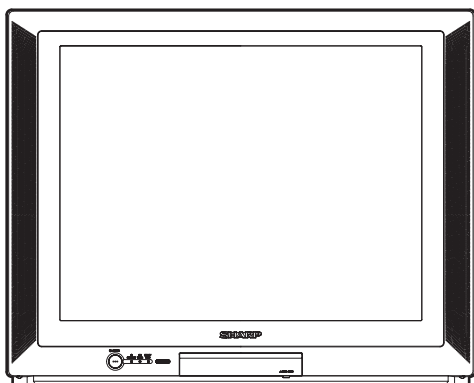


SHARP**SERVICE MANUAL**

S45H829HFG3RU


COLOUR TELEVISION
Chassis No.GB-4
MODEL 29H-FG3RU

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

FEATURES

- World Multi 28 System
- 100-CH Program Memory
- AV Mode (Standard / Dynamic / Soft / Custom)
- CATV Hyper Band Ready
- 4 Line Digital Comb Filter
- Velocity Modulation
- Blue/Black Stretch Circuit
- Picture Noise Reduction
- White Temp. Select
- Aperture Control
- Gamma Correction
- Multi Language OSD (English / Russian)
- On/Off/Reminder Timer
- Comfy View
- Rear AV-IN 1 & 2, S-Video In, AV Output (Monitor Out), Headphone and Front AV-IN 3
- AFT
- Component Input Terminal
- Multi Language TELETEXT
- AV STEREO
- Child Lock
- Dynamic Skin Tone
- Graphic Equalizer
- Clock
- Sound Mode (Music / Movie / News / Custom)
- Hotel Mode
- 16 : 9 Mode

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WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis. To prevent electric shock, do not remove cover. No user – serviceable parts inside. Refer servicing to qualified service personnel.

SHARP CORPORATION

SPECIFICATIONS

Convergence	Self Convergence System
Focus	Bj-Potential, Uni-Potential Electrostatic
Sweep Deflection	Magnetic
Intermediate Frequencies	
Picture IF Carrier	38.9MHz
Sound IF Carrier Frequency	
6.5MHz	32.4MHz
6.0MHz	32.9MHz
5.5MHz	33.4MHz
4.5MHz	34.4MHz
Colour Sub-Carrier Frequency	
PAL	34.47MHz
SECAM	34.494/34.65MHz
NTSC	35.32MHz
Power Input	220 ~ 240V AC 50/60 Hz
Power Consumption	135W
Audio Power Output Rating	5W X 2 +10W (at Max.)
Speaker	
Size	4.3 x 21.8 cm X 2pcs(front) +10cm round (rear woofer) x 1pc + 32mm round (tweeter) x2pcs
Aerial Input Impedance	
VHF/UHF	75 ohms Unbalanced
Receiving Channel	
PAL-B/G, SECAM-B/G	
VHF-Channels	E2 thru E12
UHF-Channels	E21thru E69
CATV	X thru Z +2, S1 thru S41
PAL-D/K, SECAM-D/K	
VHF-Channels	R1 thru R12, C1 thru C12
UHF-Channels	21thru 69, C21 thru C57
PAL-I, SECAM-I	
VHF-Channels	(IRELAND) B thru J
UHF-Channels	(U.K. & H.K.) 21thru 69
NTSC-M	
VHF-Channels	2 thru 13 (US) 1 thru 12 (Japan)
UHF-Channels	14 thru 69 (US) 13 thru 62 (Japan)
CATV	A-6 thru A-1, A thru W+29 (US) C13 thru C63 (Japan)
Receiving Frequency	44.25 MHz thru 863.25 MHz
Dimensions	Width: 722mm Height: 582mm Depth: 495mm Weight (approx): 45.0 kg

Specifications are subject to change without prior notice.

IMPORTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service personnel only.

SERVICE OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dog and 2nd anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with the same type number of picture tube for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.

X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute minimum. Since certain malfunctions or servicing may produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

1. When repairing the circuit, please make sure do not increase the high voltage of the set to more than 34.0kV (at beam 0 μA).
2. To keep the set in a normal operation , please make sure it's function at 30.0kV ±1.5kV (at beam 1,700 μA). The set has been factory - adjusted to the above-mentioned high voltage.
∴ If there is a possibility that the high voltage fluctuates as a result of the repairs, never forget to check for such high voltage after the work.
3. Do not substitute a picture tube with unauthorized types and/or brands which may cause excessive X-ray radiation.

BEFORE RETURNING THE RECEIVER

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metal control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor- capacity networks, mechanical insulators etc.

ADJUSTMENT PRECAUTIONS

This model's setting are adjusted in two different ways: through the I2C bus control and in the conventional analog manner. The adjustments via the I2C bus control include preset-only items and variable data.

1. Setting the service mode by the microprocessor.

- ① Press and hold the local key "VOL DOWN" & "CH UP" when power on the main switch, TV will enter into the SERVICE MODE. (The initial values of EEPROM are automatically preset when new EEPROM is used.)
- ② Press the CH DOWN / UP key on the remote controller to get ready to select the mode one by one.
- ③ Press the CH DOWN / UP key on the remote controller to select the modes reversibly one by one.
- ④ Using the VOLUME UP/ DOWN key on the remote controller, the data can be modified.
- ⑤ Use the MENU Key on the remote controller to select the mode as shown in the next page.
- ⑥ When press the local key "VOL DOWN" & "CH UP" at the same time, it will be released from the service mode.

2. Factory Presetting.

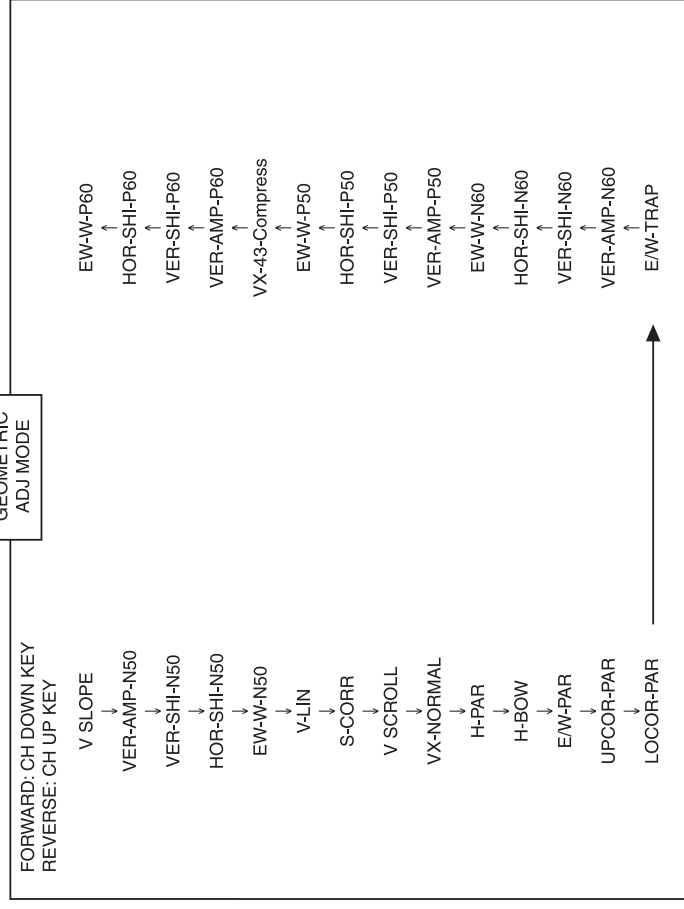
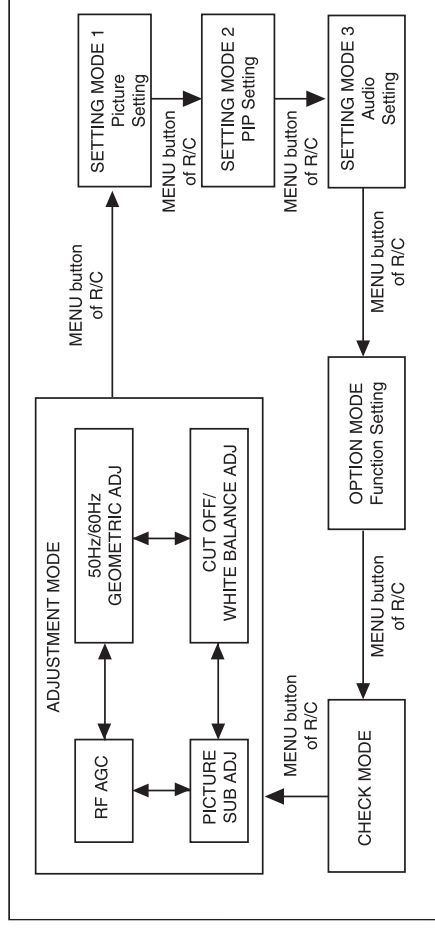
- ① After enter into the SERVICE MODE, at "INIT EEPROM" SERVICE ITEM (which is under "CHECK MODE" section) press REMOTE CONTROLLER key of code "ED" the initial values are automatically preset.
- ② The initial data are preset as listed in page 4-2 to 5-1.
- ③ Make sure whether the data need to modify or not (Initial data).

Note: Once the chassis has been assembly together and in ready condition, please make sure it's go through initialize process (see sect 2-1) above)

Precaution: If haven't done this initialization, malfunction might be happen.

SERVICE MODE

- (1) In the Service Mode, Key is used to select the mode in the following order.



INITIAL SETTING

(1) Execute MCL 1/2 key to set the following data in EEPROM.

SREC/SRAC/SY/STTM				SREC-SCA (SKD)			
R/C CODE	CH-NO.	Fv (MHz)	S-SYSTEM	MCL 1 (R/C CODE 117h)	CH-NO.	Fv (MHz)	MCL 2 (R/C CODE 169h)
TV-CH.	SKIP OFF FREE						S-SYSTEM
0	SKIP OFF FREE						
1	E-2	48.25	5.5	B/G	AU-0	590.25	5.5
2	E-4/B-3	62.25	5.5	B/G	AU-2	46.25	5.5
3	OIR-3	77.25	6.5	D/K	AU-3	64.25	5.5
4	E-5	175.25	5.5	B/G	AU-4	86.25	5.5
5	E-6/B-5	182.25	5.5	B/G	AU-5A	95.25	5.5
6	OIR-7	183.25	6.5	D/K	AU-6	138.25	5.5
7	OIR-8	191.25	6.5	D/K	AU-7	175.25	5.5
8	E-8/B-7	196.25	5.5	B/G	AU-8	182.25	5.5
9	J-9	199.25	4.5	M	AU-9	189.25	5.5
10	E-10/B-9	210.25	5.5	B/G	AU-10	196.25	5.5
11	E-12/B-1	224.25	5.5	B/G	AU-11	209.25	5.5
12	E-21	471.25	5.5	B/G		216.25	5.5
13	I-23	487.25	6.0	I		SKIP OFF FREE	
14	E-25	503.25	5.5	B/G		SKIP OFF FREE	
15	E-34	575.25	5.5	B/G		SKIP OFF FREE	
16	E-35	583.25	5.5	B/G		SKIP OFF FREE	
17	E-37	599.25	5.5	B/G		SKIP OFF FREE	
18	J-38	621.25	4.5	M		SKIP OFF FREE	
19	OIR-42	639.25	6.5	D/K		SKIP OFF FREE	
20	B-50	703.25	5.5	B/G		SKIP OFF FREE	
21	I-54	735.25	6.0	I		SKIP OFF FREE	
22	E-58	767.25	5.5	B/G		SKIP OFF FREE	
23	E-64	815.25	5.5	B/G		SKIP OFF FREE	
24	I-69	855.25	6.0	I		SKIP OFF FREE	
25	E-69	855.25	5.5	B/G		SKIP OFF FREE	
26	US-2	55.25	4.5	M		SKIP OFF FREE	
27	A-6	83.25	4.5	M		SKIP OFF FREE	
28	JA-6	183.25	4.5	M	WE-28	527.25	5.5
29	JA-8	193.25	4.5	M		SKIP OFF FREE	B/G
30	JA-12	217.25	4.5	M		SKIP OFF FREE	
31	US-14	471.25	4.5	M		SKIP OFF FREE	
32	JA-14	477.25	4.5	M		SKIP OFF FREE	
33	JA-50	693.25	4.5	M		SKIP OFF FREE	
34	US-83	885.25	4.5	M		SKIP OFF FREE	
35	S-2	112.25	5.5	B/G		SKIP OFF FREE	
36	S-10	168.25	5.5	B/G		SKIP OFF FREE	
37		SKIP OFF FREE				590.25	5.5
38	S-20	294.25	5.5	B/G		SKIP OFF FREE	B/G
39	S-41	463.25	5.5	B/G		SKIP OFF FREE	
40		SKIP OFF FREE				SKIP OFF FREE	
41	B-43	647.25	5.5	B/G	E-2	48.25	5.5
42	B-45	663.25	5.5	B/G	WE-4	62.25	5.5
43	B-47	679.25	5.5	B/G	OI-3	77.25	6.5
44	E-5	174.95	5.5	B/G	E-5	175.25	5.5
45	E-5	175.55	5.5	B/G	OIR-7	183.25	6.5
46		SKIP OFF FREE			OIR-8	191.25	6.5
47		SKIP OFF FREE			E-10	210.25	5.5
48		SKIP OFF FREE			E-12	224.25	5.5
49		SKIP OFF FREE			I-23	487.25	6.0
50		SKIP OFF FREE			WE-25	503.25	5.5
51		SKIP OFF FREE			E-34	575.25	5.5

R/C CODE TV-CH	SREC/SPAC/SYI/STTM		SREC-SCA (SKD)	
	CH-No.	MCL 1 (R/C CODE 117h) Fv (MHz)	CH-No.	MCL 2 (R/C CODE 169h) Fv (MHz)
52	SKIP OFF FREE	599.25	E-37	599.25
53	SKIP OFF FREE	621.25	JPN-38	4.5
54	SKIP OFF FREE	639.25	OI-42	6.5
55	SKIP OFF FREE	735.25	I-54	6.0
56	SKIP OFF FREE	767.25	E-58	5.5
57	SKIP OFF FREE	815.25	WE-64	5.5
58	SKIP OFF FREE	855.25	I-69	6.0
59	SKIP OFF FREE	91.25	JA-1	4.5
60	SKIP OFF FREE	183.25	JA-6	4.5
61	SKIP OFF FREE	193.25	JA-8	4.5
62	SKIP OFF FREE	217.25	JA-12	4.5
63	SKIP OFF FREE	471.25	US-14	4.5
64	SKIP OFF FREE	693.25	JA-50	4.5
65	SKIP OFF FREE	112.25	S-2	5.5
66	SKIP OFF FREE	168.25	S-10	5.5
67	SKIP OFF FREE	294.25	S-20	5.5
68	SKIP OFF FREE	463.25	S-41	5.5
69	SKIP OFF FREE	174.95	E-5	5.5
70	SKIP OFF FREE	175.55	E-5	5.5
?	?	?	?	?
99	SKIP OFF FREE	SKIP OFF FREE		

SHIPPING SETTING & CHECKING

(1) The following default data has been factory-setting for the EEPROM.

Model-Set: The data in table below (1.1). Model set overview is updated to the respective EEPROM location base on RC key input Model Set 1~10.

MODEL-SET KEY	OSD LANGUAGE	SOUND SYSTEM
1	Chinese	(AUTO)
2	Chinese	(AUTO)
3	English	(AUTO)
4	Arabic	(AUTO)
5	Russian	(AUTO)
6	Malay	(AUTO)
7	French	(AUTO)
8	English	*
9	Thai	(AUTO)
10	Iranian	(AUTO)

For model Set 8 processing only, the respective EEPROM position is updated again with MCL2 data (just like MCL2 key has been pressed)

Default Settings:

Table 1.1

Items	GENERAL	Default Settings
Last power	ON	
Last TV/AV mode	TV mode	
Last position-TV	Program 1	
Last position-RADIO	Program 1	
Flashback Program-TV	Program 1	
Flashback Program-RADIO	Program 1	
Favorite Program A	Program 10	
Favorite Program B	Program 20	
Favorite Program C	Program 30	
Favorite Program D	Program 40	
1 / 2 digit entry	2 digit entry	
Volume	0	
GAME Volume	0	
PIP	OFF	
PIP location	Lower-Right	
Last position-PIP	Program 1	
AFT	All Programs ON	
NICAM STEREO mode	All Programs STEREO	
NICAM BILINGUAL mode	All Programs M1	
NICAM MONO mode	All Programs MONO	
A2 STEREO mode	All Programs STEREO	
A2 BILINGUAL mode	All Programs MAIN	
PICTURE menu		
VIDEO MODE	DYNAMIC	
CONTRAST	60	
COLOUR	+6	
BRIGHTNESS	0	
TINT	0	
SHARPNESS	+6	
PICTURE NR	OFF	
WHITE TEMP	0 (CENTER)	
SOUND menu		
SURROUND	OFF	
BBE	ON	
BALANCE	0	
AVL	ON	
SUPER BASS/BASS+	ON	

Note : The CHILD LOCK PASSWORD and VIEW TIMER PASSWORD are common use.

Refer to next page for setting of each destination.

Items	Default Settings
MODE	EQUALIZER menu
INSET menu (for PIP model)	MOVIE
BRIGHTNESS	0
TINT	0
FEATURE menu	
BLUE BACK	OFF
AUTO SELECT	ON
POWER SAVE (*1)	OFF
COMFY VIEW (*2)	OFF
SAFETY MODE (*3)	OFF
ROTATION	0
16:9 MODE	OFF
DEMO	OFF
CHILD LOCK menu	
LOCK TV	OFF
LOCK STATUS	OFF
LOCK GAME (*4)	OFF
PASSWORD	0000
TIMER menu	
CLOCK	---
DAY	SUN
ON TIMER	---
STATUS	ONCE
POSITION	---
VOLUME	---
OFF TIMER	---
REMINDER	---
BEEP REMINDER	OFF
VIEW TIMER menu	
VIEWING TIME	---
LOCK	---
PASSWORD	0000
CH SETTING menu	
POSITION NAME	BLANK (For all position)
COLOUR	All Programs AUTO
SOUND	All Programs AUTO
SKIP	All Programs OFF
FM RADIO menu	
SKIP	All Programs OFF

Refer to next page for (*1) ~ (*4)

(1) Refer to below table (2.1) for setting of each destination.

MODEL	MAGNETIC FIELD (V.H) nT	BACKGROUND	LANGUAGE	S-SYS	FACTORY SET
HONG KONG	20,000	17,000K	CHINESE	AUTO	SET 2
SINGAPORE	-10,000	12,300K	ENGLISH	AUTO	SET 3
MIDDLE EAST	30,000	20,000	ARABIC	AUTO	SET 4
AUSTRALIA	-50,000	20,000	ENGLISH	AUTO	SET 8
RUSSIA	45,000	20,000	RUSSIAN	AUTO	SET 5

Table 2.1

(2) Refer to below table (2.2) for NORMAL setting of each AV mode.

MODE	DYNAMIC	STANDARD	SOFT
CONTRAST	60	60	50
COLOUR	+6	+1	-5
BRIGHTNESS	0	0	0
TINT	0	0	0
SHARPNESS	+6	1	- 4
PEICTURE NR	OFF	OFF	OFF
WHITE TEMP	0 (center)	0 (center)	0 (center)

Table 2.2

- (3) Refer to below note for *1 ~ *4.
(*1) : Only available for model with POWER SAVE function.
(*2) : Only available for model with COMIFY VIEW function.
(*3) : Only available for model with SAFETY MODE function.
(*4) : Only available for model with GAME function.

OPTION MODE MENU

ITEM	SERVICE MODE	EEPROM ITEM	OSD	DATA	INITIAL DATA	SETTING DATA
0001	Option Mode	Picture Tube Used Type	TUBE-TYPE	0/1	1	1
0002		PIF Frequency Setting	PIF	0.7	2	2
0003		Sound M	SND-M	0/1	0	1
0004		Sound DK	SND-DK	0/1	1	1
0005		Sound I	SND-I	0/1	1	1
0006		Sound BG	SND-BG	0/1	1	1
0007		Colour System SECAM	SECAM	0/1	1	1
0008		Colour System NTSC358	NTSC358	0/1	0	1
0009		Colour System NTSC443	NTSC443	0/1	1	1
0010		Game IC	GAME-IC	0/1	0	0
0011		Picture In Picture	PIP	0/1	0	0
0012		Headphone	HEADPHONE	0/1	1	1
0013		Equalizer	EQUALIZER	0/1	1	1
0014		Sub Woofer	WOOFER	0/1	1	0
0015		BBE	BBE	0/1	1	0
0016		SRS	SRS	0/1	1	0
0017		DOLBY	DOLBY	0/1	1	0
0018		Audio Configuration	AUDIO-CFG	0.4	2	1
0019		Mono Bilingual	BILINGUAL	0/1	0	0
0020		Hotel Mode	HOTEL	0/1	0	0
0021		Hotel Volume	HTL-VOL	0.60	30	30
0022		Hotel Program Number	HTL-PRG	0.99	1	1
0023		HTL-USE-LAST	HTL-USE-LAST	0/1	1	1
0024		OPC	OPC	0/1	0	1
0025		Rotation Functionality	ROTATION	0/1	0	0
0026		Childlock	CHILD	0/1	0	1
0027		Wide Screen Signalling	WSS	0/1	0	0
0028		Golden SCART	GLD-SCART	0/1	0	0
0029		Thailand OSD Language	THAI	0/1	0	0
0030		Arabic OSD Language	ARABIC	0/1	1	0
0031		Iranian OSD Language	IRANIAN	0/1	0	0
0032		Malay OSD Language	MALAY	0/1	1	0
0033		Chinese OSD Language	CHINESE	0/1	1	0
0034		French OSD Language	FRENCH	0/1	1	0
0035		Russian OSD Language	RUSSIAN	0.2	1	1
0036		Power On Last Status	PW-LAST	0.2	1	1
0037		Background	BACK-GND	0/1	0	0
0038		Tuner 2	TUNER2	0/1	1	0
0039		FM Radio	FM-RADIO	0/1	1	0
0040		Curtain Effect	CURTAIN	0/1	1	1
0041		Curtain Colour	CURT-COLOUR	0.7	7	7
0042		AV1-IN	AV1-IN	0/1	1	1
0043		AV1S-IN	AV1S-IN	0/1	1	1
0044		AV2-IN	AV2-IN	0/1	1	1
0045		Component Input	DVD1-IN	0/1	1	1
0046		AV3-IN	AV3-IN	0/1	1	1
0047		AV3S-IN	AV3S-IN	0/1	1	1
0048		INCL-AV	INCL-AV	0/1	1	1
0049		Reminder Timer	TIM-REMINDER	0/1	1	1
0050		View Timer	TIM-VIEW	0/1	1	1
0051		Switch Timer	TIM-SWITCH	0/1	1	1
0052		Time Format	TIME-FORMAT	0/1	1	1
0053		Off Timer	TIM-OFF	0/1	1	1
0054		Commercial Skip Timer	TIM-SKIP	0/1	1	0
0055		Teletext Pan-european	TXT-EURO	0/1	1	1
0056		Teletext Western	TXT-WEST	0/1	1	1
0057		Teletext On	TXT-ON	0/1	1	1
0058		Teletext Split	TXT-SPLIT	0/1	1	1
0059		Virgin Mode	VIRGIN MODE	0/1	0	0
0060		ERR-1-8-SUP	ERR-1-8-SUP	0/1	1	1
0061		ERR-XRAY	ERR-XRAY	0/1	1	1
0062		ERR-SUPVOL	ERR-SUPVOL	0/1	1	1
0063		ERR-VERTG	ERR-VERTG	0/1	1	1
0064		LOGO	ERR-VERTG	0/1	0	0

Adjustment Mode Items

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
A001	RF-AGC	0~63	UOC-TV	RF-AGC	32	19
A002	RF AGC PIP	0~63	PIP-IF	RF AGC PIP	0	0
A003	V SLOPE	0~63	UOC-TV	V SLOPE	40	35
A004	VER-AMP-N50	0~63	UOC-TV	VER-AMP-N50	32	21
A005	VER-SHI-N50	0~63	UOC-TV	VER-SHI-N50	25	25
A006	HOR-SHI-N50	0~63	UOC-TV	HOR-SHI-N50	45	44
A007	EW-W-N50	0~63	UOC-TV	EW-W-N50	40	40
A008	V-LIN	0~63	UOC-TV	V-LIN	32	32
A009	S-COR	0~63	UOC-TV	S-COR	30	32
A010	V SCROLL	0~63	UOC-TV	V SCROLL	32	32
A011	VX-NORMAL	0~63	UOC-TV	VX-NORMAL	32	32
A012	H-PAR	0~63	UOC-TV	H-PAR	35	24
A013	H-BOW	0~63	UOC-TV	H-BOW	25	28
A014	EW-PAR	0~63	UOC-TV	EW-PAR	35	42
A015	UPCOR-PAR	0~63	UOC-TV	UPCOR-PAR	45	47
A016	LOCOR-PAR	0~63	UOC-TV	LOCOR-PAR	42	44
A017	EW-TRAP	0~63	UOC-TV	EW-TRAP	32	32
A018	VER-AMP-N60	0~63	UOC-TV	VER-AMP-N60	32	22
A019	VER-SHI-N60	0~63	UOC-TV	VER-SHI-N60	25	24
A020	HOR-SHI-N60	0~63	UOC-TV	HOR-SHI-N60	45	49
A021	EW-W-N60	0~63	UOC-TV	EW-W-N60	40	41
A022	VER-AMP-P50	0~63	UOC-TV	VER-AMP-P50	32	21
A023	VER-SHI-P50	0~63	UOC-TV	VER-SHI-P50	32	25
A024	HOR-SHI-P50	0~63	UOC-TV	HOR-SHI-P50	32	44
A025	EW-W-P50	0~63	UOC-TV	EW-W-P50	32	40
A026	VX-43-COMPRESS	0~63	UOC-TV	VX-43-COMPRESS	32	5
A027	VER-AMP-F50	0~63	UOC-TV	VER-AMP-F50	32	32
A028	VER-SHI-F50	0~63	UOC-TV	VER-SHI-F50	32	32
A029	HOR-SHI-F50	0~63	UOC-TV	HOR-SHI-F50	32	32
A030	EW-W-F50	0~63	UOC-TV	EW-W-F50	32	32
A031	VER-AMP-S50	0~63	UOC-TV	VER-AMP-S50	32	32
A032	VER-SHI-S50	0~63	UOC-TV	VER-SHI-S50	32	32
A033	HOR-SHI-S50	0~63	UOC-TV	HOR-SHI-S50	32	32
A034	EW-W-S50	0~63	UOC-TV	EW-W-S50	32	32
A035	SUB-SLOPE-S	0~63	UOC-TV	SUB-SLOPE-S	32	32
A036	SUB-VX-S	0~63	UOC-TV	SUB-VX-S	32	32

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
A037	VER-AMP-C50	0~63	UOC-TV	VER-AMP-C50	32	32
A038	VER-SHI-C50	0~63	UOC-TV	VER-SHI-C50	32	32
A039	HOR-SHI-C50	0~63	UOC-TV	HOR-SHI-C50	34	34
A040	EW-W-C50	0~63	UOC-TV	EW-W-C50	32	32
A041	SUB-SLOPE-C	0~63	UOC-TV	SUB-SLOPE-C	32	32
A042	SUB-VX-C	0~63	UOC-TV	SUB-VX-C	32	32
A043	VER-AMP-P60	0~63	UOC-TV	VER-AMP-P60	32	22
A044	VER-SHI-P60	0~63	UOC-TV	VER-SHI-P60	32	24
A045	HOR-SHI-P60	0~63	UOC-TV	HOR-SHI-P60	32	49
A046	EW-W-P60	0~63	UOC-TV	EW-W-P60	32	41
A047	VER-AMP-F60	0~63	UOC-TV	VER-AMP-F60	32	32
A048	VER-SHI-F60	0~63	UOC-TV	VER-SHI-F60	32	32
A049	HOR-SHI-F60	0~63	UOC-TV	HOR-SHI-F60	32	32
A050	EW-W-F60	0~63	UOC-TV	EW-W-F60	32	32
A051	VER-AMP-S60	0~63	UOC-TV	VER-AMP-S60	32	32
A052	VER-SHI-S60	0~63	UOC-TV	VER-SHI-S60	32	32
A053	HOR-SHI-S60	0~63	UOC-TV	HOR-SHI-S60	32	32
A054	EW-W-S60	0~63	UOC-TV	EW-W-S60	32	32
A055	VER-AMP-C60	0~63	UOC-TV	VER-AMP-C60	32	32
A056	VER-SHI-C60	0~63	UOC-TV	VER-SHI-C60	32	32
A057	HOR-SHI-C60	0~63	UOC-TV	HOR-SHI-C60	32	32
A058	EW-W-C60	0~63	UOC-TV	EW-W-C60	32	32
A059	OF-ROTATE	0~127	UOC-TV	OF-ROTATE	63	0
A060	DRI-RS	0~63	UOC-TV	DRI-RS	32	32
A061	DRI-GS	0~63	UOC-TV	DRI-GS	32	32
A062	DRI-BS	0~63	UOC-TV	DRI-BS	32	32
A063	CUT-RS	0~63	UOC-TV	CUT-RS	32	32
A064	CUT-GS	0~63	UOC-TV	CUT-GS	32	32
A065	DRI-RC	0~63	UOC-TV	DRI-RC	32	32
A066	DRI-GC	0~63	UOC-TV	DRI-GC	32	32
A067	DRI-BC	0~63	UOC-TV	DRI-BC	32	32
A068	CUT-RC	0~63	UOC-TV	CUT-RC	32	32
A069	CUT-GC	0~63	UOC-TV	CUT-GC	32	32
A070	DRI-RW	0~63	UOC-TV	DRI-RW	32	32
A071	DRI-GW	0~63	UOC-TV	DRI-GW	32	32
A072	DRI-BW	0~63	UOC-TV	DRI-BW	32	32

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
A109	P-BKGD-G	0...15	PIP	P-BKGD-G	0	0
A110	P-BKGD-B	0...15	PIP	P-BKGD-B	0	0
A111	P-SUB-COL	0...15	PIP	P-SUB-COL	0	8
A112	P-SHP-MAIN-TV	0...7	PIP	P-SHP-MAIN-TV	7	3
A113	VSD	0/1	UOC-TV	VSD	0	0
A114	CUT OFF	0...63	UOC-TV	CUT OFF	6	6
A115	VG2	0/1	UOC-TV	VG2	0	1
A116	DCXO	0...127	UOC-TV	DCXO	79	57
A117	DCXO-AUTO	0/1	UOC-TV	DCXO-AUTO	0	0

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
A073	CUT-RW	0...63	UOC-TV	CUT-RW	32	32
A074	CUT-GW	0...63	UOC-TV	CUT-GW	32	32
A075	DRI-RS-DVD	0...63	UOC-TV	DRI-RS-DVD	32	32
A076	DRI-GS-DVD	0...63	UOC-TV	DRI-GS-DVD	32	32
A077	DRI-BS-DVD	0...63	UOC-TV	DRI-BS-DVD	32	32
A078	CUT-RS-DVD	0...63	UOC-TV	CUT-RS-DVD	32	32
A079	CUT-GS-DVD	0...63	UOC-TV	CUT-GS-DVD	32	32
A080	DRI-RC-DVD	0...63	UOC-TV	DRI-RC-DVD	32	32
A081	DRI-GC-DVD	0...63	UOC-TV	DRI-GC-DVD	32	32
A082	DRI-BC-DVD	0...63	UOC-TV	DRI-BC-DVD	32	32
A083	CUT-RC-DVD	0...63	UOC-TV	CUT-RC-DVD	32	32
A084	CUT-GC-DVD	0...63	UOC-TV	CUT-GC-DVD	32	32
A085	DRI-RW-DVD	0...63	UOC-TV	DRI-RW-DVD	32	32
A086	DRI-GW-DVD	0...63	UOC-TV	DRI-GW-DVD	32	32
A087	DRI-BW-DVD	0...63	UOC-TV	DRI-BW-DVD	32	32
A088	CUT-RW-DVD	0...63	UOC-TV	CUT-RW-DVD	32	32
A089	CUT-GW-DVD	0...63	UOC-TV	CUT-GW-DVD	32	32
A090	SUB-BRI	0...63	UOC-TV	SUB-BRI	32	39
A091	SUB-BRI-DVD	0...63	UOC-TV	SUB-BRI-DVD	32	38
A092	SUB-COL	0...63	UOC-TV	SUB-COL	32	34
A093	SUB-CON	0...63	UOC-TV	SUB-CON	32	48
A094	SUB-CON-DVD	0...63	UOC-TV	SUB-CON-DVD	32	49
A095	SUB-TINT-DVD	0...63	UOC-TV	SUB-TINT-DVD	32	34
A096	SUB-TINT	0...63	UOC-TV	SUB-TINT	32	34
A097	SUB-SHARP	0...63	UOC-TV	SUB-SHARP	32	12
A098	P-POSOFH-50	0...31	PIP	P-POSOFH-50	0	15
A099	P-POSOFV-50	0...7	PIP	P-POSOFV-50	0	4
A100	P-POSOFH-60	0...31	PIP	P-POSOFH-60	0	16
A101	P-POSOFV-60	0...7	PIP	P-POSOFV-60	0	4
A102	P-SUB-TINT	0...63	PIP	P-SUB-TINT	0	38
A103	P-CON-CTM	0...15	PIP	P-CON-CTM	0	4
A104	P-CON-DYN	0...15	PIP	P-CON-DYN	0	9
A105	P-CON-STD	0...15	PIP	P-CON-STD	0	4
A106	P-CON-SOFT	0...15	PIP	P-CON-SOFT	0	4
A107	P-SUB-BRI	0...15	PIP	P-SUB-BRI	0	2
A108	P-BKGD-R	0...15	PIP	P-BKGD-R	0	0

Setting Mode 1-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S001	V-LINCTRL	0~2	UOC-TV	V-LINCTRL	0	0
S002	IFLL	0~63	UOC-TV	IFLL	32	32
S003	SOC1-0	0~3	UOC-TV	SOC1-0	0	1
S004	WHITE LIMIT	0~15	UOC-TV	WHITE LIMIT	0	12
S005	GD	0/1	UOC-TV	GD	1	1
S006	AGC0-1	0~3	UOC-TV	AGC0-1	1	1
S007	FFI	0/1	UOC-TV	FFI	0	0
S008	CFA0	0/1	UOC-TV	CFA0	0	0
S009	YD PAL	0~15	UOC-TV	YD PAL	7	11
S010	YD SECAM	0~15	UOC-TV	YD SECAM	7	11
S011	YD N358	0~15	UOC-TV	YD N358	7	9
S012	YD N443	0~15	UOC-TV	YD N443	7	7
S013	YD AV-PAL	0~15	UOC-TV	YD AV-PAL	7	7
S014	YD AV-SECAM	0~15	UOC-TV	YD AV-SECAM	7	7
S015	YD AV-N358	0~15	UOC-TV	YD AV-N358	7	7
S016	YD AV-N443	0~15	UOC-TV	YD AV-N443	7	7
S017	YD SAV-PAL	0~15	UOC-TV	YD SAV-PAL	7	7
S018	YD SAV-SECAM	0~15	UOC-TV	YD SAV-SECAM	7	7
S019	YD SAV-N358	0~15	UOC-TV	YD SAV-N358	7	7
S020	YD SAV-N443	0~15	UOC-TV	YD SAV-N443	7	7
S021	YD COMP-PAL	0~15	UOC-TV	YD COMP-PAL	7	7
S022	YD COMP-SECAM	0~15	UOC-TV	YD COMP-SECAM	7	7
S023	YD COMP-N358	0~15	UOC-TV	YD COMP-N358	7	7
S024	YD COMP-N443	0~15	UOC-TV	YD COMP-N443	7	7
S025	SBO1-0	0~3	UOC-TV	SBO1-0	1	1
S026	CHSE1-0	0~3	UOC-TV	CHSE1-0	2	1
S027	FCO	0/1	UOC-TV	FCO	0	0
S028	OSO	0/1	UOC-TV	OSO	1	1
S029	DFL	0/1	UOC-TV	DFL	1	1
S030	EVG	0/1	UOC-TV	EVG	1	1
S031	HCO	0/1	UOC-TV	HCO	1	1
S032	SVMA	0/1	UOC-TV	SVMA	1	1
S033	FBC	0/1	UOC-TV	FBC	0	0
S034	SLG1-0	0~3	UOC-TV	SLG1-0	1	1
S035	CL3-0	0~15	UOC-TV	CL3-0	7	7
S036	GAM	0/1	UOC-TV	GAM	1	1
S037	TFR	0/1	UOC-TV	TFR	0	1
S038	CLD	0/1	UOC-TV	CLD	0	0
S039	BKS	0/1	UOC-TV	BKS	1	1
S040	BSD	0/1	UOC-TV	BSD	0	1
S041	AAS	0~3	UOC-TV	AAS	1	1
S042	DSK-EXT	0/1	UOC-TV	DSK-EXT (DSK)	1	1
S043	BLS	0/1	UOC-TV	BLS	0	1
S044	LLB	0/1	UOC-TV	LLB	0	0
S045	DSA	0/1	UOC-TV	DSA	0	1
S046	RPA1-0	0~2	UOC-TV	RPA1-0	0	2
S047	RPO1-0	0~3	UOC-TV	RPO1-0	3	3

Setting Mode 1-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S048	COR1-0	0~3	UOC-TV	COR1-0	2	1
S049	CRA0	0/1	UOC-TV	CRA0	0	0
S050	SPR2-0	0~6	UOC-TV	SPR2-0	0	5
S051	SYM2-0	0~7	UOC-TV	SYM2-0	5	3
S052	SMD1-0	0~3	UOC-TV	SMD1-0	3	3
S053	PEAKFREOPAL443	0~3	UOC-TV	PEAKFREOPAL443	0	1
S054	PEAKFREOPALM	0~3	UOC-TV	PEAKFREOPALM	0	0
S055	PEAKFREOPALN	0~3	UOC-TV	PEAKFREOPALN	0	0
S056	PEAKFREONTSC443	0~3	UOC-TV	PEAKFREONTSC443	0	1
S057	PEAKFREONTSCM	0~3	UOC-TV	PEAKFREONTSCM	0	0
S058	PEAKFREQSECAM	0~3	UOC-TV	PEAKFREQSECAM	0	0
S059	PEAKFREQAV	0~3	UOC-TV	PEAKFREQAV	0	3
S060	OF-COL-TV	0~31~62	UOC-TV	OF-COL-TV	31	45
S061	OF-COL-AV	0~31~62	UOC-TV	OF-COL-AV	31	46
S062	OF-COL-DVD	0~31~62	UOC-TV	OF-COL-DVD	31	45
S063	OF-COL-P	0~31~62	UOC-TV	OF-COL-P	31	40
S064	OF-COL-S	0~31~62	UOC-TV	OF-COL-S	31	31
S065	OF-COL-N4	0~31~62	UOC-TV	OF-COL-N4	31	31
S066	OF-COL-N3	0~31~62	UOC-TV	OF-COL-N3	31	46
S067	OF-SHP-TV	0~31~62	UOC-TV	OF-SHP-TV	36	23
S068	OF-SHP-AV	0~31~62	UOC-TV	OF-SHP-AV	36	49
S069	OF-SHP-DVD	0~31~62	UOC-TV	OF-SHP-DVD	31	35
S070	OF-SHP-P	0~31~62	UOC-TV	OF-SHP-P	31	35
S071	OF-SHP-S	0~31~62	UOC-TV	OF-SHP-S	31	31
S072	OF-SHP-N4	0~31~62	UOC-TV	OF-SHP-N4	31	31
S073	OF-SHP-N3	0~31~62	UOC-TV	OF-SHP-N3	31	40
S074	OF-TINT-TV	0~31~62	UOC-TV	OF-TINT-TV	31	31
S075	OF-TINT-AV	0~31~62	UOC-TV	OF-TINT-AV	31	34
S076	OF-TINT-DVD	0~31~62	UOC-TV	OF-TINT-DVD	31	32
S077	OF-TINT-ADJ	0~31~62	UOC-TV	OF-TINT-ADJ	31	31
S078	BB-TINT	0~63	UOC-TV	BB-TINT	32	32
S079	VMA-SOFT	0~3	UOC-TV	VMA-SOFT	0	0
S080	WS-SOFT	0~3	UOC-TV	WS-SOFT	0	1
S081	VMA-STD	0~3	UOC-TV	VMA-STD	1	1
S082	WS-STD	0~3	UOC-TV	WS-STD	1	1
S083	VMA-DYN	0~3	UOC-TV	VMA-DYN	3	2
S084	WS-DYN	0~3	UOC-TV	WS-DYN	3	1
S085	VMA-CTM	0~3	UOC-TV	VMA-CTM	2	2
S086	WS-CTM	0~3	UOC-TV	WS-CTM	2	1
S087	U-COL-SOFT	0~31~62	UOC-TV	U-COL-SOFT	26	25
S088	U-COL-STD	0~31~62	UOC-TV	U-COL-STD	31	31
S089	U-COL-DYN	0~31~62	UOC-TV	U-COL-DYN	36	36
S090	U-CON-SOFT	0~63	UOC-TV	U-CON-SOFT	50	50
S091	U-CON-STD	0~63	UOC-TV	U-CON-STD	60	60
S092	U-CON-DYN	0~63	UOC-TV	U-CON-DYN	60	60
S093	U-SHP-SOFT	0~31~62	UOC-TV	U-SHP-SOFT	26	26
S094	U-SHP-STD	0~31~62	UOC-TV	U-SHP-STD	31	31

Setting Mode 1-3

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S095	U-SHP-DYN	0--31--62	UOC-TV	U-SHP-DYN	36	36
S096	VOL5-0	0--63	UOC-TV	VOL5-0	32	35
S097	HOP1-0	0--3	UOC-TV	HOP1-0	2	0
S098	TAS5-0-NORM	0--63	UOC-TV	TAS5-0-NORM	10	10
S099	TAS5-0-A	0--63	UOC-TV	TAS5-0-A	23	23
S100	BR3-0	0--31	UOC-TV	BR3-0	16	25
S101	HSD6-0	0--127	UOC-TV	HSD6-0	63	3
S102	VSD6-0	0--127	UOC-TV	VSD6-0	63	63
S103	HOPB1-0	0--3	UOC-TV	HOPB1-0	1	1
S104	TASB5-0	0--63	UOC-TV	TASB5-0	2	2
S105	PGB5-0	0--127	UOC-TV	PGB5-0	73	73
S106	VOLB5-0	0--63	UOC-TV	VOLB5-0	32	32
S107	SMTHB	0/1	UOC-TV	SMTHB	0	0
S108	SMTH	0/1	UOC-TV	SMTH	0	0
S109	RANGE1-0	0--3	UOC-TV	RANGE1-0	1	0
S110	RANGEB1-0	0--3	UOC-TV	RANGEB1-0	1	1
S111	PWR-SAVING	0/1	UOC-TV	PWR-SAVING	1	1
S112	PWR-TIME	0--3	UOC-TV	PWR-TIME	0	3
S113	I-TIME	0--3	UOC-TV	I-TIME	0	0
S114	GAME-HON	0--255	GAME-IC	GAME-HON	6	10
S115	GAME-VERT-1	0--255	GAME-IC	GAME-VERT-1	23	27
S116	GAME-VERT-2	0--255	GAME-IC	GAME-VERT-2	0	0
S117	GAME-ORIV	0--255	GAME-IC	GAME-ORIV	192	192
S118	GAME-MODE	0--255	GAME-IC	GAME-MODE	1	1
S119	PHI FORCE	0/1	UOC-TV	PHI FORCE	1	1
S120	PHI	0--3	UOC-TV	PHI	3	3
S121	BPD	0/1	UOC-TV	BPD	0	0
S122	E2D	0/1	UOC-TV	E2D	0	0
S123	ACL	0/1	UOC-TV	ACL	1	1
S124	MUS	0/1	UOC-TV	MUS	0	1
S125	CB	0/1	UOC-TV	CB	1	0
S126	SVM-OSD-PW	0--3	UOC-TV	SVM-OSD-PW	3	3
S127	SMD-OSD-TM	0--7	UOC-TV	SMD-OSD-TM	2	2
S128	XDT	0/1	UOC-TV	XDT	0	1
S129	HLB	0/1	UOC-TV	HLB	1	1
S130	WBF	0--15	UOC-TV	WBF	10	6
S131	WBR	0--15	UOC-TV	WBR	8	13
S132	FSL	0/1	UOC-TV	FSL	0	0
S133	HP2	0/1	UOC-TV	HP2	0	0
S134	CUR_VPOS	0..63	UOC-TV	CUR_VPOS	20	20
S135	OSVE	0/1	UOC-TV	OSVE	0	1
S136	GAIN-RED	0--127	UOC-TV	GAIN-RED	20	20
S137	GAIN-GREEN	0--127	UOC-TV	GAIN-GREEN	20	20
S138	GAIN-BLUE	0--127	UOC-TV	GAIN-BLUE	20	20

Setting Mode 2-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S201	P-POSHOR	0--255	PIP	P-POSHOR	2C	28
S202	P-POSVR-50	0--255	PIP	P-POSVR-50	1E	22
S203	P-POSVR-60	0--255	PIP	P-POSVR-60	1A	23
S204	P-HFP	0--15	PIP	P-HFP	0	7
S205	P-VFP	0--15	PIP	P-VFP	0	8
S206	P-VSPDEL-50	0--31	PIP	P-VSPDEL-50	0D	13
S207	P-VSPDEL-60	0--31	PIP	P-VSPDEL-60	0D	13
S208	P-VERBLK	0/1	PIP	P-VERBLK	0	0
S209	P-SELDEL	0--15	PIP	P-SELDEL	8	8
S210	P-CLPDEL	0--31	PIP	P-CLPDEL	6	6
S211	P-AGCMD	0--3	PIP	P-AGCMD	3	3
S212	P-AGCVL	0--15	PIP	P-AGCVL	8	8
S213	P-CLMPID	0--3	PIP	P-CLMPID	3	3
S214	P-BLKVCHYS	0/1	PIP	P-BLKVCHYS	0	0
S215	P-BLKCVL	0/1	PIP	P-BLKCVL	0	0
S216	P-LMOFST	0--3	PIP	P-LMOFST	0	0
S217	P-PLITC-TV	0--3	PIP	P-PLITC-TV	2	2
S218	P-PLITC-AV	0--3	PIP	P-PLITC-AV	1	1
S219	P-BLKVCFIL	0/1	PIP	P-BLKVCFIL	0	0
S220	P-YCD-TV-P	0--15	PIP	P-YCD-TV-P	8	8
S221	P-YCD-TV-N3	0--15	PIP	P-YCD-TV-N3	8	8
S222	P-YCD-TV-N4	0--15	PIP	P-YCD-TV-N4	8	8
S223	P-YCD-TV-S	0--15	PIP	P-YCD-TV-S	8	8
S224	P-YCD-AV-P	0--15	PIP	P-YCD-AV-P	8	8
S225	P-YCD-AV-N3	0--15	PIP	P-YCD-AV-N3	8	8
S226	P-YCD-AV-N4	0--15	PIP	P-YCD-AV-N4	8	8
S227	P-YCD-AV-S	0--15	PIP	P-YCD-AV-S	8	8
S228	P-LOCKSP	0/1	PIP	P-LOCKSP	0	0
S229	P-CKILL	0--3	PIP	P-CKILL	0	0
S230	P-BGPOS	0/1	PIP	P-BGPOS	1	1
S231	P-DEEMP	0--3	PIP	P-DEEMP	0	0
S232	P-COLON	0/1	PIP	P-COLON	0	0
S233	P-CHRBW	0--3	PIP	P-CHRBW	0	0
S234	P-IFCOMP	0--3	PIP	P-IFCOMP	2	2
S235	P-SATNR	0/1	PIP	P-SATNR	1	1
S236	P-SCADJ-P	0--31	PIP	P-SCADJ-P	7	7
S237	P-SCADJ-N3	0--31	PIP	P-SCADJ-N3	7	7

Setting Mode 2-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S238	P-SCADJ-N4	0...31	PIP	P-SCADJ-N4	7	7
S239	P-SCADJ-S	0...31	PIP	P-SCADJ-S	7	7
S240	P-PKLR	0...255	PIP	P-PKLR	80	190
S241	P-PKLG	0...255	PIP	P-PKLG	80	190
S242	P-PKLB	0...255	PIP	P-PKLB	80	190
S243	P-YCOR	0/1	PIP	P-YCOR	1	1
S244	P-PALIDL2	0/1	PIP	P-PALIDL2	0	0
S245	P-PALIDL1	0...3	PIP	P-PALIDL1	1	1
S246	P-PALIDL0	0/1	PIP	P-PALIDL0	0	0
S247	P-PKBOOST	0/1	PIP	P-PKBOOST	1	1
S248	P-CLPLEN	0...3	PIP	P-CLPLEN	0	0
S249	P-SOMREL	0...3	PIP	P-SOMREL	2	2
S250	P-SCMIDL	0...7	PIP	P-SCMIDL	5	5
S251	P-SECDIV	0/1	PIP	P-SECDIV	1	1
S252	P-BELLIIR	0/1	PIP	P-BELLIIR	1	1
S253	P-PALINC1	0/1	PIP	P-PALINC1	0	0
S254	P-PALINC2	0/1	PIP	P-PALINC2	0	0
S255	P-LOCKSP	0...3	PIP	P-LOCKSP	3	3
S256	P-SECACCL	0...7	PIP	P-SECACCL	5	5
S257	P-SECACC	0/1	PIP	P-SECACC	1	1
S258	P-ADLCK	0/1	PIP	P-ADLCK	1	1
S259	P-ADLCKSEL	0/1	PIP	P-ADLCKSEL	1	1
S260	P-ADLCKCC	0/1	PIP	P-ADLCKCC	1	1
S261	P-CLRANGE	0...3	PIP	P-CLRANGE	1	1
S262	P-NADJ	0...7	PIP	P-NADJ	3	3
S263	P-NSRED	0...7	PIP	P-NSRED	6	6
S264	P-SLLTHD	0...3	PIP	P-SLLTHD	0	0
S265	P-ISHT	0...3	PIP	P-ISHT	3	3
S266	P-ENLIM	0/1	PIP	P-ENLIM	1	1
S267	P-DTECT5060	0/1	PIP	P-DTECT5060	1	1
S268	P-VTHRL50	0...127	PIP	P-VTHRL50	41	41
S269	P-BCOROFF	0/1	PIP	P-BCOROFF	0	0
S270	P-VTHRL60	0...127	PIP	P-VTHRL60	60	60
S271	P-VTHRH50	0...15	PIP	P-VTHRH50	8	8
S272	P-VTHRH60	0...15	PIP	P-VTHRH60	13	13
S273	P-CLMSTGY	0/1	PIP	P-CLMSTGY	0	0
S274	P-SLLTHDV	0...7	PIP	P-SLLTHDV	0	0
S275	P-VFLYWHLM	0...3	PIP	P-VFLYWHLM	1	1
S276	P-VFLYWHL	0/1	PIP	P-VFLYWHL	1	1

Setting Mode 2-3

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S277	P-CLMPCHRY	0...3	PIP	P-CLMPCHRY	0	0
S278	P-VDETIFS	0/1	PIP	P-VDETIFS	1	1
S279	P-VDETITC	0/1	PIP	P-VDETITC	0	0
S280	P-VLP	0...3	PIP	P-VLP	1	1
S281	P-LATENCY	0...3	PIP	P-LATENCY	3	3
S282	P-FILTBRST	0/1	PIP	P-FILTBRST	1	1
S283	P-CLMPIST	0...31	PIP	P-CLMPIST	26	26
S284	P-UVSEQ	0/1	PIP	P-UVSEQ	0	0
S285	P-ABRTHD	0...15	PIP	P-ABRTHD	0	0
S286	P-ABRSPD	0...7	PIP	P-ABRSPD	0	0
S287	P-CZMEN	0/1	PIP	P-CZMEN	0	0
S288	P-CZMSP	0...3	PIP	P-CZMSP	0	0
S289	P-U-COL-DYN	0.60	PIP	P-U-COL-DYN	0	30
S290	P-U-COL-STD	0.60	PIP	P-U-COL-STD	0	30
S291	P-U-COL-SOFT	0.60	PIP	P-U-COL-SOFT	0	30
S292	P-U-SHP-DYN	0.60	PIP	P-U-SHP-DYN	0	30
S293	P-U-SHP-STD	0.60	PIP	P-U-SHP-STD	0	30
S294	P-U-SHP-SOFT	0.60	PIP	P-U-SHP-SOFT	0	30
S295	P-SHP-MAIN-AV	0...3	PIP	P-SHP-MAIN-AV	2	3
S296	P-MAT	0...3	PIP	P-MAT	0	0

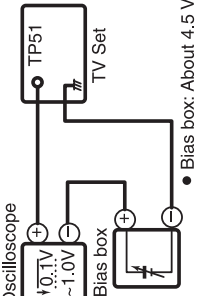
Setting Mode 3-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA #2
S301	FMI	0/1	DSP	FMI	0	0
S302	BPB	0/1	DSP	BPB	0	0
S303	BPB2	0/1	DSP	BPB2	1	1
S304	FILTBW-M	0~3	DSP	FILTBW-M	0	0
S305	ID-BYPF	0/1	DSP	ID-BYPF	0	0
S306	ID-PGAIN	0/1	DSP	ID-PGAIN	0	0
S307	MPX-P-BW	0/1	DSP	MPX-P-BW	0	0
S308	FMSUB-BW	0/1	DSP	FMSUB-BW	0	0
S309	EIAJ-DEL	0~3	DSP	EIAJ-DEL	0	0
S310	NDETBS	0/1	DSP	NDETBS	0	0
S311	NICDEEM	0/1	DSP	NICDEEM	0	0
S312	NLOERLIM	0~255	DSP	NLOERLIM	100	100
S313	NUPERLIM	0~255	DSP	NUPERLIM	200	200
S314	FILTBW	0~3	DSP	FILTBW	0	0
S315	OVMTHR	0~3	DSP	OVMTHR	1	1
S316	DECLEV	0~31	DSP	DECLEV	16	7
S317	MONOLEV	0~31	DSP	MONOLEV	16	5
S318	NICLEV	0~31	DSP	NICLEV	16	18
S319	SAPLEV	0~31	DSP	SAPLEV	16	6
S320	ADCLEV	0~31	DSP	ADCLEV	16	13
S321	IISLEV	0~31	DSP	IISLEV	16	0
S322	BBEC-ON	0~15	DSP	BBEC-ON	0	15
S323	BBEP-ON	0~15	DSP	BBEC-OFF	0	8
S324	BBEC-OFF	0~15	DSP	BBEP-ON	0	5
S325	BBEP-OFF	0~15	DSP	BBEP-OFF	0	7
S326	MAINLOUD	0/1	DSP	MAINLOUD	0	0
S327	MAINLONA	0~7	DSP	MAINLONA	3	0
S328	MAINLOCH	0~3	DSP	MAINLOCH	0	0
S329	INSOEF	0~7	DSP	INSOEF	3	4
S330	AVLMOD	0~7	DSP	AVLMOD	0	5
S331	AVLWGT	0/1	DSP	AVLWGT	1	1
S332	AVLLE	0~15	DSP	AVLLE	7	10
S333	SRS3DCEN	0~15	DSP	SRS3DCEN	1	7
S334	SRS3DSP	0~15	DSP	SRS3DSP	0	0
S335	SRS3DBYP	0/1	DSP	SRS3DBYP	0	0
S336	CLIPMANAGE	0~4	DSP	CLIPMANAGE	0	4
S337	VDSMIXLEV	0~5	DSP	VDSMIXLEV	3	5
S338	DBEADR	0~63	DSP	DBEADR	0	0
S339	DBECOEF-LBS	0~255	DSP	DBECOEF-LBS	0	0
S340	DBECOEF-MBS	0~15	DSP	DBECOEF-MBS	0	0

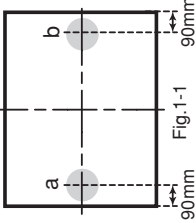
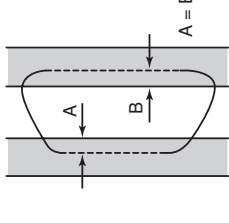
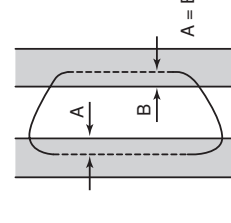
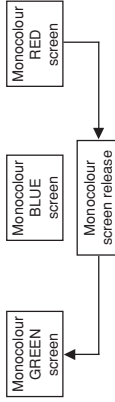
Setting Mode 3-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA #2
S341	DUBADR	0~255	DSP	DUBADR	0	0
S342	DUBCOEF-LSB	0~255	DSP	DUBCOEF-LBS	0	0
S343	DUBCOEF-MSB	0~15	DSP	DUBCOEF-MBS	0	0
S344	BAMAMO	0~3	DSP	BAMAMO	0	1
S345	BAMASUB	0/1	DSP	BAMASUB	0	0
S346	BAMAFIC	0~15	DSP	BAMAFIC	0	12
S347	BASS-MV	0~31	DSP	BASS-MV	16	31
S348	TREB-MV	0~31	DSP	TREB-MV	16	25
S349	EQ100-MV	0~31	DSP	EQ100-MV	12	20
S350	EQ300-MV	0~31	DSP	EQ300-MV	12	16
S351	EQ1K-MV	0~31	DSP	EQ1K-MV	12	19
S352	EQ3K-MV	0~31	DSP	EQ3K-MV	12	16
S353	EQ8K-MV	0~31	DSP	EQ8K-MV	12	20
S354	BASS-MS	0~31	DSP	BASS-MS	16	31
S355	TREB-MS	0~31	DSP	TREB-MS	16	25
S356	EQ100-MS	0~31	DSP	EQ100-MS	12	20
S357	EQ300-MS	0~31	DSP	EQ300-MS	12	17
S358	EQ1K-MS	0~31	DSP	EQ1K-MS	12	13
S359	EQ3K-MS	0~31	DSP	EQ3K-MS	12	17
S360	EQ8K-MS	0~31	DSP	EQ8K-MS	12	20
S361	BASS-NW	0~31	DSP	BASS-NW	16	31
S362	TREB-NW	0~31	DSP	TREB-NW	16	25
S363	EQ100-NW	0~31	DSP	EQ100-NW	12	13
S364	EQ300-NW	0~31	DSP	EQ300-NW	12	16
S365	EQ1K-NW	0~31	DSP	EQ1K-NW	12	19
S366	EQ3K-NW	0~31	DSP	EQ3K-NW	12	16
S367	EQ8K-NW	0~31	DSP	EQ8K-NW	12	13
S368	BASS-CT	0~31	DSP	BASS-CT	16	31
S369	TREB-CT	0~31	DSP	TREB-CT	16	25
S370	IDMOD-SE	0~3	DSP	IDMOD-SE	0	0
S371	BPR-VOL	0~60	DSP	BPR-VOL	20	30
S372	DEMUT-DLAY	0~16	DSP	DEMUT-DLAY	8	8
S373	AV-OUT LV	0~255	DSP	AV-OUT LV	16	18

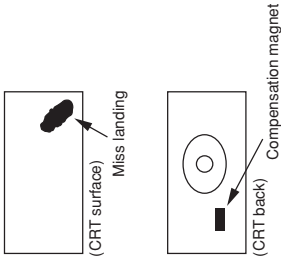
PIF ADJUSTMENT

No.	Adjustment point	Adjustment condition/procedure	Waveform or remarks
1	RF-AGC TAKE OVER POINT AD- JUSTMENT (PC BUS CONTROL)	1. Receive "PAL COLOR BAR" signal. Signal Strength: $54 \pm 1\text{dB}\mu\text{V}$ (75 ohm termination) 2. Connect the oscilloscope to TP53 (Tuner's AGC Terminal) as shown in figure 3-1. Oscilloscope  Fig. 3 3. Select "RF-AGC" item in the Adjustment Mode. Adjust the "RF-AGC" bus data to obtain the Tuner output pin drop $0.1\text{V} \sim 1.0\text{V}$ below maximum voltage. 4. Change the antenna input signal to $63 \sim 67\text{dB}\mu\text{V}$, and make sure there is no noise. 5. Set the RF AGC to 0 - 6 V with no saturation with the waveform. 6. Turn up the input signal to $90 \sim 95\text{dB}\mu\text{V}$ to be sure that there is no cross modulation beat.	

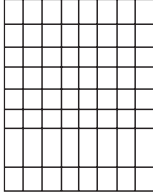
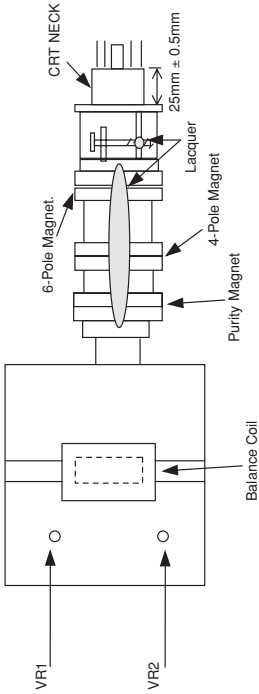
PURITY ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	PURITY ADJ.	1. Select the green monocolour screen with remote controller, and set the beam current of 1.7mA with the contrast control. 2. Degauss the CRT enough with the degaussing coil. Note: Follow the job instruction manual to adjust the magnetic field. 3. The purity magnet must be previously set at the 0 magnetic field, and the convergence must be adjusted to be rough. With P-MAG, adjust it to the center - rank A. 4. Observe the points a,b, as shown in Fig.1-1 through the microscope. Move DY fore and aft to set the landing at the point (Rank A). 5. If the a/b balance is poor, compensate it to the center "Rank AB". 6. Aline it to zero, keeping the raster rotation in the east direction. 6. Tighten the deflection coil fastening screws. • Tightening torque : $108\text{N} \pm 20\text{N}$ ($11\text{Kgf} \pm 2\text{Kgf}$) 8. Checking the CRT corner area, bond the magnetic sheet to set the landing at rank A for compensation. Note: Apply the adjustment after aging with the beam current $1700 \pm 50\mu\text{A}$ or more for 30 minutes or more. Note: Select the service mode, and press the monocolour key of R/C for process, and the monocolour screen (green) will be selected.	Fig.1-1  Fig.1-2  Fig.1-3  (on the right of the CRT) (on the left of the CRT) * Every push of the monocolour key changes the screen as follows.  * Adjustment for uniformity is change to another content. Please refer to the following page. * Continuously press the monocolour key 1 second or more, and the monocolour mode will be selected without the service mode. * Even with TEXT key or "R/G/B" key, it can be directly switched to each monocolour screen.

PURITY ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
2	Uniformity (To adjustment (To perform after the purity and convergence adjustment.)	Before adjustment begin, Horizontal magnetic field = 0G Vertical magnetic field = Each destination's adjustment magnetic field. Make sure to degauss it. (North direction Red uniformity) 1. Horizontal mf = Set to monocolor screen red and adjust to +0.25G 2. Pay attention to the edge of CRT, if the landing is poor adjust by attaching the compensation magnet at the back of CRT. (refer to Fig-1) (South direction Red uniformity) 1. Horizontal mf = Set to monocolor screen red and adjust to -0.25G. 2. Pay attention to the edge of CRT, if the landing is poor adjust by attaching the compensation magnet at the back of CRT. (The same method is applied for adjustment of monocolor screen blue for blue uniformity, and changing both the magnetic field for north and south direction.) * During the pasting of compensation magnet, use the crosshatch pattern. Make sure there is no blur or bendlines occur. If the blur or bend are serious, adjust the location of compensation magnet to make it better.	 Fig. 1

CONVERGENCE ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CONVERGENCE ADJ. (To be done after the purity adjustment.)	1. Receive the "Crosshatch Pattern" signal. 2. Using the remote controller, call NORMAL mode. (Static convergence) 1. Overlap blue and red with the open-/closing angle and rotation of the 4 pole magnet. 2. Overlap green on blue and red with the open-/closing angle and rotation of the 6 pole magnet. (Dynamic convergence) 1. Fix the wedges in a position so that the deflection yoke neck is at the center of top bottom and left right. (Straight line and without any blur horizontal / vertical line). 2. Adjust the Red, Blue, upper and lower of the centre Y axis on the screen by using the Volume (VR2, VR1) at the deflection yoke. (Refer to fig.1 and fig.2) 3. If the Horizontal Red, Blue (XV) on the screen centre X axis shifted, correct the Red, Blue (XV) by adjusting the balance coil on the deflection yoke. (Refer to Fig. 3) 4. After confirm that there is no problems on the entire screen, bond each wedge on CRT and glass tape on it. Fastening the screws of DY and magnet unit (purity, 4 - pole and 6 - pole), then coat the lacquer paint on DY fastening screw and magnet unit fastening screw. Note: In case of poor convergence adjustment on the top and bottom and of the screen, adjust DY by swing rightward and leftward. (Refer to Fig-4)	 X axis Y axis Fig. 1 Adjust by VR1 Fig. 2 Adjust by VR2 Fig. 3 Adjust by Balance Coil Fig. 4 Adjust by Swing DY  VR1 VR2 Balance Coil 6-Pole Magnet. CRT NECK 25mm ± 0.5mm Lacquer 4-Pole Magnet Purity Magnet

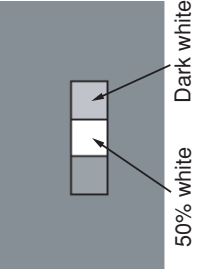
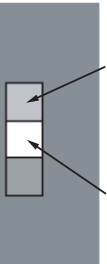
FOCUS ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	FOCUS ADJUSTMENT	1. Receive E-5CH (Monoscop pattern). 2. With the remote controller, make the image normal. 3. Adjust the focus VR to make the character "575" on left bottom of monoscope as fine as possible.	

CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CRT CUTOFF ADJUSTMENT (I/C BUS CONTROL)	Note : - Before CRT cutoff adjustment, make sure following items are in INITIAL DATA. - A063 CUT-RS = 32 - A064 CUT-GS = 32 - A114 CUT OFF = 6 - Switch TV to video mode , blue back off , with no video signal and Press R/C to set picture into normal condition. - Go to service mode at adjustment mode item A115 (VG2). - Adjust screen voltage until retrace line appear, the following OSD will appear at bottom of screen. UNSTABLE OUT ABOVE - Finally , slowly decrease the screen variable resistor until following OSD appear. STABLE IN ABOVE / BELOW * * The last OSD row is the indication of the screen voltage value. If it show "BELOW", please increase the screen voltage and vice versa until "STABLE" AND "IN" OSD appear. Note :No matter the indication of last row's OSD is indicate "ABOVE" or "BELOW", the important thing is OSD change to "STABLE" and "IN".	
2	WHITE BALANCE BACKGROUND I/C BUS ADJUSTMENT (AV-IN SIGNAL)	- Receive the internal RF monoscope pattern. - Make the picture normal with the remote controller. - Connect the beam ammeter between terminal of R623. - Coarsely confirm the beam current to approx. 1.7mA. - Receive the window pattern with AV input. - With the data of DRI-GS and DRI-BS, adjust the color temperature of the 50% white. - Adjust the right dark area of the window to 12300K with CUT-RS and CUT-GS. - Go back to 50% white area to check colour temperature, if out of range, please go back to step (6). Note 1: Apply this adjustment after aging 30 min or more with the beam current $1700 \pm 50 \mu A$. (On the white or green monocolour screen) 2: The colour temperature is based on the shipment destination as shown in Table 2.1 at page 6-1. 3: Adjust DRI-GC/GW, DRI-BC/BW , CUT-RW/C and CUT-GW/C as following DATA, after finishing DRI-BS and DRI-GS DATA adjustment. CUT-FW/C = CUT-RS CUT-GW/C = CUT-GS DRI-RW = 32 (FIXED), DRI-RS = 32 (FIXED) DRI-BC = "DRI-BS" (For 7500°K, 12300°K, 17000°K and 18000°K Condition)	7500K X : 0.300 Y : 0.310 18000K X : 0.255 Y : 0.255 17000K X : 0.261 Y : 0.261 12300K X : 0.272 Y : 0.275 (With Monolta color thermometer CA-100) * 12300°K DRI-GW = "DRI-GS" - 7 DRI-BW = "DRI-BS" - 7 DRI-GC = "DRI-GS" - 7 DRI-RC = 25 * 17000°K & 18000°K DRI-GW = "DRI-GS" - 7 DRI-BW = "DRI-BS" - 7 DRI-GC = "DRI-GS" - 5 DRI-RC = 27 * 7500°K DRI-GW = "DRI-GS" - 5 DRI-BW = "DRI-BS" - 5 DRI-GC = "DRI-GS" - 7 DRI-RC = 25

CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
3	WHITE BALANCE BACKGROUND IFC BUS ADJUSTMENT (DVD SIGNAL)	- The window pattern is received with DVD signal (component signal). - Apply the adjustment in the same manners as 2 (AV-IN SIGNAL) and subsequence above. (DRI-GS-DVD, DRI-BS-DVD, CUT-RS-DVD, CUT-GS-DVD) - Select the SUB-CONTRAST adjustment mode with the remote controller, and adjust 50% white to 165 ± 10cd. Apply the adjustment after the end of 2 (AV-IN SIGNAL). Note 1: All of the DRI-GW/C-DVD & DRI-BW/C-DVD can be obtained by using same calculation as white balance adjustment above (No.2). CUT-RW/C-DVD and CUT-GW/C-DVD setting data are as follow. CUT-RW/C-DVD = CUT-RS-DVD CUT-GW/C-DVD = CUT-GS-DVD	Note 1: Use the window pattern of the signal generator SX-1006 for adjustment. 
4	SUB-BRIGHTNESS ADJUSTMENT (IFC BUS CONTROL) (AV-IN SIGNAL)	- Receive the window pattern with AV input. - Make the image normal with the remote controller. - Select the sub-bright adjustment mode with the remote controller, and adjust the right dark white area of the window pattern to $3.0 \text{ cd} \pm 0.5 \text{cd}$.	Note 1: Use "Y" of Minolta color analyzer CA-100 in adjustment. Note 2: Use the window pattern of the signal generator SX-1006 for adjustment. 
5	SUB-BRIGHTNESS ADJUSTMENT (IFC BUS CONTROL) (DVD SIGNAL)	- Select DVD mode. - Receive the signal of the DVD signal generator (Component signal) (Window Pattern) - Make the image normal with the remote controller. - Select the SUB-BRIGHT adjustment mode (DVD) and adjust the right dark white area of the window pattern to $3.0 \text{ cd} \pm 0.5 \text{cd}$ of the window pattern.	
6	SUB-CONTRAST ADJUSTMENT (AV-IN SIGNAL)	- Receive the window pattern with AV input. - Make the image normal with the remote controller. - Select the SUB-CONTRAST adjustment mode with the remote controller, and adjust 50% white to 130 ± 10cd. Note : Make sure the TV set already in the RF receiving state before changing to AV mode to continue with this adjustment. (no POWER OFF from the previous adjustment.)	
7	SUB-CONTRAST ADJUSTMENT (DVD SIGNAL)	- Select the DVD mode. - Receive the signal of the DVD signal generator (Component signal) (Window Pattern) - Select the SUB-CONTRAST adjustment mode (DVD) with the remote controller, and adjust 50% white to 130 ± 10cd. Note : Make sure the TV set already in the RF receiving state before changing to AV mode to continue with this adjustment. (no POWER OFF from the previous adjustment.)	

HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	MAIN SCREEN ADJUSTMENT	Adjust V-Slope by Volume Up / Down Remote Control. Refer to Fig. 1-1.	 A : Out of spec B : OK C : Out of spec
	V-SLOPE	Adjust the overscan to 8.5%.	
	VER-AMP-N50	Align the center of the screen to the geometric center of CRT. (monoscope)	
	VER-SHI-N50	Align the center of the screen to the geometric center of CRT.	
	HOR-SHI-N50	Adjust the overscan to 8.5%.	
	EW-W-N50	Adjust the linearity to the best.	
	V-LINE	Already preset. (Adjust this unless the linearity is achieved.)	
	V-S CORR	Already preset.	
	V-SCROLL	Already preset.	
	VX-NORMAL	Already preset.	
	H-PAR	Adjust the 2nd vertical line from the end of the crosshatch pattern. Refer to Fig 1.6. (crosshatch)	
	H-BOW	Adjust the 2nd vertical line from the end of the crosshatch pattern. Refer to Fig 1.7. (crosshatch)	
	E/W-PAR	Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the middle 4 blocks are straight. Refer to Fig 1-2.	
	UPCOR-PAR	Adjust the 2nd upper vertical line from the right end of the crosshatch pattern so that the upper line are straight. Refer to Fig 1-3.	
	LOCOR-PAR	Adjust the 2nd lower vertical line from the right end of the crosshatch pattern so that the bottom line are straight. Refer to Fig 1-4.	
	EW-TRAP	Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the D1 (center area of the second vertical line - edge of screen) and D2 (top area of the second vertical line - edge of screen) are same. Refer to Fig 1-5.	
	VER-AMP-N60	Adjust the overscan to 10%.	
	VER-SHI-N60	Align the center of the screen to the geometric center of CRT.	

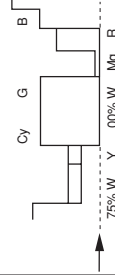
HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
	VHOR-SHI-N60 EW-W-N60	Align the center of the screen to the geometric center of CRT Align the center of the screen to the geometric center of CRT NOTE : There are no separate adjustment for 16:9 mode and Normal mode adjustment. The 16:9 (Panorama mode 50/60Hz) data need to follow the adjusted data for Normal mode (50/60Hz). Please set the data as below. VER-AMP-P50 = VER-AMP-N50 VER-SHI-P50 = VER-SHI-N50 HOR-SHI-P50 = HOR-SHI-N50 EW-W-P50 = EW-W-N50 VER-AMP-P60 = VER-AMP-N60 VER-SHI-P60 = VER-SHI-N60 HOR-SHI-P60 = HOR-SHI-N60 EW-W-P60 = EW-W-N60	

GAME OPERATION CHECK

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	(For models with GAME only.)	1. Use the "GAME" key (R/C) to enter the Game Mode. 2. Press the TREBLE UP (code=46H) key (direct key to enter "The Rock" game), and then confirm the position and the function of the game. Note : (A) For the HORIZONTAL position, enter service mode and choose "Setting Mode 1". Key in the alphabetic number 114 to enter GAME-HON. Adjust to the proper horizontal position. (B) For the VERTICAL position, remain in the same "Setting Mode 1". Key in the alphabetic number 115 to enter GAME-VERT-1. Adjust to the proper vertical position. 3. If adjustment OK, then press the "GAME MODE" key to exit to previously viewed channel from the game mode.	

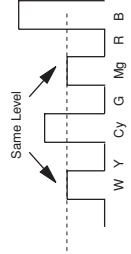
PAL CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	SUB COLOUR (I/C BUS CONTROL)	1. Receive the "PAL Color Bar" signal. 2. Make the image normal with the remote controller. 3. Connect the oscilloscope to TP48R (IC851 #9). (Use Probe 10:1) Range : 2 V/Div Sweep Time : 20 μ sec/Div 4 Set the sub color adjustment mode with the remote controller, and vary the sub color data to make 00% W of the color bar and RED at the same level for adjustment shown in Fig .	 Fig .

FM RADIO OPERATION CHECK

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	(For models with RADIO only.)	1. Use the signal generator to set carrier frequency of 89.5 MHz with sound modulation 400Hz. 2. Connect the signal to the FM radio tuner using the RF coaxial cable with female adaptor. 3. Press the "FM RADIO" button of R/C to access the FM RADIO menu. 4. Select the "FREQUENCY" in menu and press the VOL+ key to search the frequency of 89.5 MHz. 5. Confirm the 400 Hz audio is clearly detected. 6. Press the "FM RADIO" button of R/C to exit.	

NTSC CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	SUB-TINT (I/C BUS CONTROL)	1. Receive the "NTSC 3 58 Colour Bar" signal through AV IN 2 Connect the oscilloscope to TP47B (P860 Pin6) BLUE-OUT ● Range : 00mV/Div (AC)(Use Probe 0:) ● Sweep time : 0 μ sec/Div 3 Select the "SUB-TINT" item in the ADJUSTMENT MODE Adjust the "SUB-TINT" data to obtain the waveform shown as Figure (W and Mg same level)	

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO) (Continued)

No.	Adjusting point	Adjusting procedure/conditions	Waveform and remarks
8	COLOUR SYSTEM	1. Receive the "PAL COLOUR BAR" signal, press the COLOUR SYSTEM key to select modes except PAL, check the COLOUR is not working properly. Then, select the "PAL" mode. Check again its colour so that it is working properly. 2. Receive "SECAM COLOUR BAR" signal, press COLOUR SYSTEM key to select modes except SECAM, check the COLOUR is not working properly. Then, select the "SECAM" mode. Check again its colour so that it is working properly. 3. Receive "NTSC 4.43" signal, press COLOUR SYSTEM key to select modes except NTSC4.43, check the COLOUR is not working properly. Then, select the "NTSC 4.43" mode. Check again its colour so that it is working properly. 4. Receive "NTSC 4.43/3.58 COLOUR BAR" signal thru AV, press COLOUR SYSTEM key to select modes except N4.43/3.58, check the COLOUR is not working properly. Then, select the "NTSC 4.43/3.58" mode. Check again its colour so that it is working properly.	
9	SOUND SYSTEM	1. Receive "PAL-D/K" signal, press the "SOUND SYSTEM" to select B/G, I. Check the sound output is not working properly. Select D/K and check the sound output to make sure it is working properly. 2. Receive "PAL-I" signal, press the "SOUND SYSTEM" to select B/G, D/K. Check the sound output is not working properly. Select I and check the sound output to make sure it is working properly. 3. Receive "PAL-B/G" signal, press the "SOUND SYSTEM" to select I, D/K. Check the sound output is not working properly. Select B/G and check the sound output to make sure it is working properly.	
10	HEADPHONE OUTPUT CHECKING	1. Receive PAL COLOUR BAR with SOUND 400Hz, 100% MODULATION (±50kHz Dev). 2. Maximum volume, and check the headphone output with 400Hz sound and no sound out from speaker. Ref : OUTPUT level of HEADPHONE is as following. Apx. 500mVp-p	
11	NOISE MUTE CHECKING	1. Receive "PAL COLOUR BAR" signal. 2. Turn up the volume control to maximum, make sure the sound is heard from the speakers. Then put the unit in no signal state. 3. Check the sound mute is effective. 4. Finally turn sound level of CTV to minimum.	

18-2

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO)

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CONTRAST key	1. Receive "Monoscope Pattern" signal. 2. Press to MENU mode, then Select Picture Mode and set to select CONTRAST. 3. Press Volume Up/Down key to check whether the CONTRAST effect is OK or not.	
2	COLOUR key	1. Receive "Color Bar" signal. 2. Press to MENU mode, then Select Picture Mode and set to select COLOUR. 3. Press Volume Up/Down key to check whether the COLOUR effect is OK or not.	
3	BRIGHTNESS key	1. Receive "Monoscope Pattern" signal. 2. Press to MENU mode, then Select Picture Mode and set to select BRIGHTNESS. 3. Press Volume Up/Down key to check whether the BRIGHTNESS effect is OK or not.	
4	TINT key	1. Receive the "NTSC Colour Bar" signal thru AV in. 2. Press to MENU mode, then Select Picture Mode and set to select TINT. 3. Press Volume Up/Down key to check TINT, UP for GREEN direction and DOWN for RED direction whether is OK or not.	
5	SHARPNESS Key	1. Receive "Monoscope Pattern" signal. 2. Press to MENU mode, then Select Picture Mode and set to select SHARPNESS. 3. Press Volume Up/Down key to check whether the SHARPNESS effect is OK or not.	
6	NORMAL Key	1. Once in PICTURE Mode, and the NORMAL key is pressed, all the settings will be present to normal setting. (Normal setting value for every mode, refer to Table 2.2 on page 6-1).	Notes: If nothing is display mean contrast, colour, bright, tint, sharpness are all in normal setting.
7	WHITE TEMP	1. Receive "Monoscope Pattern" signal. 2. Set FUNCTION to select WHITE TEMP. 3. Press Volume Up/Down key to check WHITE TEMP Option, STANDARD; NORMAL SETTING, WARM for more REDDISH direction changing, COOL for more BLUISH direction changing.	

18-1

PROTECTOR OPERATION CHECKING

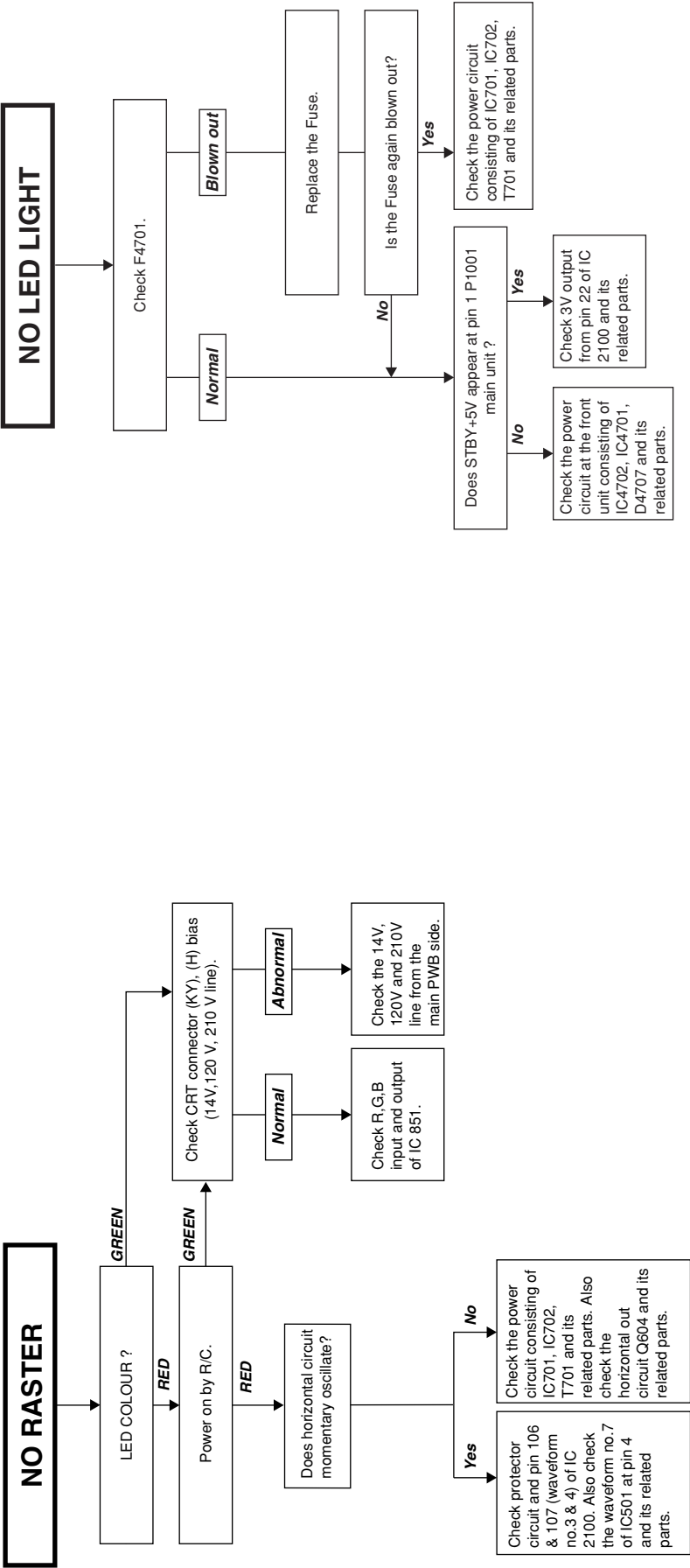
No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	H, V PROTECTOR	1. Receive E-5ch(Monoscopepattern). 2. Connect the bias box to the cathode side (R607) of D604. 3. Set the voltage of the bias box at 10V, and verify that the protector does not operate. 4. Set the voltage of the bias box at 18V, and verify that the protector operate.	Ref : Apx.13.3V.

SOUND OUTPUT CHECKING

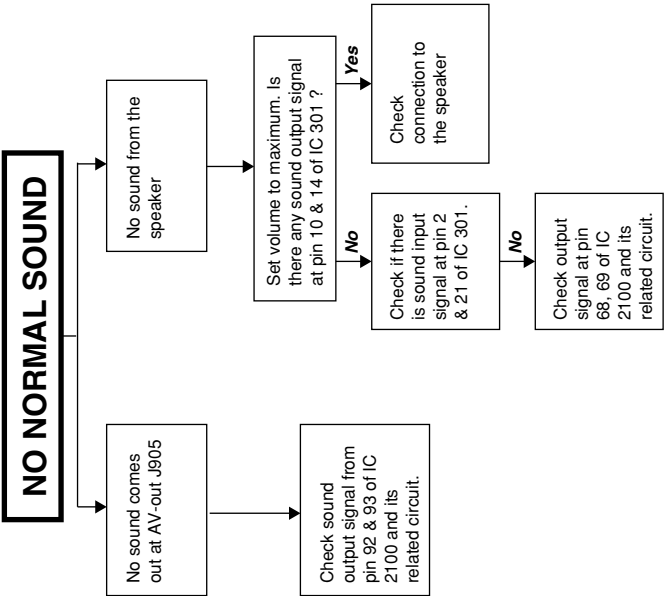
No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks																								
1	Front speaker output checking	1. Receive the E-10ch (PAL colour bar). 2. Set the volume to maximum and set the other sound setting as follow. <table><tr><td>Setting item</td><td>#1</td><td>#2</td></tr><tr><td>Equalizer</td><td>Music</td><td>Music</td></tr><tr><td>Surround</td><td>OFF</td><td>OFF</td></tr><tr><td>BBE</td><td>OFF</td><td>-</td></tr><tr><td>Balance</td><td>0</td><td>0</td></tr><tr><td>AVL</td><td>OFF</td><td>OFF</td></tr><tr><td>Super Bass</td><td>OFF</td><td>-</td></tr><tr><td>Bass +</td><td>-</td><td>ON</td></tr></table> 3. Connect the voltmeter to the speaker terminal and make sure the reading is 5.0 ± 1 Vrms.	Setting item	#1	#2	Equalizer	Music	Music	Surround	OFF	OFF	BBE	OFF	-	Balance	0	0	AVL	OFF	OFF	Super Bass	OFF	-	Bass +	-	ON	#1 : Sound setting for model with BBE and Super Bass in the sound menu. #2 : Sound setting for model without BBE and with Bass + in the sound menu.
Setting item	#1	#2																									
Equalizer	Music	Music																									
Surround	OFF	OFF																									
BBE	OFF	-																									
Balance	0	0																									
AVL	OFF	OFF																									
Super Bass	OFF	-																									
Bass +	-	ON																									
2	Rear woofer output checking (For model with woofer box only)	1. Receive the E-10ch (PAL colour bar). 2. Connect the woofer wire from P303 to a 16 ohm dummy load. 3. Set the volume to maximum and set the other sound setting as follow. <table><tr><td>Equalizer</td><td>Music</td></tr><tr><td>Surround</td><td>OFF</td></tr><tr><td>BBE</td><td>OFF</td></tr><tr><td>Balance</td><td>0</td></tr><tr><td>AVL</td><td>OFF</td></tr><tr><td>Super Bass</td><td>ON</td></tr></table> 4. Connect the voltmeter to the dummy load and make sure the reading is 12 ± 1 Vrms.	Equalizer	Music	Surround	OFF	BBE	OFF	Balance	0	AVL	OFF	Super Bass	ON													
Equalizer	Music																										
Surround	OFF																										
BBE	OFF																										
Balance	0																										
AVL	OFF																										
Super Bass	ON																										

29H-FG3RU

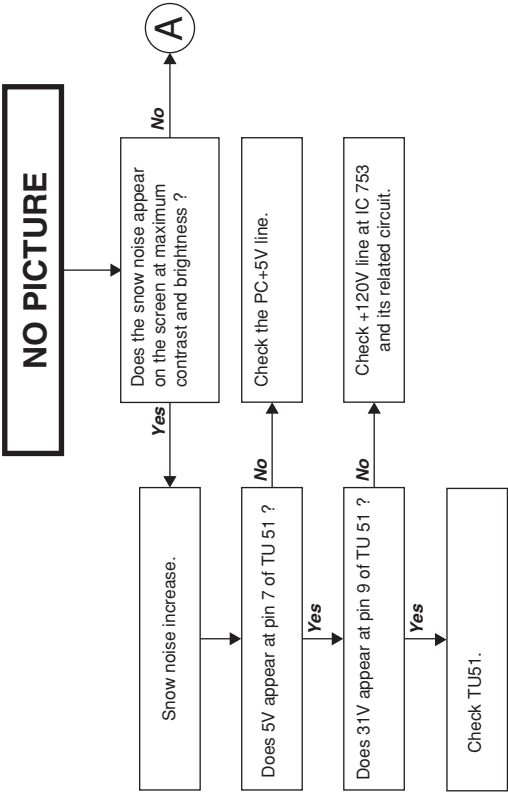
29H-FG3RU



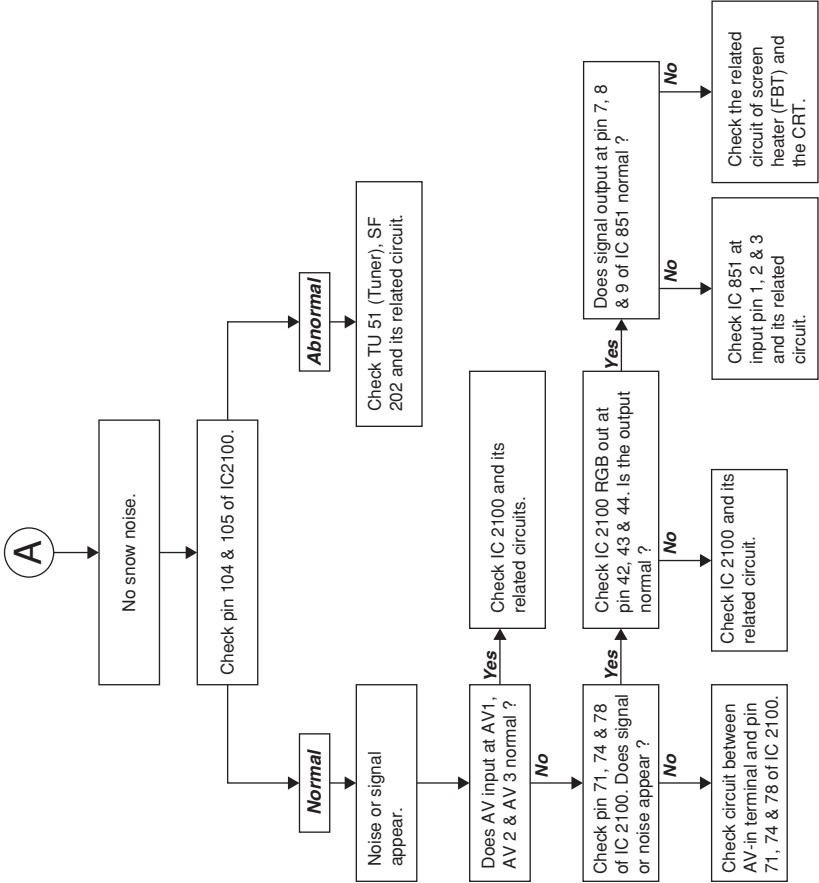
TROUBLE SHOOTING TABLE (Continued)



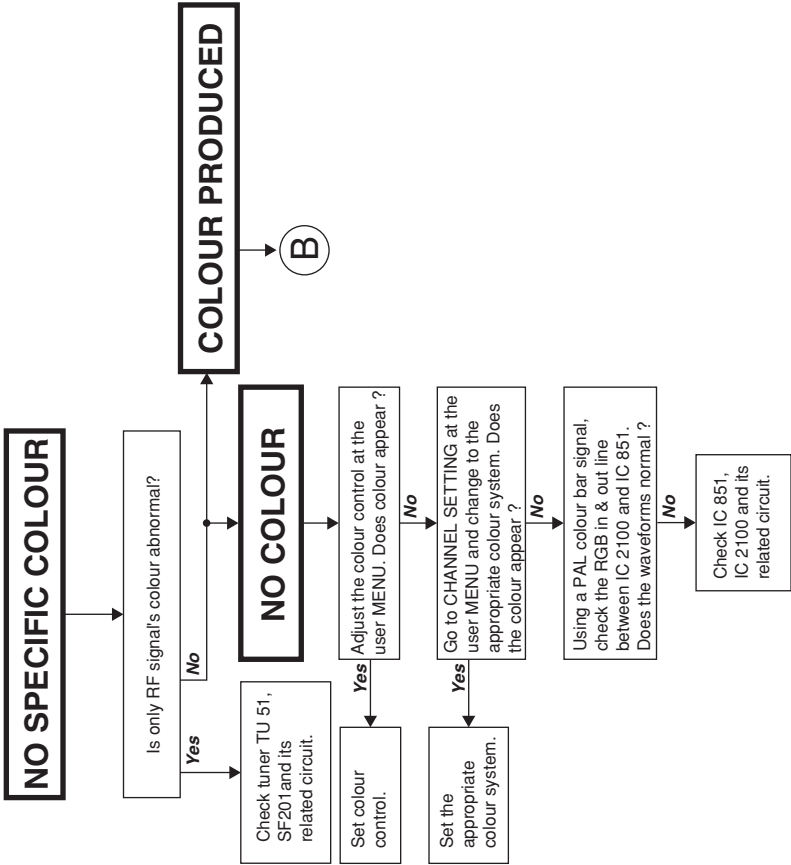
TROUBLE SHOOTING TABLE (Continued)



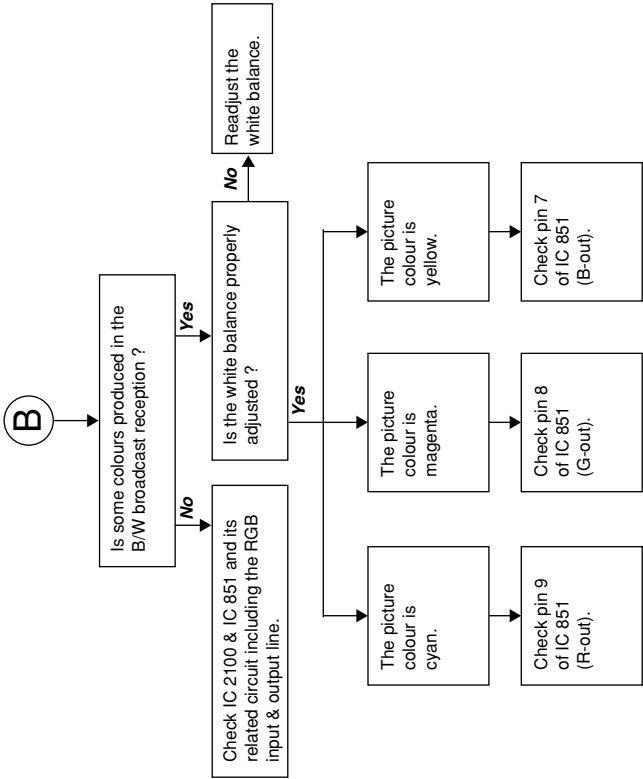
TROUBLE SHOOTING TABLE (Continued)



TROUBLE SHOOTING TABLE (Continued)

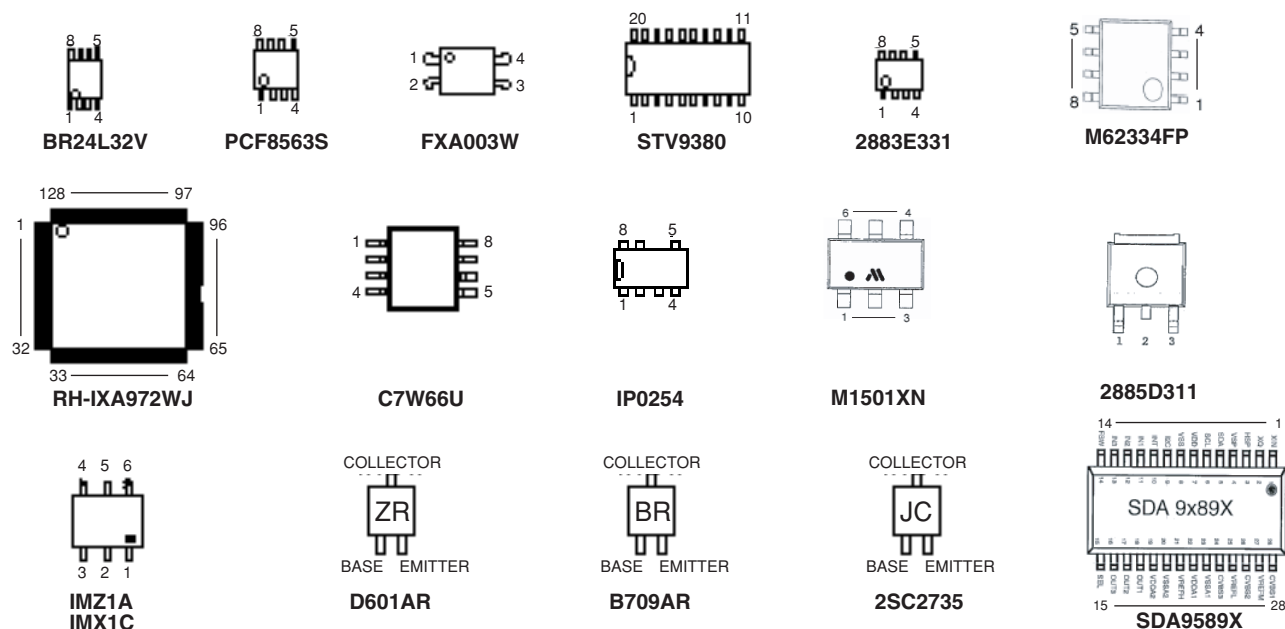


TROUBLE SHOOTING TABLE (Continued)

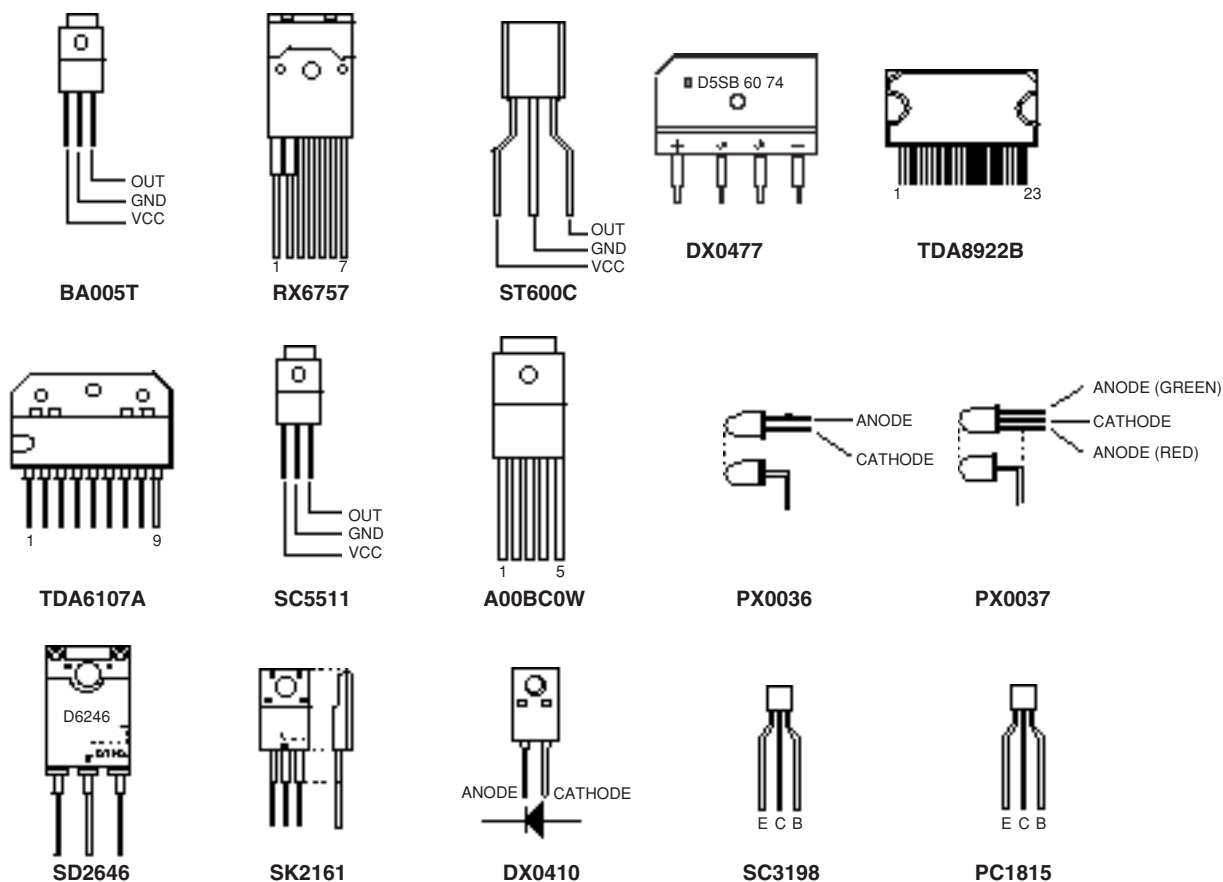


SOLID STATE DEVICE BASE DIAGRAM

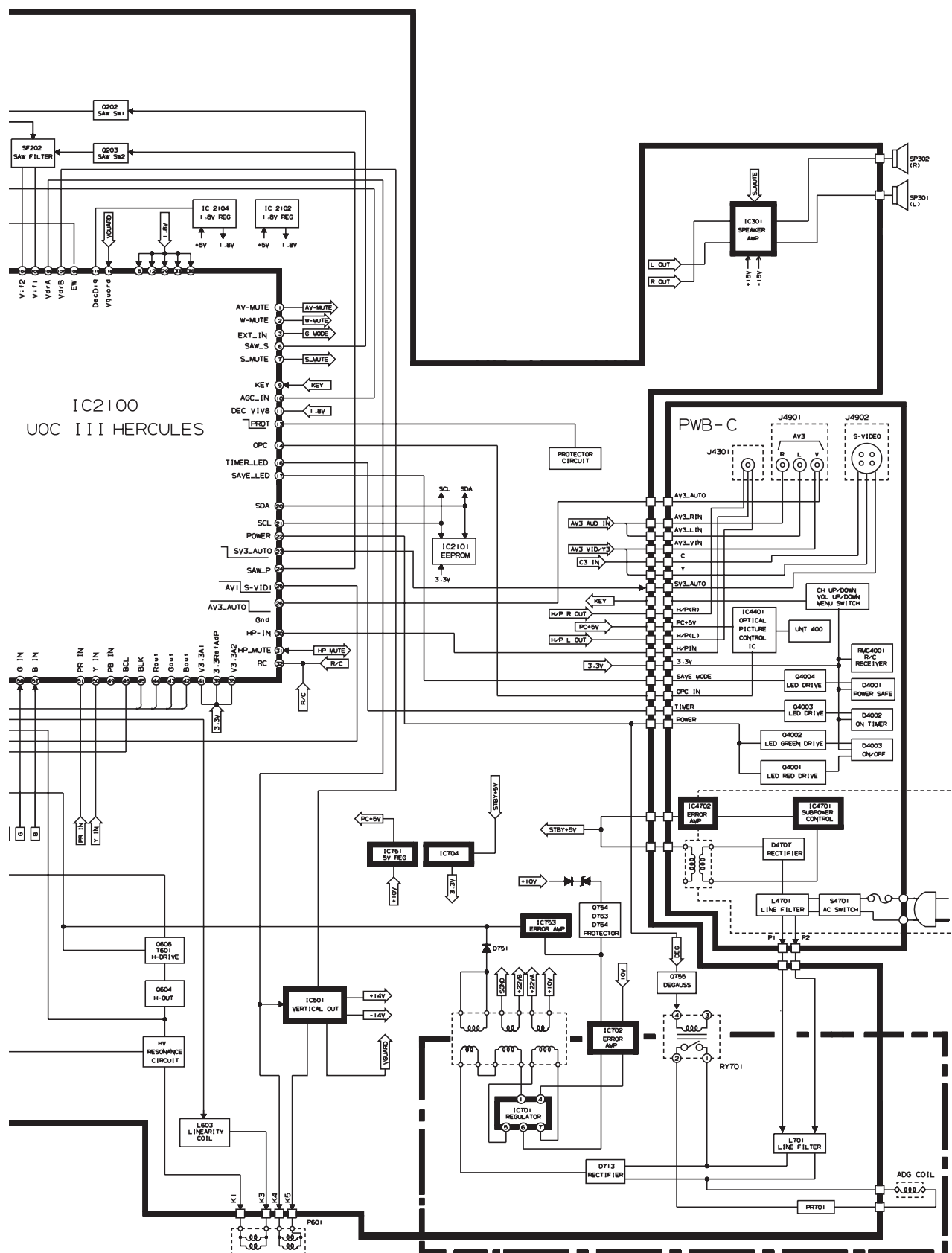
TOP VIEW



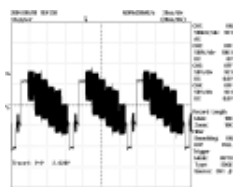
SIDE VIEW



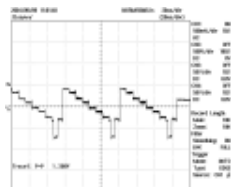




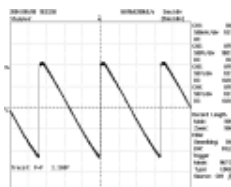
WAVEFORMS



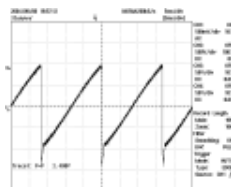
① Horizontal Rate
Pin 1 Vp-p = 2.02 V



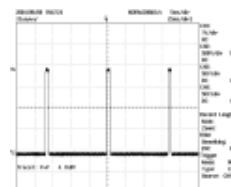
② Horizontal Rate
Pin 2 Vp-p = 1.30 V



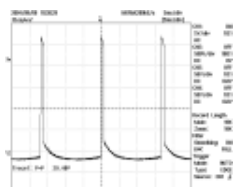
③ Vertical Rate
Pin 3 Vp-p = 2.26 V



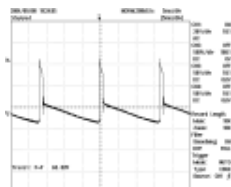
④ Vertical Rate
Pin 4 Vp-p = 2.40 V



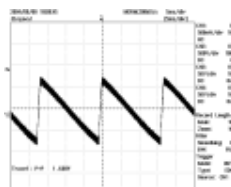
⑤ Vertical Rate
Pin 5 Vp-p = 4.16 V



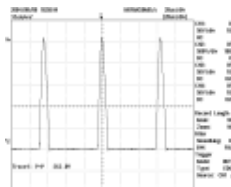
⑥ Vertical Rate
Pin 6 Vp-p = 29.40 V



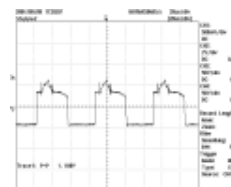
⑦ Vertical Rate
Pin 7 Vp-p = 60.00 V



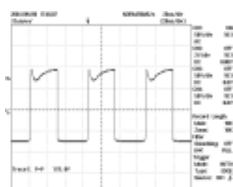
⑧ Vertical Rate
Pin 8 Vp-p = 1.60 V



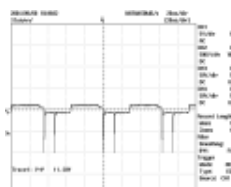
⑨ Horizontal Rate
Pin 9 Vp-p = 262.0 V



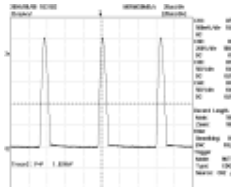
⑩ Horizontal Rate
Pin 10 Vp-p = 262.0 V



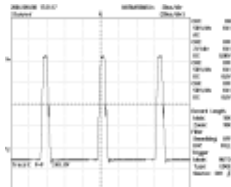
⑪ Horizontal Rate
Pin 11 Vp-p = 176.0 V



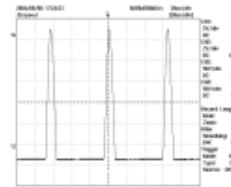
⑫ Horizontal Rate
Pin 12 Vp-p = 11.20 V



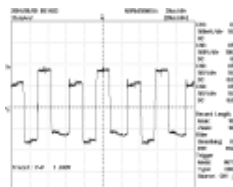
⑬ Horizontal Rate
Pin 13 Vp-p = 1.024 kV



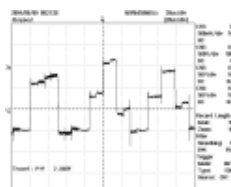
⑭ Horizontal Rate
Pin 14 Vp-p = 248.0 V



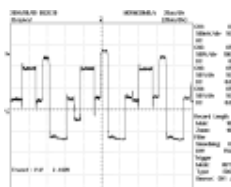
⑮ Horizontal Rate
Pin 15 Vp-p = 31.20 V



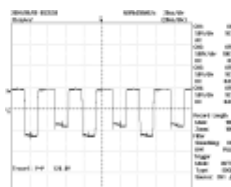
⑯ Horizontal Rate
Pin 16 Vp-p = 1.84 V



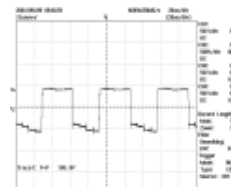
⑰ Horizontal Rate
Pin 17 Vp-p = 2.04 V



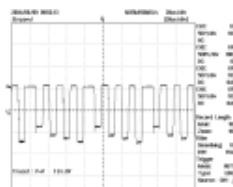
⑱ Horizontal Rate
Pin 18 Vp-p = 2.10 V



⑲ Horizontal Rate
Pin 19 Vp-p = 120.0 V



⑳ Horizontal Rate
Pin 20 Vp-p = 106.0 V



㉑ Horizontal Rate
Pin 21 Vp-p = 134.0 V

DESCRIPTION OF SCHEMATIC DIAGRAM

SAFETY NOTES:

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "A" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE (— — —) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

NOTES:

1. The unit of resistance "ohm" is omitted.
(K = 1000 ohms, M = Meg ohm).
2. All resistors are 1/16 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted. ($P = \mu\text{F}$).

VOLTAGE MEASUREMENT CONDITIONS:

1. Voltage in parenthesis measured with no Signal.
2. Voltages without parenthesis measured with PAL Colour-Signal.
3. All the voltages in each point are measured high impedance volt-meter.

WAVEFORM MEASUREMENT CONDITIONS:

1. RF colour bar signal of 2.0V peak to peak applied at RF Tuner TU51.
2. Approximately 4.0 V AGC bias (without signal).

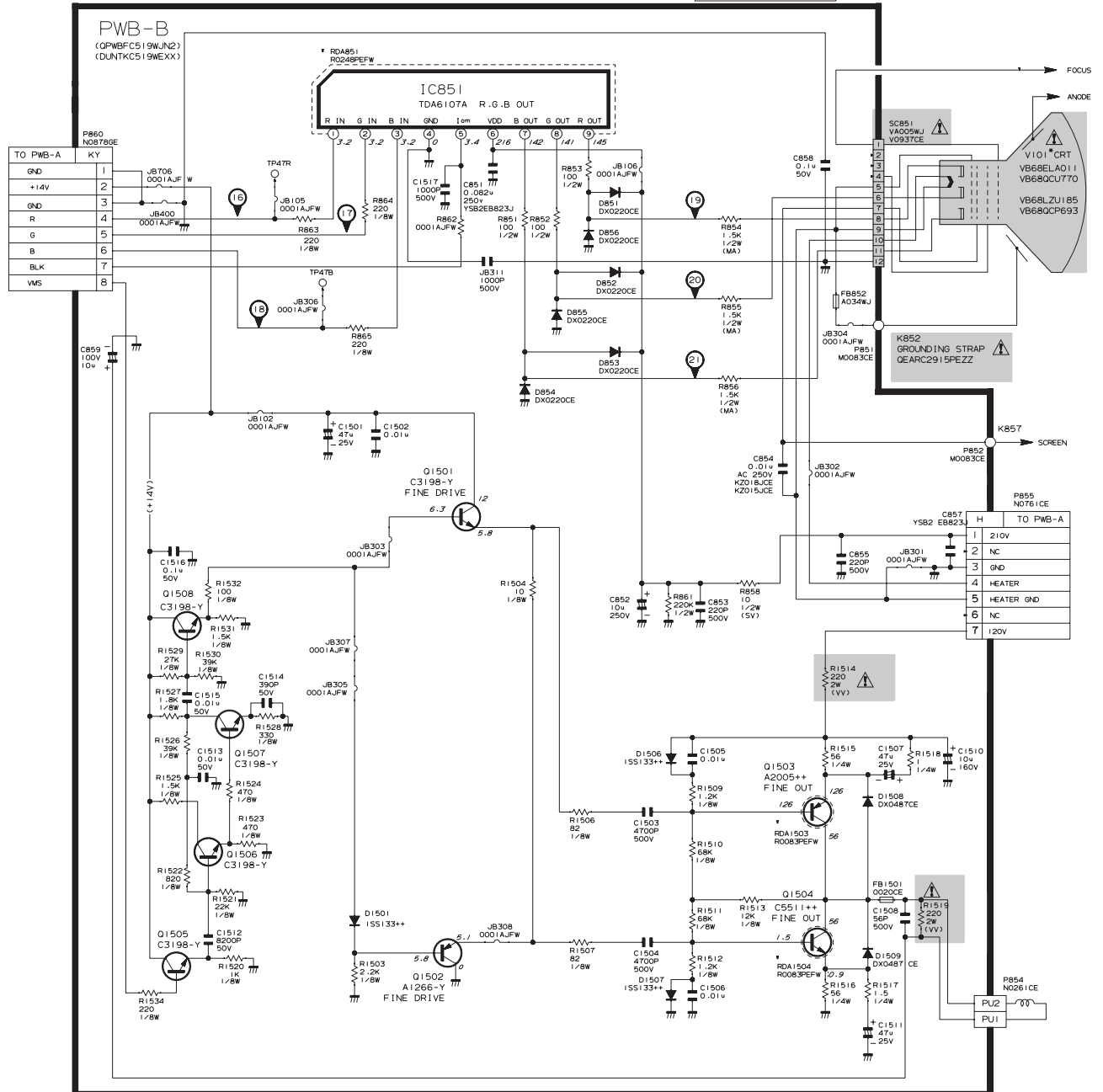
SCHEMATIC DIAGRAM

CRT UNIT

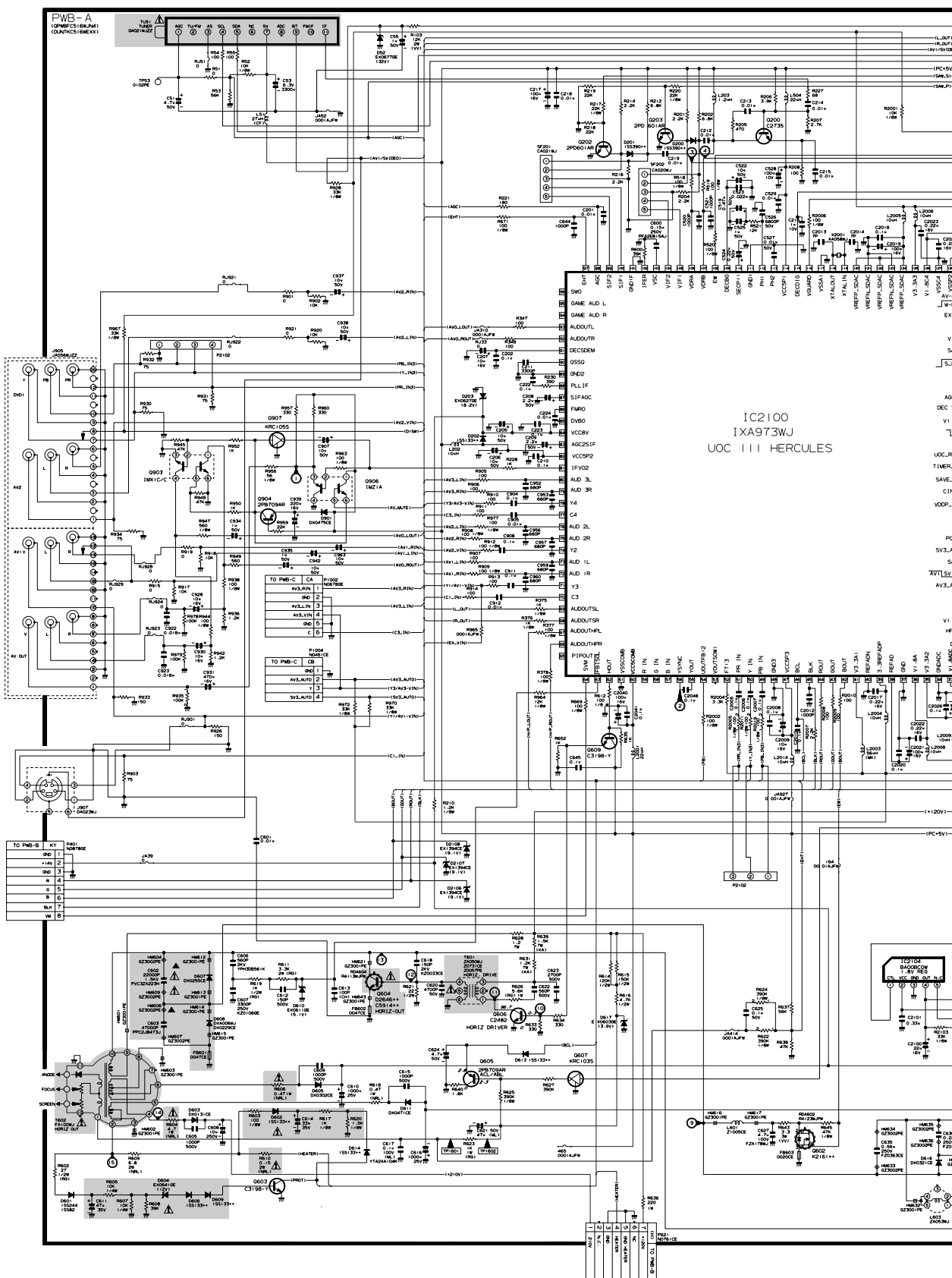
AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2. THE UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, p, etc).

REPLACE WITH A PICTURE
TUBE OF THE SAME TYPE
NUMBER FOR CONTINUED
SAFETY.



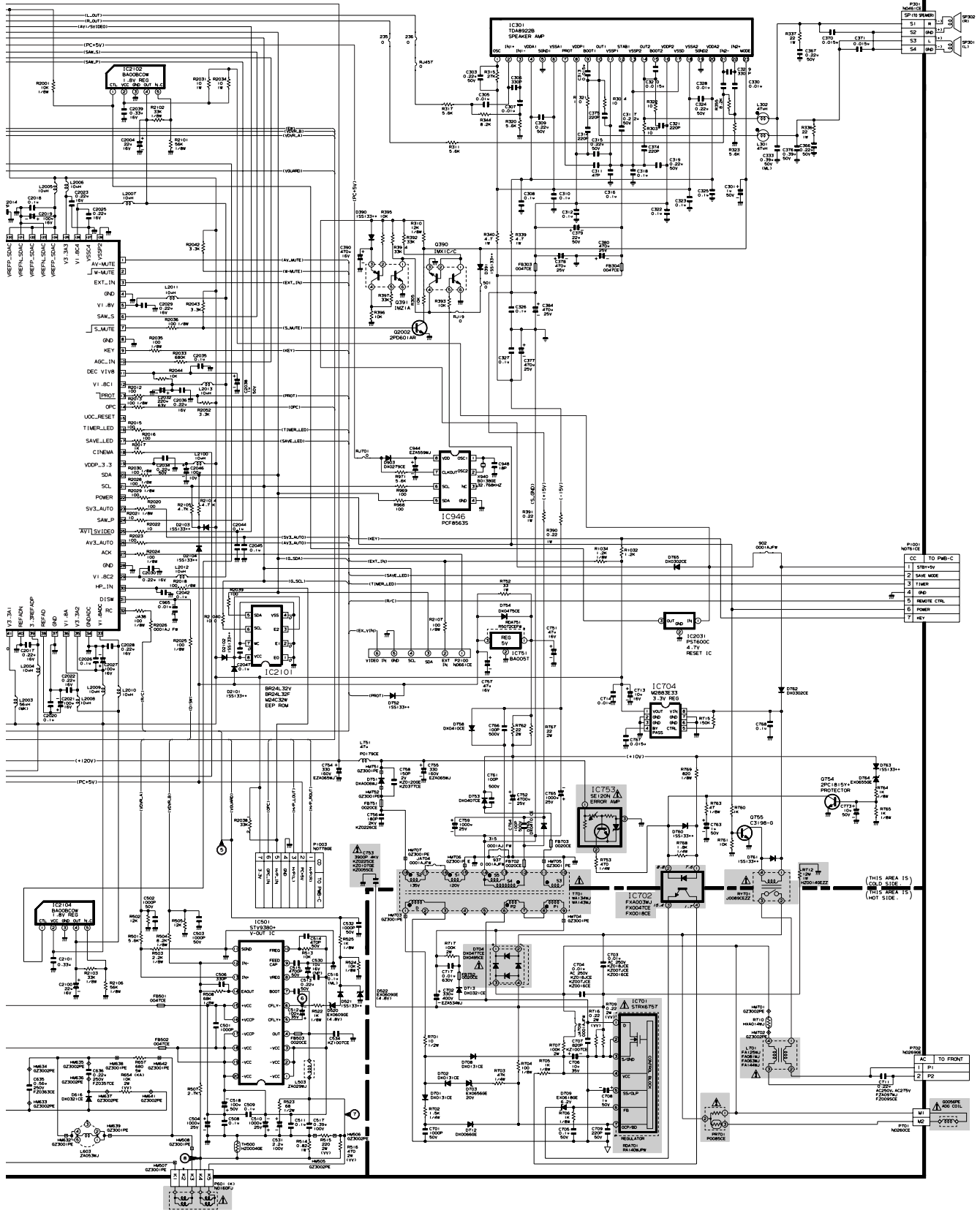
MAIN UNIT



VERSION 0

AND SHADED COMPONENTS
ARE SAFETY RELATED PARTS.
MARK X-RAY RELATED PARTS.

NOTE 1: THE UNIT OF RESISTANCE "OHM" IS OMITTED
(X=100 OHMS, H=1000 OHMS).
2. ALL RESISTORS ARE 1/8 WATT UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE P. WITH PREFIX SYMBOL
(u, p, etc.).



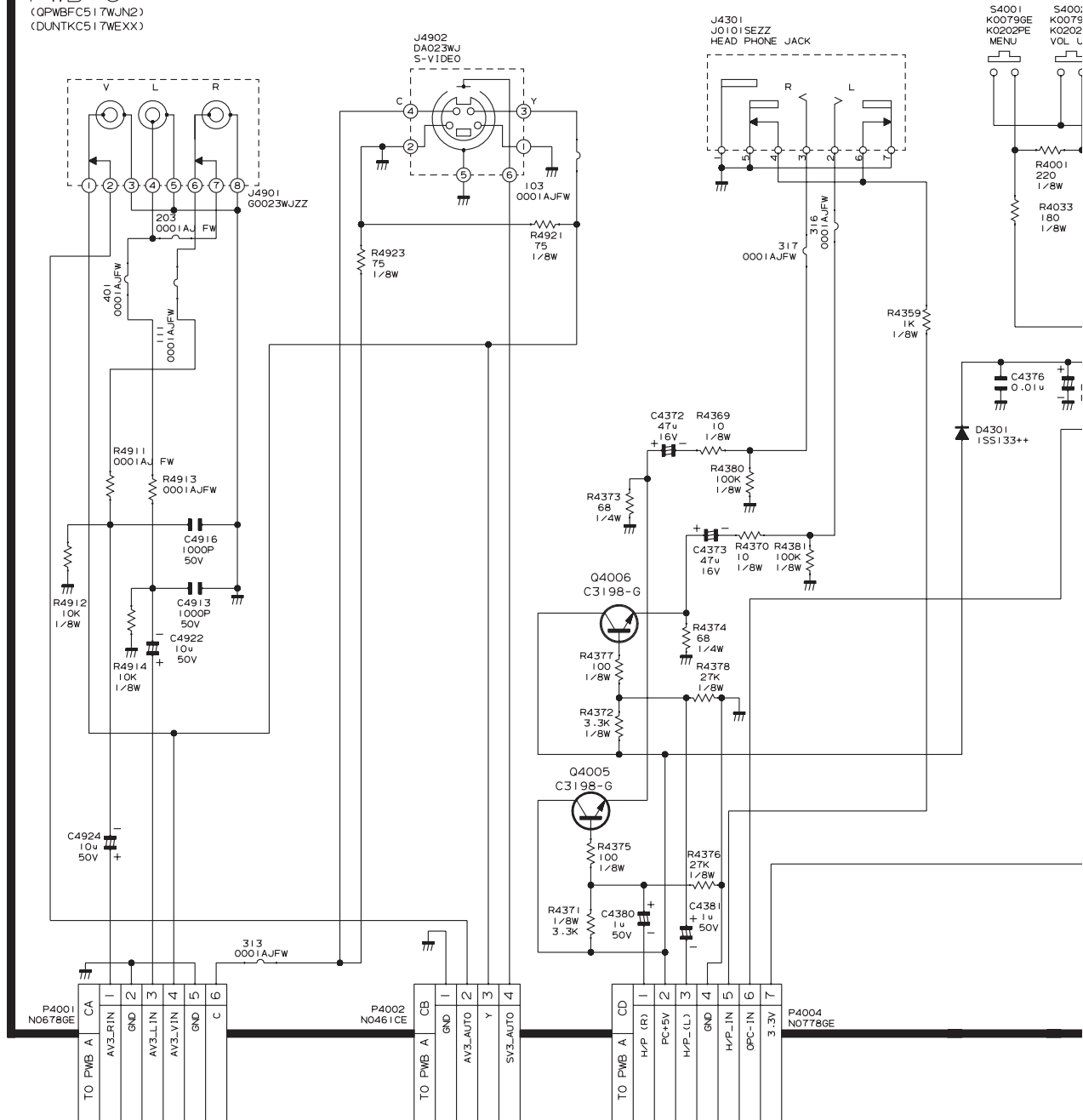
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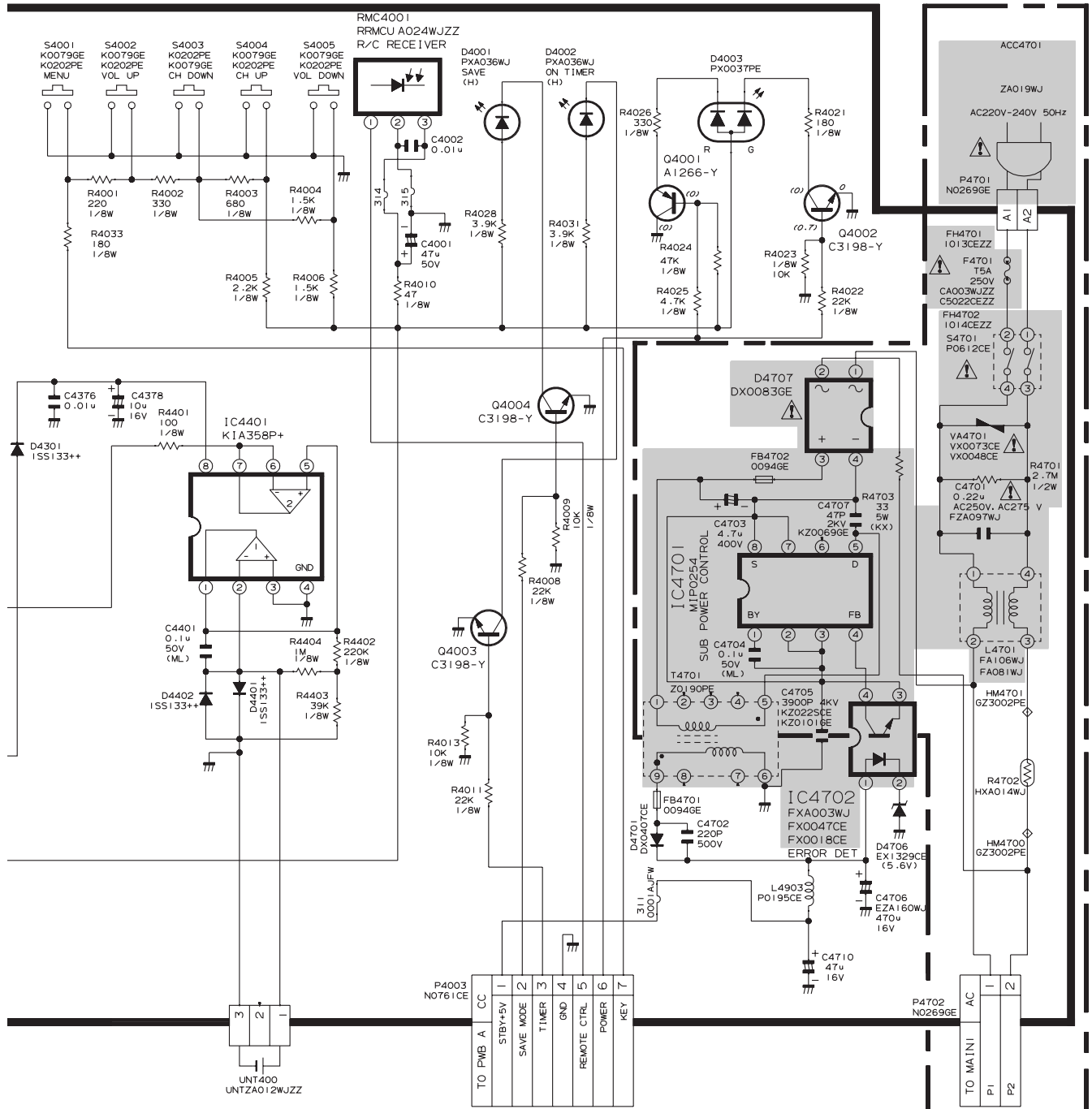
FRONT UNIT

PWB-C

(QPWBF517WJN2)

(DUNTKC517WEXX)

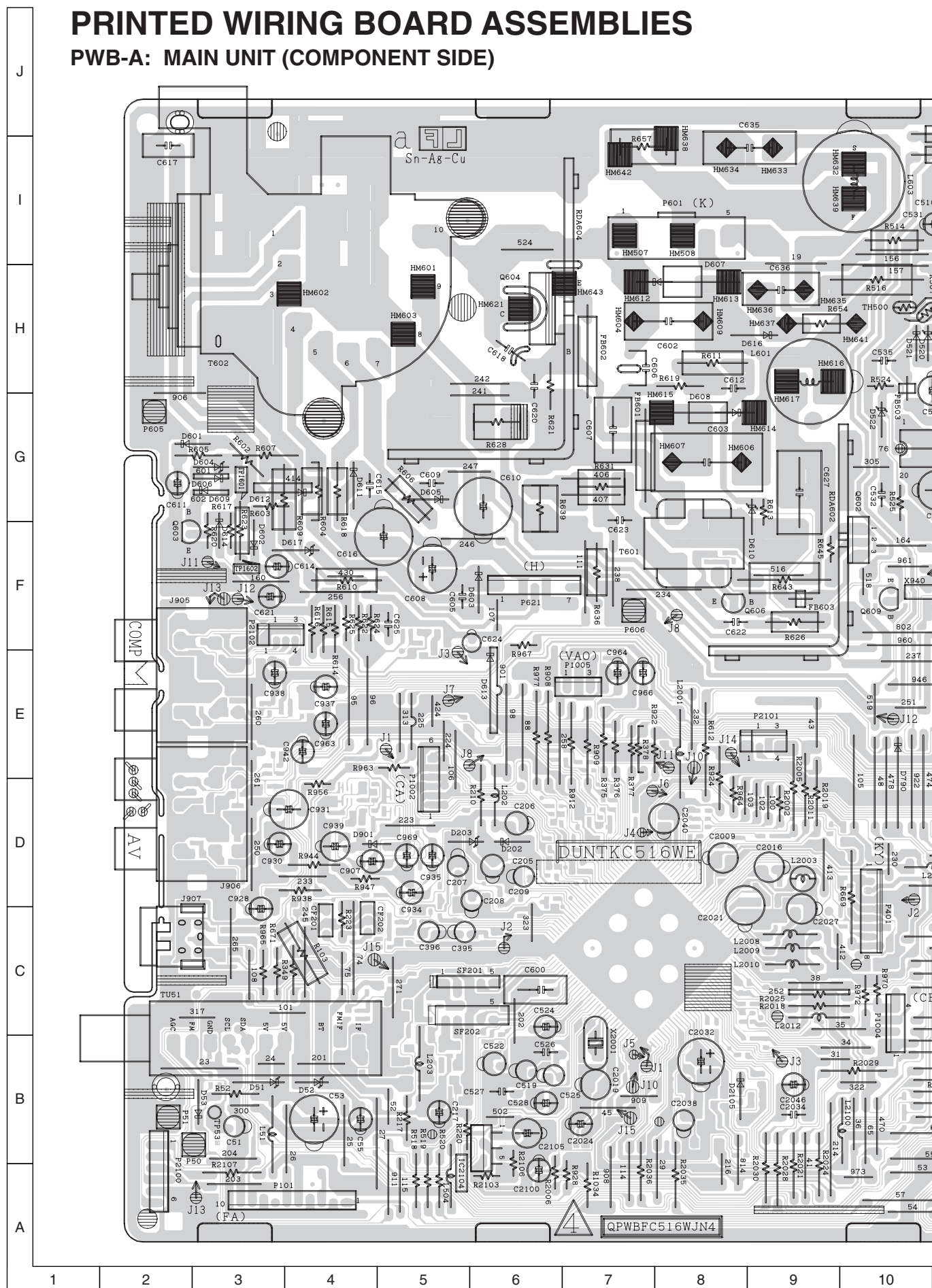


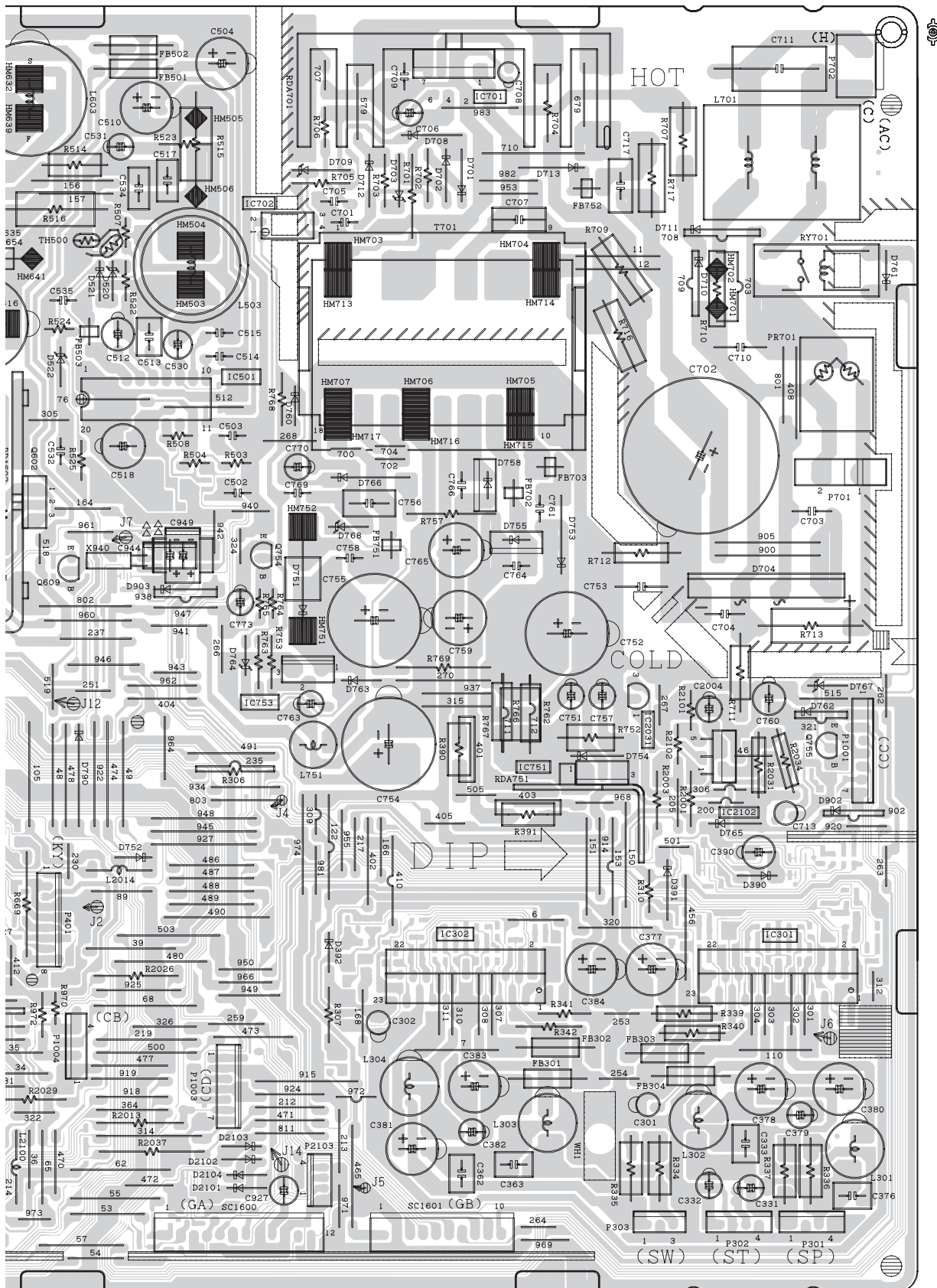


10	11	12	13	14	15	16	17	18	19
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PRINTED WIRING BOARD ASSEMBLIES

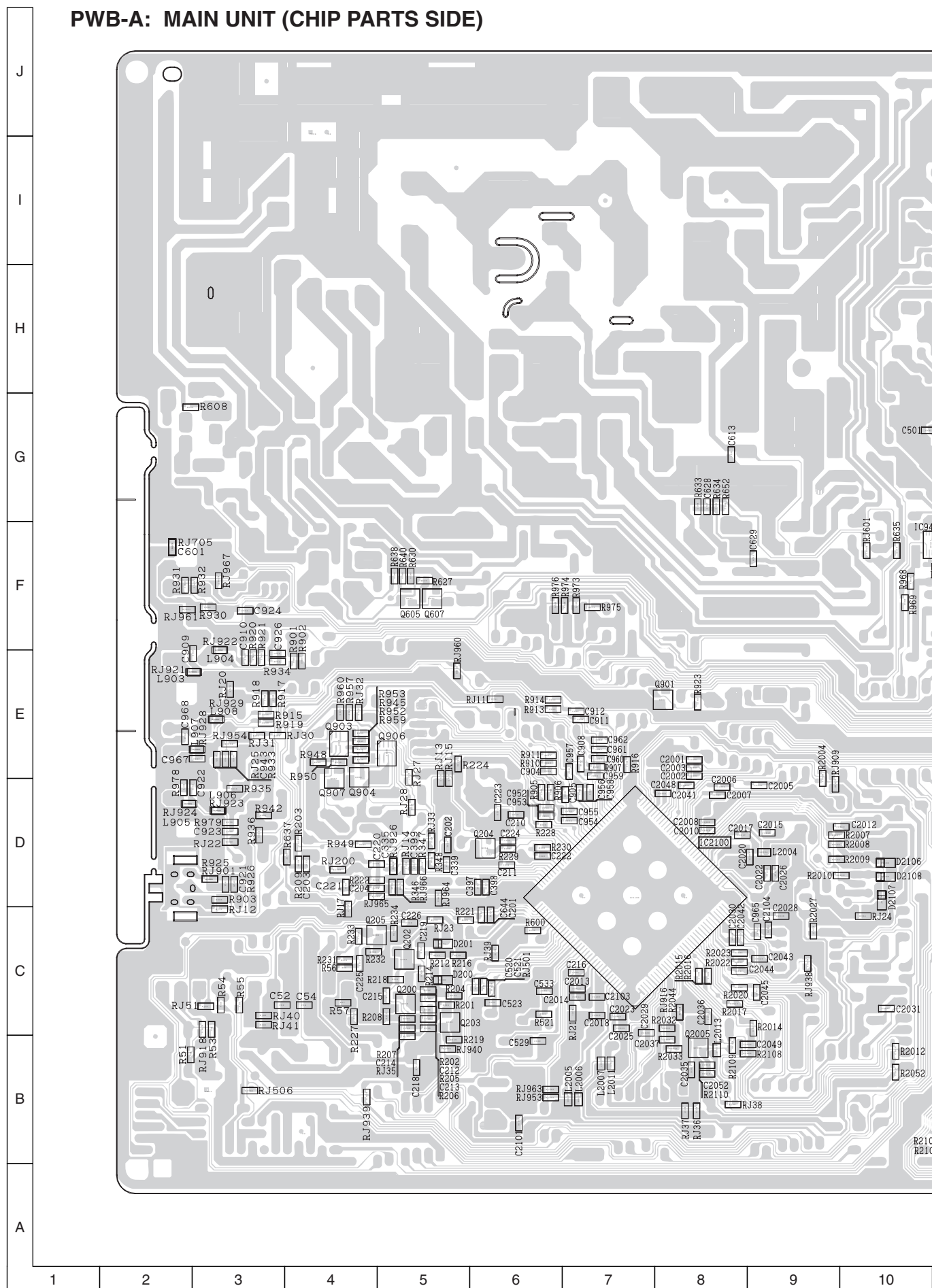
PWB-A: MAIN UNIT (COMPONENT SIDE)

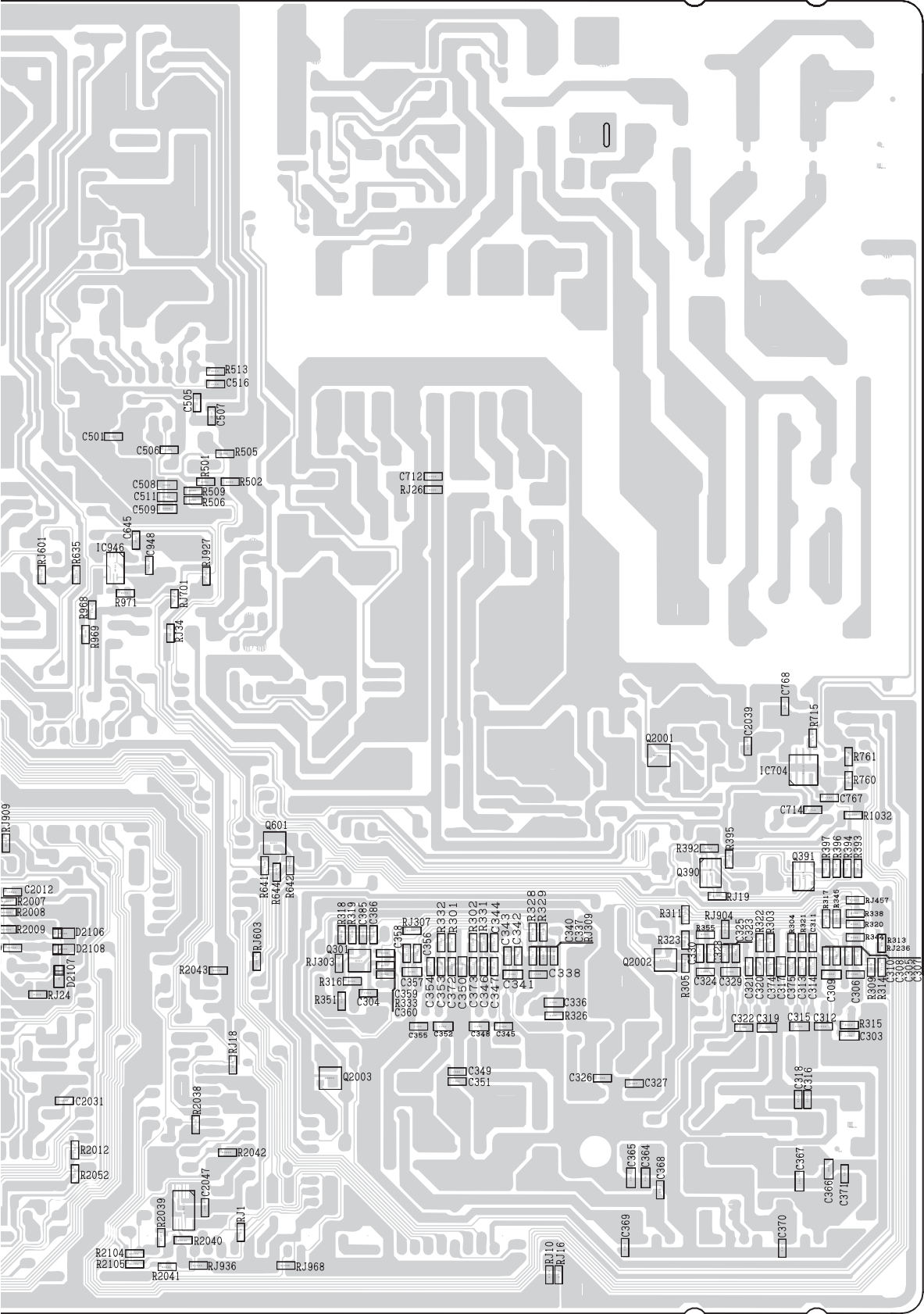




10	11	12	13	14	15	16	17	18	19
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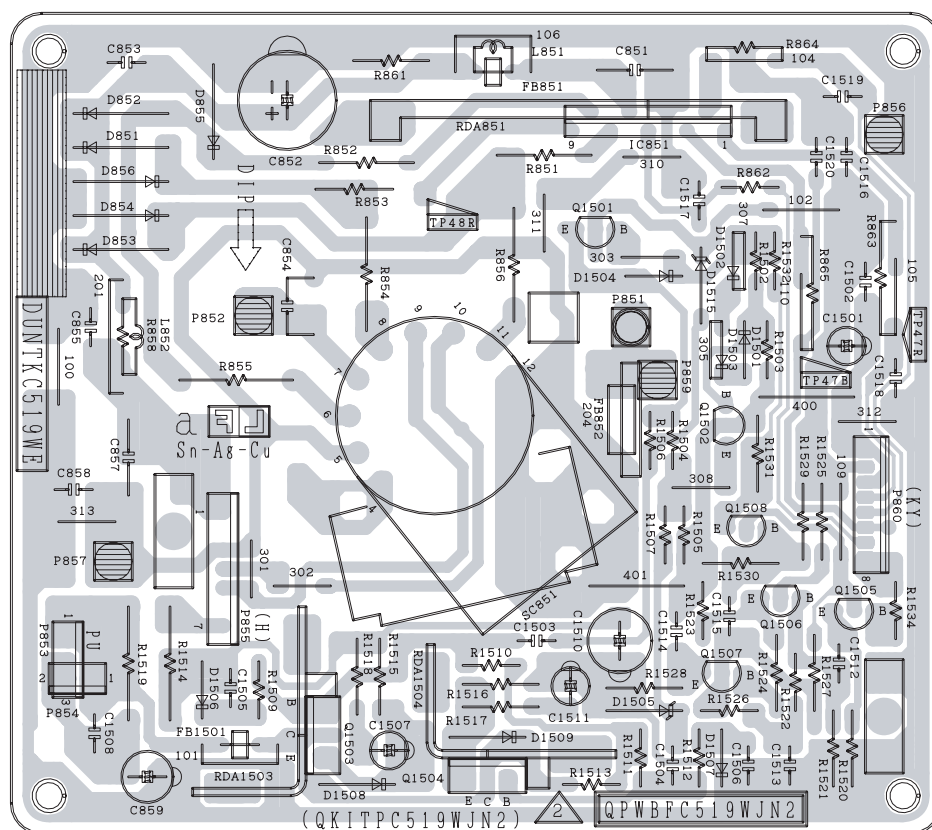
PWB-A: MAIN UNIT (CHIP PARTS SIDE)



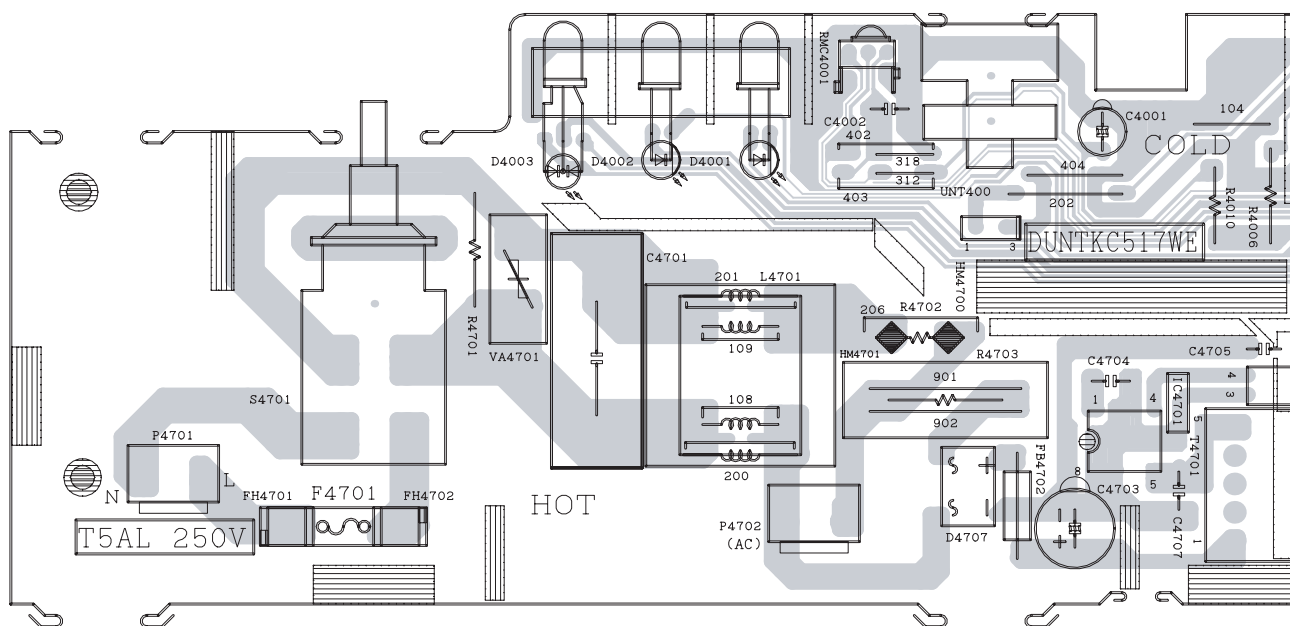


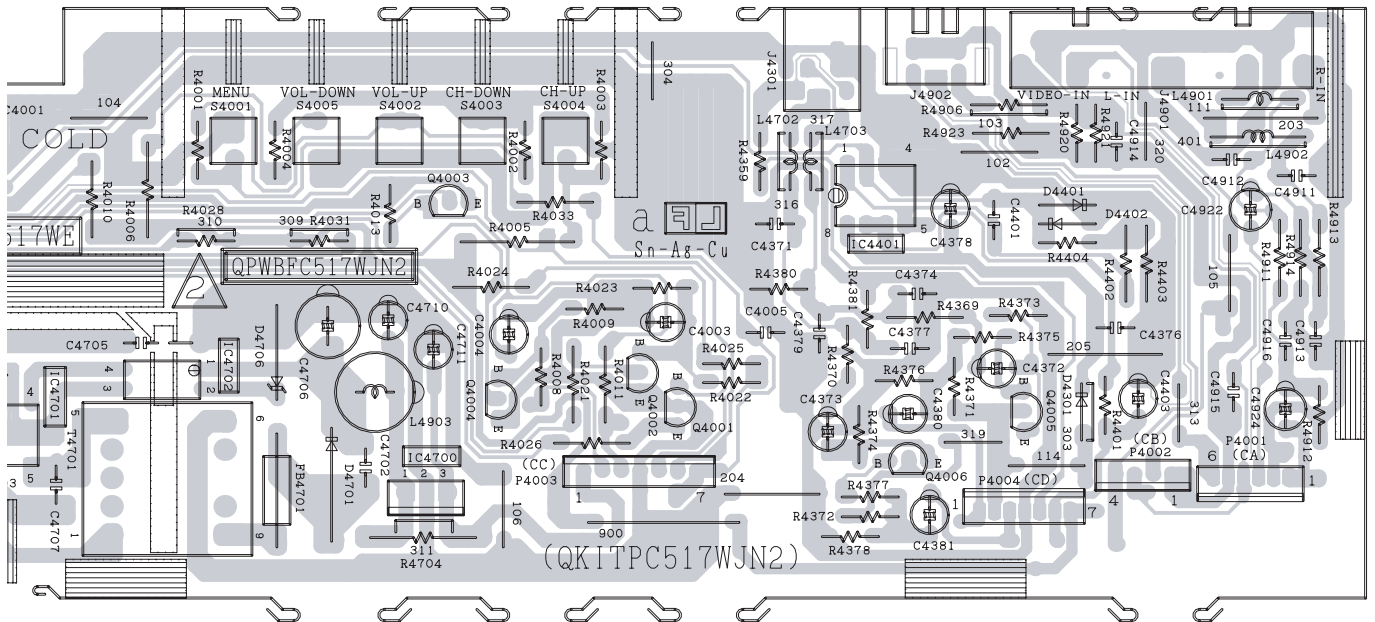
10	11	12	13	14	15	16	17	18	19
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PWB-B: CRT UNIT



PWB-C: FRONT UNIT





10	11	12	13	14	15	16	17	18	19
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10. REPLACEMENT PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "△" in the Replacement Parts Lists.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |
| 5. CODE | 6. QUANTITY |

MARK ★: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
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PICTURE TUBE

△ V101	VB68QCU770X3E	R	Picture Tube	CX
	PMAGFA009WJZZ	R	Magnet	AK
	PMAGG3002CEZZ	R	Magnet	AC
	QEARCA023WJZZ	R	Ground-Part	AG
△	RCiLG0056PEZZ	R	Degaussing Coil	AS

PRINTED WIRING BOARD ASSEMBLIES

(NOT REPLACEMENT ITEM)

PWB-A	DUNTKC516WEH4	—	Main Unit	—
PWB-B	DUNTKC519WEA1	—	CRT Unit	—
PWB-C	DUNTKC517WEA2	—	Front Unit	—

PWB-A DUNTKC516WEH4 MAIN Unit

TUNER

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

△ TU51	RTUNQA021WJZZ	R	Tuner	AW
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INTEGRATED CIRCUITS

IC301	VHiTDA8922B-1	R	I.C.	AV
IC501	VHiSTV9380+3E	R	STV9380A	AP
△ IC701	VHiSTRX6757-1	R	STR-X6757LF	AS
△ IC702	RH-FXA003WJZZ	R	PC123Y82	AD
IC704	VHiM2883E331EY	R	NJM2883E33	AF
IC751	VHiBA005T/-1	R	BA05T	AF
△ IC753	VHiSE120N/-1	R	SE120N	AG
IC946	VHiPCF8563S-1Y	R	PCF8563TS/F4	AL
IC2031	VHiPST600C/-1+	R	IC-PST600C-2	AD
IC2100	RH-iXA973WJZZQ	R	I.C.	BH
IC2101	VHiBR24L32V-1Y	R	BR24L32FV-W	AG
IC2102	VHiBA00BC0W-1S	R	BA00BC0WT-V5	AG
IC2104	VHiBA00BC0W-1S	R	BA00BC0WT-V5	AG

TRANSISTORS

Q200	VS2SC2735//1EY	R	2SC2735	AC
Q202	VS2PD601AR/-1Y	R	2PD601AR	AB
Q203	VS2PD601AR/-1Y	R	2PD601AR	AB
Q390	VSIMX1C/C//1Y	R	iMX1C/C	AC
Q391	VSIMZ1A///-1Y	R	iMZ1A//	AC

Ref. No.	Part No.	★	Description	Code
Q602	VS2SK2161++-1	R	2SK2161	AG
Q603	VS2SC3198-Y-1+	R	2SC3198-Y	AA
△ Q604	VS2SD2646++1E	R	2SD2646	AM
Q605	VS2PB709AR/-1Y	R	2PB709AR	AB
Q606	VS2SC2482//1+	R	2SC2482	AD
Q607	VSKRC103S//1Y	R	KRC103S	AA
Q609	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q754	VS2PC1815Y+1+	R	2PC1815Y	AC
Q755	VS2SC3198-G-1+	R	2SC3198-G	AA
Q903	VSIMX1C/C//1Y	R	iMX1C/C	AC
Q904	VS2PB709AR/-1Y	R	2PB709AR	AB
Q906	VSIMZ1A///-1Y	R	iMZ1A//	AC
Q907	VSKRC105S//1Y	R	KRC105S	AB
Q2002	VS2PD601AR/-1Y	R	2PD601AR	AB

DIODES AND LED'S

D52	RH-EX0677GEZZY	R	Zener Diode, 32V	AC
D200	VHD1SS390++1Y	R	1SS390	AB
D201	VHD1SS390++1Y	R	1SS390	AB
D202	VHD1SS133++1Y	R	1SS133	AA
D203	RH-EX0627GEZZY	R	Zener Diode, 8.2V	AA
D390	VHD1SS133++1Y	R	1SS133	AA
D391	VHD1SS133++1Y	R	1SS133	AA
D520	RH-EX0609GEZZY	R	Zener Diode, 4.8V	AA
D521	VHD1SS133++1Y	R	1SS133	AA
D522	RH-EX0609GEZZY	R	Zener Diode, 4.8V	AA
D601	VHD1SS244//1Y	R	1SS244	AB
△ D602	VHD1SS133++1Y	R	1SS133	AA
△ D603	RH-DX0131CEZZY	R	Diode	AC
△ D604	RH-EX0641GEZZY	R	Zener Diode, 12V	AA
D605	RH-DX0302CEZZY	R	Diode	AC
△ D606	VHD1SS133++1Y	R	1SS133	AA
△ D607	RH-DX0255CEZZ	R	Diode	AC
△ D608	RH-DXA006WJZZ	R	Diode	AD
△ D609	VHD1SS133++1Y	R	1SS133	AA
D610	RH-EX0611GEZZY	R	Zener Diode, 5.1V	AA
D611	RH-DX0471CEZZY	R	Diode	AE
D613	VHD1SS133++1Y	R	1SS133	AA
D614	VHD1SS133++1Y	R	1SS133	AA
D616	RH-DX0321CEZZY	R	Diode	AC
D617	RH-EX0603GEZZY	R	Zener Diode, 3.9V	AA
D701	RH-DX0131CEZZY	R	Diode	AC
D702	RH-DX0131CEZZY	R	Diode	AC
D703	RH-EX0656GEZZY	R	Zener Diode, 20V	AB
△ D704	RH-DX0477CEZZ	R	Diode	AF
D708	RH-DX0131CEZZY	R	Diode	AC
D709	RH-EX0618GEZZY	R	Zener Diode, 6.2V	AB
D712	RH-DX0066GEZZY	R	Diode	AC
D713	RH-DX0321CEZZY	R	Diode	AC
D751	RH-DXA006WJZZ	R	Diode	AD
D752	VHD1SS133++1Y	R	1SS133	AA
D753	RH-DX0407CEZZY	R	Diode	AD
D754	RH-DX0475CEZZY	R	Diode	AB
D755	RH-DX0410CEZZ	R	Diode	AG
D758	RH-DX0410CEZZ	R	Diode	AG
D760	VHD1SS133++1Y	R	1SS133	AA
D761	VHD1SS133++1Y	R	1SS133	AA
D762	RH-DX0302CEZZY	R	Diode	AC
D763	VHD1SS133++1Y	R	1SS133	AA
D764	RH-EX0655GEZZY	R	Zener Diode	AB
D765	RH-DX0302CEZZY	R	Diode	AC
D901	RH-DX0475CEZZY	R	Diode	AB
D903	RH-DX0279CEZZY	R	Diode	AB
D2101	VHD1SS133++1Y	R	1SS133	AA
D2102	VHD1SS133++1Y	R	1SS133	AA
D2103	VHD1SS133++1Y	R	1SS133	AA
D2104	VHD1SS133++1Y	R	1SS133	AA
D2106	RH-EX1394CEZZY	R	Zener Diode, 9.1V	AB
D2107	RH-EX1394CEZZY	R	Zener Diode, 9.1V	AB
D2108	RH-EX1394CEZZY	R	Zener Diode, 9.1V	AB
R710	RH-HXA014WJZZ+	R	Thermistor	AD
TH500	RH-HZ0004GEZZ+	R	Thermistor	AE

CRYSTALS

△ PR701	RMPTP0085CEZZ	R	Packaged Circuit	AL
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Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
X940	RCRSB0138GEZZ	R	Crystal, 32.768MHz	AD	C319	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC
X2001	RCRSAA058WJZZ	R	Crystal	AD	C320	VCKYCY1HB153KY	R 0.015	50V Ceramic	AA
FILTERS					C321	VCKYCY1HB221KY	R 220p	50V Ceramic	AA
SF201	RFILCA021WJZZ	R	Filter	AK	C322	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA
SF202	RFILCA020WJZZ	R	Filter	AM	C323	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA
COIL AND TRANSFORMERS					C324	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC
L51	VP-CF270K0000Y	R	Peaking, 27μH	AB	C325	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA
L202	VP-DF100K0000Y	R	Peaking, 10μH	AB	C326	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA
L203	VP-XF1R2K0000Y	R	Peaking, 1.2μH	AB	C327	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA
L301	RCiLPA288WJZZ	R	Coil, 47μH	AE	C328	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA
L302	RCiLPA288WJZZ	R	Coil, 47μH	AE	C329	VCKYCY1HB331KY	R 330p	50V Ceramic	AA
L503	RCiLZA029WJZZ	R	Coil	AM	C330	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA
L504	VP-XF220K0000Y	R	Peaking, 22μH	AB	C333	VCFYFA1HA394J+	R 0.39	50V Mylar	AC
L601	RCiLZ1005CEZZ	R	Coil	AH	C366	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC
L603	RCiLZA053WJZZ	R	Coil	AG	C367	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC
▲ L701	RCiLFA144WJZZ	R	Coil	AG	C370	VCKYCY1HB153KY	R 0.015	50V Ceramic	AA
L751	RCiLP0179CEZZ+	R	Coil, 47μH	AD	C371	VCKYCY1HB153KY	R 0.015	50V Ceramic	AA
L2001	VP-XF220K0000Y	R	Peaking, 22μH	AB	C374	VCKYCY1HB221KY	R 220p	50V Ceramic	AA
L2003	VP-MK560K0000+	R	Peaking, 56μH	AB	C375	VCKYCY1HB221KY	R 220p	50V Ceramic	AA
L2004	VPCEM100MR70NYR	R	Peaking, 10μH	AC	C376	VCFYFA1HA394J+	R 0.39	50V Mylar	AC
L2005	VPCEM100MR70NYR	R	Peaking, 10μH	AC	C377	VCEA0A1EW477M+	R 470	25V Electrolytic	AD
L2006	VPCEM100MR70NYR	R	Peaking, 10μH	AC	C378	VCEA0A1EW477M+	R 470	25V Electrolytic	AD
L2007	VPCEM100MR70NYR	R	Peaking, 10μH	AB	C379	VCEA0A1HW226M+	R 22	50V Electrolytic	AB
L2009	VP-DF100K0000Y	R	Peaking, 10μH	AB	C380	VCEA0A1EW477M+	R 470	25V Electrolytic	AD
L2010	VP-DF100K0000Y	R	Peaking, 10μH	AB	C384	VCEA0A1EW477M+	R 470	25V Electrolytic	AD
L2011	VPCEM100MR70NYR	R	Peaking, 10μH	AC	C390	VCEA0A1CW477M+	R 470	16V Electrolytic	AC
L2012	VP-DF100K0000Y	R	Peaking, 10μH	AB	C501	VCKYCY1HB102KY	R 1000p	50V Ceramic	AA
L2013	VPCEM100MR70NYR	R	Peaking, 10μH	AC	C502	VCKYPA1HB102K+	R 1000p	50V Ceramic	AA
L2014	VP-DF100K0000Y	R	Peaking, 10μH	AB	C503	VCKYPA1HB102K+	R 1000p	50V Ceramic	AA
L2100	VP-DF100K0000Y	R	Peaking, 10μH	AB	C504	VCEA0A1EW108M	R 1000	25V Electrolytic	AD
▲ T601	RTRNZA050WJZZ	R	Transformer	AF	C506	VCKYCY1HB331KY	R 330p	50V Ceramic	AA
▲ T602	RTRNFA100WJZZ	R	H-Volt Transformer	AX	C508	VCKYTV1HF104ZY	R 0.1	50V Ceramic	AB
▲ T701	RTRNWA134WJZZ	R	Transformer	AR	C509	VCKYTV1HF104ZY	R 0.1	50V Ceramic	AB
CAPACITORS					C510	VCEA0A1EW108M	R 1000	25V Electrolytic	AD
C51	VCEA9M1HW475M+	R 4.7	50V Electrolytic	AB	C511	VCKYTV1HF104ZY	R 0.1	50V Ceramic	AB
C53	VCEA0A0JW338M	R 3300	6.3V Electrolytic	AD	C512	VCEA0A1VW107M+	R 100	35V Electrolytic	AC
C55	VCEA0A1HW105M+	R 1	50V Electrolytic	AB	C513	VCFYFA1HA224J+	R 0.22	50V Mylar	AB
C201	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C514	VCKYPA1HB471K+	R 470p	50V Ceramic	AA
C202	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C515	VCKYPA1HB472K+	R 4700p	50V Ceramic	AB
C205	VCEA9M1HW106M+	R 10	50V Electrolytic	AB	C516	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA
C206	VCEA9M1HW106M+	R 10	50V Electrolytic	AB	C517	RC-FZ0272CEZZ+	R 0.39	100V M. Polypro	AD
C207	VCEA9M1CW106M+	R 10	16V Electrolytic	AB	C518	VCEA0A1HW107M+	R 100	50V Electrolytic	AB
C208	VCEA9M1HW225M+	R 2.2	50V Electrolytic	AB	C519	VCEA9M1HW474M+	R 0.47	50V Electrolytic	AB
C209	VCEA9M1HW225M+	R 2.2	50V Electrolytic	AB	C520	VCCCCY1HH102JY	R 1000p	50V Ceramic	AB
C210	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C521	VCCCCY1HH102JY	R 1000p	50V Ceramic	AB
C211	VCKYCY1HB332KY	R 3300p	50V Ceramic	AA	C522	VCEA9M1HW106M+	R 10	50V Electrolytic	AB
C212	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C523	VCKYCY1HB223KY	R 0.022	50V Ceramic	AA
C214	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C524	VCEA0A1HW224M+	R 0.22	50V Electrolytic	AB
C215	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C525	VCEA9M1HW105M+	R 1	50V Electrolytic	AB
C216	VCKYCY1AB105KY	R 1	10V Ceramic	AB	C526	VCQYTA1HM682K+	R 6800p	50V Mylar	AA
C217	VCEA0A1CW107M+	R 100	16V Electrolytic	AC	C527	VCQYTA1HM103J+	R 0.01	50V Mylar	AB
C218	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C528	VCEA0A1AW107M+	R 100	10V Electrolytic	AB
C219	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C529	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA
C222	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C530	VCE9GA1CW106M+	R 10	16V Electrolytic	AB
C223	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C531	VCEA0A2AW225M+	R 2.2	100V Electrolytic	AB
C224	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C532	VCKYPA1HB102K+	R 1000p	50V Ceramic	AA
C301	VCEA9M1HW105M+	R 1	50V Electrolytic	AB	C534	RC-KZ1007CEZZ	R 820p	1kV Ceramic	AC
C303	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC	C600	VCFPFA2EB154J	R 0.15	250V M. Polypro	AC
C305	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	C601	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA
C306	VCKYCY1HB331KY	R 33p	50V Ceramic	AA	▲ C602	VCFPVC3ZA223H	R 0.022	1.8kV M. Polypro	AD
C307	VCKYCY1HB103KY	R 0.01	50V Ceramic	AA	▲ C603	VCQPPC2JB473J	R 0.047	630V Mylar	AC
C308	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C605	VCKYPA2HB102K+	R 1000p	500V Ceramic	AA
C309	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC	C606	VCKYPH3DB561K	R 560p	2kV Ceramic	AC
C310	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C607	RC-KZ0106GEZZ	R 3300p	250V Ceramic	AG
C311	VCCCCY1HH470JY	R 47p	50V Ceramic	AA	C608	VCEA4A2EN106M+	R 10	250V Electrolytic	AD
C312	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C609	VCKYPA2HB102K+	R 1000p	500V Ceramic	AA
C313	VCKYCY1HB153KY	R 0.015	50V Ceramic	AA	C610	VCEA0A1EW108M	R 1000	25V Electrolytic	AD
C314	VCKYCY1HB221KY	R 220p	50V Ceramic	AA	▲ C611	VCEA0A1VW476M+	R 47	35V Electrolytic	AB
C315	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC	C612	VCKYPA2HB151K+	R 150p	500V Ceramic	AB
C316	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C613	VCCCCY1HH101JY	R 100p	50V Ceramic	AA
C317	VCKYTV1HF224ZY	R 0.22	50V Ceramic	AC	▲ C614	VCEA0A1VW336M+	R 33	35V Electrolytic	AA
C318	VCKYCY1HB104KY	R 0.1	50V Ceramic	AA	C615	VCKYPA2HB102K+	R 1000p	500V Ceramic	AA
					C616	VCEA0A1EW108M	R 1000	25V Electrolytic	AD
					C617	VCQYTA2AA104K+	R 0.1	100V Mylar	AB
					C618	RC-KZ0033CEZZ	R 150p	2kV Ceramic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C620	VCKYPA1HB472K+ R	4700p	50V Ceramic	AB	C2012	VCKYCY1HB102KYR	1000p	50V Ceramic	AA
C621	VCEA0A1HW476M+R	47	50V Electrolytic	AB	C2013	VCCCCY1HH7R0DYR	7p	50V Ceramic	AA
C622	VCKYPA2HB561K+ R	560p	500V Ceramic	AA	C2014	VCCCCY1HH7R0DYR	7p	50V Ceramic	AA
C623	VCKYPA2HB272K+ R	2700p	500V Ceramic	AB	C2017	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C624	VCEA9M1HW475M+R	4.7	50V Electrolytic	AB	C2018	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C625	VCQYTA1HM104K+R	0.1	50V Mylar	AC	C2019	VCEA9M1CW107M+R	100	16V Electrolytic	AB
C627	RC-FZA178WJZZ R	4.7	100V M.Polypro	AG	C2020	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C635	RC-FZ0363CEZZ R	0.56	250V M.Polypro	AF	C2021	VCEA9M1CW107M+R	100	16V Electrolytic	AB
C636	RC-FZ0357CEZZ R	0.22	250V M.Polypro	AE	C2022	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C644	VCCCCY1HH102JYR	1000p	50V Ceramic	AB	C2023	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C645	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	C2025	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C701	VCKYPA1HB102K+ R	1000p	50V Ceramic	AA	C2026	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C702	RC-EZA534WJZZ R	330	400V Electrolytic	AP	C2027	VCEA9M1CW107M+R	100	16V Electrolytic	AB
C703	RC-KZ018JCEZZ R	0.01	250V Ceramic	AC	C2028	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C704	RC-KZ018JCEZZ R	0.01	250V Ceramic	AC	C2029	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C705	VCIFYA1HA104J+ R	0.1	50V Mylar	AA	C2030	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C706	VCEA0A1VW106M+R	10	35V Electrolytic	AB	C2032	VCEA0A1JW227M+ R	220	63V Electrolytic	AC
C707	RC-KZ1007CEZZ R	8200p	1kV Ceramic	AC	C2034	VCIFYA1HA224J+ R	0.22	50V Mylar	AB
C708	VCEA9M1HW105M+R	1	50V Electrolytic	AB	C2035	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C709	VCKYPA1HB221K+ R	220p	50V Ceramic	AA	C2036	VCKYCY1CF224ZY R	0.22	16V Ceramic	AB
C711	RC-FZA097WJZZ R	0.22	250V M.Polypro	AC	C2038	VCEA9M1HW105M+R	1	50V Electrolytic	AB
C713	VCEA9M1CW106M+R	10	16V Electrolytic	AB	C2039	VCKYCY1CF334ZY R	0.33	16V Ceramic	AB
C714	VCKYCY1HB103KYR	0.01	50V Ceramic	AA	C2040	VCEA9M1CW107M+R	100	16V Electrolytic	AB
C717	VCIFYA2JA103K+ R	0.01	630V Mylar	AC	C2041	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C751	VCEA0A1CW476M+R	47	16V Electrolytic	AB	C2042	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C752	VCEA0A1EW478M R	4700	25V Electrolytic	AG	C2044	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
△ C753	RC-KZ022SCEZZ R	3900p	4kV Ceramic	AD	C2045	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C754	RC-EZA065WJZZ R	330	160V Electrolytic	AK	C2046	VCEA0A1AW107M+R	100	10V Electrolytic	AB
C755	RC-EZA065WJZZ R	330	160V Electrolytic	AK	C2047	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C756	RC-KZ0226CEZZ+ R	180p	2kV Ceramic	AC	C2048	VCKYCY1HB104KYR	0.1	50V Ceramic	AA
C757	VCEA0A1CW476M R	47	16V Electrolytic	AB	C2100	VCEA0A1CW226M+R	22	16V Electrolytic	AB
C758	RC-KZ0120GEZZ R	150p	2V Ceramic	AC	C2101	VCKYCY1AB334KYR	0.33	10V Ceramic	AB
C759	VCEA0A1EW108M R	1000	25V Electrolytic	AD	RESISTORS				
C761	VCKYPA2HB101K+ R	100p	500V Ceramic	AB	JA38	VRD-RA2BE101JY R	100	1/8W Carbon	AA
C763	VCEA0A1HW105M+R	1	50V Electrolytic	AB	R51	VRS-CY1JF000JY R	0	1/16W Metal Oxide	AA
C764	VCKYPA2HB101K+ R	100p	500V Ceramic	AB	R52	VRD-RA2BE103JY R	10K	1/8W Carbon	AA
C765	VCEA0A1EW108M R	1000	25V Electrolytic	AD	R53	VRS-CY1JF563JY R	56K	1/16W Metal Oxide	AA
C766	VCKYPA2HB101K+ R	100p	500V Ceramic	AB	R54	VRS-CY1JF101JY R	100	1/16W Metal Oxide	AA
C767	VCKYCY1HB153KYR	0.015	50V Ceramic	AA	R55	VRS-CY1JF101JY R	100	1/16W Metal Oxide	AA
C768	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R103	VRS-VV3DB123JY R	12K	2W Metal Oxide	AA
C773	VCEA0A1HW106M+R	10	50V Electrolytic	AB	R201	VRS-CY1JF222JY R	2.2K	1/16W Metal Oxide	AA
C904	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R204	VRS-CY1JF222JY R	2.2K	1/16W Metal Oxide	AA
C905	VCKYCY1HB103KYR	0.01	50V Ceramic	AA	R205	VRS-CY1JF471JY R	470	1/16W Metal Oxide	AA
C907	VCEA0A1HW106M+R	10	50V Electrolytic	AB	R2052	VRS-CY1JF332JY R	3.3K	1/16W Metal Oxide	AA
C908	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R206	VRS-CY1JF392JY R	3.9K	1/16W Metal Oxide	AA
C911	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R207	VRS-CY1JF272JY R	2.7K	1/16W Metal Oxide	AA
C912	VCKYCY1HB103KYR	0.01	50V Ceramic	AA	R208	VRS-CY1JF101JY R	100	1/16W Metal Oxide	AA
C922	VCKYCY1HB183KYR	0.018	50V Ceramic	AA	R210	VRD-RA2BE122JY R	1.2K	1/8W Carbon	AA
C923	VCKYCY1HB183KYR	0.018	50V Ceramic	AA	R212	VRS-CY1JF682JY R	6.8K	1/16W Metal Oxide	AA
C928	VCEA0A1CW106M+R	10	16V Electrolytic	AB	R214	VRS-CY1JF222JY R	2.2K	1/16W Metal Oxide	AA
C930	VCEA0A1CW106M+R	10	16V Electrolytic	AB	R216	VRS-CY1JF222JY R	2.2K	1/16W Metal Oxide	AA
C931	VCEA0A1CW477M+R	470	16V Electrolytic	AC	R217	VRD-RA2BE223JY R	22K	1/8W Carbon	AA
C934	VCEA0A1HW105M+R	1	50V Electrolytic	AB	R218	VRS-CY1JF223JY R	22K	1/16W Metal Oxide	AA
C935	VCEA0A1HW105M+R	1	50V Electrolytic	AB	R219	VRS-CY1JF223JY R	22K	1/16W Metal Oxide	AA
C937	VCEA0A1HW106M+R	10	50V Electrolytic	AB	R220	VRD-RA2BE223JY R	22K	1/8W Carbon	AA
C938	VCEA0A1HW106M+R	10	50V Electrolytic	AB	R221	VRS-CY1JF181JY R	180	1/16W Metal Oxide	AA
C939	VCEA0A1CW227M+R	220	16V Electrolytic	AC	R227	VRS-CY1JF680JY R	68	1/16W Metal Oxide	AA
C942	VCEA0A1HW106M+R	10	50V Electrolytic	AB	R228	VRS-CY1JF102JY R	1K	1/16W Metal Oxide	AA
C944	RC-EZA559WJZZ R		Electrolytic	AF	R230	VRS-CY1JF391JY R	390	1/16W Metal Oxide	AA
C948	VCCCCY1HH180JYR	18p	50V Ceramic	AA	R303	VRS-CY1JF100JY R	10	1/16W Metal Oxide	AA
C952	VCCCCY1HH681JYR	680p	50V Ceramic	AB	R304	VRS-CY1JF100JY R	10	1/16W Metal Oxide	AA
C953	VCCCCY1HH681JYR	680p	50V Ceramic	AB	R305	VRS-CY1JF103JY R	10K	1/16W Metal Oxide	AA
C956	VCCCCY1HH681JYR	680p	50V Ceramic	AB	R310	VRD-RA2BE123JY R	12K	1/8W Carbon	AA
C957	VCCCCY1HH681JYR	680p	50V Ceramic	AB	R311	VRS-CY1JF562JY R	5.6K	1/16W Metal Oxide	AA
C959	VCCCCY1HH681JYR	680p	50V Ceramic	AB	R315	VRS-CY1JF273JY R	27K	1/16W Metal Oxide	AA
C960	VCCCCY1HH681JYR	680p	50V Ceramic	AB	R317	VRS-CY1JF562JY R	5.6K	1/16W Metal Oxide	AA
C963	VCEA0A1HW106M+R	10	50V Electrolytic	AB	R320	VRS-CY1JF562JY R	5.6K	1/16W Metal Oxide	AA
C965	VCKYCY1HB103KYR	0.01	50V Ceramic	AA	R321	VRS-CY1JF100JY R	10	1/16W Metal Oxide	AA
C2004	VCEA0A1CW226M+R	22	16V Electrolytic	AB	R322	VRS-CY1JF100JY R	10	1/16W Metal Oxide	AA
C2005	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R323	VRS-CY1JF562JY R	5.6K	1/16W Metal Oxide	AA
C2006	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R336	VRS-VV3AB220J R	22	1W Metal Oxide	AA
C2007	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R337	VRS-VV3AB220J R	22	1W Metal Oxide	AA
C2008	VCKYCY1HB104KYR	0.1	50V Ceramic	AA	R339	VRN-VV3AB4R7J R	4.7	1W Metal Film	AA
C2009	VCEA9M1CW106M+R	10	16V Electrolytic	AB	R340	VRN-VV3AB4R7J R	4.7	1W Metal Film	AA
C2010	VCKYCY1HB104KYR	0.1	50V Ceramic	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R344	VRS-CY1JF822JY	R	8.2K 1/16W Metal Oxide	AA	R715	VRS-CY1JF154JY	R	150K 1/16W Metal Oxide	AA
R347	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA	R716	VRN-VV3DBR22J	R	0.22 2W Metal Film	AB
R348	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA	R717	VRS-VV3DB104J	R	100K 2W Metal Oxide	AB
R355	VRS-CY1JF822JY	R	8.2K 1/16W Metal Oxide	AA	R752	VRS-VV3AB330J	R	33 1W Metal Oxide	AA
R375	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R753	VRD-RA2EE471JY	R	470 1/4W Carbon	AA
R376	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R760	VRS-CY1JF102JY	R	1K 1/16W Metal Oxide	AA
R377	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R761	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA
R378	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R762	VRS-VV3DB220J	R	22 2W Metal Oxide	AA
R390	VRN-VV3ABR22J	R	0.22 1W Metal Film	AA	R763	VRD-RA2BE470JY	R	47 1/8W Carbon	AA
R391	VRN-VV3ABR22J	R	0.22 1W Metal Film	AA	R764	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA
R392	VRS-CY1JF333JY	R	33K 1/16W Metal Oxide	AA	R765	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA
R393	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA	R767	VRS-VV3DB220J	R	22 2W Metal Oxide	AA
R394	VRS-CY1JF333JY	R	33K 1/16W Metal Oxide	AA	R768	VRD-RA2EE182JY	R	1.8K 1/4W Carbon	AA
R395	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA	R769	VRD-RA2BE821JY	R	820 1/8W Carbon	AA
R396	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA	R901	VRS-CY1JF000JY	R	0 1/16W Metal Oxide	AA
R397	VRS-CY1JF333JY	R	33K 1/16W Metal Oxide	AA	R902	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA
R501	VRS-CY1JF562JY	R	5.6K 1/16W Metal Oxide	AA	R903	VRS-CY1JF750JY	R	75 1/16W Metal Oxide	AA
R502	VRS-CY1JF123JY	R	12K 1/16W Metal Oxide	AA	R905	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R503	VRD-RA2BE222JY	R	2.2K 1/8W Carbon	AA	R906	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R504	VRD-RA2BE822JY	R	8.2K 1/8W Carbon	AA	R907	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R505	VRS-CY1JF123JY	R	12K 1/16W Metal Oxide	AA	R908	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R507	VRN-RA2BK272FY	R	2.7K 1/8W Metal Film	AA	R909	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R508	VRD-RA2BE683JY	R	68K 1/8W Carbon	AA	R910	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R513	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA	R911	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R514	VRN-VV3ABR82J	R	0.82 1W Metal Film	AA	R912	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R515	VRS-VV3DB221J	R	220 2W Metal Oxide	AA	R913	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R516	VRS-VV3DB471J	R	470 2W Metal Oxide	AA	R914	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R518	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R915	VRS-CY1JF000JY	R	0 1/16W Metal Oxide	AA
R519	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R917	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA
R520	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R918	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA
R521	VRS-CY1JF123JY	R	12K 1/16W Metal Oxide	AA	R919	VRS-CY1JF000JY	R	0 1/16W Metal Oxide	AA
R522	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R920	VRS-CY1JF103JY	R	10K 1/16W Metal Oxide	AA
R523	VRD-RM2HD680JY	R	68 1/2W Carbon	AA	R921	VRS-CY1JF000JY	R	0 1/16W Metal Oxide	AA
R524	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA	R926	VRS-CY1JF151JY	R	150 1/16W Metal Oxide	AA
R525	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R928	VRD-RA2BE333JY	R	33K 1/8W Carbon	AA
R600	VRS-CY1JF393FY	R	39K 1/16W Metal Oxide	AA	R930	VRS-CY1JF750JY	R	75 1/16W Metal Oxide	AA
R602	VRS-SV2HC270J	R	27 1/2W Metal Oxide	AA	R931	VRS-CY1JF750JY	R	75 1/16W Metal Oxide	AA
⚠ R603	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R932	VRS-CY1JF750JY	R	75 1/16W Metal Oxide	AA
⚠ R604	VRN-VV3AB4R7J	R	4.7 1W Metal Film	AA	R933	VRS-CY1JF151JY	R	150 1/16W Metal Oxide	AA
⚠ R605	VRD-RA2EE103GY	R	10K 1/4W Carbon	AA	R934	VRS-CY1JF750JY	R	75 1/16W Metal Oxide	AA
⚠ R606	VRN-VV3ABR47J	R	0.47 1W Metal Film	AA	R935	VRS-CY1JF104JY	R	100K 1/16W Metal Oxide	AA
⚠ R607	VRD-RA2EE103JY	R	10K 1/4W Carbon	AA	R936	VRS-CY1JF122JY	R	1.2K 1/16W Metal Oxide	AA
⚠ R608	VRS-CY1JF393JY	R	39K 1/16W Metal Oxide	AA	R938	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R609	VRN-VV3DBR8J	R	6.8 2W Metal Film	AB	R942	VRS-CY1JF122JY	R	1.2K 1/16W Metal Oxide	AA
⚠ R610	VRN-VV3DBR15J	R	0.15 2W Metal Film	AB	R944	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R611	VRS-VV3DB332J	R	3.3K 2W Metal Oxide	AA	R945	VRS-CY1JF473JY	R	47K 1/16W Metal Oxide	AA
R612	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R947	VRD-RA2BE561JY	R	560 1/8W Carbon	AA
R614	VRD-RM2HD124JY	R	120K 1/2W Carbon	AA	R948	VRS-CY1JF473JY	R	47K 1/16W Metal Oxide	AA
R615	VRD-RM2HD154JY	R	150K 1/2W Carbon	AA	R949	VRS-CY1JF561JY	R	560 1/16W Metal Oxide	AA
R616	VRD-RM2HD472JY	R	4.7K 1/2W Carbon	AA	R950	VRS-CY1JF102JY	R	1K 1/16W Metal Oxide	AA
⚠ R617	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R952	VRS-CY1JF102JY	R	1K 1/16W Metal Oxide	AA
R618	VRN-VV3ABR47J	R	0.47 1W Metal Film	AA	R956	VRD-RA2BE560JY	R	56 1/8W Carbon	AA
R619	VRS-SV2HC102J	R	1K 1/2W Metal Oxide	AA	R957	VRS-CY1JF331JY	R	330 1/16W Metal Oxide	AA
⚠ R620	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA	R959	VRS-CY1JF223JY	R	22K 1/16W Metal Oxide	AA
R621	VRD-RM2HD220JY	R	22 1/2W Carbon	AA	R960	VRS-CY1JF331JY	R	330 1/16W Metal Oxide	AA
R622	VRD-RA2BE394JY	R	390K 1/8W Carbon	AA	R963	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R638	VRS-CY1JF473JY	R	47K 1/16W Metal Oxide	AA	R964	VRD-RA2BE123JY	R	12K 1/8W Carbon	AA
R639	VRS-KA3NG152J	R	1.5K 7W Metal Oxide	AD	R967	VRD-RA2BE333JY	R	33K 1/8W Carbon	AA
R640	VRS-CY1JF182JY	R	1.8K 1/16W Metal Oxide	AA	R968	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R643	VRN-VV3LB3R3J	R	3.3 3W Metal Film	AB	R969	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA
R645	VRD-RA2BE473JY	R	47K 1/8W Carbon	AA	R970	VRD-RA2BE333JY	R	33K 1/8W Carbon	AA
R652	VRS-CY1JF102JY	R	1K 1/16W Metal Oxide	AA	R971	VRS-CY1JF562JY	R	5.6K 1/16W Metal Oxide	AA
R654	VRS-VV3DB103J	R	10K 2W Metal Oxide	AA	R972	VRD-RA2BE333JY	R	33K 1/8W Carbon	AA
R657	VRS-KA3HG681J	R	680 5W Metal Oxide	AD	R977	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R669	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R978	VRS-CY1JF104JY	R	100K 1/16W Metal Oxide	AA
R671	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R979	VRS-CY1JF104JY	R	100K 1/16W Metal Oxide	AA
R701	VRD-RM2HD100JY	R	10 1/2W Carbon	AA	R1032	VRS-CY1JF122JY	R	1.2K 1/16W Metal Oxide	AA
R702	VRD-RA2EE152JY	R	1.5K 1/4W Carbon	AA	R1034	VRD-RA2BE122JY	R	1.2K 1/8W Carbon	AA
R703	VRD-RA2EE473JY	R	47K 1/4W Carbon	AA	R2001	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA
R704	VRD-RA2BE101JY	R	100 1/8W Carbon	AA	R2002	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R705	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R2004	VRS-CY1JF332JY	R	3.3K 1/16W Metal Oxide	AA
R706	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA	R2005	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R707	VRS-VV3DB104J	R	100K 2W Metal Oxide	AB	R2006	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R709	VRN-VV3DBR22J	R	0.22 2W Metal Film	AB	R2007	VRS-CY1JF222JY	R	2.2K 1/16W Metal Oxide	AA
⚠ R712	RR-HZ0014GEZZY	R	12M 1W	AE	R2008	VRS-CY1JF101JY	R	100 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R2009	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2010	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2011	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2012	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2013	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2015	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2016	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2017	VRS-CY1JF102JY	R 1K	1/16W Metal Oxide	AA
R2018	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2019	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2020	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2021	VRD-RA2BE100JY	R 10	1/8W Carbon	AA
R2022	VRS-CY1JF100JY	R 10	1/16W Metal Oxide	AA
R2023	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2024	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2025	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2028	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2029	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2030	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2031	VRS-VV3AB100J	R 10	1W Metal Oxide	AA
R2033	VRS-CY1JF684JY	R 680K	1/16W Metal Oxide	AA
R2034	VRS-VV3AB100J	R 10	1W Metal Oxide	AA
R2035	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2036	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R2038	VRS-CY1JF333JY	R 33K	1/16W Metal Oxide	AA
R2039	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2040	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA
R2042	VRS-CY1JF332JY	R 3.3K	1/16W Metal Oxide	AA
R2043	VRS-CY1JF332JY	R 3.3K	1/16W Metal Oxide	AA
R2044	VRS-CY1JF103JY	R 10K	1/16W Metal Oxide	AA
R2101	VRD-RA2BE563GY	R 56K	1/8W Carbon	AA
R2102	VRD-RA2BE333GY	R 33K	1/8W Carbon	AB
R2103	VRD-RA2BE333GY	R 33K	1/8W Carbon	AB
R2104	VRS-CY1JF472JY	R 4.7K	1/16W Metal Oxide	AA
R2105	VRS-CY1JF472JY	R 4.7K	1/16W Metal Oxide	AA
R2106	VRD-RA2BE563GY	R 56K	1/8W Carbon	AA
R2107	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
RJ10	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ11	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ12	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ15	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ16	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ18	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ19	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ20	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ21	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ22	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ23	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ24	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ25	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ27	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ32	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ33	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ36	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ37	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ38	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ40	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ41	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ51	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ236	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ307	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ457	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ501	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ506	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ701	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ901	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ904	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ909	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ921	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ922	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ923	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ924	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ926	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ927	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ928	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
RJ929	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ938	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ939	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ940	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ960	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ961	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA
RJ963	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

FB303	RBLN-0047CEZZY	R	Balun	AB
FB304	RBLN-0047CEZZY	R	Balun	AB
FB501	RBLN-0047CEZZY	R	Balun	AB
FB502	RBLN-0047CEZZY	R	Balun	AB
FB601	RBLN-0047CEZZY	R	Balun	AB
FB602	RBLN-0047CEZZY	R	Balun	AB
FB503	RBLN-0020CEZZ+	R	Balun	AB
FB603	RBLN-0020CEZZ+	R	Balun	AB
FB702	RBLN-0020CEZZ+	R	Balun	AB
FB703	RBLN-0020CEZZ+	R	Balun	AB
FB751	RBLN-0020CEZZ+	R	Balun	AB
FB752	RBLN-0020CEZZ+	R	Balun	AB
J905	QTANJA056WJZZ	R	Terminal	AH
J907	QSOCDA023WJZZ	R	Socket	AE
P301	QPLGN0461CEZZ	R	Plug, 4pin(SP)	AB
P401	QPLGN0878GEZZ	R	Plug, 8pin(KY)	AC
△ P601	QPLGN0160FJZZ	R	Plug, 5pin(K)	AD
P621	QPLGN0761CEZZ	R	Plug, 7pin(H)	AD
P701	QPLGN0260CEZZ	R	Plug, 2pin	AC
P702	QPLGN0269GEZZ	R	Plug, 2pin(AC)	AB
P1001	QPLGN0761CEZZ	R	Plug, 7pin(CC)	AD
P1002	QPLGN0678GEZZ	R	Plug, 6pin(CA)	AB
P1003	QPLGN0778GEZZ	R	Plug, 7pin(CD)	AC
P1004	QPLGN0461CEZZ	R	Plug, 4pin(CB)	AB
P2100	QPLGN0661CEZZ	R	Plug, 6pin	AD
△ RDA602	PRDARA123WJPW	R	Heat Sink	AF
△ RDA604	PRDARA113WJPW	R	Heat Sink, For Q604	AF
△ RDA701	PRDARA140WJPW	R	Heat Sink, For IC701	AG
△ RDA751	PRDAR5072CEFW	R	Heat Sink, For IC751	AC
△ RY701	RRLYJ0089CEZZ	R	Relay	AG
TP53	QLUGP0102PEZZ	R	Lug	AA

PWB-B DUNTKC519WEA1 CRT Unit

INTEGRATED CIRCUITS

IC851	VHITDA6107A-1	R	TDA6107AJF/N1	AK
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TRANSISTORS

Q1501	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q1502	VS2SA1266-Y-1+	R	2SA1266-Y	AA
Q1503	VS2SA2005++1E	R	2SA2005	AE
Q1504	VS2SC5511++1E	R	2SC5511	AE
Q1505	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q1506	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q1507	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q1508	VS2SC3198-Y-1+	R	2SC3198-Y	AA

DIODES AND LED'S

D851	RH-DX0220CEZZY	R	Diode	AB
D852	RH-DX0220CEZZY	R	Diode	AB
D853	RH-DX0220CEZZY	R	Diode	AB
D854	RH-DX0220CEZZY	R	Diode	AB
D855	RH-DX0220CEZZY	R	Diode	AB
D856	RH-DX0220CEZZY	R	Diode	AB
D1501	VHD1SS133++-1Y	R	1SS133	AA
D1506	VHD1SS133++-1Y	R	1SS133	AA
D1507	VHD1SS133++-1Y	R	1SS133	AA
D1508	RH-DX0487CEZZY	R	Diode	AC
D1509	RH-DX0487CEZZY	R	Diode	AC

CAPACITORS

C851	VCFYSB2EB823J	R	0.082 250V Mylar	AD
C852	VCEA0A2EW106M+R	10	250V Electrolytic	AD
C853	VCKYPA2HB221K+R	220p	500V Ceramic	AB

Ref. No.	Part No.	★	Description	Code
C854	RC-KZ018JCEZZ	R	0.01 250V Ceramic	AC
C855	VCKYPA2HB221K+	R	220p 500V Ceramic	AB
C857	VCFSB2EB823J	R	0.082 250V Mylar	AD
C858	VCQYTA1HM104J+	R	0.1 50V Mylar	AB
C859	VCEA0A2AW106M+	R	10 100V Electrolytic	AC
C1501	VCEA0A1EW476M+	R	47 25V Electrolytic	AB
C1502	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C1503	VCKYPA2HB472K+	R	4700p 500V Ceramic	AB
C1504	VCKYPA2HB472K+	R	4700p 500V Ceramic	AB
C1505	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C1506	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C1507	VCEA0A1EW476M+	R	47 25V Electrolytic	AB
C1508	VCCSPA2HL560K+	R	56p 500V Ceramic	AA
C1510	VCEA4A2CN106M+	R	10 160V Electrolytic	AC
C1511	VCEA0A1EW476M+	R	47 25V Electrolytic	AB
C1512	VCQYTA1HM822J+	R	8200p 50V Mylar	AA
C1513	VCQYTA1HM103J+	R	0.01 50V Mylar	AB
C1514	VCKYPA1HB391K+	R	390p 50V Ceramic	AA
C1515	VCQYTA1HM103J+	R	0.01 50V Mylar	AB
C1516	VCQYTA1HM104K+	R	0.1 50V Mylar	AC
C1517	VCKYPA2HB102K+	R	1000p 500V Ceramic	AA
JB311	VCKYPA2HB102K+	R	1000p 500V Ceramic	AA

RESISTORS

R851	VRD-RM2HD101JY	R	100 1/2W Carbon	AA
R852	VRD-RM2HD101JY	R	100 1/2W Carbon	AA
R853	VRD-RM2HD101JY	R	100 1/2W Carbon	AA
R854	VRC-MA2HG152KY	R	1.5K 1/2W Solid	AA
R855	VRC-MA2HG152KY	R	1.5K 1/2W Solid	AA
R856	VRC-MA2HG152KY	R	1.5K 1/2W Solid	AA
R858	VRS-SV2HC100J	R	10 1/2W Metal Oxide	AA
R861	VRD-RM2HD224JY	R	220K 1/2W Carbon	AA
R863	VRD-RA2BE221JY	R	220 1/8W Carbon	AA
R864	VRD-RA2BE221JY	R	220 1/8W Carbon	AA
R865	VRD-RA2BE221JY	R	220 1/8W Carbon	AA
R1503	VRD-RA2BE222JY	R	2.2K 1/8W Carbon	AA
R1504	VRD-RA2BE100JY	R	10 1/8W Carbon	AA
R1506	VRD-RA2BE820JY	R	82 1/8W Carbon	AA
R1507	VRD-RA2BE820JY	R	82 1/8W Carbon	AA
R1509	VRD-RA2BE122JY	R	1.2K 1/8W Carbon	AA
R1510	VRD-RA2BE683JY	R	68K 1/8W Carbon	AA
R1511	VRD-RA2BE683JY	R	68K 1/8W Carbon	AA
R1512	VRD-RA2BE122JY	R	1.2K 1/8W Carbon	AA
R1513	VRD-RA2BE123JY	R	12K 1/8W Carbon	AA
△ R1514	VRS-VV3DB221J	R	220 2W Metal Oxide	AA
R1515	VRD-RA2EE560JY	R	56 1/4W Carbon	AA
R1516	VRD-RA2EE560JY	R	56 1/4W Carbon	AA
R1517	VRD-RA2EE1R5JY	R	1.5 1/4W Carbon	AA
R1518	VRD-RA2EE1R0JY	R	1 1/4W Carbon	AA
△ R1519	VRS-VV3DB221J	R	220 2W Metal Oxide	AA
R1520	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA
R1521	VRD-RA2BE223JY	R	22K 1/8W Carbon	AA
R1522	VRD-RA2BE821JY	R	820 1/8W Carbon	AA
R1523	VRD-RA2BE471JY	R	470 1/8W Carbon	AA
R1524	VRD-RA2BE471JY	R	470 1/8W Carbon	AA
R1525	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA
R1526	VRD-RA2BE393JY	R	39K 1/8W Carbon	AA
R1527	VRD-RA2BE182JY	R	1.8K 1/8W Carbon	AA
R1528	VRD-RA2BE331JY	R	330 1/8W Carbon	AA
R1529	VRD-RA2BE273JY	R	27K 1/8W Carbon	AA
R1530	VRD-RA2BE393JY	R	39K 1/8W Carbon	AA
R1531	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA
R1532	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R1534	VRD-RA2BE221JY	R	220 1/8W Carbon	AA

MISCELLANEOUS PARTS

FB852	RBLN-A034WJZZY	R	Balun	AA
FB1501	RBLN-0020CEZZ+	R	Balun	AB
P851	QTiPM0083CEZZ	R	Tip	AB
P852	QTiPM0083CEZZ	R	Tip	AB
P854	QPLGN0261CEZZ	R	Plug, 2pin	AB
P855	QPLGN0761CEZZ	R	Plug, 7pin(H)	AD
P860	QPLGN0878GEZZ	R	Plug, 8pin(KY)	AC
RDA851	PRDAR0248PEFW	R	Heat Sink	AF
RDA1503	PRDAR0083PEFW	R	Heat Sink	AD

Ref. No.	Part No.	★	Description	Code
	RDA1504	PRDAR0083PEFW	R Heat Sink	AD
△ SC851	QSOCVA005WJZZ	R	Socket, 12pin	AE

**PWB-C DUNTKC517WEA2
FRONT Unit****INTEGRATED CIRCUITS**

IC4401	VHiKiA358P+-1	R	KiA358P	AD
△ IC4701	VHiMiP0254/-1	R	MiP0254SPSCF	AL

TRANSISTORS

Q4001	VS2SA1266-Y-1+	R	2SA1266-Y	AA
Q4002	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q4003	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q4004	VS2SC3198-Y-1+	R	2SC3198-Y	AA
Q4005	VS2SC3198-G-1+	R	2SC3198-G	AA
Q4006	VS2SC3198-G-1+	R	2SC3198-G	AA

DIODES AND LED'S

D4001	RH-PXA036WJZZ	R	PhotoDiode	AD
D4002	RH-PXA036WJZZ	R	PhotoDiode	AD
D4003	RH-PX0037PEZZ	R	PhotoDiode	AD
D4301	VHD1SS133+-1Y	R	1SS133	AA
D4401	VHD1SS133+-1Y	R	1SS133	AA
D4402	VHD1SS133+-1Y	R	1SS133	AA
D4701	RH-DX0407CEZZY	R	Diode	AD
D4706	RH-EX1329CEZZY	R	Zener Diode, 5.6V	AD
△ D4707	RH-DX0083GEZZ	R	Diode	AC
△ IC4702	RH-FXA003WJZZ	R	PC123Y82	AD
R4702	RH-HXA014WJZZ+	R	Thermistor	AD

PACKAGED CIRCUIT

△ VA4701	RH-VX0073CEZZ	R	Varistor	AD
△ ACC4701	QACCZA019WJJPZ	R	AC Cord	AH

COIL AND TRANSFORMERS

△ L4701	RCiLFA106WJZZ	R	Coil	AE
L4903	RCiLP0195CEZZ+	R	Coil	AC
△ T4701	RTRNZ0190PEZZ	R	Transformer	AH

CAPACITORS

C4001	VCEA0A1HW476M+	47	50V Electrolytic	AB
C4002	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C4372	VCEA0A1CW476M+	47	16V Electrolytic	AB
C4373	VCEA0A1CW476M+	47	16V Electrolytic	AB
C4376	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA
C4378	VCEA0A1CW106M+	10	16V Electrolytic	AB
C4380	VCEA0A1HW105M+	1	50V Electrolytic	AB
C4381	VCEA0A1HW105M+	1	50V Electrolytic	AB
C4401	VCQYTA1HM104K+	R	0.1 50V Mylar	AC
△ C4701	RC-FZA097WJZZ	R	0.02 250V M.Polypro	AC
C4702	VCKYPA2HB221K+	R	220p 500V Ceramic	AB
△ C4703	VCEA0A2GW475M	R	4.7 400V Electrolytic	AE
△ C4704	VCQYTA1HM104K+	R	0.1 50V Mylar	AC
△ C4705	RC-KZ022SCEZZ	R	3900p 4kV Ceramic	AD
C4706	RC-EZA160WJZZ	R	470 16V Electrolytic	AC
△ C4707	RC-KZ0069GEZZ	R	47p 2kV Ceramic	AC
C4710	VCEA0A1CW476M+	47	16V Electrolytic	AB
C4913	VCKYPA1HB102K+	R	1000p 50V Ceramic	AA
C4916	VCKYPA1HB102K+	R	1000p 50V Ceramic	AA
C4922	VCEA0A1HW106M+	10	50V Electrolytic	AB
C4924	VCEA0A1HW106M+	10	50V Electrolytic	AB

RESISTORS

R4001	VRD-RA2BE221JY	R	220 1/8W Carbon	AA
R4002	VRD-RA2BE331JY	R	330 1/8W Carbon	AA
R4003	VRD-RA2BE681JY	R	680 1/8W Carbon	AA
R4004	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA
R4005	VRD-RA2BE222JY	R	2.2K 1/8W Carbon	AA
R4006	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA
R4008	VRD-RA2BE223JY	R	22K 1/8W Carbon	AA
R4009	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA
R4010	VRD-RA2BE470JY	R	47 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
R4011	VRD-RA2BE223JY	R	22K 1/8W Carbon	AA
R4013	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA
R4021	VRD-RA2BE181JY	R	180 1/8W Carbon	AA
R4022	VRD-RA2BE223JY	R	22K 1/8W Carbon	AA
R4023	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA
R4024	VRD-RA2BE473JY	R	47K 1/8W Carbon	AA
R4025	VRD-RA2BE472JY	R	4.7K 1/8W Carbon	AA
R4026	VRD-RA2BE331JY	R	330 1/8W Carbon	AA
R4028	VRD-RA2BE392JY	R	3.9K 1/8W Carbon	AA
R4031	VRD-RA2BE392JY	R	3.9K 1/8W Carbon	AA
R4033	VRD-RA2BE181JY	R	180 1/8W Carbon	AA
R4359	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA
R4369	VRD-RA2BE100JY	R	10 1/8W Carbon	AA
R4370	VRD-RA2BE100JY	R	10 1/8W Carbon	AA
R4371	VRD-RA2BE332JY	R	3.3K 1/8W Carbon	AA
R4372	VRD-RA2BE332JY	R	3.3K 1/8W Carbon	AA
R4373	VRD-RA2EE680JY	R	68 1/4W Carbon	AA
R4374	VRD-RA2EE680JY	R	68 1/4W Carbon	AA
R4375	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R4376	VRD-RA2BE273JY	R	27K 1/8W Carbon	AA
R4377	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R4378	VRD-RA2BE273JY	R	27K 1/8W Carbon	AA
R4380	VRD-RA2BE104JY	R	100K 1/8W Carbon	AA
R4381	VRD-RA2BE104JY	R	100K 1/8W Carbon	AA
R4401	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
R4402	VRD-RA2BE224JY	R	220K 1/8W Carbon	AA
R4403	VRD-RA2BE393JY	R	39K 1/8W Carbon	AA
R4404	VRD-RA2BE105JY	R	1M 1/8W Carbon	AA
⚠ R4701	VRC-UA2HG275KY	R	2.7M 1/2W Solid	AC
⚠ R4703	VRW-KP3HC330J	R	33 5W Cement	AD
R4912	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA
R4914	VRD-RA2BE103JY	R	10K 1/8W Carbon	AA
R4921	VRD-RA2BE750JY	R	75 1/8W Carbon	AA
R4923	VRD-RA2BE750JY	R	75 1/8W Carbon	AA

SWITCHES

S4001	QSW-K0079GEZZ+	R	Switch, MENU	AB
S4002	QSW-K0079GEZZ+	R	Switch, VOL. UP	AB
S4003	QSW-K0079GEZZ+	R	Switch, CH. DOWN	AB
S4004	QSW-K0079GEZZ+	R	Switch, CH. UP	AB
S4005	QSW-K0079GEZZ+	R	Switch, VOL. DOWN	AB
⚠ S4701	QSW-P0612CEZZ	R	Switch	AG

MISCELLANEOUS PARTS

⚠ F4701	QFS-CA003WJZZ	R	Fuse, 5A 250V	AC
FB4701	RBLN-0094GEZZY	R	Balun	AB
⚠ FB4702	RBLN-0094GEZZY	R	Balun	AB
⚠ FH4701	QFSDH1013CEZZ+	R	Fuse Holder	AC
⚠ FH4702	QFSDH1014CEZZ+	R	Fuse Holder	AC
J4301	QJAKJ0101SEZZ	R	HEAD PHONE JACK	AE
J4901	QJAKG0023WJZZ	R	JACK, 8pin	AE
J4902	QSOCD A033WJZZ	R	Socket, S-VIDEO	AD
P4001	QPLGN0678GEZZ	R	Plug, 6pin(CA)	AB
P4002	QPLGN0461CEZZ	R	Plug, 4pin(CB)	AB
P4003	QPLGN0761CEZZ	R	Plug, 7pin(CC)	AD
P4004	QPLGN0778GEZZ	R	Plug, 7pin(CD)	AC
⚠ P4701	QPLGN0269GEZZ	R	Plug, 2pin	AB
P4702	QPLGN0269GEZZ	R	Plug, 2pin(AC)	AB
RMC4001	RRMCUA024WJZZ	R	Remote Receiver	AG
UNT400	RUNTZA012WJZZ	R	3pin	AM
	LHLDP1056PE00	R	Holder	AC
	LHLDZ1525CEN1	R	Holder	AB

Ref. No.	Part No.	★	Description	Code
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MISCELLANEOUS PARTS

SP301	VSP2204PB048A	R	Speaker(L)	AT
SP302	VSP2204PB048A	R	Speaker(R)	AT
	QCNW-C625WJPZ	R	Connecting Cord	AF
	QCNW-C627WJPZ	R	Connecting Cord	AG
	QCNW-C628WJPZ	R	Connecting Cord	AD
	QCNW-C629WJPZ	R	Connecting Cord	AE
	QCNW-C630WJPZ	R	Connecting Cord	AF
	QCNW-C631WJPZ	R	Connecting Cord	AG
	QCNW-C754WJPZ	R	Connecting Cord	AF
	QCNW-D145WJPZ	R	Connecting Cord	AE
	QCNW-D348WJPZ	R	Connecting Cord	AM

SUPPLIED ACCESSORIES

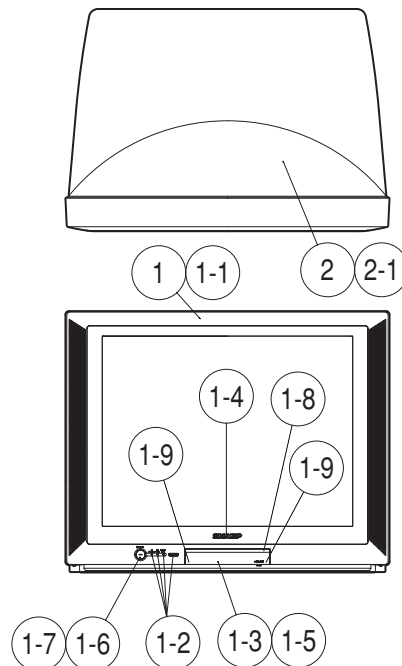
X1	TiNS-B941WJZZ	R	Opearation Manual	AK
X2	RRMCGA271WJSA	R	Infrared Remote Control Unit	AR

**PACKING PARTS
(NOT REPLACEMENT ITEM)**

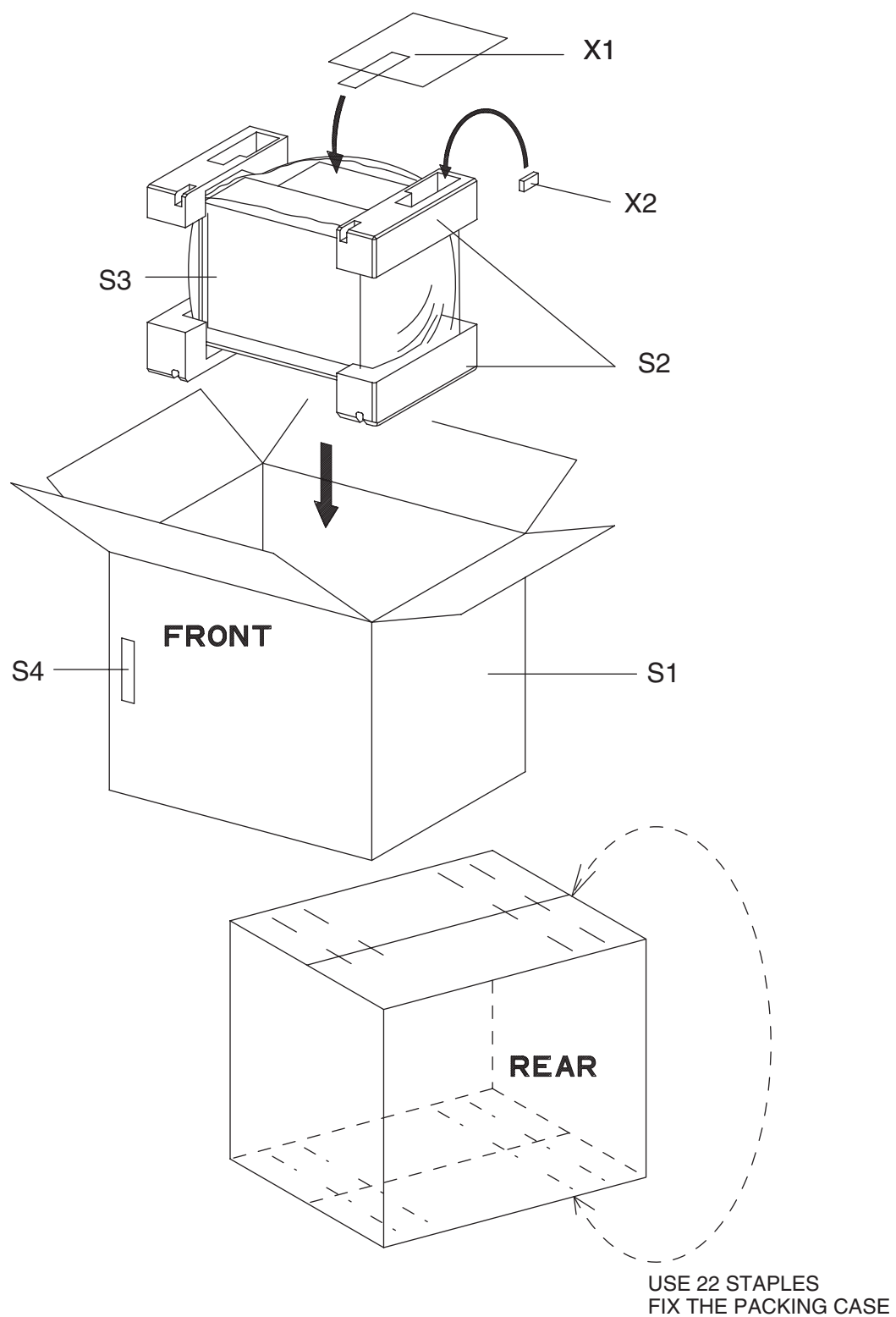
S1	SPAKCC094WJZZ	-	Packing Case	—
S2	SPAKXA414WJZZ	-	Packing Add.	—
S3	SSAKH0018PEZZ	-	Polyethylene Bag	—
S4	TLABKA008WJZZ	-	Sensor Label	—

CABINET PARTS

1	CCABAB064WEV0	R	Front Cabinet Ass'y	BP
1-1	<i>Not Available</i>	-	Front Cabinet	—
1-2	HDECQA377WJSA	R	LED & R/C Dec.	AD
1-3	GDORFA083WJSB	R	Door	AH
1-4	HBDGB3141CESA	R	SHARP Badge	AG
1-5	HiNDPA805WJSA	R	Indication Plate (In door)	AD
1-6	JBTN-A348WJKA	R	Power Button	AD
1-7	MSPRC0005PEFW	R	Power Button Spring	AB
1-8	MSPRPA003WJFW	R	Spring For Door	AB
1-9	PSPAGA026WJZZ	R	Door Spacer x2	AB
2	CCABBA438WEV0	R	Rear Cabinet Ass'y	BL
2-1	<i>Not Available</i>	-	Rear Cabinet	—



PACKING OF THE SET



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