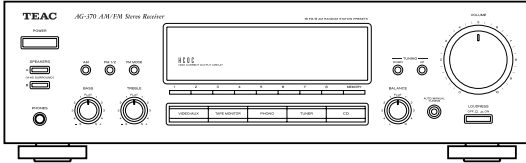


TEAC



SERVICE MANUAL

AG-370

AM/FM Stereo Receiver

CONTENTS

1 SPECIFICATIONS	2
2 ADJUSTMENTS AND CHECKS	3
3 EXPLODED VIEWS AND PARTS LIST	6
4 PC BOARDS AND PARTS LIST	8

NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

1 SPECIFICATIONS

Amplifier Section

Output Power 50 + 50 watts RMS (0.9 % THD, 1 kHz, 8 ohms)
 Total Harmonic Distortion..... 0.05 % (at 45 watts, 1 kHz)
 Input Sensitivity/Impedance PHONO: 4 mV/22 kohms
 LINE: 270 mV/20 kohms
 Frequency Response..... PHONO: 20 Hz–20 kHz, +/-–3 dB
 LINE: 20 Hz–30 kHz, +/-–3 dB
 Signal-to-Noise Ratio..... PHONO: 60 dB
 LINE: 68 dB
 Tone Control BASS: +/-–9 dB at 100 Hz
 TREBLE: +/-–7 dB at 10 kHz
 Loudness Control (Volume at –40 dB Position)
 +7 dB at 100 Hz, +5 dB at 10 kHz

FM Tuner Section

(Without notes 98.1 MHz, 65 dBf)

Tuning Range 87.5 MHz–108.0 MHz (100 kHz steps)
 Usable Sensitivity (IHF) Mono: 20 dBf
 50 dB Quieting Sensitivity Mono: 39 dBf, Stereo: 46 dBf
 Capture Ratio 2.8 dB
 Image Rejection Ratio 20 dB
 AM Suppression Ratio 48 dB
 Harmonic Distortion (1 kHz) Mono: 0.4 %, Stereo: 0.5 %
 Frequency Response..... 30 Hz–15 kHz, +/-–3 dB
 Stereo Separation (1 kHz) 35 dB
 Signal-to-Noise Ratio Mono: 57 dB, Stereo: 55 dB

AM Tuner Section

Tuning Range 520 kHz–1,720 kHz (10 kHz steps)
 Usable Sensitivity 55 dB/m
 Total Harmonic Distortion 1 % at 85 dB/m
 Signal-to-Noise Ratio..... 48 dB

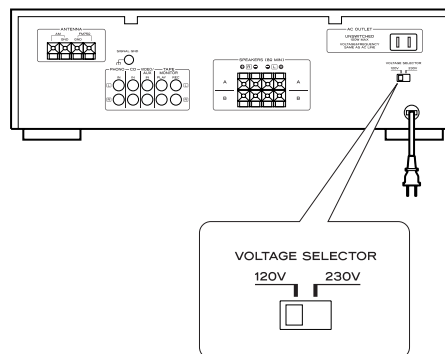
General

Power Requirements..... 120 V/230 V, 50-60 Hz
 Power Consumption 120 W
 AC Outlet Unswitched x 1, 100 W max (1 A max)
 Dimensions (W x H x D) 17-1/8" x 5-1/8" x 12-5/8"
 (435 x 130 x 320 mm)
 Weight (net) 15-7/16 lbs (7.0 kg)
 Standard Accessories AM Loop Antenna x 1
 FM "T" Type Antenna x 1

• Design and specifications are subject to change without notice.

Voltage Conversion

(General export models only)



Be sure to remove the power cord from the AC outlet before repositioning the voltage converter switch.

1. Locate the voltage selector on the rear panel.
2. Using a flat-bladed screwdriver, set to the appropriate 230V or 120V position according to your area.

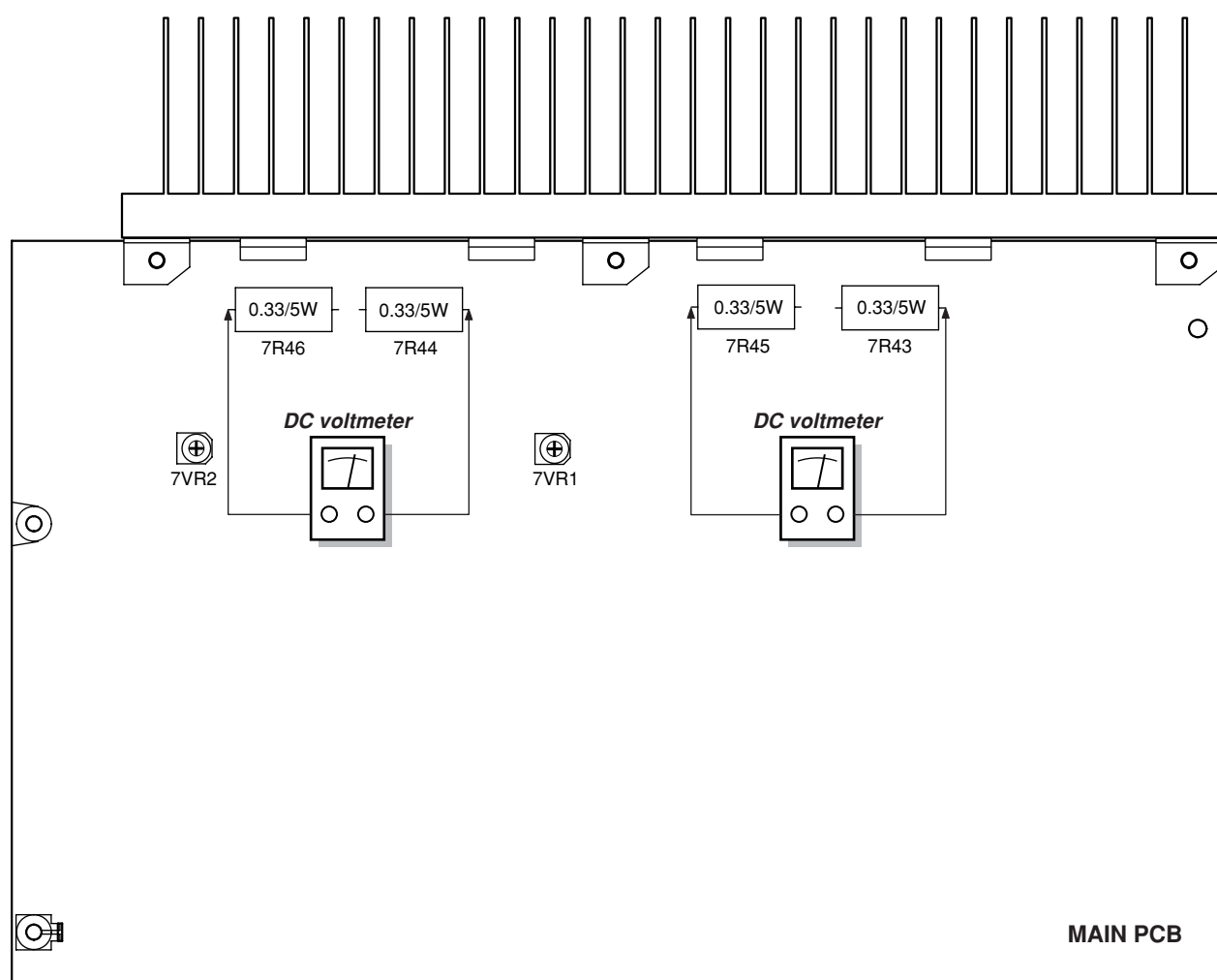
IN NORTH AMERICA USE ONLY ON 120 V SUPPLY.

2 ADJUSTMENTS AND CHECKS

2-1 AMPLIFIER SECTION

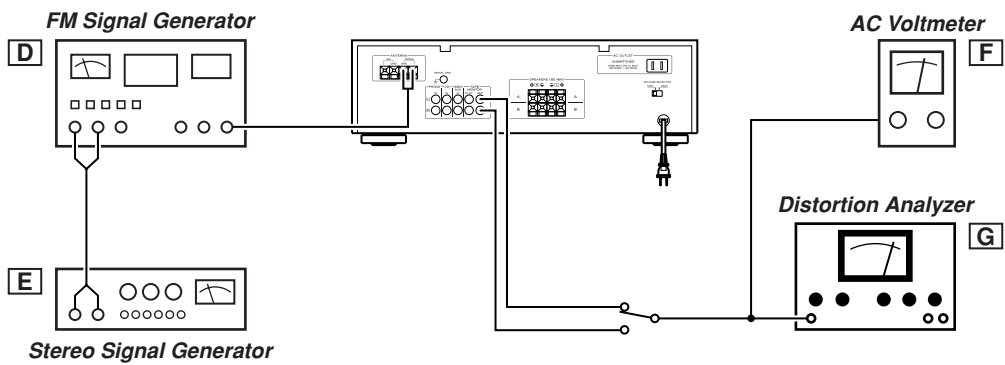
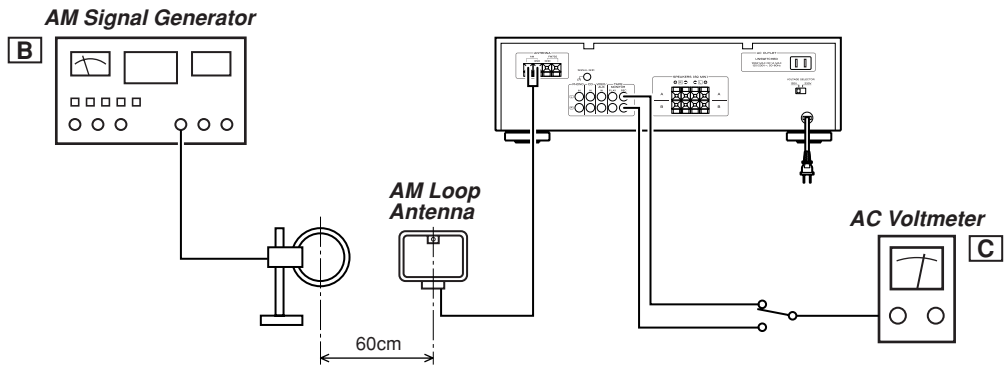
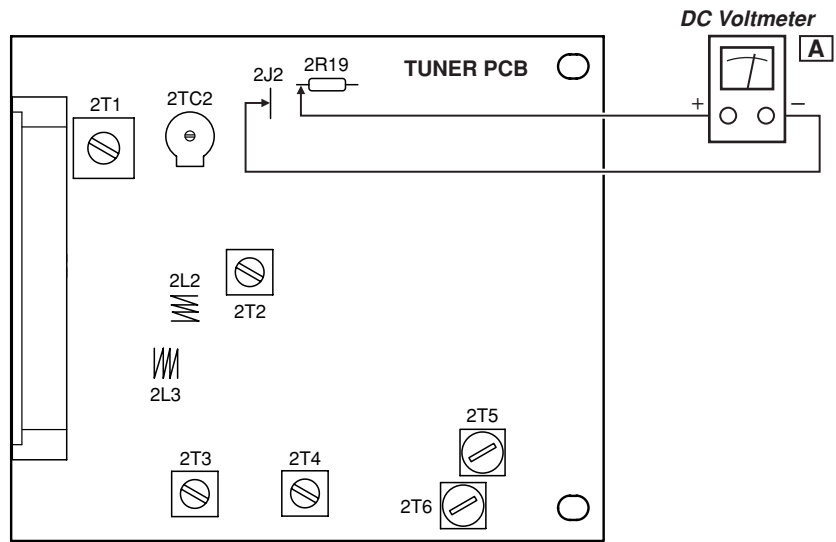
Bias Current Adjustment

1. Turn the unit on, and set the input selector switch to "CD".
2. Set 7VR1 and 7VR2 to the center position.
3. Connect the DC voltmeter as shown below after preheating for 10 minutes, and adjust 7VR1 (Lch) so that the voltage becomes $3.3 \pm 1.3\text{mV}$.
4. Adjust 7VR2 (Rch) in the same way.

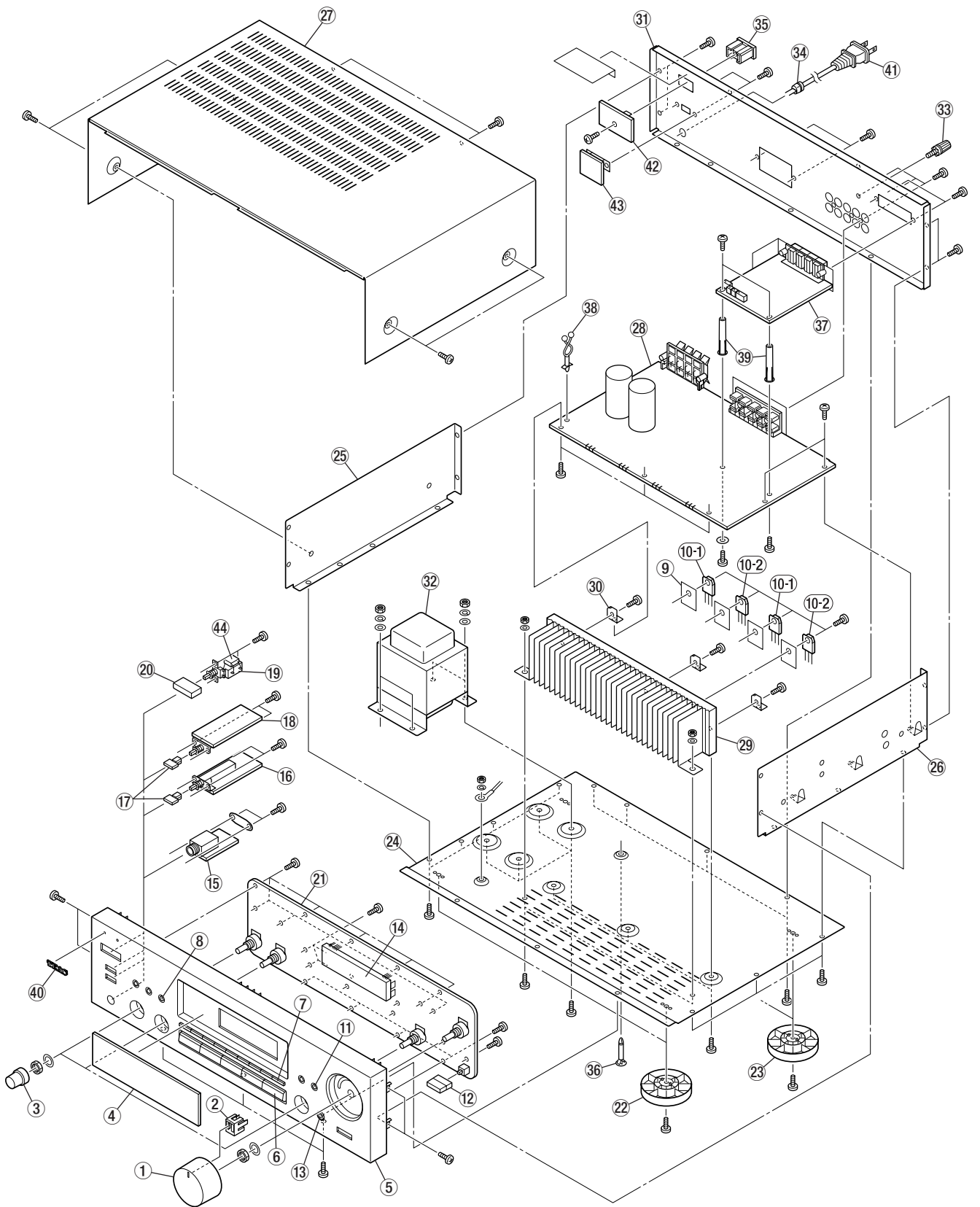


2-2 TUNER SECTION

ITEM	SETTING			ADJUSTMENT POINTS	ADJUST
	INPUT	OUTPUT	AG-370		
1. VT Adjust	/	[A] 2R19 (VT) 2J2 (GND)	FM 87.5 MHz	2L3 (3.5T)	DC 1.0±0.05V
			FM 108.0 MHz	Check	DC 8.0±0.5V
			AM 530 kHz	2T2 (RED)	DC 1.1±0.05V
			AM 1720 kHz	Check	≤ 8.0V
2. AM Sensitivity	[B] 600 kHz/1500 kHz 50 dB/m 400 Hz (30 % Mod)	[C] REC OUT	AM 600 kHz	2T1 (BLK)	Max.
			AM 1500 kHz	2TC2	Max.
			After adjusting 2TC2, readjust 2T1 at 600 kHz.		
3. AM IF	[B] 1000 kHz 50 dB/m 400 Hz (30 % Mod)	[C] REC OUT	AM 1000 kHz	2T3 (WHT)	Max.
4. FM Sensitivity	[D] 90 MHz 10~20 dBf 1 kHz (100 % Mod)	[F] REC OUT	FM 90 MHz	2L2 (4.5T)	Max.
5. FM Distortion	[D] 98 MHz 60 dBf 1 kHz (100 % Mod)	[G] REC OUT	FM 98 MHz	2T4 (PINK)	Min. distortion
6. FM Stereo	[D] [E] 98 MHz 60 dBf Stereo signal L-R	[G] REC OUT	FM 98 MHz	2T5, 2T6	Min. distortion



3 EXPLODED VIEWS AND PARTS LIST



EXPLODED VIEW LIST

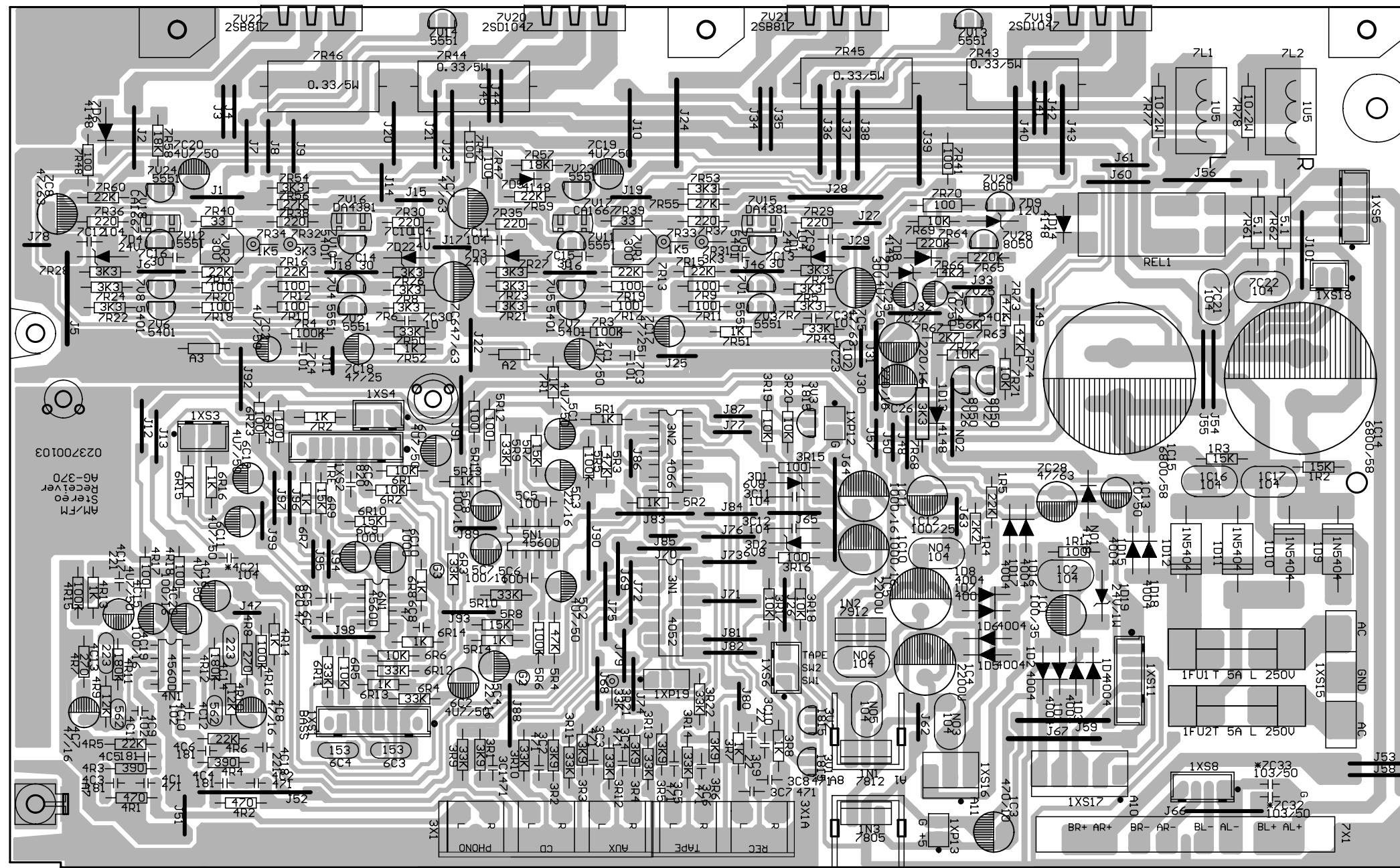
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	9A06536200	MASTER VR KNOB	53W360900
2	9A06900300	INDICATOR	510104200
3	9A09581400	TONE CONTROL KNOB	530503000
4	9A09580800	DISPLAY LENS	510503600
5	9A09580700	PANEL	510503500
6	9A09580900	FUNCTION KEY	530502500
7	9A09581200	MEMORY KEY	530502600
8	9A09581000	BAND KEY	530502900
9	9A09592000	SILICON RUBBER, T0-3P2	322228370
10-1	△ 9A09590200	TR, 2SD1047E	230104705
10-2	△ 9A09590300	TR, 2SB817E	230817005
11	9A09581100	TUNING KEY	530502800
12	9A06536000	LOUD KNOB	53W360700
13	9A09581300	AUTO/MANUAL KEY	530502700
14	9A09592900	VFD DISPLAY	250370000
15	9A09579810	HEADPHONE PCB ASSY	033700601
16	9A09579910	SELECT PCB ASSY	033700401
17	9A07063400	SPEAKER SWITCH KNOB	53W361000
18	9A09580010	SELECT PCB ASSY	033700501
19	△ 9A06602800	POWER SWITCH	180222501
20	9A06535900	POWER KNOB	530049400
21	9A09579410	CONTROL PCB ASSY	033700201
22	9A06536400	LEG (GOLD)	540082601
23	9A06536300	LEG (BLACK)	540082600
24	9A09581600	BOTTOM COVER	520504800
25	9A06901000	SIDE BRACKET (L)	52W360300
26	9A09581800	SIDE BRACKET (R)	520505100
27	9A09581900	TOP COVER	520505000
28	9A09579310	MAIN PCB ASSY	033700101
29	9A09591800	HEAT SINK (A)	560502100
30	9A06901200	H/S BRACKET	540082800
31	9A09581700	REAR COVER	520504900
32	△ 9A09580100	POWER TRANSFORMER	157631522
33	9A06904300	GND TERMINAL, M3	320018601
34	△ 9A06900600	CORD BUSHING	550011700
35	△ 9A06602900	AC SOCKET	26CS18401
36	9A07064400	SPACER SUPPORT	550098819
37	9A09579510	TUNER PCB ASSY	033700301
38	9A09591700	CABLE CLIP	550505500
39	9A09591600	PCB SUPPORT	550505200
40	9A06900700	NAME PLATE	510104300
41	△ 9A09580200	AC POWER CORD	210183011
42	9A09579610	POWER SOCKET PCB ASSY	033700701
43	9A09579710	POWER SELECT SW PCB ASSY	033700801
44	△ 9A09587200	C, 275V 0.01UF	136M103M2

INCLUDED ACCESSORIES

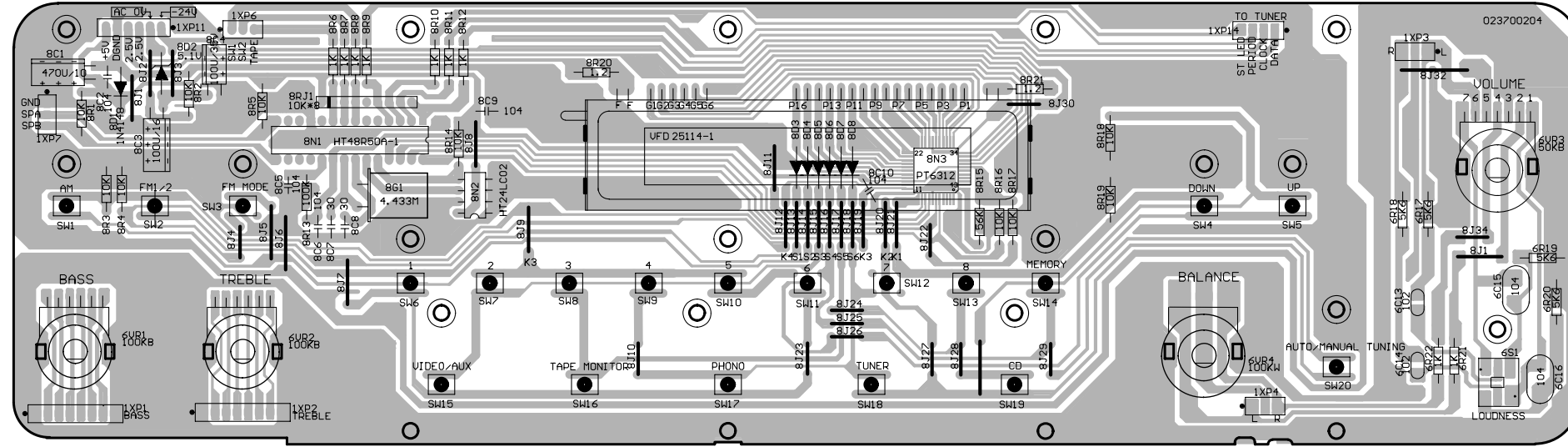
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A09471700	OWNER'S MANUAL, EFSP	600520205
	9A06902500	FM ANT	59W360100
	9A06902600	AM ANT	59W360200

4 PC BOARDS AND PARTS LIST

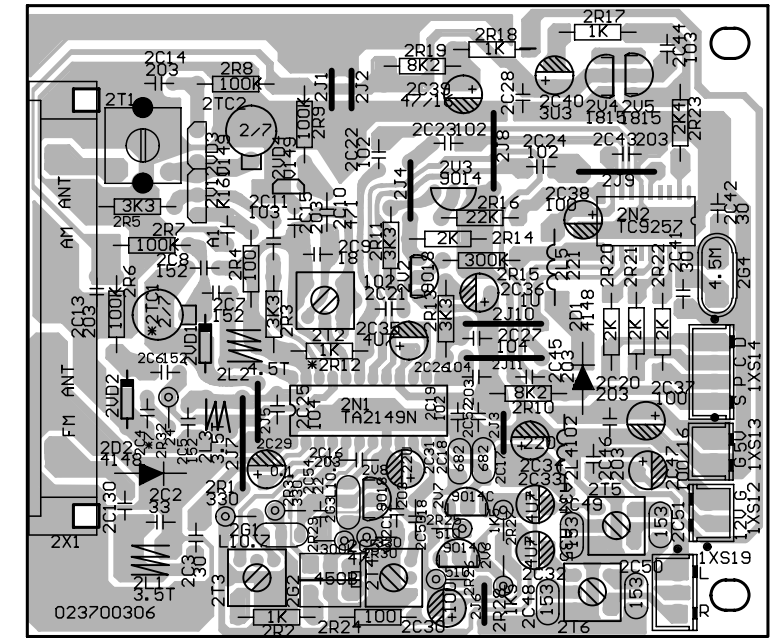
MAIN PCB



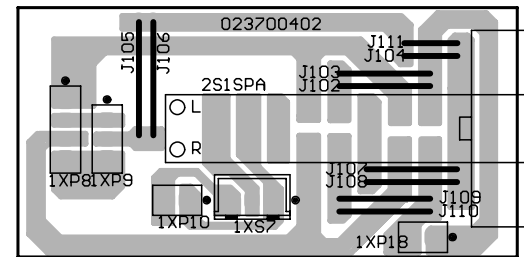
FRONT PCB



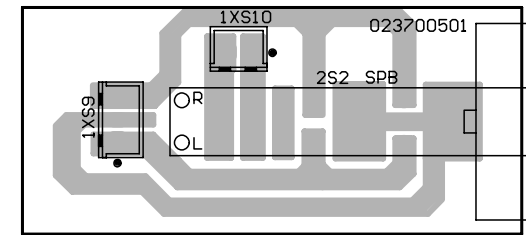
TUNER PCB



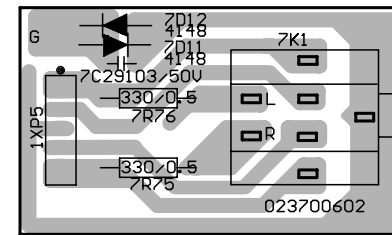
SP SEL PCB



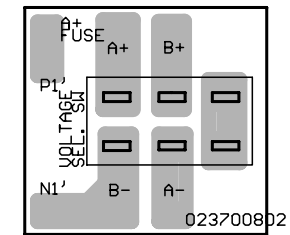
SP SEL PCB



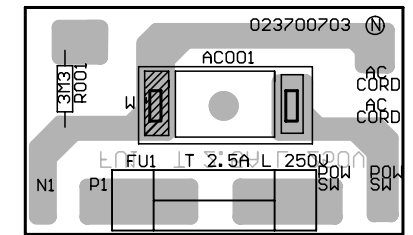
HEADPHONE PCB



POW SEL PCB



POWER PCB



MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579310	MAIN PCB ASSY
	9A09592100	MAIN PCB
	9A06534100	SP JACK
	9A06534200	RCA JACK, 6P
	9A06534300	RCA JACK, 4P
	9A06896100	FUSE CLIP
	9A06897300	LEAD PIN, 3P
	9A06901200	H/S BRACKET
	9A09591600	PCB SUPPORT
	9A09591700	CABLE CLIP
	9A09591800	HEAT SINK (A)
	9A09591900	HEAT SINK (B)
	9A09592000	SILICON RUBBER, T0-3P2
1C1	△ 9A09586700	C, ELEC 35V 100UF M
1C4-5	△ 9A09586600	C, ELEC 25V 2200UF M
1C12	△ 9A09586500	C, ELEC 25V 100UF M
1C14-15	△ 9A09587000	C, ELEC 58V 6800UF M
1D1-8	△ 9A09589300	DIODE, IN4004
1D9-12	△ 9A09589400	DIODE, IN5404
1D13-14	9A09589500	DIODE, IN4148
1D15-18	△ 9A09589300	DIODE, IN4004
1D19	9A09589100	DIODE, ZENER 24V 1W
1FU1-2	△ 9A09591200	FUSE, 5A 250V SLOW BLOW
1N1	△ 9A09590800	IC, L7812CV
1N2	△ 9A09590900	IC, L7912CV
1N3	△ 9A09590700	IC, L7805CV
3D1-2	9A09588800	DIODE, ZENER 6V8 1/2W
3N1	9A09590400	IC, TC4052BP
3N2	9A09590500	IC, TC4066BP
3V1-3	9A09589600	TR, 2SC1815GR
4N1	9A09590600	IC, 4560D
5N1	9A09590600	IC, 4560D
6N1	9A09590600	IC, 4560D
7C28	△ 9A09587100	C, ELEC 63V 47UF M
7D1-4	9A09589000	DIODE, ZENER 24V 1/2W
7D5-6	9A09589500	DIODE, IN4148
7D7	9A09589200	DIODE, ZENER 30V 1/2W
7D8	9A09589500	DIODE, IN4148
7D9	9A09588900	DIODE, ZENER 12V 1/2W
7L1-2	9A09591000	COIL, SPRING 1.5UH
7R43-46	△ 9A09585600	R, CEMENT 5W R33 J
7R61-62	△ 9A09585400	R, 2W 6R1 J
7R70	△ 9A09585300	R, 0.5W 100 J
7R77-78	△ 9A09585500	R, 2W 10 J
7V1-4	9A09589700	TR, 2N5551
7V5-10	9A09589800	TR, 2N5401
7V11-14	9A09589700	TR, 2N5551
7V15-16	9A09589900	TR, 3DA4381
7V17-18	9A09590000	TR, 3CA1667
7V19-20	△ 9A09590200	TR, 2SD1047E
7V21-22	△ 9A09590300	TR, 2SB817E
7V23-24	9A09589700	TR, 2N5551
7V25	9A09589800	TR, 2N5401
7V26-29	9A09590100	TR, 2SC8050D
7VR1-2	9A09585700	VR, SEMI-FIXED 300 J
REL1	9A09591100	RELAY, 12V 5A

CONTROL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579410	CONTROL PCB ASSY
	9A09593800	FRONT PCB
	9A09592900	VFD DISPLAY
	9A09593900	VFD SHIELD CASE
6S1	9A09593000	SW, LOUDNESS
6VR1-2	9A06534400	VR, 100KBX2
6VR3	9A06604000	VR, 50KAX2
6VR4	9A06534500	VR, 100KW
8D1	9A09589500	DIODE, IN4148
8D2	9A09592400	DIODE, ZENER 5V1 1/2W
8D3-8	9A09589500	DIODE, IN4148
8G1	9A09592800	OSC, CRYSTAL 4.433M
8N1	9A09592500	IC, HT48R50A-1
8N2	9A09592600	IC, HT24LC02
8N3	9A09592700	IC, PT6312LQ
SW1-20	9A09593100	SW, TACT

TUNER PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579510	TUNER PCB ASSY
	9A09625000	TUNER PCB
	9A09625100	TUNER SHIELD CASE
2D1-2	9A09589500	DIODE, IN4148
2G1	9A09622100	FILTER, CERAMIC L10.7MS2 R
2G2	9A09622200	FILTER, CERAMIC SFU450B
2G3	9A09622100	FILTER, CERAMIC L10.7MS2 R
2G4	9A09622300	OSC, CRYSTAL 4.5MHZ
2L1	9A09622400	COIL, SPRING 3.5T M4.5
2L2	9A09622500	COIL, SPRING 4.5T M3.5
2L3	9A09622600	COIL, SPRING 3.5T M3.5
2L4	9A09622700	INDUCTOR, AL0410 102
2L5	9A09622800	INDUCTOR, AL0410 221
2N1	9A09622900	IC, TA2149N
2N2	9A09623000	IC, TC9257F
2T1	9A09623800	IFT, AM RF10B (BLK)
2T2	9A09623900	IFT, AM OSC 7B (RED)
2T3	9A09624000	IFT, AM IFT 7B (WHT)
2T4	9A09624100	IFT, FM DET 7B (PNK)
2T5-6	9A09624200	IFT, MPX 8B (BLK)
2TC2	9A09624300	SVC, CYM1-2/7
2V1	9A09624400	FET, 2SK161GR
2V2	9A09624500	TR, 2SC9018I
2V3	9A09624600	TR, 2SC9014C
2V4-5	9A09589600	TR, 2SC1815GR
2V6-7	9A09624600	TR, 2SC9014C
2V8	9A09624700	TR, 2SC9018H
2VD1-2	9A09624800	DIODE, VARACTOR V1043
2VD3-4	9A09624900	DIODE, VARACTOR V149B
2X1	9A07129000	ANT JACK

SELECT PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579910	SELECT PCB ASSY
	9A09626300	SP SEL PCB
2S1	9A09625800	SP SELECTOR SW

SELECT PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09580010	SELECT PCB ASSY
	9A09626400	SP SEL PCB
2S2	9A09625800	SP SELECTOR SW

HEADPHONE PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579810	HEADPHONE PCB ASSY
	9A09625700	HEADPHONE PCB
	9A06901600	H/P JACK HOLDER
7D11-12	9A09589500	DIODE, 1N4148
7K1	9A06535000	HEAD PHONE JACK
7R75-76	△ 9A06889700	R, 1/2W 330

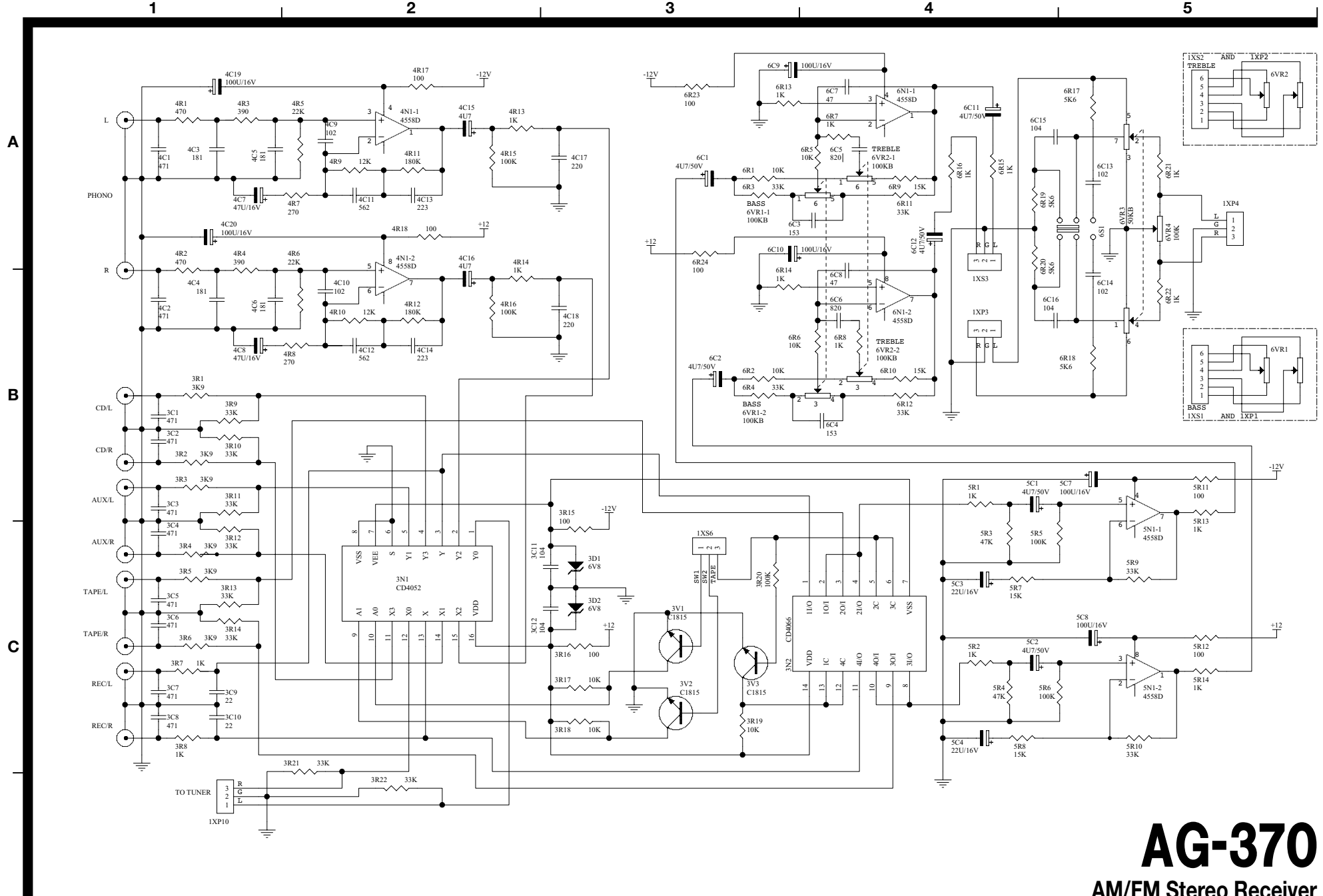
POWER SELECT SW PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579710	POWER SELECT SW PCB ASSY
	9A09625400	POW SEL PCB
	△ 9A07069700	POWER CHANGE SWITCH

POWER SOCKET PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	9A09579610	POWER SOCKET PCB ASSY
	9A09625300	POWER PCB
	△ 9A06602900	AC SOCKET
	9A06896100	FUSE CLIP
FU1	△ 9A09625200	FUSE, 2.5A 250V SLOW BLOW

TEAC SCHEMATIC DIAGRAM AG-370 MAIN PCB (1/2)



AG-370

AM/FM Stereo Receiver

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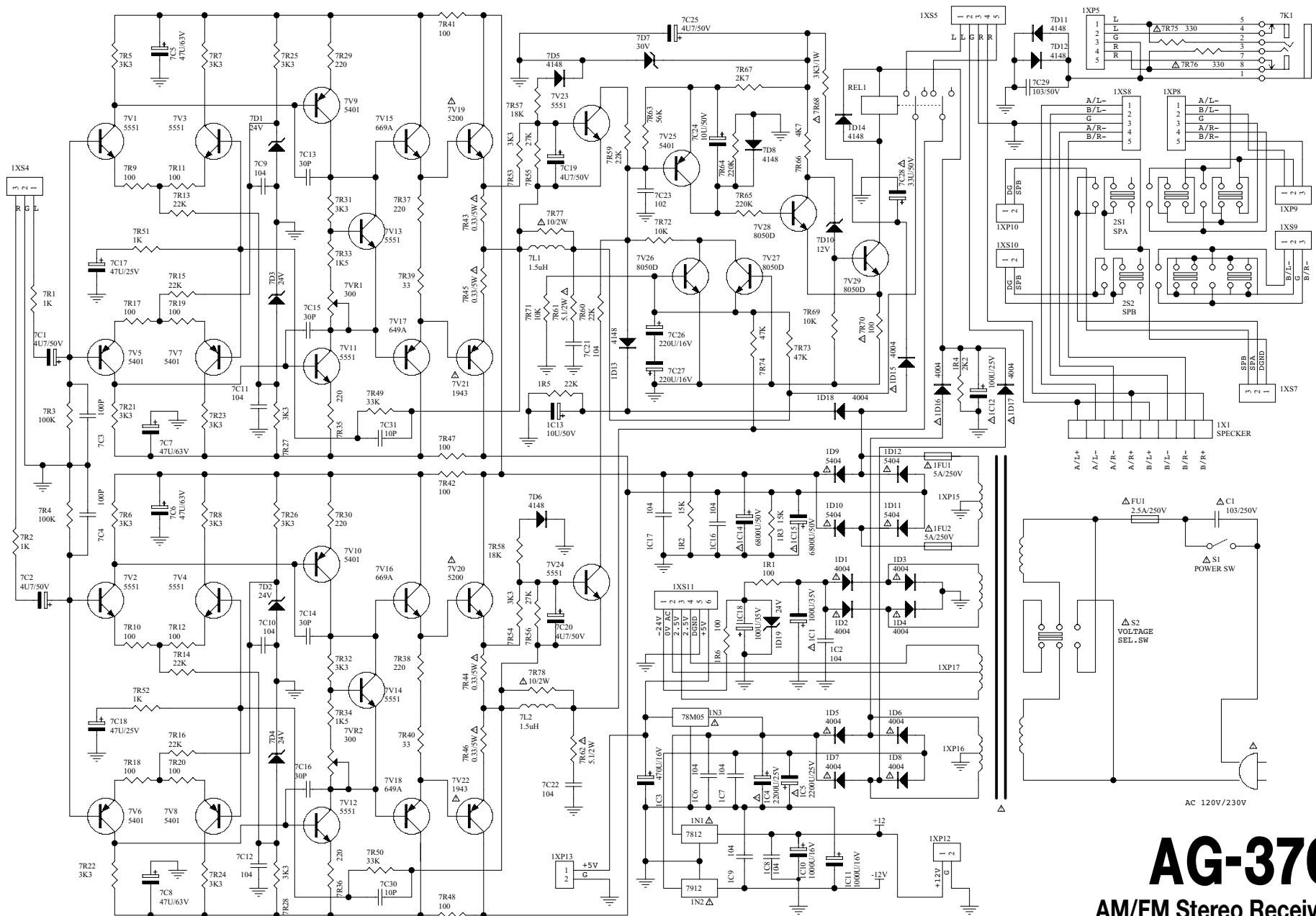
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A

B

C



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AM/FM Stereo Receiver

1st Issue; January 2003

TEAC SCHEMATIC DIAGRAM AG-370 TUNER PCB

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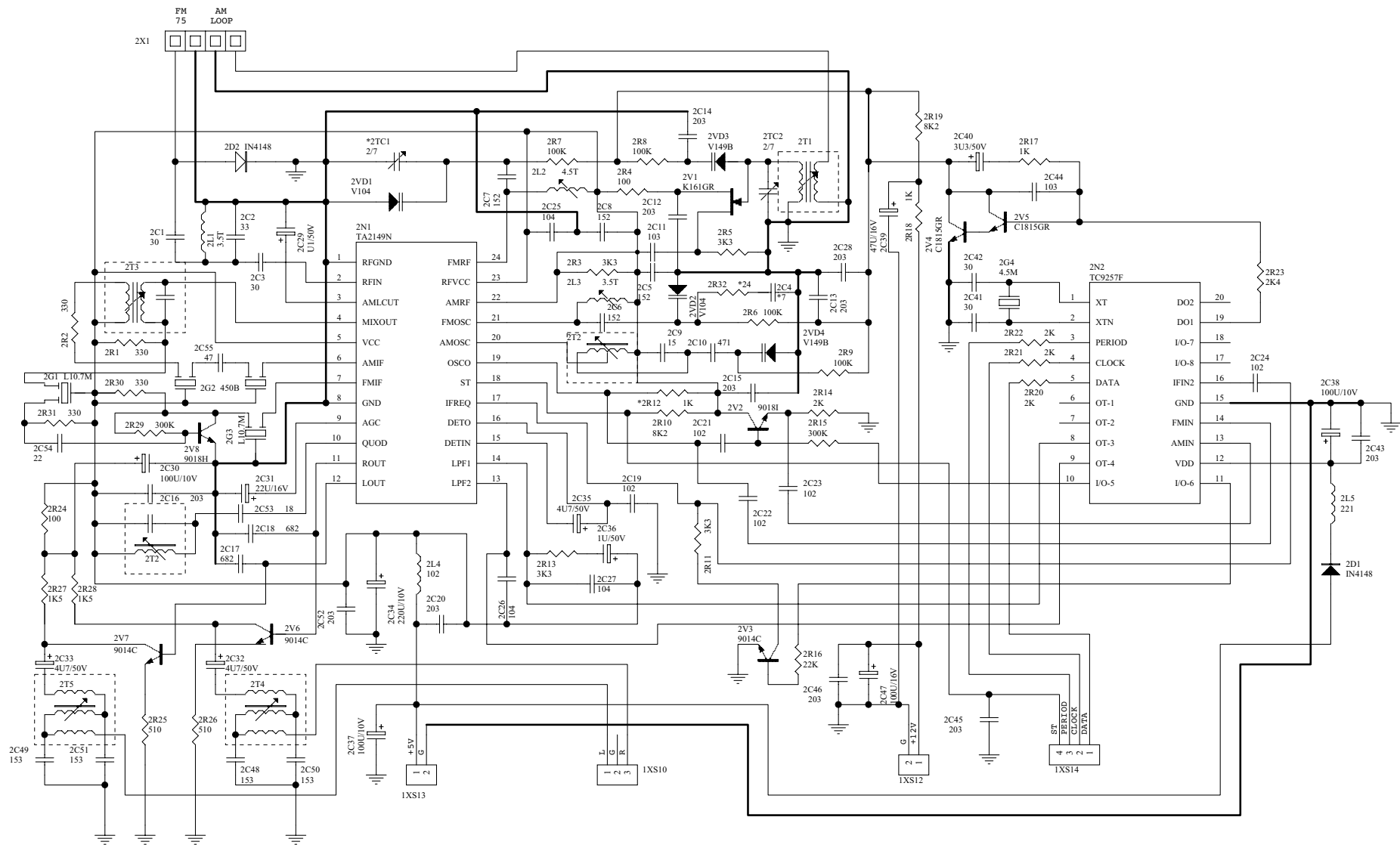
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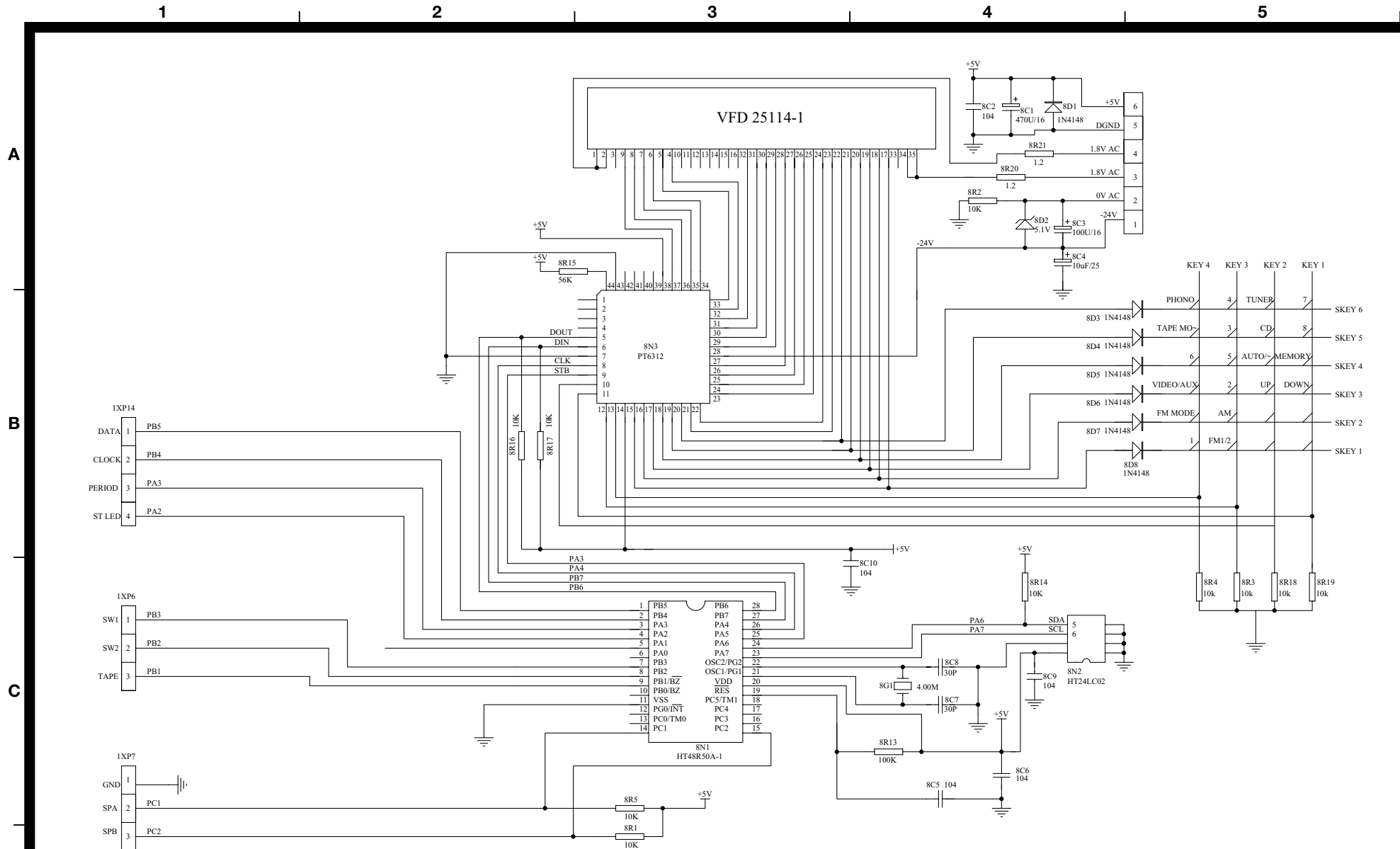


AG-370

AM/FM Stereo Receiver

1st Issue; January 2003

TEAC SCHEMATIC DIAGRAM AG-370 FRONT PCB



A

B

C

INSTRUCTIONS FOR SERVICE PERSONNEL
BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES:

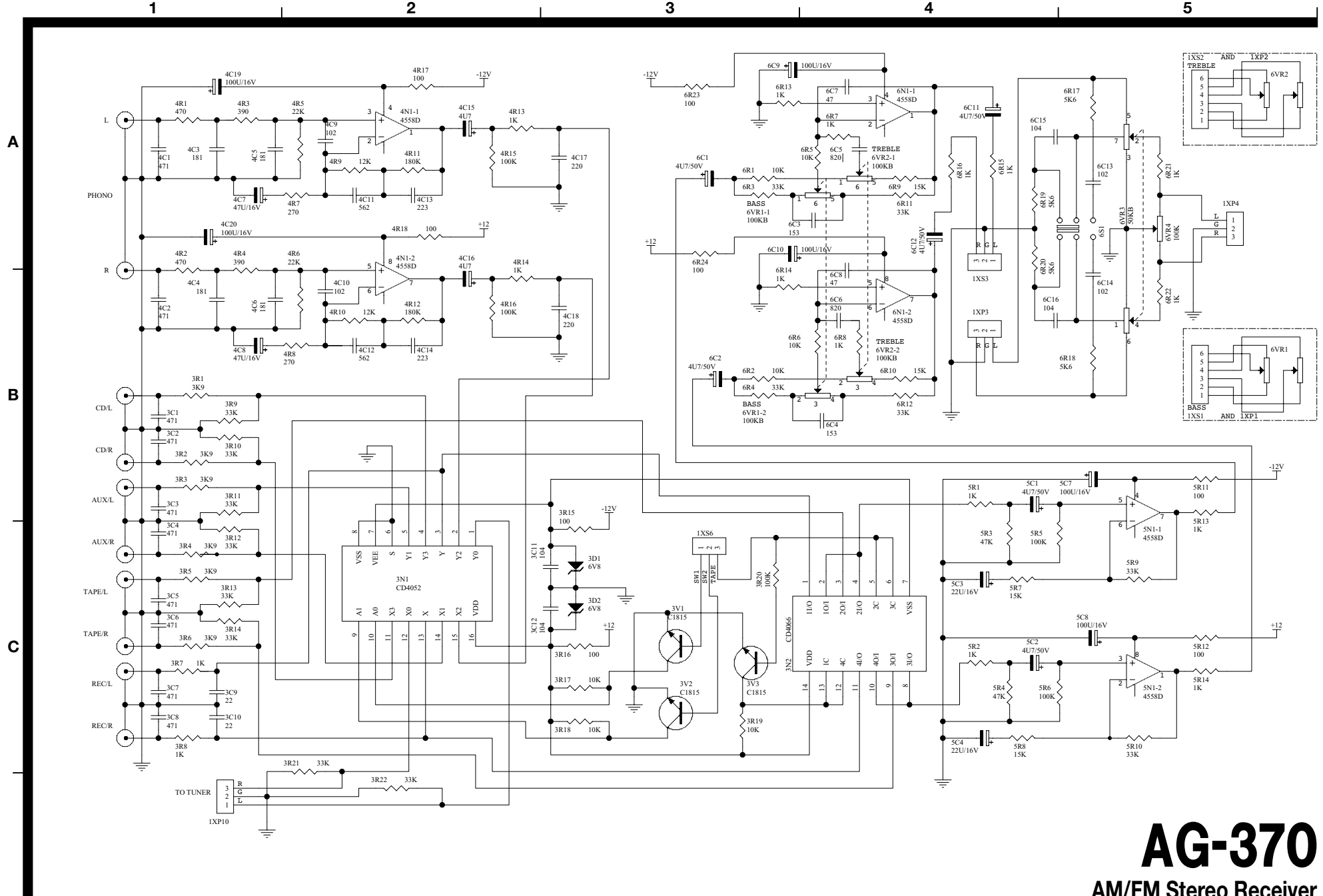
△ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

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AM/FM Stereo Receiver

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TEAC SCHEMATIC DIAGRAM AG-370 MAIN PCB (1/2)



AG-370

AM/FM Stereo Receiver

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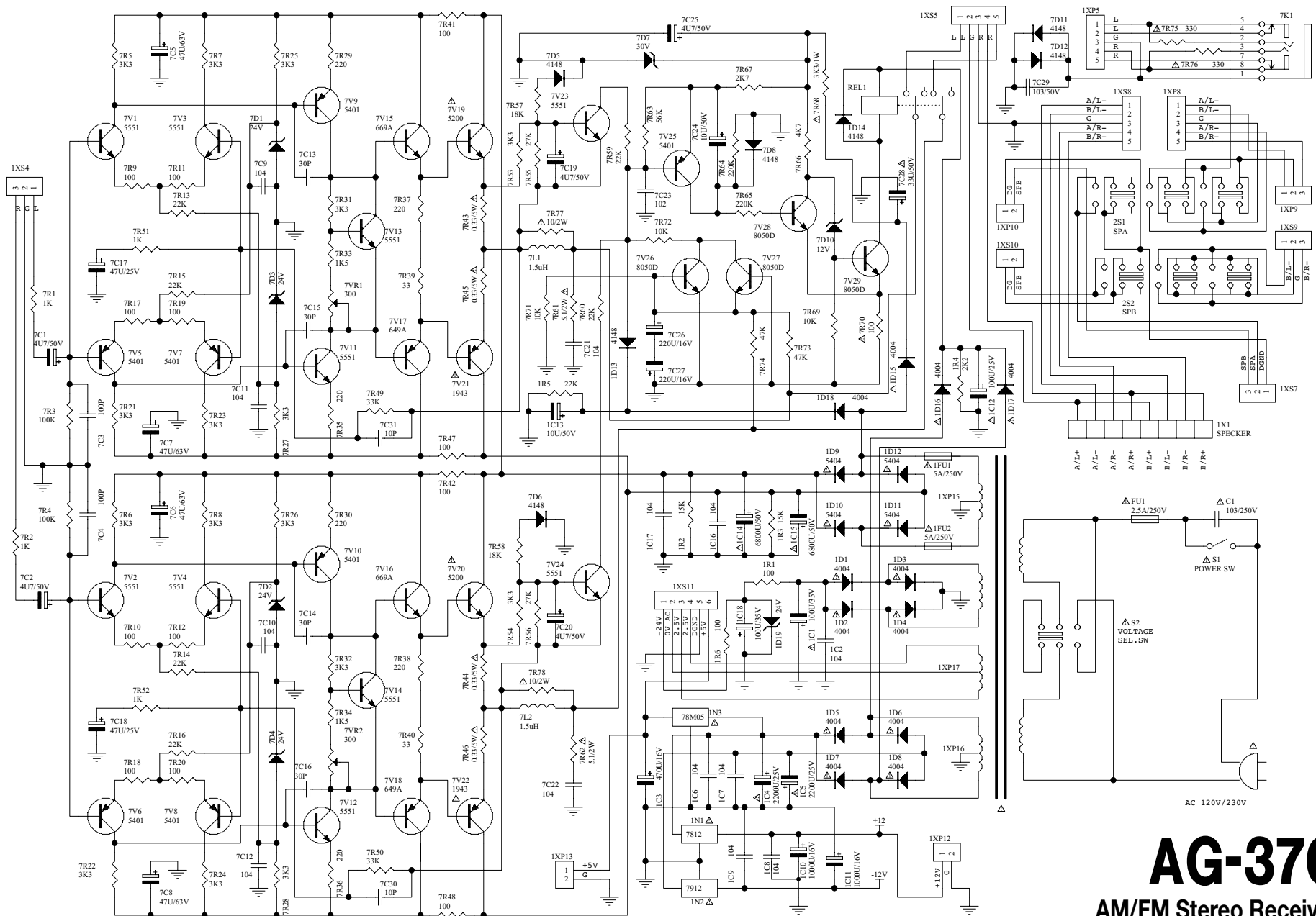
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C



AG-370

AM/FM Stereo Receiver

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TEAC SCHEMATIC DIAGRAM AG-370 TUNER PCB

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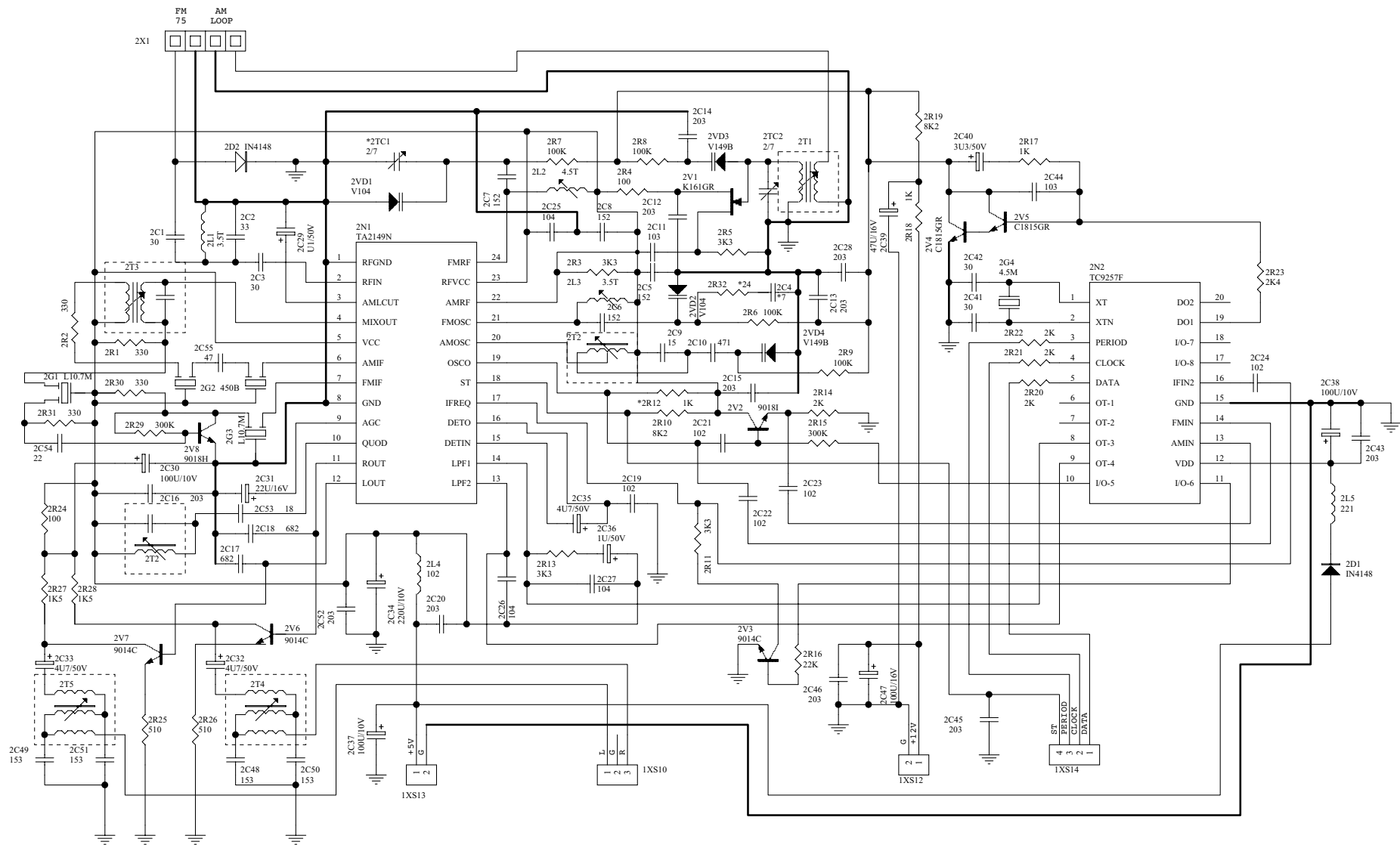
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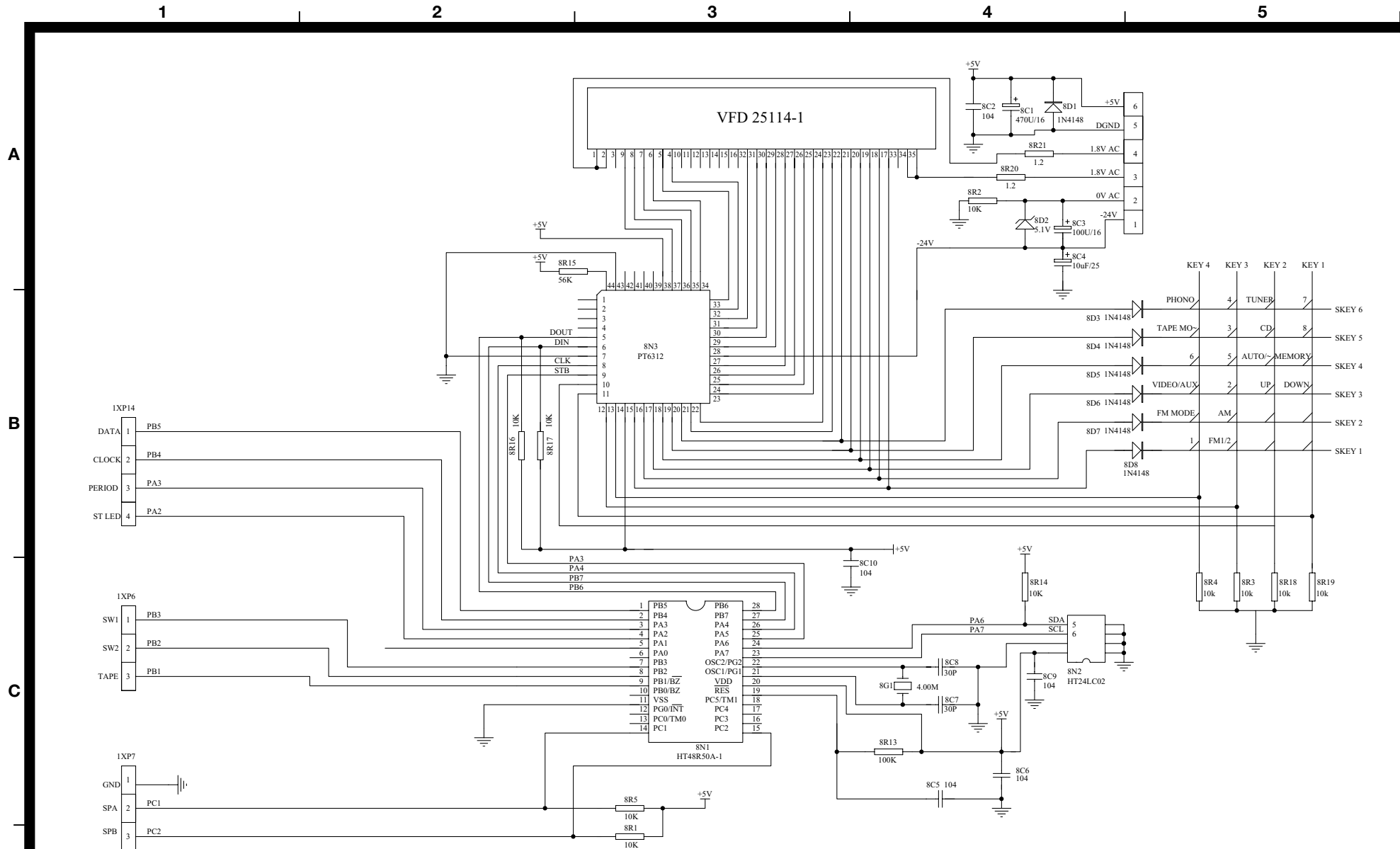


AG-370

AM/FM Stereo Receiver

1st Issue; January 2003

TEAC SCHEMATIC DIAGRAM AG-370 FRONT PCB



INSTRUCTIONS FOR SERVICE PERSONNEL
BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES:
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AM/FM Stereo Receiver
 1st Issue; January 2003