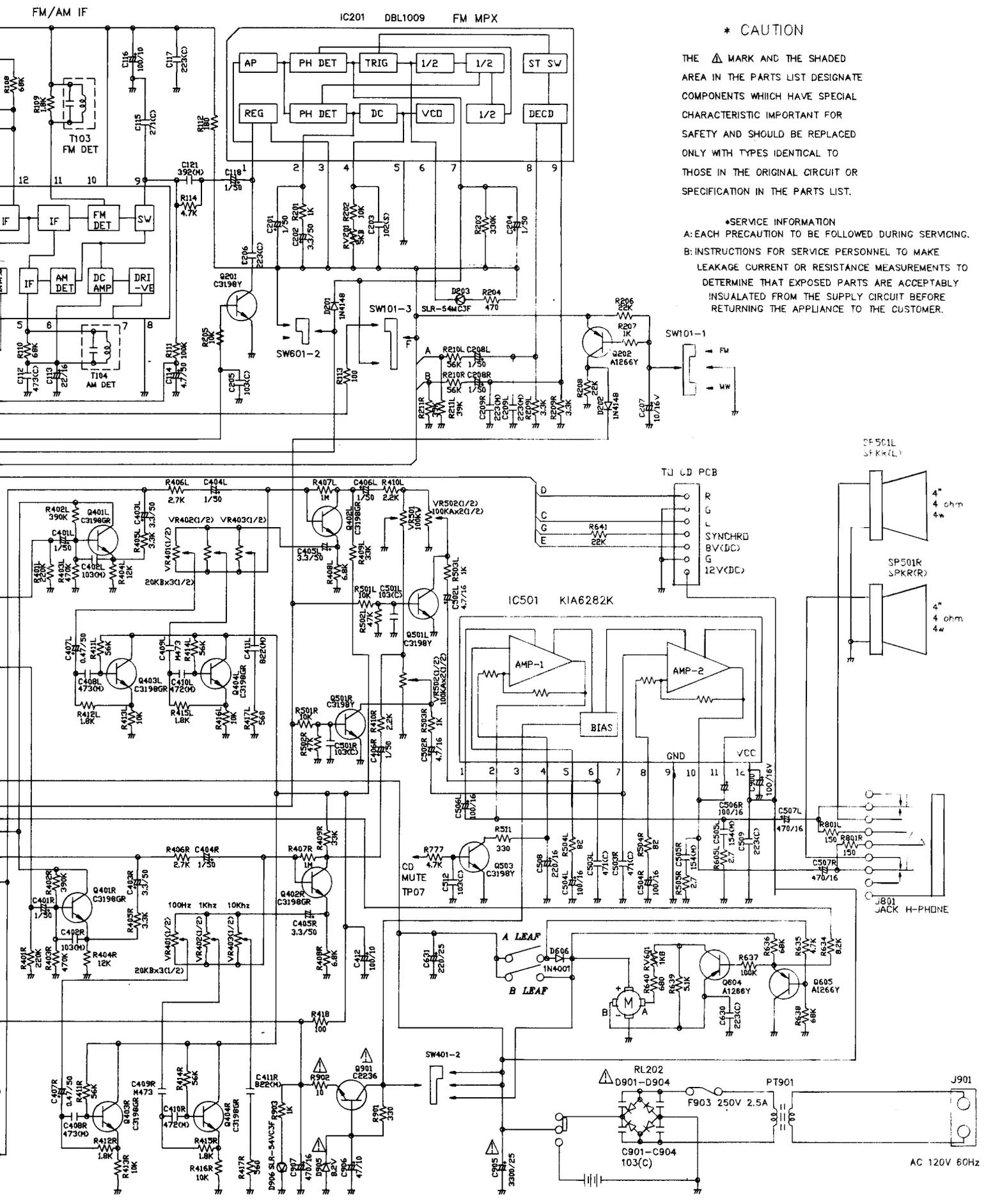
IC101(FM F/E)  
DBL1017



# SCHEMATIC DIAGRAM (AUDIO)



# CIRCUIT DIAGRAM (AUDIO SECTION)



### \* CAUTION

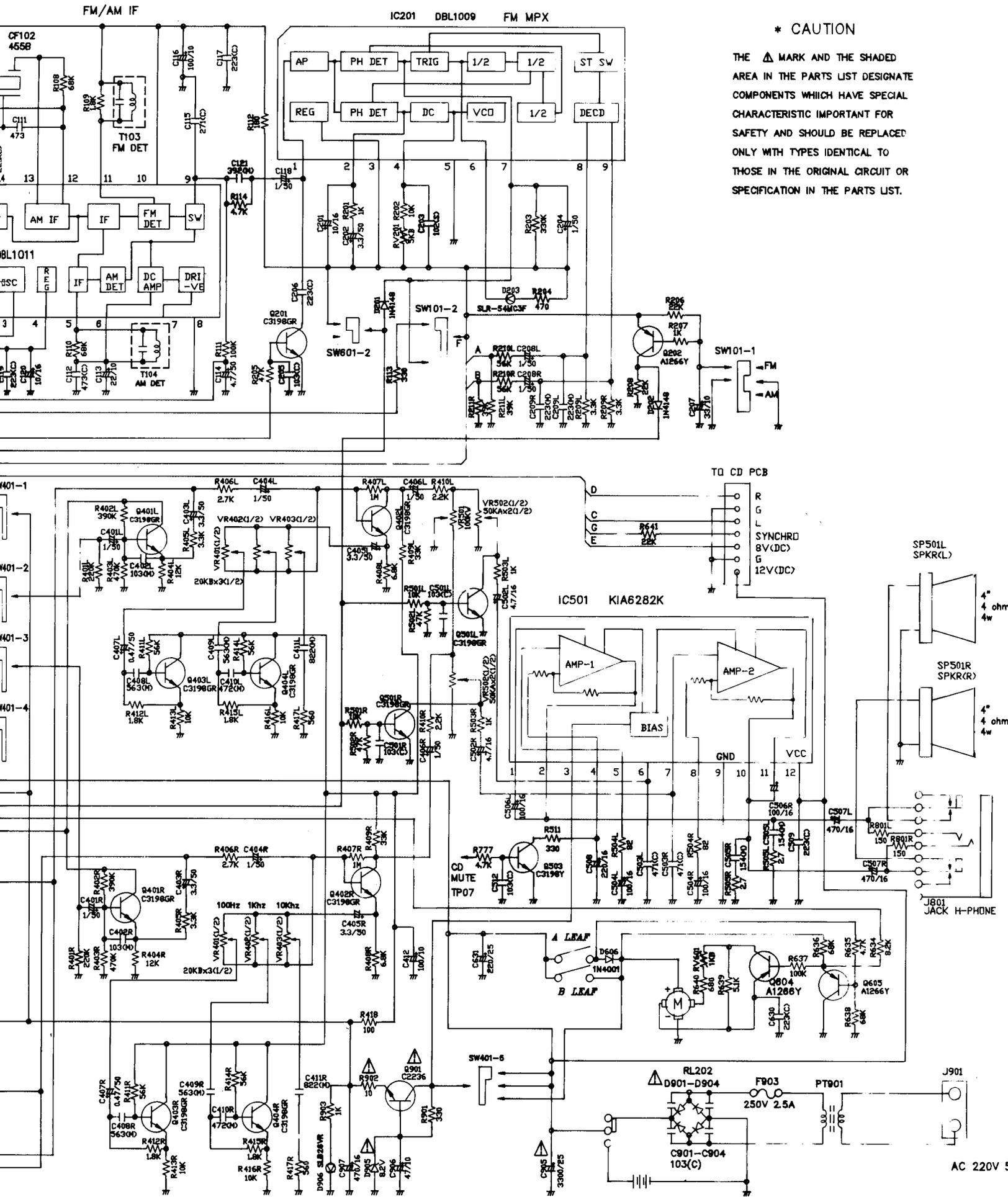
THE  $\Delta$  MARK AND THE SHADED AREA IN THE PARTS LIST DESIGNATE COMPONENTS WHICH HAVE SPECIAL CHARACTERISTIC IMPORTANT FOR SAFETY AND SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT OR SPECIFICATION IN THE PARTS LIST.

### \*SERVICE INFORMATION

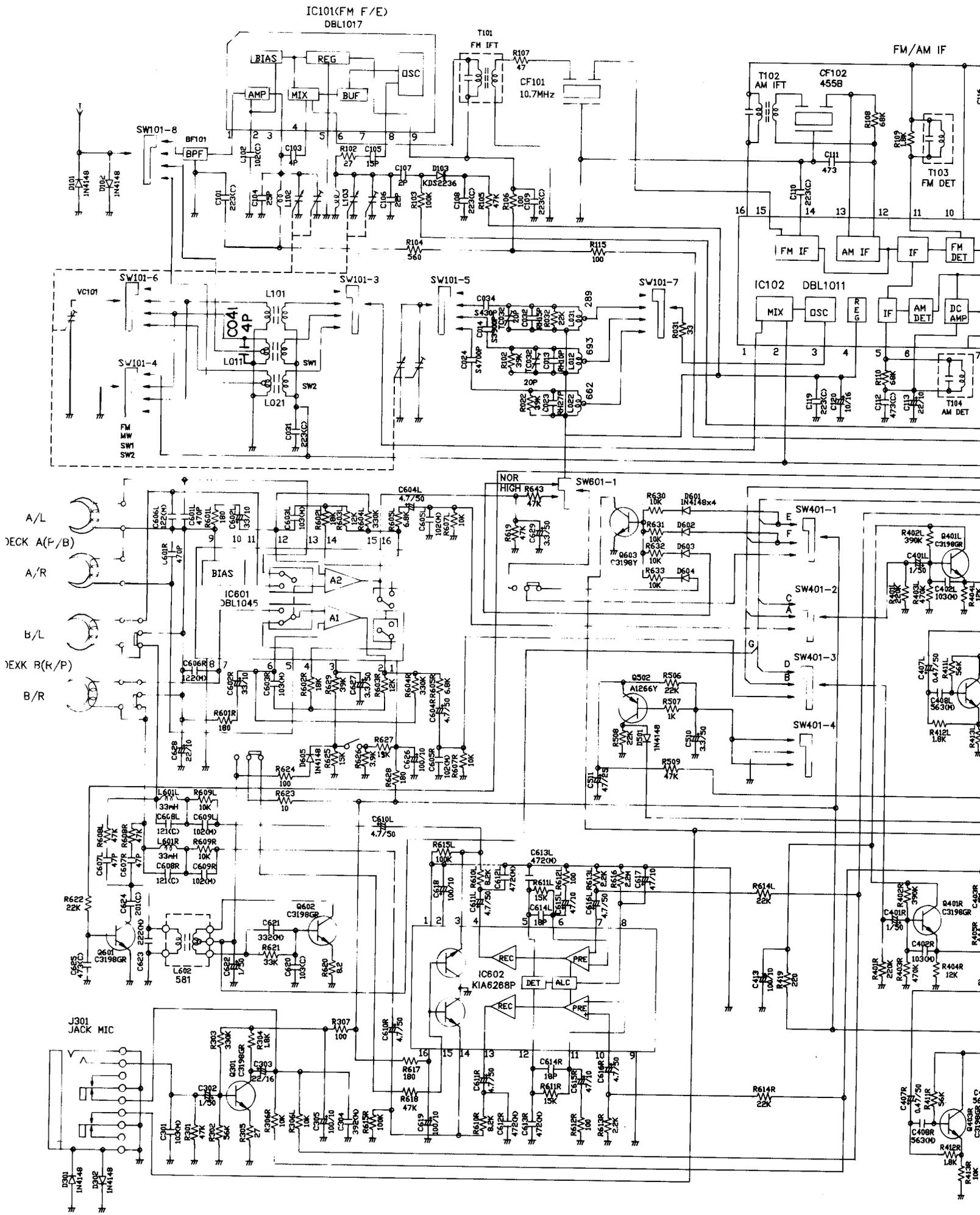
- A: EACH PRECAUTION TO BE FOLLOWED DURING SERVICING.
- B: INSTRUCTIONS FOR SERVICE PERSONNEL TO MAKE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.



# DIAGRAM ( AUDIO SECTION )

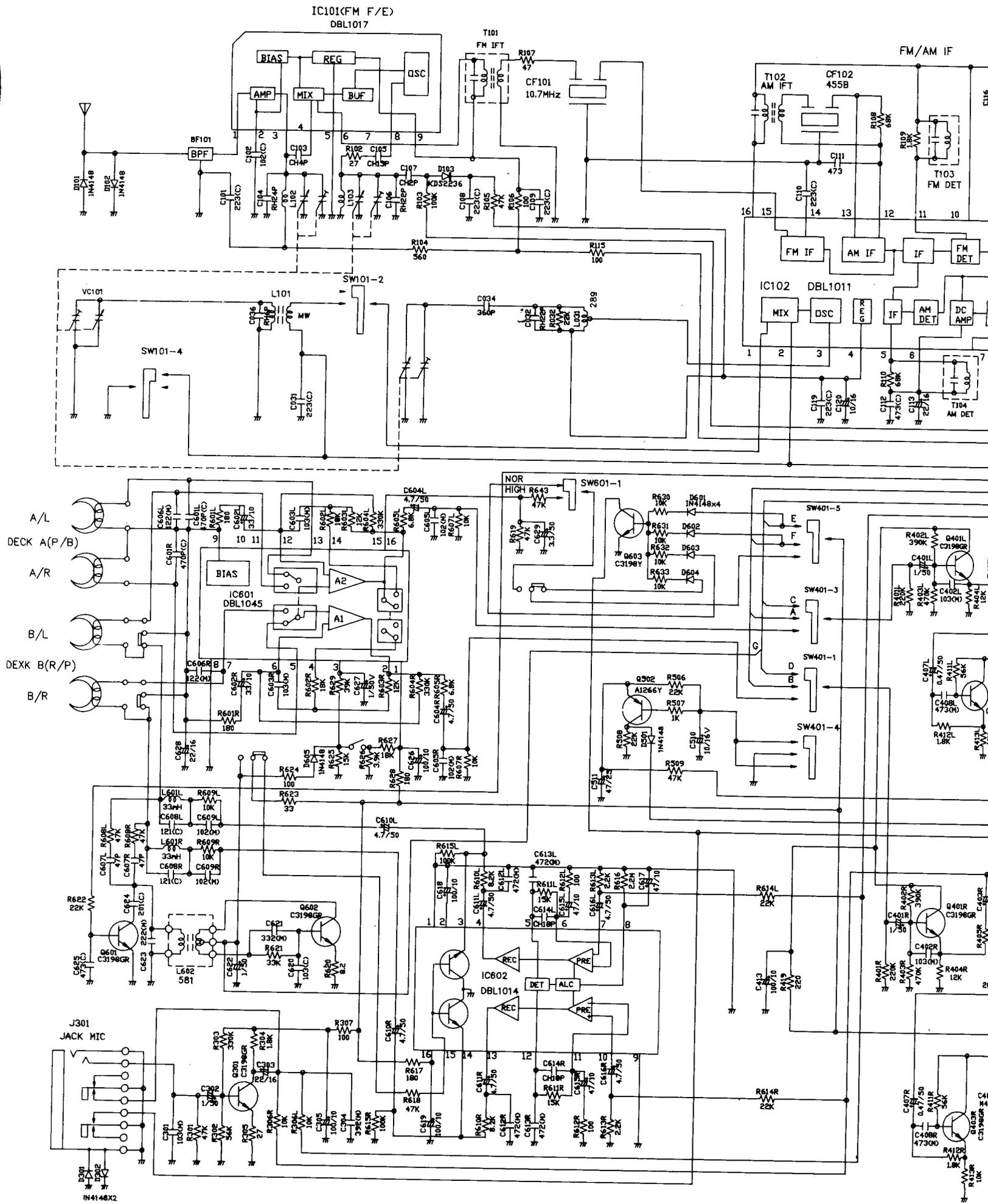


# ACD-4314M SCHEMATIC DIAG

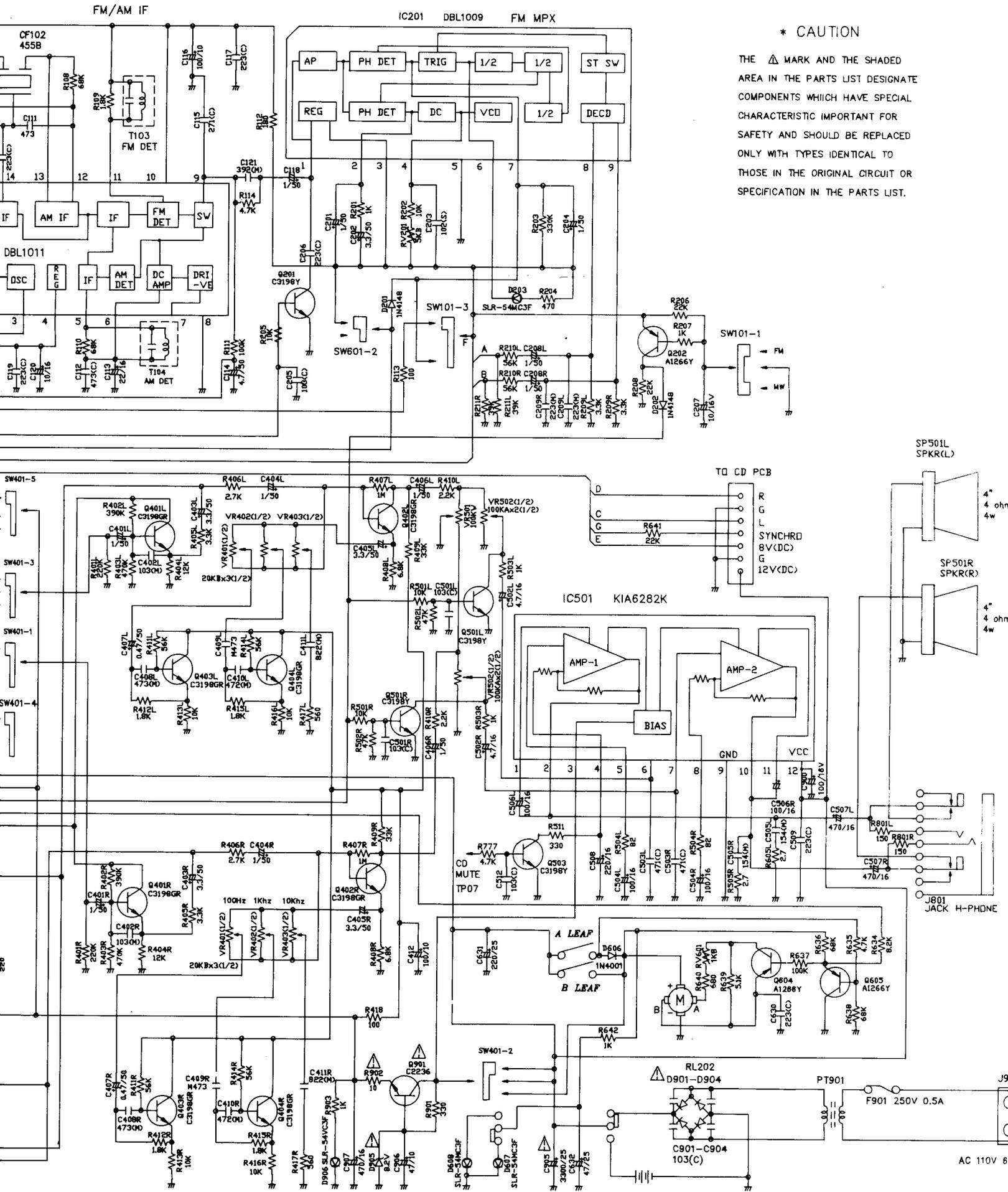




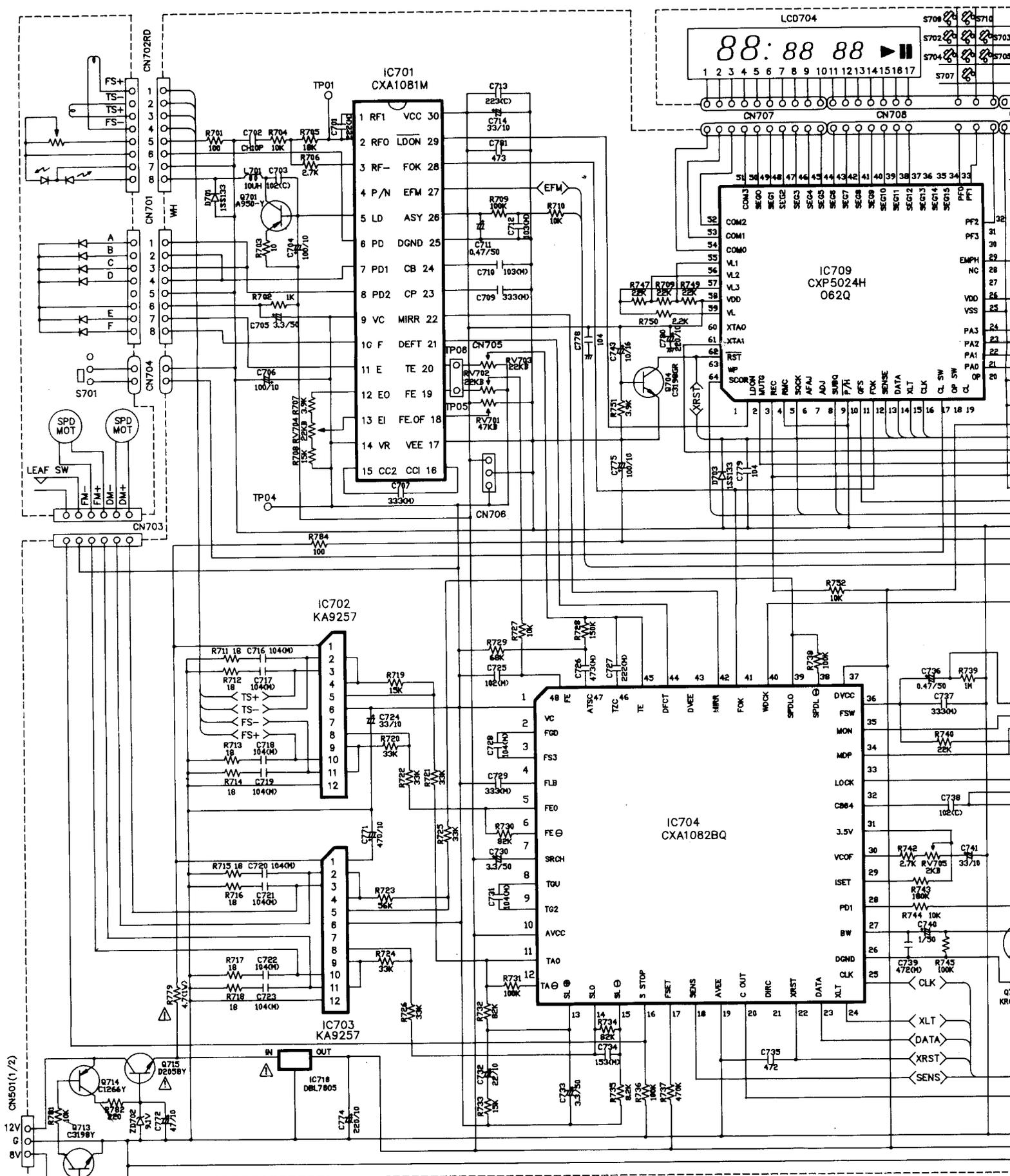
# ACD-4300-ENFE SCHEMATIC DIA



# TIC DIAGRAM ( AUDIO SECTION )



# ACD-4300 SCHEMATIC DIA



### \* SERVICING INSTRUCTIONS

- 1) DISCONNECT THE SET FROM THE MAIN SUPPLY BEFORE OPENING THE CABINET.
- 2) COMPONENTS IDENTIFIED WITH THE SYMBOL  $\Delta$  ON THE SCHEMATIC DIAGRAM ARE NEEDED TO BE CRITICAL WITH RESPECT TO THE RISKS OF FILE AND ELECTRICAL SHOCK ASSOCIATED WITH THE SET.
- 3) USE ONLY REPLACEMENT PARTS THAT HAVE THE CRITICAL CHARACTERISTICS RECOMMENDED BY THE MANUFACTURER.
- 4) SERVICE PERSONNEL SHALL MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CURRENT BEFORE RETUNING THE APPARATUS TO THE CUSTOMER

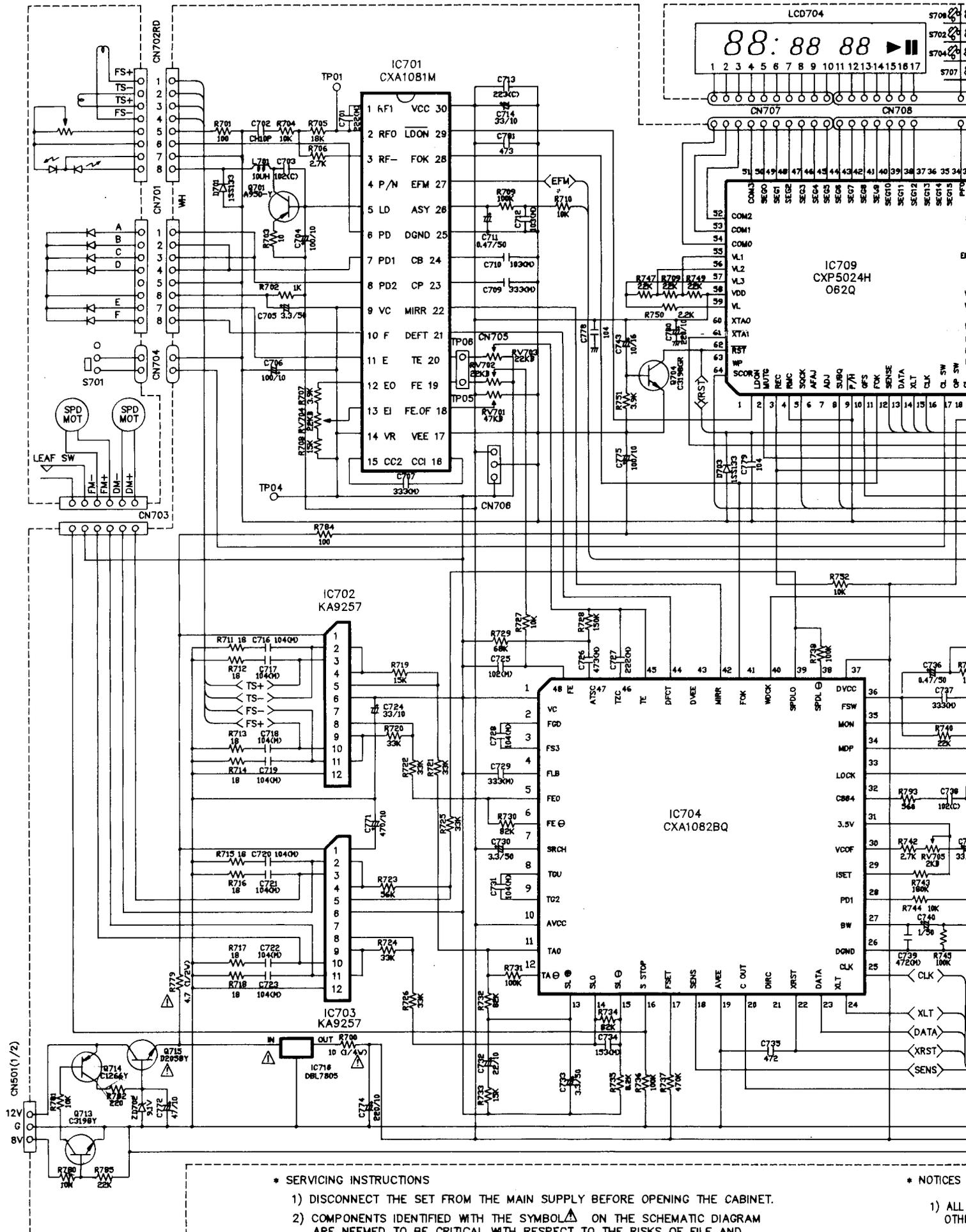
### \* NOTICES

- 1) ALL RESISTORS ARE OTHERWISE SPECIFIED.
- 2) ALL CAPACITORS ARE OTHERWISE SPECIFIED.
- 3) THIS SCHEMATIC IS SUBJECT TO CHANGE WITHOUT NOTICE.





# ACD-4300U SCHEMATIC D



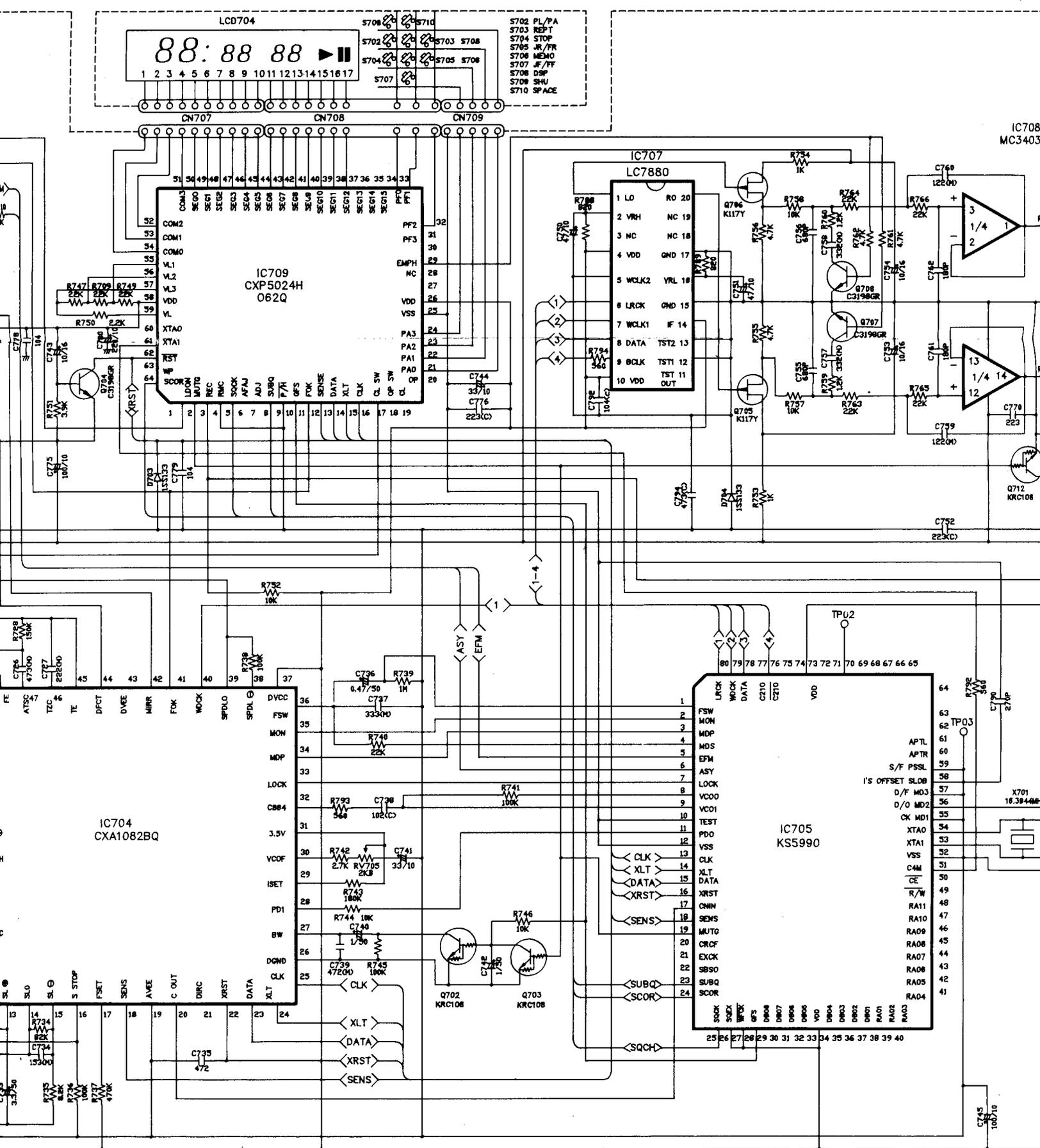
## \* SERVICING INSTRUCTIONS

- 1) DISCONNECT THE SET FROM THE MAIN SUPPLY BEFORE OPENING THE CABINET.
- 2) COMPONENTS IDENTIFIED WITH THE SYMBOL  $\Delta$  ON THE SCHEMATIC DIAGRAM ARE NEEDED TO BE CRITICAL WITH RESPECT TO THE RISKS OF FIRE AND ELECTRICAL SHOCK ASSOCIATED WITH THE SET.
- 3) USE ONLY REPLACEMENT PARTS THAT HAVE THE CRITICAL CHARACTERISTICS RECOMMENDED BY THE MANUFACTURER.
- 4) SERVICE PERSONNEL SHALL MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CURRENT BEFORE RETURNING THE APPARATUS TO THE CUSTOMER

## \* NOTICES

- 1) ALL
- 2) ALL
- 3) THI

# U SCHEMATIC DIAGRAM ( CD SECTION )



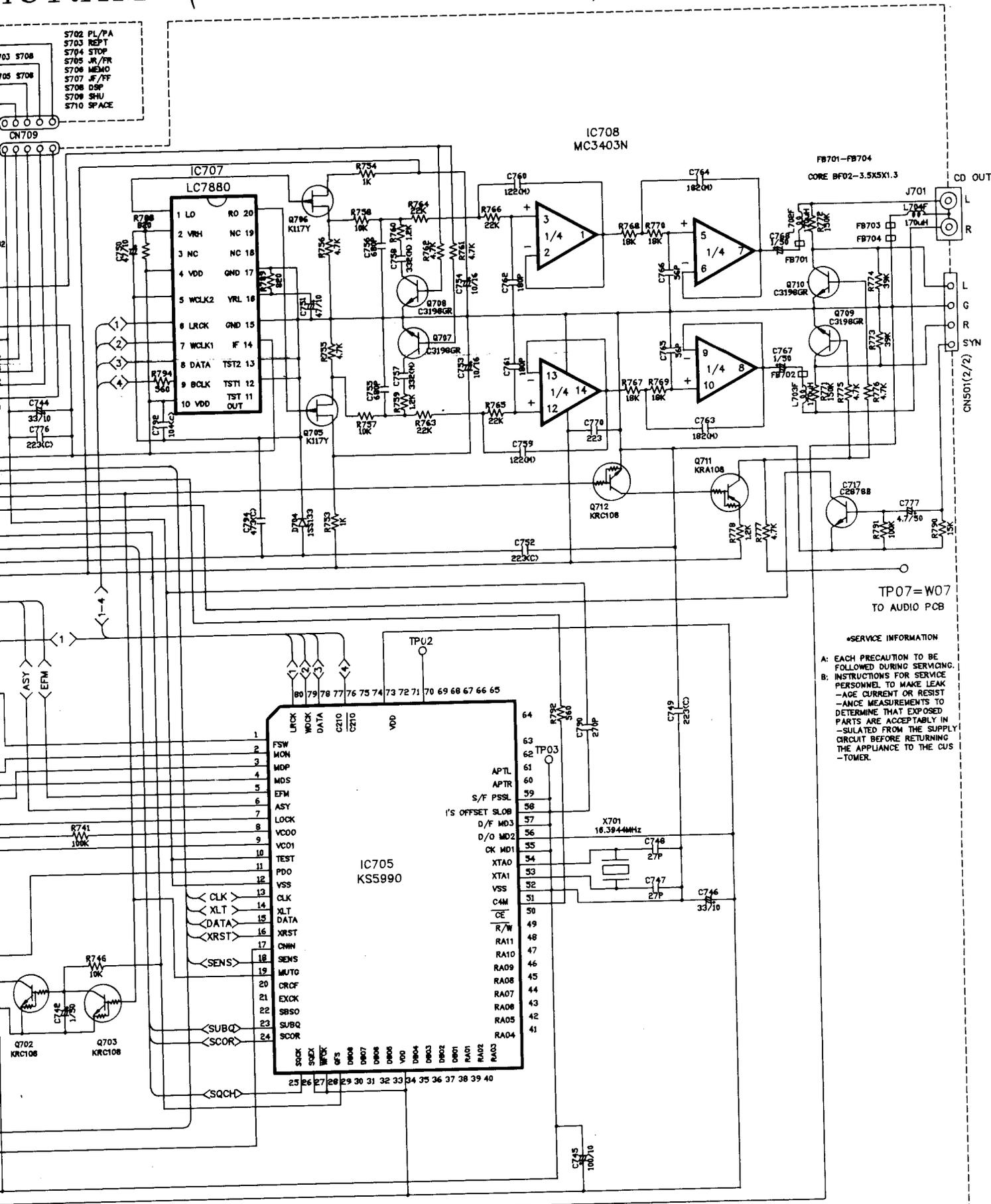
**\* NOTICES**

PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE OPENING THE CABINET.  
 ⚠ ON THE SCHEMATIC DIAGRAM  
 ATTENTION TO THE RISKS OF FILE AND  
 SET.  
 VERIFY THE CRITICAL CHARACTERISTICS

- 1) ALL RESISTANCE VALUES ARE INDICATED IN OHM AND 1/8W OR 1/4W UNLESS OTHERWISE NOTICED, K=KILO, M=MEGA
- 2) ALL CAPACITANCE VALUES ARE INDECATED IN MICRO FARADS P=PICO FARADS.
- 3) THIS SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY

BEFORE CURRENT OR RESISTANCE MEASUREMENTS  
 ACCEPTABLY INSULATED FROM THE SUPPLY  
 POINTS TO THE CUSTOMER

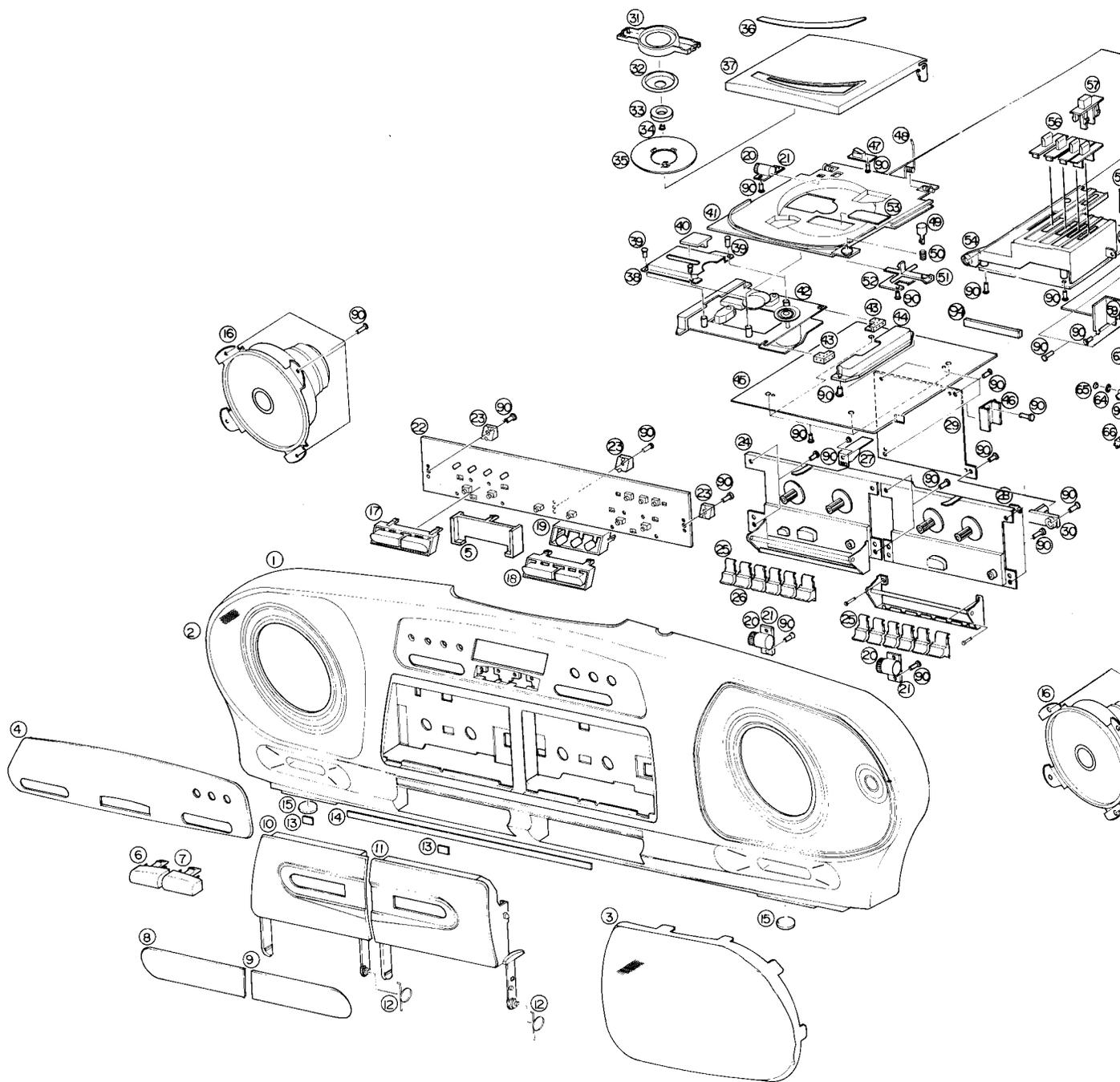
# GRAM ( CD SECTION )

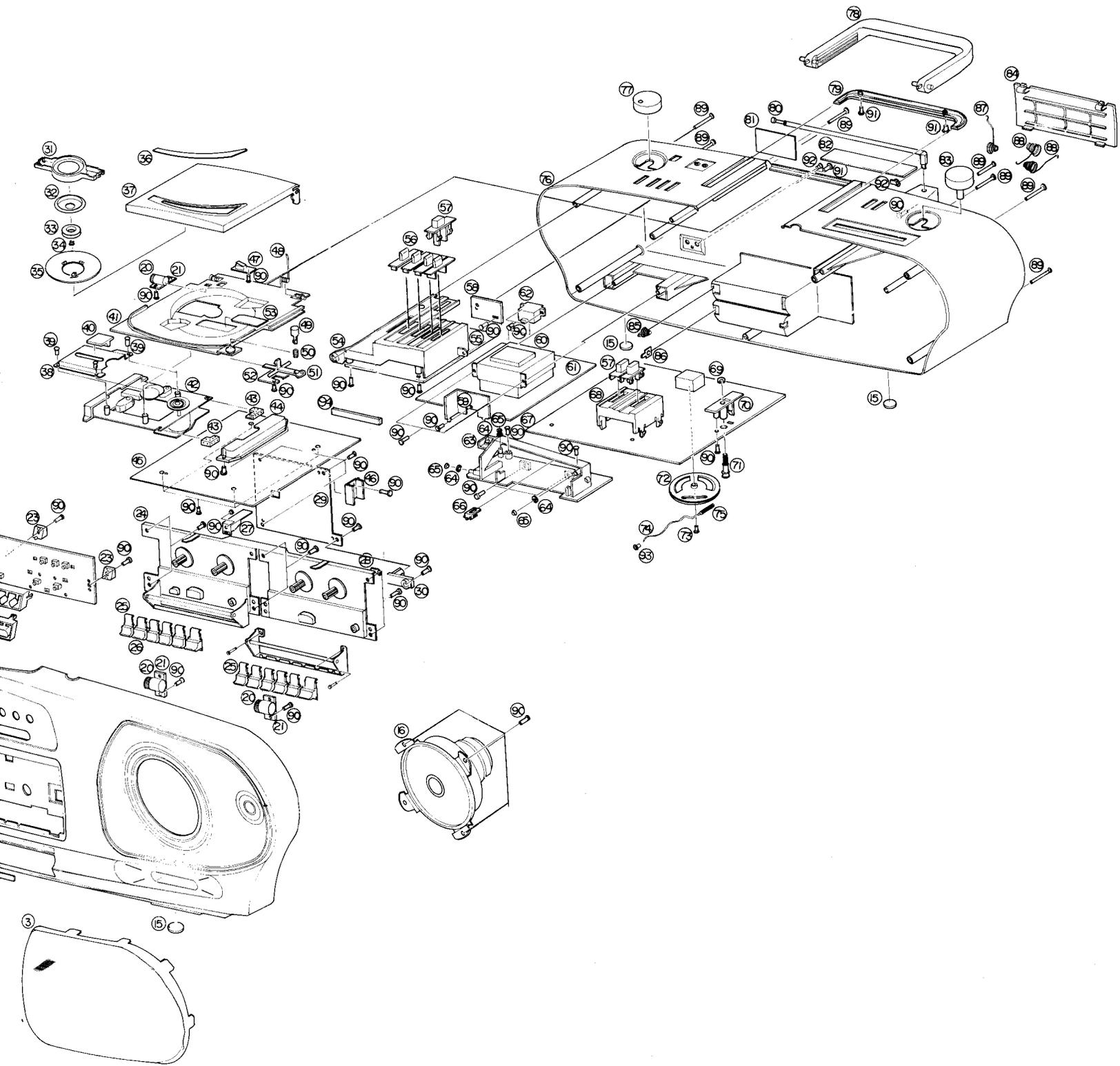


RESISTANCE VALUES ARE INDICATED IN OHM AND 1/6W OR 1/4W UNLESS OTHERWISE NOTICED, K=KILO, M=MEGA  
 CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS P=PICO FARADS.  
 SCHEMATIC DIAGRAM MIGHT BE MODIFIED WITH DEVELOPMENT OF TECHNOLOGY

# 9. EXPLODED VIEW

## ■ CABINET EXPLODED VIEW





## 10. ACD-4300 MACHANICAL PARTS LIST

NO.	PART NAME	PART CODE	DESCRIPTION
1	CABINET FRONT	9CD0120300	MIPS
2	GRILL SPEAKER "L"	9CD12013L0	SCP 0.6T
3	GRILL SPEAKER "R"	9CD12013R0	SCP 0.6T
4	PLATE LCD	9CD902900	PVC 0.5T
5	GUIDE LCD	9CD2503400	ABS
6	KNOB STOP	9CD1311900	ABS
7	KNOB PLAY	9CD1311800	ABS
8	PLATE DOOR "B"	9CD0902400	PVC 1T
9	PLATE DOOR "A"	9CD0902300	PVC 1T
10	DOOR CAST "B"	9CD1803000	MIPS
11	DOOR CAST "A"	9CD1802900	MIPS
12	SPRING DOOR	9713015400	PWR1
13	MIRROR	97A2200100	A1200S T0.3
14	PLATE DECK	9CD0902500	PC 0.5T
15	CUSHION FOOT	9710801100	RUBBER
16	SPEAKER	9718505804	4" 4 OHM 4W
17	KNOB REPEAT	9CD1312100	ABS
18	KNOB FF	9CD1312200	ABS
19	KNOB DISPLAY	9CD1312000	ABS
20	DAMPER GEAR	9712604300	ACETAL (POM)
21	DAMPER BASE	9712604400	ABS
22	PCB LCD	9CD6558705	221 × 57 × 1.6T
23	GUIDE PCB "B"	9CD2503100	ABS
24	DECK MICHANISM DECK MECHANISM	9736007100 9CD6001200	TN-521ZSW-244 ADR-1158FW
25	KNOB DECK "A" KNOB DECK "B"	9CD1312300 9CD1312500	ABS ABS
26	KNOB DECK PLAY	9CD1312400	ABS
27	SPRING REC	9733014300	STS304 T0.4
28	LUG EGG	9718858500	BSP
29	PCB DECK	9CD6558703	133 × 113 × 1.6T
30	GUIDE PCB "A"	9CD2503000	ABS
31	GUIDE CHUCK	9CD2502300	ABS
32	CHUCK PLATE "D"	9CD2A00400	SECC T0.5
33	MAGNET	9CD5400300	FERRITE T5.0
34	SCREW MACHINE	7001200411	PAN 2 × 4 MFZN
35	CHUCK PLATE "C"	9CD2A00300	ABS
36	PLATE CD DOOR	9CD0902700	PC 0.5T
37	DOOR CD	9CD1802800	MIPS
38	COVER PICK UP	9CD0400500	SECC
39	SCREW TAPTITE	7173200411	TT2 BIN 2 × 4 MFZN

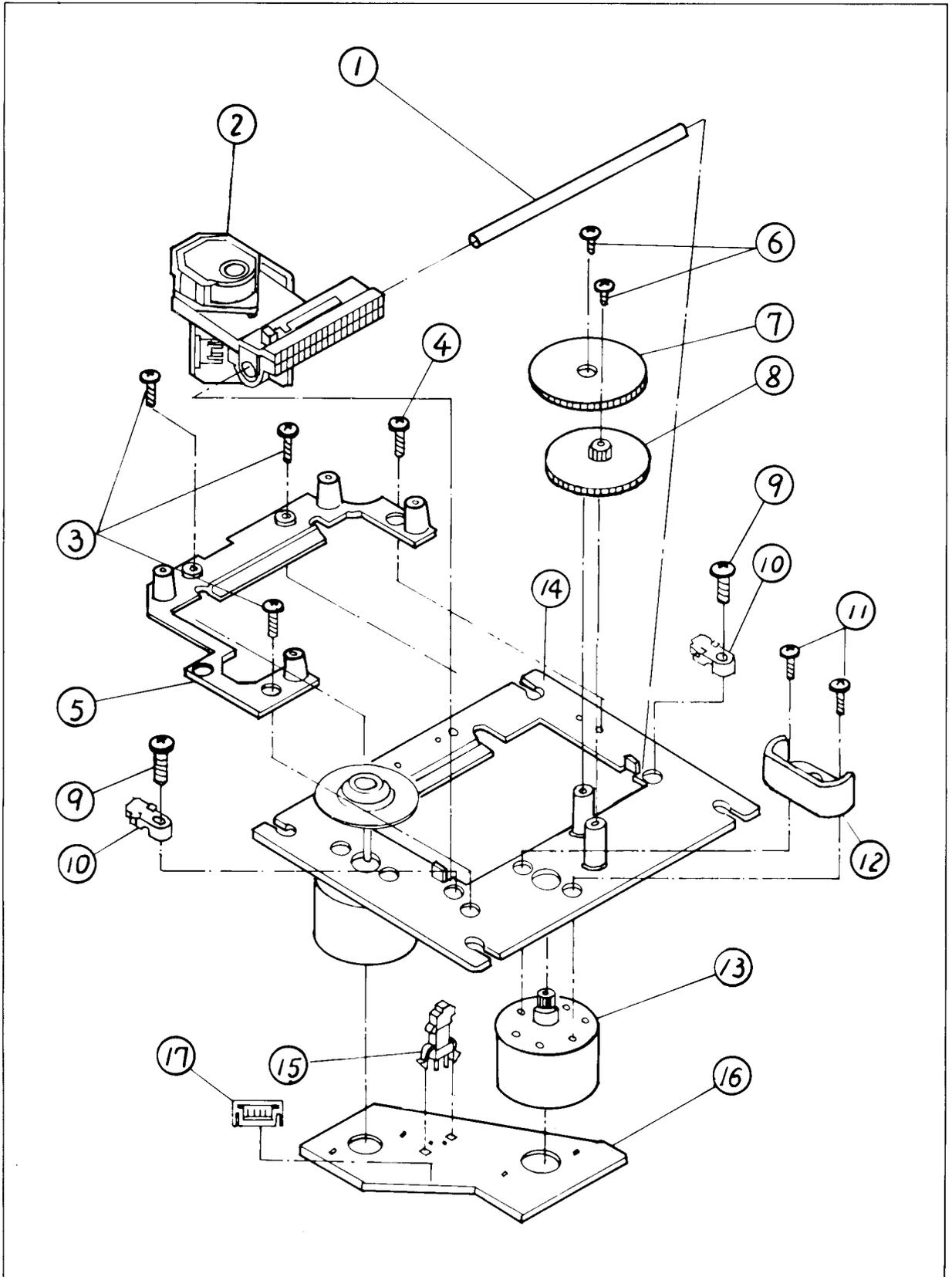
## 10. ACD-4300 MACHANICAL PARTS LIST

NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY
1	CABINET FRONT	9CD0120300	MIPS	1
2	GRILL SPEAKER "L"	9CD12013L0	SCP 0.6T	1
3	GRILL SPEAKER "R"	9CD12013R0	SCP 0.6T	1
4	PLATE LCD	9CD902900	PVC 0.5T	1
5	GUIDE LCD	9CD2503400	ABS	1
6	KNOB STOP	9CD1311900	ABS	1
7	KNOB PLAY	9CD1311800	ABS	1
8	PLATE DOOR "B"	9CD0902400	PVC 1T	1
9	PLATE DOOR "A"	9CD0902300	PVC 1T	1
10	DOOR CAST "B"	9CD1803000	MIPS	1
11	DOOR CAST "A"	9CD1802900	MIPS	1
12	SPRING DOOR	9713015400	PWR1	2
13	MIRROR	97A2200100	A1200S T0.3	2
14	PLATE DECK	9CD0902500	PC 0.5T	1
15	CUSHION FOOT	9710801100	RUBBER	4
16	SPEAKER	9718505804	4" 4 OHM 4W	2
17	KNOB REPEAT	9CD1312100	ABS	1
18	KNOB FF	9CD1312200	ABS	1
19	KNOB DISPLAY	9CD1312000	ABS	1
20	DAMPER GEAR	9712604300	ACETAL (POM)	3
21	DAMPER BASE	9712604400	ABS	3
22	PCB LCD	9CD6558705	221 × 57 × 1.6T	1
23	GUIDE PCB "B"	9CD2503100	ABS	3
24	DECK MICHANISM DECK MECHANISM	9736007100 9CD6001200	TN-521ZSW-244 ADR-1158FW	1 1
25	KNOB DECK "A" KNOB DECK "B"	9CD1312300 9CD1312500	ABS ABS	9 1
26	KNOB DECK PLAY	9CD1312400	ABS	1
27	SPRING REC	9733014300	STS304 T0.4	1
28	LUG EGG	9718858500	BSP	1
29	PCB DECK	9CD6558703	133 × 113 × 1.6T	1
30	GUIDE PCB "A"	9CD2503000	ABS	1
31	GUIDE CHUCK	9CD2502300	ABS	1
32	CHUCK PLATE "D"	9CD2A00400	SECC T0.5	1
33	MAGNET	9CD5400300	FERRITE T5.0	1
34	SCREW MACHINE	7001200411	PAN 2 × 4 MFZN	1
35	CHUCK PLATE "C"	9CD2A00300	ABS	1
36	PLATE CD DOOR	9CD0902700	PC 0.5T	1
37	DOOR CD	9CD1802800	MIPS	1
38	COVER PICK UP	9CD0400500	SECC	1
39	SCREW TAPTITE	7173200411	TT2 BIN 2 × 4 MFZN	3

NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY
40	CUSHION PICK UP	9CD4201700	RUBBER	1
41	CABINET TOP	9CD0120500	MIPS	1
42	CD MECHANISM	9CD6000300	KSM-210B-DM	1
43	CHSHION CD RUBBER	9CD4204800	SILICON RUBBER	4
44	HOLDER CD DECK	9712308600	ABS	2
45	PCB CD	9CD6558500	330 × 197 × 1.6T	1
46	HEAT SINK TR	9714402100	BSP	1
47	PCB LEAF SW	9CD6558706	25 × 16 × 1.6T	
48	SPRING CD	9CD3002400	PWR1 BK COATING	1
49	KNOB CD EJEJT	9CD1306900	ABS	1
50	SPRING CD OPEN	9CD3002200	PW-1	1
51	HOOK CD DOOR	9CD2601000	ACETAL	1
52	PCB HOOK BRKT	9CD6558709	35 × 17 × 1.6T	1
53	LABEL CAUTION	9CD9300300	PE FILM 53 × 18	1
54	CHASSIS "L"	9CD0602800	ABS	1
55	PCB EQ	9CD6558702	131 × 129.5 × 1.6T	1
56	KNOB EQ.	9CD1312600	ABS	4
57	KNOB SLIDE	9CD1312700	ABS	3
58	PCB JACK	9CD6558704	47.5 × 32 × 1.6T	1
59	HEAT SINK	9CD4400800	A120S	1
60	POWER TRANS			1
61	PCB POWER	9CD6558707	140 × 110 × 1.6T	1
62	SOCKET AC	9716381400	2 PIN HSC1466-01-0111	1
63	CHASSIS "R"	9CD0602900	ABS	1
64	PULLEY	9713703300	PE	2
65	BUSH	9714001400	ACETAL	2
66	POINTER	9711704600	ABS	1
67	PCB TUNER	9CD6558701	158 × 136 × 1.6T	1
68	GUIDE BAND	9CD2503200	ABS	1
69	SHAFT STOPPER	9713602500	ACETAL (POM)	1
70	HOLDER T/SHAFT	9CD2300400	ABS	1
71	SHAFT TUNING	9713604200	ACETAL (POM)	1
72	DRUM DIAL	9712905100	ABS	1
73	SCREW MACHINE	8001260511	PAN 2.6 × 5 MFZN	1
74	CORD DIAL	224229001	D0.5 WH	0.5ME
75	SPRING DRUM	971300500	PW1 D0.5	1
76	CABINET BACK	9CD0120400	MIPS	1
77	KNOB VR	9CD1312900	ABS	1
78	HANDLE	9CD1900600	MIPS	1
79	COVER HANDLE	9CD0404400	MIPS	1
80	ANT. ROD	9716804700	3-SECTION DW-4	1
81	LABEL SPEC	9CD9304600	PE FILM 65 × 30	1

NO.	PART NAME	PART CODE	DESCRIPTION	Q'TY
82	PLATE DIAL	9CD0902600	PC 0.5T	1
83	KNOB TUNING	9CD1312800	ABS	1
84	COVER BATTERY	9CD0404300	MIPS	1
85	SPRING	9713009102	PW-1 D1.0 NI	1
86	TERMIYAL BATT.	9716404701	BSP T0.3	1
87	SPRING BATT. "A"	9713010701	PW-1 D1.0	1
88	SPRING BATT. "B"	9713010901	PW-1 D0.1	2
89	SCREW TAPTITE	7173302511	TT2 BIN 3×25	7
90	SCREW TAPTITE	7173301011	TT2 BIN 3×10	
91	SCREW TAPTITE	7173301011	TT2 BIN 3×8 BK	3
92	DIA-EGG LUG	9718887300		1
93	EYELET	9713400300	BS	1
94	CUSHION PCB DECK	9CD4205700	CUSHION SPONGE	1

# 11. CD MECHANISM



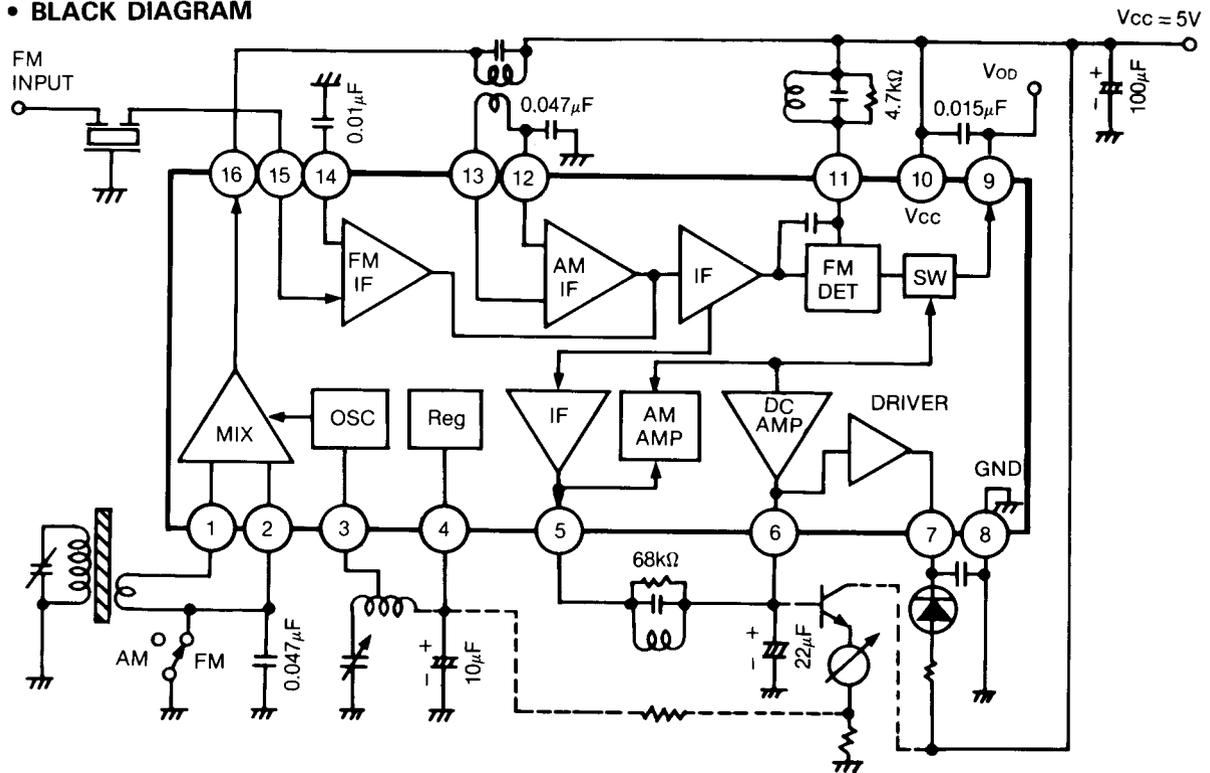
## 12. CD (KSM-150B DM) PARTS LIST

NO.	CODE NO.	DESCRIPTION	Q'TY	REMARK
1	4-910-431-02	SLIDE SHAFT	1	
2		PICK UP ASS'Y	1	
3	7-685-783-01	SCREW (TT2 PAN 2×6)	3	
4	7-685-781-01	SCREW (TT2 PAN 2×4)	1	
5	2-641-444-03	CHASSIS HOLDER	1	
6	3-303-809-31	SPECIAL SCREW (M1.7×3)	2	
7	2-641-404-02	GEAR A	1	
8	2-641-403-06	GEAR B	1	
9	2-641-447-01	SPECIAL SCREW TAPPING 2.6×8	2	
10	2-641-448-02	SHAFT CLAMPER	2	
11	7-621-255-25	SCREW MACHINE (PAN2×4)	2	
12	2-641-434-21	GEAR COVER	2	
13	X-2640-770-1	SLED MOTOR ASS'Y	1	
14		MAIN CHASSIS	1	
15	1-570-822-21	LEAF SWITCH	1	
16	1-623-947-11	MOTOR P.C.B.	1	
17	1-564-722-11	CONNECTOR (6P)	1	

## 13. IC BLOCK DIAGRAM

### ■ DBL 1011

#### • BLACK DIAGRAM



#### • ELECTRICAL CHARACTERISTICS

##### 1. DC CHARACTERISTICS ( $V_{CC} = 5V$ , Terminal voltage at no signal)

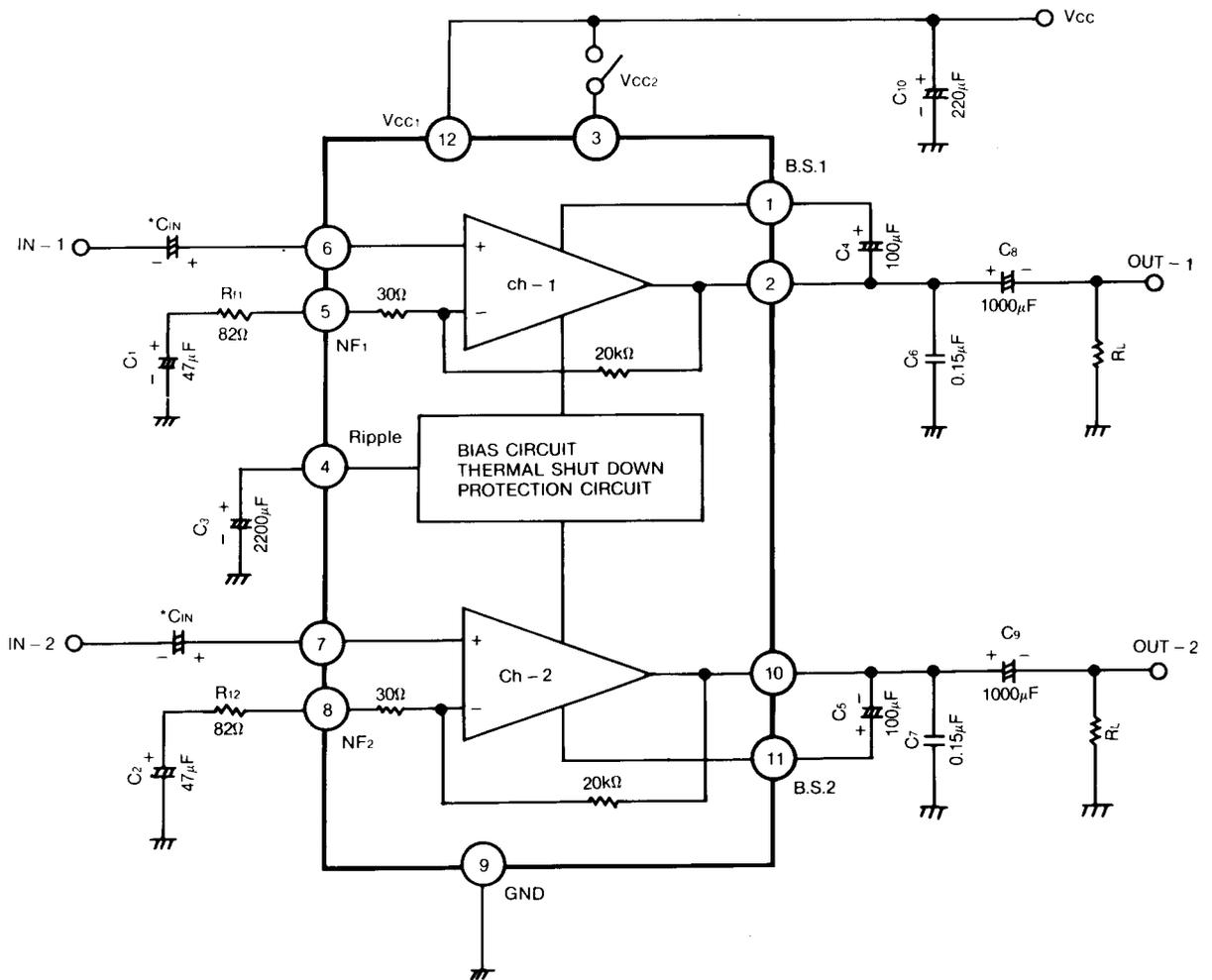
ITEM	SYMBOL	TYP.		UNIT
		AM	FM	
Terminal 1 Voltage (AM MIX IN)	$V_1$	1.5	0	V
Terminal 2 Voltage (AM MIX BYPASS)	$V_2$	1.5	0	V
Terminal 3 Voltage (AM OSC)	$V_3$	2.3	2.3	V
Terminal 4 Voltage (Reg)	$V_4$	2.3	2.3	V
Terminal 5 Voltage (AM IF OUT)	$V_5$	1.0	0.9	V
Terminal 6 Voltage (Meter OUT)	$V_6$	1.0	0.9	V
Terminal 7 Voltage (LED)	$V_7$	—	—	V
Terminal 8 Voltage (GND)	$V_8$	0	0	V
Terminal 9 Voltage (DET OUT)	$V_9$	1.4	1.5	V
Terminal 10 Voltage ( $V_{CC}$ )	$V_{10}$	5.0	5.0	V
Terminal 11 Voltage (FM DET)	$V_{11}$	5.0	5.0	V
Terminal 12 Voltage (AM IF BYPASS)	$V_{12}$	1.5	1.5	V
Terminal 13 Voltage (AM IF IN)	$V_{13}$	1.5	1.5	V
Terminal 14 Voltage (FM IF BYPASS)	$V_{14}$	1.5	1.5	V
Terminal 15 Voltage (FM IF IN)	$V_{15}$	1.5	1.5	V
Terminal 16 Voltage (AM MIX OUT)	$V_{16}$	5.0	5.0	V

**2. AC CHARACTERISTICS**  $T_a = 250^{\circ}\text{C}$ ,  $V_{cc} = 5\text{V}$ , FM:  $f = 10.7\text{MHz}$ ,  $\Delta f = \pm 22.5\text{ kHz}$ ,  $f_m = 400\text{Hz}$   
 AM:  $f = 1\text{ MHz}$ ,  $\text{Mod} = 30\%$ ,  $f_m = 400\text{Hz}$

CHARACTERISTICS		SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current		$I_{cc(1)}$	1	FM $V_{IN} = 0$	—	10	15	mA
		$I_{cc(2)}$		AM $V_{IN} = 0$	—	7	10	
FM	Input Limiting Voltage	$V_{IN(lim)}$	1	-3DB Limiting	—	40	46	$\text{dB}\mu$
	Recovered Output Voltage	$V_{OD}$	1	$V_{IN} = 66\text{dB}\mu\text{V}$	57	85	114	$\text{mV}_{rms}$
	Signal to Noise Ratio	S/N	1	$V_{IN} = 80\text{dB}\mu\text{V}$	—	65	—	dB
	Total Harmonic Distortion	THD	1	$V_{IN} = 80\text{dB}\mu\text{V}$	—	0.05	—	%
	AM Rejection Ratio	AMR	1	$V_{IN} = 80\text{dB}\mu\text{V}$	—	38	—	$\text{dB}\mu$
	Meter Drive Voltage	$V_M$	1	$V_{IN} 100\text{dB}\mu\text{V} 1$	16	1.75	1.9	V
	Lamp ON Sensitivity	$V_L$	1	$I_L = 1\text{mA}$	—	46	52	dB
AM	Gain	$G_V$	1	$V_{IN} = 26\text{dB}\mu\text{V}$	20	30	60	$\text{mV}_{rms}$
	Recovered Output Voltage	$V_{OD}$	1	$V_{IN} = 60\text{dB}\mu\text{V}$	65	95	125	$\text{mV}_{rms}$
	Signal to Noise Ratio	S/N	1	$V_{IN} = 60\text{dB}\mu\text{V}$	—	47	—	dB
	Total Harmonic Distortion	THD	1	$V_{IN} = 60\text{dB}\mu\text{V}$	—	1.0	—	%
	Meter Drive Voltage	$V_M$	1	$V_{IN} = 100\text{dB}\mu\text{V}$	1.6	1.75	1.9	V
	Lamp ON Sensitivity	$V_L$	1	$I_L = 1\text{mA}$	—	32	—	$\text{dB}\mu$
	Local OSC Stop Voltage	$V_{stop}$	1	$R_{DUMP} =$	—	1.5	—	
Pin ⑤ Output Resistance		$R_{O9}$	—	$F = 1\text{kHz}$	—	3.0	—	$\text{k}\Omega$

■ KIA 7282AP

• TEST CIRCUIT AND BLOCK DIAGRAM



\* This IC can be used without coupling capacitor ( $C_{in}$ ). If volume slide noise occurred by input offset voltage is undesirable, it needs to use the capacitor ( $C_{in}$ ).

• ELECTRICAL CHARACTERISTICS

(Unless otherwise specified,  $V_{CC} = 9V$ ,  $R_L = 4\Omega$ ,  $g = 600\Omega$ ,  $f = 1kHz$ ,  $T_a = 25^\circ C$ )

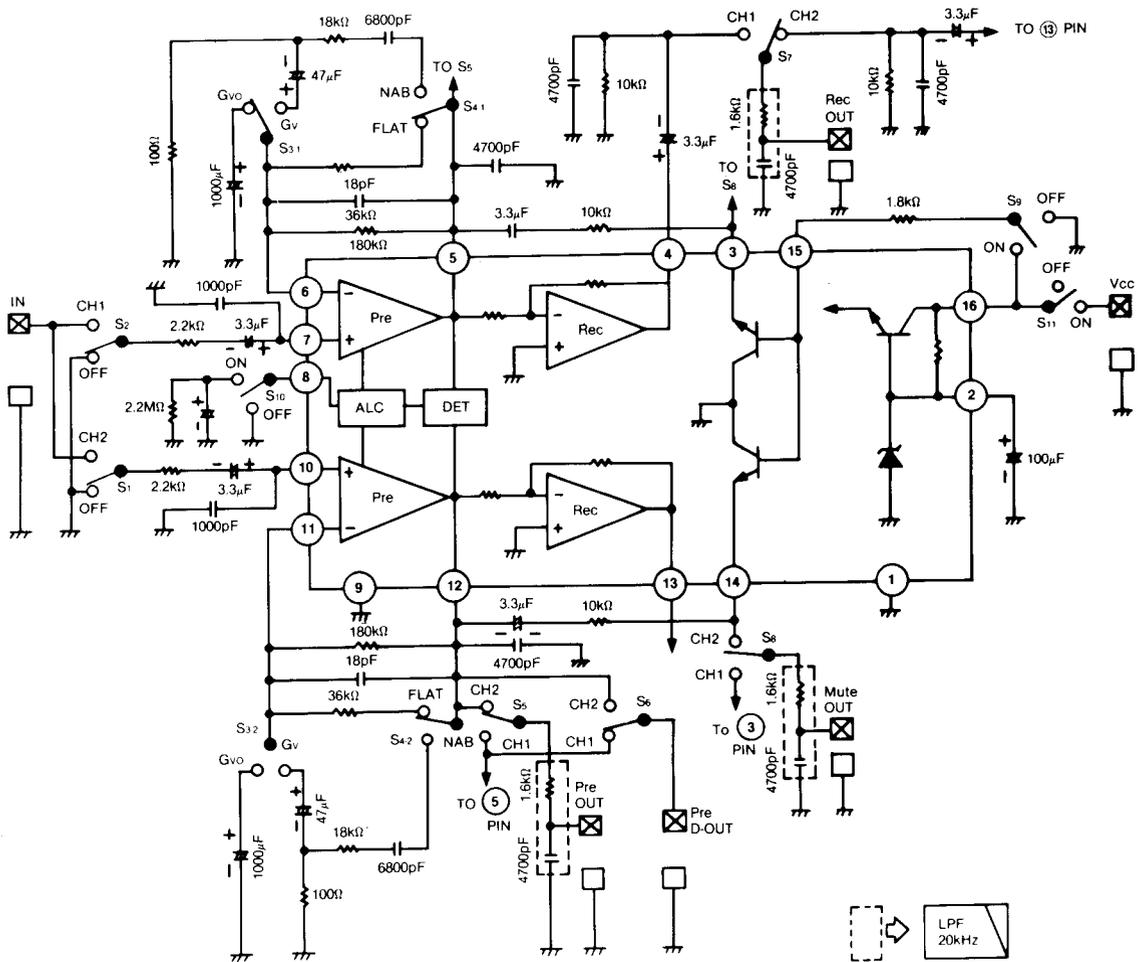
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	$I_{CCQ}$		$V_{in} = 0$	—	19	45	mA
Output Power	$P_{our}$ (1)		THD = 10%	2.0	2.5	—	W
	$P_{our}$ (2)		THD = 10%, $V_{CC} = 12V$	—	4.6	—	
Total Harmonic Distortion	THD		$P_{our} = 1W/CH.$	—	0.25	1.0	%
Voltage Gain	$G_V$ (1)		$R_f = 82\Omega$ $V_{our} = 0.775V_{rms}$	43	45	47	dB
	$G_V$ (2)		$R_f = 0, V_{our} = 0.775V_{rms}$	—	56	—	
Input Resistance	$R_{IN}$		—	—	30	—	k $\Omega$
Output Noise Voltage	$V_{NO}$		$R_g = 10k\Omega$ $BW = 20Hz \sim 20kHz$	—	0.3	1.0	mV $_{rms}$
Ripple Rejection Ratio	R.R.		$R_g = 600\Omega$ $F_{ripple} = 100Hz$	—	54	—	dB
Cross Talk	C.T.		$R_g = 10k\Omega$ , Amp1 $\leftarrow$ 2 $V_{our} = 0dBm$ , $f = 1kHz$	—	45	—	dB
Input Offset Voltage	$V_5, V_7$		—	—	20	60	mV

• TYPICAL DC VOLTAGE OF EACH TERMINAL ( $V_{CC} = 9V$ ,  $T_a = 25^\circ C$ )

TERMINAL No.	1	2	3	4	5	6	7	8	9	10	11	12
DC Voltage (V)	8.2	4.5	$V_{CC}$	8.9	0.6	0.01	0.01	0.6	GND	4.5	8.2	$V_{CC}$

\* ③ pin is connected to  $V_{CC}$ .

• TEST CIRCUIT AND BLOCK DIAGRAM



• **ELECTRICAL CHARACTERISTICS**

(Unless otherwise specified,  $V_{CC} = 9V$ ,  $f = 1\text{ kHz}$ ,  $T_a = 25^\circ C$ )

CHARACTERISTICS	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	$I_{CCQ}$	1	$V_{IN} = 0$	—	8.5	10.5	mA
Open Loop Voltage Gain	$G_{VO}$	1	$V_{IN} = 80\text{dBm}$	65	78	—	dB
Max. Output Voltage	$V_{OM(1)}$	1	THD = 1%	0.5	0.8	—	$V_{rms}$
Total Harmonic Distortion	THD(1)	1	$V_O = 0.2V_{rms}$	—	0.15	0.5	%
Output Noise Voltage	$V_{NO}$	1	B.P.F. NAB $R_g = 2.2k\Omega$ 30Hz ~ 20kHz	—	0.26	0.6	$mV_{rms}$
Cross Talk	C.T.	1	$R_g = 2.2k\Omega$	47	60	—	dB
Closed Loop Voltage Gain	$G_V$	1	$R_L = 10\Omega$	12.7	14.7	16.7	dB
Max. Output Voltage	$V_{OM(2)}$	1	THD = 1%	2.0	2.5	—	$V_{rms}$
Total Harmonic Distortion	THD(2)	1	$V_O = 1.5V_{rms}$	—	0.2	—	%
ALC Range (Note)	$R_{ALC}$	1	$V_{IN} = 60\text{dB}$ , $R_{IN} = 2.2k\Omega$	—	45	—	dB
Total Harmonic Distortion (ALC)	THD (ALC)	1	$V_{IN} = -20\text{dBm}$ $R_{IN} = 2.2k\Omega$ $R_L = 10k\Omega$	—	0.3	1.0	%
ALC Voltage	$V_{O(ALC)}$	1	$V_{IN} = -20\text{dBm}$ , $R_{IN} = 2.2k\Omega$ , $R_L = 10k\Omega$	0.9	1.1	1.42	$V_{rms}$
Muting Attenuation	ATT	1		45	55	—	dB
ALC Balance	$B_{ALC}$	—	$V_{IN} = -20\text{dBm}$	—	0	2	dB

• Note: Input voltage range from  $V_{IN} = -60\text{dB}$  to output voltage  $V_{OUT} = 3\text{dB up}$ .

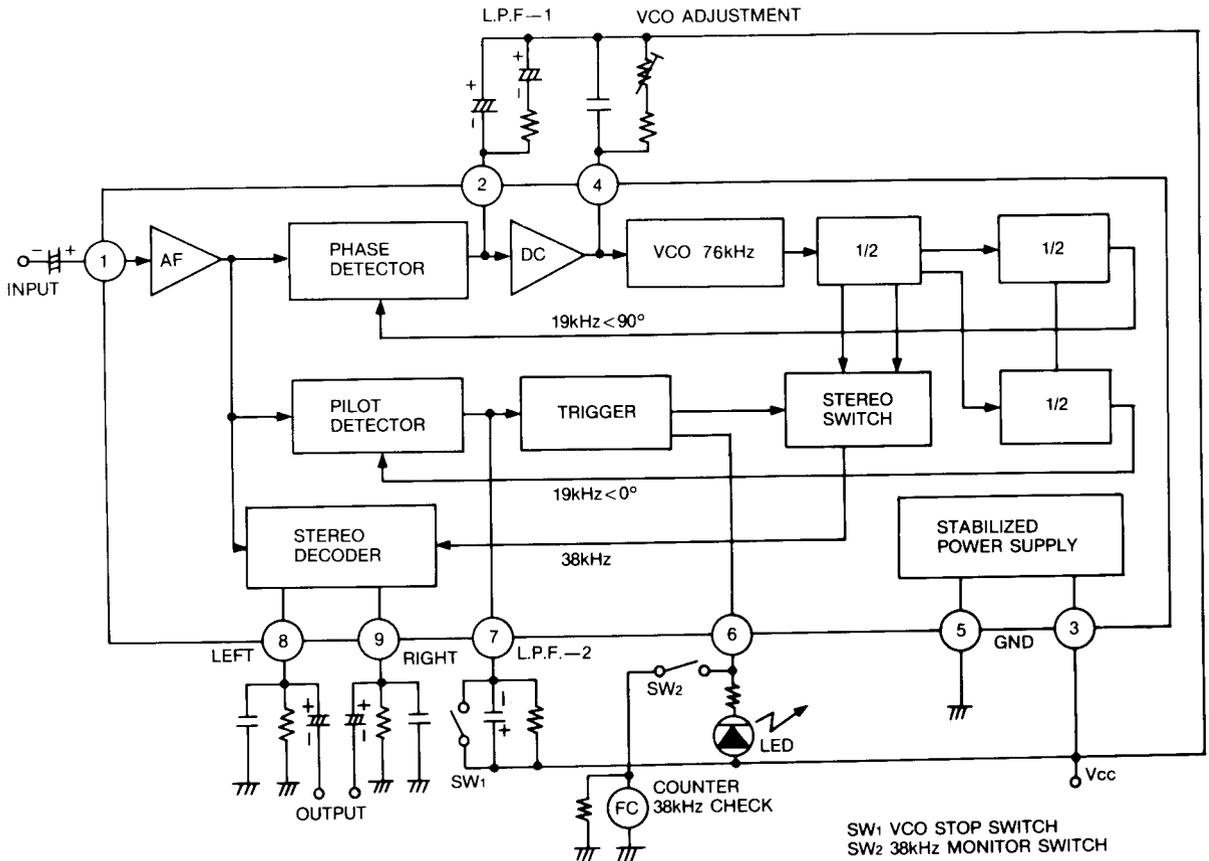
■ DBL 1009

• ELECTRICAL CHARACTERISTICS

DC CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ ,  $V_{cc} = 8\text{V}$ , Terminal Voltage at No Signal)

TERMINAL	ITEM	SYMBOL	TYP.	UNIT
KIA 7343AP		KIA 7343AP		
1	INPUT	$V_1$	3.5	V
2	L.P.F. 1	$V_2$	6.6	V
3	$V_{cc}$	$V_3$	8.0	V
4	VCO	$V_4$	7.1	V
5	GND	$V_5$	0	V
6	ST. LAMP	$V_6$	—	V
7	L.P.F. 2	$V_7$	7.4	V
8	L-CH OUTPUT	$V_8$	4.0	V
9	R-CH OUTPUT	$V_9$	4.0	V

• BLACK DIAGRAM

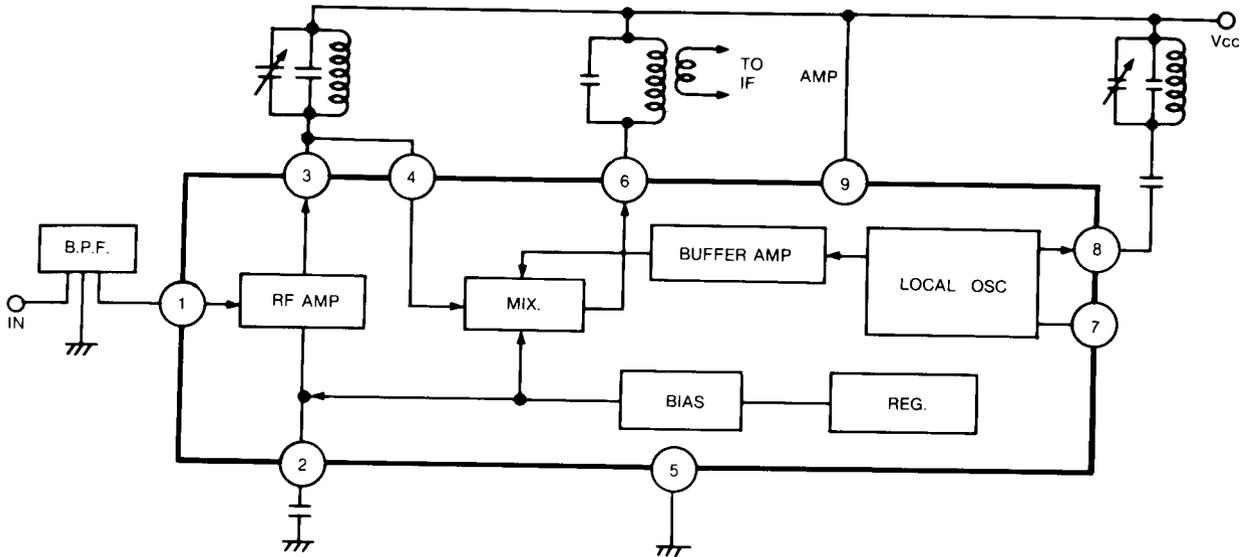


• ELECTRICAL CHARACTERISTICS (AC)

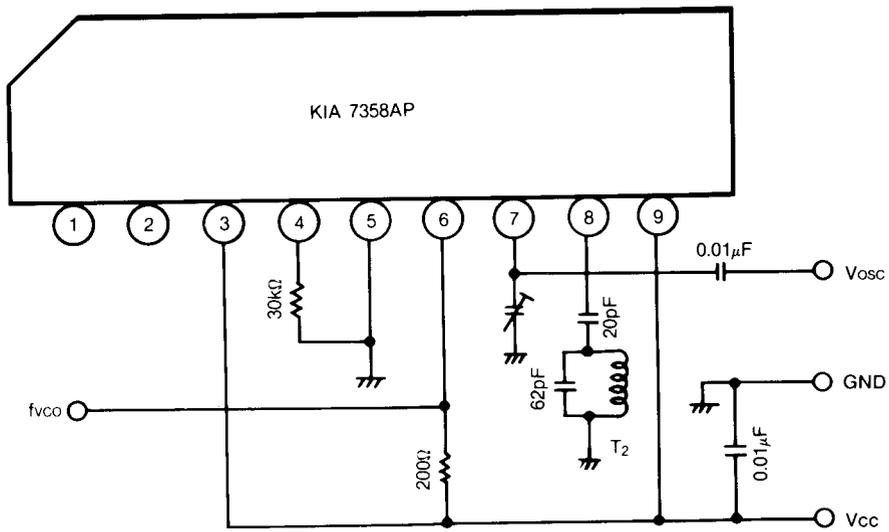
(Unless otherwise specified,  $T_a = 25^\circ\text{C}$ ,  $V_{CC} = 8\text{V}$ ,  $f = 1\text{kHz}$ )

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Supply Current		$I_{CC(1)}$	—	at Lmap off	—	11	18	mA	
Input Resistance		$R_{IN}$	—	—	—	33	—	$k\Omega$	
Max. Composite Signal Input Voltage		$V_{IN(MAX)}$ (STEREO)	—	L + R = 90%, P = 10%	—	900	—	$mV_{rms}$	
Separation		Sep.	—	L + R = $180mV_{rms}$ , P = $20mV_{rms}$	36	45	—	dB	
Total Harmonic Distortion	Monaural	THE (MONAURAL)	—	$V_{IN} = 200mV_{rms}$	—	0.08	0.3	%	
	Stereo	THE (STEREO)	—	L + R = $180mV_{rms}$ , P = $20mV_{rms}$	—	0.08	—	%	
Voltage Gain		Gv	—	$V_{IN} = 200mV_{rms}$	-2.0	0.5	2.0	dB	
Channel Balance		C.B.	—	$V_{IN} = 200mV_{rms}$	—	0	1.5	dB	
Lamp Sensitivity	ON	$V_L(ON)$	—	Pilot Input	—	10	15	$mV_{rms}$	
	OFF	$V_L(OFF)$	—		2	6	—	$mV_{rms}$	
Stereo Lamp Hysteresis		$V_H$	—	To Turn Off from Lamp Turn on	—	3	—	$mV_{rms}$	
Capture Range		C.R.	—	P = $20mV_{rms}$	—	$\pm 3$	—	%	
Carrier Leak	19kHz	C.L.	—	L + R = $180mV_{rms}$ , P = $20mV_{rms}$	—	34	—	dB	
	38kHz				—	42	—		
SCA Rejection Ratio		SCA Rej.	—	L + R = $160mV_{rms}$ , P = $20mV_{rms}$ SCA = $20mV_{rms}$ , $F_{SCA} = 67\text{kHz}$	—	70	—	dB	
Signal to Noise Ratio		S/N	—	$V_{IN} = 180mV_{rms}$ , $f = 1\text{kHz}$ $R_g = 620\Omega$	—	74	—	dB	
Output Current (Pin ⑧, Pin ⑨)		$I_{OUT}$	—	$R_L = 3.3k\Omega$	$V_{CC} = 3.5\text{V}$	—	0.3	0.6	mA
					$V_{CC} = 8.0\text{V}$	—	1.2	1.8	
					$V_{CC} = 12\text{V}$	—	1.4	2.1	

■ KIA 7358AP (DBL1017)



• TEST CIRCUIT (I)



• ELECTRICAL CHARACTERISTICS

( $V_{CC}=5V$ ,  $f=83MHz$ ,  $f_m 1kHz$ ,  $\Delta f=22.5kHz$  dev.,  $T_a=25^\circ C$ )

CHARACTERISTIC		SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current		$I_{CC}$	2	$V_{IN}=0$	—	5.2	8.0	mA
-3dB Limiting Sensitivity		$V_{IN(lim)}$	2		—	11.0	—	dB $\mu$
Quiescent Sensitivity		$Q_S$	2		—	11.0	—	dB $\mu$
Conversion Gain		$G_C$	—	$f_{osc}MHz$	90	165	220	mV $_{rms}$
① Pin Impedance	Parallel Input Resistance	$r_{ip(1)}$	3	f = 83 MHz	—	57	—	$\Omega$
③ Pin Impedance	Parallel Output Resistance	$r_{op(3)}$	3		—	25	—	k $\Omega$
	Parallel Output Capacitance	$C_{op(3)}$			—	2.0	—	pF
④ Pin Impedance	Parallel Input Resistance	$r_{ip(4)}$	3		—	2.7	—	k $\Omega$
	Parallel Input Capacitance	$C_{ip(4)}$			—	3.3	—	pF
⑥ Pin Impedance	Parallel Output Resistance	$r_{op(6)}$	3		f = 10.7 MHz	—	100	—
	Parallel Output Capacitance	$C_{op(6)}$		—		4.8	—	pF
Local OSC Stop Voltage		$V_{stop}$	1		—	0.9	1.3	V

## 14. PART LIST

### ■ ASSY-CODE: ACD-4300

PART-CODE	PART-NAME	PART-DESC	Q'TY	LOCATION
5L00000581	COIL BIAS DSC	80KHz	1.0000	L602
5LF100K642	COIL FILTER	10UH K FIXED	1.0000	L701
5L00000266	COIL FM OSC	LMY-014-137	1.0000	L103
5LR0000267	COIL FM RF	LMY-014-138	1.0000	L102
5LT333K271	COIL TRAP	S-074-202 33MH	2.0000	L601L, L601R
9CD8860600	CONN AS	1P DIA 1007 #26 300MM BK	1.0000	W901
9CD8861800	CONN AS	1P DIA AWG26 450MM RED	1.0000	W501
9CD8862100	CONN AS	6P AWG28 UL2547 × 2 250M/M	1.0001	CN607
9CD88625U0	CONN AS	PH6P 200MM WH	1.0000	CN703
9CD8870300	CONN AS	AWG30 8P 200MM WH PH	1.0000	CN701
9CD8870400	CONN AS	AWG30 8P 200MM RD PH	1.0000	CN702
9CD8871003	CONN AS	AWG26 2P 450MM YW	2.0002	CN604, CN903
9CD8871600	CONN AS	#26 9P RIBBON 250MM	1.0001	CN605
9CD8872400	CONN AS	#22 1P SPK WH 500MM	1.0000	W801
9CD8872500	CONN AS	#22 1P SPK RD 300MM	1.0000	W802
9CD8872600	CONN AS	#22 1P SPK BK 550MM	1.0000	W804
9CD8872700	CONN AS	#22 1P SPK BK 300MM	1.0000	W803
9CD8888800	CONN AS	AWG26 11P 450MM	1.0001	CN101
9CD8888900	CONN AS	AWG26 13P 300MM	1.0001	CN601
9CD8889000	CONN AS	AWG26 3P 200MM	1.0001	CN904
9CD8889300	CONN AS	AWG26 11P 350MM	1.0001	CN708
9CD8889400	CONN AS	AWG26 9P 400MM	1.0001	CN707
9CD8889500	CONN AS	AWG26 5P 300MM	1.0001	CN 709
9CD8892500	CONN AS	#26 7P 200MM BOARD IN	1.0001	CN501
9718884200	CONN AS	AWG22 2P 400MM RIBBON	1.0001	CN901
9718887300	CONN AS	AWG26 1P 150MM BK EGG-DIA	1.0000	W001
97388555U0	CONN AS	2P AWG26 UL1007 500M/M	1.0001	CN102
9738855600	CONN AS	AWG28 7/0.12 3P 200 2547	1.0001	CN606
9738857000	CONN AS	AWG26 7/0.12 2P 250MM	1.0001	CN704
9768863101	CONN AS	4P 300MM BOARD IN TYPE	2.0002	CN302, CN902
9768876100	CONN AS	#28 2547 300MM SHIELD	1.0001	CN401
9768876700	CONN AS	#22 1P 250MM BK DIAMOND	1.0000	W07
9CD6000300	DECK MECHANISM	KSM-1508-DM	1.0000	00240
9736007100	DECK MECHANISM	TN-521ZSW-244	1.0000	00010
DKDS2236--	DIODE	KDS-2236	1.0000	D103
DKN4001A--	DIODE	KN4001A	1.0000	D606

PART-CODE	PART-NAME	PART-DESC	Q'TY	LOCATION
DKN4148---	DIODE	KN4148	12.0000	D101, D102, D201, D202 D301, D302, D501, D601 D602, D603, D604, D605
DKSS133---	DIODE	1SS133	3.0000	D701, D703, D704
DRL202----	DIODE	RL202	4.0000	D901, D902, D903, D904
DKTZ8R2A--	DIODE ZENER	MTZ-8.2	1.0000	D905
DKTZ9R1A--	DIODE ZENER	MWZ-9.1	1.0000	D702
TKTK117Y--	FET	KTK117 (Y)	2.0000	Q705, Q706
5PE107MA5A	FILTER CERA	SFE 10.7MA5A RED	1.0000	CF101
5PU455B---	FILTER CERA	SFU-455B	1.0000	CF102
5BPWB8---	FILTER FM BAND	BPWB8	1.0000	BF101
5F1GB2522M	FUSE	UL/CSA MF51 2.5A 250V NM	1.0000	F903
1CXA1081M-	IC	CXA1081M	1.0000	IC701
1CXA1082BQ	IC	CXA1082BQ	1.0000	IC704
1DBL1009--	IC	DBL1009	1.0000	IC201
1DBL1011--	IC	DBL1011 FM/AM IF	1.0000	IC102
1DBL1014--	IC	DBL1014	1.0000	IC602
1DBL1017--	IC	DBL1017 FM FRONT END	1.0000	IC101
1DBL1045--	IC	DBL1045	1.0000	IC601
1KA9257---	IC	KA9257	2.0000	IC702, IC703
1KS5990---	IC	KS5990	1.0000	IC705
1K1A6282K-	IC	KIA6282K	1.0000	IC501
1MC3403N--	IC	MC3403N	1.0000	IC708
1CXP5024H-	IC CPU	CXP-5024H062Q	1.0000	IC709
1LC7881---	IC DAC	LC7881	1.0000	IC707
1DBL7805	IC REGULATOR	DBL 7805	1.0000	IC716
5107AWH139	IFT AM DET	7x7 WHITE HMJ-020-017	1.0000	T104
5107ARD336	IFT AM OSC	7x7 RD 10000A01	1.0000	L031
5107AYW138	IFT AM TOP	HMJ-020-016 YW	1.0000	T102
5107FBL136	IFT FM DET	7x7 BLUE HMJ-020-014	1.0000	T103
5107FOR137	IFT FM DET	7x7 ORANGE HMJ-020-015	1.0000	T101
9766318110	JACK HEADPHONE	SHQ9075-01-040	2.0000	J301, J801
9716311100	JACK PHONE	SE-041-1	1.0000	J701
DCG630ATSC	LCD	CG630A-TSC (A)	1.0000	D704
D5LR54MC3-	LED	SLR-54MC3F	1.0000	D203
D5LR54VC3-	LED	SLR-54VC3F	1.0000	D906
RS01Y479J-	R M-OXIDE FILM	1W 4.7 OHM J	1.0000	R779
RV6217223-	R SEMI FIXED	VM6CK-PH (IS) 22KB	3.0000	RV702, RV703, RV704
RV6217473-	R SEMI FIXED	VM6CK-PH (IS) 47KB	1.0000	RV701
RV6417102-	R SEMI FIXED	VM6CK-PV 1K OHM B	1.0000	RV601
RV6417202-	R SEMI FIXED	VM6CK-PV 2K B	1.0000	RV705
RV6417502-	R SEMI FIXED	VM6CK-PV 5K B	1.0000	RV201

PART-CODE	PART-NAME	PART-DESC	Q'TY	LOCATION
5S70102214	SW MICRO	KMA-1214 P2 1C-2P	1.0000	S701
5S30402220	SW SLIDE	00420116B 4C-2P	2.0000	SW101, SW601
5S30603112	SW SLIDE	00630480 6C-3P	1.0000	SW401
5S30402109	SW SLIDE R/P	00420795 4C-2P	1.0000	SW602
5S40201153	SW TACT	KHH15906 2C-1P	9.0000	S702, S703, S704, S705 S706, S707, S708, S709 S710
2TP07245BR	TAPE OPP	0.072T × 45MM	1.0000	00040
2TQ00010CL	TAPE SCOTCH	W10	1.0000	00080
2TU07012CL	TAPE VINYL	0.07T × 12MM CLEAR	1.0000	00050
TKRC108M--	TR	KRC108M	3.0000	Q702, Q703, Q712
TKTC3198GR	TR	KTC3198-GR	3.0000	Q707, Q708, Q709
TKTD2058Y-	TR	KTD2058Y	1.0000	Q715
TZRA108M--	TR	KRA108M	1.0000	Q711
TZTA1266Y-	TR	KTA1266Y- (AUTO)	5.0000	Q202, Q502, Q604, Q605 Q714
TZTA1271Y-	TR	KTA1271Y	1.0000	Q701
TZTC28788-	TR	KTC2878-B (AUTO)	1.0000	Q717
TZTC3198GR	TR	KTC3198GR (AUTO)	13.0000	Q301, Q401L, Q402L Q403L, Q404L, Q601 Q602, Q704, Q710
TZTC3198Y-	TR	KTC3198Y- (AUTO)	6.0000	Q201, Q501L, Q503 Q603, Q713
TZTC3205Y-	TR	KTC3205Y	1.0000	Q901
5TPJ05700J	TRANS POWER	EI57 100V 50/60Hz JIS	1.0000	PT901
9717610800	VARICON POLY	2LXT-L5, R-116381	1.0000	VC101
5V1104560A	VR ROTATY	K162H00-100KA × 2	1.0000	VR502
5V2104536W	VR SLIDE	S102GNJ-100KW	1.0000	VR501
5V2203580B	VR SLIDE	S102GKJ 20KB × 2	3.0000	VR401, VR402, VR403
9718858500	WIRE AS	#26 7/0.16 BK 100 W/EGG	1.0000	W504
WP-4WH2517	WIRE LEAD 1007	AWG26 7/0.16 WH 10-250-10	1.0000	W503
W144RD1017	WIRE LEAD 1007	AWG26 7/0.16 RD 10-100-10	1.0000	W002

# ACD-4300 SERIES OPTION PARTS LIST

ACD-4300					MODEL	4300 KOREA	4315J JAPAN	4312Z	4313Z	4314M
PCB	LOCATION	ITEM	DESCRIPTION	BAND POWER DECK		FM/AM 110/220V, 60Hz	FM/AM 110V, 50/60Hz	LW 3 BAND	LW/MW/SW FM	MW/SW1 SW2/FM
TUNER PCB	BF101	FILTER BANDPASS	PFWB4		0		BPWB8	PFWB4	PFWB4	PFWB4
	C032	C CER	22PF		0		4PF	33PF	15PF	15PF
	C034	C STYRLO	50V 360PF		0		X	430PF	430PF	430PF
	C036	C CERA	6PF		0		X	0	0	0
	C106	C CERA	22PF		0		27PF	0	0	0
	C108	C CERA	223MF		0		X	0	0	0
	JW126	WIRE JUMPER	AWG22 10MM		0		X	0	0	0
	JW142	WIRE JUMPER	AWG22 5MM		0		X	X	X	X
	JW151	WIRE JUMPER	AWG22 5MM		X		0	X	X	X
	JW187	WIRE JUMPER	AWG22 5MM		0		X	0	0	0
	JW188	WIRE JUMPER	AWG22 5MM		X		0	X	X	X
	L031	COIL MW OSC	7.5 × 7.5 130MM (289)		0		7 × 7 RD 1000ADI (336)	0	0	0
	L101	COIL AM ANT	VAR 8 × 80 (698)		0		BAR 8 × 80 (697)	LW/MW (758)	LW/MW (758)	280μH (698)
	R105	R CARBON FILM	47K		0		X	0	0	0
	W002	WIRE LEAD 1007	AWG26 RD10-100-10		X		0	X	X	X
	VC101	VARICON POLY	P <sub>2</sub> S-22BPT		0		R-116381 2LXT-L5	P <sub>2</sub> S-22BPT	P <sub>2</sub> S-22BPT	P <sub>2</sub> S-22BPT
	L012	COIL LW OSC	185UH		X		X	0	0	12.4μH
	R031	R CARBON FILM	1/5 330MH J		X		X	0	0	0
	TC041	C-TRIMMER	20PF		X		X	0	0	X
	TC102	C-TRIMMER	20PF		X		X	0	0	0
	W003	WIRE LEAD	AWG26 7/0.16 10-100-10 RD		X		X	0	0	0
	JW185	WIRE JUMPER	AWG22 1/0.65		0		0	0	X	X
	C024	C-STYROL	50V 3300PF J		X		X	X	0	4700PF
	JW134	WIRE-JUMPER	AWG22 1/0.65		X		X	X	0	0
	JW161	WIRE-JUMPER	AWG22 1/0.65		X		X	X	0	0
	L022	COIL SW OSC	1.8μH		X		X	X0	1.2μH	
	L021	COIL SW ANT	1.95μH		X		X	X	0	1.5μH

ACD-4300				MODEL	4300 KOREA	4315J JAPAN	4312Z	4313Z	4314M
PCB	LOCATION	ITEM	DESCRIPTION	BAND POWER DECK	FM/AM 110/220V, 60Hz	FM/AM 110V, 50/60Hz	LW 3 BAND	LW/SW/MW FM	SW1/SW1 MW/FM
TUNER PCB	R022	R-CARBON FILM	1/4 22K OHM		X	X	X	0	39K
	TC302	TRIMMER	20PF 6φ		X	X	X	0	0
	C021	C-CERA	RH 10PF		X	X	X	0	0
	W004	WIRE LEAD	AWG26 7/0.16 10-100-10 WH		X	X	X	0	0
	C023	C-CERA	RH 15PF		X	X	X	0	27PF
	105	—	—		X	X	X	X	5mm JUMPER
	JW155	WIRE JUMPER	AWG22 1/0.65		X	X	X	X	0
	JW159	WIRE JUMPER	AWG22 1/0.65		X	X	X	X	0
	JW162	WIRE JUMPER	AWG22 1/0.65		X	X	X	X	0
	JW163	WIRE JUMPER	AWG22 1/0.65		X	X	X	X	0
	L011	COIL SW1 ANT	12.5μH		X	X	X	X	0
	R012	R CARBON FILM	39K OHM		X	X	X	X	0
	C013	C-CERA	SK 50V 270PF		X	X	270P		RH 10PF
	C014	C-STYROL	50V 330PF J		X	X	330P	330P	3900PF
	C036	C-CERA	RH 50V 6PF		0	0	X	X	X
	JW101	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	0
	JW111	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	0
	JW112	WIRE JUMPER	AWG22 1/0.65 5		X	X	0	0	X
	JW116	WIRE JUMPER	AWG22 1/0.65 5		X	X	0	0	0
	JW117	WIRE JUMPER	AWG22 1/0.65 5		0	0	X	X	X
	JW125	WIRE JUMPER	AWG22 1/0.65 10		0	0	X	X	X
	JW127	WIRE JUMPER	AWG22 1/0.65 5		X	X	0	0	0
	JW128	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	X
	JW129	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	0
	JW131	WIRE JUMPER	AWG22 1/0.65 10		0 X	0		X	X
	JW132	WIRE JUMPER	AWG22 1/0.65 10		0	0	X	X	X
	JW133	WIRE JUMPER	AWG22 1/0.65 10		0	0	X	X	X
	JW138	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	0
	JW141	WIRE JUMPER	1/6 33 OHM J		0	0	X	X	X
	JW143	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	0
JW144	WIRE JUMPER	AWG22 1/0.65 10		X	X	0	0	0	

ACD-4300				MODEL	4300 KOREA	4315J JAPAN	4312Z	4313Z	4314M
PCB	LOCATION	ITEM	DESCRIPTION BAND POWER DECK	2 BAND 110/220V, 60Hz	2 BAND 110V, 50/60Hz	LW 3 BAND 220V 50Hz	LW/SW/ MW/FM 220V/50Hz	SW1/SW2/ MW/FM 110/220V 60Hz	
TUNER PCB	JW147	WIRE JUMPER	AWG22 1/0.65 10	X	X	0	0	0	
	JW148	WIRE JUMPER	AWG22 1/0.65 5	0	0	X	X	X	
	JW152	WIRE JUMPER	AWG22 1/0.65 10	X	X	0	0	0	
	JW154	WIRE JUMPER	AWG22 1/0.65 10	X	X	0	0	0	
	JW156	WIRE JUMPER	AWG22 1/0.65 10	0	0	X	X	X	
	JW157	WIRE JUMPER	AWG22 1/0.65 5	X	X	0	0	0	
	JW130	WIRE JUMPER	AWG22 1/0.65 10	0	0	0	0	X	
	SW101	SW SLIDE	4C-2P	0	0	8C-4P	8C-4P	8C-4P	
	C041	C-CERA	68PF	-	-	-	0	4PF	
DECK PCB	CN602	CONN AS	AWG26 3P 150MM	0	X	X	X	X	
	CW602	CONN AS	AWG26 3P 150MM	0	X	X	X	X	
	CW603	CONN AS	AWG26 3P 200MM	0	X	X	X	X	
	C632	C ELECTRO	25V 47MF	0	X	X	X	X	
	R642	R CARBON FILM	1/4 1K	0	X	X	X	X	
POWER PCB	FC901	CLIP FUSE	FC-5N	0	X	X	X	0	
	FC902	CLIP FUSE	FC-5N	0	X	X	X	0	
	FC903	CLIP FUSE	FC-5N	X	0	0	0	X	
	F901	FUSE	KS 250V 0.5A	0	X	X	X	0	
	F902	FUSE	KS 250V 0.25A	0	X	X	X	0	
	F903	FUSE	UL/CSA, 250V 2.5A	X	0	0	0	X	
	JW512	WIRE JUMPER	AWG22 10MM	0	X	X	X	0	
	PT901	TRANS POWER	EI = 57 110/220V, 60Hz	5TPK0570KS	5TPJ05700J	5TPV05600V	←	TRPK0570KS	
	S901	SW SLIDE	00120353 VTG SEL	0	X	X	X	0	
	J901	SOKET AC	2PIN HSC-1466	0	2PIN HSC-1463	HSC-1466	HSC-1466	HSC-1466	
	CD001	CORD AC	300V 3A KKS-15	0	KP-211 VF/KS-21	KKP-4190 E.C	KKP-4190 E.C		
	AD001	ADAPTER	(15A 300V)	0	X	X	X	0	
	LCD PCB	CN603	CONN AS	AWG 26 3P 200MM	0	X	X	X	X
D607		LED	SLR-54MC3F	0	X	X	X	X	
D608		LED	SLR-54MC3F	0	X	X	X	X	
C632		CONN AS	AWG26 3P, 200mm	0	X	X	X	X	
CN602		CONN AS	AWG 26 3P, 150mm	0	X	X	X	X	
R642		R-CARBON FILM	1/4W 1K OHM J	0	X	X	X	X	