

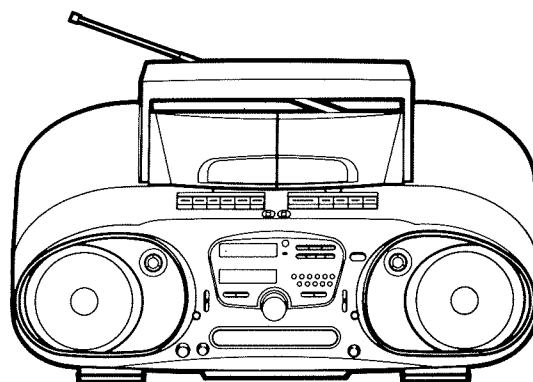
# Service Manual

CD/RADIO CASSETTE RECORDER

ACD-7310/7300

120390 ✓

120391 ✓



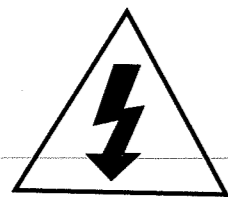
DAEWOO ELECTRONICS CO., LTD.

DAEWOO

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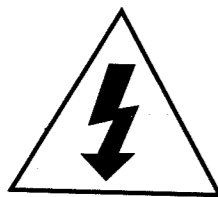
**WARNING:** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,  
DO NOT REMOVE COVER (OR BACK).  
NO USER SERVICEABLE PARTS INSIDE.  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PERSENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

**CAUTION**

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

**LASER SAFETY**

THIS UNIT EMPLOYS A LASER. ONLY A QUALIFIED SERVICE PERSONNEL SHOULD THE COVER OF ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

**CAUTION:** USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

**CAUTION :** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION :** POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

**1. SPECIFICATIONS**

AM Performance Specifications

**General**

Standard modulation for specifications . . . . . 400Hz, 30%  
Reference power output . . . . . 50 mW

Test Item	Unit	Nominal	Limit
Intermediate frequency . . . . .	(kHz)	450	± 4
Frequency coverage . . . . .	(kHz)	530-1720	
Usable sensitivity (S/N=20dB) 600/1000/1400kHz . .	(dBμ)	56	62
S/N at 1000 kHz, (5mV/m) . . . . .	(dB)	40	30
AGC figure of merit at 1000 kHz, 100mV/m . . . . .	(dB)	40	36
IF rejection ratio at 600 kHz . . . . .	(dB)	50	40
Image rejection ratio at 1400 kHz . . . . .	(dB)	35	25
THD at 50mW, 1000 kHz, (5mV/m) . . . . .	(%)	1	3
-6dB bandwidth at 1000 kHz . . . . .	(kHz)		5-15
Whistle modulation at 2nd and 3rd, (1mV/m-100 mV/m) . . . . .	(%)	5	10
Fidelity, at -6dB 100 Hz-0 dB . . . . .	MIN		100-1800
Overload distortion at 1000 kHz, 100mV/m (Mod. voltage 80%, dist 5%) . . . . .	(dB)	100	94
Osc. fall out . . . . .	(V)	-	8
Dial calibration error at 600 kHz . . . . .	(%)		5
1400 kHz . . . . .	(%)		5
Antenna . . . . .	Ferrite bar antenna		

**PRODUCT SAFETY NOTICE**

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by a  $\Delta$  in the schematic diagrams and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

### 1.2 LW

NO	TEST ITEMS	FREQ.	UNIT	NOMINAL	LIMIT	REMARKS
1	Tuning Range		kHz		(145 +/- 5)-(281 +/- 5)	
2	Intermediate Frequency		kHz	450	±3	
3	Max. Sensivity	@ 160 kHz	dB/m		60	
		@ 210 kHz	dB/m		60	
		@ 250 kHz	dB/m		60	
4	20 dB Quieting Sens	@ 160 kHz	dB/m	60	67	
		@ 210 kHz	dB/m	60	67	
		@ 250 kHz	dB/m	60	67	
5	S/N Radio 74 dB/m Input	@ 250 kHz	dB	35	30	
6	6dB Bandwidth	@ 250 kHz	kHz		5-10	
7	Selectivity +/- 10 kHz	@ 250 kHz	dB	20	15	
18	If Rejection	@ 250 kHz	dB	45	35	
19	Image Rejection	@ 250 kHz	dB	45	35	
10	A.G.C.	@ 250 kHz	dB	36	30	
11	Overload Capacity 80% Mod	@ 250 kHz	dB/m	100	94	
12	Distortion 30% Mod. 100dB/m Input	@ 250 kHz	%	1	3	
13	Hum/Noise Output	@ Vol Min @ 250 kHz	mV	1	3	
		@ Vol Max @ 250 kHz	mV			
14	Hum Modulation	@ 250 kHz	dB	40	30	

### FM Performance Specifications

General	
Standard modulation frequency	1KHz, 75 kHz deviation at mono
Standard modulation level	1000 Hz, 75 kHz deviation at stereo
Reference power output	50mW (L + R = 45%, L-R = 45%, PILOT = 10%)

Test Item	Unit	Nominal	Limit
Intermediate frequency	(MHz)	10.7	10.7 ± 0.3
Frequency coverage	(MHz)	87-108.5	88-108
Usable sensitivity (S/N = 30dB) 90/98/106 MHz	(dBμ)	16	26
-3dB limiting sensitivity, 98, MHz	(dBμ)	18	26
S/N at 98 MHz (1mV/m)	(dB)	50	42
Image rejection ration at 106 MHz	(dB)	30	20
IF rejection ratio at 90 MHz	(dB)	60	50
THD at 50mW, 98 MHz	(%)	1	3
AM suppression at 1mV	(dB)	40	30
De-emphasis response, 400Hz = 0dB			
22.5 kHz DEV			
100 Hz	(dB)	-1	±6
10 kHz	(dB)	-13	±6
Osc. minimum voltage	(V)	-	6
-3dB AFC hold range at 98 MHz, 60 dB	(kHz)	±250	±150/±350
Overload distortion			
75 kHz deviation, 100mV	(%)	5	10
100 Hz Mod	(dB)	30	20
Stereo separation, 1 kHz Mod	(dB)	30	20
10 kHz Mod	(dB)	20	15

### Compact Disc Performance Specifications

General	
Sampling frequency	44.1 kHz
Quantization number	16 bit linear/channel
Transmission bit rate	4.3218 Mb/sec.
Transmission clock	8.6432 MHz
Error correction	CIRC C1, C2 double correction
Pick up	
System	Object lens drive type optical pickup
Object lens drive system	2-dimensional parallel drive type
Optical source	Semiconductor laser
Wave length	780 mm
Tracking system	3 beam tracking serve type
Others	
Digital filter	2 times over sampling type
D/A converter	R-2R ladder type

### Cassette Record/Playback Section

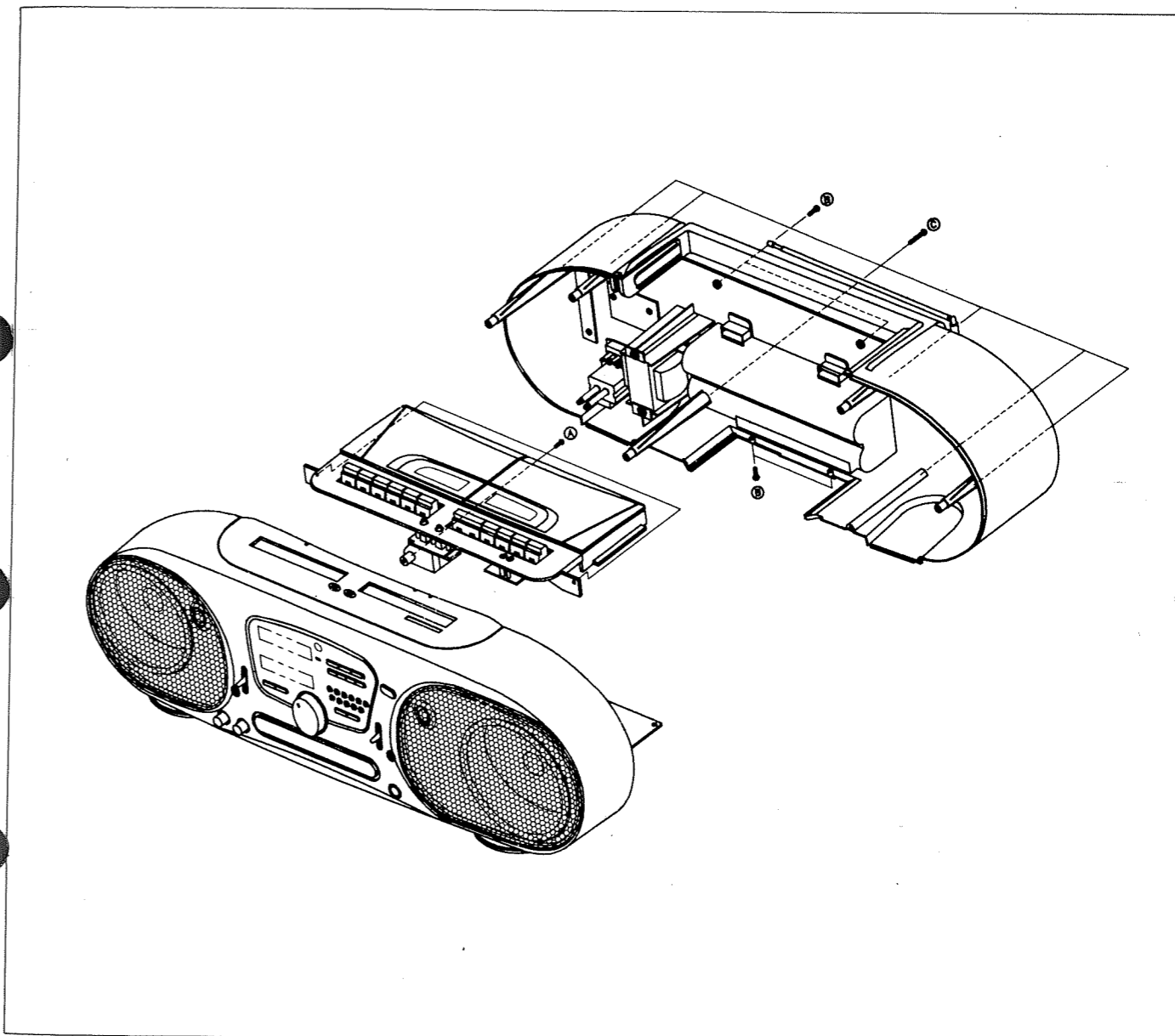
NO	TEST ITEMS		UNIT	NOMINAL	LIMIT	REMARKS
1	TAPE SPEED	MTT-111	%		+3, -2	
2	WOW & FLUTTER WRMS	MTT-111	%	0.2	0.35	
3	TAPE WINDING TIME	F. FWD	TDK C600	SEC	120	
		REWIND	TDK C600	SEC	120	
4	PLAY TORQUE		G-cm		30-50	
5	F. FWD/REW TORQUE		g-cm		55-120	
6	POWER OUTPUT @10% T.H.D	MTT-212E	W		3.5	
7	S/N RATIO (UNWEGHTED)	MTT-212E	dB	45	33	
8	FREQ. RESPONSE	@ 125 Hz	MTT-257CX	dB		+/- 6
		@ 8 kHz	MTT-257C	dB		+/- 6
9	DISTORTION THD AT REF. O/P	MTT-118	%	1	3	
10	HUM/NOISE OUTPUT	@ VOL. MIN		mV	1	3
		@ VOL. MAX		mV		50
11	CHANNEL BALANCE	MTT-118	dB		3	
12	SEPARATION	MTT-141	dB	35	30	
13	CROSSTALK WITH 1 kHz B.P.F.	MTT-121	dB	40	35	
14	SPEED DIFFERENCE (DECK A & B)	MTT-111	Hz		+70/-40	
15	FAILOUT VOLTAGE	DC/AC	V		9/180	

### OVERALL (RECORD/PLAYBACK)

14	MAX. RECORDING INPUT LEVEL (10% T.H.D)		mV	-10	-20	
15	MIC S.R.L		mV	-65	+/- 5	
16	CHANNEL BALANCE		dB		3	
17	S/N RATIO	MTT-212E	dB	45	38	
18	SEPARATION	MTT-141	dB	35	30	
19	ERASE RATIO WITH 1 kHz B.P.F.	TDK-AD	dB	50	40	
		TDK-SA	dB			
		TDK-MA	dB			
20	DISTORTION THD AT REF O/P		%	2	4	
21	ALC EFFECT -60 dB to +30 dB		dB	2	5	
22	ALC RECOVERY TIME		SEC	5	8	
23	FREQ. RESPONSE @ 125 Hz	MTT-257C	dB		+/- 6	
	HIGH DUBBING @ 8 kHz	MTT-257C	dB		+/- 6	
24	MIC INPUT SENSITIVITY		dB	-65	+/- 6	
25	DOLBY NR EFFECT	TDK-AD	dB			
		TDK-SA	dB			
		TDK-MA	dB			

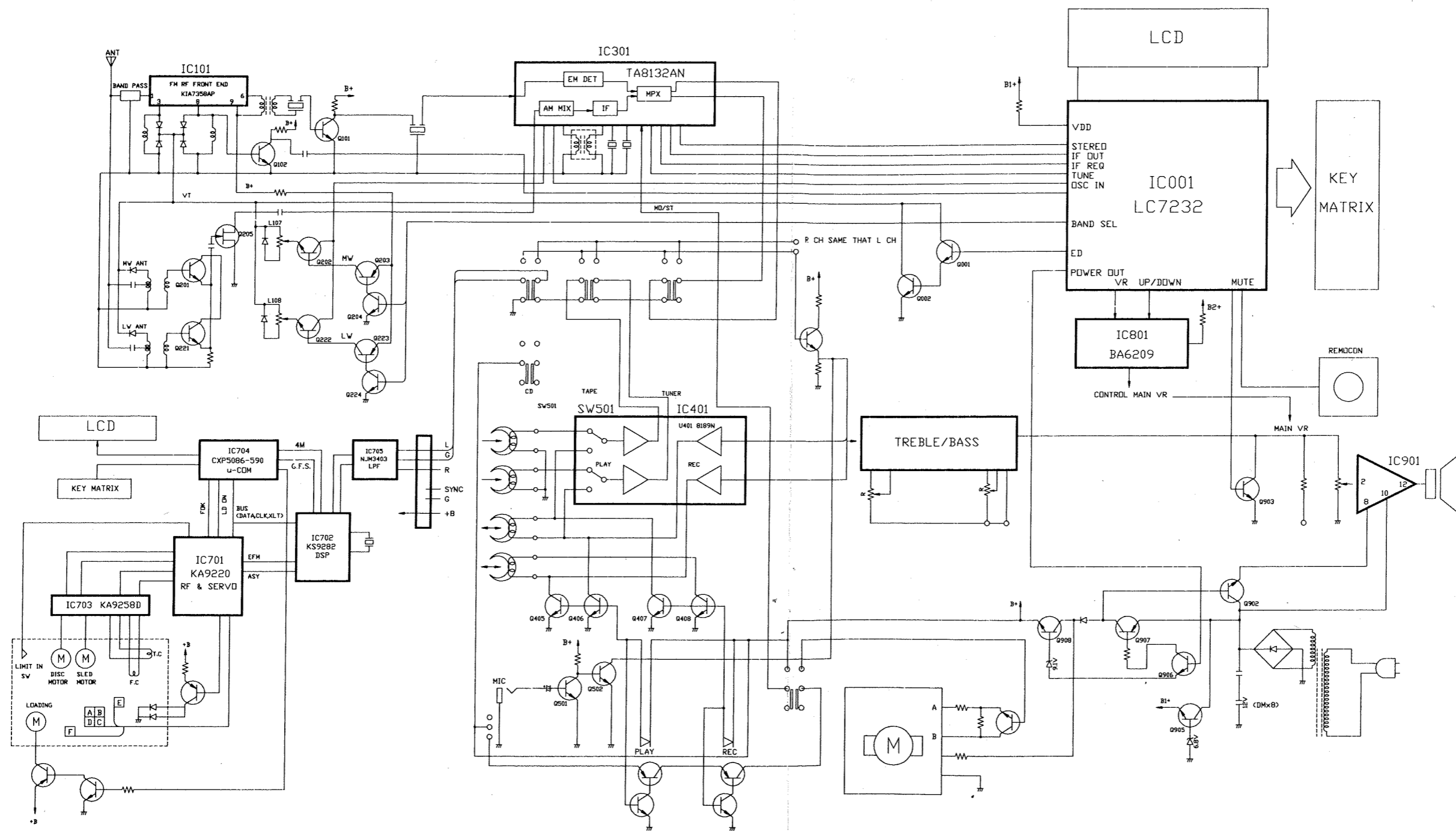
## 2. DISASSEMBLY INSTRUCTIONS

1. Remove the battery cover and take out batteries.
2. Remove 6 screws C holding the cabinet front.
3. Remove 2 screws B holding the cabinet top.
4. Remove 2 screws B holding the cabinet front.
5. Remove 3 screws A holding the cabinet front.

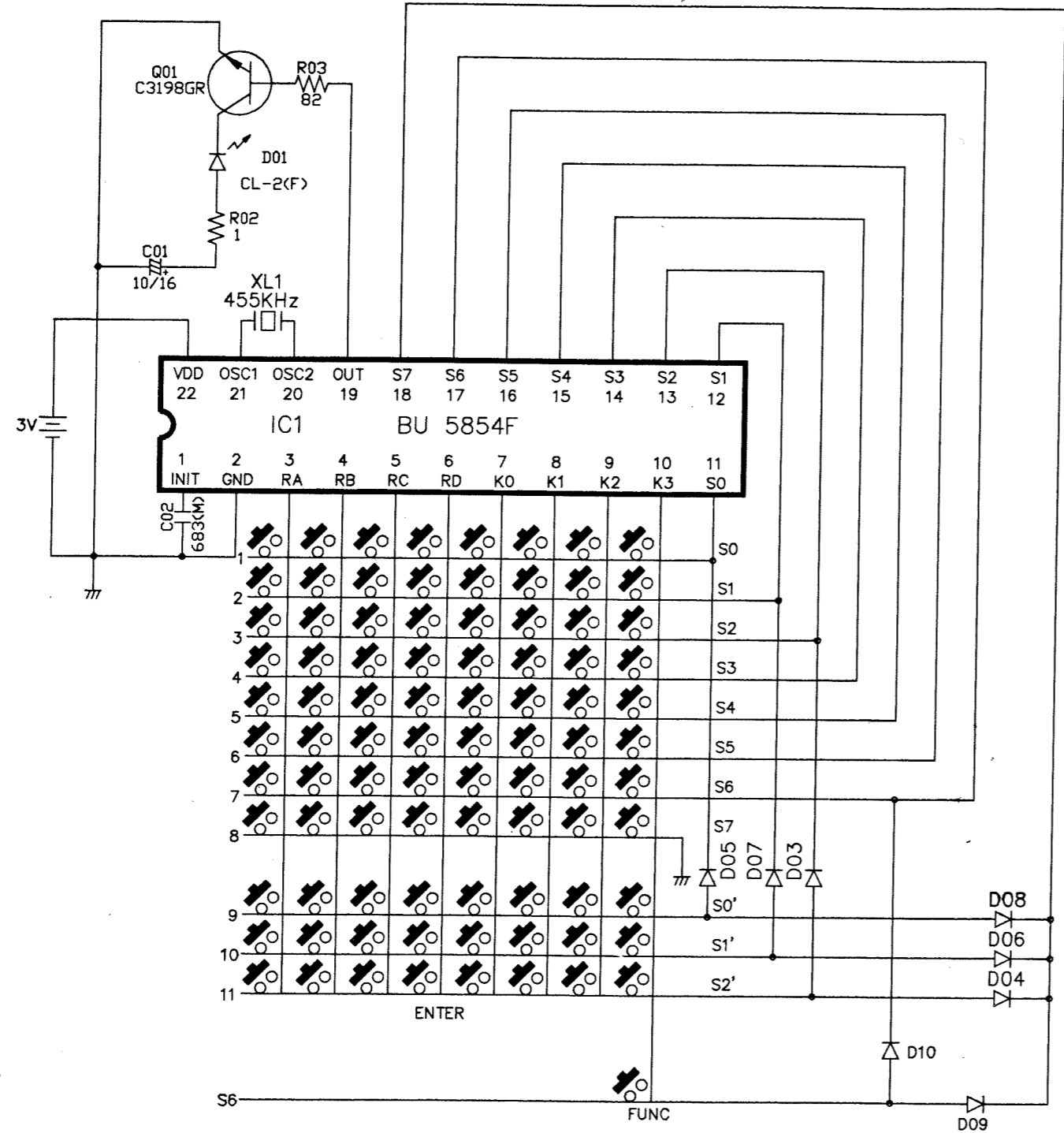


### 3. BLOCK DIAGRAM

(TUNER + DECK + AMP)



# 4. CIRCUIT DIAGRAM OF REMOTE CONTROL



	K0	K1	K2	K3	RA	RB	RC	RD
S0	0/+10	1	2	3	4	5	6	7
S1	8	9	MAIN POWER ON					DISC SKIP
S2		STOP	PLAY/ PAUSE	SHUFFLE	SKIP (cd/tu) UP	SKIP DN (cd/tu)	REPEAT /1/ALL	SPACE
S3	INTRO					MUTE	VR UP	VR DOWN
S4	TIMER	SLEEP	CLOCK	BAND SCAN	MEMORY UP	MEMORY DOWN	CD DIRECT	
S5	CD	PHONO	TUNER	TAPE1	TAPE2	AUX		MODE (TUNER)
S6	A PLAY	PAUSE	STOP	FF	FR	REC REC MUTE		EQ ON
S7	B PLAY	PAUSE	STOP	FF	FR			
⚡ S0		TV	MDP	VCR			SURR.MODE	PRO.LOG'C
⚡ S1	DELAY TIME UP	DOWN				SURR. VR UP	DOWN	
⚡ S2			TEST TONE					ENTER
⚡ S3								RD+S2(DIODE)
⚡ S4								
⚡ S5								
⚡ S6								
⚡ S7								

NOT USED  
★  
FUNC  
K3+S6(DIODE)

NOTE: USING ★ Marked point only for ACD-7310/7300

## 5. MECHANICAL ADJUSTMENT

### General Remarks

Before attempting to adjust the mechanism, wipe clean all type contacting surfaces (Pinch Rollers, R/P Head, Erase Head, and Capstan) as well as the contact surfaces of the driving parts (i.e., Motor Pulley, Fly-wheel and Cluth Ass'y) with a piece of soft cloth soaked in alcohol. Grease stains may cause trouble.

### Caution

Never attempt to clean the drive belts (Capstan and FF/Rewind Belts) with alcohol soaked fabric, because they are specially surface-treated.

Any belt which has been stained with grease should be replaced.

### Take-up Torque Adjustment (Figure 7)

1. Insert a cassette torque meter and measure in playback mode.
2. If the take-up torque is not adequate (30 to 70 g-cm), wipe the flywheel and/or replace the capstan belt and take-up reel.

### Fast-Forward Torque Adjustment (Figure 7)

1. Measure the fast-forward torque:  
Torque of more than 55g-cm is necessary for fast-forward operation.
2. If the fast-forward torque is not adequate (over 55g-cm), wipe the flywheel, cluth Ass'y, and/or replace the RF belt.

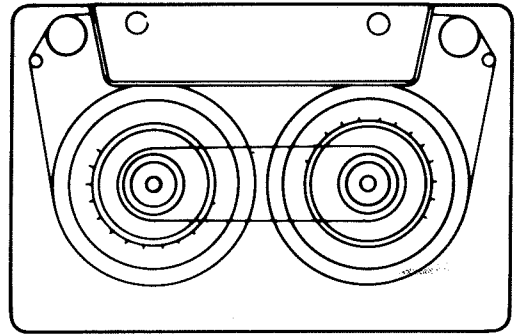


Figure 7

### Pinch Roller Adjustment (Figure 8)

1. While keeping the unit in the playback mode, measure the pinch roller contact with a spring gauge (0 to 500 gauge).
2. Hook the spring gauge to the pinch roller and pull it away from the capstan. Measure the force at the moment when the pinch roller comes in contact with the capstan (when the pinch roller starts revolving).
3. To adjust the contact pressure, bend the spring, and/or replace spring.

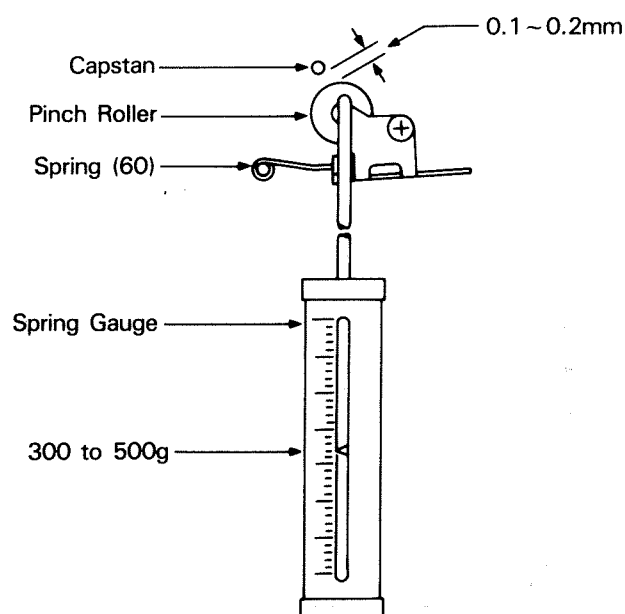


Figure 8



## 6. STANDARD MAINTENANCE

Whenever a unit is brought in for service or repair, it should be cleaned and the head should be demagnetized.

1. Cleaning: Clean the head and all tape handling surfaces using standard swabs. Wipes dry.
2. Demagnetization: Do not demagnetized tools near the head, since they can demagnetize it. With normal use, the head will retain small amounts of residual magnetism which results in increased noise and loss of high-frequency response. Use a standard tape head demagnetizer to demagnetize the playback head.
3. Lubrication: Use a high-grade of specially formulated lubricant in the appropriate places. Lubrication is normally required only when parts tend to bind, or after long periods of use. Use all lubricants sparingly and avoid contact with other parts.

## 7. CIRCUIT ADJUSTMENT

### TAPE SECTION

#### Pre-adjustment Procedures

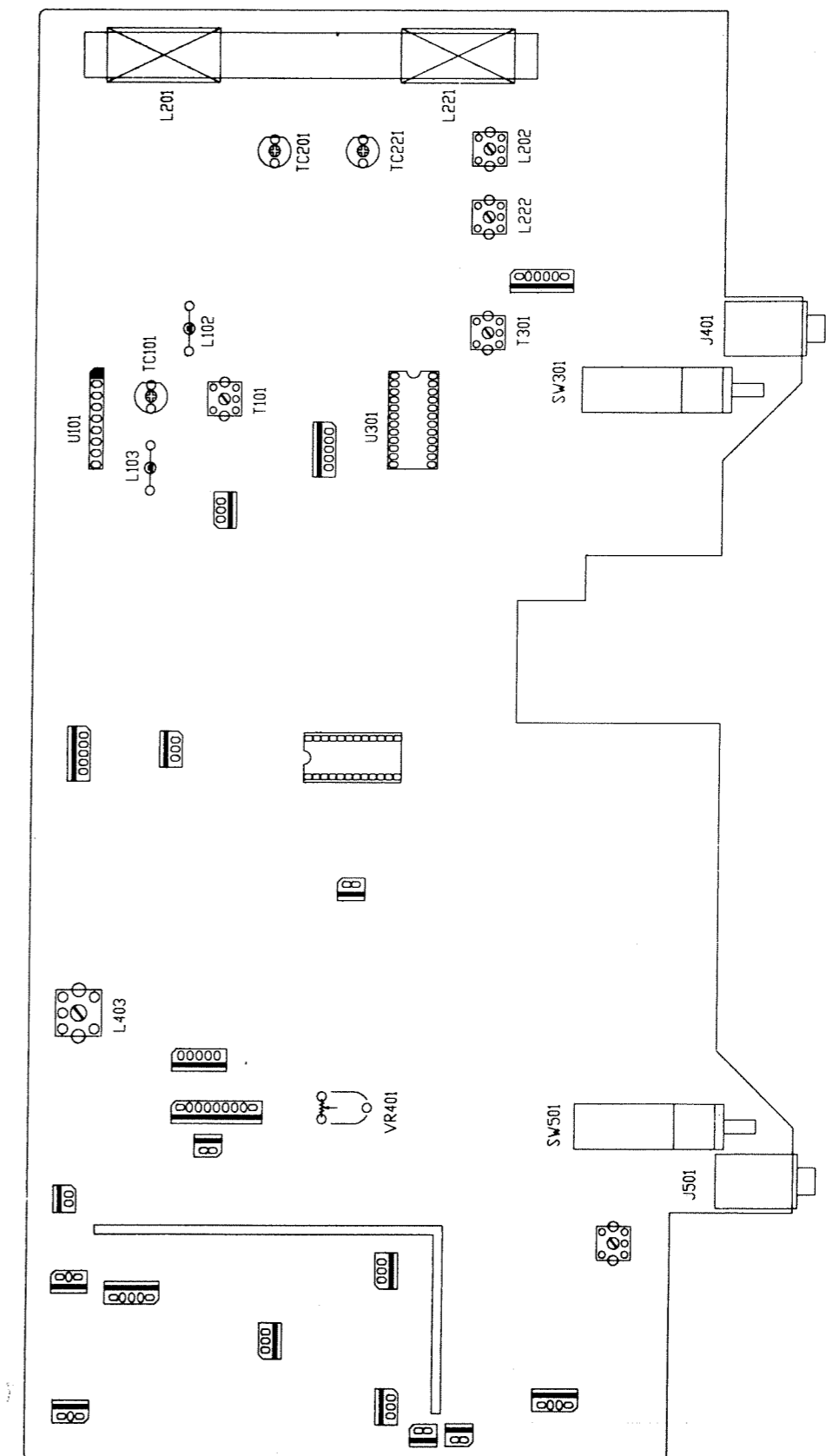
1. Be sure to demagnetize and clean the head before proceeding with head adjustment.
2. Never use a magnetized Screwdriver for the head adjustment.

#### Equipment Required

1. Frequency counter
2. Test tapes MTT-111N and MTT-113C
3. Dummy load 32 ohm
4. SSVM
5. Test tape normal blank tape and MTT-501

### Alignment Point Locations

(Top View)  
DECK PCB ASS'Y



### Tape speed Adjustment (Figures 15 and 17)

Step	Connection	Setting	Adjust	Adjust for
1	See Figure 15	Play the test tape 3000Hz (MTT-111N)	Deck A. RV401 See Figure 14	Frequency counter reading $3000 \pm 30\text{Hz}$

### Tape Speed Adjustment

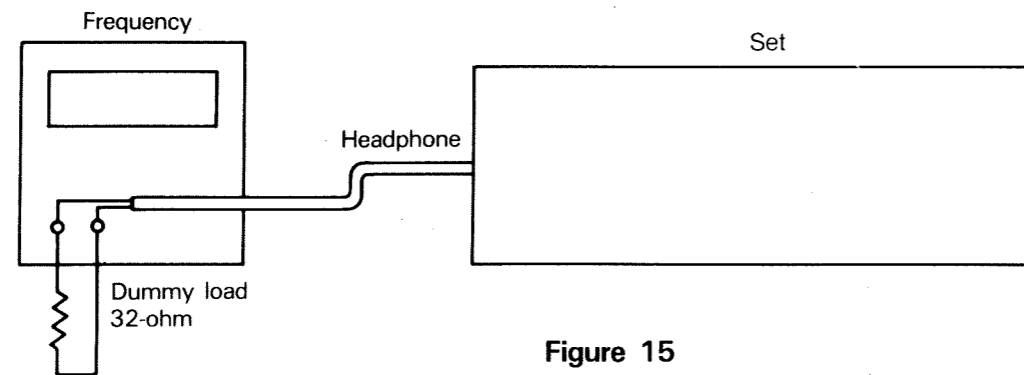


Figure 15

### Head Azimuth Adjustment (Figure 16)

Step	Connection	Setting	Adjust	Adjust for
1	See Figure 16	Play the test tape 8 kHz position (MTT-113C)	Azimuth screw See Figure 17	Maximum amplitude and both channels the same level
2	After adjustment, secure the azimuth screw with lock paint or glue.			

### Head Azimuth Adjustment

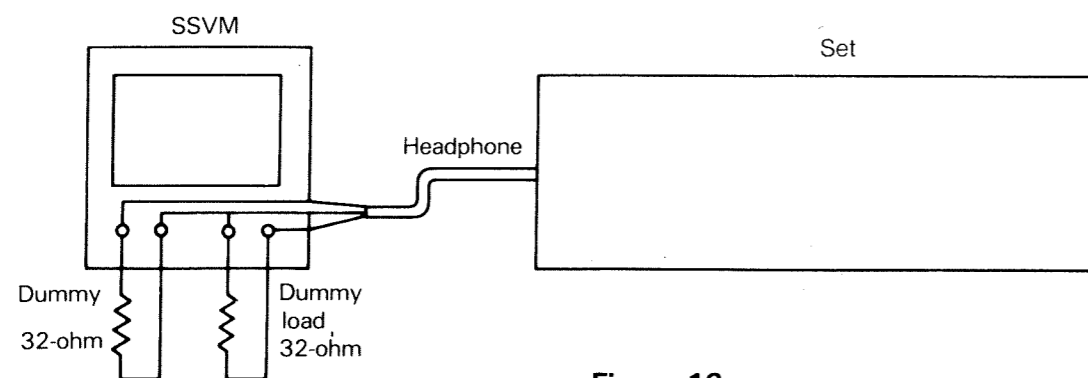
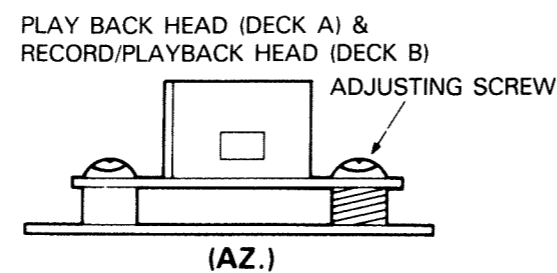


Figure 16



### REC Bias Oscillator Frequency Adjustment (Figure 18 and 19)

Step	Connection	Setting	Adjust	Adjust for
1	See Figure 18	Deck B the REC. position	Deck B. L403 See figure 19	Beat cut switch: OFF Frequency counter reading $80\text{kHz} \pm 50\text{Hz}$

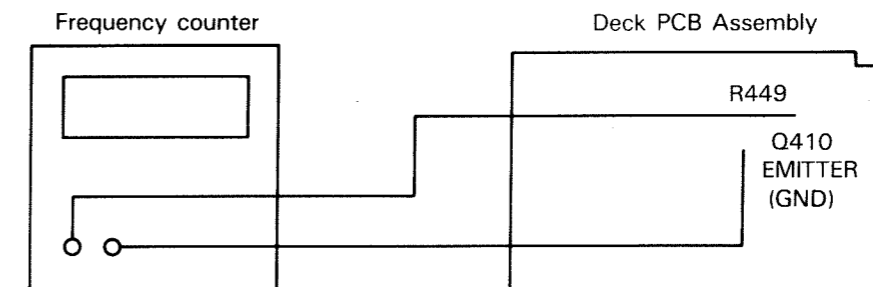


Figure 18

### CD PLAYER SECTION

#### Equipment required

1. SSVM
2. Test disc Sony YEDS-18
3. Oscilloscope (60 MHz)
4. Frequency counter
5. Gain adjustment jig (Focus, Tracking)
6. RC Osc

#### Alignment Point Locations

**To Adjust:**

1. Checking point before adjustment
  - (1) Laser on check. (Without disc)
  - (2) Focus search checking. (Without disc)
2. Adjustment mode set
  - (1) Set all of the adjustment volume to center position.
  - (2) Connect JIG "A" to CN 705
  - (3) Use YES-18 disc unless otherwise Indicated.
  - (4) Perform adjustment in the order given.
  - (5) Remove the solder on CN 705.

**Test Point & volume location**

RV702, Focus offset .....TP5, TP6 (Vref)  
 RV703, Focus Gain .....TP3, TP6 (Vref)  
 RV704, Tracking Gain .....TP4, TP6 (Vref)  
 RV701, Tracking Balance .....TP4, TP6 (Vref)

**Focus Offset Adjustment**

Step	Connection	Setting	Adjust	Adjust for
1	See Figure 22	Play the test disc Sony YEDS-18	RV701	SSVM reading optimum point

**Oscilloscope (60 MHz)**

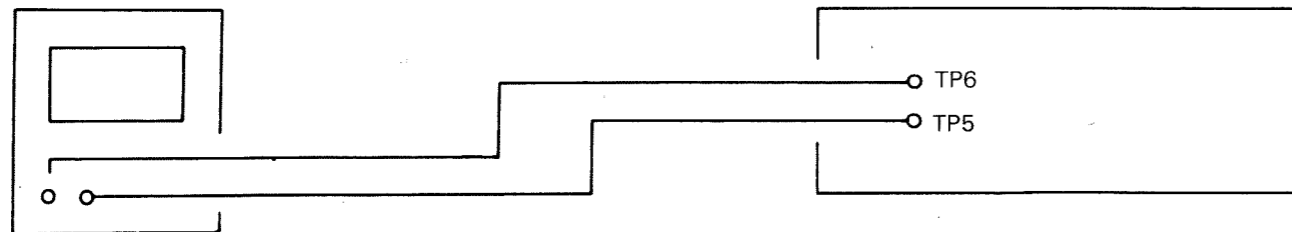


Figure 22

**Tracking Balance Adjustment**

Step	Connection	Setting	Adjust	Adjust for
1		Turn the volume of RV704 to counterclockwise (TE gain minimum)		
2	See Figure 23	Play the test disc Sony YEDS-18	RV 702	
3		To make scope wave above and below center line (0V) in shape above and size.		
4		Return RV704 to center position		

**Oscilloscope (60 MHz)**

**Frequency counter**

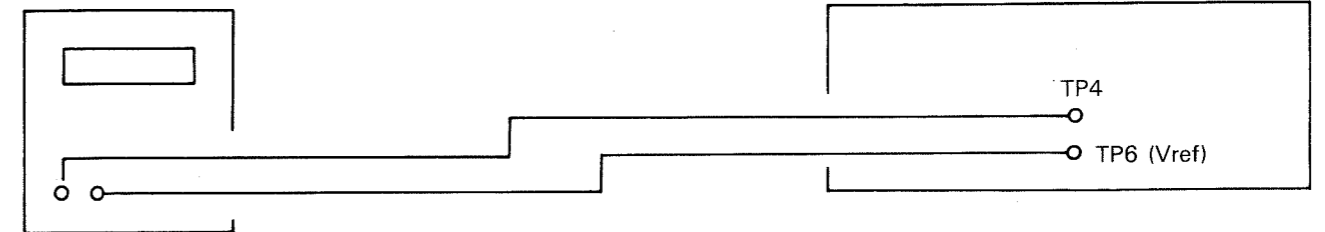


Figure 23

**Focus Gain Adjustment**

Step	Connection	Setting	Adjust	Adjust for
1		Remove JIG "A" position.		
2		Connect JIG "B" according to JIG circuit, And turn the switch of JIG to "FE" position.		
3	See Figure 24	Play the test disc Sony YEDS-18	RV 703	Two needle of SSVM meet at the same point

**Tracking Gain Adjustment**

Step	Connection	Setting	Adjust	Adjust for
		Remove JIG "A" position		
1		Connect JIG B according to JIG circuit and turn the switch of JIG to "TE" position.		
2	See Figure 24	Poly the test disc sony YEDS-18	RV 704	Two needle of SSVM meet at the same point

Caution: Shorten the number A, A' and number B, B' each other.

### Focus Gain and Tracking Gain (Gain Adjustment JIG Circuit)

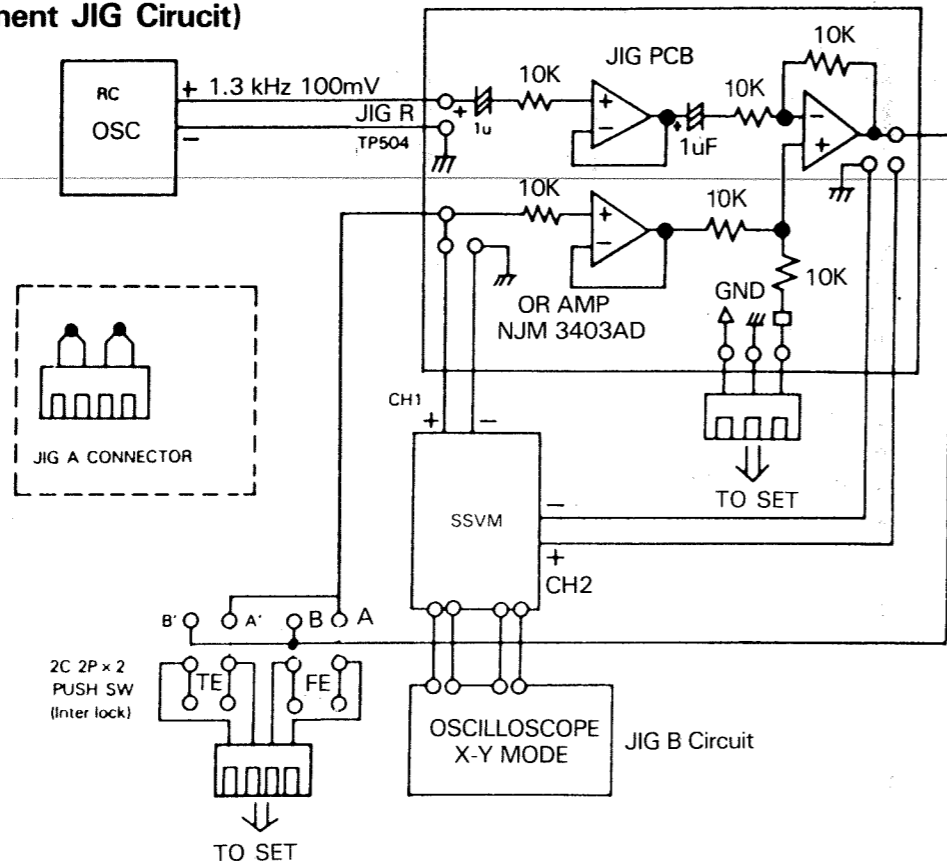
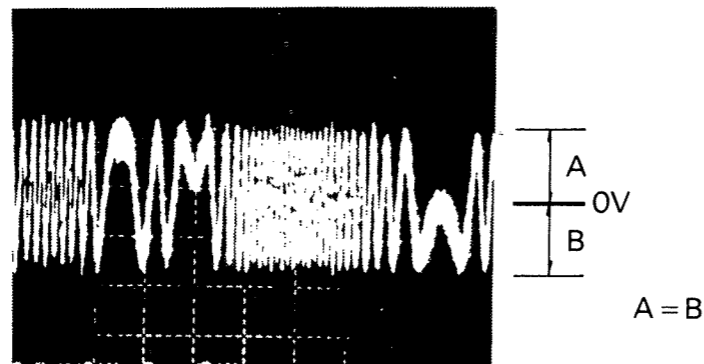


Figure 24

### SIMPLE ADJUSTMENT

#### 1) Tracking balance adjustment

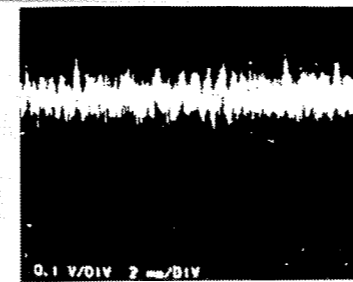
- (1) Connect the oscilloscope with TP4 and the ground of the oscilloscope with TP6 (0.5V/DIV, 5msec/DIV, DC).
- (2) Insert a disc and playback CD
- (3) Turn the volume of RV704 to counterclockwise.
- (4) Adjust RV703 so that the waveform is symmetry above and below (A = B) relative the 0 volt.
- (5) Return RV704 to center position.



#### 2) Focus gain adjustment

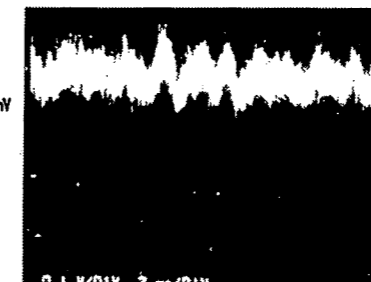
- (1) Connect the oscilloscope with TP3 and the ground of the oscilloscope with TP6.
- (2) Insert a disc and playback CD.
- (3) Adjust RV703 so that the center of waveform meets at the 100mV Lines as shown in the figure below (Normal waveform).

(NORMAL WAVEFORM)



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

(LOW FOCUS GAIN)



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

(HIGH FOCUS GAIN)

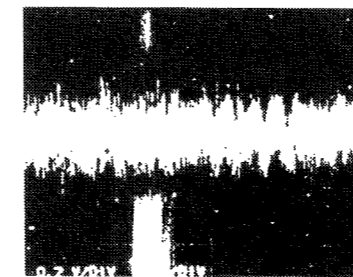


VOLT/DIV: 0.1V  
TIME/DIV: 2MS

#### 3) Tracking gain adjustment

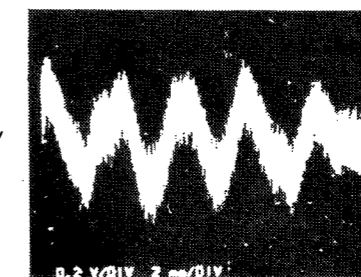
- (1) Connect the oscilloscope: with TP4 and the ground of the oscilloscope with TP6.
- (2) Insert a disc and playback CD.
- (3) Adjust RV704 so that the waveform becomes the normal waveform as shown in the figure below.

(NORMAL WAVEFORM)



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

(LOW TRACKING GAIN)



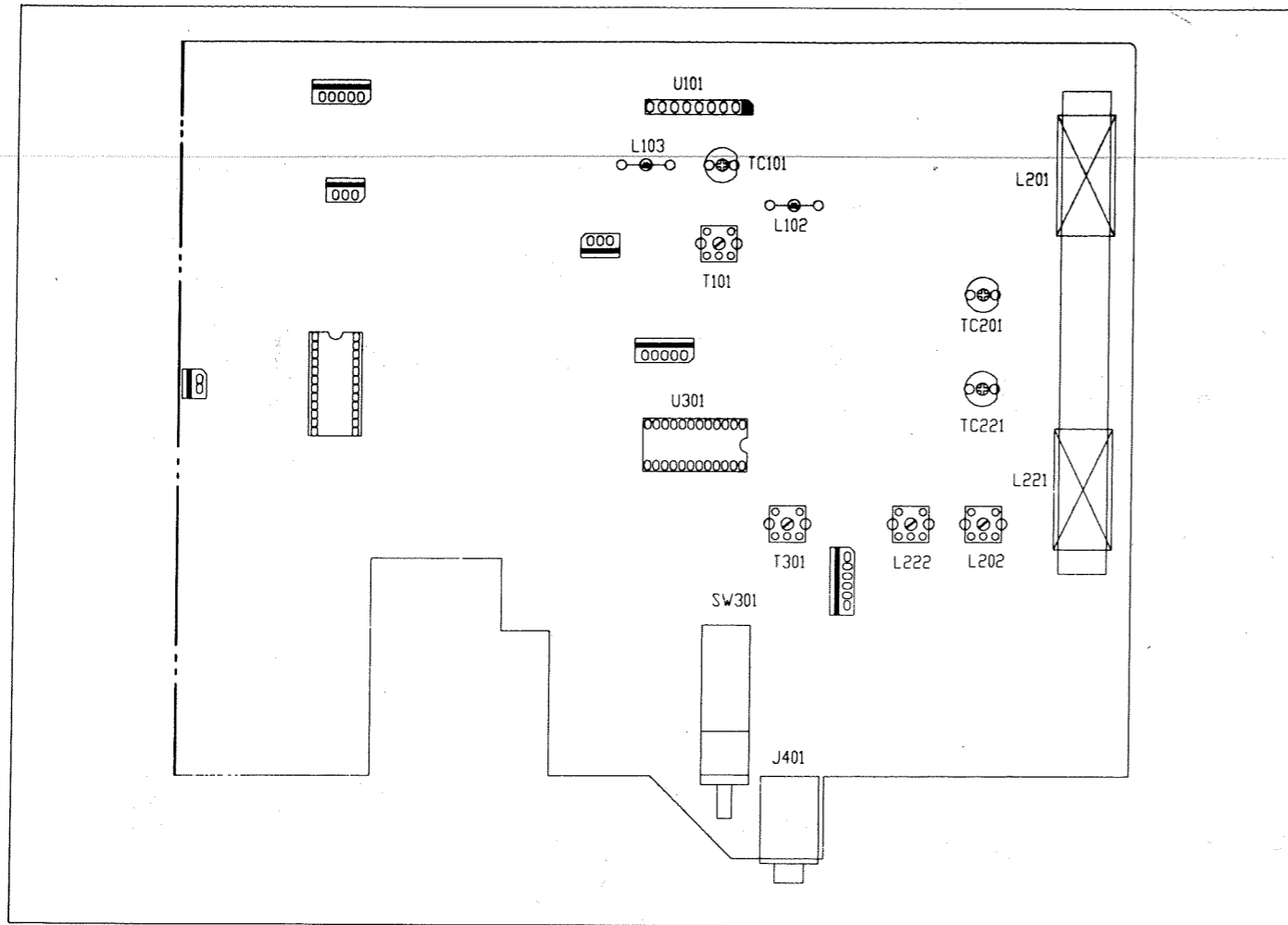
VOLT/DIV: 0.2V  
TIME/DIV: 2MS

(HIGH TRACKING GAIN)



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

**TUNER SECTION  
Alignment Point Locations**



**Equipment Required**

1. Signal generator with a frequency range of a 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. SSVM.

**AM ALIGNMENT**

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

**NOTE:**

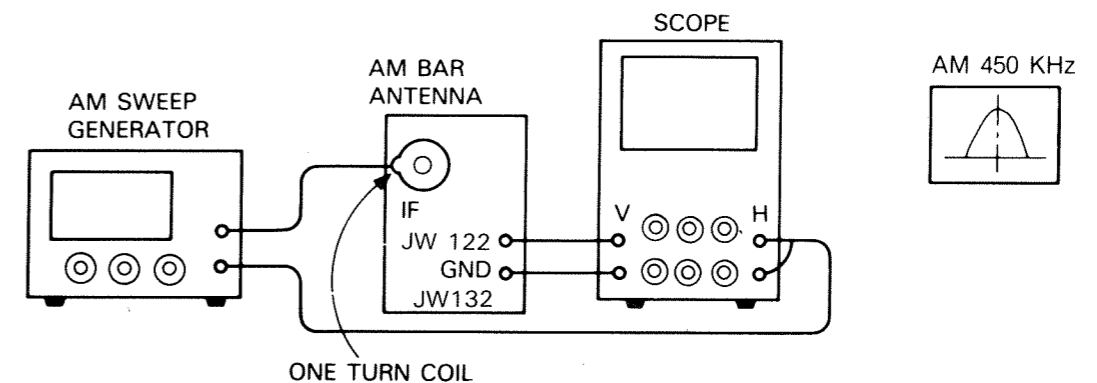
1. Use a screwdriver with plastic grip for all adjustments.
2. Standard test frequency 400Hz and modulation 30% for AM.
3. Standard test frewency 400Hz and deviation 22.5 kHz for FM.

**MW ALIGNMENT (Figures 25, 26 and 27)**

Band	Step	Signal Generator Frequency	Radio Setting	Adjustment	Remarks
MW BAND	1	450 kHz	(Lowest Frequency)	T301	
	2	531 kHz	(Lowest Frequency)	Osc. Coil L202	VT: 1.0V (DC) DC Voltagfe Meter VT (VT002) GND
	3	Repeat steps 2 and 3 as required.			
	4	603 kHzz	Tune to Signal	Ant. Coil L201	Ajust for maximum indication.
	5	1404 kHz	Tune to Signal	ANT. Tirm TC201	Adjust for maximum indication
	6	Repeat steps 5 and 6 as required.			

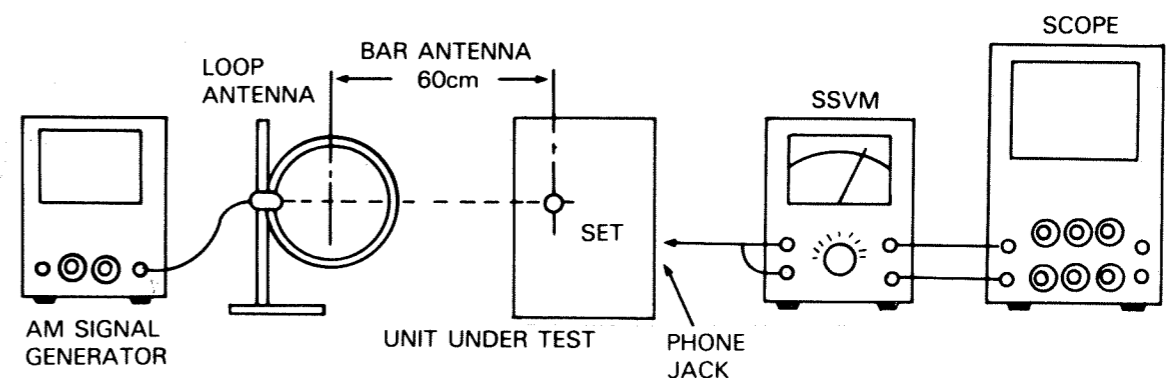
Band	Step	Connection	Setting	Adjust	Adjust for
LW BAND	1	143 kHz	Lowest	OSC, Coil L222	VT: 1.0 (DC) DC Voltage Meter VR (VT 002) GND
	2	170 kHz	Tune to Signal	ANT, Coil L221	Adjust for maximum indication
	3	260 kHz	Tune to Signal	ANT, Trim TC221	Adjust for maximum indication

**MW IF ALIGNMENT**



**Figure 26**

**MW ALIGNMENT**



**Figure 27**

### 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 (Figures 25 and 28)

Step	Signal Generator Frequency	Radio Setting	Adjustment	Remarks
1	10.7 MHz	(Lowest Frequency)	T101	Adjust for maximum indication.

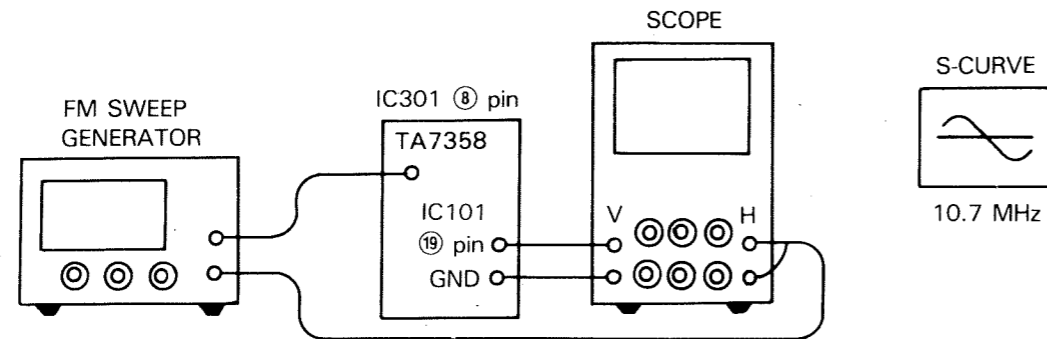


Figure 28

### FM-RF ALIGNMENT

1. Turn on the signal generator and the SSVM, 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 SSVM 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.

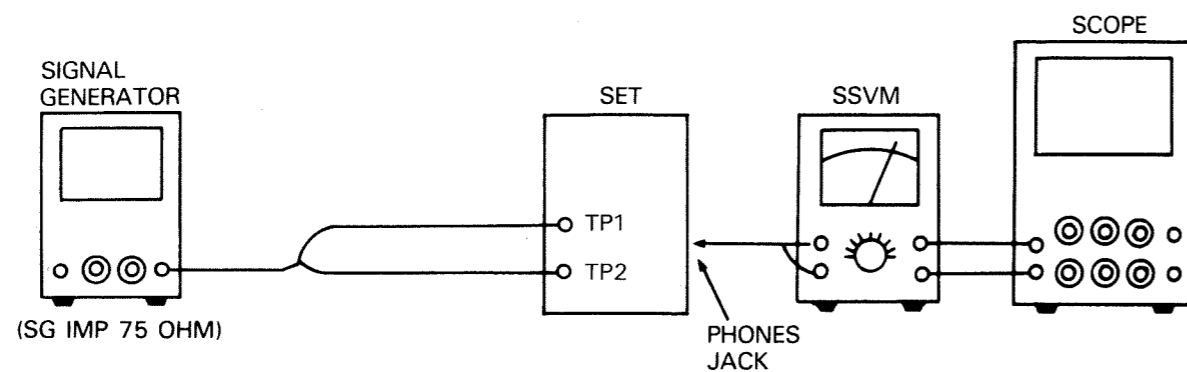


Figure 29

### FM-RF ALIGNMENT CHART (Figures 25 and 29)

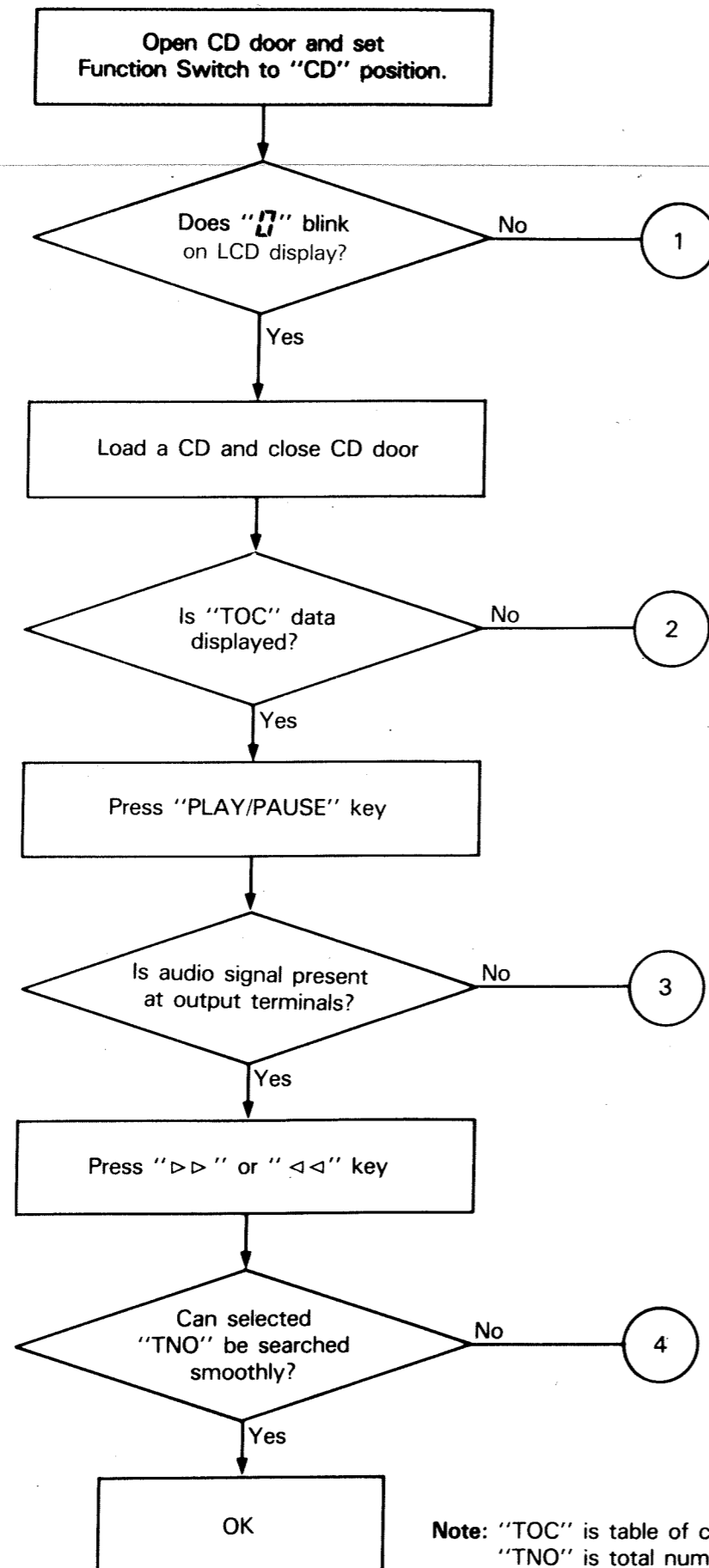
Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
1	87.5 MHz	(Lowest Frequency)	Osc. Coil L103	Adjust for DC 3V. DC Voltage Meter VT (VT001) and GND.
2	90 MHz	Tune to signal	Ant. Coil L102	Adjust for maximum output indication.
3	106MHz		Ant. Trim TC101	
4	Repeat steps 2 and 3 as required.			

## 8. TROUBLESHOOTING CHART

Symptom	Cause	Remedy
Output level too low	Power amplifier circuit 1. Faulty IC 901 2. Shorted C911 and C912.	1. Check and replace. 2. Check and replace.
Overall:		
Tape:	Pre-amplifier circuit Faulty Q601, Q602	Check and replace
FM:	FM Front/End circuit 1. Faulty IC101 2. Open or shorted C105. 3. Open or shorted VD101, VD102.	1. Check and replace. 2. Check and replace. 3. Check and replace.
	FM decode circuit 1. Faulty IC301 2. Shorted C312, C313,	1. Check and replace. 2. Check and replace.
AM/FM:	FM-AM IF amplifier circuit Faulty Q303.	Check and replace.
Poor tape high frequency response	1. Incorrect head azimuth. 2. Faulty REC/PB head (66). 3. Shorted C406, C420	1. Adjust head azimuth. 2. Clean and replace REC/PB head. 3. Check and replace.
No sound	Power supply circuit 1. Faulty SW501 or poor contact. 2. Faulty J401 and J901 or poor contact.	1. Check and replce. 2. Check and replace.
	Power amplifier circuit 1. Open or shorted IC901 2. Open or shorted C911 and C912.	1. Check and replace. 2. Check and replace.
	Output circuit 1. Open or shorted speaker voice coil.	1. Check and replace.
	Pre-amplifier circuit 1. Open or shorted Q601, Q602 2. Open or shorted REC/PB head. 3. Open REC/PB head leads. 4. Open Vr601, VR602	1. Check and replace. 2. Check and replace. 3. Check REC/PB head leads. 4. Check and replace.
	FM tuner circuit 1. Faulty Q103, Q104. 2. Faulty IC101	1. Check and replace. 2. Check and replace.
	AM converter circuit 1. Oper or short L201, L202 2. Shorted VD201, VD202.	1. Check and replace. 2. Check and replace.
	AM/FM IF amplifier 1. Faulty IC301 2. Open or shorted T101. 3. Shorted CF302	1. Check and replace. 2. Check and replace. 3. Check and replace.

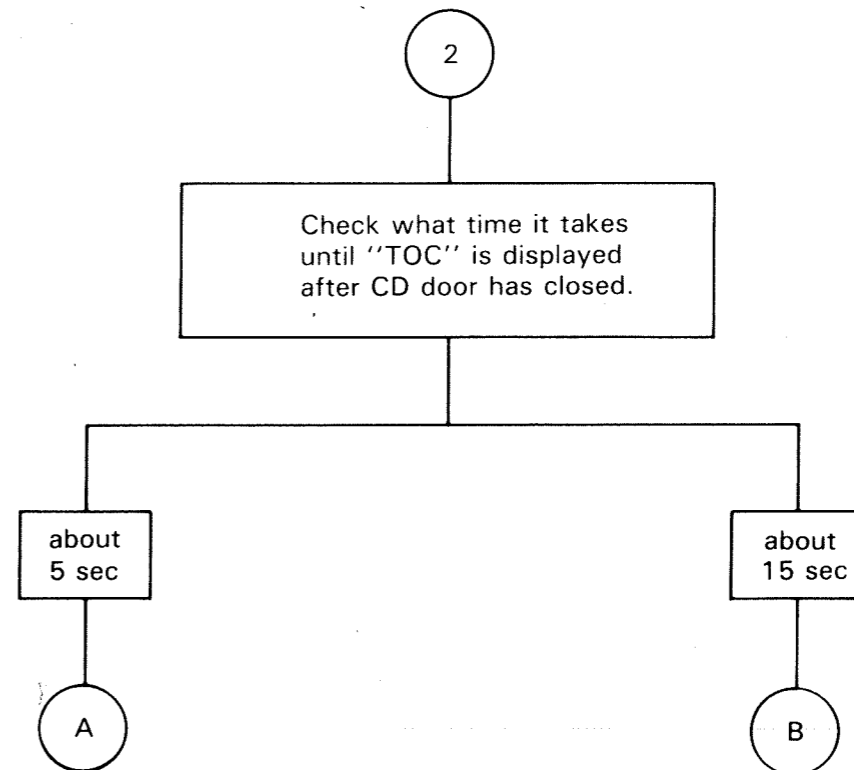
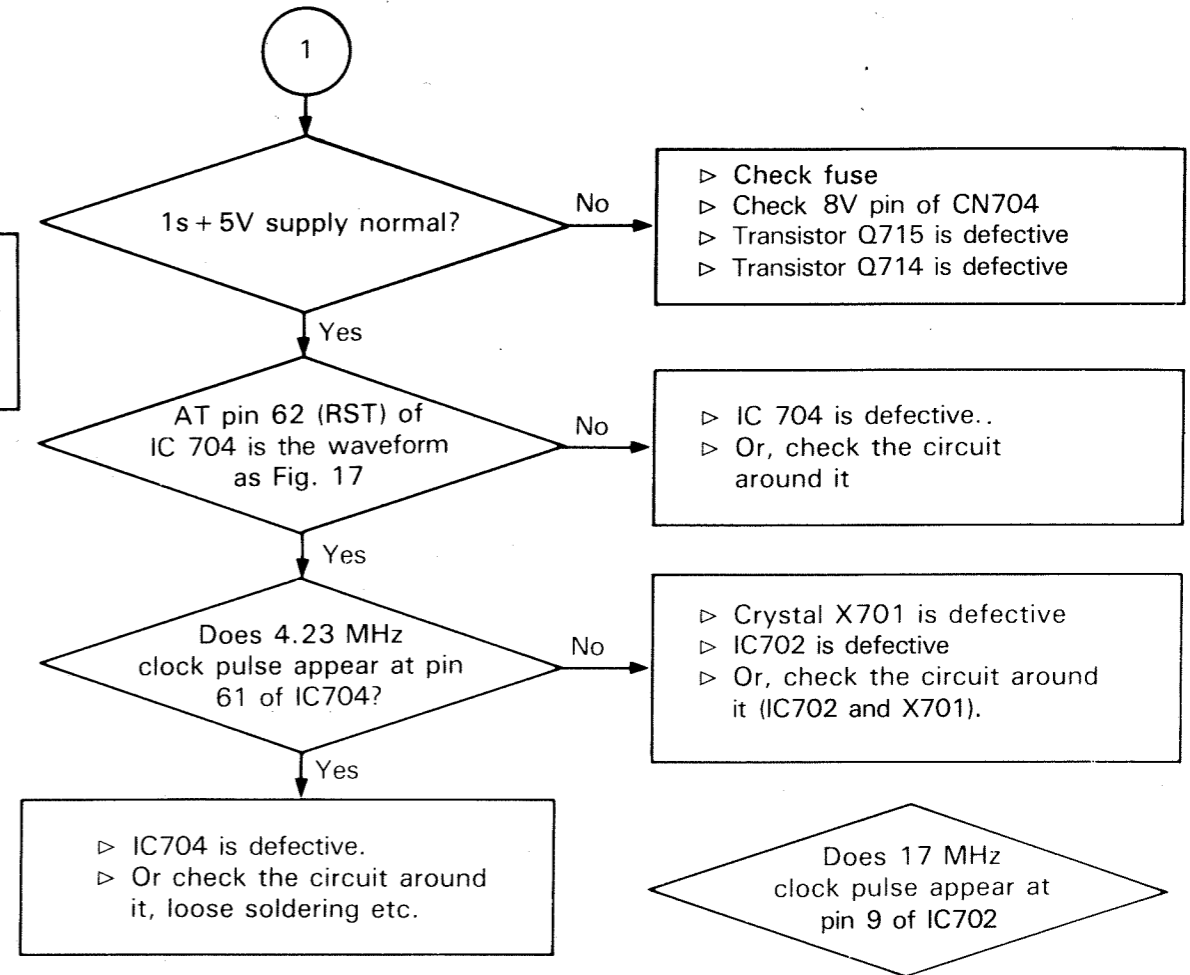
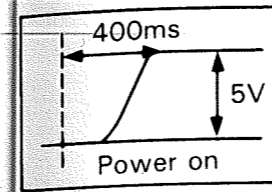
Symptom	Cause	Remedy
Tape inoperative	1. Motor (68) dead. 2. Capstan belt (40) slipping. 3. Leaf switch (23) poor contact.	1. Check motor lead-wires and replace motor. 2. Wipe flywheel (43) and replace capstan belt. 3. Adjust or replace leaf switch.
Won't take-Up tape	Capstan belt (59) slipping.	Wipe flywheel (43) and/or replace capstan belt (59).
No fast-forward and rewind	Clutch assembly (39) slipping	Wipe flywheel (43), clutch, assembly (39), and/or replace FF/re-wind belt (40).
Excessive wow	1. Motor (68) defective: 2. Pinch roller (35) dirty.	1. Replace. 2. Clean or replace.
Uneven speed	1. Motor (68) defective. 2. Motor pulley (58) slipping. 3. Capstan belt (59) slipping.	1. Replace. 2. Adjust or replace motor pulley. 3. Wipe flywheel, motor pulley and replace capstan belt.
No playback	1. REC/PB head (66) defective or open. 2. REC/PB head dirty 3. Open or shorted REC/PB head leadwires. 4. No power to amplifier. 5. Defective component (s) in amplifier.	1. Replace. 2. Wipe REC/PB head with a cloth moistened with alcohol. 3. Replace wire. 4. Replace leaf switch. 5. Check and replace defective component (s).
Low playback or distorted playback output	1. Amplifier defective. 2. REC/PB head dirty. 3. REC/PB head badly worn	1. Check and replace defective component (s). 2. Wire REC/PB head with a cloth moistened with alcohol 3. Replace
No erase	1. Erase head (67) defective or open. 2. Open or shorted erase head leadwires.	1. Replace. 2. Check and replace.
No record	1. REC/PB head (66) defective or open. 2. Component (s) in amplifier defective. 3. REC/PB head dirty.	1. Replace. 2. Check and replace defective component (s). 3. Wipe REC/PB head with a cloth moistened with alcohol.

### Troubleshooting Chart, CD Section



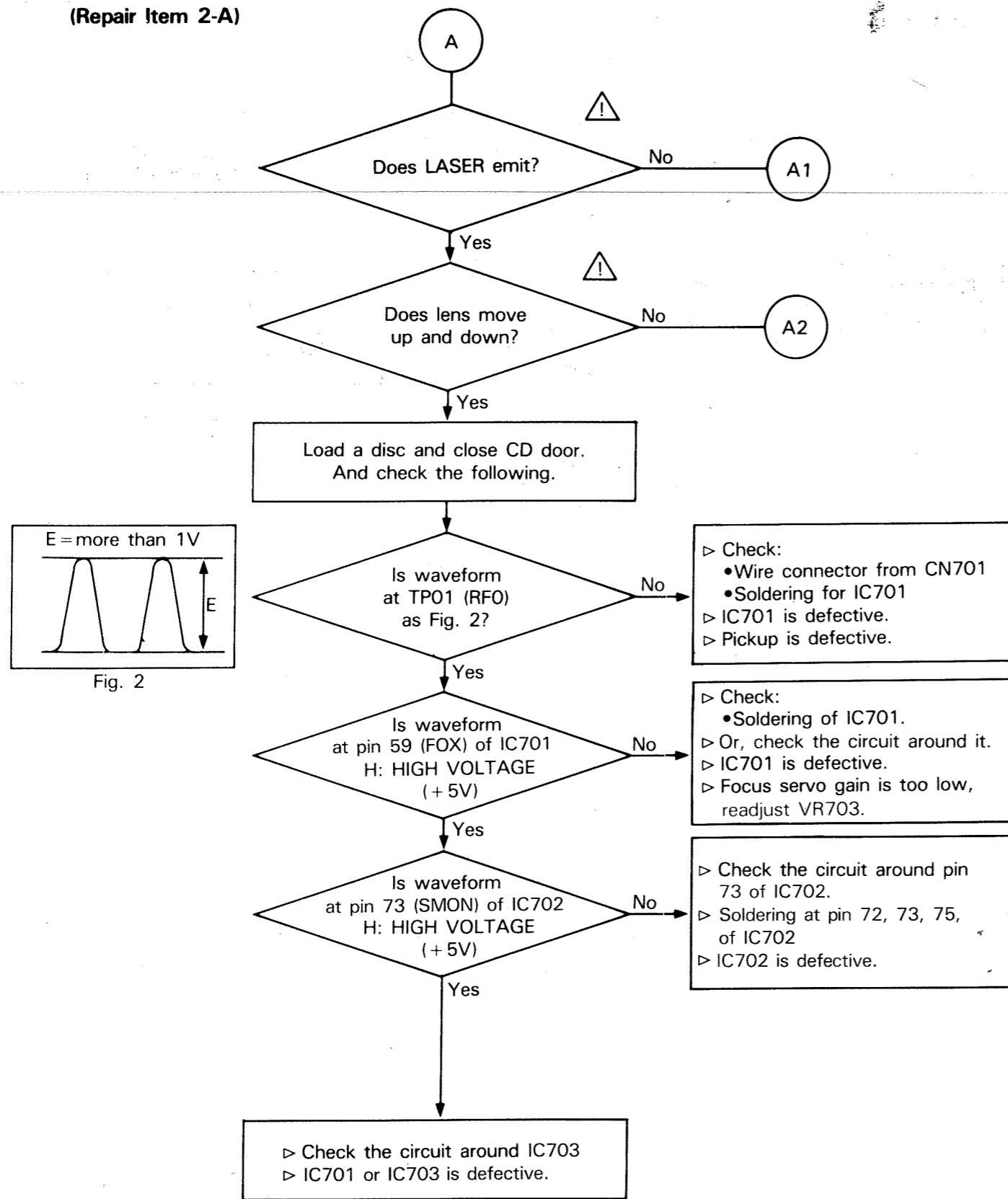
Note: "TOC" is table of contents.  
"TNO" is total number of tracks.

### (Repair item 1)

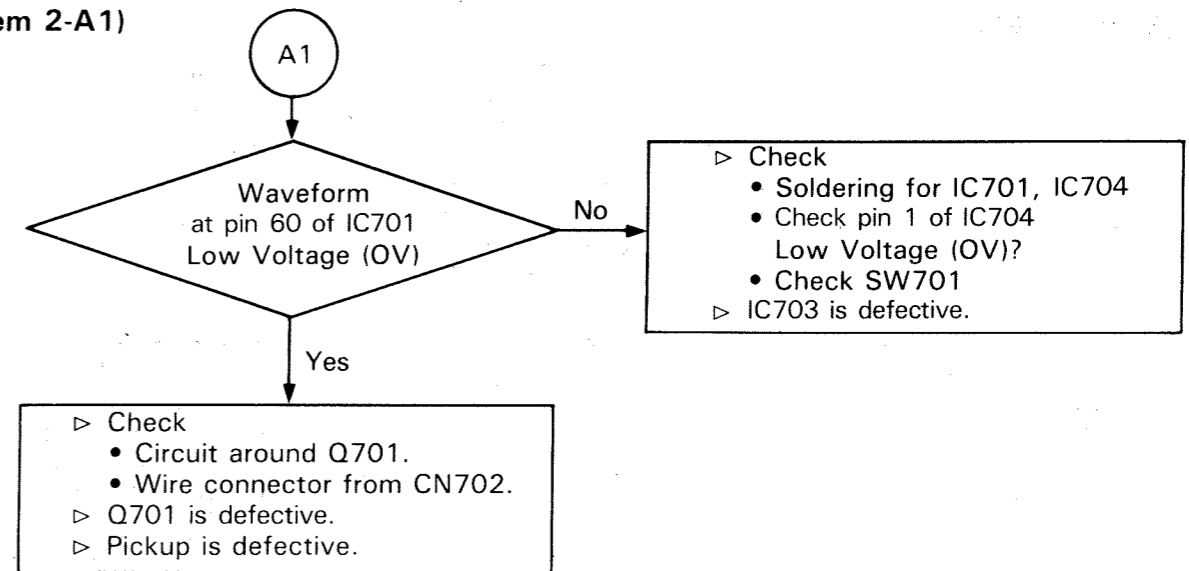




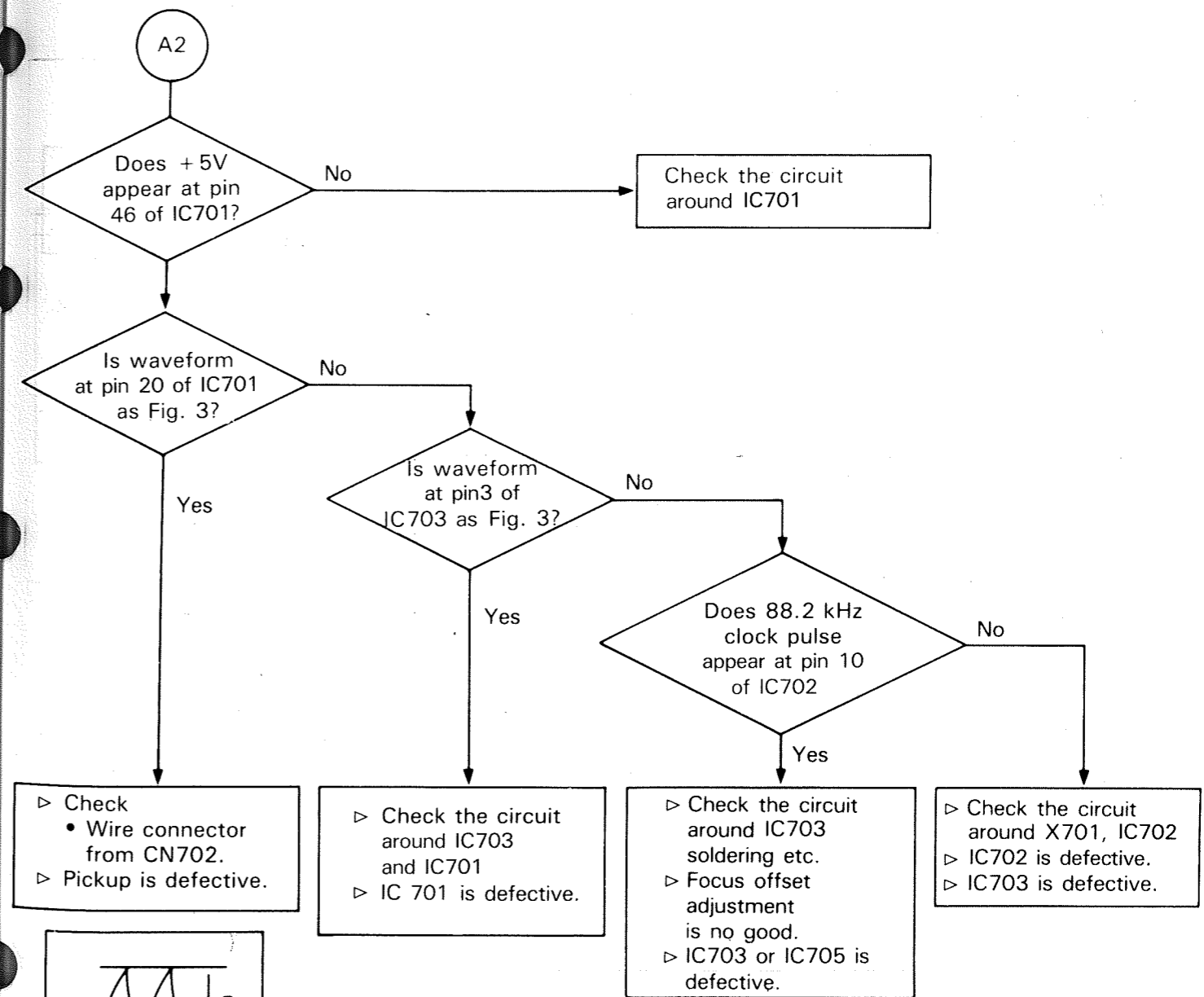
(Repair Item 2-A)



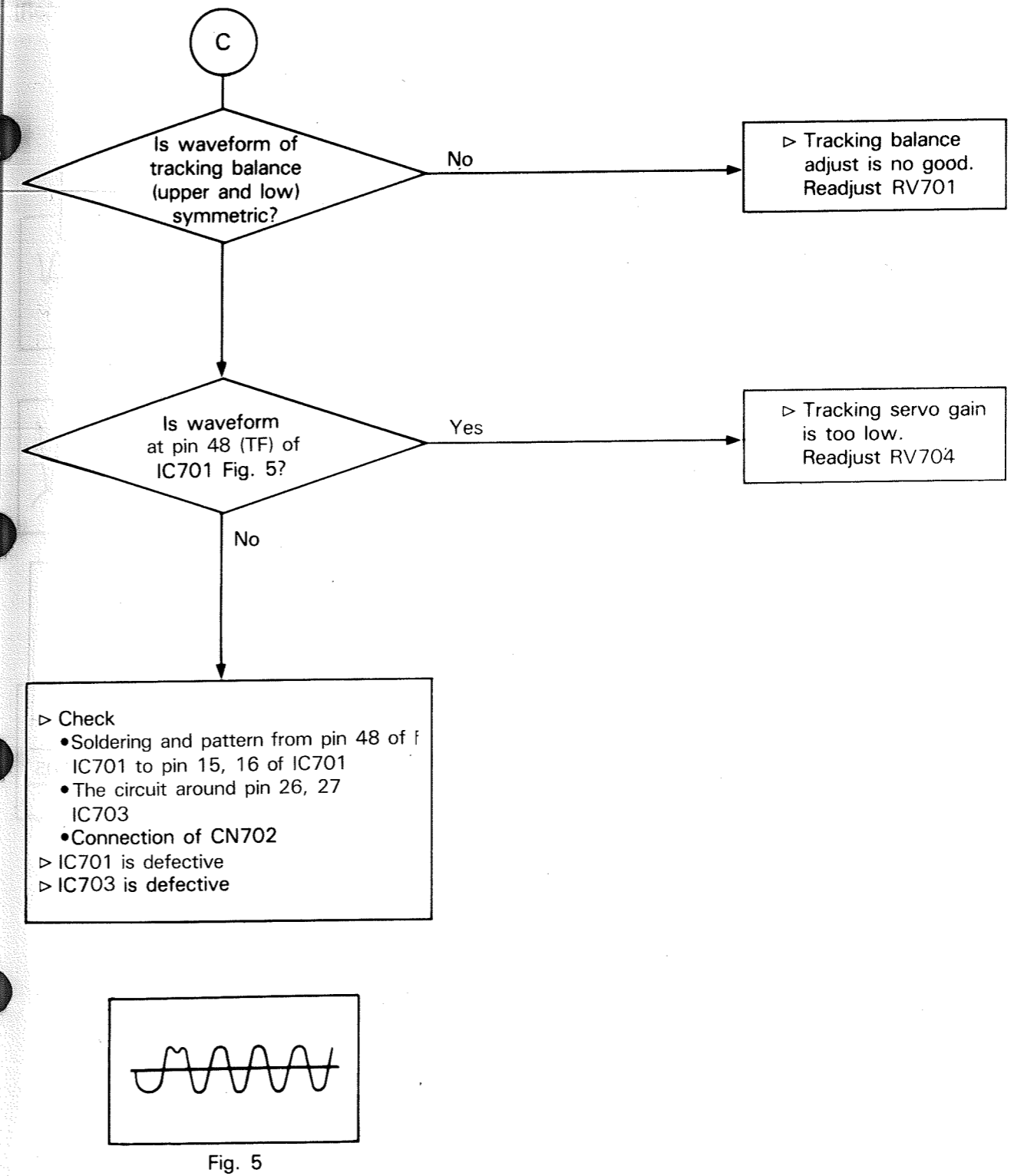
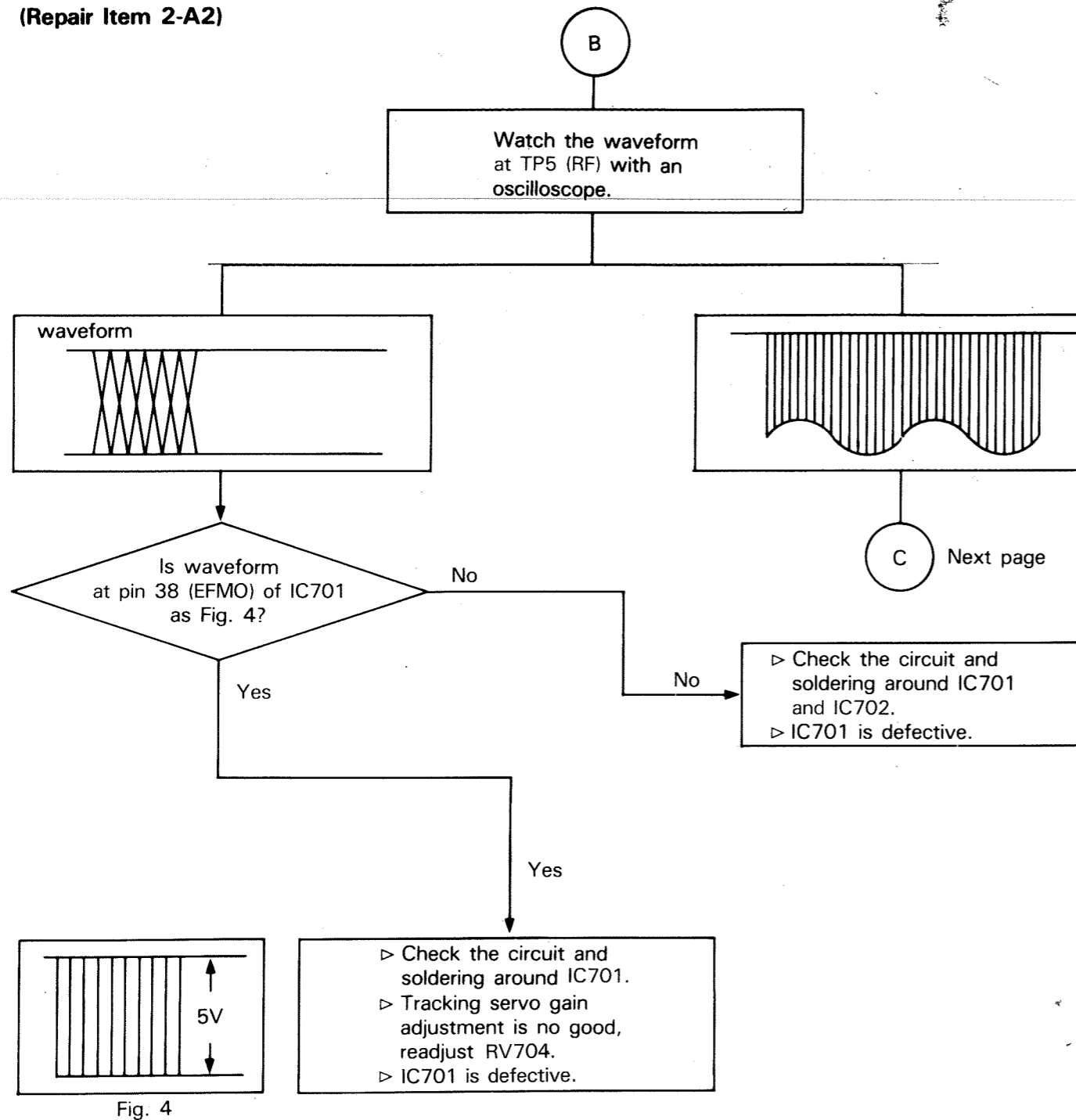
(Repair Item 2-A1)



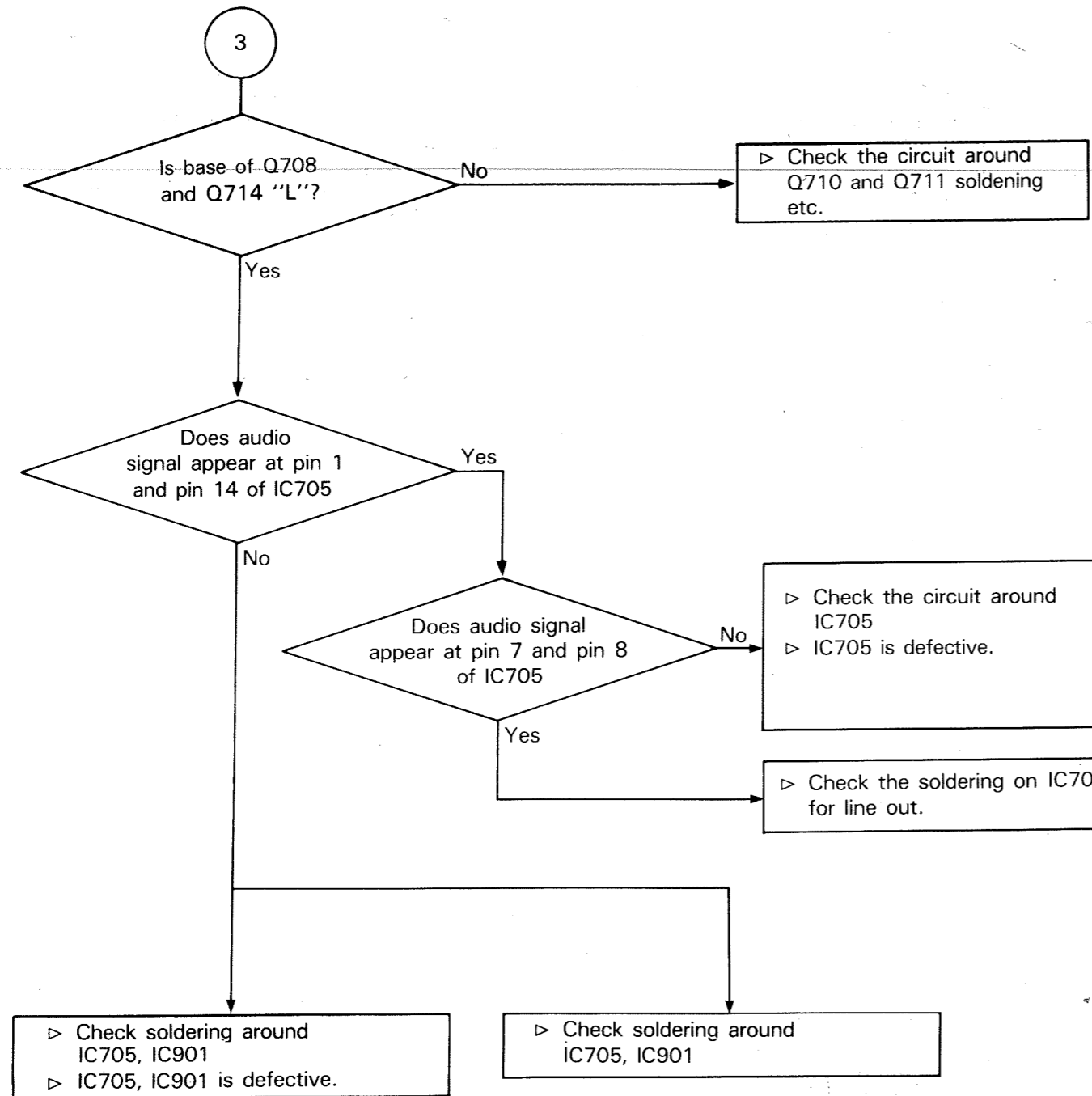
(Repair Item 2-B)



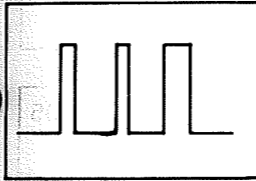
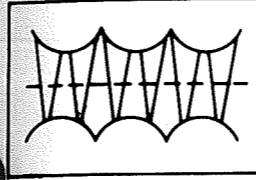
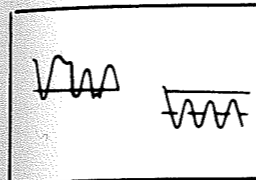
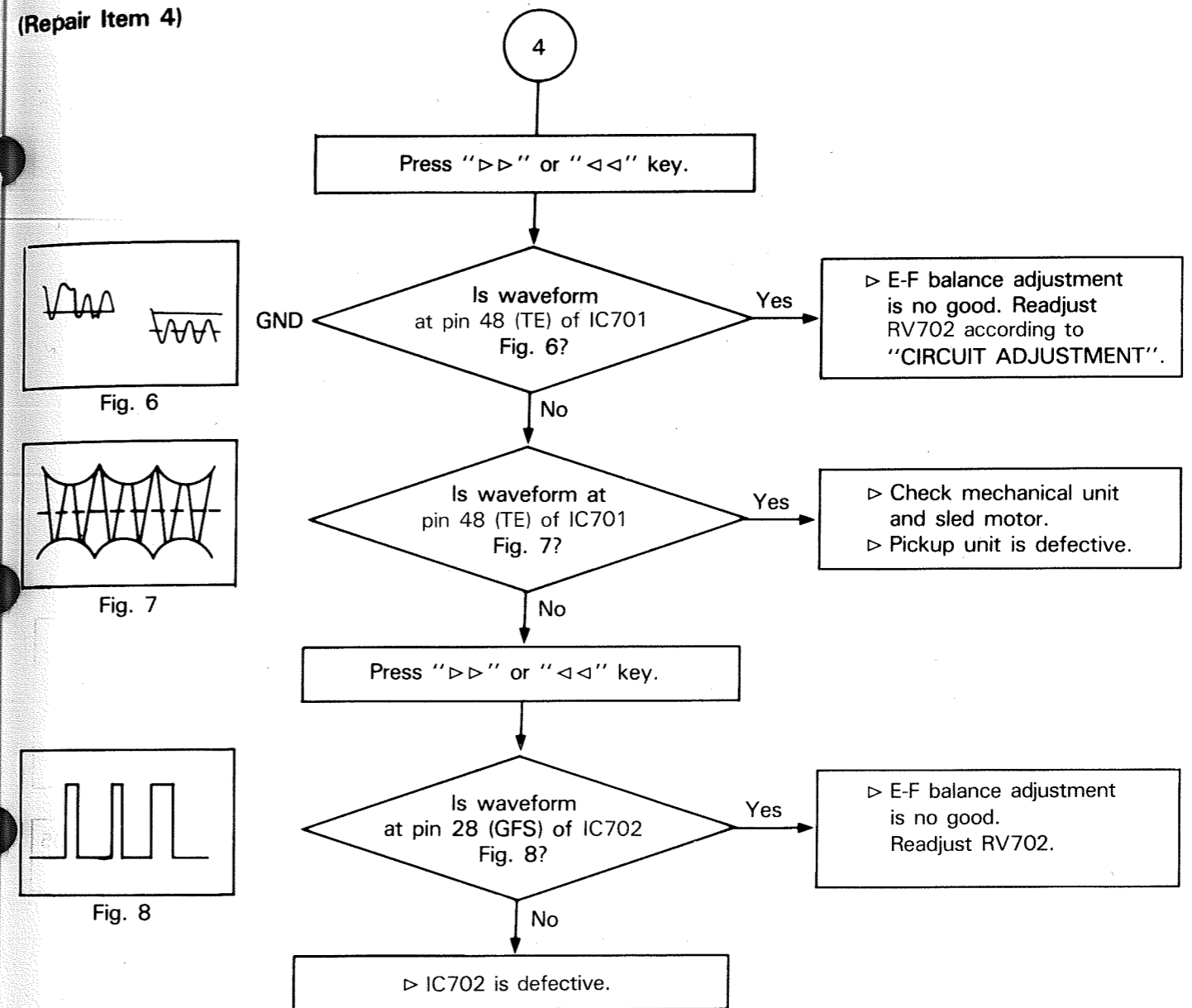
(Repair Item 2-A2)



(Repair Item 3)

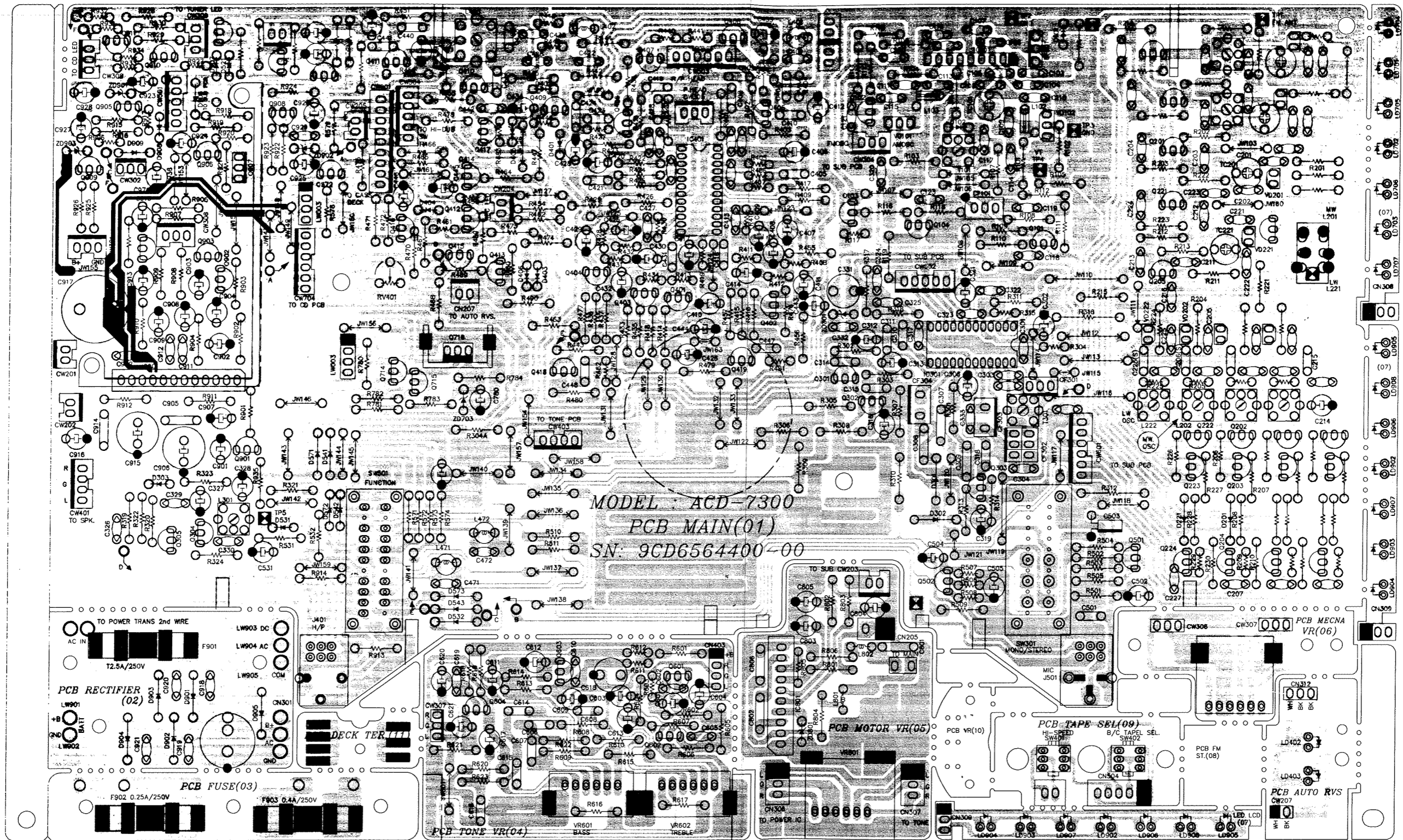


(Repair Item 4)

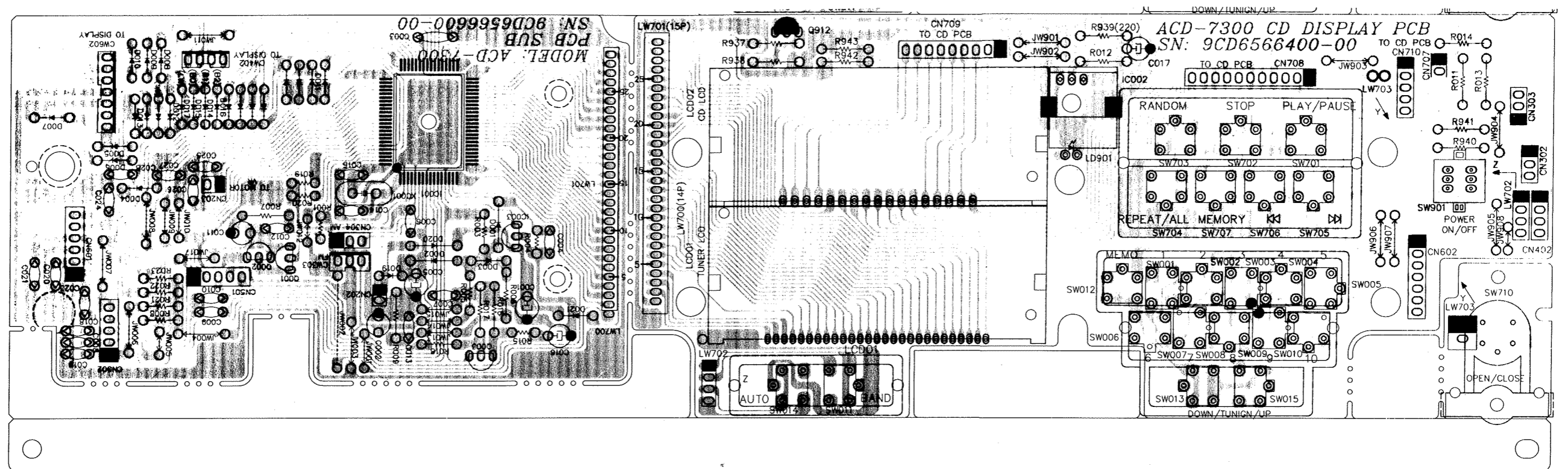


# 9. P.C. BOARD VIEWS

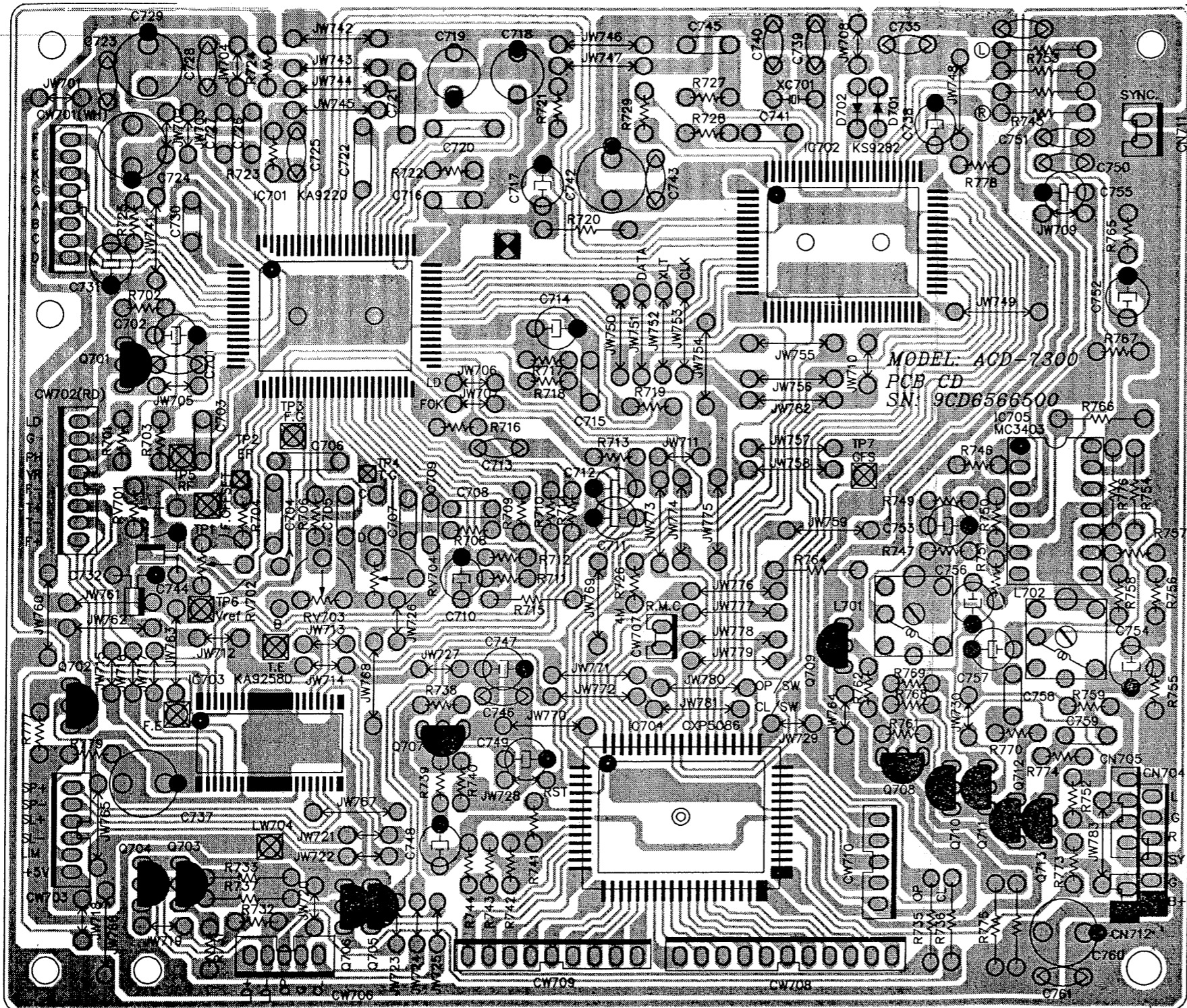
## • MAIN P.C. BOARD



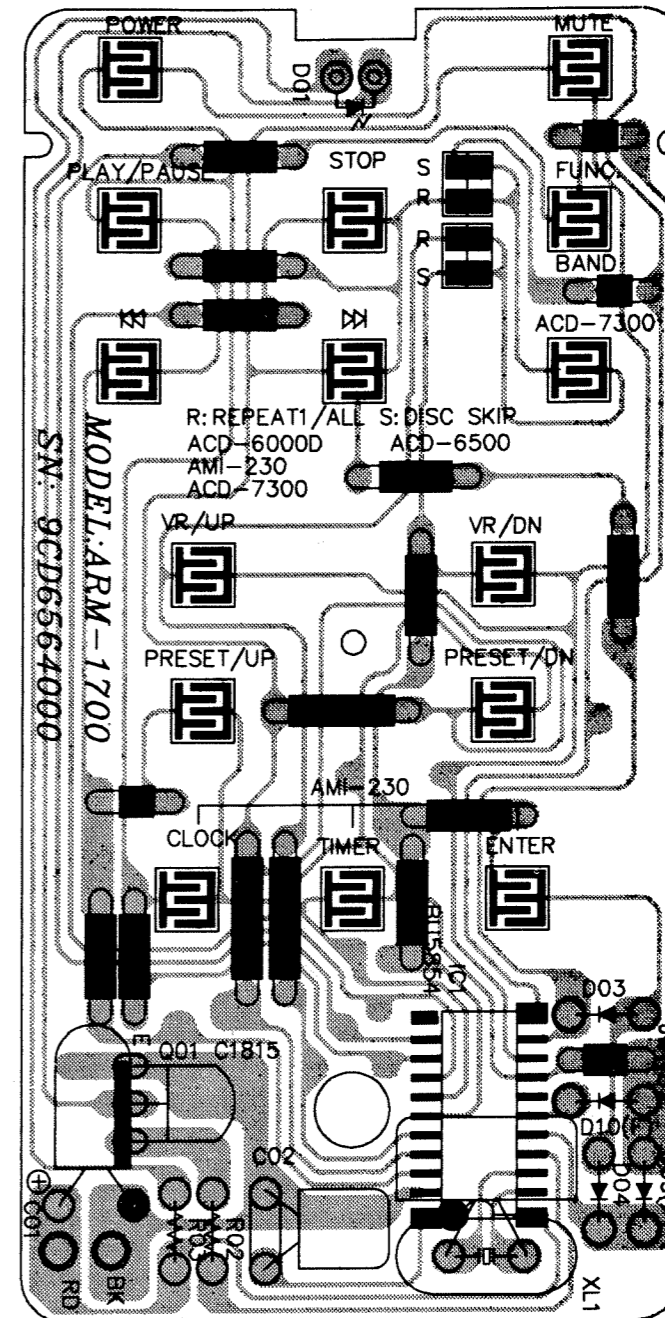
• SUB P.C.BOARD



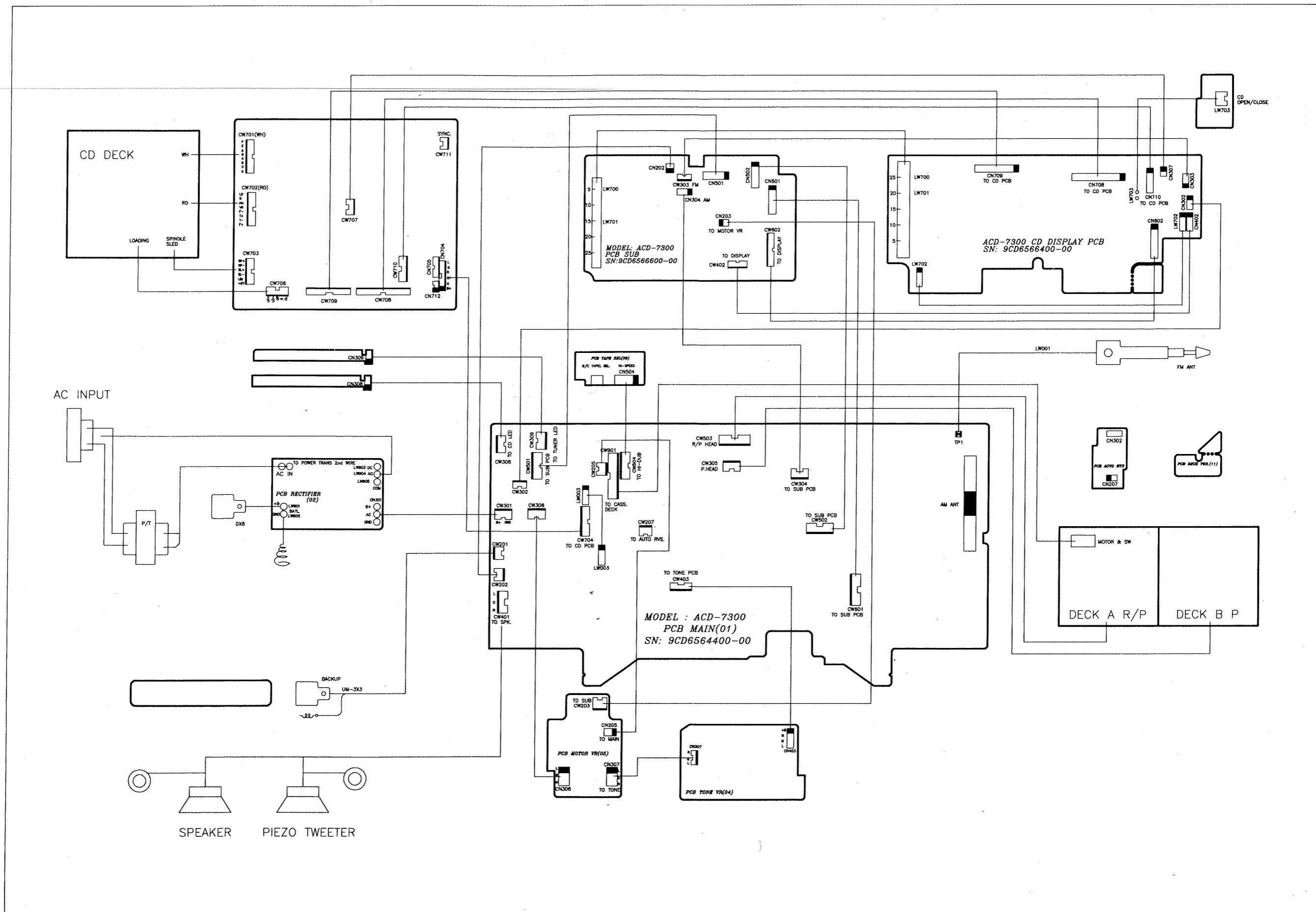
• CD P.C.BOARD



• REMOTE CONTROL P.C. BOARD



# 10. WIRING DIAGRAM



# 11. ELECTRICAL PART LIST

PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
C CERA	CCKB1H101K	5	HIKB 50V 100PF K AXL 26MM	EA	C326 C602 C605 C610 C619
C CERA	CCKB1H102K	6	HIKB 50V 1000PF K AXL 26M	EA	C009 C010 C104 C110 C304 C701
C CERA	CCKB1H121K	4	HIKB 50V 120PF K AXL 26MM	EA	C401 C422 C471 C472
C CERA	CCKB1H151K	2	HIKB 50V 150PF K AXL 26MM	EA	C435 C486
C CERA	CCKB1H271K	1	HIKB 50V 270PF K AXL 26MM	EA	C437
C CERA	CCKB1H331K	1	HIKB 50V 330PF K AXL 26MM	EA	C317
C CERA	CCKB1H561K	2	HIKB 50V 560PF K AXL 26MM	EA	C911 C912
C CERA	CCKB1H821K	2	HIKB 50V 820PF K AXL 26MM	EA	C403 C419
C CERA	CCKF1H1032	10	HIKF 50V 0.01MF Z AXIAL	EA	C012 C105 C213 C320 C329 C723 C725 C728 C735 C743
C CERA	CCKF1H104Z	1	HIKF 50V 0.1MF Z AXL 26MM	EA	C322
C CERA	CCKF1H223Z	47	HIKF 50V 0.022MF Z 26MM	EA	C003 C004 C006 C008 C013 C018 C019 C020 C021 C023 C024 C025 C026 C027 C028 C109 C114 C116 C117 C118 C119 C120 C123 C201 C203 C204 C207 C211 C212 C216 C221 C223 C224 C227 C301 C303 C324 C325 C332 C442 C746 C761 C918 C919 C920 C921 C929
C CERA	CKCH1H101J	1	CH 50V 100PF J AXL 26MM	EA	C225
C CERA	CKCH1H109K	1	CH 50V 1PF K AXL 26MM	EA	C333
C CERA	CKCH1H150J	2	CH 50V 15PF J AXL 26MM	EA	C103 C113
C CERA	CKCH1H200J	3	CH 50V 20PF J AXL 26MM	EA	C014 C015 C205
C CERA	CKCH1H330J	6	CH 50V 33PF J AXIAL 26MM	EA	C111 C330 C413 C427 C739 C740
C CERA	CKCH1H409K	1	CH 50V 4PF K AXL 26MM	EA	C115
C CERA	CKCH1H470J	2	CH 50V 47PF J AXL 26MM	EA	C222 C713
C CERA	CKCH1H509K	3	CH 50V 5PF K AXL 26MM	EA	C106 C107 C108
C CERA	CKCH1H809K	2	CH 50V 8PF K AXL 26MM	EA	C750 C751
C CERA	CKSL1H680J	1	SL 50V 68PF J AXL 26MM	EA	C121
C ELECTRO	CEXE1C102A	2	RS 16V 1000MF 13×20	EA	C906 C915
C ELECTRO	CEXE1C221A	10	RS 16V 220MF 10×12.5	EA	C001 C505 C724 C729 C732 C738 C742 C744 C755 C926
C ELECTRO	CEXE1C471A	3	RS 16V 470MF 10×20	EA	C618 C737 C760
C ELECTRO	CEXE1E100A	1	25V 10MF RS 5×11 TAPING	EA	C01
C ELECTRO	CEXE1E101A	15	RS 25V 100MF 8×11.5	EA	C002 C005 C302 C331 C408 C439 C702 C747 C803 C904 C907 C916 C925 C928 C970
C ELECTRO	CEXE1E220A	1	RS 25V 22MF 5×11	EA	C316
C ELECTRO	CEXE1E221A	2	RS 25V 220MF 10×16	EA	C446 C902
C ELECTRO	CEXE1E221A	2	RS 25V 220MF 10×16	EA	C446 C902
C ELECTRO	CEXE1E330A	1	RS 25V 33MF 6.3×11	EA	C718
C ELECTRO	CEXE1E470A	16	RS 25V 47MF 6.3×11	EA	C016 C017 C328 C406 C414 C417 C420 C430 C612 C621 C731 C752 C780 C903 C913 C923
C ELECTRO	CEXE1H100A	10	50V RS 10MF (5×11) TP	EA	C306 C327 C407 C426 C443 C712 C804 C805 C901 C927



PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
C ELECTRO	CEXE1H109A	18	50V RS 1MF (5x11) TP	EA	C011 C319 C411 C415 C429 C432 C433 C434 C502 C601 C603 C604 C609 C611 C613 C617 C620 C924
C ELECTRO	CEXE1H228A	1	50V RS 0.22MF (5x11) TP	EA	C748
C ELECTRO	CEXE1H229A	6	50V RS 2.2MF (5x11) TP	EA	C409 C412 C428 C749 C908 C909
C ELECTRO	CEXE1H338A	1	50V RS 0.33MF (5x11) TP	EA	C710
C ELECTRO	CEXE1H339A	2	50V RS 3.3MF (5x11) TP	EA	C445 C719
C ELECTRO	CEXE1H478A	3	50V RS 0.47MF (5x11) TP	EA	C711 C714 C717
C ELECTRO	CEXE1H479A	13	50V RS 4.7MF (5x11) TP	EA	C312 C313 C321 C425 C444 C503 C504 C531 C753 C754 C756 C757 C910
C ELECTRO	CEXF1E332V	1	RSS 25V 3300MF 16x31.5	EA	C917
C MYLAR	CMXM1H102J	4	50V 0.001MF J	EA	C402 C418 C608 C616
C MYLAR	CMXM1H103J	9	50V 0.01MF J	EA	C310 C311 C314 C315 C441 C501 C715 C726 C727
C MYLAR	CMXM1H104J	8	50V 0.1MF J	EA	C704 C706 C720 C712 C722 C801 C802 C806
C MYLAR	CMXM1H122J	1	50V 0.0012MF J	EA	C730
C MYLAR	CMXM1H123J	1	50V 0.012MF J	EA	C318
C MYLAR	CMXM1H152K	2	50V 1500 PF K	EA	C438 C745
C MYLAR	CMXM1H153J	1	50V 0.015MF J TAPPING	EA	C708
C MYLAR	CMXM1h154J	2	50V 0.15MF J	EA	C905 C914
C MYLAR	CMXM1H182J	2	50V 1800PF J	EA	C404 C423
C MYLAR	CMXM1H183J	2	50V 0.018MF J	EA	C405 C421
C MYLAR	CMXM1H222J	3	50V 2200PF J	EA	C416 C431 C705
C MYLAR	CMXM1H332J	1	50V 3300PF J	EA	C440
C MYLAR	CMXM1H333J	3	50 0.300MF J	EA	C716 C758 C759
C MYLAR	CMXM1H472J	3	50V 0.0047MF J	EA	C410 C424 C703
C MYLAR	CMXM1H473J	5	50V 0.047MF J	EA	C606 C607 C614 C615 C741
C MYLAR	CMXM1H682J	3	50V 0.0068MF J	EA	C447 C448 C707
C MYLAR	CMXM1H683J	1	50V 0.068 MF J	EA	C307
C MYLAR	CMXM1H823J	3	50V 0.082MF J	EA	C02 C308 C309
C STYBOL	CSYS1H201J	1	50V 200PF J	EA	C226
C STYROL	CSYS1H431J	1	50V 430PF J	EA	C206
CLIP FUSE	9734600700	2	FC-5N	EA	FC901 FC902
COIL CHOKE	5LC333K505	4	33MH	EA	L401 L402 L471 L472
COIL DC OSC	5L00000573	1	7x7 2.8MH 3% Q=50 (5144)	EA	L301
COIL FM OSC	5L00000587	1	0.5x3x5 AN 1/2T	EA	L103
COIL FM OSC	5L00000630	1	0.6x3.4x3.1/2T CW	EA	L102
COIL LW OSC	5L0451K652	1	454UH 7x7 CAN BK	EA	L222
COIL MW OSC	5L0111K651	1	110UH 7x7 CAN	EA	L202
COIL MW/LW ANT	5LA0000567	1	FA92 3567 W/BAR. HOLDER	EA	L221
COIL OSC	5L00000500	1	0500 10x10 BK	EA	L403
CONN AS	9738836400	1	AWG26 1P WH 200MM DIM	EA	LW001
CONN AS	9738836500	3	AWG26 2P 150MM	EA	CN202 CN203 CN205 CW202 CW203 CW205
CONN AS	9738836600	1	WG26 2P 500+350MM	EA	CN201 CW201
CONN AS	9738836700	2	AWG26 2P 250MM	EA	CN707 CN707 CW707

PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
CONN AS	9738836800	2	#28 3P2P SHIELD 300MM B/I	EA	CN306 CN307 CW305 CW306 CW307
CONN AS	9738836900	1	3P 1P SHIELD + 1P200MM	EA	CN304 CW304
CONN AS	9738837000	2	AWG26 3P 250MM WH	EA	CN303 CN309 CW303 CW309
CONN AS	9738837100	1	AWG26 3P 250MM RD	EA	CN308 CW308
CONN AS	9738837200	1	AWG24 3P 250MM	EA	CN301 CW301
CONN AS	9738837300	1	AWG26 3P 400MM	EA	CN302 CW302
CONN AS	9738837400	1	AWG26 2P550MM + 2P150MM	EA	CN401 CW401
CONN AS	9738837500	1	4P 2P SHIELD + 1P 250MM B/I	EA	CN403 DW403
CONN AS	9738837600	1	AWG26 4P 250MM	EA	CN402 CW402
CONN AS	9738837700	2	AWG26 5P 250MM	EA	CN501 CN504 CW501 CW504
CONN AS	9738837800	1	AWG26 5P 150MM	EA	CN502 CW502
CONN AS	9738837900	1	AWG26 5P 250MM	EA	CN710 CW710
CONN AS	9738838000	0	6P SHIELD 300MM	EA	CW503
CONN AS	9738838100	1	AWG26 6P 2P SHIELD + 3P500MM	EA	CN704 CW704
CONN AS	9738838200	1	AWG26 6P 200MM	EA	CN601 CW601
CONN AS	9738838300	1	AWG26 7P 250MM BOARD IN	EA	CN602 CW602
CONN AS	9738838400	2	AWG26 9P 350MM BOARD IN	EA	CN709 CN709 CW709
CONN AS	9738838500	2	AWG26 11P 300MM BOARD IN	EA	CN708 CN708 CW708
CONN AS	9738838600	0	AWG26 9P 350MM	EA	CW901
CONN AS	9738838700	1	#20 8P PH WH 150MM SHIELD	EA	CN701 CW701
CONN AS	9738838800	1	#28 8P PH RD 150 SHIELD + 4	EA	CN702 CW702
CONN AS	9738838900	1	AWG28 5P PH 150MM	EA	CN706 CW706
CONN AS	9738839000	1	AWG28 6P PH 100MM	EA	CN703 CW703
CONN AS	9738839100	1	#22 7/0.26 BK 600MM DIAMO	EA	LW704
CONN AS	9738839400	1	AWG26 2P 2.5MM 500MM	EA	CN713 CW713
CORD POWER VDE	9716905500	1	KKP-419CKLCE-2FKKS-15 N/M	EA	00110
DIODE	DKSSI33----	49	1SS133 AUTO 26MM	EA	D001 D002 D003 D004 D005 D006 D007 D008 D009 D010 D011 D012 D013 D014 D015 D016 D019 D020 D021 D03 D04 D101 D201 D221 D301 D302 D303 D401 D402 D043 D404 D405 D407 D501 D502 D531 D532 D541 D542 D543 D571 D572 D573 D701 D702 D906 D907 D908 D909
DIODE	DRL202----	4	RL202	EA	D901 D902 D903 D904
DIODE	D1N4001----	1	1N4001	EA	D905
DIODE	D1SV147----	2	1SV-p147	EA	VD101 VD102
DIODE	D1SV149----	4	1SV-149	EA	VD201 VD202 VD221 VD222
DIODE ZENER	DKTZ10A----	1	MTZ-10 26MM TAPPING	EA	ZD903
DIODE ZENER	DKTZ25R6A--	1	MTZ-5.6 26MM TAPPING	EA	ZD301
DIODE ZENER	DKTZ26R2A--	1	MTZ-6.2 26MM TAPPING	EA	ZD801
DIODE ZENER	DKTZ26R8A--	1	MTZ 6.8 26MM TAPPING	EA	ZD901
DIODE ZENER	DKTZ9R1A--	2	MTZ-9.1 26MM TAPPING	EA	ZD703 ZD902
FET	TKTK161Y--	1	KTK161 (Y)	EA	Q205
FILTER BANDPASS	5PPFWB4----	1	PFWB4	EA	BF001
FILTER CERA	5PE107MS2A	2	SFE107MS2-A	EA	CF101 CF301
FILTER CERAMIC	5PSFZ450HL	1	SFZ450HL	EA	CF302

PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
FILTER DISCRIMINATOR	5PCDA107MG	1	CDA 10.7MG-18	EA	CF303
FILTER RESONATOR	5PCSB456F-	1	CSB456F18	EA	CF304
FUSE GLASS TUBE	5FSGB2522L	1	SENKO TL 2.5A 250V MF51	EA	F901
IC	1BA6209N--	1	BA6209N	EA	IC801
IC	1KA9258D--	1	KA9258D	EA	IC703
IC	1K1A7358AP	1	KIA 7358AP	EA	IC101
IC	1K1A8132N-	1	KIA8132N	EA	IC301
IC	1MC3403N--	1	MC3403N	EA	IC705
IC	1TA8189N--	1	TA8189N	EA	IC401
IC AUDIO	1K1A8207K-	1	KIA8207K	EA	IC901
IC AUDIO DSP	1KS9282B--	1	KS9282B	EA	IC702
IC AUDIO RESET	1K1A7029P-	1	KIA7029P	EA	IC003
IC CPU	1CXP508690	1	CXP586HQ-590	EA	IC704
IC DTS	1LC7232492	1	LC7232-8492	EA	IC001
IC PREAMP	1DHR38N---	1	DHR38N	EA	IC002
IC RF	1KA9220---	1	KA9220	EA	IC701
IC TX	1BU5854F--	1	BU5854F	EA	IC01
IFT AM	5107AYW143	1	7x7 7MC-45050N-KR YELLOW	EA	T301
IFT FM DET	5107FOR137	1	7x7 ORANGE HMJ-020-015	EA	T101
JACK HEADPHONE	9766318110	2	SHQ9075-01-040	EA	J401 J501
LCD	DLE0679AP-	1	LE-0679AP	EA	LCD02
LCD	DLF0680AP-	1	LE-0680AP	EA	LCD01
LED	DSL25VR3G	1	SLB25VR3G	EA	LD901
LED	DSL31MC3-	14	SLV31MC3 (GERRN)	EA	LD701 LD702 LD703 LD704 LD705 LD706 LD707 LD902 LD903 LD904 LD905 LD906 LD907 LD908
LED IR	DCL2S-----	1	CL2S	EA	D01
PCB CD	9CD6566500	1	120x140xT1.6 94HB	EA	B001
PCB MAIN	9CD6564400	1	330x197xT1.6 1VO	EA	B001
PCB REMOCON	9CD6564000	1	88x44xT1.6 94HB	EA	B01
PCB SUB	9CD6566600	1	132x79xT1.6 94HB	EA	B001
PIEZO BUZZER	9CD8511900	2	B20-FJ 20PI	EA	O0290
PIN WRAPPING	9716404000	12	MFZN1.1x1.1 PANASERT	ME	TP1 TP1 TP2 TP2 TP3 TP3 TP4 TP4 TP5 TP5 TP6 TP7
R CARBON FILM	RD-AZ100JK	2	1/6 10 OHM J	EA	R005 R906
R CARBON FILM	RD-AZ102JK	12	1/6 1K OHM J	EA	R481 R482 R507 R704 R719 R725 R731 R732 R746 R752 R759 R799
R CARBON FILM	RD-AZ103JK	16	1/6 10K OHM J	EA	R004 R018 R021 R022 R023 R315 R428 R483 R718 R749 R751 R756 R758 R773 R778 R932
R CARBON FILM	RD-AZ104JK	4	1/6 100K OHM J	EA	R709 R712 R717 R724
R CARBON FILM	RD-AZ105JK	3	1/6 1M OHM J	EA	R419 R506 R721
R CARBON FILM	RD-AZ109JK	1	1/6 1 OHM J	EA	R03
R CARBON FILM	RD-AZ121JK	1	1/6 120 OHM J	EA	R933
R CARBON FILM	RD-AZ122JK	3	1/6 1.2K OHM J	EA	R413 R434 R920
R CARBON FILM	RD-AZ123JK	1	1/6 12K OHM J	EA	R765

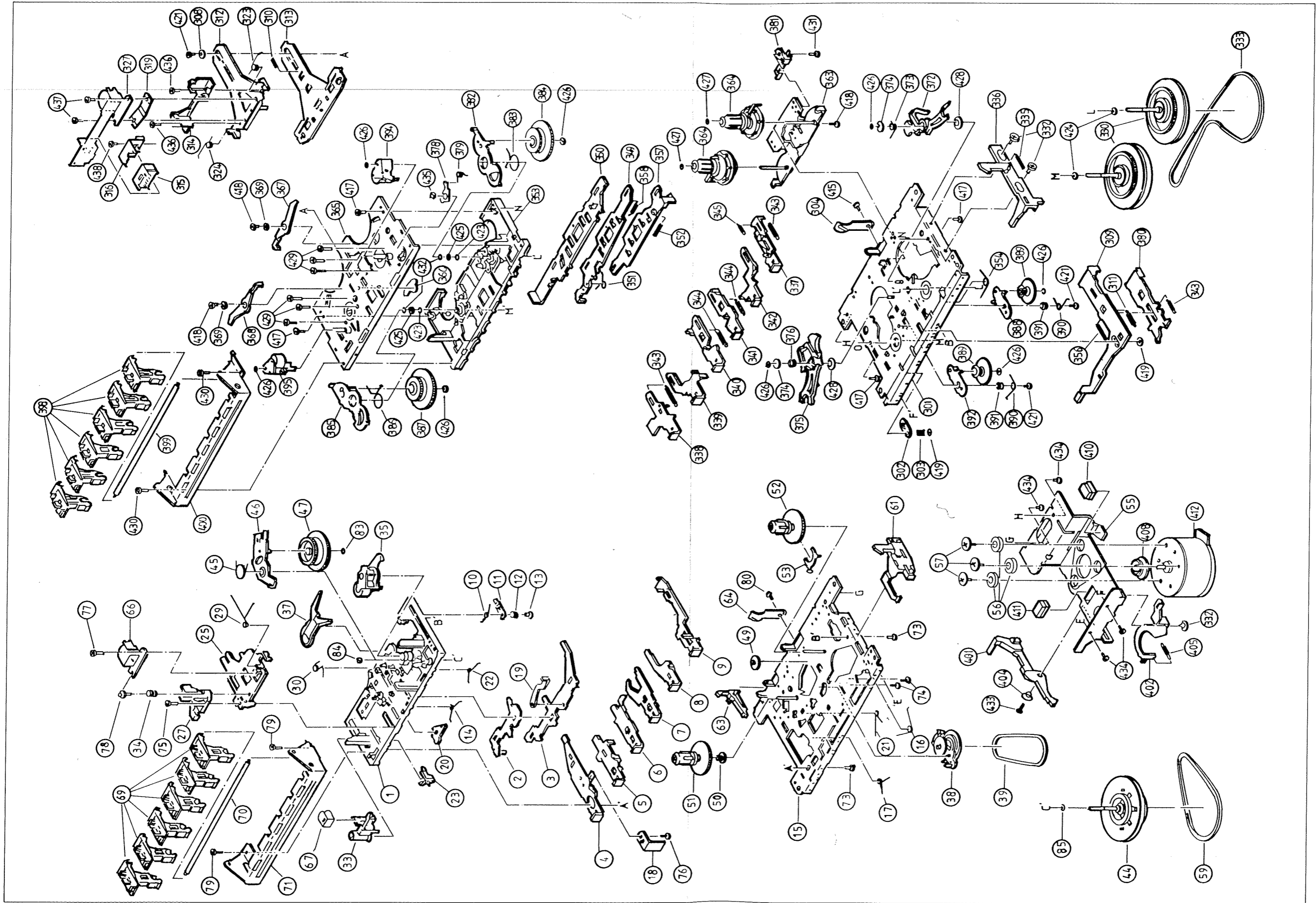
PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
R CARBON FILM	RD-AZ124JK	1	1/6 120K OHM J	EA	R711
R CARBON FILM	RD-AZ153JK	2	1/6 15K OHM J	EA	R404 R427
R CARBON FILM	RD-AZ183JK	2	1/6 18K OHM J	EA	R750 R757
R CARBON FILM	RD-AZ184JK	5	1/6 180K OHM J	EA	R405 R410 R44 R430 R722
R CARBON FILM	RD-AZ220JK	3	1/6 22 OHM J	EA	R015 R072 R917
R CARBON FILM	RD-AZ221JK	2	1/6 220 OHM J	EA	R304 R508
R CARBON FILM	RD-AZ222JK	5	1/6 2.2K OHM J	EA	R438 R439 R440 R441 R741
R CARBON FILM	RD-AZ223JK	6	1/6 22K OHM J	EA	R701 R738 R739 R724 R743 R744
R CARBON FILM	RD-AZ224JK	1	1/6 220K OHM J	EA	R611
R CARBON FILM	RD-AZ229JK	1	1/6 2.2 OHM J	EA	R934
R CARBON FILM	RD-AZ271JK	2	1/6 270 OHM J	EA	R412 R431
R CARBON FILM	RD-AZ273JK	2	1/6 27K OHM J	EA	R703 R729
R CARBON FILM	RD-AZ332JK	3	1/6 3.3K OHM J	EA	R727 R728 R927
R CARBON FILM	RD-AZ333JK	6	1/6 33K OHM J	EA	R008 R019 R020 R408 R448 R449
R CARBON FILM	RD-AZ334JK	2	1/6 330K OHM J	EA	R411 R432
R CARBON FILM	RD-AZ391JK	2	1/6 390 OHM J	EA	R770 R774
R CARBON FILM	RD-AZ472JK	12	1/6 4.7K OHM J	EA	JW706 R003 R117 R446 R458 R726 R735 R736 R747 R755 R768 R769
R CARBON FILM	RD-AZ473JK	5	1/6 47K OHM J	EA	R713 R740 R761 R762 R767
R CARBON FILM	RD-AZ474JK	2	1/6 470K OHM J	EA	R506A R723
R CARBON FILM	RD-AZ561JK	1	1/6 560 OHM J	EA	R461
R CARBON FILM	RD-AZ562JK	2	1/6 5.6K OHM J	EA	R612 R931
R CARBON FILM	RD-A563JK	1	1/6 56K OHM J	EA	R710
R CARBON FILM	RD-AZ564JK	1	1/6 560K OHM J	EA	R603
R CARBON FILM	RD-AZ682JK	3	1/6 6.8K OHM J	EA	R407 R425 R714
R CARBON FILM	RD-AZ683JK	3	1/6 68K OHM J	EA	R205 R225 R716
R CARBON FILM	RD-AZ820JK	2	1/6 82 OHM J	EA	R02 R701
R CARBON FILM	RD-AZ822JK	5	1/6 8.2K OHM J	EA	R001 R290 R406 R424
R CARBON FILM	RD-4Z100JK	7	1/4 OHM J	EA	R452 R475 R801 R804 R805 R806 R924
R CARBON FILM	RD-4Z101JK	16	1/4 100 OHM J 26MM	EA	R011 R101 R106 R107 R112 R115 R304A x321 R403 R423 R450 R509 R601 R775 R904 R910
R CARBON FILM	RD-4Z102JK	19	1/4 1K OHM J	EA	R012 R105 R206 R215 R226 R302 R303 R323 R401 R402 R420 R421 R456 R463 R467 R504 R614 R621 R754
R CARBON FILM	RD-4Z103JK	2	1/4 10K OHM J	EA	R009 R013 R014 R426 R445 R455 R459 R520 R521 R532 R745 R753 R764 R780 R782 R798 R907 R928 R942 R943
R CARBON FILM	RD-4Z104JK	15	1/4 100K OHM J	EA	R102 R103 R201 R202 R204 R211 R221 R222 R224 R317 R460 R578 R901 R919 R941
R CARBON FILM	RD-4Z105JK	3	1/4 1M OHM J	EA	R502 R602 R605
R CARBON FILM	RD-4Z121JK	1	1/4 120 OHM J	EA	R930
R CARBON FILM	RD-4Z122JK	1	1/4 1.2K OHM J	EA	R784

PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
R CARBON FILM	RD-4Z123JK	6	1/4 12K OHM J	EA	R510 R511 R608 R609 R615 R616
R CARBON FILM	RD-4Z124JK	1	1/4 120K OHM J	EA	R324
R CARBON FILM	RD-4Z151JK	3	1/4 150 OHM J	EA	R783 R913 R914
R CARBON FILM	RD-4Z153JK	2	1/4 15K OHM J	EA	R622 R623
R CARBON FILM	RD-4Z183JK	3	1/4 18K OHM J	EA	R017 R903 R921
R CARBON FILM	RD-4Z220JK	1	1/4 22 OHM J	EA	R104
R CARBON FILM	RD-4Z221JK	2	1/4 220 OHM J	EA	R409 R939
R CARBON FILM	RD-4Z222JK	4	1/4 2.2K OHM J	EA	R108 R414 R435 R453
R CARBON FILM	RD-4Z223JK	5	1/4 22K OHM J	EA	R301 R473 R474 R531 R781
R CARBON FILM	RD-4Z224JK	2	1/4 220K OHM J	EA	R113 R618
R CARBON FILM	RD-4Z229JK	3	1/4 2.2 OHM J	EA	R911 R912 R929
R CARBON FILM	RD-4Z271JK	1	1/4 270 OHM J	EA	R312
R CARBON FILM	RD-4Z273JK	2	1/4 27K OHM J	EA	R766 R776
R CARBON FILM	RD-4Z330JK	1	1/4 33 OHM J	EA	R915
R CARBON FILM	RD-4Z331JK	5	1/4 330 OHM J	EA	R110 R213 R214 R922 R926
R CARBON FILM	RD-4Z332JK	13	1/4 3.3K OHM J	EA	R213 R305 R308 R310 R311 R416 R436 R443 R466 R468 R469 R908 R909
R CARBON FILM	RD-4Z333JK	6	1/4 33K OHM J	EA	R429 R451 R465 R470 R571 R573
R CARBON FILM	RD-4Z392JK	2	1/4 3.9K OHM J	EA	R572 R574
R CARBON FILM	RD-4Z393JK	3	1/4 39K OHM J	EA	R320 R418 R433
R CARBON FILM	RD-4Z470JK	1	1/4 OHM J 26MM	EA	E316
R CARBON FILM	RD-4Z471JK	1	1/4 470 OHM J	EA	R114
R CARBON FILM	RD-4Z472JK	19	1/4 4.7K OHM J	EA	R207 R227 R442 R447 R464 R471 R476 R477 R478 R479 R480 R610 R617 R802 R803 R905 R936 R937 R940
R CARBON FILM	RD-4Z473JK	8	1/4 47K OHM J	EA	R016 R203 R223 R319 R457 R579 R613 R620
R CARBON FILM	RD-4Z474JK	1	1/4 470K OHM J	EA	R503
R CARBON FILM	RD-4Z479JK	2	1/4 4.7 OHM J	EA	R923 R925
R CARBON FILM	RD-4Z561JK	4	1/4 560 OHM J	EA	R111 R604 R607 R916
R CARBON FILM	RD-4Z562JK	4	1/4 5.6K OHM J	EA	R007 R306 R309 R619
R CARBON FILM	RD-4Z563JK	3	1/4 56K OHM J	EA	R501 R935 R938
R CARBON FILM	RD-4Z564JK	1	1/4 560K OHM J	EA	R606
R CARBON FILM	RD-4Z680JK	1	1/4 66 OHM J	EA	R505
R CARBON FILM	RD-4Z681JK	1	1/4 680 OHM J	EA	R109
R CARBON FILM	RD-4Z683JK	1	1/4 68K OHM J	EA	R307
R CARBON FILM	RD-4Z820JK	2	1/4 82 OHM J	EA	R733 R737
R CARBON FILM	RD-4Z822JK	17	1/4 8.2K OHM J	EA	R006 R116 R118 R119 R208 R210 R228 R230 R313 R314 R316 R417 R444 R462 R720 R902 R918
R CARBON FILM	RD-4Z823JK	3	1/4 82K OHM J	EA	R415 R437 R715
R CARBON FILM	RD-4Z824JK	1	1/4 820K OHM J	EA	R322
R FUSIBLE	RF-4Z100J-	1	1/4 10 OHM J	EA	R777
R FUSIBLE	RF-4Z479J-	1	1/4 4.7 OHM J	EA	R779
R SEMI FIXED	RV6417222-	1	VM6CK-PV (1S) 2.2K OHM B	EA	RV401

PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
R SEMI FIXED	RV6417223-	4	VM6CK-PV (1S) 22K OHM B	EA	RV701 RV702 RV703 RV704
RESONATOR CERA	97P0A00010	1	CSB-455EB (REMOCON AS)	EA	XL1
SOCKET AC	9716381400	1	2PIN HSCI466-01-0111	EA	J901
SPEAKER	9CD8511800	2	3.20HM 12K50DW94015A	EA	00280
SW LEVER	5S80202334	1	LS-23-22GP 2C-2P	EA	SW301
SW LEVER	5S80403331	1	LS-23-43G	EA	SW501
SW PUSH	5S40202328	3	KPT-2203	EA	SW401 SW402 SW901
SW TACT	5S50101001	23	KPT-1105A 1C-1P	EA	SW001 SW002 SW003 SW004 SW005 SW006 SW007 SW008 SW009 SW010 SW011 SW012 SW013 SW014 SW015 SW701 SW702 SW703 SW704 SW705 SW706 SW707 SW710
TR	TKTA1266Y-	1	KTA1266Y	EA	Q715
TR	TKTB1366Y-	1	KTB1366Y	EA	Q907
TR	TKTD2058Y-	1	KTD2058Y	EA	Q716
TR	TSS8050C--	3	SS8050C	EA	Q905 Q908 Q909
TR	TSS9014C--	28	SS9014C	EA	Q001 Q002 Q003 Q104 Q204 Q224 Q303 Q304 Q305 Q401 Q403 Q410 Q411 Q413 Q415 Q417 Q418 Q419 Q501 Q502 Q572 Q712 Q713 Q901 Q903 Q906 Q910 Q911
TR	TSS9015C--	8	SS9015C	EA	Q103 Q203 Q223 Q409 Q412 Q414 Q416 Q902
TR	TZTA1266Y-	2	KTA1266Y- (AUTO) (1015Y)	EA	Q708 Q912
TR	TZTA950Y--	2	KTA950Y (AUTO)	EA	Q701 Q702
TR	TZTA966AY-	2	KTA966A-Y	EA	Q703 Q704
TR	TZTC1815Y-	1	KTC1815-Y (AUTO)	EA	Q01
TR	TZTC2120Y-	2	KTC2120Y (AUTO)	EA	Q705 Q706
TR	TZTC2878B-	10	KTC2878-B (AUTO)	EA	Q2020 Q222 Q301 Q302 Q402 Q404 Q405 Q406 Q407 Q408
TR	TZTC3194Y-	4	KTC3194Y	EA	Q101 Q102 Q201 Q221
TR	TZTC3198GR	4	KTC3198GR (1815GR)	EA	Q601 Q602 Q603 Q604
TR	TZTC3198Y-	5	KTC3198Y- (1815Y) (AUTO)	EA	Q707 Q709 Q710 Q711 Q714
TRANS POWER	5TPF05701F	1	EI-57 230V 50Hz	EA	PT901
TRIMMER	9737611600	3	5 PI 20PF	EA	TC101 TC201 TC221
VR MOTOR	5V6104709A	1	RK16Y 12MC 100KAX2	EA	VR801
VR ROTARY	5V1503710B	2	184RV-01-23.5-B50K	EA	VR601 VR602
WIRD FLAT	WDB4071517	3	AWG26 7P 150MM 2MM PITCH	EA	LW700
WIRE FLAT	WDB4081517	1	AWG26 8P 150MM 2MM PITCH	EA	LW701
WIRE LEAD	WP-ORD2017	1	AWG22 7/0.26 RD 10-200-10	EA	LW901
WIRE LEAD	WP-4BK1517	4	AWG26 7/0.16 BK 10-150-10	EA	LW006 LW 402 LW903
WIRD LEAD	WP-4BK6007	3	AWG26 7/0.16 BK 10-60-10	EA	LW007 LW008 LW009
WIRE LEAD	WP-4BL1517	2	AWG26 7/0.16 BL 10-150-10	EA	LW021 LW905
WIRE LEAD	WP-4RD1517	4	AWG26 7/0.16 RD 10-150-10	EA	LW004 LW401 LW904
WIRE LEAD	WP-4RD3017	3	AWG26 7/0.16 BK 10-300-10	EA	LW002 LW501 LW502
WIRE LEAD	WP-4WH2017	1	AWG26 7/0.16 WH 10-200-10	EA	LW005
WIRE LEAD 1007	WP-OBK2017	1	AWG 22 7/0.26 BK 10-200-10	EA	LW902
WIRE LEAD 1007	WP-4YW1217	1	AWG26 7/0.16 YW 10-120-10	EA	LW503

PART NAME	PART CODE	Q'TY	DESCRIPTION	UNIT	LOCATION
WIRE RIBBON	WBB4022017	1	AWG26 2P 200MM	EA	LW703
WIRE RIBBON	WBB4041017	1	AWG26 7/0.16 4P 10-100-10	EA	LW003
WIRE RIBBON	WBB4042517	1	#26 4P 250MM 2.5MM PITCH	EA	LW702
WIRE RIBBON 1007	WP-4021017	1	AWG26 7/0.16 2P 10-100-10	EA	W01

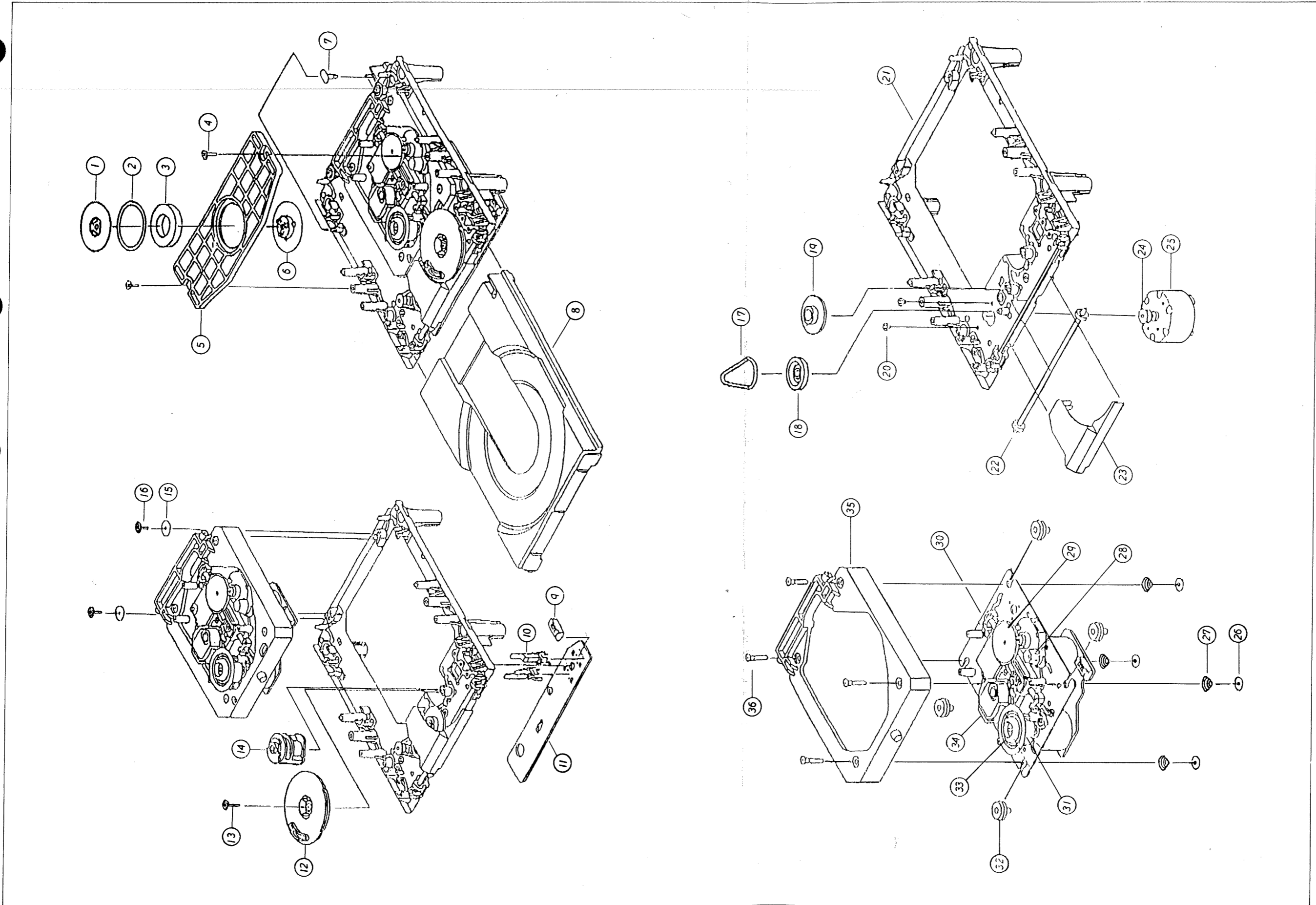
# 12. CASSETTE MECHANISM EXPLODED VIEW AND PART LIST



## PARTS LIST

NO.	PARTS NAME	DESCRIPTION	Q'TY
1	BASE ASS'Y	1921 14 301	2
2	SWITCH ACTUATOR	1921 14 09	2
3	PUSH BUTTON ACTUATOR	1921 14 08	2
4	REC BUTTON LEVER	1921 14 22	1
5	PLAY BUTTON LEVER	1921 14 23	2
6	REW BUTTON LEVER	1921 14 24	2
7	FF BUTTON LEVER	1921 14 25	2
8	STOP BUTTON LEVER	1921 14 26	2
9	PAUSE BUTTON LEVER	1921 14 61	2
10	P CONTROL SPRING	1921 14 13A	2
11	PAUSE LEVER (E)	1921 14 55	2
12	PAUSE LEVER SPRING	1921 14 12	2
13	PAUSE STOPPER	1921 14 11	2
14	BUTTON LEVER SPRING (A)	1921 14 14	2
15	CHASSIS ASS'Y	1921 01 501	2
16	E ACTUATOR SPRING	1921 14 16	2
17	P.S. LEVER SPRING	1921 14 17	2
18			
19	E KICK LEVER	1821 01 159	2
20	PR STOPPER	1921 14 20	2
21	REC BUTTON LEVER SPRING	1921 14 21	1
22	BUTTON LEVER SPRING (B)	1921 14 15	2
23	LEAF SWITCH MWS-1541T	6401 01 149	2
24			
25	HEAD PANEL	1921 03 11	2
26			
27	HEAD BASE	1921 03 04A	2
28			
29	PANEL P SPRING	1921 03 03	2
30	M CONTROL SPRING	1921 14 18	2
31			
32			
33	MG ARM	1921 03 05	1
34	AZIMUTH SPRING	1821 03 07	2
35	PINCH ROLLER ARM ASS'Y	1921 04 309	2
36			
37			
38	SENSING LEVER	1921 26 04	2
39	RF CLUTCH ASS'Y	1921 07 302	2
40	RF BELT	1921 07 03	2

# 13. CD MECHANISM EXPLODED VIEW AND PARTS LIST



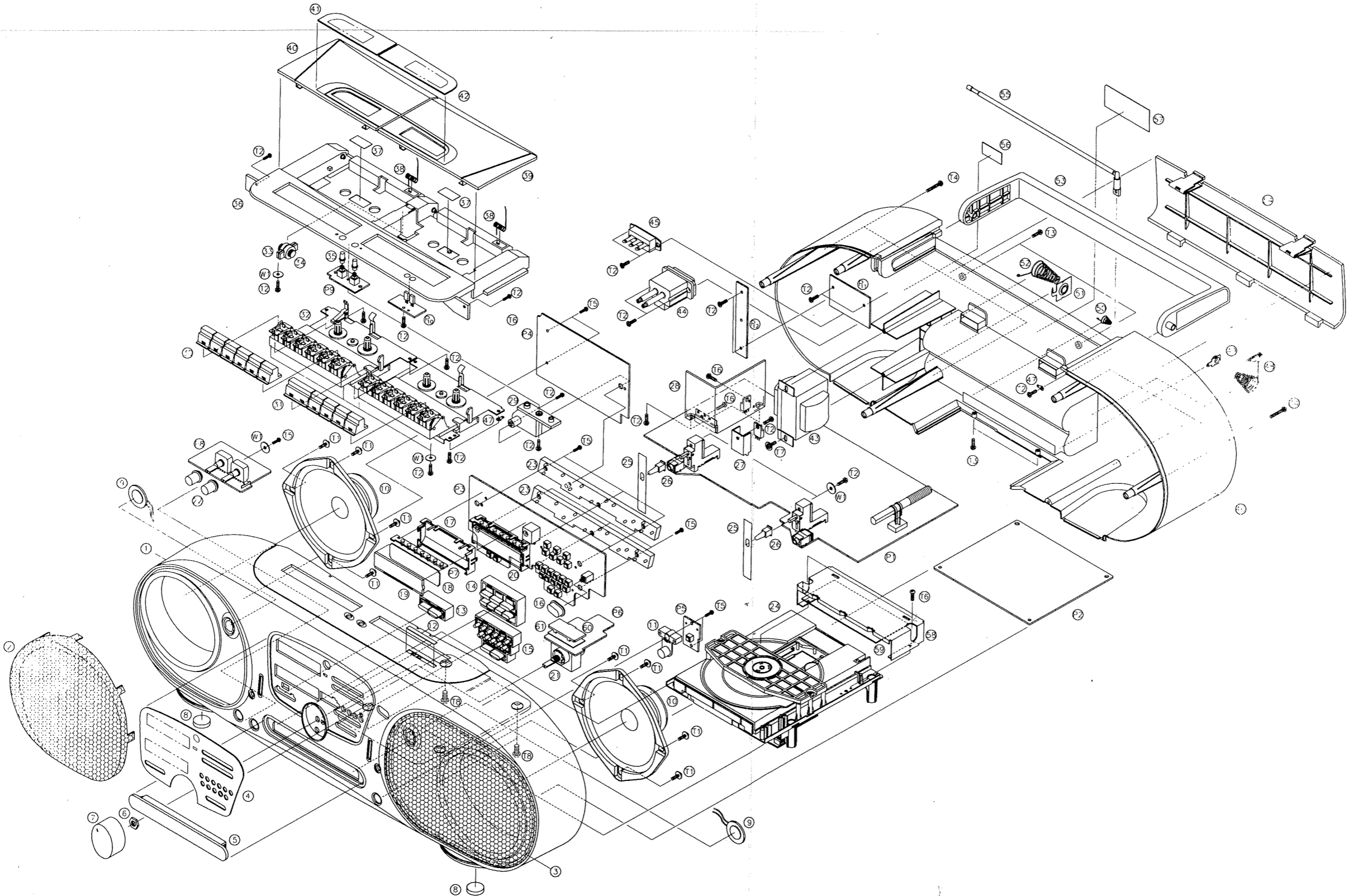
**KSL-2101ABM PART LIST**

NO	PART NO.	PARTS NAME	Q'TY	REMARKS
1	2-625-537-01	YOKE (S) CHUCKING	1	
2	2-625-541-02	DAMPER (S)	1	
3	1-452-483-21	MAGNET	1	
4	2-626-284-01	SCREW (PTPWH 2.6 × 6)	2	
5	2-625-546-01	PLATE (S) CHUCKING	1	
6	2-625-548-02	PULLY (G) CHUCKING	1	
7		SW PIN	2	
8	2-625-550-03	TRAY (S)	1	
9	1-564-721-11	PIN CONNECTOR	1	
10	1-527-085-11	SWITCH LEAF	2	
11	1-640-523-12	PC BOARD LOADING	1	
12	2-825-547-03	GEAR (S) DRIVE	1	
13	3-316-301-51	SCREW (PTPWH 2.6 × 16)	1	
14	2-625-545-04	CAM (S) CONTROL	1	
15		FALT WASHER	2	
16	2-626-284-01	SCREW (P-TPWH 2.6 × 7)	2	
17	3-853-387-01	BELT LM	1	
18	2-625-536-02	LOADING PULLY	1	
19	2-625-534-02	PULL (S), MIDWAY	1	
20	2-625-279-01	SCREW B2.6 × 5	2	
21	2-625-552-06	CHASSIS (S) OUTSERT MAIN	1	
22	2-625-535-01	GEAR (S) TRAY	1	
23	2-625-644-01	COVER (S) GEAR	1	
24		MOTOR PULLY	1	
25	X-2625-117-1	LOADING MOTOR ASSEMBLY	1	
26	2-625-730-01	WASHER BASED SCREW	4	
27	2-625-539-01	SPRING (S)	4	
28		MOTOR GEAR	1	
29		GEAR (A)	1	
30		OUTSERT MAIN CHASSIS	1	
31		TURNTABLE	1	
32		INSALATOR	4	
33		CENTER KING	1	
34		OPITICAL PICK UP	1	
35	X-2625-227-2	CHASSIS ASS'Y (G) SUB	1	
36		INSULATOR PIN	4	



# 14. EXPLODED VIEWS & PARTS LIST

• MAIN SET

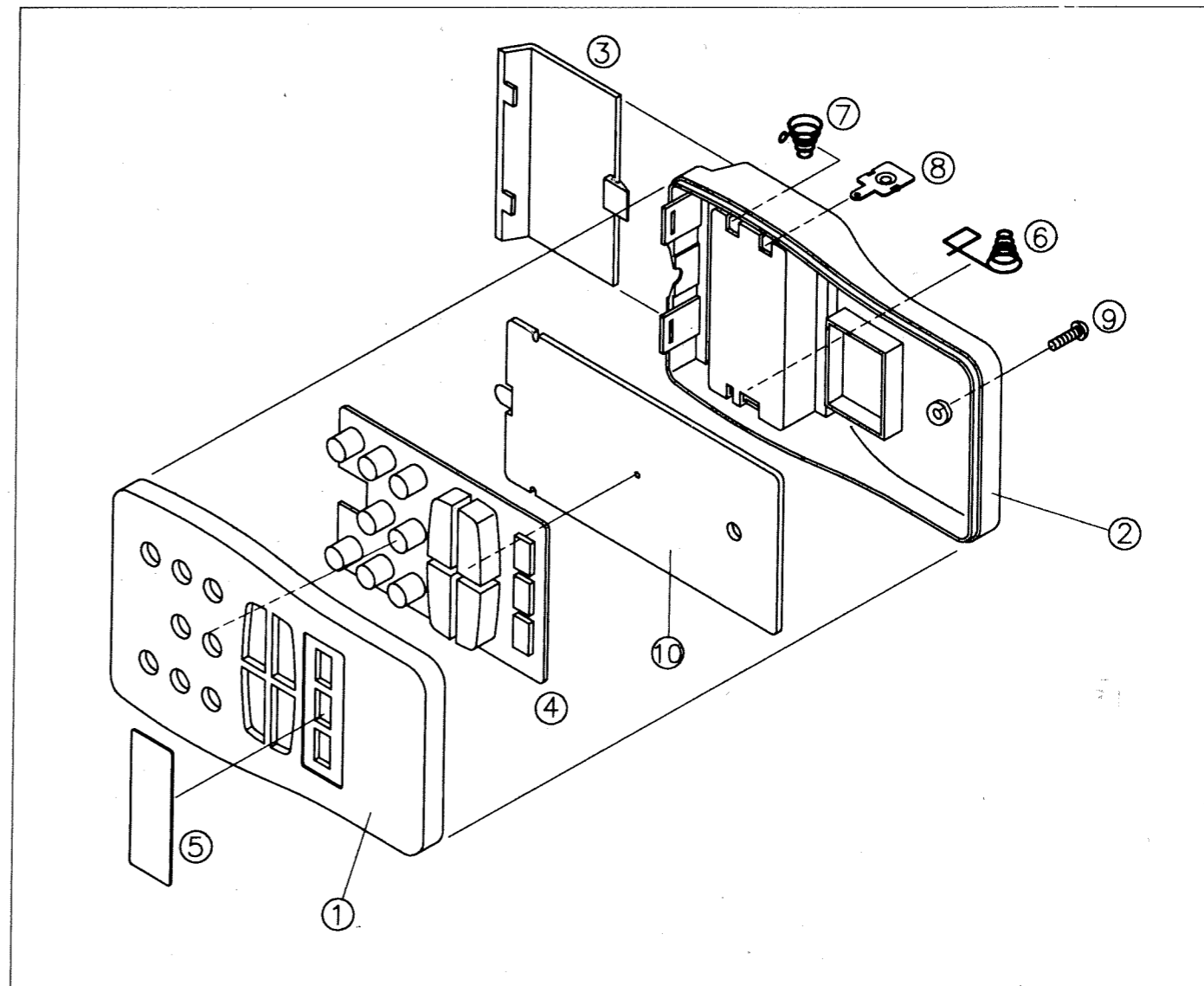


## EXPLODED VIEW

NO	PARTS NAME	PARTS CODE	DESCRIPTIONS	Q'TY	REMARK
1	CABINET FRONT	9CD0122700	MIPS, SPRAY	1	
2	GRILL SPEAKER "L"	9CD12016L0	SCP 0.6T	1	
3	GRILL SPEAKER "R"	9CD12016R0	SCP 0.6T	1	
4	WINDOW LCD (D)	9CD1608000	PVC 1.0T	1	
5	DOOR CD	9CD1805100	MIPS, SPRAY	1	
6	NUT HEX	—	—	1	
7	KNOB VR	9CD1319900	ABS, RED PAINT	1	
8	CUSHION FOOT	9CD4206100	U/RUBBER	2	
9	PIEZO BUZZER	9CD8511900	B20-FJ 20PI	2	
10	SPEAKER	9CD8511800	3.2 OHM, 5"	2	
11	KNOB CD OPEN	9CD1320200	ABS	1	
12	PLATE DIRECTION	9CD09052S0	PVC 0.5T	1	AUTO STOP
		9CD09052R0		1	AUTO REVERSE
13	KNOB BAND	9CD1320600	ABS	1	
14	KNOB CD	9CD1319600	ABS	1	
15	KNOB PRESET	9CD1320500	ABS	1	
16	KNOB POWER	9CD1320300	ABS	1	
17	GUIDE LCD	9CD2504300	ABS. WHITE	2	
18	PLATE LCD	9CD0903900	PVC 1.0T MILKY	2	
19	LCD CD	DLE0679AP-	LE-0679AP	1	
20	LCD TUNER	DLE0680AP-	LE-0680AP	1	
21	VR MOTOR	5V6104709A	RK 16Y 12MC 100KA × 2	1	
22	KNOB BASS	9CD1320000	ABS. RED PAINT	2	
23	HOLDER LCD PCB	9CD2301600	ABS	2	
24	CD DECK MECHA	9CD6002500	KSL-2101ABM	1	
25	SHEET BLIND	9CD9602600	LEXAN 0.25T	2	
26	KNOB LEVER	9CD1320100	ABS	2	
27	HEAT SINK TR	9714402100	BSP 1.0T	1	
28	HEAT SINK	9CD4401200	AL 2.0T	1	
29	BRACKET TOP	9CD2409000	MIPS	1	
30	KNOB DECK	9CD1319700	ABS	10	
31	KNOB DECK PLAY	9CD1319800	ABS	1	A/STOP
32	CASS DECK MECHA	9CD6004100	GM-21ZSW-637AB	1	A/STOP
		9CD6004200	GM-521ZSW-111AB	1	A/REVERSE
33	DAMPER GEAR	9CD2602100	ACETAL	2	
34	DAMPER BASE	9CD2602200	ABS	2	
35	KNOB SELECTOR	9CD1320400	ABS	2	
36	CABINET TOP	9CD0122900	MIPS	1	
37	MIRROR	97A2200100	AL	2	
38	SPRING CASS DOOR	9CD3003700	PW-1 D1.0	2	
39	DOOR CASSETTE "B"	9CD1805000	MIPS	1	

NO	PARTS NAME	PARTS CODE	DESCRIPTIONS	Q'TY	REMARK
40	DOOR CASSETTE "A"	9CD1804900	MIPS	1	
41	WINDOW DOOR "A"	9CD16084A0	PVC 0.5T	1	
42	WINDOW DOOR "B"	9CD16084B0	PVC 0.5T	1	
43	POWER TRANSFORMER	5TPF05701F	EI-57 230V 50Hz	1	
44	SOCKET COVER	9716320801	PC	1	
45	SWITCH VOL SEL	5S30102346	UN-12028	1	DUAL VOLTAGE
46	CABINET BACK	9CD0122800	MIPS	1	
47	LUG EGG	4710302000	BSP	1	
48	SPRING TERMINAL	9CD3003900	STS D1.2	1	
49	SPRING BATT B (+)	9CD3004300	BSP 0.5T	1	
50	SPRING BATT B (-)	9CD3003300	PW-1	1	
51	SPRING BATT (+)	9CD3005500	BSP 0.5T	1	
52	SPRING BATT (-)	9CD3005600	PW-1	1	
53	HANDLE	9CD1900800	MIPS	1	
54	COVER BATTERY	9CD0406300	MIPS	1	
55	ANTENNA ROD	9716804700	3 SECTION	1	
56	LABEL CLASS I	9CD9300100	PAPER	1	
57	LABEL SPEC	9CD9305100	PE FILM	1	
58	SHIELD COVER	9CD3302100	EGI 0.6T	1	
59	SHIELD PLATE	9CD3302200	SEXH	1	
60	SHIELD VOL	9CD3302000	ET 0.3T	1	
61	SHIELD FIBER	9CD3302500	FIBER	1	
P1	PCB MAIN	9CD6564400	312×167×1.6T	1	
P2	PCB CD	9CD6566500	120×140×1.6T	1	
P3	PCB DISPLAY	9CD6566400	196×87×1.6T	1	
P4	PCB SUB	9CD6566600	132×79×1.6T	1	
P5	PCB CD OPEN	-	33.5×23×1.6T	1	
P6	PCB MOTOR VR	9CD6564405	46.5×76×1.6T	1	
P7	PCB LCD LED	9CD6564407	77×9×1.6T	1	
P8	PCB TONE VR	9CD6564404	78×44×1.6T	1	
P9	PCB TAPE SEL	9CD6564409	44×21×1.6T	1	
P10	PCB TAPE DIRECTION	9CD6564411	38×21.5×1.6T	1	
P11	PCB RECTIFIER	9CD6564402	58×38×1.6T	1	
P12	PCB FUSE	9CD6564403	88×16×1.6T	1	
T1	SCREW TAPTITE	7178300811	TT2 WAS 3×8 MFZN	8	SPK +FR
T2	SCREW TAPTITE	7173301011	TT2 BIN 3×10 MFZN	30	
T3	SCREW TAPTITE	7173301212	TT2 BIN 3×12 BK	4	
T4	SCREW TAPTITE	7171302011	TT2 PAN 3×20 MFZN	6	
T5	SCREW TAPTITE	7173261011	TT2 BIN 2.6×10 MFZN	11	
T6	SCREW TAPTITE	7173300411	TT2 BIN 3×4 MFZN	4	
T7	SCREW TAPTITE	7178301211	TT2 WAS 3×12 MFZN	2	P.T+BACK
T8	SCREW TAPTITE	7173401012	TT2 BIN 4×10 BK	4	CD DECK
W1	WASHER PLAIN	7400103211	PW-1-3.2 MFZN	8	

### • REMOTE CONTROL SECTION

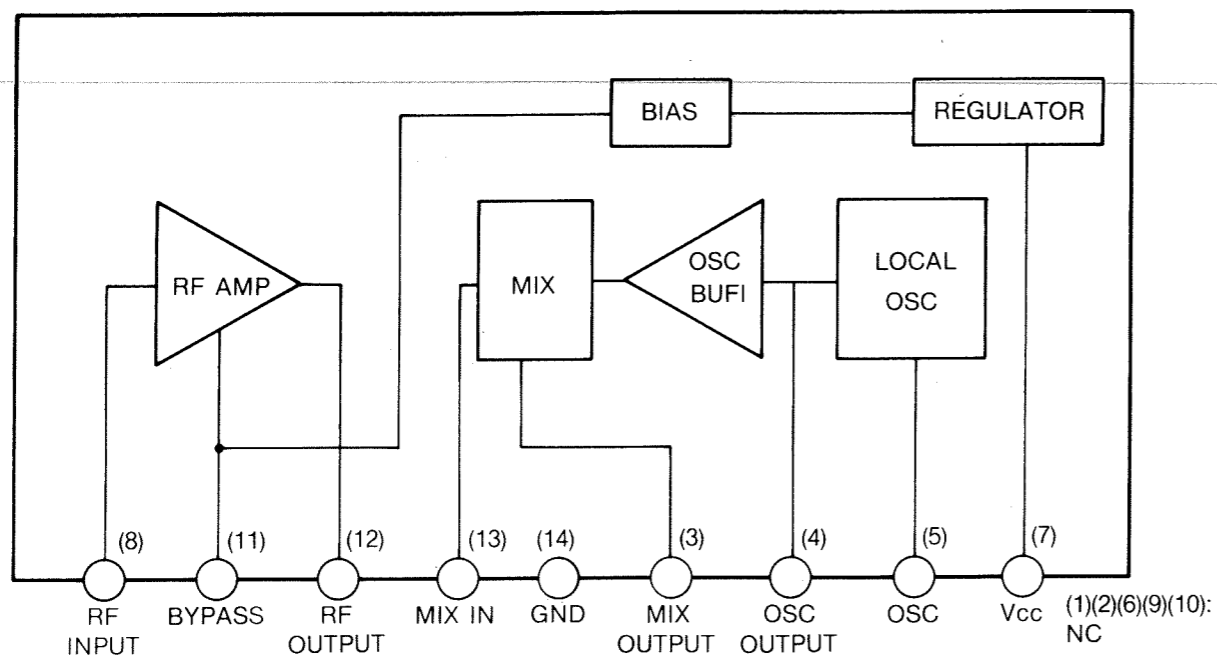


### • REMOTE PART LIST

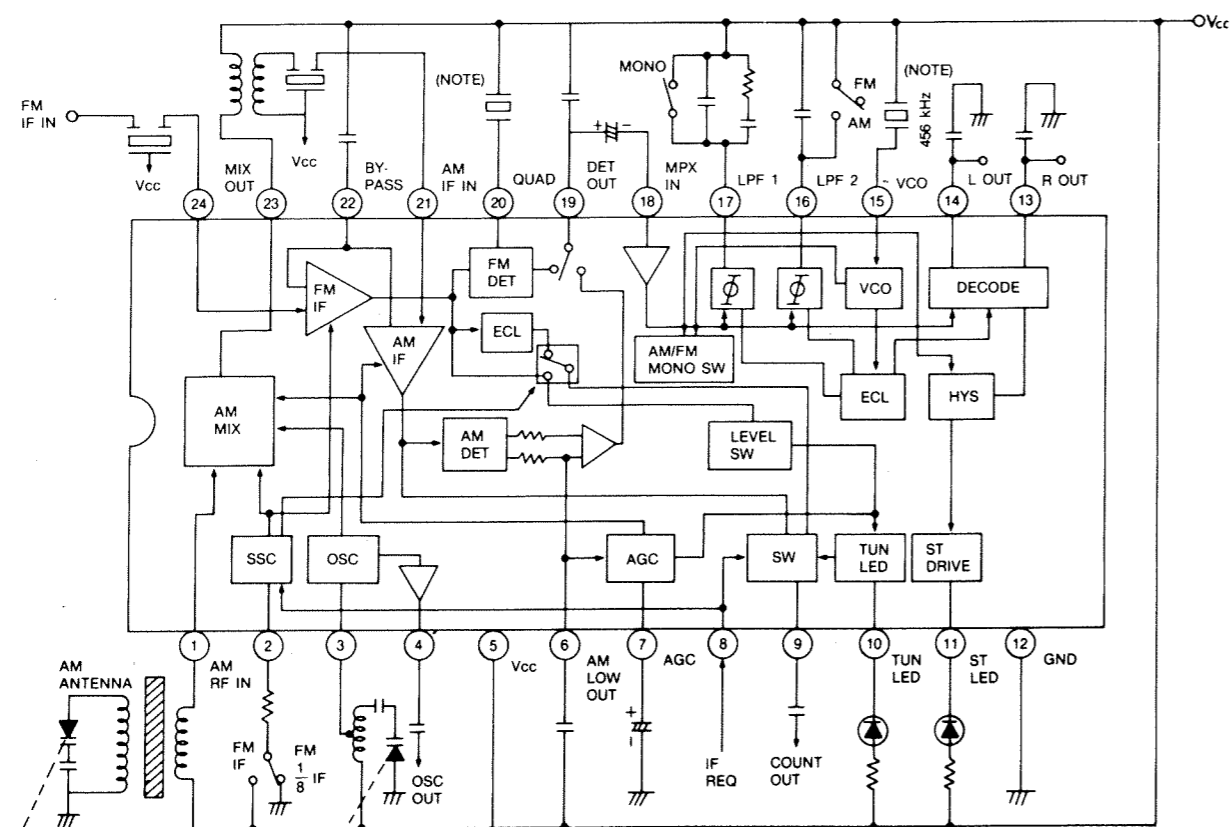
NO	DRW. NO.	TITLE NAME	Q'TY	MATERIAL	(MATER, TYPE) DIM	REMARK
1	9CD0122400	CABI TOP REMOC	1	ABS		
2	9CD0122500	CABI BOTTOM REMOC	1	ABS		
3	9CD0406200	COVER BATTERY	1	ABS		
4	9CD1319000	KNOB REMOCON	1	SILICON	RUBBER	
5	9CD0905500	PLATE REMOCON B	1	LEXAN	T0.25	
6	9CD3005800	SPRING REMOCON ⊖ ⊕	1	SUS		
7	9CD3005400	SPRING REMOCON ⊖	1	PW-1		
8	9CD6450200	TERMINAL BATT REM	1	BsP		
9	7173261012	SCREW TAPTITE	1			
10	9CD6564000	PCB REMOCON	1			

# 15. TRANSISTOR & IC LEAD IDENTIFICATION AND INTERNAL DIAGRAM

TA 7358AP. 1K1M6058AP.



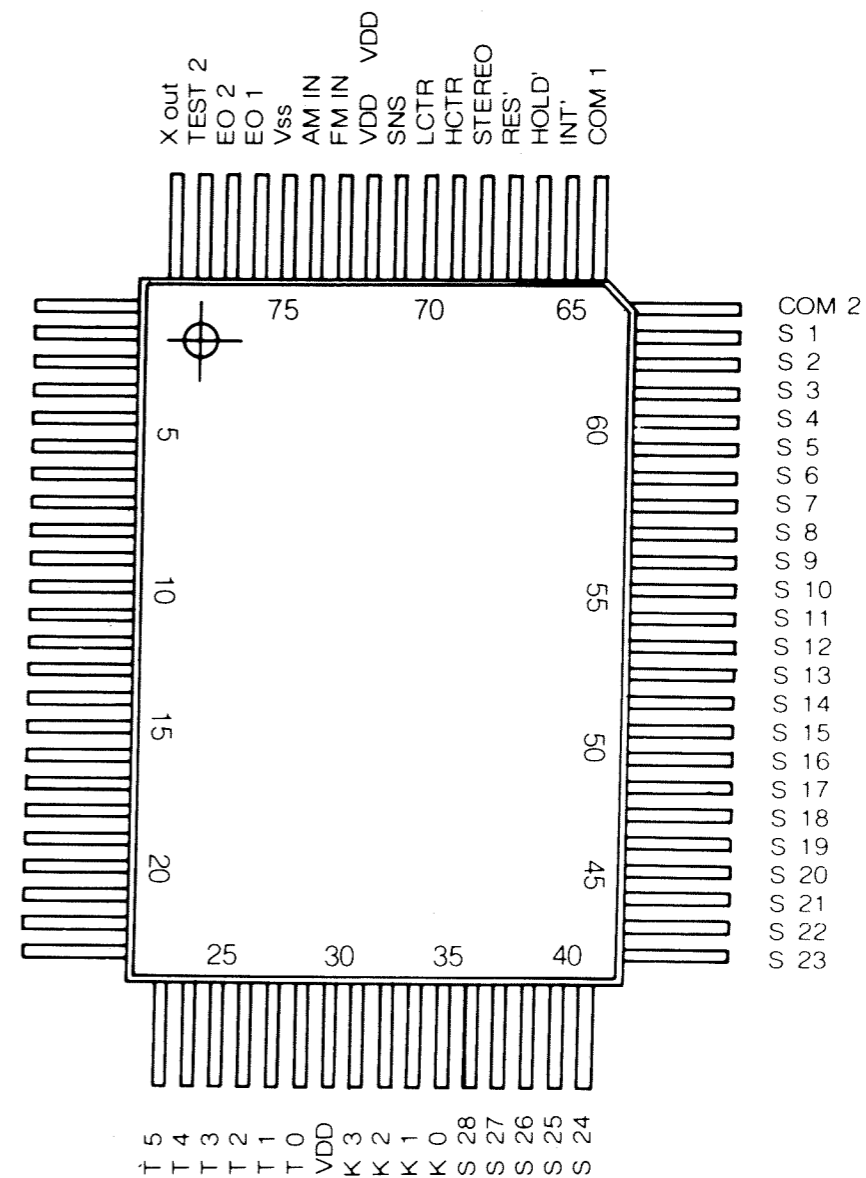
TA 8132AN



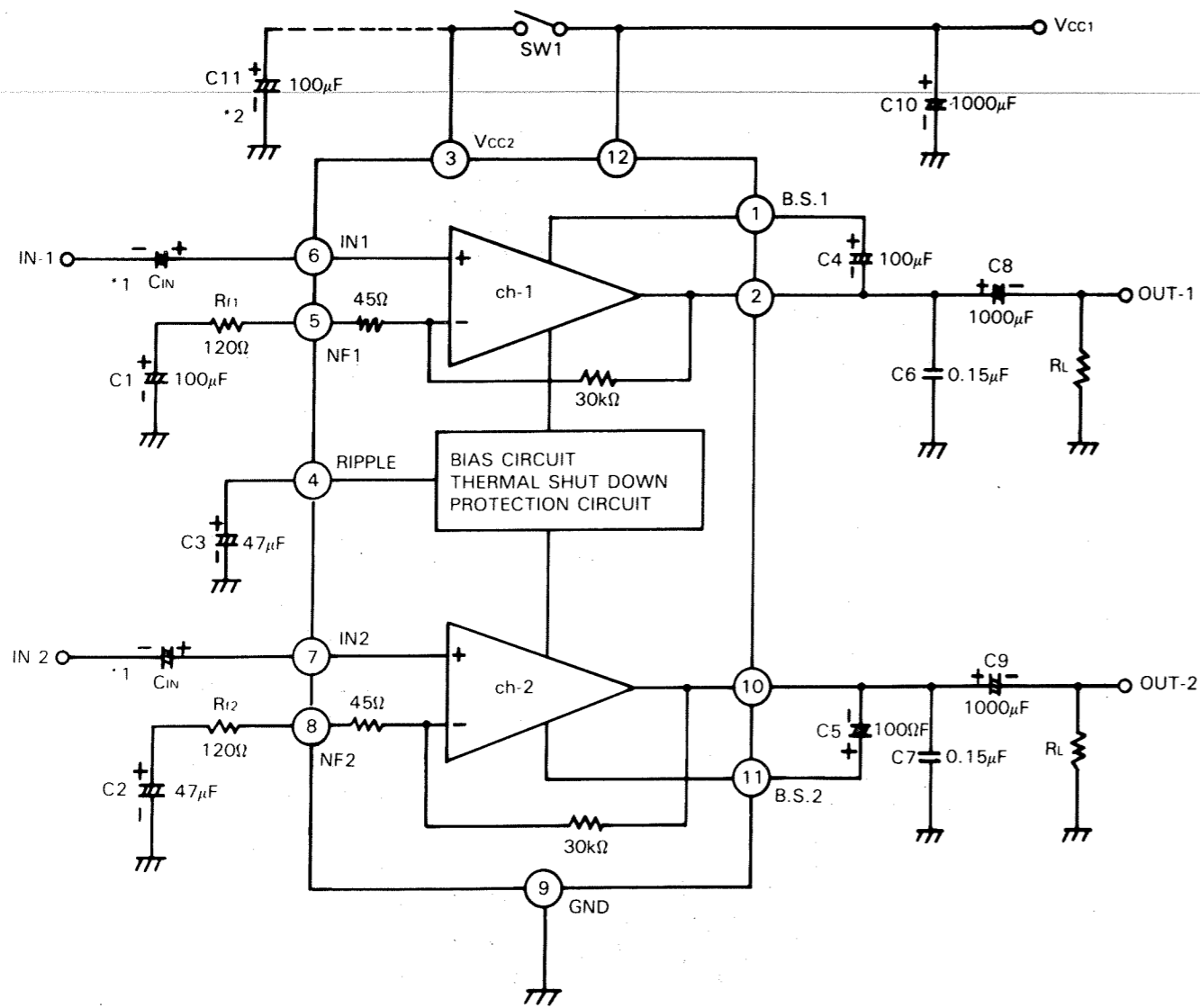
(NOTE)  
We recommend  
Ceramic resonator : CSB456F18  
Ceramic discriminator : CDA107MG18

LC 7232

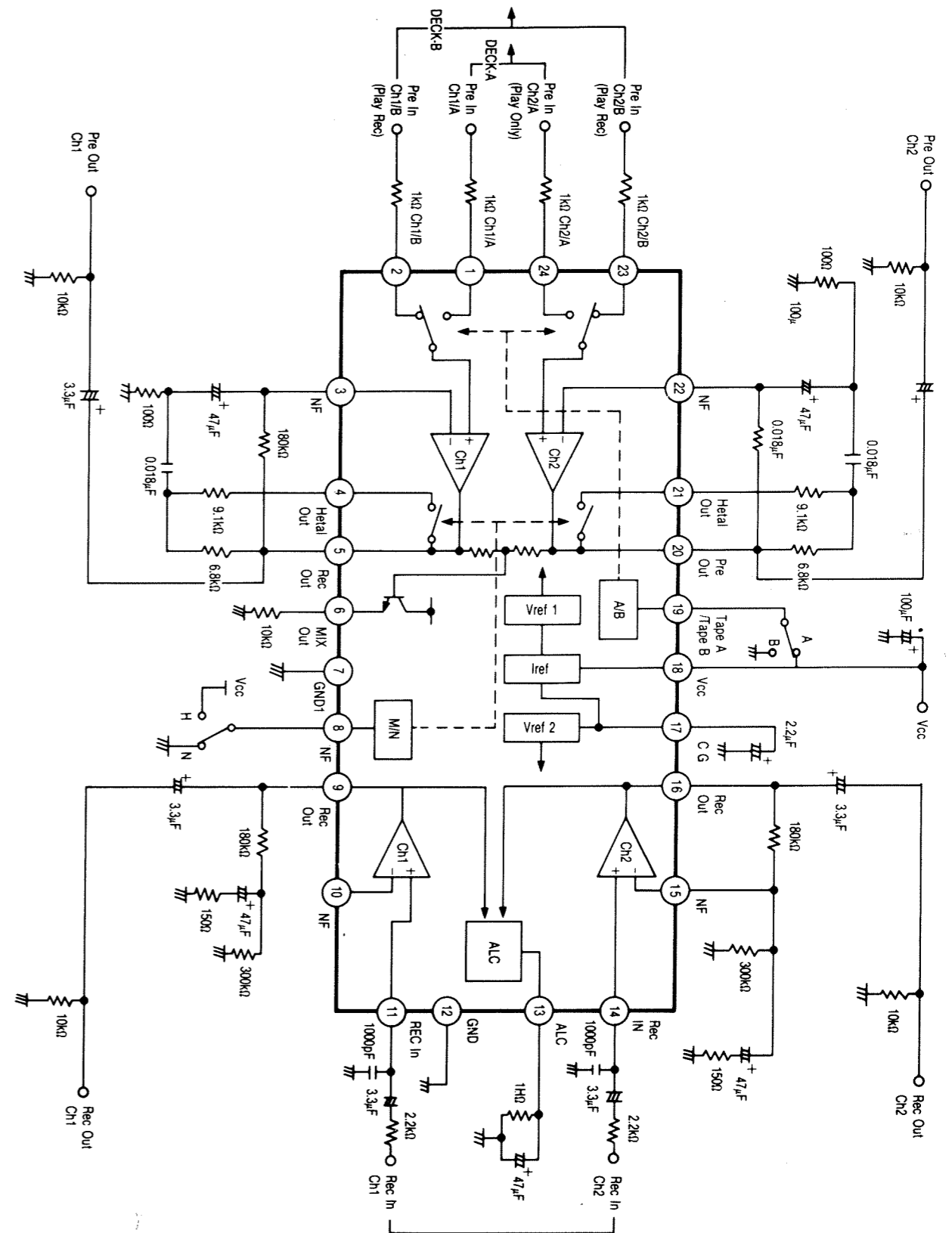
- X in
- TEST 1
- RMC IN
- SD'
- K5
- K4
- SURROUND
- FM
- MW
- LW(TV MODE)
- Vup/RMC SYS
- Vdw/RMC STB
- MO/ST
- MUTE
- CE
- DATA
- CLK
- IF CNT
- A MUTE
- POWER OUT
- SW1/TV-L
- SW2/TV-H
- T7
- T6





TA 8207K



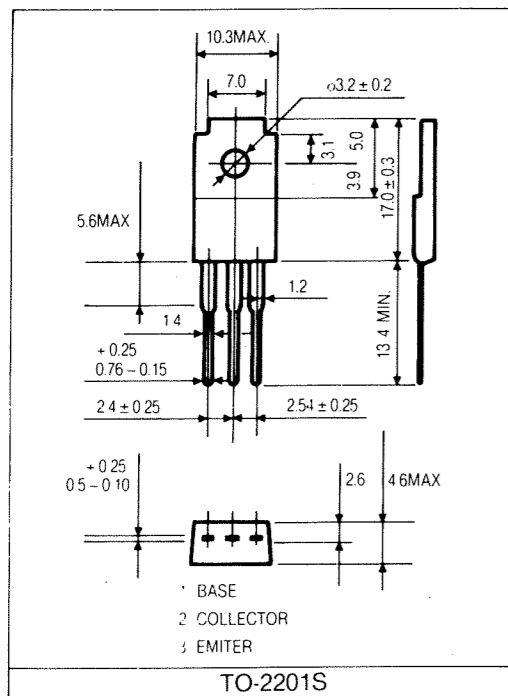
TA 8189



### TRANSISTORS

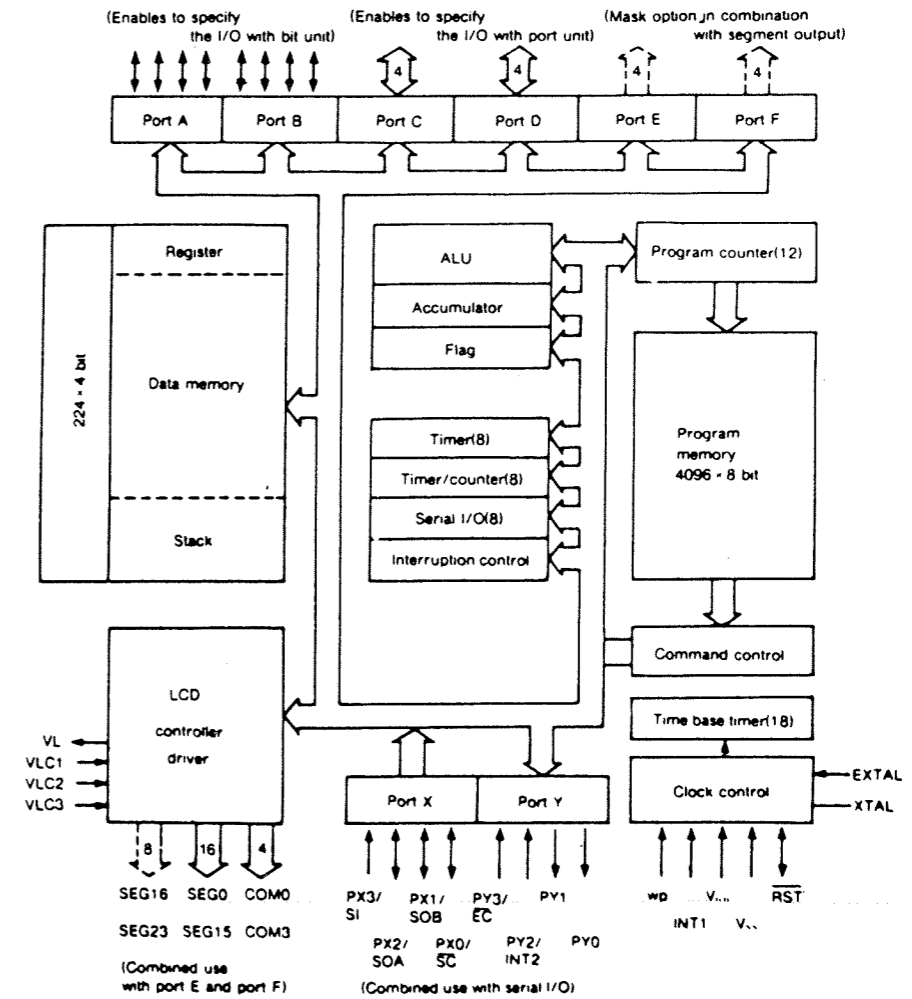
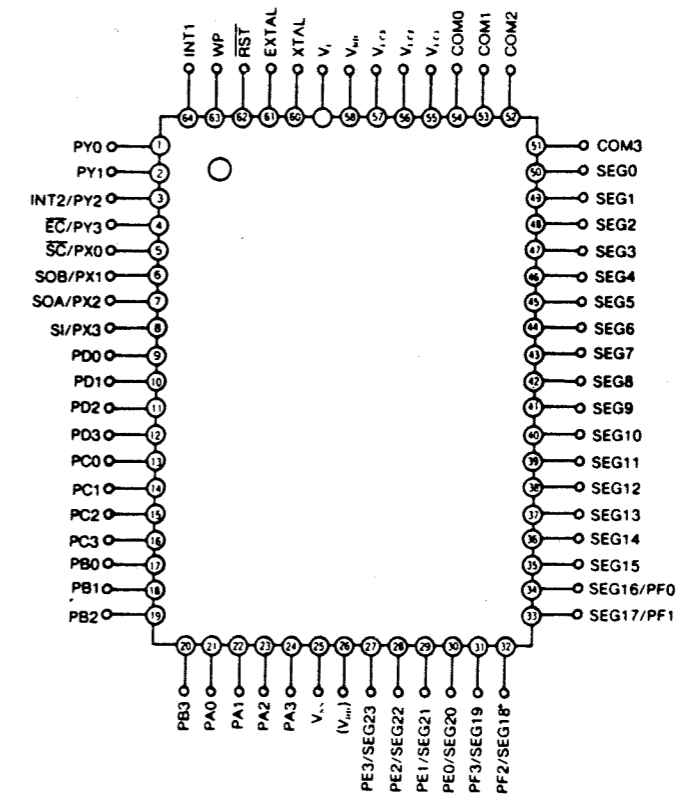
UTENS	TYPES	REMARKS
SS9014C	EBC	TO-92 
SS9015C	EBC	
SS8050C	EBC	
KTC1815GR	ECB	TO-92 
KTA1015GR	ECB	
KTC2878B	ECB	

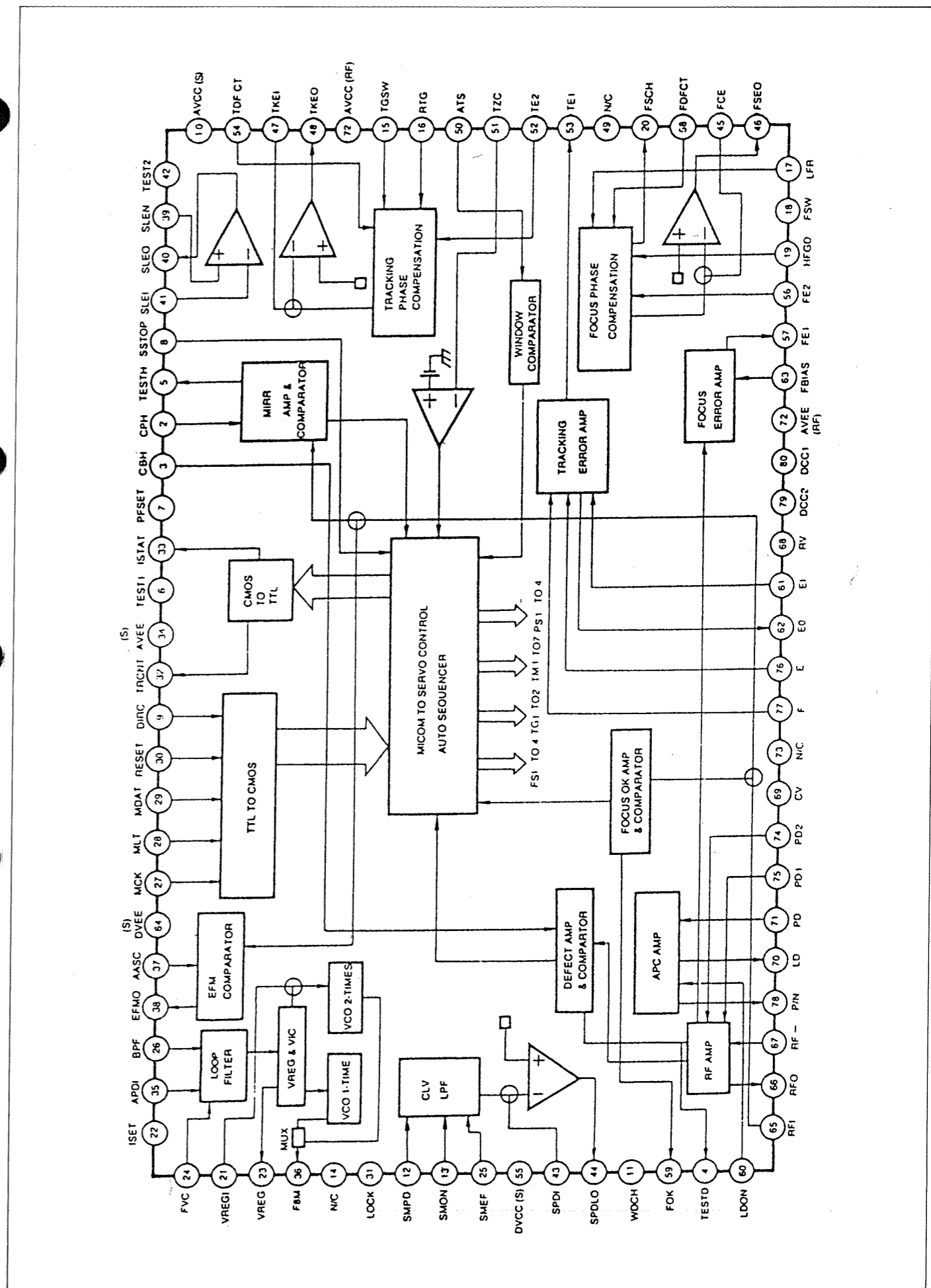
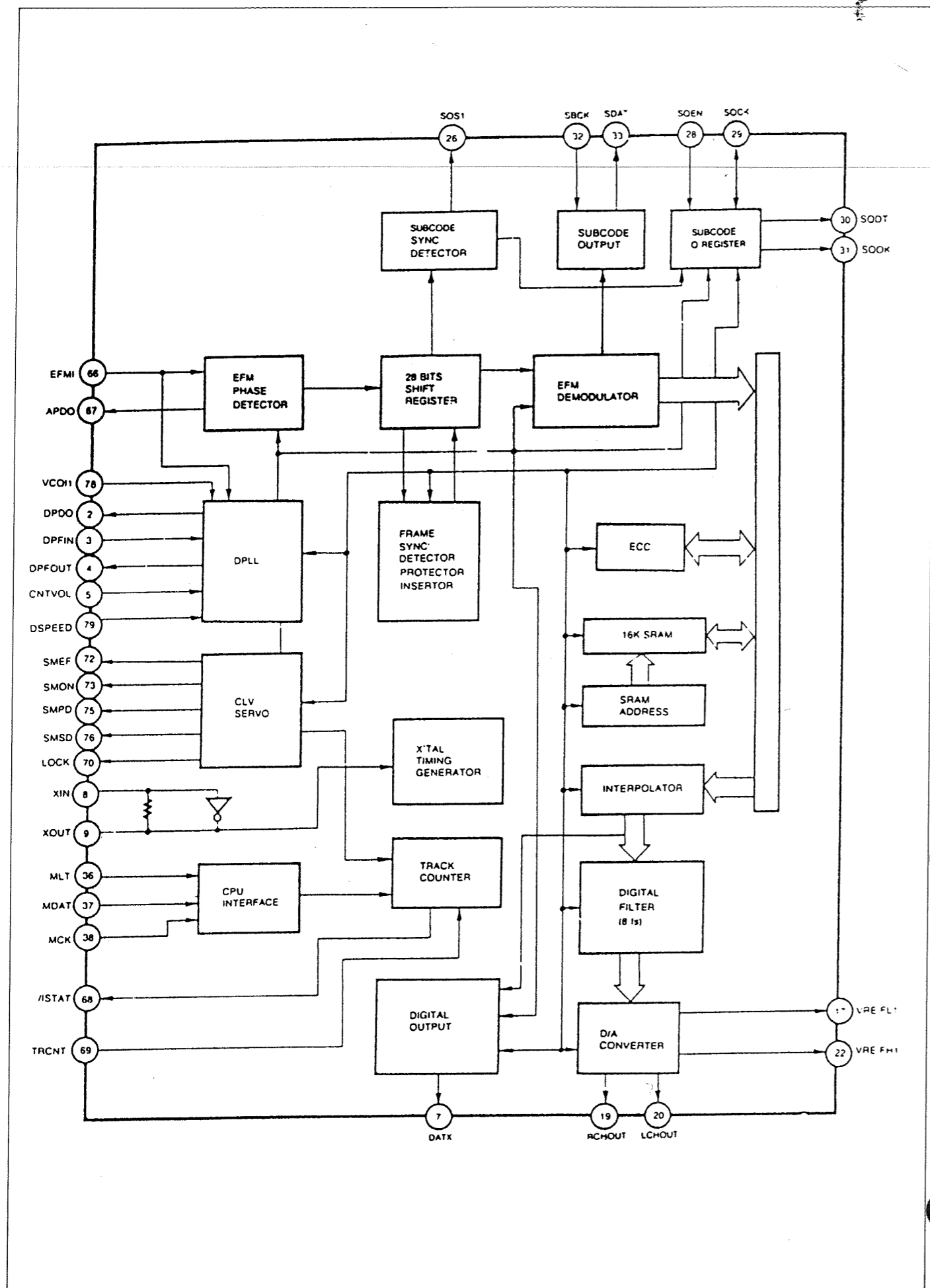
### KSD 2058



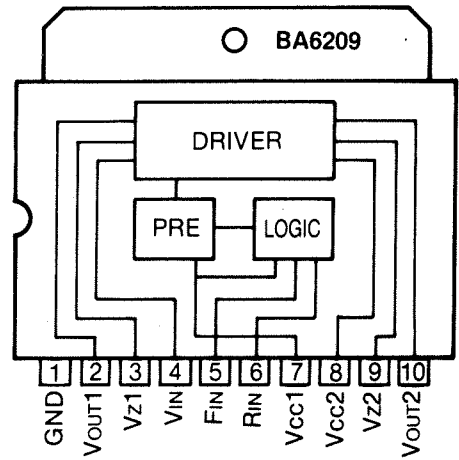
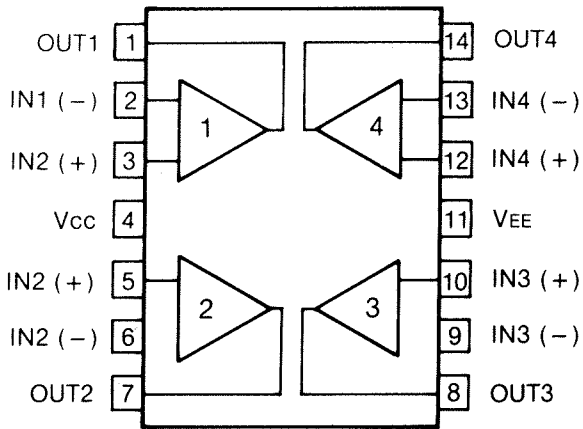
### CXP-5024

Pin Configuration Diagram (Top View)

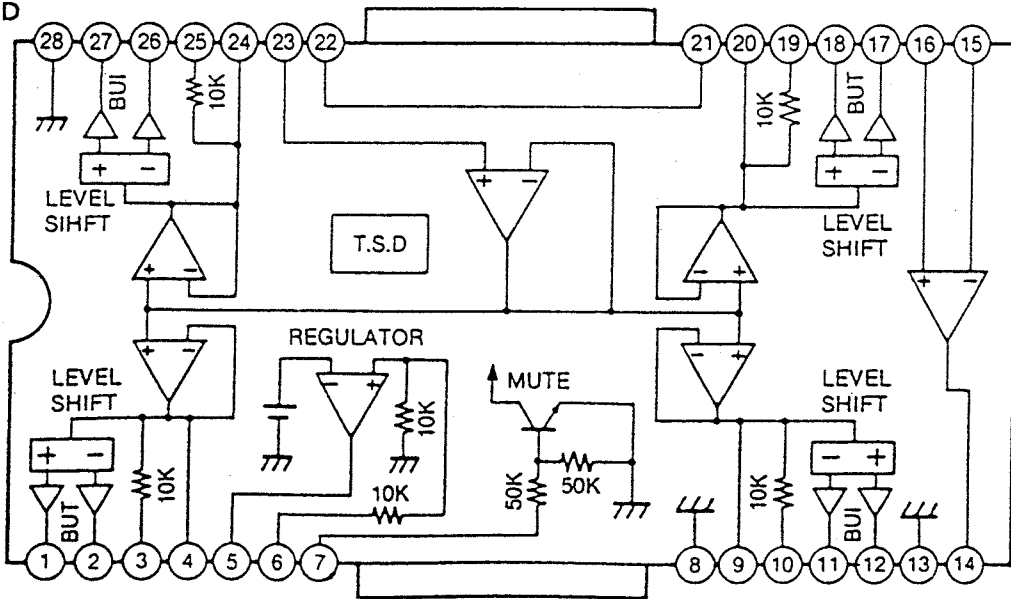




MC 3403



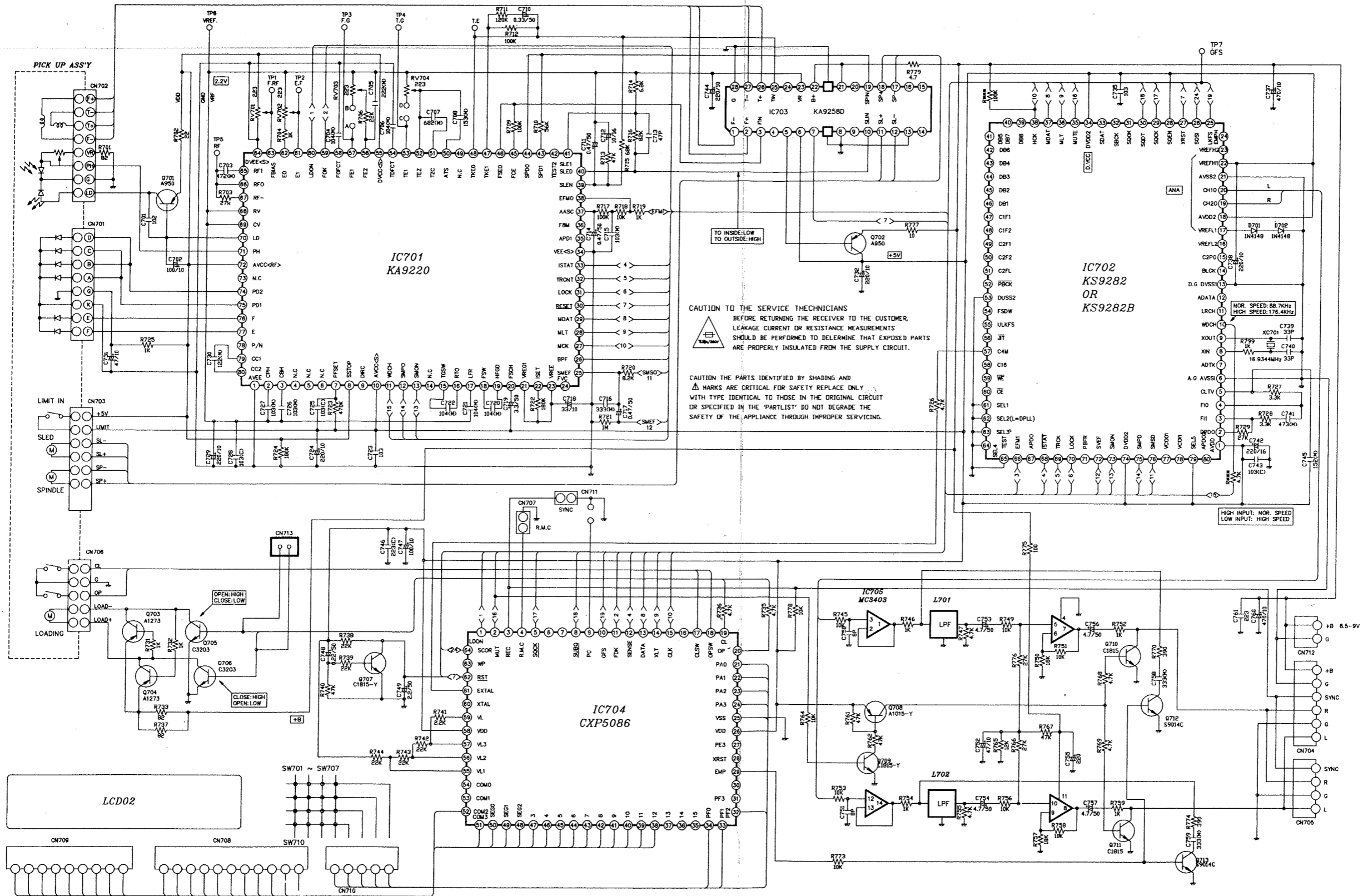
KA9258D





# 16. SCHEMATIC DIAGRAM

## • CD SECTION

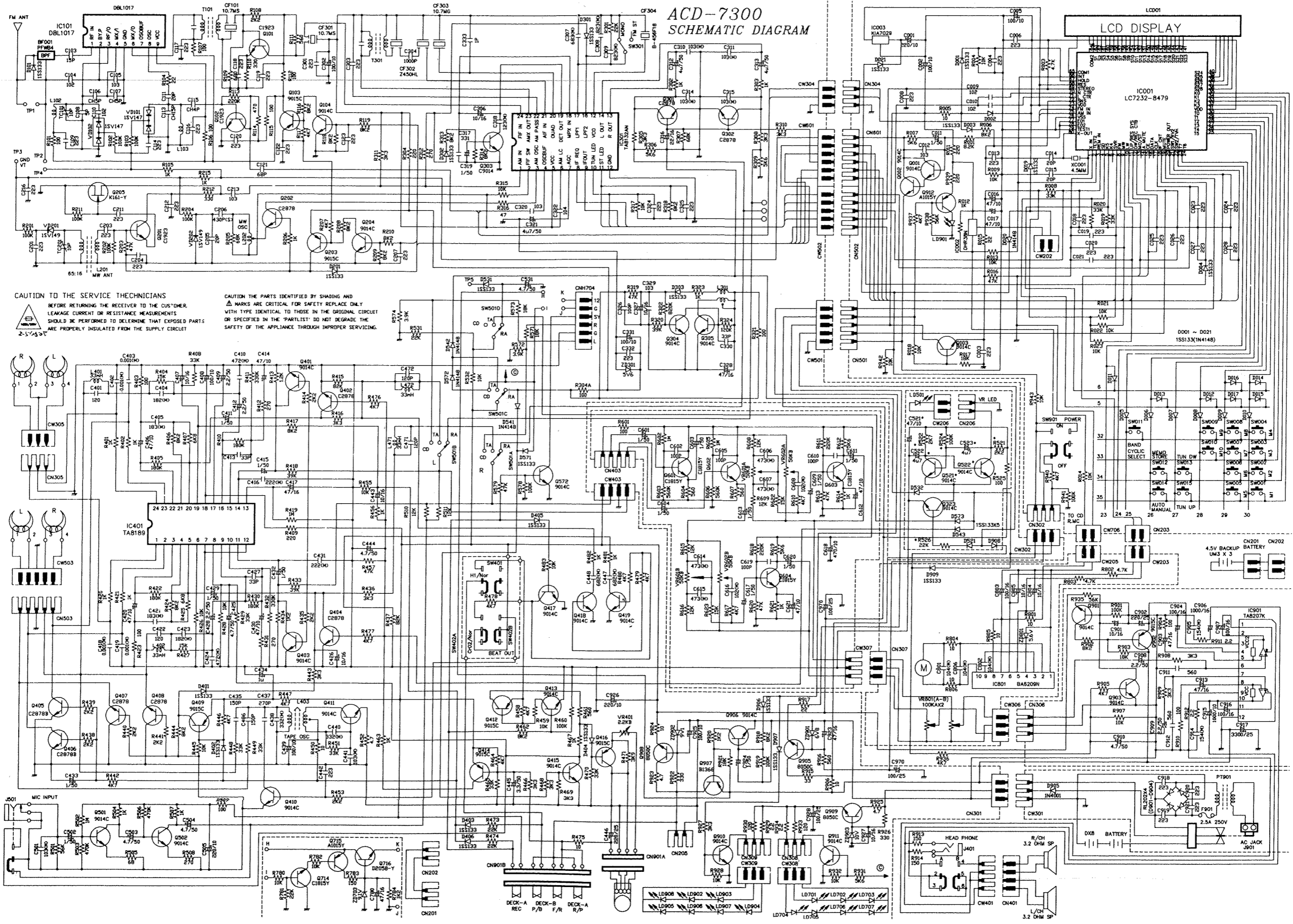


### ■ SERVICING INSTRUCTIONS

- 1) DISCONNECT THE SET FROM THE MAIN SUPPLY BEFORE OPENING THE CABINET.
- 2) COMPONENTS IDENTIFIED WITH THE SYMBOL Δ ON THE SCHEMATIC DIAGRAM ARE 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.

• TUNER & AMP SECTION (2BAND: FM/AM)

ACD-7300  
SCHEMATIC DIAGRAM



CAUTION TO THE SERVICE TECHNICIANS  
BEFORE RETURNING THE RECEIVER TO THE CUSTOMER,  
LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS  
SHOULD BE PERFORMED TO DETERMINE THAT EXPOSED PARTS  
ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT

CAUTION: THE PARTS IDENTIFIED BY SHADING AND  
A MARKS ARE CRITICAL FOR SAFETY. REPLACE ONLY  
WITH TYPE IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT  
OR SPECIFIED IN THE 'PARTLIST'. DO NOT DEGRADE THE  
SAFETY OF THE APPLIANCE THROUGH IMPROPER SERVICING.

• TAPE & AMP SECTION (3BAND: FM, AM, LW)

