THOMSON CONSUMER ELECTRONICS

Audio/Communication
Basic Service Data

RCA PROSCAN

Latin America After Sales
Indianapolis, IN 46290 U.S.A.

SERVICE DATA INDEX

CAUTION: Modification or repair of this unit by unauthorized persons is a direct violation of FCC Rules Part 68.216 and could result in risk of electric shock. You are urged to contact a qualified factory authorized service facility for repairs.

SAFETY NOTICE
USE ISOLATION TRANSFORMER WHEN SERVICING

Components having special safety characteristics are identified by a (⚠) on schematics and on the parts list in this Service Data and its bulletins. Before servicing this instrument, it is important that the service technician read and follow the "Safety Precautions" in the Basic Service Data.

First Edition - First Printing

RP7982A/7986A/7989A
VOLTAGE CHARTS

	IC501 TA8227P	IC301 TC4052BP	IC302 TC4052BP	IC303 TC9235	IC601 TC9243F	IC201 AN7312	IC101 TA2132F	IC102 TA2099
PIN 1	13.0 V	0 V	0 V	0 V	0 V	0 V	0.8 V	1.9 V
PIN 2	6.9 V	0 V	0.3 V	3.5 V	3 V	0 V	0 V	4.9 V
PIN 3	12.9 V	0 V	0 V	3.5 V	2.9 V	3.4 V	4.3 V	2.0 V
PIN 4	0 V	0.4 V	0 V	3.5 V	2.8 V	1.4 V	0 V	2.0 V
PIN 5	0.6 V	0 V	0 V	3.5 V	0 V	1.3 V	4.5 V	1.8 V
PIN 6	0 V	0 V	0 V	6.4 V	0 V	0 V	4.5 V	2.5 V
PIN 7	0 V	0 V	0 V	6.4 V	0.15 V	0 V	4.0 V	0.4 V
PIN 8	0.6 V	0 V	0 V	0 V	0 V	1.3 V	0 V	1.2 V
PIN 9	7.0 V	0 V	0 V	6.4 V	0 V	1.4 V	3.4 V	3.4 V
PIN 10	12.8 V	4.7 V	0 V	6.9 V	0 V	3.3 V	0.6 V	3.4 V
PIN 11	6.8 V	0.4 V	0 V	1.6 V	0 V	0 V	0 V	0 V
PIN 12	13.3 V	0 V	0 V	3.5 V	0 V	6.7 V	4.5 V	1.3 V
PIN 13		0 V	0 V	3.5 V	2.9 V	6.7 V	4.5 V	1.3 V
PIN 14		0 V	0 V	3.5 V	2.9 V		4.5 V	4.9 V
PIN 15		0 V	0.3 V	3.5 V	2.8 V		4.5 V	0.4 V
PIN 16		7.1 V	7.9 V	6.4 V	2.7 V		4.5 V	1.7 V
PIN 17					0 V			0 V
PIN 18					2.6 V			0.4 V
PIN 19					0 V			4.9 V
PIN 20					2.55 V			1.3 V
PIN 21								2.0 V
PIN 22								0 V
PIN 23								0 V
PIN 24								2 V

IC601 TC9309AF-128									
PIN 1	2.4 V	PIN 18	2.4 V	PIN 35	0.2 V	PIN 52	0.4 V	PIN 69	0 V
PIN 2	2.4 V	PIN 19	2.4 V	PIN 36	0.2 V	PIN 53	0 V	PIN 70	2.5 V
PIN 3	2.4 V	PIN 20	2.4 V	PIN 37	0.2 V	PIN 54	0 V	PIN 71	0 V
PIN 4	2.4 V	PIN 21	2.4 V	PIN 38	0.2 V	PIN 55	4.8 V	PIN 72	4.8 V
PIN 5	2.4 V	PIN 22	2.4 V	PIN 39	0.2 V	PIN 56	0 V	PIN 73	0 V
PIN 6	2.4 V	PIN 23	2.4 V	PIN 40	0.2 V	PIN 57	0 V	PIN 74	2.4 V
PIN 7	2.4 V	PIN 24	2.4 V	PIN 41	0 V	PIN 58	0 V	PIN 75	2.4 V
PIN 8	2.4 V	PIN 25	2.4 V	PIN 42	0 V	PIN 59	4.8 V	PIN 76	2.4 V
PIN 9	2.4 V	PIN 26	2.4 V	PIN 43	0 V	PIN 60	0 V	PIN 77	2.4 V
PIN 10	2.4 V	PIN 27	2.4 V	PIN 44	0 V	PIN 61	4.9 V	PIN 78	2.4 V
PIN 11	2.4 V	PIN 28	2.4 V	PIN 45	0 V	PIN 62	0 V	PIN 79	2.4 V
PIN 12	2.4 V	PIN 29	2.4 V	PIN 46	0 V	PIN 63	4.8 V	PIN 80	2.4 V
PIN 13	2.4 V	PIN 30	0 V	PIN 47	0.2 V	PIN 64	5.6 V		
PIN 14	2.4 V	PIN 31	0.2 V	PIN 48	4.8 V	PIN 65	0.5 V		
PIN 15	2.4 V	PIN 32	0.2 V	PIN 49	5.4 V	PIN 66	2.4 V		
PIN 16	2.4 V	PIN 33	3.1 V	PIN 50	0.3 V	PIN 67	1.5 V		
PIN 17	2.4 V	PIN 34	0.2 V	PIN 51	0 V	PIN 68	1.1 V		

RP7982A/7986A/7989A
VOLTAGE CHARTS

	TRANSISTOR	E	B	C
Q101	9018G	0 V	0.7 V	3.1 V
Q102	2SA733P	4.9 V	4.2 V	4.8 V
Q103	2SC945P	0 V	0 V	3.4 V
Q104	2SC945P	0 V	0.7 V	0 V
Q105	2SA733P	5.0 V	4.2 V	4.9 V
Q106	2SC945P	0 V	0.7 V	0 V
Q107	2SC945P	0 V	0 V	1.7 V
Q201	2SC945P	0 V	0 V	0.2 V
Q202	2SC945P	0 V	0 V	0.2 V
Q203	2SC945P	0 V	0.6 V	0 V
Q204	2SC945P	7.5 V	7.9 V	7.9 V
Q301	2SC945P	0.4 V	1.1 V	3.0 V
Q302	2SC945P	0.4 V	1.1 V	3.0 V
Q303	2SC945P	0 V	0 V	6.4 V
Q304	2SC945P	0 V	0 V	6.4 V
Q501	8050C	0 V	0 V	0 V
Q502	8050C	0 V	0 V	0 V
Q503	8050C	0 V	0 V	0 V
Q504	8050C	0 V	0 V	0 V
Q505	8050C	0 V	0 V	0 V
Q506	2SD2012	0 V	0 V	13.2 V
Q507	2SA733P	13.2 V	13.2 V	0 V
Q508	2SC945P	0 V	0 V	13.1 V
Q509	KSA928A-Y	13.1 V	12.5 V	13.1 V
Q510	8050C	0 V	0.6 V	0 V
Q511	2SA733P	12.9 V	13.0 V	0 V
Q601	2SC945P	0 V	0 V	0.2 V
Q602	2SA733P	0.2 V	0.2 V	0.2 V
Q603	2SA733P	0.9 V	0.8 V	-0.2 V
Q604	2SC945P	0 V	0 V	0.2 V
Q605	2SC945P	0 V	0.6 V	0 V
Q606	2SA733P	0.2 V	4.9 V	-0.3 V
Q607	2SC945P	0 V	0 V	0.7 V
Q608	2SC945P	0.6 V	0 V	2.5 V
Q614	2SC945P	0 V	1.1 V	2.5 V
Q615	2SC945P	0 V	0.6 V	2.5 V
Q616	2SC945P	0.6 V	1.2 V	0.6 V
Q617	2SC945P	0 V	0.6 V	0.6 V

SERVICE ADJUSTMENT

Lubrication

The mechanical parts are factory coated with a thin coat of light grease and should not require further lubrication. If a light grease is applied, be careful not to get any grease on the play/record head or erase head, hubs, pulleys, tapes reels, drive belts, or switches. Use a good lubricant such as Silicon Lube G322L or Lubricate (00).

Service Check

Before aligning the mechanism, wipe off any accumulated dirt with denatured alcohol. Wipe around parts where the tape contacts and around all rotating parts. Drive belts are specially processed. Do not clean them with alcohol.

Mechanical Torques

Use a cassette type torque gauge and check the tape mechanism.

Take-up torque	35 to 80 g-cm
Rewind torque	65 g-cm min.
Fast forward torque	65 g-cm min.

Pinchwheel Pressure

No adjustment to the pinch roller spring is necessary. It should be sufficient to give at least 40 g-cm pull force.

Tape Head Servicing

Each time the unit is serviced, the face of all heads should be thoroughly cleaned with denatured alcohol or commercial head cleaning solution. The playback head should be demagnetized with a commercial demagnetizer. Accumulation of tape oxide during normal operations can cause problems, including loss of high frequencies and wow and flutter.

Erase Head

The erase head is properly aligned when the tape rides directly between the tape guide on the head without crinkling the tape.

Play/Record and Playback Head Azimuth Adjustment

To adjust the play/record and playback head azimuth screw:

1. Connect two (2) VTVMs and a dual trace scope to the stereo headphone jack (as shown) with a 32 ohm dummy load. (See Figure 1.)

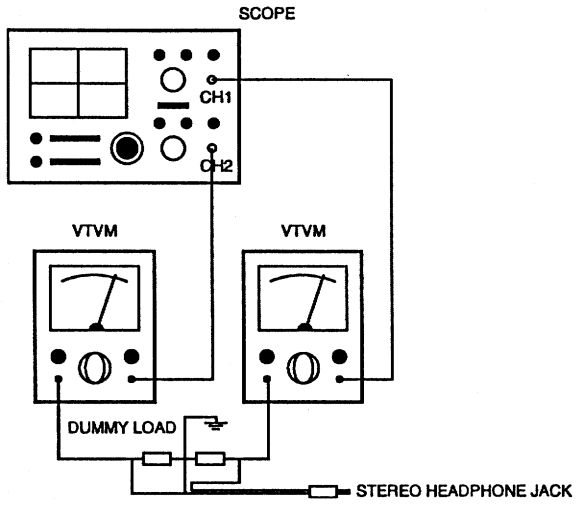


Figure 1. Azimuth Adjustment

2. Insert a 8 kHz test tape (such as TEAC) into the tape mechanism and play it back.
3. While playing back the test tape, slowly turn the azimuth adjusting screw until the amplitude of both channel output waveforms is maximum and inphase. (See Figure 2.)
4. Secure the azimuth screw in place with glue or paint after making the adjustment.

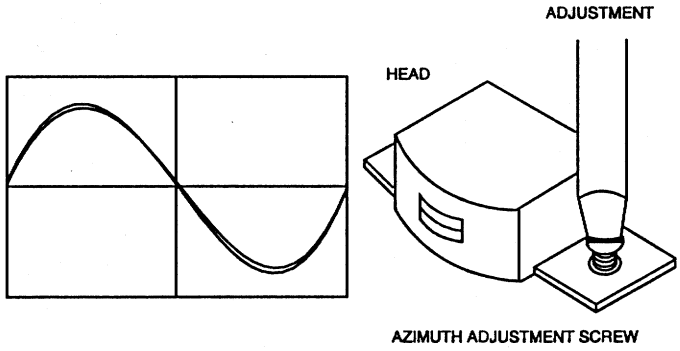


Figure 2. Head Output Signal

Tape Speed Adjustment

1. Set the function switch to TAPE.
2. Connect a frequency counter with a 32 ohm dummy load to the stereo headphone jack.(See Figure 3.)

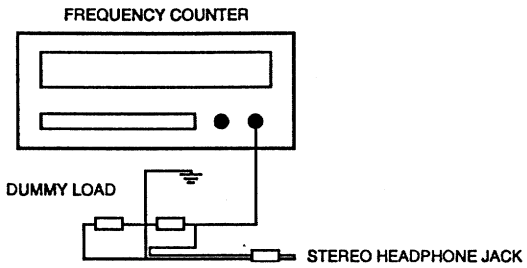


Figure 3. Tape Speed Adjustment

3. Insert and play back a 3 kHz test tape (TEAC MTT-114 or equivalent) into the tape mechanism.
4. Insert an insulated alignment tool and adjust the tape speed potentiometer (MOTOR) until the frequency counter indicates 2940 Hz to 3090 Hz.

Bias Oscillator Frequency and Level Adjustment

1. Set the function switch to TAPE and the record and play tape mechanism to RECORD
2. Connect a VTVM and frequency counter to test point R/P HEAD.
3. Adjust bias oscillator coil L201 until the VTVM indicates 14V ±0.5V.

TUNER ALIGNMENT PROCEDURE

Equipment needed :

1. AM Signal generator
2. FM Signal generator
3. DC Voltage meter
4. Oscilloscope
5. Output meter (VTVM)

AM Alignment : Use AM S/G and loop antenna

STEP	S/G FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	450 kHz(1 kHz 30% mod.)	Low end	Connect oscilloscope or VTVM to speaker jack	T102	Adjust for maximum output
2	520 kHz (1 kHz 30% mod.)	Low end	Connect DC voltage meter to test point Vt and ground	T103	Adjust until Vt equal to 1.2 ± 0.1V
3	1710 kHz (1 kHz 30% mod)	High end	Same as step 2		Adjust until Vt equal to 7.6 ± 0.1 V
4	600 kHz (1 kHz 30% mod.)	600 kHz		L104 (AM ANT)	Same as step 1
5	1400 kHz (1 kHz 30% mod.)	1400 kHz			Same as step 1
6	Repeat steps 4 and 5 to minimize tracking error				
7	1000 kHz (VDE) (1 kHz 30% mod.)	1000 kHz (VDE)			Same as step 6

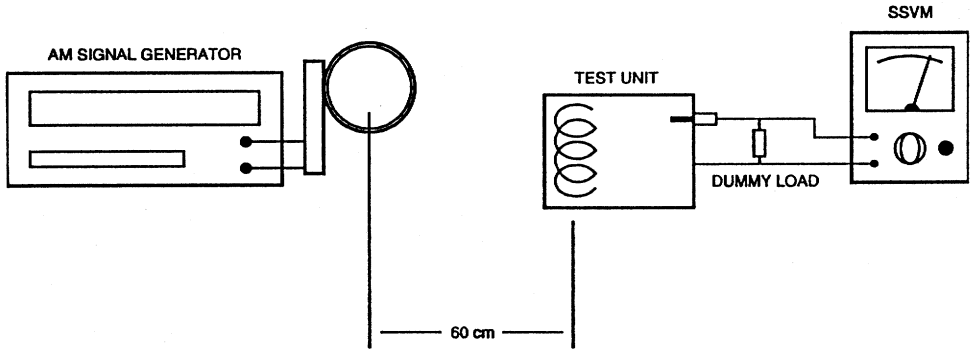


Figure 4. AM IF/RF Tracking

FM Alignment :

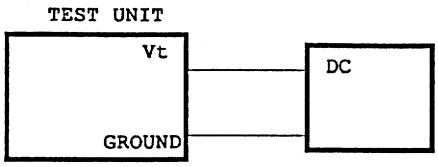


Figure 5. FM Band Frequency Coverage Alignment.

Connect FM S/G to ANT inputs (mod 1 kHz 22.5 kHz dev.)

STEP	S/G FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	87.5 MHz	Low end	Connect DC voltage meter to test point Vt and ground	L403	Adjust until Vt equal to 2.5 ± 0.1V
2	108 MHz	High end	Same as step 2		Repeat step 2 1F Vt until equal to 6.3± 0.1 V
3	90 MHz	90 MHz	Same as step 1	L402	Same as step 1
4	106 MHz	106 MHz	Same as step 1	TC 401	Same as step 1
5	Repeat steps 3 and 4 to minimize tracking error				

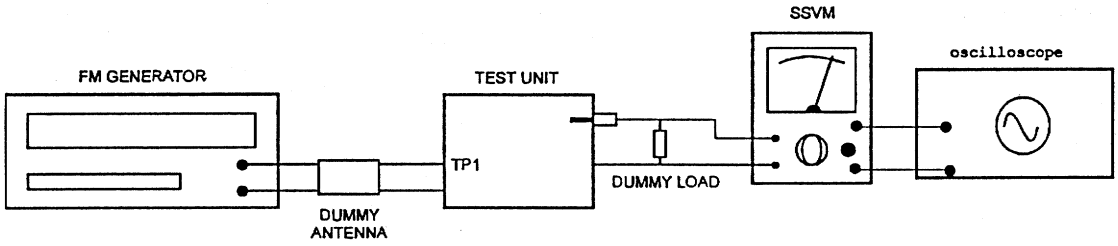
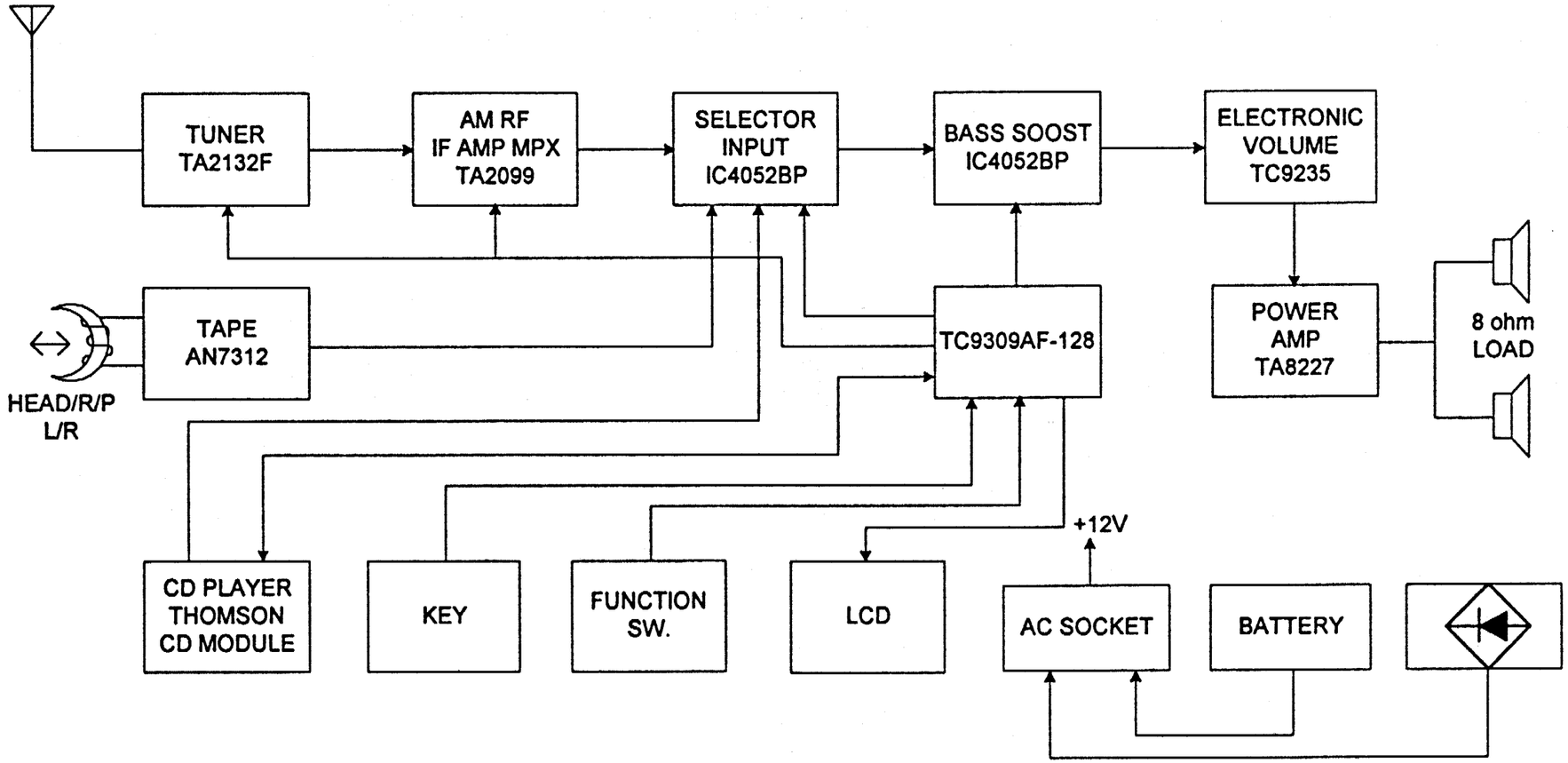
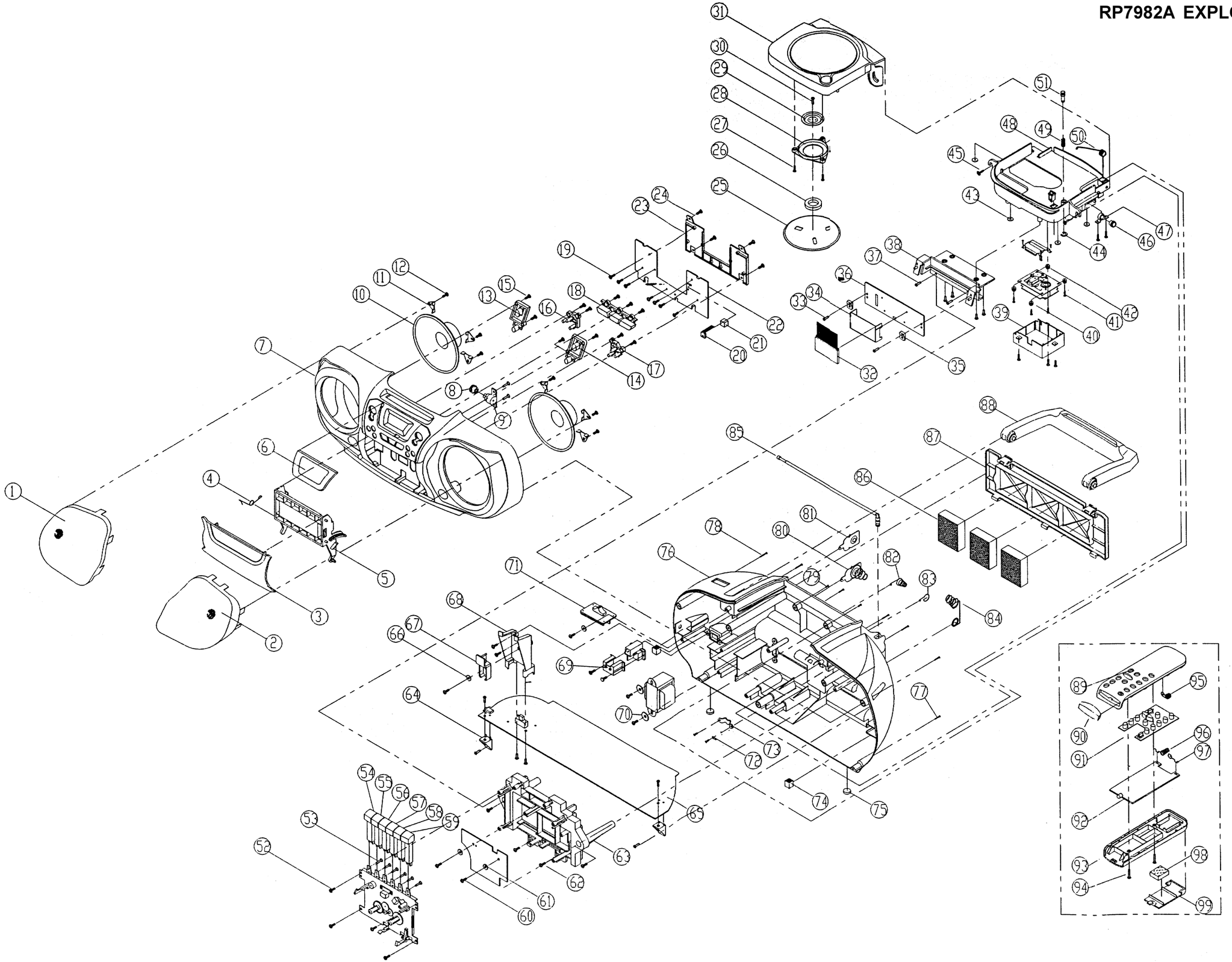


Figure 6. FM Band/Tracking


TUNER
TA2132F
AM RF
IF AMP MPX
TA2099
SELECTOR
INPUT
IC4052BP
BASS SOOST
IC4052BP
ELECTRONIC
VOLUME
TC9235
TAPE
AN7312
HEAD/R/P
L/R
TC9309AF-128
POWER
AMP
TA8227
8 ohm
LOAD
+12V
CD PLAYER
THOMSON
CD MODULE
KEY
FUNCTION
SW.
LCD
AC SOCKET
BATTERY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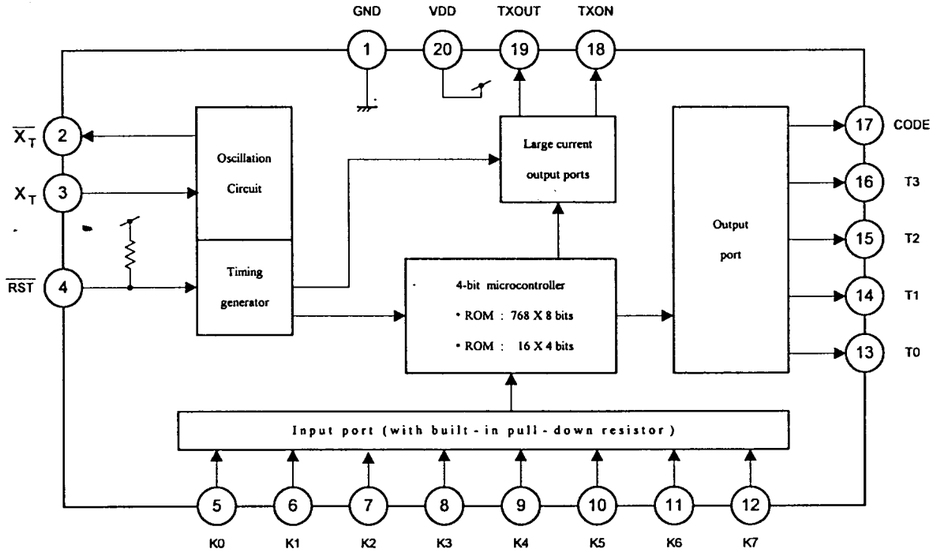
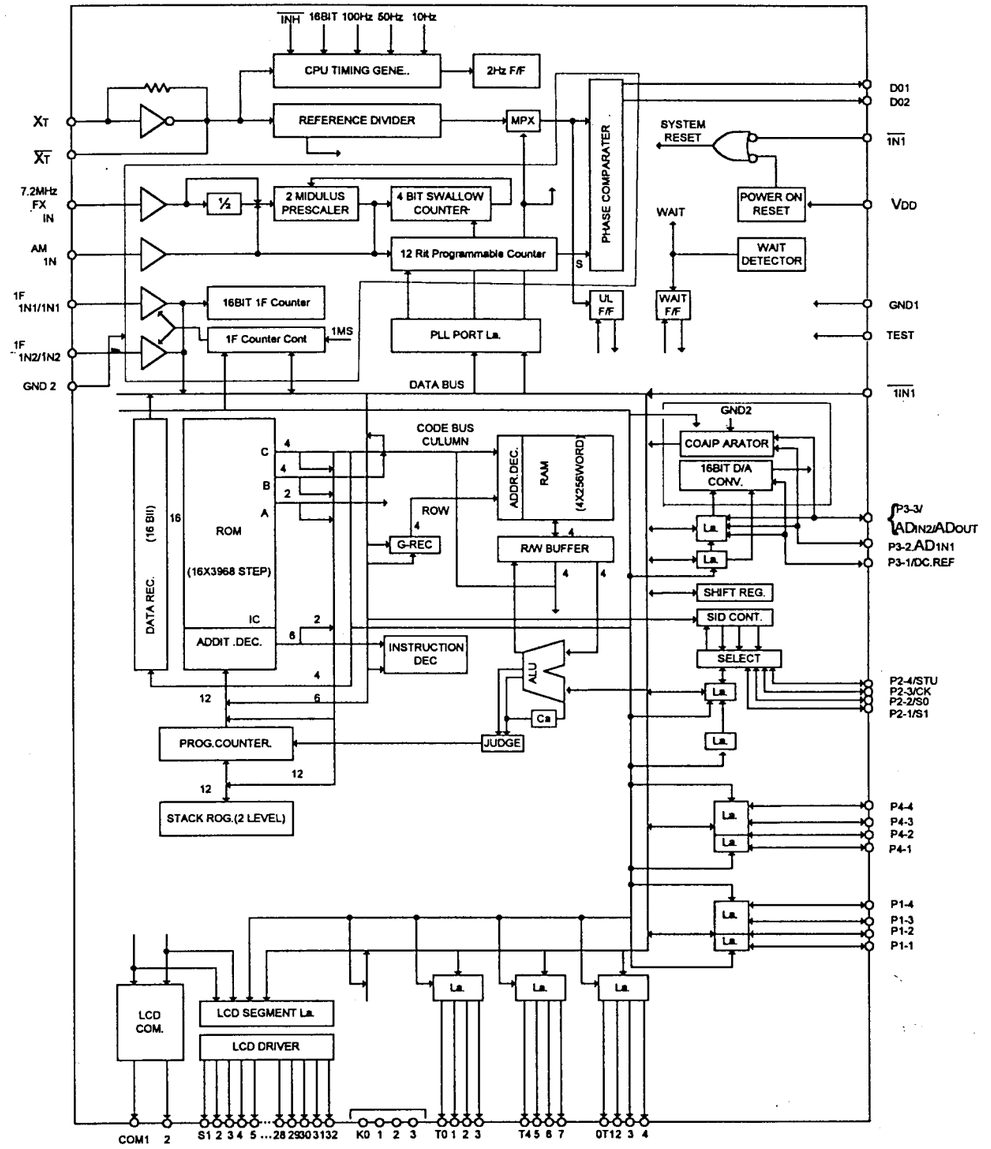
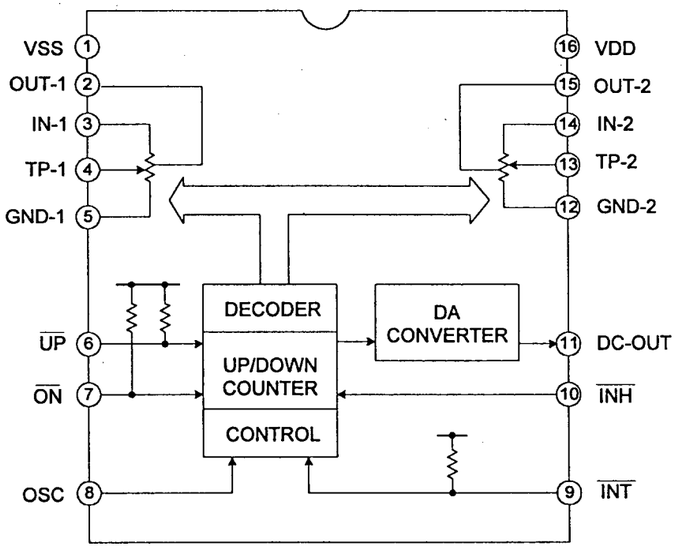
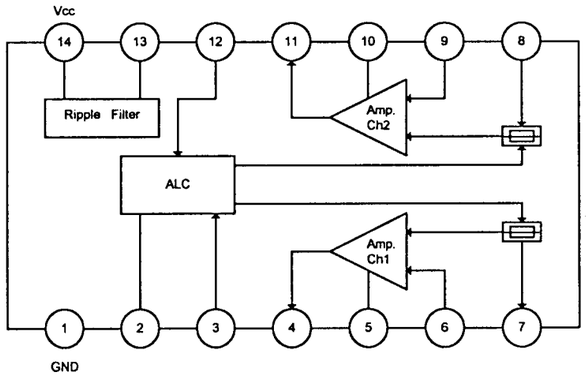
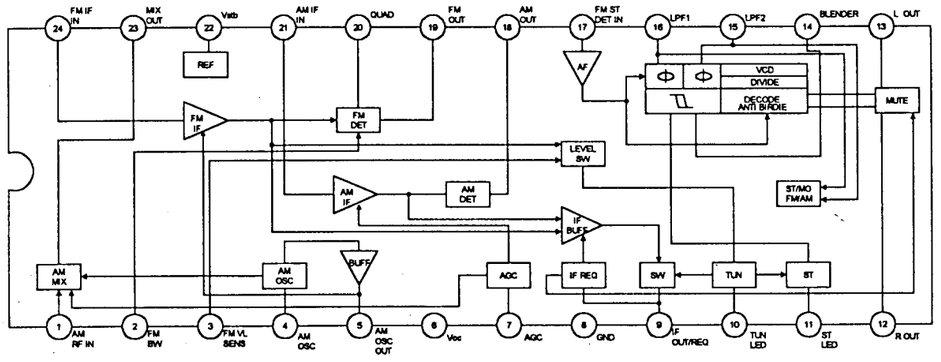
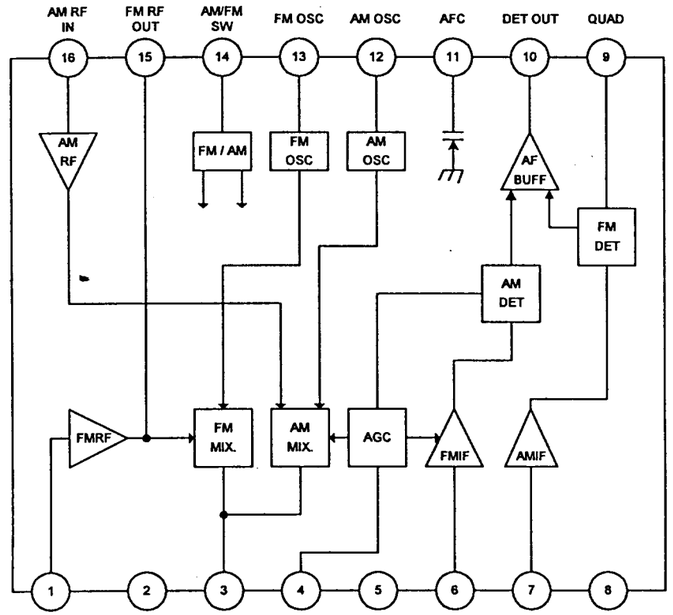

GND
VDD
TXOUT
TXON
1
20
19
18
$\overline{X_T}$ 2
X_T 3
$\overline{RST}$ 4
Oscillation Circuit
Timing generator
Large current output ports
4-bit microcontroller
• ROM : 768 X 8 bits
• ROM : 16 X 4 bits
Output port
17 CODE
16 T3
15 T2
14 T1
13 T0
Input port (with built-in pull-down resistor)
5 K0
6 K1
7 K2
8 K3
9 K4
10 K5
11 K6
12 K7

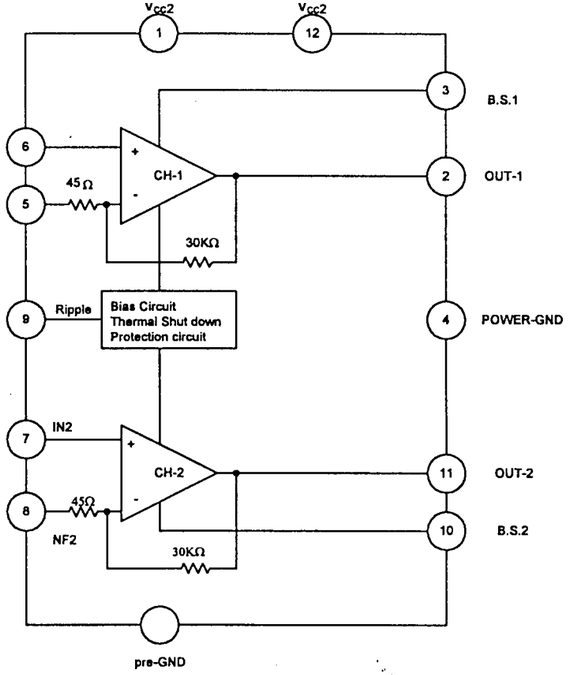

INH 16BIT 100Hz 50Hz 10Hz
CPU TIMING GENE..
2Hz F/F
REFERENCE DIVIDER
MPX
PHASE COMPARATER
SYSTEM RESET
POWER ON RESET
WAIT
WAIT DETECTOR
WAIT F/F
UL F/F
2 MIDULUS PRESCALER
4 BIT SWALLOW COUNTER
12 Bit Programmable Counter
16BIT 1F Counter
1F Counter Cont
1MS
PLL PORT La.
DATA BUS
XT
XT
7.2MHz FX IN
AM 1N
1F 1N1/1N1
1F 1N2/1N2
GND 2
D01
D02
1N1
VDD
GND1
TEST
1IN1
GND2
COMPARATOR
16BIT D/A CONV.
CODE BUS CULUMN
ROM
(16X3968 STEP)
DATA REC. (16 BII)
ADDIT .DEC.
INSTRUCTION DEC
ADDR.DEC.
RAM
(4X256WORD)
ROW
G-REC
R/W BUFFER
ALU
JUDGE
PROG.COUNTER.
STACK ROG.(2 LEVEL)
SHIFT REG.
SID CONT.
SELECT
P3-3/ADIN2/ADOUT
P3-2/AD1N1
P3-1/DC.REF
P2-4/STU
P2-3/CK
P2-2/S0
P2-1/S1
P4-4
P4-3
P4-2
P4-1
P1-4
P1-3
P1-2
P1-1
LCD COM.
LCD SEGMENT La.
LCD DRIVER
COM1 2
S1 2 3 4 5 ... 28 29 30 31 32
K0 1 2 3
T0 1 2 3
T4 5 6 7
0T12 3 4

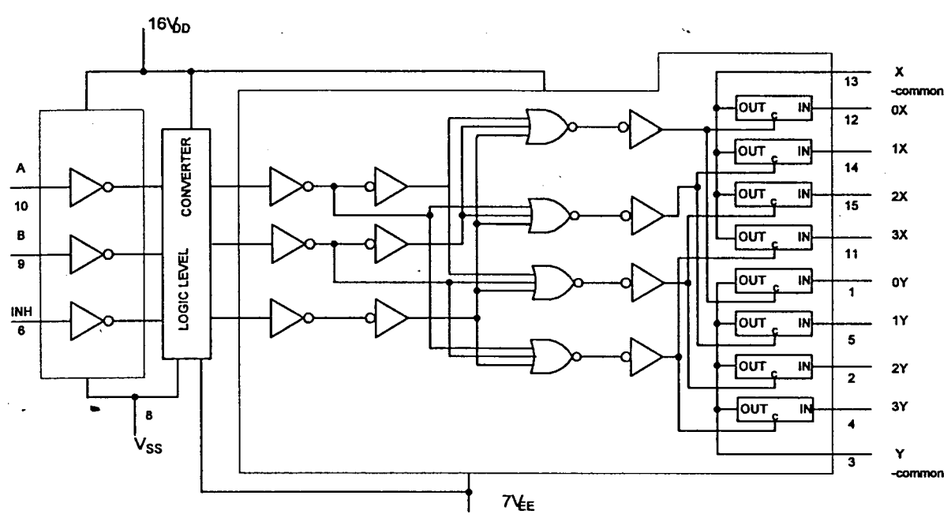

VSS 1
OUT-1 2
IN-1 3
TP-1 4
GND-1 5
16 VDD
15 OUT-2
14 IN-2
13 TP-2
12 GND-2
$\overline{UP}$ 6
$\overline{ON}$ 7
OSC 8
11 DC-OUT
10 $\overline{INH}$
9 $\overline{INT}$
DECODER
UP/DOWN COUNTER
CONTROL
DA CONVERTER


Vcc
14
13
12
11
10
9
8
Ripple Filter
Amp. Ch2
ALC
Amp. Ch1
1
2
3
4
5
6
7
GND


FM IF IN
MIX OUT
Vstb
AM IF IN
QUAD
FM OUT
AM OUT
FM ST DET IN
LPF1
LPF2
BLENDER
L OUT
REF
AF
VCO
DIVIDE
DECODE
ANTI BACKE
MUTE
FM IF
FM DET
LEVEL SW
AM IF
AM DET
IF BUFF
ST/MO FM/AM
AM MIX
AM OSC
BUFF
AGC
IF REQ
SW
TUN
ST
1 AM RF IN
2 FM SW
3 FM VL SENS
4 AM OSC
5 AM OSC OUT
6 Vcc
7 AGC
8 GND
9 IF OUT/REQ
10 TUN LED
11 ST LED
12 R OUT


AM RF IN
FM RF OUT
AM/FM SW
FM OSC
AM OSC
AFC
DET OUT
QUAD
16
15
14
13
12
11
10
9
AM RF
FM / AM
FM OSC
AM OSC
AF BUFF
FM DET
AM DET
FMRF
FM MIX.
AM MIX.
AGC
FMIF
AMIF
1 FM RF
2 RF GND
3 MIX OUT
4 AGC
5 Vcc
6 FM IF IN
7 AM IF IN
8 GND


Vcc2
Vcc2
1
12
3
B.S.1
6
5
45Ω
CH-1
2
OUT-1
30KΩ
9
Ripple
Bias Circuit
Thermal Shut down
Protection circuit
4
POWER-GND
7
IN2
CH-2
11
OUT-2
8
45Ω
NF2
30KΩ
10
B.S.2
pre-GND


16 VDD
A
10
B
9
INH
6
LOGIC LEVEL CONVERTER
8
VSS
7 VEE
13
X -common
OUT IN
12
0X
14
1X
15
2X
11
3X
1
0Y
5
1Y
2
2Y
4
3Y
3
Y -common

SAFETY PRECAUTIONS

1. **Before returning the instrument to the customer,** always make a safety check of the entire instrument, including, but not limited to, the following items:

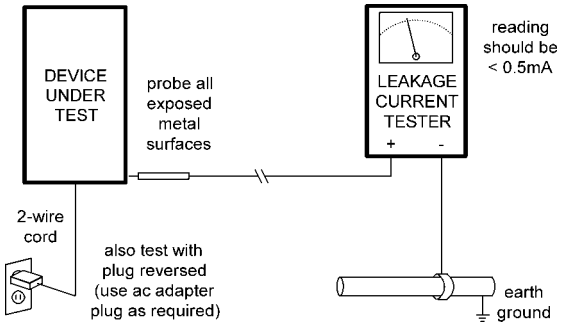
   a. Be sure that no built-in protective devices are defective and/ or have been defeated during servicing. (1) Protective shields are provided on this instrument to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience. (2) When reassembling the instrument, be sure to put back in place all protective devices, including, but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage, and may expose themselves and others to possible injury.**

   b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) excessively wide cabinet ventilation slots, and (2) improperly fitted and/or incorrectly secured cabinet covers.

   c. **Leakage Cold Check** - With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the *on* position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each push button/customer control, exposed metal screws, metallized overlays and to each cable connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the AC switch in the *off* position.

   d. **Leakage Current Hot Check**

      On completely assembled instrument, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) *C101.1 Leakage Current for Appliances* and Underwriters Laboratories (UL) *1492 (Section 67)*. Measure for current from a known earth ground (metal waterpipe, conduit, etc.) to all exposed metal or conductive parts of the instrument (antenna connections, handle bracket, metal cabinet, screwheads, metallic overlays, push-buttons, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milliamp. Reverse the instrument power cord plug in the outlet and repeat the test.



   ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING TO ANTENNA OR ACCESSORIES.

   e. **Interconnected Equipment AC Leakage Test**

      Avoid shock hazards. The instrument, accessory, or cable(s) to which this instrument is connected should have the applicable sections of the leakage resistance cold check and the leakage current hot check performed. Do not connect this instrument to an antenna, cable or accessory that exhibits excessive leakage currents.

2. Read and comply with all caution and safety-related notes on or inside the instrument cabinet, and on the chassis.

3. **Design Alteration Warning** - *Do not* alter or add to the mechanical or electrical design of this instrument. Design alterations and additions, including, but not limited to, circuit modifications and the addition of items such as auxiliary audio output connections, cables and accessories, etc., might alter the safety characteristics of this instrument and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and will make you, the servicer responsible for personal injury or property damage resulting therefrom.

4. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: (a) near sharp edges, (b) near thermally hot parts - be sure that leads and components do not touch thermally hot parts, and (c) the AC supply. Always inspect in all areas for pinched, out-of-place, or frayed wiring. Do not change spacing between components and the printed-circuit board. Check AC power cord for damage.

5. Components, parts and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.

6. **PRODUCT SAFETY NOTICE** - Many electrical and mechanical parts have special safety-related characteristics, some of which are often not evident from visual inspection, nor can the protection they give be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified in this service data by a (⚠) on schematics and in the parts list. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part in this service data parts list might create shock, fire and/or other hazards. Product Safety is under review continuously and new instructions are issued whenever appropriate. For the latest information, always consult the appropriate current service literature.

SPECIFICATIONS

Power source	:	DC 12V "D" SIZE (1.5V X 8), AC 120V, 60Hz
Load impedance	:	8 ohm
Reference output	:	50 mW
3 % THD output	:	1.6W x 2
Speaker	:	4" , 8 ohm X 2
Recording system	:	AC Bias
Erase system	:	Magnet Erase

Band : AM, 1 kHz 30% MOD.

Characteristic		Unit	Limit
Frequency Range	Low High	kHz kHz	520 1710
Intermediate Frequency		kHz	450 ± 5
Usable Sensitivity (S/N 20dB)	600 kHz 1000 kHz 1400 kHz	µV/m µV/m µV/m	1580 1000 1000
Selectivity ±10kHz		dB	20

BAND : FM, 1 kHz 22.5kHz DEV.

Characteristic		Unit	Limit
Frequency Range	LOW HIGH	MHz MHz	87.5 108
Intermediate Frequency		MHz	10.7± 0.05
Usable Sensitivity (S/N 50dB)	90.1MHz 98.1MHz 106.1MHz	µV µV µV	12 12 12
S/N at 1mV Input 22.5kHz Deviation	98.1MHz	dB	45

TAPE RECORDER

Characteristic	Unit	Limit
Play Frequency Response 125Hz-8kHz	dB	-4
S/N Ratio MTT-112B	dB	40
Track cross talk (w/Band Pass Filter)	dB	50
Tape speed 3 kHz-10 dB	%	±3
Wow & Flutter (JIS WTD)	%	< 0.35
Channel separation 1kHz-10 dB (w/Band Pass Filter)	dB	26

CD SPECIFICATIONS

Test disc	:	PHILIPS test disc 5A
Bass boost	:	Off
Functions	:	Play/Pause, Stop, Skip (<</>>), Repeat Play
Display	:	LCD Multi-display

Digital signal processing

Optical pick/up	:	3-beam laser
Error correction	:	Cross Interleaved Reed-solomon Code
Digital filter	:	16-bit linear
Sampling rate	:	2 Times

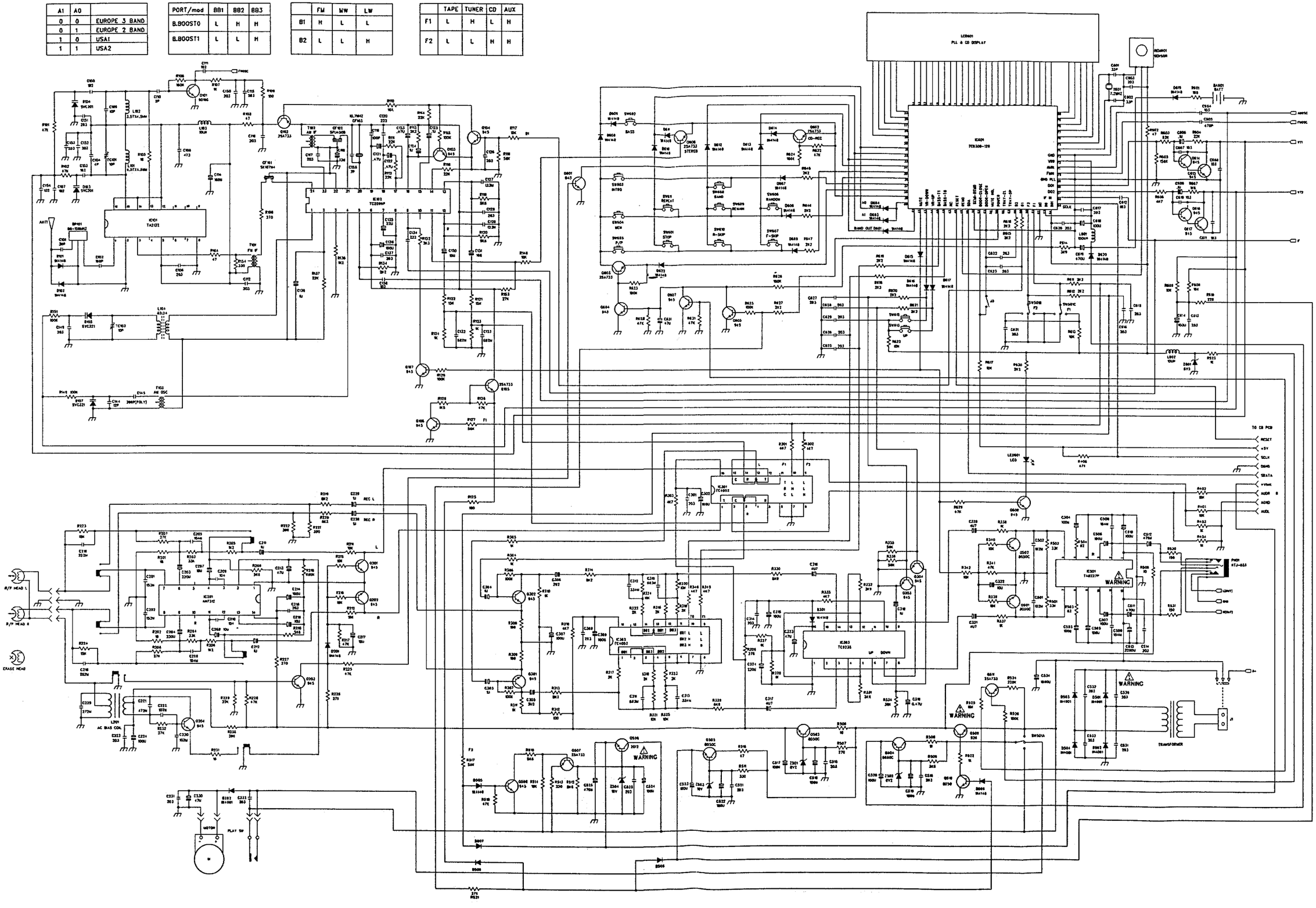
Item	Unit	Limit
Frequency Response 100Hz / 16 kHz	dB	± 4
S/N Ratio	dB	50
Interruption in information layer	µm	400
Black dot	µm	400
Eccentric disc	µm	
Dynamic range	dB	65
Channel separation (w/Band Pass Filter)	dB	45

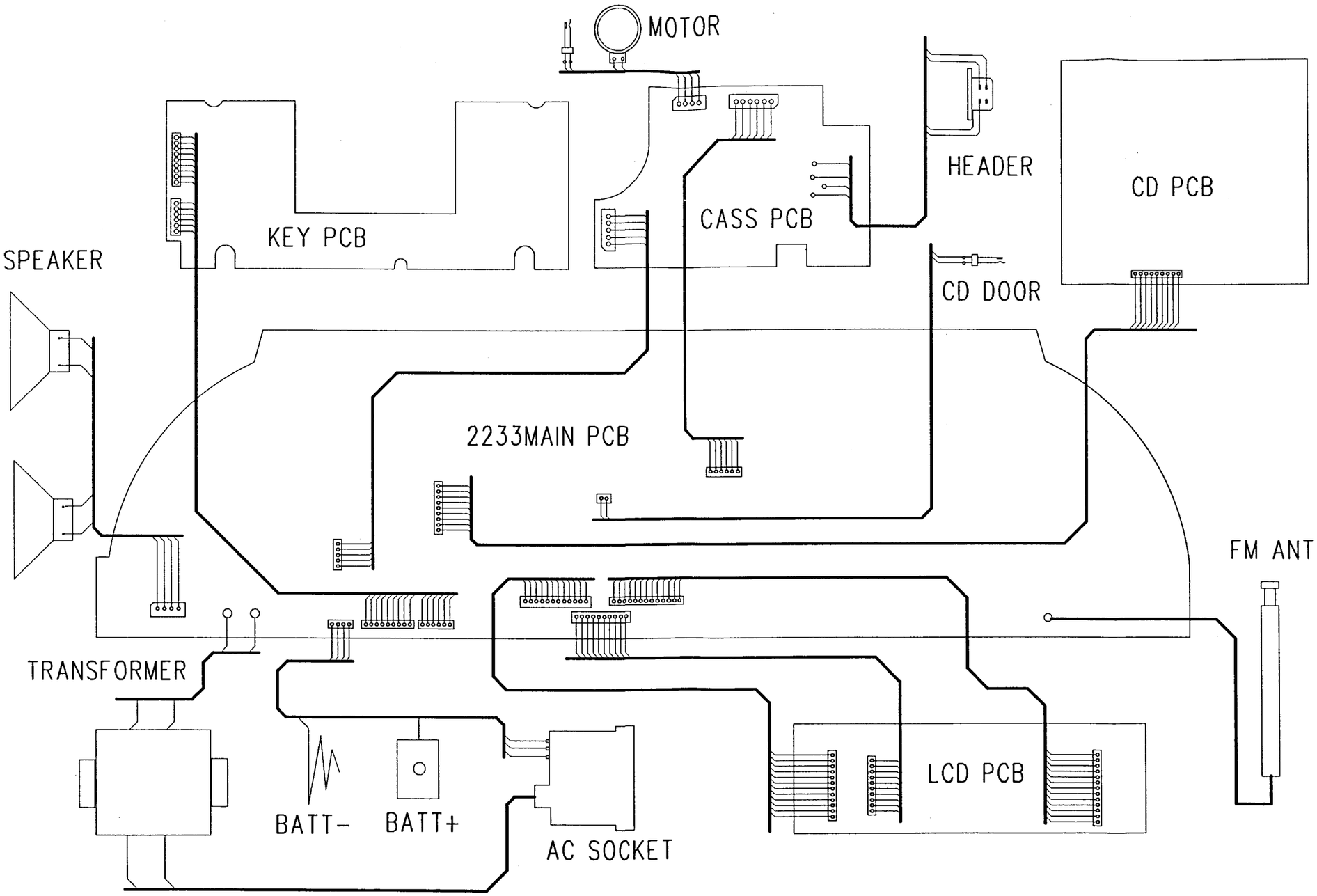
A1	A0	
0	0	EUROPE 3 BAND
0	1	EUROPE 2 BAND
1	0	USA1
1	1	USA2

PORT/mod	BB1	BB2	BB3
B.BOOST0	L	H	H
B.BOOST1	L	L	H

	FM	MW	LW
B1	H	L	L
B2	L	L	H

	TAPE	TUNER	CD	AUX
F1	L	H	L	H
F2	L	L	H	H




MOTOR
KEY PCB
CASS PCB
HEADER
CD PCB
SPEAKER
CD DOOR
2233MAIN PCB
FM ANT
TRANSFORMER
BATT-
BATT+
AC SOCKET
LCD PCB

REPLACEMENT PARTS

BEFORE REPLACING PARTS, READ THE FOLLOWING:

Approved Substitute Stock Numbers - Before ordering stock numbers in the part list, look for an approved substitute stock number in the current Price Schedule. This will minimize your service time and avoid ordering parts you already have in stock.

PRODUCT SAFETY NOTE: Components marked with a critical safety symbol have special characteristics important to safety. Before replacing any of these components, carefully read the PRODUCT SAFETY NOTICE in the basic service data. Do not degrade the safety of the set through improper servicing. Although assemblies as a whole may not be marked with a critical safety symbol , replacement of assemblies with other assemblies not approved may result in a safety hazard.

Warranty Status of Assemblies and Parts - All assemblies and components shown in this part list are eligible for warranty exchange or replacement except those with a dot shown to the left of the Description. Assemblies and components with a dot to the left of the Description are NOT eligible for warranty exchange or replacement.

Warranty replacement of cabinet parts requires the approval of a Thomson Consumer Electronics Field Service Manager.

Warranty Status and Specifications of assemblies and components are subject to change without notice. Consult the TCE Parts Pricing Microfiche for the latest warranty status information.

⚠ **Critical Safety Symbol**

• **Not Eligible For Warranty**

@NOTE: When ordering components that are listed more than once in this part list, always adhere to the serial number application guidelines given in the description column. If a serial number application guideline is not given, always select the component with a value, rating, other specification or identification marking(s) that match those of the corresponding component in the instrument you are servicing.

Symbol	Stock	Drawing	Description
RP7982A			
CABINET & CHASSIS ASY			
1	4A32194	41-02223-01	GRILLE SPEAKER L
2	4A32195	41-02233-00	GRILLE SPEAKER R
3	9A32196	66-02233-00	DOOR CASS
4	3A32197	36-02233-00	SPRING CASS DOOR
5	38A32198	48-02233-03	BRACKET CASS DOOR
6	6A32200	43-02233-01	LENS DISPLAY
7	98A32201	60-02233-00	CABINET FRONT
10	95A32005	14-04008-45	SPEAKER 4' 8 OHM 3W
13	43A32202	52-02233-02	KNOB PLAY
14	43A32203	52-02233-01	KNOB TUNING
16	43A32204	52-02233-03	KNOB REPEAT/PROG/SHUFFLE
17	43A32204	52-02233-03	KNOB REPEAT/PROG/SHUFFLE
18	43A32205	52-02233-00	KNOB VOLUME
29	9A32206	66-02233-01	DOOR CD
30	63A32207	91-02233-10	DISPLAY LCD
48	3A32033	36-07999-01	SPRING CD DOOR
52	43A32208	53-02233-05	KNOB CASS PAUSE
53	43A32209	53-02233-04	KNOB CASS STOP/EJECT
54	43A32210	53-02233-03	KNOB CASS F.F.
55	43A32211	53-02233-02	KNOB CASS REWIND
56	43A32212	53-02233-01	KNOB CASS PLAY
57	43A32213	53-02233-00	KNOB CASS RECORD
69	43A32214	52-02233-05	KNOB FUNCTION
72	45A32215	81-00154-00	FOOT RUBBER FOAM
73	45A32216	81-03310-00	FOOT RUBBER
74	98A32217	61-02233-00	CABINET REAR
78	3A31735	74-07936-02	SPRING, BATTERY -
79	2A31736	74-07936-01	CONTACT, BATTERY +
80	3A32218	36-02322-02	SPRING BATTERY - AA
81	3A32219	36-03316-01	SPRING BATTERY + AA
82	3A31730	74-07936-00	SPRING, BATTERY +/-
83	82A32220	23-02233-00	ANTENNA ROD
85	9A32221	58-02233-00	DOOR BATTERY
86	78A32222	57-02233-00	HANDLE
CD	73A32223	00-0033001	CD MECHANISM
CASSETTE ASY			
4	2A32514	201010011B	LEVER EJECT KICK
11	1A32515	201N03	PAUSE ROD ASY
21	39A26216	20101023A	LEAF SWITCH
36	2A26219	201N06A	PINCH ROLLER AEM ASY
38	5A26220	201N12A	R.F. CLUTCH ASY
49	2A26225	201N13A	FLYWHEEL ASY
51	1A26226	20109064A	BELT FEEL
52	1A26227	20111076	BELT MIN
56	72A26229	507MT0040	MOTOR
D201	198589	02-04148-00R	DIODE 1N4148
D202	198597	02-04001-00	DIODE
IC201	EA33X9424	03-07312-00	IC
Q201	148256	01-00945-16	TRANSISTOR 2GC945P
Q202	148256	01-00945-16	TRANSISTOR 2GC945P
Q203	148256	01-00945-16	TRANSISTOR 2GC945P
Q204	148256	01-00945-16	TRANSISTOR 2GC945P
SW201	39A26984	16-10602-01W	SWITCH PUSH
ELECTRICAL COMPONENTS			
C530	18A32517	050020300	⚠ CAP CERAMIC .02UF

REPLACEMENT PARTS (Continued)

Symbol	Stock	Drawing	Description
D101	198589	02-04148-00R	DIODE 1N4148
D102	198589	02-04148-00R	DIODE 1N4148
D103	16A15172	02-00201-00	DIODE
D104	16A15172	02-00201-00	DIODE
D105	16A31281	02-00321-00	DIODE
D107	16A31281	02-00321-00	DIODE
D301	198589	02-04148-00R	DIODE 1N4148
D501	198597	02-04001-00	DIODE
D502	198597	02-04001-00	DIODE
D504	198597	02-04001-00	DIODE
D504	198597	02-04001-00	DIODE
D505	198589	02-04148-00R	DIODE 1N4148
D506	198589	02-04148-00R	DIODE 1N4148
D601	198589	02-04148-00R	DIODE 1N4148
D602	198589	02-04148-00R	DIODE 1N4148
D603	198589	02-04148-00R	DIODE 1N4148
D604	198589	02-04148-00R	DIODE 1N4148
D605	198589	02-04148-00R	DIODE 1N4148
D607	198589	02-04148-00R	DIODE 1N4148
D608	198589	02-04148-00R	DIODE 1N4148
D609	198589	02-04148-00R	DIODE 1N4148
D610	198589	02-04148-00R	DIODE 1N4148
D611	198589	02-04148-00R	DIODE 1N4148
D612	198589	02-04148-00R	DIODE 1N4148
D613	198589	02-04148-00R	DIODE 1N4148
D614	198589	02-04148-00R	DIODE 1N4148
D615	198589	02-04148-00R	DIODE 1N4148
D616	198589	02-04148-00R	DIODE 1N4148
D617	198589	02-04148-00R	DIODE 1N4148
D619	198589	02-04148-00R	DIODE 1N4148
D620	198589	02-04148-00R	DIODE 1N4148
D622	198589	02-04148-00R	DIODE 1N4148
IC101	33A32225	03-02132-01	IC TA2132F
IC102	33A32226	03-02099-00	IC TA2099
IC301	33A11623	03-04552-00	IC TC4052BP
IC302	33A11623	03-04552-00	IC TC4052BP
IC303	33A32227	03-09235-00	IC TC9235P
IC501	33A23328	03-08227-00	⚠ IC TA8227P
IC601	33A32228	03-09309-04	IC TC9309AF-128
L101	36A32232	09-45045-00	COIL FM
L102	36A32232	09-45045-00	COIL FM
L103	36A32233	09-70101-00	COIL 10UH
L104	36A32234	09-06224-54	COIL AM
L601	36A32235	09-70102-00	COIL 100UH
L602	36A32233	09-70101-00	COIL 10UH
Q101	15A15171	01-09018-07	TRANSISTOR
Q102	219079	01-00733-16	TRANSISTOR 2SA733P
Q103	148256	01-00945-16	TRANSISTOR 2GC945P
Q104	148256	01-00945-16	TRANSISTOR 2GC945P
Q105	219079	01-00733-16	TRANSISTOR 2SA733P
Q106	148256	01-00945-16	TRANSISTOR 2GC945P
Q107	148256	01-00945-16	TRANSISTOR 2GC945P
Q301	148256	01-00945-16	TRANSISTOR 2GC945P
Q302	148256	01-00945-16	TRANSISTOR 2GC945P
Q303	148256	01-00945-16	TRANSISTOR 2GC945P
Q304	148256	01-00945-16	TRANSISTOR 2GC945P
Q501	15A31744	01-08050-03S	TRANSISTOR 8050C
Q502	15A31744	01-08050-03S	TRANSISTOR 8050C
Q503	15A31744	01-08050-03S	TRANSISTOR 8050C
Q504	15A31744	01-08050-03S	TRANSISTOR 8050C
Q505	15A31744	01-08050-03S	TRANSISTOR 8050C
Q506	15A26815	01-02102-00	⚠ TRANSISTOR 2SD2012
Q507	219079	01-00733-16	TRANSISTOR 2SA733P
Q508	148256	01-00945-16	TRANSISTOR 2GC945P
Q509	15A10368	01-00928-00	⚠ TRANSISTOR KSA928AY
Q510	15A31744	01-08050-03S	TRANSISTOR 8050C
Q511	219079	01-00733-16	TRANSISTOR 2SA733P
Q601	148256	01-00945-16	TRANSISTOR 2GC945P
Q602	219079	01-00733-16	TRANSISTOR 2SA733P
Q603	219079	01-00733-16	TRANSISTOR 2SA733P
Q604	148256	01-00945-16	TRANSISTOR 2GC945P
Q605	148256	01-00945-16	TRANSISTOR 2GC945P
Q606	219079	01-00733-16	TRANSISTOR 2SA733P
Q607	148256	01-00945-16	TRANSISTOR 2GC945P
Q614	148256	01-00945-16	TRANSISTOR 2GC945P
Q615	148256	01-00945-16	TRANSISTOR 2GC945P
Q616	148256	01-00945-16	TRANSISTOR 2GC945P
Q617	148256	01-00945-16	TRANSISTOR 2GC945P
SKT-001	34A32236	12-00004-09M	⚠ SOCKET AC
SW503	39A32237	16-10403-02M	SWITCH SLIDE
SW601	39A26820	16-10102-03S	SWITCH TACT
SW602	39A26820	16-10102-03S	SWITCH TACT
SW603	39A26820	16-10102-03S	SWITCH TACT
SW615	39A32010	16-00000-09	SWITCH CD DOOR
T102	61A32230	08-00029-04	TRANSFORMER 10MM AM900-029
T103	61A32231	08-01014-02	TRANSFORMER 10MM 1A1014N
X601	75A32229	04-07200-00H	CRYSTAL 7.2MHZ
Z501	16A12906	02-50082-00	DIODE ZENER 8.2V 1/2W
Z502	16A32224	02-50063-00	DIODE ZENER 6.2V .5W
Z503	16A31282	02-50100-00	DIODE,ZENER 10V 1/2W
Z601	16A15177	02-50062-00	DIODE

MISCELLANEOUS

HEA	245945	73-02233-00	HEADPHONE
LAB	4A32519	POPRP7982	LABEL POP
UCE	UCRP7982	UCRP7982	UCE & CARE GUIDE

RP7986A

CABINET & CHASSIS ASY

1	4A32194	41-02223-01	GRILLE SPEAKER L
2	4A32195	41-02233-00	GRILLE SPEAKER R
3	9A32196	66-02233-00	DOOR CASS
4	3A32197	36-02233-00	SPRING CASS DOOR
5	38A32198	48-02233-03	BRACKET CASS DOOR
6	6A32200	43-02233-01	LENS DISPLAY

REPLACEMENT PARTS (Continued)

Symbol	Stock	Drawing	Description
7	98A32201	60-02233-00	CABINET FRONT
10	95A32005	14-04008-45	SPEAKER 4' 8 OHM 3W
13	43A32202	52-02233-02	KNOB PLAY
14	43A32203	52-02233-01	KNOB TUNING
16	43A32204	52-02233-03	KNOB REPEAT/PROG/SHUFFLE
17	43A32204	52-02233-03	KNOB REPEAT/PROG/SHUFFLE
18	43A32205	52-02233-00	KNOB VOLUME
29	9A32206	66-02233-01	DOOR CD
30	63A32207	91-02233-10	DISPLAY LCD
48	3A32033	36-07999-01	SPRING CD DOOR
52	43A32208	53-02233-05	KNOB CASS PAUSE
53	43A32209	53-02233-04	KNOB CASS STOP/EJECT
54	43A32210	53-02233-03	KNOB CASS F.F.
55	43A32211	53-02233-02	KNOB CASS REWIND
56	43A32212	53-02233-01	KNOB CASS PLAY
57	43A32213	53-02233-00	KNOB CASS RECORD
69	43A32214	52-02233-05	KNOB FUNCTION
72	45A32215	81-00154-00	FOOT RUBBER FOAM
73	45A32216	81-03310-00	FOOT RUBBER
74	98A32217	61-02233-00	CABINET REAR
78	3A31735	74-07936-02	SPRING, BATTERY -
79	2A31736	74-07936-01	CONTACT, BATTERY +
80	3A32218	36-02322-02	SPRING BATTERY - AA
81	3A32219	36-03316-01	SPRING BATTERY + AA
82	3A31730	74-07936-00	SPRING, BATTERY +/-
83	82A32220	23-02233-00	ANTENNA ROD
85	9A32221	58-02233-00	DOOR BATTERY
86	78A32222	57-02233-00	HANDLE
CD	73A32223	00-0033001	CD MECHANISM
CASSETTE ASY			
4	2A32514	201010011B	LEVER EJECT KICK
11	1A32515	201N03	PAUSE ROD ASY
21	39A26216	20101023A	LEAF SWITCH
36	2A26219	201N06A	PINCH ROLLER AEM ASY
38	5A26220	201N12A	R.F. CLUTCH ASY
49	2A26225	201N13A	FLYWHEEL ASY
51	1A26226	20109064A	BELT FEEL
52	1A26227	20111076	BELT MIN
56	72A26229	507MT0040	MOTOR
D201	198589	02-04148-00R	DIODE 1N4148
D202	198597	02-04001-00	DIODE
IC201	EA33X9424	03-07312-00	IC
Q201	148256	01-00945-16	TRANSISTOR 2GC945P
Q202	148256	01-00945-16	TRANSISTOR 2GC945P
Q203	148256	01-00945-16	TRANSISTOR 2GC945P
Q204	148256	01-00945-16	TRANSISTOR 2GC945P
SW201	39A26984	16-10602-01W	SWITCH PUSH
ELECTRICAL COMPONENTS			
C530	18A32517	050020300	⚠ CAP CERAMIC .02UF
D101	198589	02-04148-00R	DIODE 1N4148
D102	198589	02-04148-00R	DIODE 1N4148
D103	16A15172	02-00201-00	DIODE
D104	16A15172	02-00201-00	DIODE
D105	16A31281	02-00321-00	DIODE
D107	16A31281	02-00321-00	DIODE
D301	198589	02-04148-00R	DIODE 1N4148
D501	198597	02-04001-00	DIODE
D502	198597	02-04001-00	DIODE
D504	198597	02-04001-00	DIODE
D504	198597	02-04001-00	DIODE
D505	198589	02-04148-00R	DIODE 1N4148
D506	198589	02-04148-00R	DIODE 1N4148
D601	198589	02-04148-00R	DIODE 1N4148
D602	198589	02-04148-00R	DIODE 1N4148
D603	198589	02-04148-00R	DIODE 1N4148
D604	198589	02-04148-00R	DIODE 1N4148
D605	198589	02-04148-00R	DIODE 1N4148
D607	198589	02-04148-00R	DIODE 1N4148
D608	198589	02-04148-00R	DIODE 1N4148
D609	198589	02-04148-00R	DIODE 1N4148
D610	198589	02-04148-00R	DIODE 1N4148
D611	198589	02-04148-00R	DIODE 1N4148
D612	198589	02-04148-00R	DIODE 1N4148
D613	198589	02-04148-00R	DIODE 1N4148
D614	198589	02-04148-00R	DIODE 1N4148
D615	198589	02-04148-00R	DIODE 1N4148
D616	198589	02-04148-00R	DIODE 1N4148
D617	198589	02-04148-00R	DIODE 1N4148
D619	198589	02-04148-00R	DIODE 1N4148
D620	198589	02-04148-00R	DIODE 1N4148
D622	198589	02-04148-00R	DIODE 1N4148
IC101	33A32225	03-02132-01	IC TA2132F
IC102	33A32226	03-02099-00	IC TA2099
IC301	33A11623	03-04552-00	IC TC4052BP
IC302	33A11623	03-04552-00	IC TC4052BP
IC303	33A32227	03-09235-00	IC TC9235P
IC501	33A23328	03-08227-00	⚠ IC TA8227P
IC601	33A32228	03-09309-04	IC TC9309AF-128
L101	36A32232	09-45045-00	COIL FM
L102	36A32232	09-45045-00	COIL FM
L103	36A32233	09-70101-00	COIL 10UH
L104	36A32234	09-06224-54	COIL AM
L601	36A32235	09-70102-00	COIL 100UH
L602	36A32233	09-70101-00	COIL 10UH
Q101	15A15171	01-09018-07	TRANSISTOR
Q102	219079	01-00733-16	TRANSISTOR 2SA733P
Q103	148256	01-00945-16	TRANSISTOR 2GC945P
Q104	148256	01-00945-16	TRANSISTOR 2GC945P
Q105	219079	01-00733-16	TRANSISTOR 2SA733P
Q106	148256	01-00945-16	TRANSISTOR 2GC945P
Q107	148256	01-00945-16	TRANSISTOR 2GC945P
Q301	148256	01-00945-16	TRANSISTOR 2GC945P
Q302	148256	01-00945-16	TRANSISTOR 2GC945P

REPLACEMENT PARTS (Continued)

Symbol	Stock	Drawing	Description
Q303	148256	01-00945-16	TRANSISTOR 2GC945P
Q304	148256	01-00945-16	TRANSISTOR 2GC945P
Q501	15A31744	01-08050-03S	TRANSISTOR 8050C
Q502	15A31744	01-08050-03S	TRANSISTOR 8050C
Q503	15A31744	01-08050-03S	TRANSISTOR 8050C
Q504	15A31744	01-08050-03S	TRANSISTOR 8050C
Q505	15A31744	01-08050-03S	TRANSISTOR 8050C
Q506	15A26815	01-02102-00	⚠ TRANSISTOR 2SD2012
Q507	219079	01-00733-16	TRANSISTOR 2SA733P
Q508	148256	01-00945-16	TRANSISTOR 2GC945P
Q509	15A10368	01-00928-00	⚠ TRANSISTOR KSA928AY
Q510	15A31744	01-08050-03S	TRANSISTOR 8050C
Q511	219079	01-00733-16	TRANSISTOR 2SA733P
Q601	148256	01-00945-16	TRANSISTOR 2GC945P
Q602	219079	01-00733-16	TRANSISTOR 2SA733P
Q603	219079	01-00733-16	TRANSISTOR 2SA733P
Q604	148256	01-00945-16	TRANSISTOR 2GC945P
Q605	148256	01-00945-16	TRANSISTOR 2GC945P
Q606	219079	01-00733-16	TRANSISTOR 2SA733P
Q607	148256	01-00945-16	TRANSISTOR 2GC945P
Q614	148256	01-00945-16	TRANSISTOR 2GC945P
Q615	148256	01-00945-16	TRANSISTOR 2GC945P
Q616	148256	01-00945-16	TRANSISTOR 2GC945P
Q617	148256	01-00945-16	TRANSISTOR 2GC945P
SKT-001	34A32236	12-00004-09M	⚠ SOCKET AC
SW503	39A32237	16-10403-02M	SWITCH SLIDE
SW601	39A26820	16-10102-03S	SWITCH TACT
SW602	39A26820	16-10102-03S	SWITCH TACT
SW603	39A26820	16-10102-03S	SWITCH TACT
SW615	39A32010	16-00000-09	SWITCH CD DOOR
T102	61A32230	08-00029-04	TRANSFORMER 10MM AM900-029
T103	61A32231	08-01014-02	TRANSFORMER 10MM 1A1014N
X601	75A32229	04-07200-00H	CRYSTAL 7.2MHZ
Z501	16A12906	02-50082-00	DIODE ZENER 8.2V 1/2W
Z502	16A32224	02-50063-00	DIODE ZENER 6.2V .5W
Z503	16A31282	02-50100-00	DIODE,ZENER 10V 1/2W
Z601	16A15177	02-50062-00	DIODE

MISCELLANEOUS

LAB	4A32520	POPRP7986	LABEL POP
UCE	UCRP7986	UCRP7986	UCE & CARE GUIDE

RP7989A

CABINET & CHASSIS ASY

1	4A32194	41-02223-01	GRILLE SPEAKER L
2	4A32195	41-02233-00	GRILLE SPEAKER R
3	9A32196	66-02233-00	DOOR CASS
4	3A32197	36-02233-00	SPRING CASS DOOR
5	38A32198	48-02233-03	BRACKET CASS DOOR
6	6A32200	43-02233-01	LENS DISPLAY
7	98A32201	60-02233-00	CABINET FRONT
10	95A32005	14-04008-45	SPEAKER 4' 8 OHM 3W
13	43A32202	52-02233-02	KNOB PLAY
14	43A32203	52-02233-01	KNOB TUNING
16	43A32204	52-02233-03	KNOB REPEAT/PROG/SHUFFLE
17	43A32204	52-02233-03	KNOB REPEAT/PROG/SHUFFLE
18	43A32205	52-02233-00	KNOB VOLUME
20	33A32516	02-66938-00	REMOTE SENSOR
29	9A32206	66-02233-01	DOOR CD
30	63A32207	91-02233-10	DISPLAY LCD
48	3A32033	36-07999-01	SPRING CD DOOR
52	43A32208	53-02233-05	KNOB CASS PAUSE
53	43A32209	53-02233-04	KNOB CASS STOP/EJECT
54	43A32210	53-02233-03	KNOB CASS F.F.
55	43A32211	53-02233-02	KNOB CASS REWIND
56	43A32212	53-02233-01	KNOB CASS PLAY
57	43A32213	53-02233-00	KNOB CASS RECORD
69	43A32214	52-02233-05	KNOB FUNCTION
72	45A32215	81-00154-00	FOOT RUBBER FOAM
73	45A32216	81-03310-00	FOOT RUBBER
74	98A32217	61-02233-00	CABINET REAR
78	3A31735	74-07936-02	SPRING, BATTERY -
79	2A31736	74-07936-01	CONTACT, BATTERY +
80	3A32218	36-02322-02	SPRING BATTERY - AA
81	3A32219	36-03316-01	SPRING BATTERY + AA
82	3A31730	74-07936-00	SPRING, BATTERY +/-
83	82A32220	23-02233-00	ANTENNA ROD
85	9A32221	58-02233-00	DOOR BATTERY
86	78A32222	57-02233-00	HANDLE
CD	73A32223	00-0033001	CD MECHANISM

CASSETTE ASY

4	2A32514	201010011B	LEVER EJECT KICK
11	1A32515	201N03	PAUSE ROD ASY
21	39A26216	20101023A	LEAF SWITCH
36	2A26219	201N06A	PINCH ROLLER AEM ASY
38	5A26220	201N12A	R.F. CLUTCH ASY
49	2A26225	201N13A	FLYWHEEL ASY
51	1A26226	20109064A	BELT FEEL
52	1A26227	20111076	BELT MIN
56	72A26229	507MT0040	MOTOR
D201	198589	02-04148-00R	DIODE 1N4148
D202	198597	02-04001-00	DIODE
IC201	EA33X9424	03-07312-00	IC
Q201	148256	01-00945-16	TRANSISTOR 2GC945P
Q202	148256	01-00945-16	TRANSISTOR 2GC945P
Q203	148256	01-00945-16	TRANSISTOR 2GC945P
Q204	148256	01-00945-16	TRANSISTOR 2GC945P
SW201	39A26984	16-10602-01W	SWITCH PUSH

ELECTRICAL COMPONENTS

C530	18A32517	050020300	⚠ CAP CERAMIC .O2UF
D101	198589	02-04148-00R	DIODE 1N4148
D102	198589	02-04148-00R	DIODE 1N4148

REPLACEMENT PARTS (Continued)

Symbol	Stock	Drawing	Description
D103	16A15172	02-00201-00	DIODE
D104	16A15172	02-00201-00	DIODE
D105	16A31281	02-00321-00	DIODE
D107	16A31281	02-00321-00	DIODE
D301	198589	02-04148-00R	DIODE 1N4148
D501	198597	02-04001-00	DIODE
D502	198597	02-04001-00	DIODE
D504	198597	02-04001-00	DIODE
D504	198597	02-04001-00	DIODE
D505	198589	02-04148-00R	DIODE 1N4148
D506	198589	02-04148-00R	DIODE 1N4148
D601	198589	02-04148-00R	DIODE 1N4148
D602	198589	02-04148-00R	DIODE 1N4148
D603	198589	02-04148-00R	DIODE 1N4148
D604	198589	02-04148-00R	DIODE 1N4148
D605	198589	02-04148-00R	DIODE 1N4148
D607	198589	02-04148-00R	DIODE 1N4148
D608	198589	02-04148-00R	DIODE 1N4148
D609	198589	02-04148-00R	DIODE 1N4148
D610	198589	02-04148-00R	DIODE 1N4148
D611	198589	02-04148-00R	DIODE 1N4148
D612	198589	02-04148-00R	DIODE 1N4148
D613	198589	02-04148-00R	DIODE 1N4148
D614	198589	02-04148-00R	DIODE 1N4148
D615	198589	02-04148-00R	DIODE 1N4148
D616	198589	02-04148-00R	DIODE 1N4148
D617	198589	02-04148-00R	DIODE 1N4148
D619	198589	02-04148-00R	DIODE 1N4148
D620	198589	02-04148-00R	DIODE 1N4148
D622	198589	02-04148-00R	DIODE 1N4148
IC101	33A32225	03-02132-01	IC TA2132F
IC102	33A32226	03-02099-00	IC TA2099
IC301	212047	03-04052-00	IC TYPE TC4052BP
IC302	212047	03-04052-00	IC TYPE TC4052BP
IC303	33A32227	03-09235-00	IC TC9235P
IC501	33A23328	03-08227-00	⚠ IC TA8227P
IC601	33A32228	03-09309-04	IC TC9309AF-128
L101	36A32232	09-45045-00	COIL FM
L102	36A32232	09-45045-00	COIL FM
L103	36A32233	09-70101-00	COIL 10UH
L104	36A32234	09-06224-54	COIL AM
L601	36A32235	09-70102-00	COIL 100UH
L602	36A32233	09-70101-00	COIL 10UH
Q101	15A15171	01-09018-07	TRANSISTOR
Q102	219079	01-00733-16	TRANSISTOR 2SA733P
Q103	148256	01-00945-16	TRANSISTOR 2GC945P
Q104	148256	01-00945-16	TRANSISTOR 2GC945P
Q105	219079	01-00733-16	TRANSISTOR 2SA733P
Q106	148256	01-00945-16	TRANSISTOR 2GC945P
Q107	148256	01-00945-16	TRANSISTOR 2GC945P
Q301	148256	01-00945-16	TRANSISTOR 2GC945P
Q302	148256	01-00945-16	TRANSISTOR 2GC945P
Q303	148256	01-00945-16	TRANSISTOR 2GC945P

Symbol	Stock	Drawing	Description
Q304	148256	01-00945-16	TRANSISTOR 2GC945P
Q501	15A31744	01-08050-03S	TRANSISTOR 8050C
Q502	15A31744	01-08050-03S	TRANSISTOR 8050C
Q503	15A31744	01-08050-03S	TRANSISTOR 8050C
Q504	15A31744	01-08050-03S	TRANSISTOR 8050C
Q505	15A31744	01-08050-03S	TRANSISTOR 8050C
Q506	15A26815	01-02102-00	⚠ TRANSISTOR 2SD2012
Q507	219079	01-00733-16	TRANSISTOR 2SA733P
Q508	148256	01-00945-16	TRANSISTOR 2GC945P
Q509	15A10368	01-00928-00	⚠ TRANSISTOR KSA928AY
Q510	15A31744	01-08050-03S	TRANSISTOR 8050C
Q511	219079	01-00733-16	TRANSISTOR 2SA733P
Q601	148256	01-00945-16	TRANSISTOR 2GC945P
Q602	219079	01-00733-16	TRANSISTOR 2SA733P
Q603	219079	01-00733-16	TRANSISTOR 2SA733P
Q604	148256	01-00945-16	TRANSISTOR 2GC945P
Q605	148256	01-00945-16	TRANSISTOR 2GC945P
Q606	219079	01-00733-16	TRANSISTOR 2SA733P
Q607	148256	01-00945-16	TRANSISTOR 2GC945P
Q614	148256	01-00945-16	TRANSISTOR 2GC945P
Q615	148256	01-00945-16	TRANSISTOR 2GC945P
Q616	148256	01-00945-16	TRANSISTOR 2GC945P
Q617	148256	01-00945-16	TRANSISTOR 2GC945P
SKT-001	34A32236	12-00004-09M	⚠ SOCKET AC
SW503	39A32237	16-10403-02M	SWITCH SLIDE
SW601	39A26820	16-10102-03S	SWITCH TACT
SW602	39A26820	16-10102-03S	SWITCH TACT
SW603	39A26820	16-10102-03S	SWITCH TACT
SW615	39A32010	16-00000-09	SWITCH CD DOOR
T102	61A32230	08-00029-04	TRANSFORMER 10MM AM900-029
T103	61A32231	08-01014-02	TRANSFORMER 10MM 1A1014N
X601	75A32229	04-07200-00H	CRYSTAL 7.2MHZ
Z501	16A12906	02-50082-00	DIODE ZENER 8.2V 1/2W
Z502	16A32224	02-50063-00	DIODE ZENER 6.2V .5W
Z503	16A31282	02-50100-00	DIODE,ZENER 10V 1/2W
Z601	16A15177	02-50062-00	DIODE

MISCELLANEOUS

LAB	4A32518	POPRP7989	LABEL POP
REM	245278	REM-RCA	REMOTE CONTROL
USE	UCRP7989	UCRP7989	USE & CARE GUIDE

Circuit	Symptom	Cause and Remedy
General	No sound	• Speakers are not connected: Check the speaker connectio. • Wrong function is selected: Set switch to the proper position. • Defective volume control: Set the volume control to a proper sound level. • Defective earphone jack: Replace the earphone jack. • Mute function is active: Release it by remote control.
AM	No sound, weak sound (Low sensitivity)	• Improper location of unit: Rotate or reposition the unit. • Defect in T102 Check resistance, voltage, and current. Replace as needed. • Defect AM antenna coil or oscilloscope coil: Replace if necessary. • Intermediate Frequency tuning faulty: Readjust (see "Alignment and Adjustment"). • RF tracking faulty: Readjust (see "Alignment and Adjustment"). • Defective TA2099: Check voltages. Replace if necessary. • Poor contact in antenna circuit: Check resistance and resolder.
FM	No sound, weak sound (Low sensitivity)	• FM antenna not connected: Connect the built-in or external antenna. • Defective band selector switch: Replace or repair the switch. • Defective IC101(TA2132) or IC 102 (TA2099): Check voltages. Replace if necessary. • Intermediate Frequency tuning faulty: Readjust (see "Alignment and Adjustment"). • Poor contact in FM antenna circuit: Resolder or repair as required.
Tape	No sound/recording, unsteady tape sound, weak sound	• Dirty capstan or head: Clean the capstan or head with alcohol. • Irregular cassette tape winding: Replace tape. • Defective IC201 (AN7312) : Check voltages. Replace if necessary. • Cassette erasure prevention tabs broken out: Replace tape or cover tab openings with adhesive tape.

Circuit	Symptom	Cause and Remedy
CD	Cannot read the table of contents. no display, no sound.	• Disc is inserted upside down: Insert disc correctly. • Disc is dirty: Wipe clean with a soft cloth. • Disc is scratched: Use a new disc. • Disc is seriously warped: Use a new disc. • A non-standard disc has been inserted: Use only a brand name disc. • Moisture has formed inside the CD deck: Wait about 20 to 30 minutes. • Defect in the servo control board: Replace or repair as required. • Defect in the CD pickup mechanism: Replace as required.