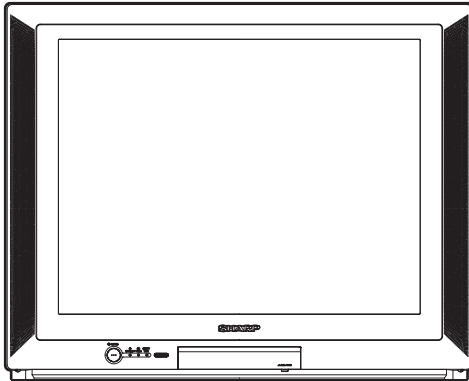


SHARP**SERVICE MANUAL**

SY4C129HFG5RU


COLOUR TELEVISION
Chassis No. GB-4
MODEL 29H-FG5RU

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 (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 TELE TEXT
- NICAM/A2
- 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	Bi-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	10W X 2 (at Max.)
Speaker	
Size	4.3 x 21.8 cm X 2pcs
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)
UHF-Channels	1 thru 12 (Japan)
CATV	13 thru 62 (Japan)
	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): 43.5 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 dag 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 μ A).
 2. To keep the set in a normal operation, please make sure it's function at 30.0kV \pm 1.5kV (at beam 1,700 μ A). 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.
- 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.

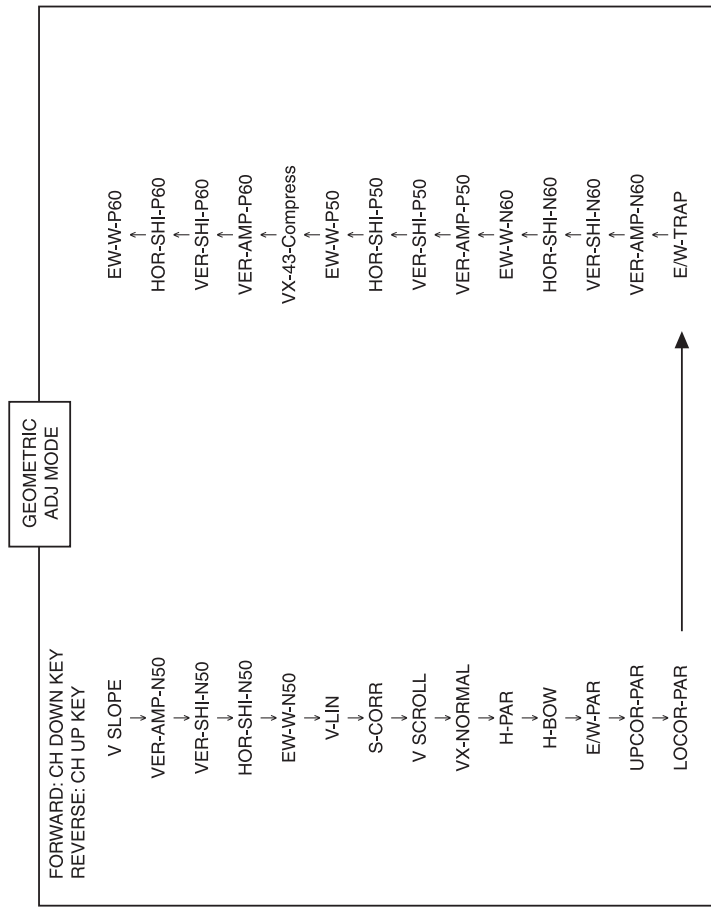
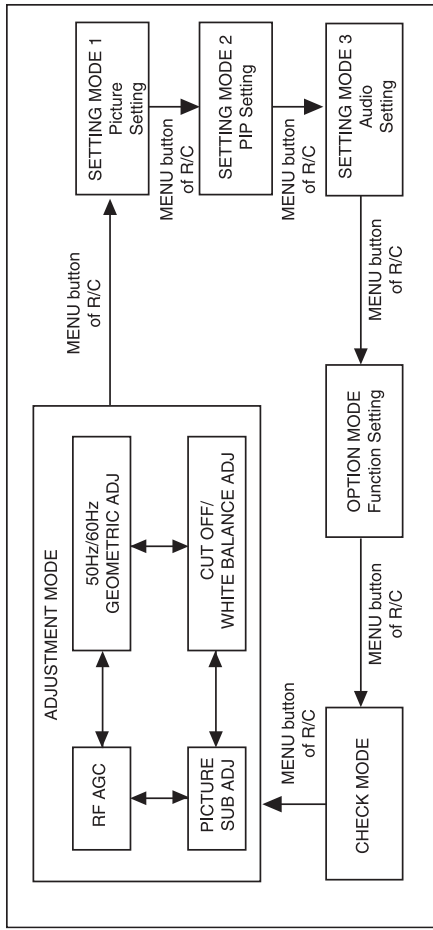
- ① After enter into the SERVICE MODE, change data "INIT EEPROM" from 0 ---> 1 (which is under "CHECK MODE" section) and then switch off the main power, the initial values are automatically preset (only when a new EEPROM is used).
- ② The initial data are preset as listed in page 4 to 11.
- ③ Make sure 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

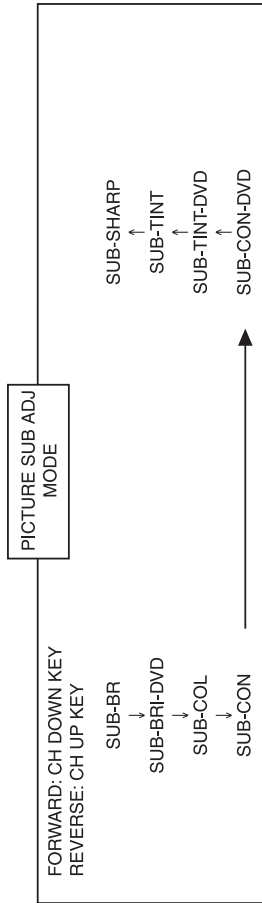
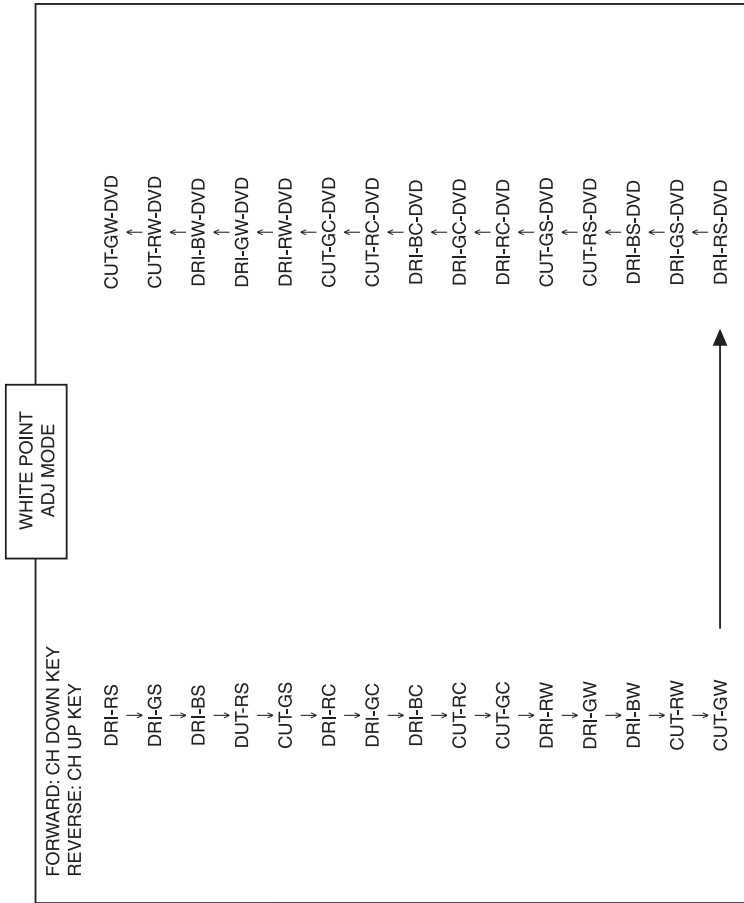
- (1) In the Service Mode, Key is used to select the mode in the following order.



INITIAL SETTING

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

R/C CODE TV-CH.	SREC(SRAC/SYI/STTM)			SREC-SCA (SKD)		
	CH.No.	Fv (MHz)	S-SYSTEM	CH.No.	MCL 2 (R/C CODE 169h)	
					Fv (MHz)	S-SYSTEM
0	SKIP OFF FREE	48.25	B/G	AU-0	590.25	5.5 B/G
1	E-2	48.25	B/G	AU-2	46.25	5.5 B/G
2	E-4/B-3	62.25	5.5 B/G	AU-3	64.25	5.5 B/G
3	OIR-3	77.25	6.5 D/K	AU-4	86.25	5.5 B/G
4	E-5	175.25	5.5 B/G	AU-5A	95.25	5.5 B/G
5	E-6/B-5	182.25	5.5 B/G	AU-6	138.25	5.5 B/G
6	OIR-7	183.25	6.5 D/K	AU-7	175.25	5.5 B/G
7	OIR-8	191.25	6.5 D/K	AU-8	182.25	5.5 B/G
8	E-8/B-7	196.25	5.5 B/G	AU-9	189.25	5.5 B/G
9	J-9	199.25	4.5 M	AU-10	196.25	5.5 B/G
10	E-10/B-9	210.25	5.5 B/G	AU-11	209.25	5.5 B/G
11	E-12/B-1	224.25	5.5 B/G		216.25	5.5 B/G
12	E-21	471.25	5.5 B/G		SKIP OFF FREE	
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 B/G
29	JA-8	193.25	4.5 M		SKIP OFF FREE	
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 B/G
38	S-20	294.25	5.5 B/G		SKIP OFF FREE	
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 B/G
42	B-45	663.25	5.5 B/G	WE-4	62.25	5.5 B/G
43	B-47	679.25	5.5 B/G	OI-3	77.25	6.5 D/K
44	E-5	174.95	5.5 B/G	E-5	175.25	5.5 B/G
45	E-5	175.55	5.5 B/G	OIR-7	183.25	6.5 D/K
46		SKIP OFF FREE		OIR-8	191.25	6.5 D/K
47		SKIP OFF FREE		E-10	210.25	5.5 B/G
48		SKIP OFF FREE		E-12	224.25	5.5 B/G
49		SKIP OFF FREE		I-23	487.25	6.0 I
50		SKIP OFF FREE		WE-25	503.25	5.5 B/G
51		SKIP OFF FREE		E-34	575.25	5.5 B/G



SHIPPING SETTING & CHECKING

(1) The following default data has been factory-set for the E2PROM.

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 1~9.

R/C CODE TV-CH.	SREC/SPAC/SY/IS/TTM		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		E-37	599.25
53	SKIP OFF FREE		JPN-38	621.25
54	SKIP OFF FREE		OI-42	639.25
55	SKIP OFF FREE		I-54	735.25
56	SKIP OFF FREE		E-58	767.25
57	SKIP OFF FREE		WE-64	815.25
58	SKIP OFF FREE		I-69	855.25
59	SKIP OFF FREE		JA-1	91.25
60	SKIP OFF FREE		JA-6	183.25
61	SKIP OFF FREE		JA-8	193.25
62	SKIP OFF FREE		JA-12	217.25
63	SKIP OFF FREE		US-14	471.25
64	SKIP OFF FREE		JA-50	693.25
65	SKIP OFF FREE		S-2	112.25
66	SKIP OFF FREE		S-10	168.25
67	SKIP OFF FREE		S-20	294.25
68	SKIP OFF FREE		S-41	463.25
69	SKIP OFF FREE		E-5	174.95
70	SKIP OFF FREE		E-5	175.55
99	SKIP OFF FREE			SKIP OFF FREE

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)

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

ITEMS	GENERAL	DEFAULT SETTINGS
Last power	ON	
Last TV/AV mode	Program 1	
Last position-TV	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	
VIDEO MODE	PICTURE menu	
CONTRAST	DYNAMIC	
COLOUR	60	
BRIGHTNESS	+6	
TINT	0	
SHARPNESS	+6	
PICTURE NR	OFF	
WHITE TEMP	0 (CENTER)	
SURROUND	SOUND menu	
BBE	OFF	
BALANCE	ON	
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
EQUALIZER menu	
MODE	MOVIE
INSET menu (for PIP mode)	
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	...:.. AM
DAY	SUN
ON TIMER	...:.. AM
STATUS	ONCE
POSITION	---
VOLUME	---
OFF TIMER	...:.. AM
REMINDER	---
BEEP REMINDER	OFF
VIEW TIMER menu	
VIEWING TIME	---
LOCK	OFF
PASSWORD	0000
CH SETTING menu	
POSITION NAME	BLANK (For all position)
COLOUR	All Programs AUTO
SOUND	All Programs AUTO
SKIP	All Programs OFF
SKIP	FM RADIO menu
SKIP	All Programs OFF

Refer to next page for *1 ~ *4.

OPTION MODE MENU

(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	18,000K	ARABIC	AUTO	SET 4
AUSTRALIA	-50,000	12,300K	ENGLISH	AUTO	SET 8
RUSSIA	45,000	7,500K	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
COLOR	+6	+1	-5
BRIGHT	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 COMFY VIEW function.
 (*3) : Only available for model with SAFETY MODE function.
 (*4) : Only available for model with GAME function.

ITEM	SERVICE MODE	EEPROM ITEM	OSD	DATA	INITIAL DATA	SETTING DATA
1	Option Mode	Picture Tube Used Type	TUBE-TYPE	0/1	1	1
2		PIF Frequency Setting	PIF	0..7	2	2
3		Sound M	SND-M	0/1	0	1
4		Sound DK	SND-DK	0/1	1	1
5		Sound I	SND-I	0/1	1	1
6		Sound BG	SND-BG	0/1	1	1
7		Colour System SECAM	SECAM	0/1	1	1
8		Colour System NTSC358	NTSC358	0/1	0	1
9		Colour System NTSC443	NTSC443	0/1	1	1
10		Game IC	GAME-IC	0/1	0	1
11		Picture In Picture	PIP	0/1	0	0
12		Headphone	HEADPHONE	0/1	1	1
13		Equalizer	EQUALIZER	0/1	1	1
14		Sub Woofer	WOOFER	0/1	1	0
15		BBE	BBE	0/1	1	0
16		SRS	SRS	0/1	1	0
17		DOLBY	DOLBY	0/1	0	0
18		Audio Configuration	AUDIO-CFG	0..4	2	2
19		Mono Bilingual	BILINGUAL	0/1	0	0
20		Hotel Mode	HOTEL	0/1	0	0
21		Hotel Volume	HTL-VOL	0..60	30	30
22		Hotel Program Number	HTL-PRG	0..99	1	1
23		HTL-USE-LAST	HTL-USE-LAST	0/1	1	1
24		OPC	OPC	0/1	0	1
25		Rotation Functionality	ROTATION	0/1	0	0
26		Childlock	CHILD	0/1	0	1
27		Wide Screen Signalling	WSS	0/1	0	0
28		Golden SCART	GLD-SCART	0/1	0	0
29		Thailand OSD Language	THAI	0/1	0	0
30		Arabic OSD Language	ARABIC	0/1	1	0
31		Iranian OSD Language	IRANIAN	0/1	0	0
32		Malay OSD Language	MALAY	0/1	1	0
33		Chinese OSD Language	CHINESE	0/1	1	0
34		French OSD Language	FRENCH	0/1	1	0
35		Russian OSD Language	RUSSIAN	0..2	1	1
36		Power On Last Status	PWLAST	0..2	1	1
37		Background	BACK-GND	0/1	0	0
38		Tuner 2	TUNER2	0/1	1	0
39		FM Radio	FM-RADIO	0/1	1	0
40		Curtain Effect	CURTAIN	0/1	1	1
41		Curtain Colour	CURT-COLOUR	0..7	7	7
42		AV1-IN	AV1-IN	0/1	1	1
43		AV1S-IN	AV1S-IN	0/1	1	1
44		AV2-IN	AV2-IN	0/1	1	1
45		Component Input	DVD1-IN	0/1	1	1
46			AV3-IN	0/1	1	1
47			AV3S-IN	0/1	1	1
48			INCL-AV	0/1	1	1
49		Reminder Timer	TIM-REMINDER	0/1	1	1
50		View Timer	TIM-VIEW	0/1	1	1
51		Switch Timer	TIM-SWITCH	0/1	1	1
52		Time Format	TIME-FORMAT	0/1	1	0
53		Off Timer	TIM-OFF	0/1	1	1
54		Commercial Skip Timer	TIM-SKIP	0/1	1	0
55		Teletext Pan-european	TXT-EURO	0/1	1	1
56		Teletext Western	TXT-WEST	0/1	1	1
57		Teletext On	TXT-ON	0/1	1	1
58		Teletext Split	TXT-SPLIT	0/1	1	1
59		Virgin Mode	VIRGIN MODE	0/1	0	0
60		ERR-1-8-SUP	ERR-1-8-SUP	0/1	1	1
61		ERR-XRAY	ERR-XRAY	0/1	1	1
62		ERR-SUPVOL	ERR-SUPVOL	0/1	1	1
63		ERR-VERTG	ERR-VERTG	0/1	1	1
64		LOGO	LOGO	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	E/W-PAR	0...63	UOC-TV	E/W-PAR	35	42
A015	UPCOR-PAR	0...63	UOC-TV	UPCOR-PAR	45	44
A016	LOCOR-PAR	0...63	UOC-TV	LOCOR-PAR	42	47
A017	E/W-TRAP	0...63	UOC-TV	E/W-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	25
A025	EW-W-P50	0...63	UOC-TV	EW-W-P50	32	44
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
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	VER-VX-C	0...63	UOC-TV	VER-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

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
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
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	PIP	SUB-SHARP	0	12
A098	P-POSOFH-50	0...31	PIP	P-POSOFH-50	0	16
A099	P-POSOFV-50	0...7	PIP	P-POSOFV-50	0	3
A100	P-POSOFH-60	0...31	PIP	P-POSOFH-60	0	16
A101	P-POSOFV-60	0...7	PIP	P-POSOFV-60	0	3
A102	P-SUB-TINT	0...63	PIP	P-SUB-TINT	0	32
A103	P-CON-CTM	0...15	PIP	P-CON-CTM	0	4
A104	P-CON-DYN	0...15	PIP	P-CON-DYN	0	4
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	4
A108	P-BKGD-R	0...15	PIP	P-BKGD-R	0	4
A109	P-BKGD-G	0...15	PIP	P-BKGD-G	0	4
A110	P-BKGD-B	0...15	PIP	P-BKGD-B	0	4
A111	P-SUB-COL	0...15	PIP	P-SUB-COL	0	7
A112	P-SUB-SHP	0...7	PIP	P-SUB-SHP	0	3
A113	VSD	0/1	UOC-TV	VSD	0	0
A114	CUT OFF VG2	0...63	UOC-TV	CUT OFF VG2	6	1
A115	VG2	0/1	UOC-TV	VG2	0	6
A116	DCXO	0...127	UOC-TV	DCXO	79	69
A117	DCXO-AUTO	0/1	UOC-TV	DCXO-AUTO	0	0

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S060	OF-COL-TV	0...31...62	UOC-TV	V-LINCTRL	0	0
S061	OF-COL-TV	0...31...62	UOC-TV	IFPLL	32	32
S062	OF-COL-DVD	0...31...62	UOC-TV	SOCI-0	0	1
S063	OF-COL-P	0...31...62	UOC-TV	WHITE LMT	0	12
S064	OF-COL-S	0...31...62	UOC-TV	GD	1	1
S065	OF-COL-N4	0...31...62	UOC-TV	AGC0-1	1	1
S066	OF-COL-N3	0...31...62	UOC-TV	FFI	0	0
S067	OF-SHP-TV	0...31...62	UOC-TV	CFA0	0	0
S068	OF-SHP-AV	0...31...62	UOC-TV	YD PAL	7	11
S069	OF-SHP-DVD	0...31...62	UOC-TV	YD SECAM	7	11
S070	OF-SHP-P	0...31...62	UOC-TV	YD N358	7	9
S071	OF-SHP-S	0...31...62	UOC-TV	YD N443	7	7
S072	OF-SHP-N4	0...31...62	UOC-TV	YD AV-PAL	7	7
S073	OF-SHP-N3	0...31...62	UOC-TV	YD AV-SECAM	7	7
S074	OF-TINT-TV	0...31...62	UOC-TV	YD AV-N358	7	7
S075	OF-TINT-AV	0...31...62	UOC-TV	YD AV-N443	7	7
S076	OF-TINT-DVD	0...31...62	UOC-TV	YD SAV-PAL	7	7
S077	OF-TINT-ADJ	0...31...62	UOC-TV	YD SAV-SECAM	7	7
S078	BB-TINT	0...63	UOC-TV	YD SAV-N358	7	7
S079	VMA-SOFT	0...3	UOC-TV	YD SAV-N443	7	7
S080	WS-SOFT	0...3	UOC-TV	YD COMP-PAL	7	7
S081	VMA-STD	0...3	UOC-TV	YD COMP-SECAM	7	7
S082	WS-STD	0...3	UOC-TV	YD COMP-N358	7	7
S083	VMA-DYN	0...3	UOC-TV	YD COMP-N443	7	7
S084	WS-DYN	0...3	UOC-TV	SBO1-0	1	1
S085	VMA-CTM	0...3	UOC-TV	CHSE1-0	2	1
S086	WS-CTM	0...3	UOC-TV	FCO	0	0
S087	U-COL-SOFT	0...31...62	UOC-TV	OSO	0	1
S088	U-COL-STD	0...31...62	UOC-TV	DFL	1	1
S089	U-COL-DYN	0...31...62	UOC-TV	EVG	1	1
S090	U-CON-SOFT	0...63	UOC-TV	HCO	1	1
S091	U-CON-STD	0...63	UOC-TV	SVMA	1	1
S092	U-CON-DYN	0...63	UOC-TV	FBC	0	0
S093	U-SHP-SOFT	0...31...62	UOC-TV	SLG1-0	1	1
S094	U-SHP-STD	0...31...62	UOC-TV	CL3-0	7	7
S095	U-SHP-DYN	0...31...62	UOC-TV	GAM	1	1
S096	VOL5-0	0...63	UOC-TV	TFR	0	1
S097	HOP1-0	0...3	UOC-TV	GLD	0	0
S098	TAS5-0-NORM	0...63	UOC-TV	BKS	1	1
S099	TAS5-0-A	0...63	UOC-TV	BSD	0	1
S100	BR13-0	0...31	UOC-TV	AAS	1	1
S101	HSD6-0	0...127	UOC-TV	DSK	1	1
S102	VSD6-0	0...127	UOC-TV	BLS	0	1
S103	HOPB1-0	0...3	UOC-TV	LLB	0	0
S104	TASB5-0	0...63	UOC-TV	DSA	0	1
S105	PGB5-0	0...127	UOC-TV	RPA1-0	0	2
S106	VOLB5-0	0...63	UOC-TV	RPO1-0	3	3
S107	SMTHB	0/1	UOC-TV	COR1-0	2	1
S108	SMTH	0/1	UOC-TV	CRA0	0	0
S109	RANGE1-0	0...3	UOC-TV	SPR2-0	0	5
S110	RANGE1-0	0...3	UOC-TV	SVM2-0	5	3
S111	PWR-SAVING	0/1	UOC-TV	SMD1-0	3	3
S112	PWR-TIME	0...3	UOC-TV	PEAKFREQPAL443	0	1
S113	I-TIME	0...3	UOC-TV	PEAKFREQPALM	0	0
S114	GAME-HON	0...255	UOC-TV	PEAKFREQPALN	0	0
S115	GAME-VERT-1	0...255	UOC-TV	PEAKFREQNTSC443	0	1
S116	GAME-VERT-2	0...255	UOC-TV	PEAKFREQNTSCM	0	0
S117	GAME-ORIV	0...255	UOC-TV	PEAKFREQSECAM	0	0
S118	GAME-MODE	0...255	UOC-TV	PEAKFREQAV	0	3

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S001	V-LINCTRL	0...2	UOC-TV	V-LINCTRL	0	0
S002	IFPLL	0...63	UOC-TV	IFPLL	32	32
S003	SOCI-0	0...3	UOC-TV	SOCI-0	0	1
S004	WHITE LMT	0...15	UOC-TV	WHITE LMT	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	0	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	GLD	0/1	UOC-TV	GLD	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	0/1	UOC-TV	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
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	SVM2-0	0...7	UOC-TV	SVM2-0	5	3
S052	SMD1-0	0...3	UOC-TV	SMD1-0	3	3
S053	PEAKFREQPAL443	0...3	UOC-TV	PEAKFREQPAL443	0	1
S054	PEAKFREQPALM	0...3	UOC-TV	PEAKFREQPALM	0	0
S055	PEAKFREQPALN	0...3	UOC-TV	PEAKFREQPALN	0	0
S056	PEAKFREQNTSC443	0...3	UOC-TV	PEAKFREQNTSC443	0	1
S057	PEAKFREQNTSCM	0...3	UOC-TV	PEAKFREQNTSCM	0	0
S058	PEAKFREQSECAM	0...3	UOC-TV	PEAKFREQSECAM	0	0
S059	PEAKFREQAV	0...3	UOC-TV	PEAKFREQAV	0	3

Setting Mode 2-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S201	P-POSHOR	0...255	PIP	P-POSHOR	44	44
S202	P-POSERVER-50	0...255	PIP	P-POSERVER-50	30	30
S203	P-POSERVER-60	0...255	PIP	P-POSERVER-60	26	26
S204	P-HFP	0...15	PIP	P-HFP	0	0
S205	P-VFF	0...15	PIP	P-VFF	0	0
S206	P-VSPDEL-50	0...31	PIP	P-VSPDEL-50	13	13
S207	P-VSPDEL-60	0...31	PIP	P-VSPDEL-60	13	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-BLKCVAL	0/1	PIP	P-BLKCVAL	0	0
S216	P-LMOFST	0...3	PIP	P-LMOFST	0	0
S217	P-PLLITC-TV	0...3	PIP	P-PLLITC-TV	2	2
S218	P-PLLITC-AV	0...3	PIP	P-PLLITC-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
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	80
S241	P-PKLB	0...255	PIP	P-PKLB	80	80
S242	P-PKLG	0...255	PIP	P-PKLG	80	80
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-SCMREL	0...3	PIP	P-SCMREL	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

Setting Mode 1-3

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
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	0
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	HBL	0/1	UOC-TV	HBL	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 3-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
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	NDETPB	0/1	DSP	NDETPB	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	DECLV	0...31	DSP	DECLV	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	BBEC-OFF	0...15	DSP	BBEC-OFF	0	8
S324	BBEP-ON	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...7	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	DREADR	0...63	DSP	DREADR	0	0
S339	DBECOEF-LBS	0...255	DSP	DBECOEF-LBS	0	0
S340	DBECOEF-MBS	0...15	DSP	DBECOEF-MBS	0	0
S341	DUBADR	0...255	DSP	DUBADR	0	0
S342	DUBCOEF-LBS	0...255	DSP	DUBCOEF-LBS	0	0
S343	DUBCOEF-MBS	0...15	DSP	DUBCOEF-MBS	0	0
S344	BAMAMO	0...3	DSP	BAMAMO	0	1
S345	BAMASUB	0/1	DSP	BAMASUB	0	0
S346	BAMAFC	0...15	DSP	BAMAFC	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	EO8K-MV	0...31	DSP	EO8K-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

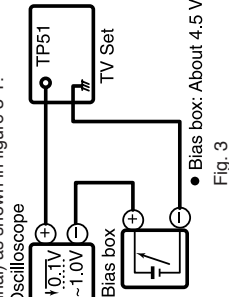
Setting Mode 2-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
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
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-FILTRST	0/1	PIP	P-FILTRST	1	1
S283	P-CLMPST	0...31	PIP	P-CLMPST	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	-30...0...+30	PIP	P-U-COL-DYN	0	0
S290	P-U-COL-STD	-30...0...+30	PIP	P-U-COL-STD	0	0
S291	P-U-SHP-DYN	-30...0...+30	PIP	P-U-SHP-DYN	0	0
S292	P-U-SHP-STD	-30...0...+30	PIP	P-U-SHP-STD	0	0
S293	P-U-SHP-STD	-30...0...+30	PIP	P-U-SHP-STD	0	0
S294	P-U-SHP-SOFT	-30...0...+30	PIP	P-U-SHP-SOFT	0	0

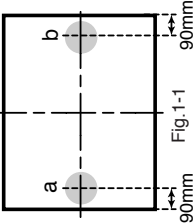
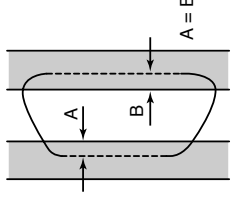
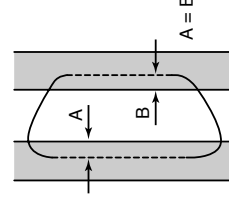
Setting Mode 3-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
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

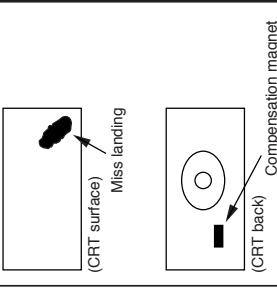
PIF ADJUSTMENT

No.	Adjustment point	Adjustment condition/procedure	Waveform or remarks
1	RF-AGC TAKE OVER POINT AD- JUSTMENT (I ² C BUS CONTROL)	<p>1. Receive "PAL COLOR BAR" signal. Signal Strength: 54 ± 1dB_V (75 ohm termination)</p> <p>2. Connect the oscilloscope to TP53 (Tuner's AGC Terminal) as shown in figure 3-1.</p>  <p>Fig. 3</p> <p>• Bias box: About 4.5 V</p> <p>3. Select "RF-AGC" item in the Adjustment Mode. Adjust the "RF-AGC" bus data to obtain the Tuner output pin drop 0.1V ~ 1.0V below maximum voltage.</p> <p>4. Change the antenna input signal to 63 ~ 67dB_V, and make sure there is no noise.</p> <p>5. Set the RF AGC to 0 - 6 V with no saturation with the waveform.</p> <p>6. Turn up the input signal to 90 ~ 95 dB_B to be sure that there is no cross modulation beat.</p>	

PURITY ADJUSTMENT

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

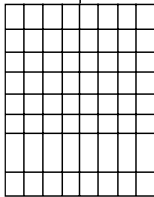
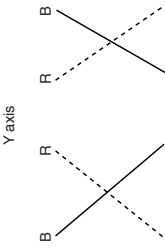
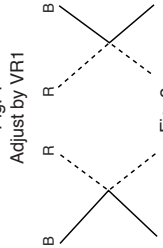
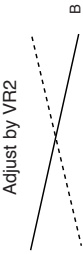
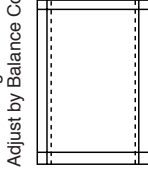
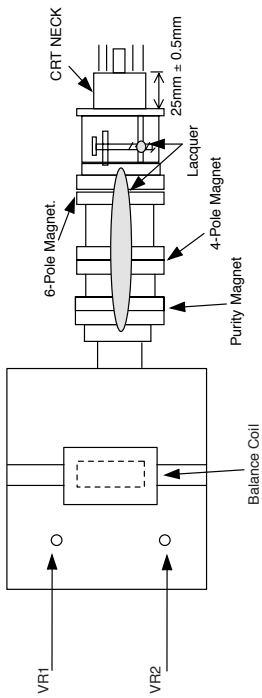
PURITY ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
2	Uniformity (To adjustment after the purity and convergence adjustment.)	<p>Before adjustment begin, Horizontal magnetic field = 0G Vertical magnetic field = Each destination's adjustment magnetic field. Make sure to degauss it.</p> <p>(North direction Red uniformity)</p> <ol style="list-style-type: none"> Horizontal mf = Set to monocolour screen red and adjust to +0.25G. Pay attention to the edge of CRT, if the landing is poor adjust by attaching the the compensation magnet at the back of CRT. (refer to Fig-1) <p>(South direction Red uniformity)</p> <ol style="list-style-type: none"> Horizontal mf = Set to monocolour screen red and adjust to -0.25G. Pay attention to the edge of CRT ,if the landing is poor adjust by attaching the compensation magnet at the back of CRT. <p>(The same method is applied for adjustment of monocolour screen blue for blue uniformity ,and changing both the magnetic field for north and south direction.)</p> <p>* 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.</p>	 <p>Fig. 1</p>

FOCUS ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	FOCUS ADJUSTMENT	<ol style="list-style-type: none"> 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. 	

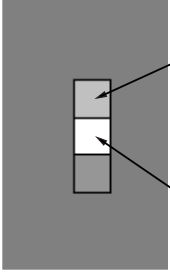
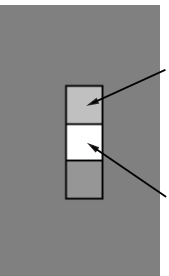
CONVERGENCE ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CONVERGENCE ADJ. (To be done after the purity adjustment.)	<ol style="list-style-type: none"> 1. Receive the " Crosshatch Pattern" signal. 2. Using the remote controller, call NORMAL mode. <p>(Static convergence)</p> <ol style="list-style-type: none"> 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. <p>(Dynamic convergence)</p> <ol style="list-style-type: none"> 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. <p>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)</p>	     

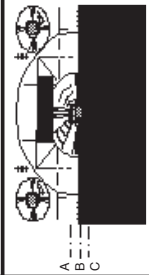
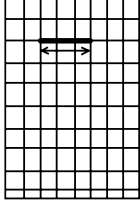
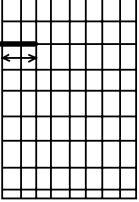
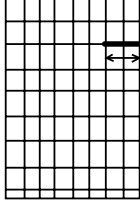
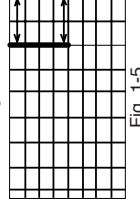
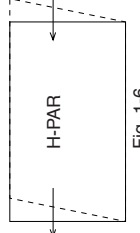
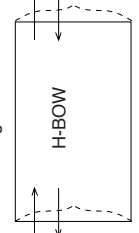
CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CRT CUTOFF ADJUSTMENT (I'C BUS CONTROL)	<p>Note :</p> <p>1. Before CRT cutoff adjustment, make sure following items are in INITIAL DATA.</p> <p>a) A063 CUT-RS = 32</p> <p>b) A064 CUT-GS = 32</p> <p>c) A114 CUT OFF = 6</p> <p>1. Switch TV to video mode , blue back off , with no video signal and Press R/C to set picture into normal condition.</p> <p>2. Go to service mode at adjustment mode item A115 (VG2).</p> <p>3. Adjust screen voltage until retrace line appear, the following OSD will appear at bottom of screen.</p> <p>UNSTABLE</p> <p>OUT</p> <p>ABOVE</p> <p>4. Finally , slowly decrease the screen variable resistor until following OSD appear.</p> <p>STABLE</p> <p>IN</p> <p>ABOVE / BELOW *</p> <p>* 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.</p> <p>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".</p>	
2	WHITE BALANCE BACKGROUND ADJUSTMENT (AV-IN SIGNAL)	<p>1. Receive the internal RF monoscope pattern.</p> <p>2. Make the picture normal with the remote controller.</p> <p>3. Connect the beam ammeter between terminal of R623.</p> <p>4. Coarsely confirm the beam current to approx. 1.7mA.</p> <p>5. Receive the window pattern with AV input.</p> <p>6. With the data of DRI-GS and DRI-BS, adjust the color temperature of the 50% white.</p> <p>7. Adjust the right dark area of the window to 12300K with CUT-RS and CUT-GS.</p> <p>8. Go back to 50% white area to check colour temperature, if out of range, please go back to step (6).</p> <p>Note 1 : Apply this adjustment after aging 30 min or more with the beam current 1700 ± 50 .A. (On the white or green monocolour screen)</p> <p>2: The colour temperature is based on the shipment destination as shown in Table 2. 1 at page 6-1.</p> <p>3: Adjust DRI-GO/GW, DRI-BC/BW , CUT-RW/C and CUT-GW/C as following DATA, after finishing DRI-BS and DRI-GS DATA adjustment</p> <p>CUT-RW/C = CUT-RS</p> <p>CUT-GW/C = CUT-GS</p> <p>DRI-RW = 32 (FIXED), DRI-RS = 32 (FIXED)</p> <p>DRI-BC = "DRI-BS"</p> <p>(For 7500_K, 12300_K, 17000_K and 18000_K Condition)</p>	<p>7500K X : 0.300 Y : 0.310</p> <p>18000K X : 0.255 Y : 0.255</p> <p>17000K X : 0.261 Y : 0.261</p> <p>12300K X : 0.272 Y : 0.275</p> <p>(With Minolta color thermometer CA-100)</p> <p>* 12300_K</p> <p>DRI-GW = "DRI-GS" - 7</p> <p>DRI-BW = "DRI-BS" - 7</p> <p>DRI-GC = "DRI-GS" - 7</p> <p>DRI-RC = 25</p> <p>* 17000_K & 18000_K</p> <p>DRI-GW = "DRI-GS" - 7</p> <p>DRI-BW = "DRI-BS" - 7</p> <p>DRI-GC = "DRI-GS" - 5</p> <p>DRI-RC = 27</p> <p>* 7500_K</p> <p>DRI-GW = "DRI-GS" - 5</p> <p>DRI-BW = "DRI-BS" - 5</p> <p>DRI-GC = "DRI-GS" - 7</p> <p>DRI-RC = 25</p>

CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

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

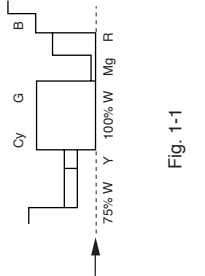
HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	MAIN SCREEN ADJUSTMENT		 <p>A : Out of spec B : OK C : Out of spec</p>
	V-SLOPE	Adjust V-Slope by Volume Up / Down Remote Control. Refer to Fig. 1-1.	
	VER-AMP-N50	Adjust the overscan to 8.5%. (monoscope)	
	VER-SHI-N50	Align the center of the screen to the geometric center of CRT. (monoscope)	
	HOR-SHI-N50	Align the center of the screen to the geometric center of CRT.	 <p>Fig. 1-2</p>
	EW-W-N50	Adjust the overscan to 8.5%. (monoscope)	
	V-LINE	Adjust the linearity to the best. (monoscope)	
	V-S CORR	Already preset.(Adjust this unless the linearity is achieved.) (monoscope)	
	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)	 <p>Fig. 1-3</p>
	H-BOW	Adjust the 2nd vertical line from the end of the crosshatch pattern. Refer to Fig 1.7. (crosshatch)	
	EW-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.	 <p>Fig. 1-4</p>
	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. (crosshatch)	 <p>Fig. 1-5</p>
	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. (crosshatch)	 <p>H-PAR</p>
	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. (crosshatch)	 <p>H-BOW</p>
	VER-AMP-N60	Adjust the overscan to 10%. (monoscope)	
	VER-SHI-N60	Align the center of the screen to the geometric center of CRT. (monoscope)	

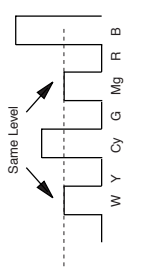
HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
	VHOR-SHI-N60	Align the center of the screen to the geometric center of CRT. (monoscope)	
	EW-W-N60	Align the center of the screen to the geometric center of CRT. (monoscope) 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	

PAL CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	SUB COLOUR (I²C BUS CONTROL)	<ol style="list-style-type: none"> 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 μsec/Div 4. Set the sub color adjustment mode with the remote controller, and vary the sub color data to make 100% W of the color bar and RED at the same level for adjustment shown in Fig. 1-1. 	 <p>Fig. 1-1</p>

NTSC CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	SUB-TINT (I²C BUS CONTROL)	<ol style="list-style-type: none"> 1. Receive the "NTSC 3.58 Colour Bar" signal through AV IN. 2. Connect the oscilloscope to TP47B (P860 Pin6) BLUE-OUT. ● Range : 100mV/Div. (AC)(Use Probe 10:1) ● Sweep time : 10 μsec/Div. 3. Select the "SUB-TINT" item in the ADJUSTMENT MODE... Adjust the "SUB-TINT" data to obtain the waveform shown as Figure 1.1 (W and Mg same level) 	 <p>Same Level</p>

GAME OPERATION CHECK

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	(For models with GAME only.)	<p>1. Use the "GAME" key (R/C) to enter the Game Mode.</p> <p>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.</p> <p>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.</p> <p>(B) For the VERTICAL position, remain in same "Setting Mode 1". Key in the alphabetic number 115 to enter GAME-VERT-1. Adjust to the proper vertical position.</p> <p>3. If adjustment OK, then press the "GAME MODE" key to exit to previously viewed channel from the game mode.</p>	

FM RADIO OPERATION CHECK

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

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO)

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CONTRAST key	<p>1. Receive "Monoscope Pattern" signal.</p> <p>2. Press to MENU mode, then Select Picture Mode and set to select CONTRAST.</p> <p>3. Press Volume Up/Down key to check whether the CONTRAST effect is OK or not.</p>	
2	COLOUR key	<p>1. Receive "Color Bar" signal.</p> <p>2. Press to MENU mode, then Select Picture Mode and set to select COLOUR.</p> <p>3. Press Volume Up/Down key to check whether the COLOUR effect is OK or not.</p>	
3	BRIGHTNESS key	<p>1. Receive "Monoscope Pattern" signal.</p> <p>2. Press to MENU mode, then Select Picture Mode and set to select BRIGHTNESS.</p> <p>3. Press Volume Up/Down key to check whether the BRIGHTNESS effect is OK or not.</p>	
4	TINT key	<p>1. Receive the "NTSC Colour Bar" signal thru AV in.</p> <p>2. Press to MENU mode, then Select Picture Mode and set to select TINT.</p> <p>3. Press Volume Up/Down key to check TINT, UP for GREEN direction and DOWN for RED direction whether is OK or not.</p>	
5	SHARPNESS key	<p>1. Receive "Monoscope Pattern" signal.</p> <p>2. Press to MENU mode, then Select Picture Mode and set to select SHARPNESS.</p> <p>3. Press Volume Up/Down key to check whether the SHARPNESS effect is OK or not.</p>	
6	NORMAL Key	<p>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).</p>	Notes:if nothing is display mean contrast, colour, bright, tint, sharpness are all in normal setting.
7	WHITE TEMP	<p>1. Receive "Monoscope Pattern" signal</p> <p>2. Set FUNCTION to select WHITE TEMP.</p> <p>3. Press Volume Up/Down key to check WHITE TEMP Option, STANDARD: NORMAL SETTING, WARM for more REDDISH direction changing, COOL for more BLUIISH direction changing.</p>	

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO) (Continued)

No.	Adjusting point	Adjusting procedure/conditions	Waveform and others
9	COLOUR SYSTEM	<ol style="list-style-type: none"> 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. 	
10	SOUND SYSTEM	<ol style="list-style-type: none"> 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. 	
11	HEADPHONE OUTPUT CHECKING	<ol style="list-style-type: none"> 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. <p>Ref : OUTPUT level of HEADPHONE is as following. Apx. 500mVp-p</p>	
12	NOISE MUTE CHECKING	<ol style="list-style-type: none"> 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. 	

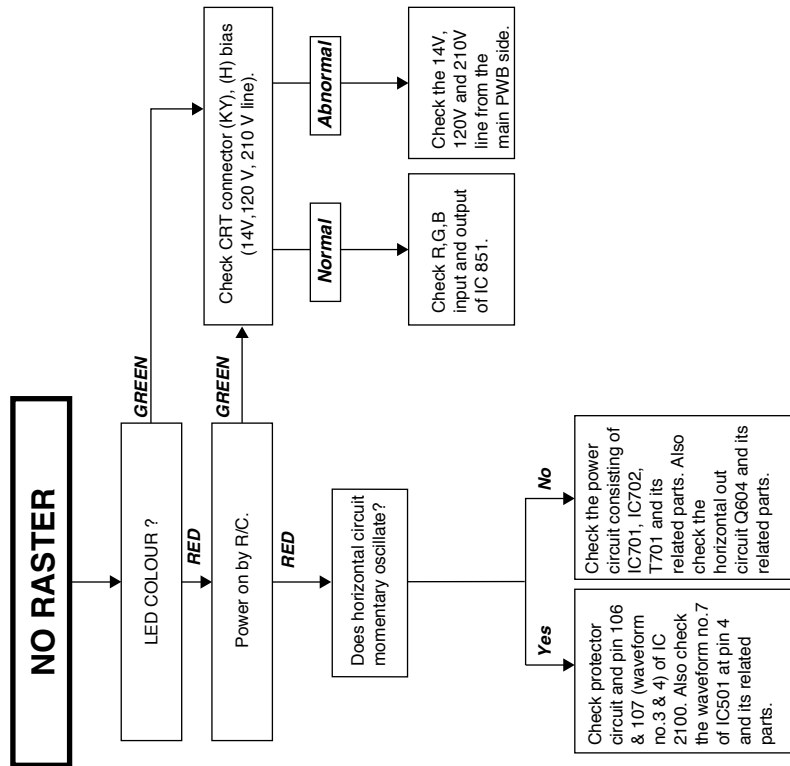
PROTECTOR OPERATION CHECKING

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	H, V PROTECTOR	<ol style="list-style-type: none"> 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

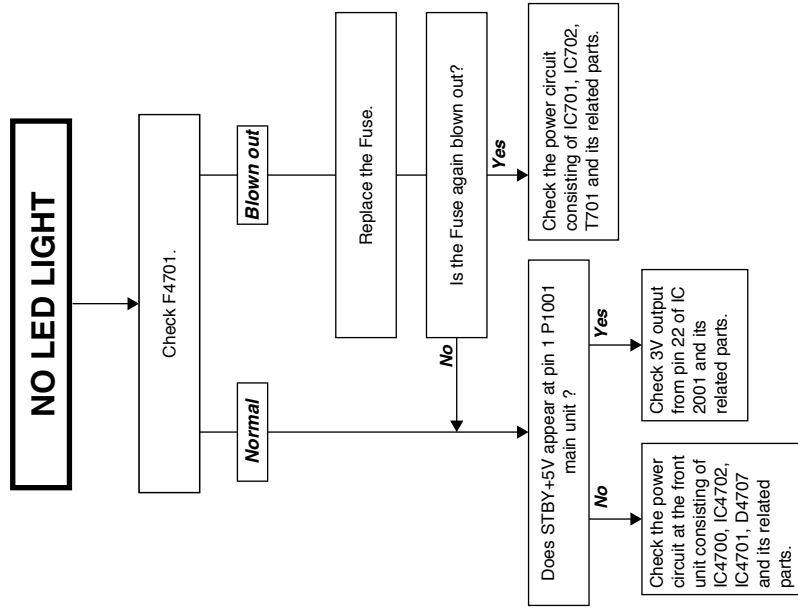
No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks																								
1	Front speaker output checking	<ol style="list-style-type: none"> 1. Receive the E-10ch (PAL colour bar). 2. Set the volume to maximum and set the other sound setting as follow. <table border="1"> <thead> <tr> <th>Setting item</th> <th>#1</th> <th>#2</th> </tr> </thead> <tbody> <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> </tbody> </table> <ol style="list-style-type: none"> 3. Connect the voltmeter to the speaker terminal and make sure the reading is 9 ± 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	<p>#1 : Sound setting for model with BBE and Super Bass in the sound menu.</p> <p>#2 : Sound setting for model without BBE and with Bass + in the sound menu.</p>
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)	<ol style="list-style-type: none"> 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 border="1"> <thead> <tr> <th>Equalizer</th> <th>Music</th> </tr> </thead> <tbody> <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> </tbody> </table> <ol style="list-style-type: none"> 4. Connect the voltmeter to the dummy load and make sure the reading is 15 ± 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																										

TROUBLE SHOOTING TABLE



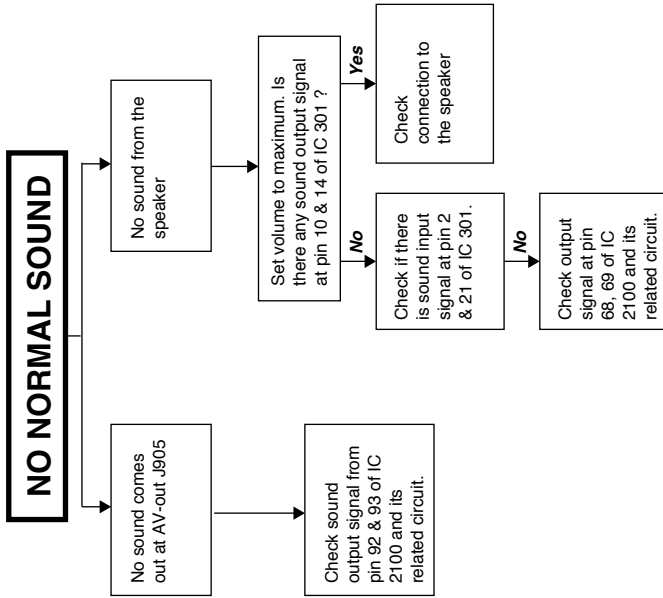
18-1

TROUBLE SHOOTING TABLE (Continued)

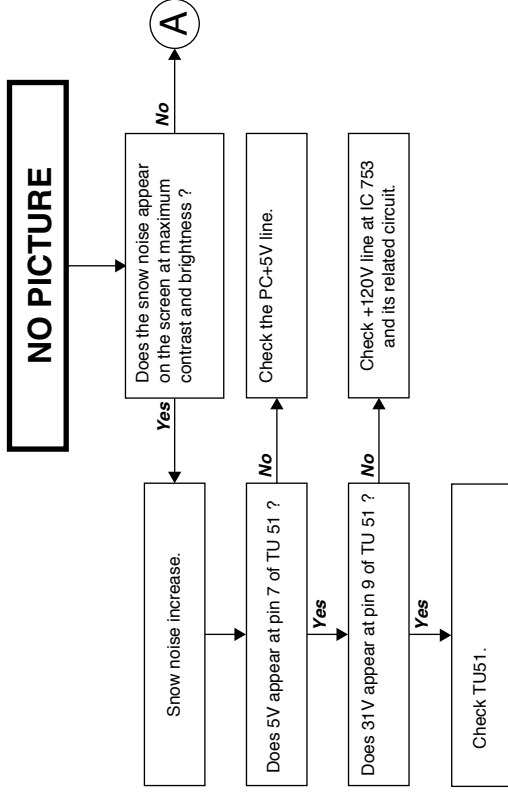


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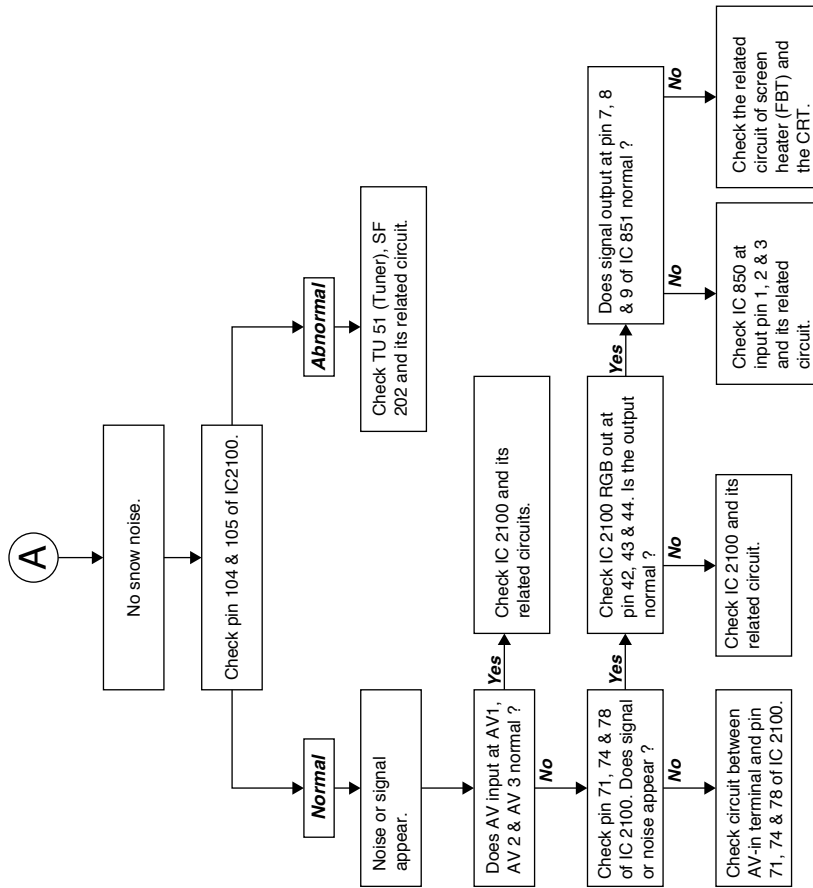
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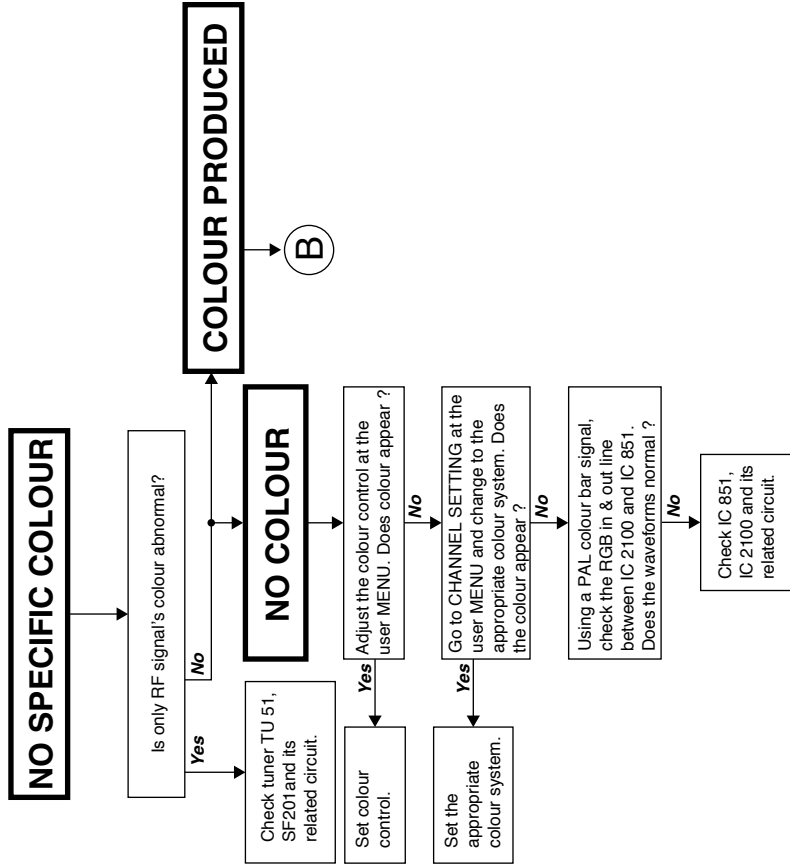
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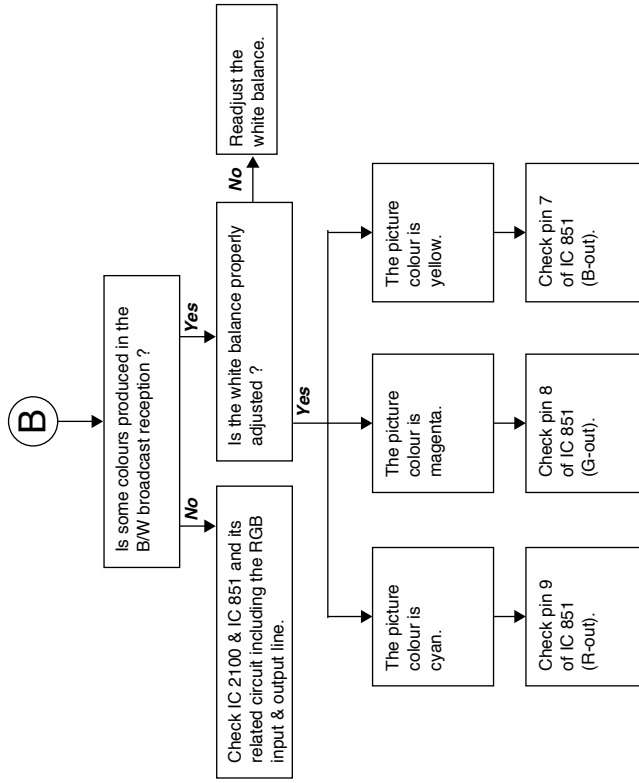
TROUBLE SHOOTING TABLE (Continued)



TROUBLE SHOOTING TABLE (Continued)

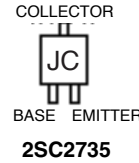
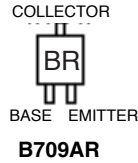
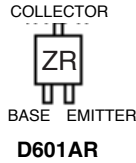
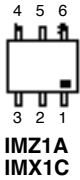
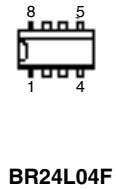
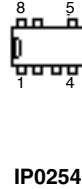
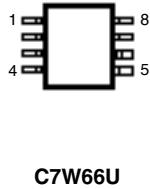
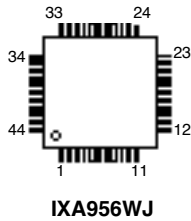
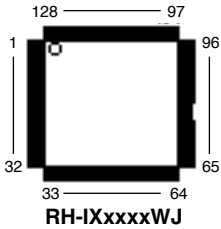
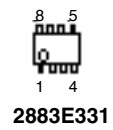
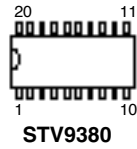
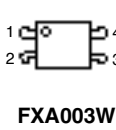
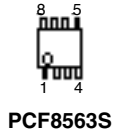
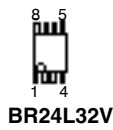
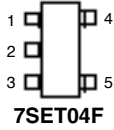


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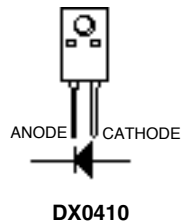
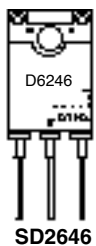
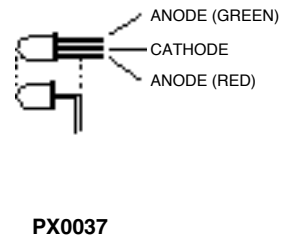
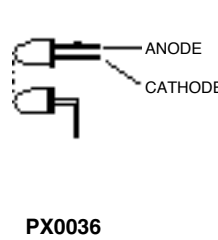
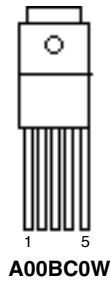
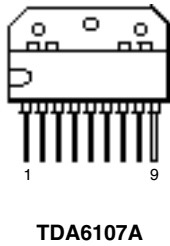
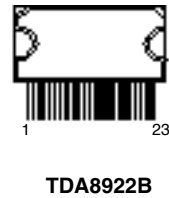
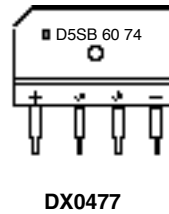
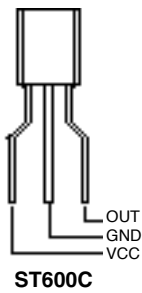


SOLID STATE DEVICE BASE DIAGRAM

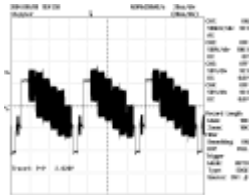
TOP VIEW



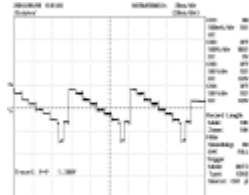
SIDE VIEW



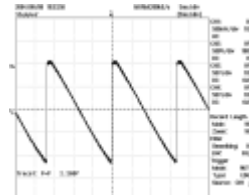
WAVEFORMS



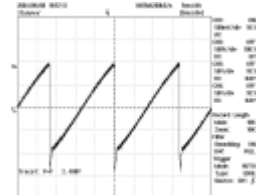
① Horizontal Rate
Pin 1 Vp-p = 2.02 V



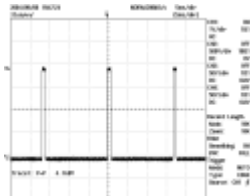
② Horizontal Rate
Pin 2 Vp-p = 1.30 V



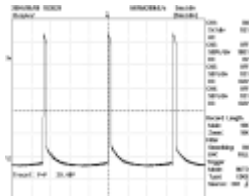
③ Vertical Rate
Pin 3 Vp-p = 2.26 V



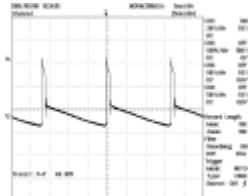
④ Vertical Rate
Pin 4 Vp-p = 2.40 V



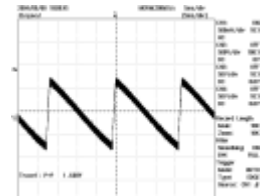
⑤ Vertical Rate
Pin 5 Vp-p = 4.16 V



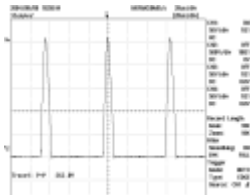
⑥ Vertical Rate
Pin 6 Vp-p = 29.40 V



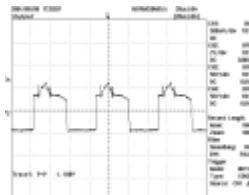
⑦ Vertical Rate
Pin 7 Vp-p = 60.00 V



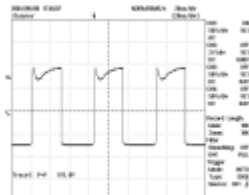
⑧ Vertical Rate
Pin 8 Vp-p = 1.60 V



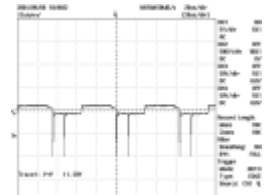
⑨ Horizontal Rate
Pin 9 Vp-p = 262.0 V



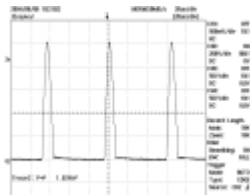
⑩ Horizontal Rate
Pin 10 Vp-p = 262.0 V



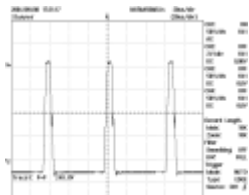
⑪ Horizontal Rate
Pin 11 Vp-p = 176.0 V



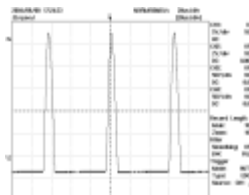
⑫ Horizontal Rate
Pin 12 Vp-p = 11.20 V



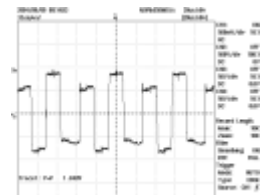
⑬ Horizontal Rate
Pin 13 Vp-p = 1.024 kV



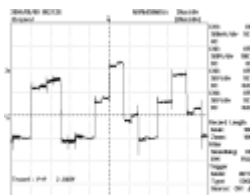
⑭ Horizontal Rate
Pin 14 Vp-p = 248.0 V



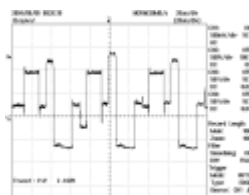
⑮ Horizontal Rate
Pin 15 Vp-p = 31.20 V



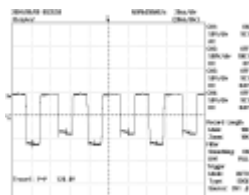
⑯ Horizontal Rate
Pin 16 Vp-p = 1.84 V



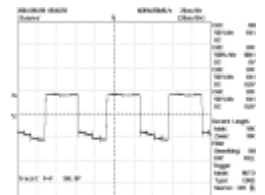
⑰ Horizontal Rate
Pin 17 Vp-p = 2.04 V



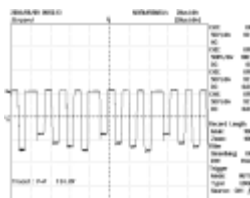
⑱ Horizontal Rate
Pin 18 Vp-p = 2.10 V



⑲ Horizontal Rate
Pin 19 Vp-p = 120.0 V



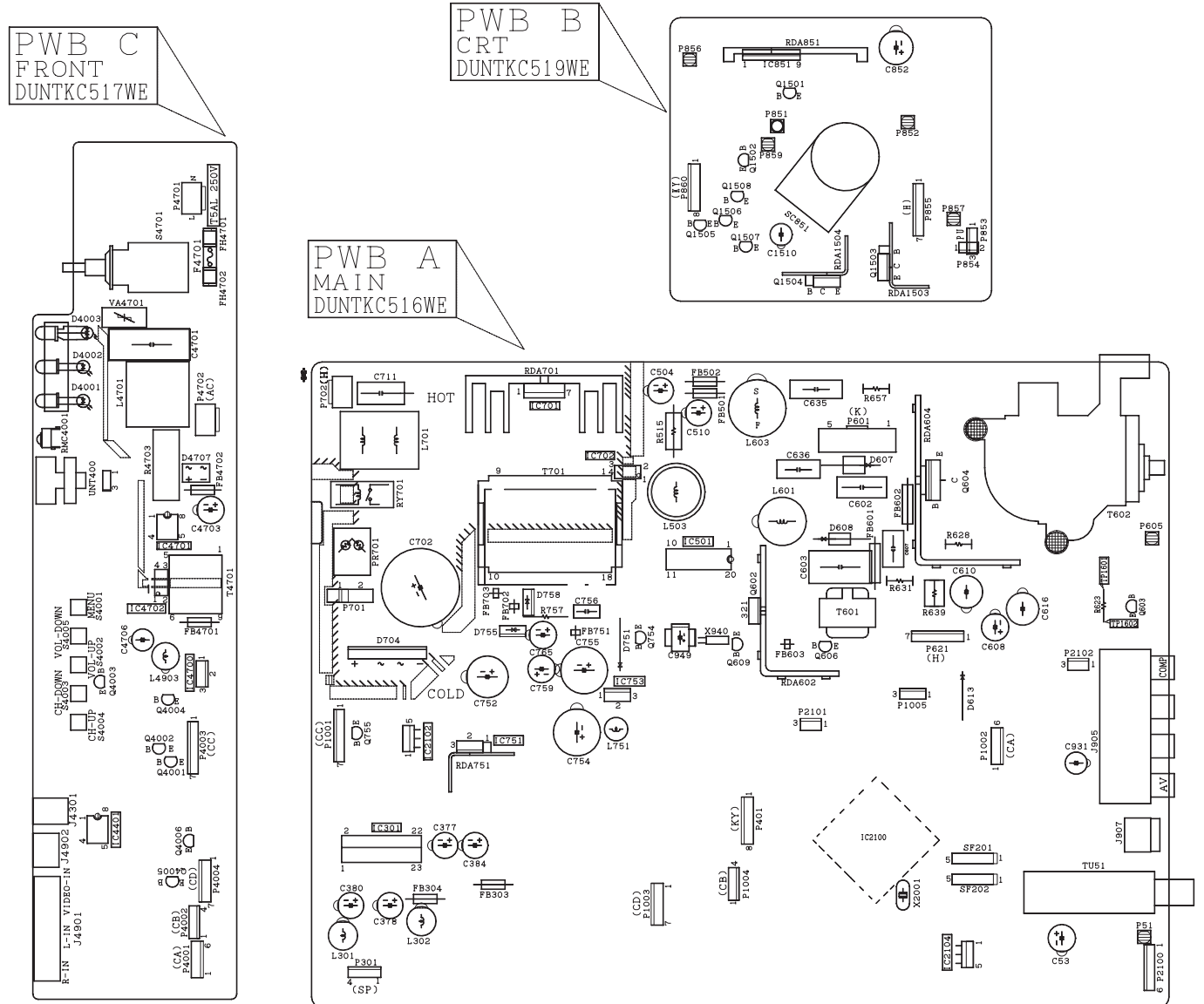
⑳ Horizontal Rate
Pin 20 Vp-p = 106.0 V



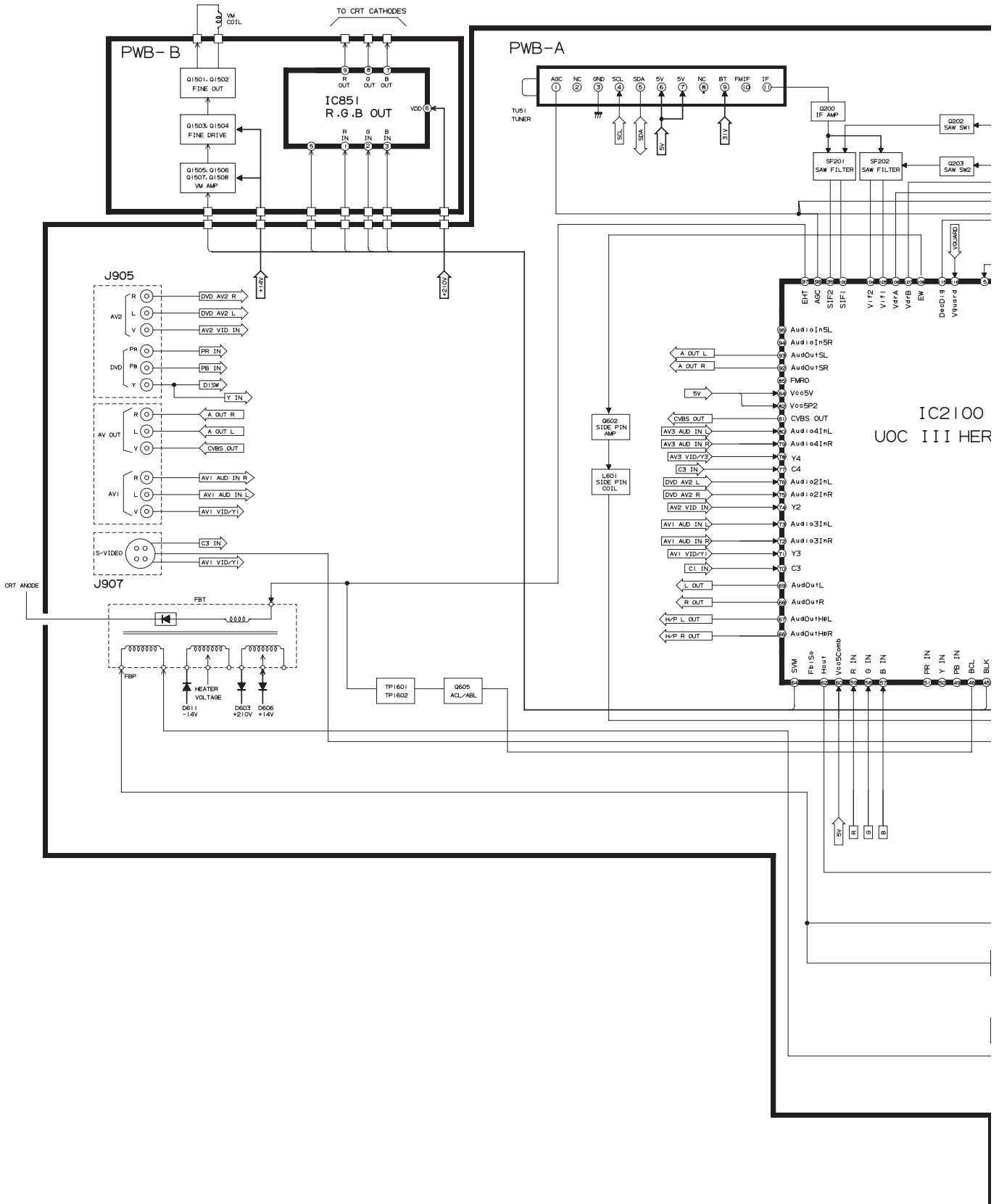
㉑ Horizontal Rate
Pin 21 Vp-p = 134.0 V

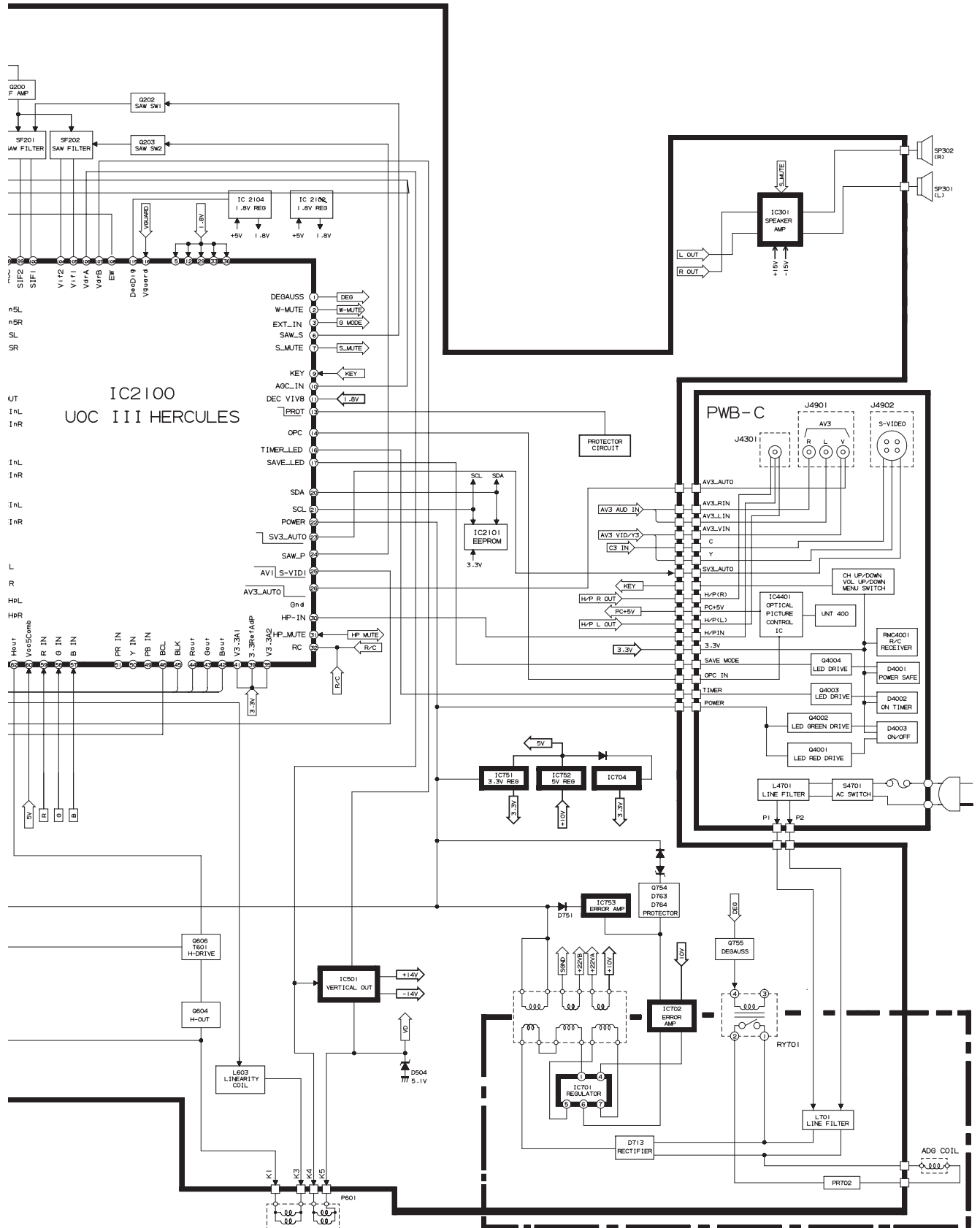
CHASSIS LAYOUT

CHASSIS LAYOUT FOR 29H-FG5RU MODEL



BLOCK DIAGRAMS





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 "△" () 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 = $\mu\mu\text{F}$).

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

J

I

H

G

F

E

D

C

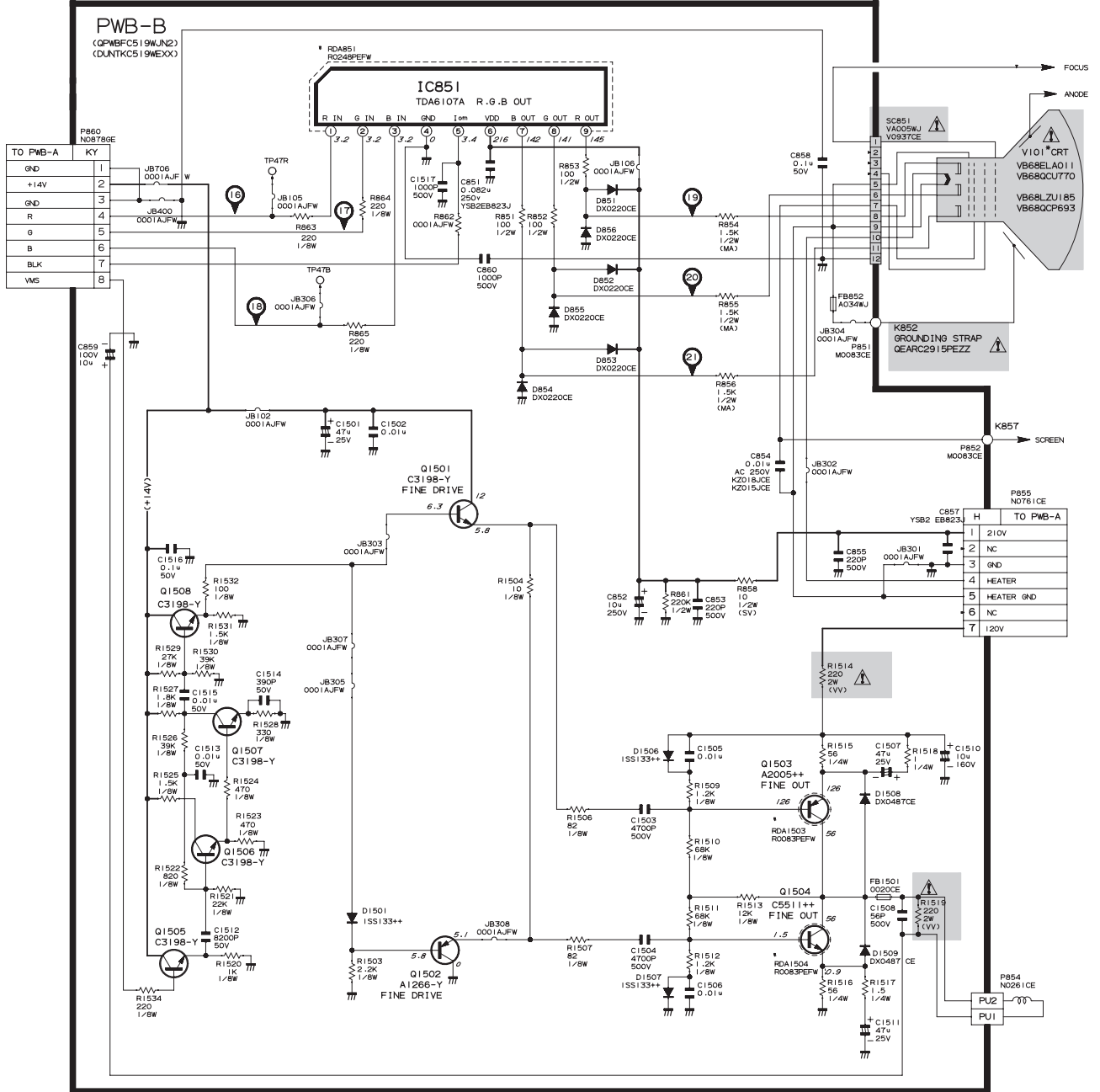
B

A

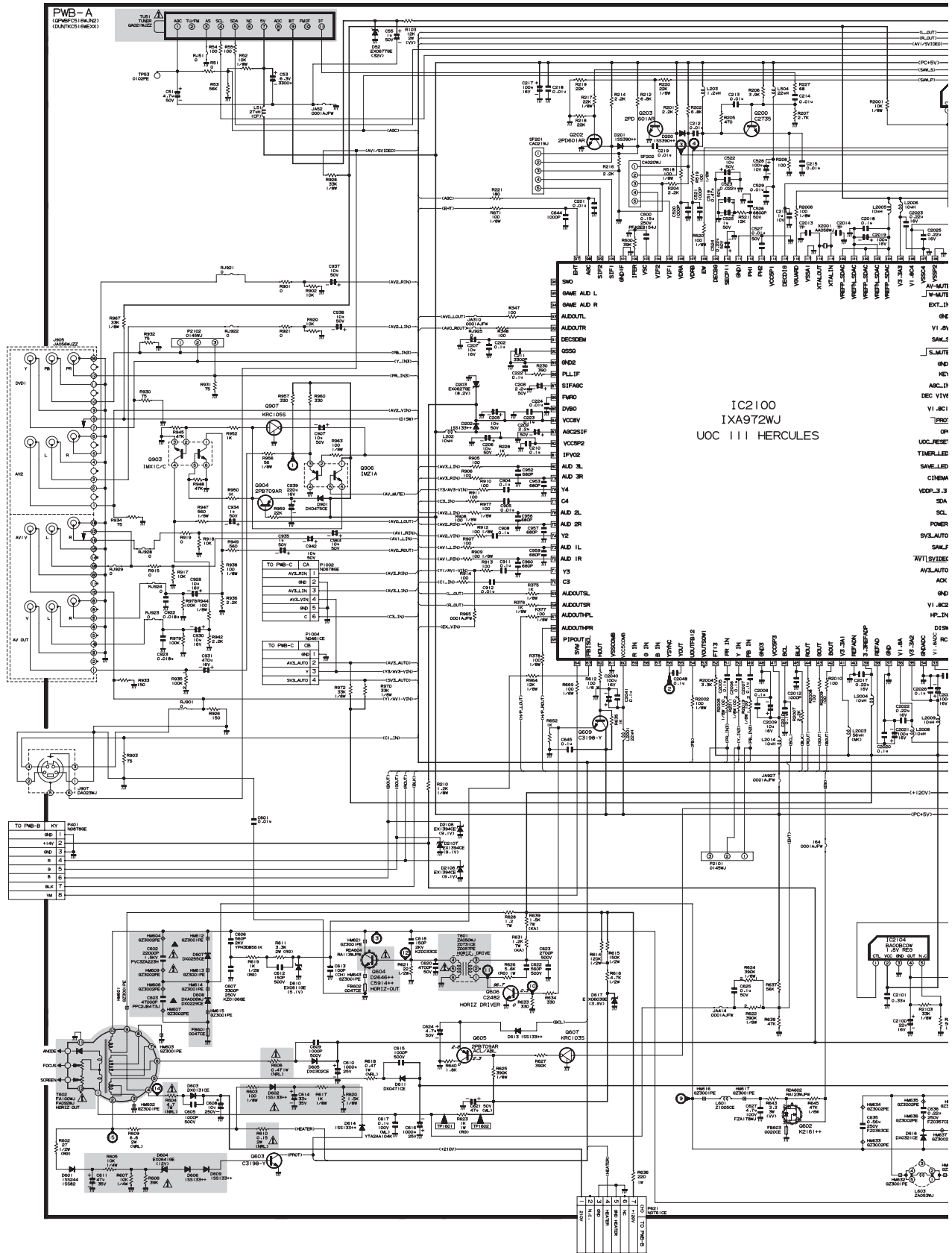
▲ AND SHADED () COMPONENTS
= SAFETY RELATED PARTS.
▲ MARK = X-RAY RELATED PARTS.

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEG OHM).
2. THE UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(μ, P, ETC).

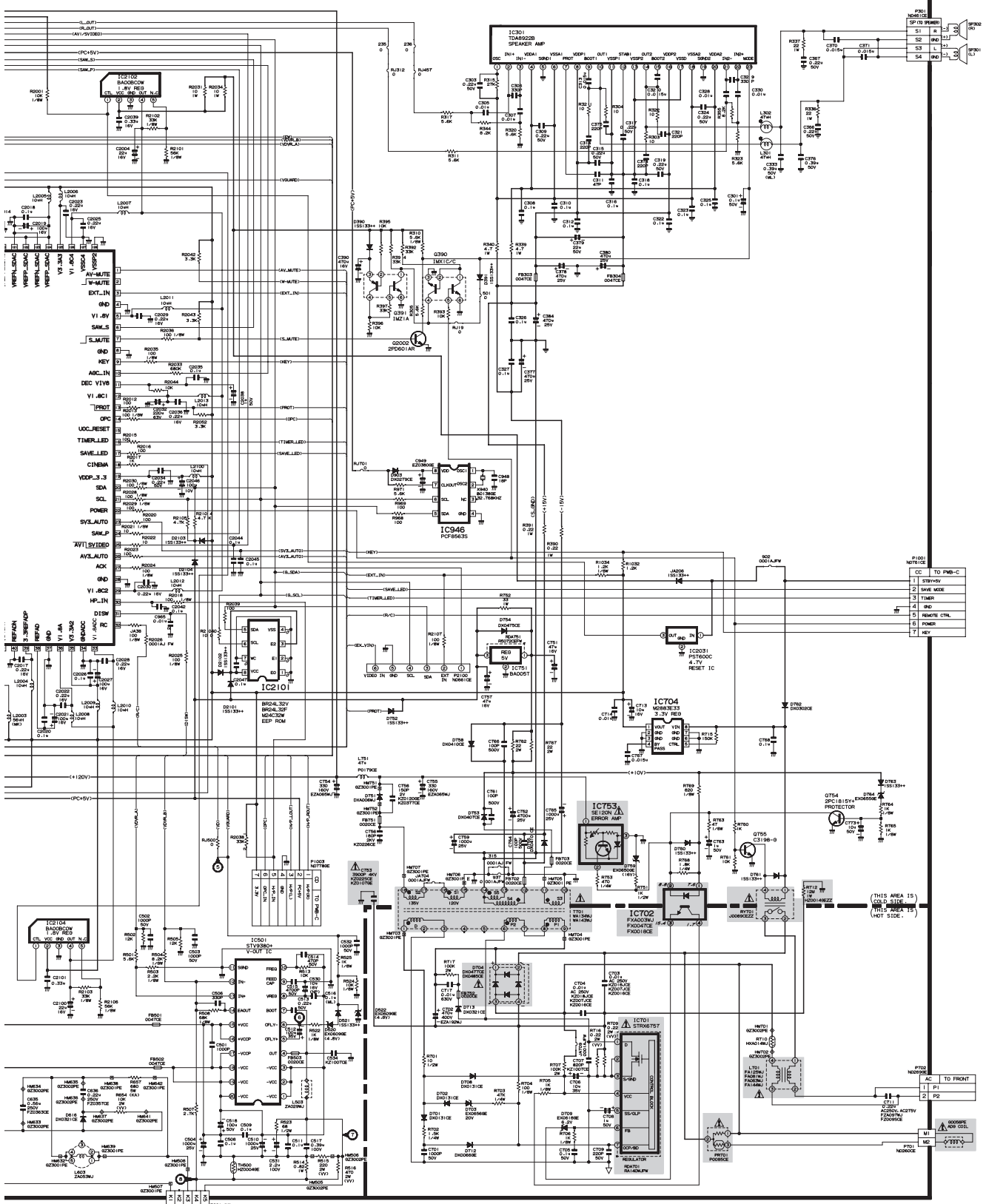
REPLACE WITH A PICTURE
TUBE OF THE SAME TYPE
NUMBER FOR CONTINUED
SAFETY.



MAIN UNIT



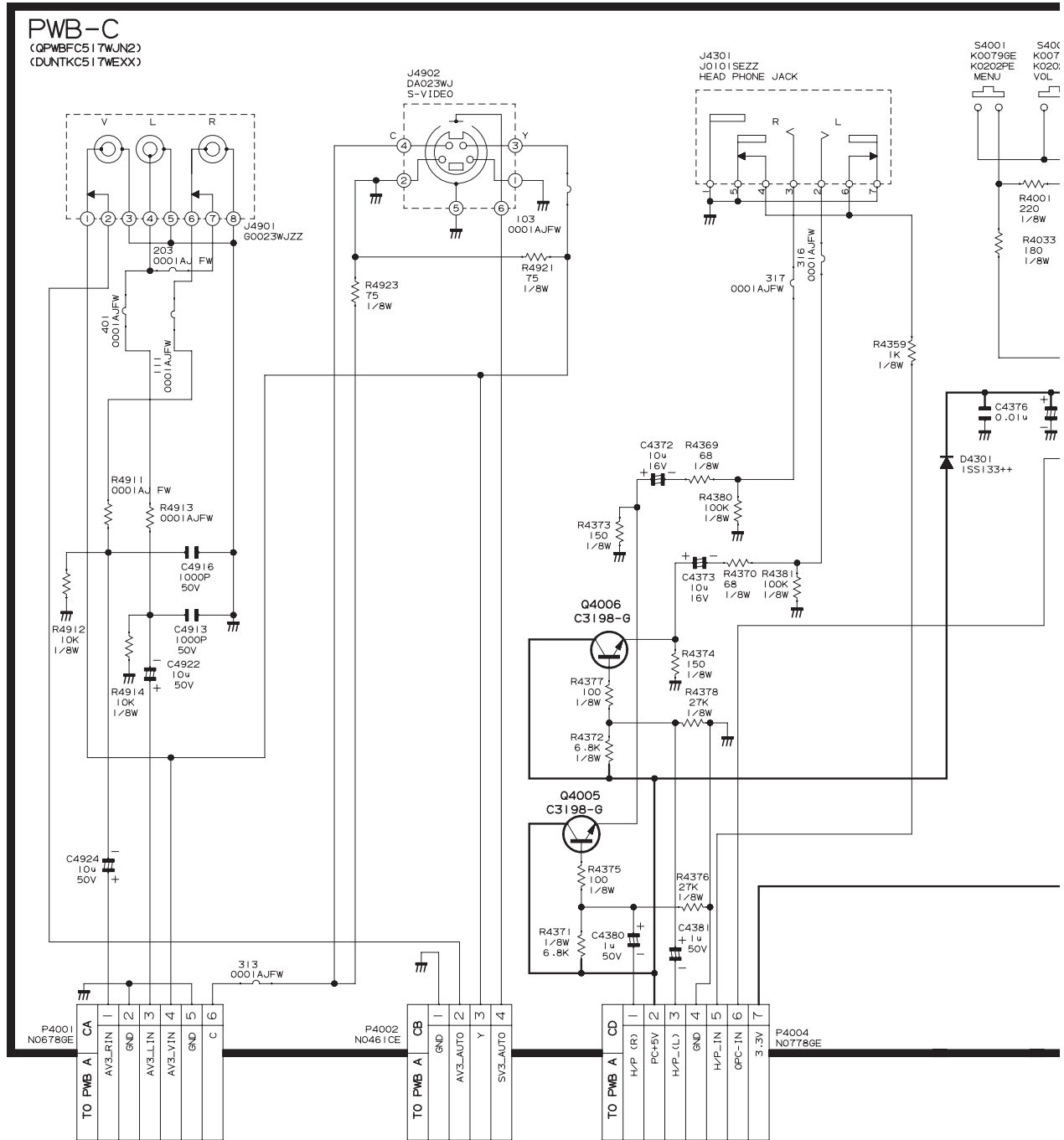
NOTE 1: THE UNIT OF RESISTANCE "OHM" IS OMITTED
 (K=1000 OHM, M=10000 OHM)
 2. ALL RESISTORS ARE 1/16 WATT UNLESS OTHERWISE NOTED.
 3. UNIT OF ALL CAPACITORS ARE P. WITH PREFIX SYMBOL.
 (u. P. ETC.).



10	11	12	13	14	15	16	17	18	19
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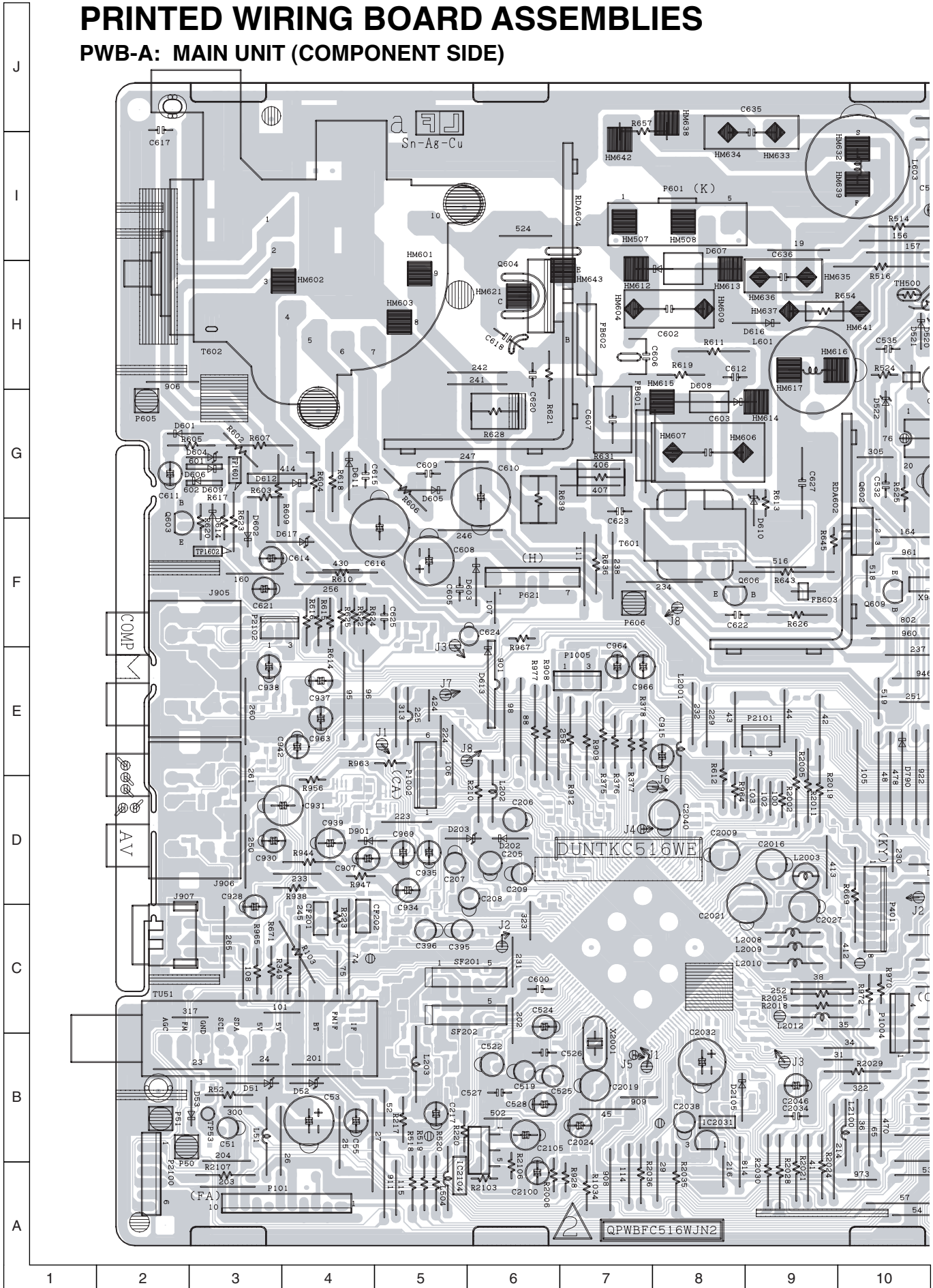
FRONT UNIT

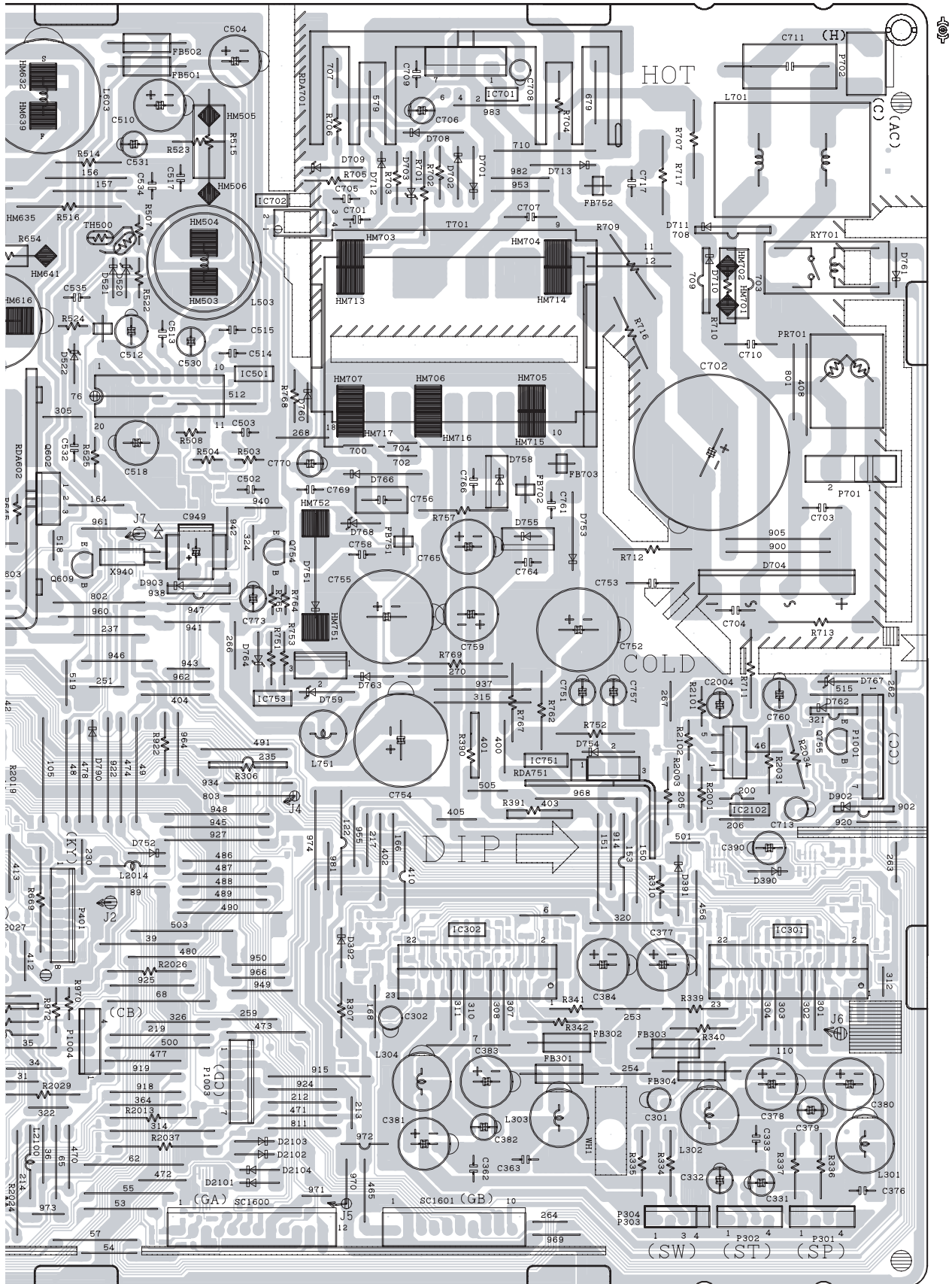
PWB-C
(QPWBF517WJN2)
(DUNTKC517WEXX)



PRINTED WIRING BOARD ASSEMBLIES

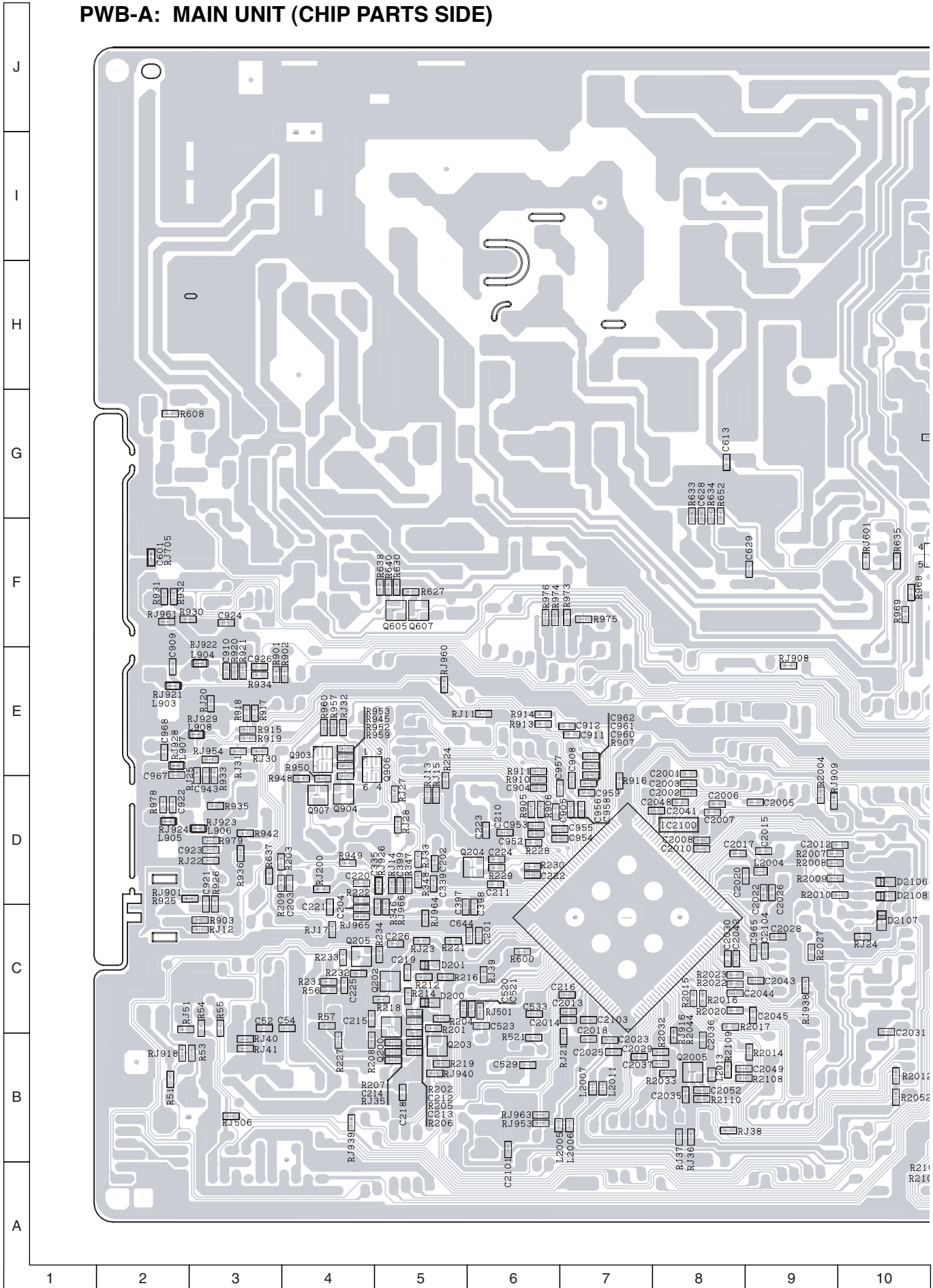
PWB-A: MAIN UNIT (COMPONENT SIDE)



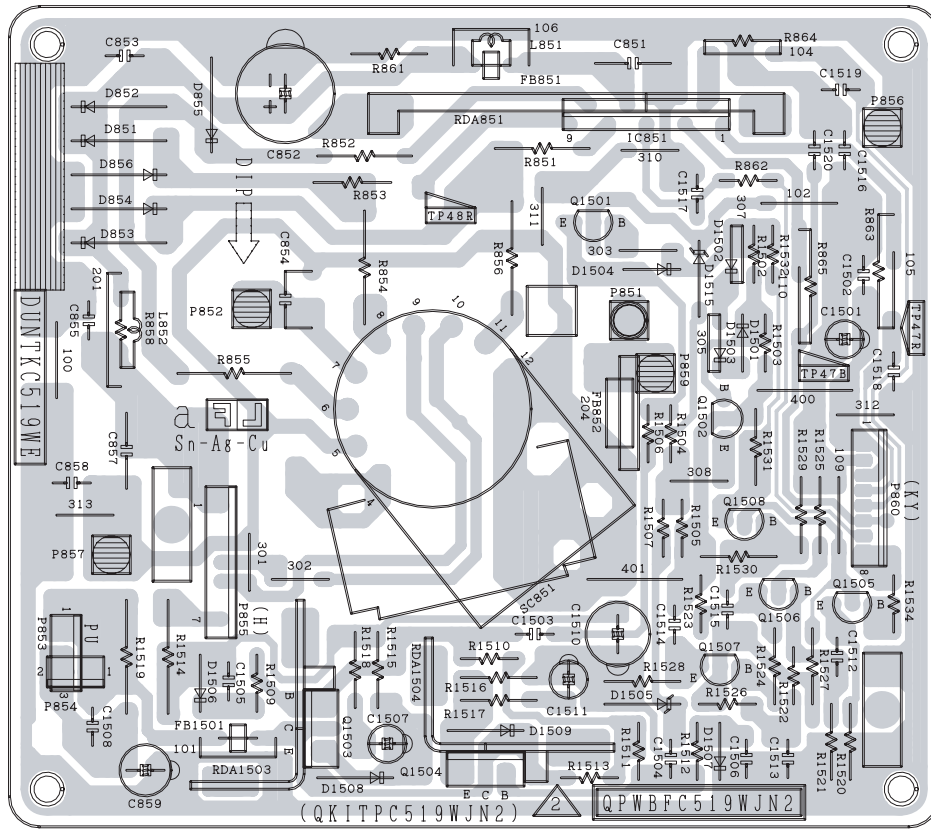


10	11	12	13	14	15	16	17	18	19
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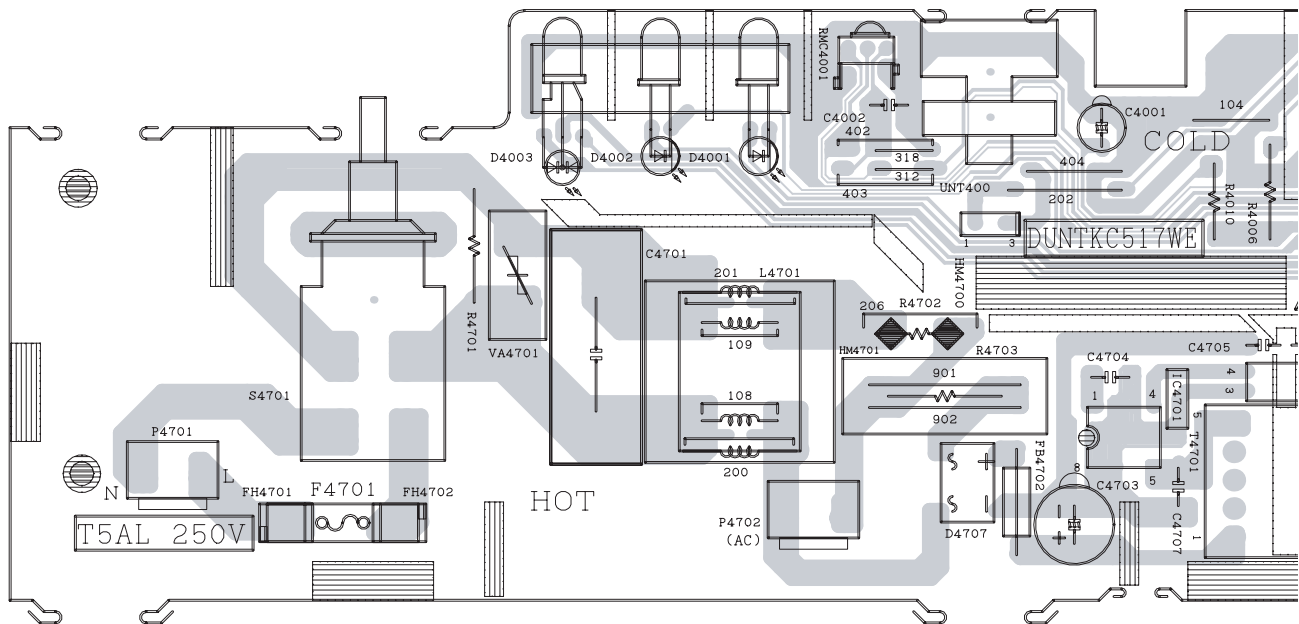
PWB-A: MAIN UNIT (CHIP PARTS SIDE)

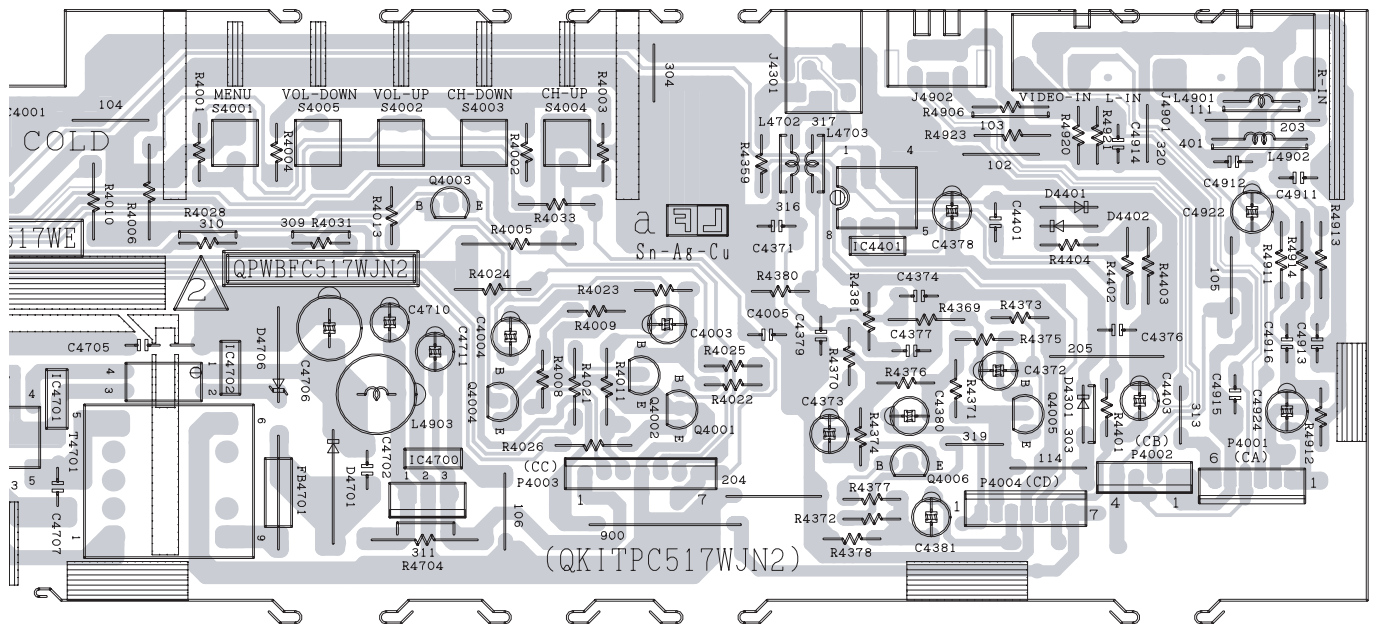


PWB-B: CRT UNIT



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 | 4. QUANTITY |

MARK ★: SPARE PARTS-DELIVERY SECTION

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

△ V101	VB68QCU185XFN	R	Picture Tube	CX
△ L703	RCiLG0056PEZZ	R	Degaussing Coil	AS
△	QEARCA023WJZZ	R	Grounding Strap	AG
	PMAGFA009WJZZ	R	Magnet	AK
	PMAGG3002CEZZ	R	Magnet	AC

PRINTED WIRING BOARD ASSEMBLIES

(NOT REPLACEMENT ITEM)

PWB-A	DUNTKC516WEA3	-	Main Unit	—
PWB-B	DUNTKC519WEA1	-	CRT Unit	—
PWB-C	DUNTKC517WEA2	-	Front Unit	—

PWB-A DUNTKC516WEA3 MAIN Unit

TUNER

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

△ TU51	RTUNQA021WJZZ	R	VHF Tuner	AW
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INTEGRATED CIRCUITS

IC301	VHiTDA8922B-1	R	I.C.	
IC501	VHiSTV9380+3ES	R	STV9380A	AP
△ IC701	VHiSTRX6757-1S	R	STR-X6757LF	AS
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	PST600C-2	AD
IC2100	RH-iXA972WJZZQ	R	TDA12021H1/N1D	BK
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

Ref. No.	Part No.	★	Description	Code
Q390	VSIMX1C/C//-1Y	R	iMX1C/C	AC
Q391	VSIMZ1A////-1Y	R	iMZ1A	AC
Q602	VS2SK2161++-1	R	2SK2161	AG
Q603	VS2SC3198-Y-1+	R	2SC3198	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	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

D52	RH-EX0677GEZZY	R	Zener Diode	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	AA
D390	VHD1SS133++-1Y	R	1SS133	AA
D391	VHD1SS133++-1Y	R	1SS133	AA
D520	RH-EX0609GEZZY	R	Zener Diode	AA
D521	VHD1SS133++-1Y	R	1SS133	AA
D522	RH-EX0609GEZZY	R	Zener Diode	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	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	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	AA
D701	RH-DX0131CEZZY	R	Diode	AC
D702	RH-DX0131CEZZY	R	Diode	AC
D703	RH-EX0656GEZZY	R	Zener Diode	AB
△ D704	RH-DX0477CEZZ	R	Diode	AF
D708	RH-DX0131CEZZY	R	Diode	AC
D709	RH-EX0618GEZZY	R	Zener Diode	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-DX0475CEZZ	R	Diode	AB
D755	RH-DX0410CEZZ	R	Diode	AG
D758	RH-DX0410CEZZ	R	Diode	AG
D759	RH-EX0650GEZZY	R	Zener Diode	AB
D760	VHD1SS133++-1Y	R	1SS133	AA
D761	VHD1SS133++-1Y	R	1SS133	AA
D762	VHD1SS133++-1Y	R	1SS133	AA
D763	VHD1SS133++-1Y	R	1SS133	AA
D764	RH-EX0655GEZZY	R	Zener Diode	AB
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	AB
D2107	RH-EX1394CEZZY	R	Zener Diode	AB
D2108	RH-EX1394CEZZY	R	Zener Diode	AB
△ JA206	VHD1SS133++-1Y	R	1SS133	AA
△ IC702	RH-FXA003WJZZ	R	PC123Y82	AD
R710	RH-HXA014WJZZ+	R	Thermistor	AD

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
TH500	RH-HZ0004GEZZ+	R	Thermistor	AE	C313	VCKYCY1HB153KY R	0.015	50V Ceramic	AA
CRYSTALS					C314	VCKYCY1HB221KY R	220P	50V Ceramic	AA
△ PR701	RMPTP0085CEZZ	R	Packaged Circuit	AL	C315	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC
X940	RCRSB0138GEZZ	R	Crystal	AD	C316	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
X2001	RCRSAA058WJZZ	R	Crystal	AD	C317	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC
FILTERS					C318	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
SF201	RFILCA021WJZZ	R	Filter	AK	C319	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC
SF202	RFILCA020WJZZ	R	Filter	AM	C320	VCKYCY1HB153KY R	0.015	50V Ceramic	AA
COILS AND TRANSFORMERS					C321	VCKYCY1HB221KY R	220P	50V Ceramic	AA
L51	VP-CF270K0000Y	R	Peaking, 27μH	AB	C322	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
L202	VP-DF100K0000Y	R	Peaking, 10μH	AB	C323	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
L203	VP-XF1R2K0000Y	R	Peaking, 1.2μH	AB	C324	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC
L301	RCiLPA229WJZZ	R	Coil	AF	C325	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
L302	RCiLPA229WJZZ	R	Coil	AF	C326	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
L503	RCiLZA029WJZZ	R	Coil	AM	C327	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
L504	VP-XF220K0000Y	R	Peaking, 22μH	AB	C328	VCKYCY1HB103KY R	0.01	50V Ceramic	AA
L601	RCiLZ1005CEZZ	R	Coil	AH	C329	VCKYCY1HB331KY R	330P	50V Ceramic	AA
L603	RCiLZA053WJZZ	R	Coil	AG	C330	VCKYCY1HB103KY R	0.01	50V Ceramic	AA
△ L701	RCiLFA125WJZZ	R	Coil	AK	C333	VCFYFA1HA394J+	R	0.39 50V Mylar	AC
L751	RCiLP0179CEZZ+	R	Coil	AD	C366	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC
L2001	VP-XF220K0000Y	R	Peaking, 22μH	AB	C367	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC
L2003	VP-MK560K0000+	R	Peaking, 56μH	AB	C370	VCKYCY1HB153KY R	0.015	50V Ceramic	AA
L2004	VPCEM100MR70NYR		Peaking, 10μH	AC	C371	VCKYCY1HB153KY R	0.015	50V Ceramic	AA
L2005	VPCEM100MR70NYR		Peaking, 10μH	AC	C374	VCKYCY1HB221KY R	220P	50V Ceramic	AA
L2006	VPCEM100MR70NYR		Peaking, 10μH	AC	C375	VCKYCY1HB221KY R	220P	50V Ceramic	AA
L2007	VPCEM100MR70NYR		Peaking, 10μH	AC	C376	VCFYFA1HA394J+	R	0.39 50V Mylar	AC
L2008	VP-DF100K0000Y	R	Peaking, 10μH	AB	C377	VCEA0A1EW477M+R	470	25V Electrolytic	AD
L2009	VP-DF100K0000Y	R	Peaking, 10μH	AB	C378	VCEA0A1EW477M+R	470	25V Electrolytic	AD
L2010	VP-DF100K0000Y	R	Peaking, 10μH	AB	C379	VCEA0A1HW226M+R	22	50V Electrolytic	AB
L2011	VPCEM100MR70NYR		Peaking, 10μH	AC	C380	VCEA0A1EW477M+R	470	25V Electrolytic	AD
L2012	VP-DF100K0000Y	R	Peaking, 10μH	AB	C384	VCEA0A1EW477M+R	470	25V Electrolytic	AD
L2013	VPCEM100MR70NYR		Peaking, 10μH	AC	C390	VCEA0A1CW477M+R	470	16V Electrolytic	AC
L2014	VP-DF100K0000Y	R	Peaking, 10μH	AB	C501	VCKYCY1HB102KY R	1000P	50V Ceramic	AA
L2100	VP-DF100K0000Y	R	Peaking, 10μH	AB	C502	VCKYPA1HB102K+ R	1000P	50V Ceramic	AA
△ T601	RTRNZA050WJZZ	R	Transformer	AF	C503	VCKYPA1HB102K+ R	1000P	50V Ceramic	AA
△ T602	RTRNFA100WJZZ	R	H-Volt Transformer	AX	C504	VCEA0A1EW108M R	1000	25V Electrolytic	AD
△ T701	RTRNWA134WJZZ	R	Transformer	AR	C506	VCKYCY1HB331KY R	330P	50V Ceramic	AA
CAPACITORS					C508	VCKYTV1HF104ZY R	0.1	50V Ceramic	AB
C51	VCEA9M1HW475M+R	4.7	50V Electrolytic	AB	C509	VCKYTV1HF104ZY R	0.1	50V Ceramic	AB
C53	VCEA0A0JW338M R	3300	6.3V Electrolytic	AD	C510	VCEA0A1EW108M R	1000	25V Electrolytic	AD
C55	VCEA0A1HW105M+R	1	50V Electrolytic	AB	C511	VCKYTV1HF104ZY R	0.1	50V Ceramic	AB
C201	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C512	VCEA0A1VW107M+R	100	35V Electrolytic	AC
C202	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	C513	VCFYFA1HA224J+	R	0.22 50V Mylar	AB
C205	VCEA9M1HW106M+R	10	50V Electrolytic	AB	C514	VCKYPA1HB471K+ R	470P	50V Ceramic	AA
C206	VCEA9M1HW106M+R	10	50V Electrolytic	AB	C515	VCKYPA1HB472K+ R	4700P	50V Ceramic	AB
C207	VCEA9M1CW106M+R	10	16V Electrolytic	AB	C516	VCKYCY1HB104KY R	0.1	50V Ceramic	AA
C208	VCEA9M1HW225M+R	2.2	50V Electrolytic	AB	C517	RC-FZ0272CEZZ+	R	0.39P 100V M.Polypro	AD
C209	VCEA9M1HW225M+R	2.2	50V Electrolytic	AB	C518	VCEA0A1HW107M+R	100	50V Electrolytic	AB
C210	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	C519	VCEA9M1HW474M+R	0.47	50V Electrolytic	AB
C211	VCKYCY1HB332KY R	3300P	50V Ceramic	AA	C520	VCCCCY1HH102JY R	1000P	50V Ceramic	AB
C212	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C521	VCCCCY1HH102JY R	1000P	50V Ceramic	AB
C213	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C522	VCEA9M1HW106M+R	10	50V Electrolytic	AB
C214	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C523	VCKYCY1HB223KY R	0.022	50V Ceramic	AA
C215	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C524	VCEA0A1HW224M+R	0.22	50V Electrolytic	AB
C216	VCKYCY1AB105KY R	1	10V Ceramic	AB	C525	VCEA9M1HW105M+R	1	50V Electrolytic	AB
C217	VCEA0A1CW107M+R	100	16V Electrolytic	AC	C526	VCQYTA1HM682K+R	6800P	50V Mylar	AA
C218	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C527	VCQYTA1HM103J+ R	0.01	50V Mylar	AB
C219	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C528	VCEA0A1AW107M+R	100	10V Electrolytic	AB
C222	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	C529	VCKYCY1HB103KY R	0.01	50V Ceramic	AA
C223	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	C530	VCE9GA1CW106M+R	10	16V Elect, (N.P)	AB
C224	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C531	VCEA0A2AW225M+R	2.2	100V Electrolytic	AB
C301	VCEA9M1CW476M+R	47	16V Electrolytic	AB	C532	VCKYPA1HB102K+ R	1000P	50V Ceramic	AA
C303	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC	C534	RC-KZ1007CEZZ	R	Ceramic	AC
C305	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	C600	VCFPFA2EB154J	R	0.15 250V M.Polypro	AC
C306	VCKYCY1HB331KY R	330P	50V Ceramic	AA	C601	VCKYCY1HB103KY R	0.01	50V Ceramic	AA
C307	VCKYCY1HB103KY R	0.01	50V Ceramic	AA	△ C602	VCFPVC3ZA223H R	0.022	1.8kVM.Polypro	
C308	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	△ C603	VCQPPC2JB473J R	0.047	630V Mylar	AC
C309	VCKYTV1HF224ZY R	0.22	50V Ceramic	AC	C605	VCKYPA2HB102K+ R	1000P	500V Ceramic	AA
C310	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	C606	VCKYPH3DB561K R	560P	2kV Ceramic	AC
C312	VCKYCY1HB104KY R	0.1	50V Ceramic	AA	△ C607	RC-KZ0106GEZZ	R	3300P 250V Ceramic	AG
					△ C608	VCEA4A2EN106M+R	10	250V Electrolytic	AD
					C609	VCKYPA2HB102K+ R	1000P	500V Ceramic	AA
					C610	VCEA0A1EW108M R	1000	25V Electrolytic	AD
					△ C611	VCEA0A1VW476M+R	47	35V Electrolytic	AB
					C612	VCKYPA2HB151K+ R	150P	500V Ceramic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
	C613		VCCCCY1HH101JY R	100P 50V Ceramic	AA	C2005		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
△	C614		VCEA0A1VW336M+R	33 35V Electrolytic	AA	C2006		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C615		VCKYPA2HB102K+ R	1000P 500V Ceramic	AA	C2007		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C616		VCEA0A1EW108M R	1000 25V Electrolytic	AD	C2008		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C617		VCQYTA2AA104K+ R	0.1 100V Mylar	AB	C2009		VCEA9M1CW106M+R 10 16V Electrolytic	AB
	C618		RC-KZ0033CEZZ R	150P 2kV Ceramic	AB	C2010		VCKYCY1HB104KYR 0.1 50V Ceramic	AA
	C620		VCKYPA1HB472K+ R	4700P 50V Ceramic	AB	C2012		VCKYCY1HB102KYR 1000P 50V Ceramic	AA
	C621		VCEA0A1HW476M+R	47 50V Electrolytic	AB	C2013		VCCCCY1HH7R0DY R 7P 50V Ceramic	AA
	C622		VCKYPA2HB561K+ R	560P 500V Ceramic	AA	C2014		VCCCCY1HH7R0DY R 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		VCKYPA1HB104K+ R	0.1 50V Ceramic	AA	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		VCCCCY1HH102JY R	1000P 50V Ceramic	AB	C2023		VCKYCY1CF224ZY R 0.22 16V Ceramic	AB
	C645		VCKYCY1HB104KYR R	0.1 50V Ceramic	AA	C2025		VCKYCY1CF224ZY R 0.22 16V Ceramic	AB
	C701		VCKYPA1HB221K+ R	1000P 50V Ceramic	AA	C2026		VCKYCY1HB104KYR 0.1 50V Ceramic	AA
	C702		RC-EZA192WJZZ R	330 400V Electrolytic	AQ	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		VCYFA1HA104J+ 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	820P Ceramic	AC	C2034		VCYFA1HA224J+ 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	820P Mylar	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 R	0.01 50V Ceramic	AA	C2040		VCEA9M1CW107M+R 100 16V Electrolytic	AB
	C717		VCYFAA2JA103K+ R	0.01 630V Mylar	AC	C2041		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C751		VCEA0A1CW476M+R	47 16V Electrolytic	AB	C2042		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C752		VCEA0A1EW478M R	4700 25V Electrolytic	AG	C2044		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
△	C753		RC-KZ022SCEZZ R	470P 4kV Ceramic	AD	C2045		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C754		RC-EZA065WJZZ R	330 160V Ceramic	AK	C2046		VCEA0A1AW107M+R 100 10V Electrolytic	AB
	C755		RC-EZA065WJZZ R	330 160V Ceramic	AK	C2047		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C756		RC-KZ0226CEZZ+ R	180P 2kV Ceramic	AC	C2048		VCKYYCY1HB104KYR 0.1 50V Ceramic	AA
	C757		VCEA0A1CW476M+R	47 16V Electrolytic	AB	C2100		VCEA0A1CW226M+R 22 16V Electrolytic	AB
	C758		RC-KZ0120GEZZ R	150P 2kV Ceramic	AC	C2101		VCKYCY1AB334KYR R 0.33 10V Ceramic	AB
	C759		VCEA0A1EW108M R	1000 25V Electrolytic	AD				
	C761		VCKYPA2HB101K+ R	100P 500V Ceramic	AB				
	C763		VCEA0A1HW105M+R	1 50V Electrolytic	AB				
	C764		VCKYPA2HB101K+ R	100P 500V Ceramic	AB	JA38		VRD-RA2BE101JY R 100 1/8W Carbon	AA
	C765		VCEA0A1EW108M R	1000 25V Electrolytic	AD	RJ10		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C766		VCKYPA2HB101K+ R	100P 500V Ceramic	AB	RJ11		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C767		VCKYCY1HB153KYR R	0.015 50V Ceramic	AA	RJ12		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C768		VCKYCY1HB104KYR R	0.1 50V Ceramic	AA	RJ15		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C773		VCEA0A1HW106M+R	10 50V Electrolytic	AB	RJ16		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C904		VCKYCY1HB104K R	0.1 50V Ceramic	AA	RJ18		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C905		VCKYCY1HB103KYR R	0.01 50V Ceramic	AA	RJ19		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C907		VCEA0A1HW106M+R	10 50V Electrolytic	AB	RJ20		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C908		VCKYYCY1HB104KYR R	0.1 50V Ceramic	AA	RJ21		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C911		VCKYYCY1HB104KYR R	0.1 50V Ceramic	AA	RJ22		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C912		VCKYYCY1HB103KYR R	0.01 50V Ceramic	AA	RJ23		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C922		VCKYYCY1HB183KYR R	0.018 50V Ceramic	AA	RJ24		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C923		VCKYYCY1HB183KYR R	0.018 50V Ceramic	AA	RJ25		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C928		VCEA0A1CW106M+R	10 16V Electrolytic	AB	RJ27		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C930		VCEA0A1CW106M+R	10 16V Electrolytic	AB	RJ32		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C931		VCEA0A1CW477M+R	470 16V Electrolytic	AC	RJ33		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C934		VCEA0A1HW105M+R	1 50V Electrolytic	AB	RJ36		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C935		VCEA0A1HW105M+R	1 50V Electrolytic	AB	RJ37		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C937		VCEA0A1HW106M+R	10 50V Electrolytic	AB	RJ38		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C938		VCEA0A1HW106M+R	10 50V Electrolytic	AB	RJ40		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C939		VCEA0A1CW227M+R	220 16V Electrolytic	AC	RJ41		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C942		VCEA0A1HW106M+R	10 50V Electrolytic	AB	RJ51		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C948		VCCCCY1HH180JY R	18P 50V Ceramic	AA	RJ236		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C949		RC-EZ0380GEZZ R	Capacitor	AM	RJ307		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C952		VCCCCY1HH681JY R	680P 50V Ceramic	AB	RJ457		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C953		VCCCCY1HH681JY R	680P 50V Ceramic	AB	RJ501		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C956		VCCCCY1HH681JY R	680P 50V Ceramic	AB	RJ506		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C957		VCCCCY1HH681JY R	680P 50V Ceramic	AB	RJ701		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C959		VCCCCY1HH681JY R	680P 50V Ceramic	AB	RJ901		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C960		VCCCCY1HH681JY R	680P 50V Ceramic	AB	RJ904		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C963		VCEA0A1HW106M+R	10 50V Electrolytic	AB	RJ909		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C965		VCKYCY1HB103KYR R	0.01 50V Ceramic	AA	RJ921		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
	C2004		VCEA0A1CW226M+R	22 16V Electrolytic	AB	RJ922		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA
						RJ923		VRS-CY1JF000JY R 0 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
RJ924	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R513	VRS-CY1JF103JY	R 10K	1/16W Metal Oxide	AA
RJ926	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R514	VRN-VV3ABR82J	R 0.82	1W Metal Film	AA
RJ927	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R515	VRS-VV3DB221J	R 220	2W Metal Oxide	AA
RJ928	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R516	VRS-VV3DB471J	R 470	2W Metal Oxide	AA
RJ929	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R518	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
RJ938	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R519	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
RJ939	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R520	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
RJ940	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R521	VRS-CY1JF123JY	R 12K	1/16W Metal Oxide	AA
RJ960	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R522	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA
RJ961	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R523	VRD-RM2HD680JY	R 68	1/2W Carbon	AA
RJ963	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R524	VRD-RA2BE103JY	R 10K	1/8W Carbon	AA
R51	VRS-CY1JF000JY	R 0	1/16W Metal Oxide	AA	R525	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA
R52	VRD-RA2BE103JY	R 10K	1/8W Carbon	AA	R600	VRS-CY1JF393FY	R 39K	1/16W Metal Oxide	AA
R53	VRS-CY1JF682JY	R 56K	1/16W Metal Oxide	AA	R602	VRS-SV2HC270J	R 27	1/2W Metal Oxide	AA
R54	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA	△ R603	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R55	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA	△ R604	VRN-VV3AB4R7J	R 4.7	1W Metal Film	AA
R103	VRS-VV3DB123J	R 12K	2W Metal Oxide	AA	△ R605	VRD-RA2EE103GY	R 10K	1/4W Carbon	AA
R201	VRS-CY1JF682JY	R 2.2K	1/16W Metal Oxide	AA	△ R606	VRN-VV3ABR47J	R 0.47	1W Metal Film	AA
R202	VRS-CY1JF682JY	R 6.8K	1/16W Metal Oxide	AA	△ R607	VRD-RA2EE103JY	R 10K	1/4W Carbon	AA
R204	VRS-CY1JF222JY	R 2.2K	1/16W Metal Oxide	AA	△ R608	VRS-CY1JF393JY	R 39K	1/16W Metal Oxide	AA
R205	VRS-CY1JF471JY	R 470	1/16W Metal Oxide	AA	R609	VRN-VV3DB6R8J	R 6.8	2W Metal Film	AB
R206	VRS-CY1JF682JY	R 3.9K	1/16W Metal Oxide	AA	△ R610	VRN-VV3DBR15J	R 0.15	2W Metal Film	AB
R207	VRS-CY1JF272JY	R 2.7K	1/16W Metal Oxide	AA	R611	VRS-VV3DB332J	R 3.3K	2W Metal Oxide	AA
R208	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA	R612	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R210	VRD-RA2BE122JY	R 1.2K	1/8W Carbon	AA	R614	VRD-RM2HD124JY	R 120K	1/2W Carbon	AA
R212	VRS-CY1JF682JY	R 6.8K	1/16W Metal Oxide	AA	R615	VRD-RM2HD154JY	R 150K	1/2W Carbon	AA
R214	VRS-CY1JF222JY	R 2.2K	1/16W Metal Oxide	AA	R616	VRD-RM2HD472JY	R 4.7K	1/2W Carbon	AA
R216	VRS-CY1JF222JY	R 2.2K	1/16W Metal Oxide	AA	△ R617	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA
R217	VRD-RA2BE223JY	R 22K	1/8W Carbon	AA	R618	VRN-VV3ABR47JY	R 0.47	1W Metal Film	AA
R218	VRS-CY1JF223JY	R 22K	1/16W Metal Oxide	AA	R619	VRS-SV2HC102JY	R 1K	1/2W Metal Oxide	AA
R219	VRS-CY1JF223JY	R 22K	1/16W Metal Oxide	AA	△ R620	VRD-RA2BE152JY	R 1.5K	1/8W Carbon	AA
R220	VRD-RA2BE223JY	R 22K	1/8W Carbon	AA	R621	VRD-RM2HD220JY	R 22	1/2W Carbon	AA
R221	VRS-CY1JF181JY	R 180	1/16W Metal Oxide	AA	R622	VRD-RA2BE394JY	R 390K	1/8W Carbon	AA
R222	VRS-CY1JF471JY	R 470	1/16W Metal Oxide	AA	R623	VRS-VV3AB102J	R 1K	1W Metal Oxide	AA
R227	VRS-CY1JF680JY	R 68	1/16W Metal Oxide	AA	R624	VRD-RA2BE184JY	R 180K	1/8W Carbon	AA
R228	VRS-CY1JF102JY	R 1K	1/16W Metal Oxide	AA	R625	VRD-RA2BE394JY	R 390K	1/8W Carbon	AA
R230	VRS-CY1JF391JY	R 390	1/16W Metal Oxide	AA	R626	VRS-VV3AB562J	R 5.6K	1W Metal Oxide	AA
R303	VRS-CY1JF100JY	R 10	1/16W Metal Oxide	AA	R627	VRS-CY1JF394JY	R 390K	1/16W Metal Oxide	AA
R304	VRS-CY1JF100JY	R 10	1/16W Metal Oxide	AA	R628	VRS-KA3NG1R2K	R 1.2	7W Metal Oxide	AD
R305	VRS-CY1JF562JY	R 5.6K	1/16W Metal Oxide	AA	R631	VRS-KA3NG122J	R 1.2K	7W Metal Oxide	AD
R310	VRD-RA2BE562JY	R 5.6K	1/8W Carbon	AA	R633	VRS-CY1JF331JY	R 330	1/16W Metal Oxide	AA
R311	VRS-CY1JF562JY	R 5.6K	1/16W Metal Oxide	AA	R634	VRS-CY1JF331JY	R 330	1/16W Metal Oxide	AA
R315	VRS-CY1JF273JY	R 27K	1/16W Metal Oxide	AA	R635	VRS-CY1JF102JY	R 1K	1/16W Metal Oxide	AA
R317	VRS-CY1JF562JY	R 5.6K	1/16W Metal Oxide	AA	R636	VRS-VV3AB221J	R 220	1W Metal Oxide	AA
R320	VRS-CY1JF562JY	R 5.6K	1/16W Metal Oxide	AA	R637	VRS-CY1JF563JY	R 56K	1/16W Metal Oxide	AA
R321	VRS-CY1JF100JY	R 10	1/16W Metal Oxide	AA	R638	VRS-CY1JF473JY	R 47K	1/16W Metal Oxide	AA
R322	VRS-CY1JF100JY	R 10	1/16W Metal Oxide	AA	R639	VRS-KA3NG152J	R 1.5K	7W Metal Oxide	AD
R323	VRS-CY1JF562JY	R 5.6K	1/16W Metal Oxide	AA	R640	VRS-CY1JF182JY	R 1.8K	1/16W Metal Oxide	AA
R336	VRS-VV3AB220J	R 22	1W Metal Oxide	AA	R643	VRN-VV3LB3R3J	R 3.3	3W Metal Film	AB
R337	VRS-VV3AB220J	R 22	1W Metal Oxide	AA	R645	VRD-RA2BE473JY	R 47K	1/8W Carbon	AA
R339	VRN-VV3AB4R7J	R 4.7	1W Metal Film	AA	R652	VRS-CY1JF102JY	R 1K	1/16W Metal Oxide	AA
R340	VRN-VV3AB4R7J	R 4.7	1W Metal Film	AA	R654	VRS-VV3DB103J	R 10K	2W Metal Oxide	AA
R344	VRS-CY1JF822J	R 8.2	1/16W Metal Oxide	AA	R657	VRS-KA3HG681J	R 680	5W Metal Oxide	AD
R347	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA	R669	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R348	VRS-CY1JF101JY	R 100	1/16W Metal Oxide	AA	R671	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R355	VRS-CY1JF822JY	R 8.2K	1/16W Metal Oxide	AA	R701	VRD-RM2HD100JY	R 10	1/2W Carbon	AA
R375	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA	R702	VRD-RA2EE152JY	R 1.5K	1/4W Carbon	AA
R376	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA	R703	VRD-RA2EE473JY	R 47K	1/4W Carbon	AA
R377	VRD-RA2BE101JY	R 100	1/8W Carbon	AA	R704	VRD-RA2BE101JY	R 100	1/8W Carbon	AA
R378	VRD-RA2BE101JY	R 100	1/8W Carbon	AA	R705	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA
R390	VRN-VV3ABR22J	R 0.22	1W Metal Film	AA	R706	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA
R391	VRN-VV3ABR22J	R 0.22	1W Metal Film	AA	R707	VRS-VV3DB104J	R 100K	2W Metal Oxide	AB
R392	VRS-CY1JF333JY	R 33K	1/16W Metal Oxide	AA	R709	VRN-VV3DBR22J	R 0.22	2W Metal Film	AB
R393	VRS-CY1JF103JY	R 10K	1/16W Metal Oxide	AA	△ R712	RR-HZ0014GEZZY	R 12M	1W Resistor	AE
R394	VRS-CY1JF333JY	R 33K	1/16W Metal Oxide	AA	R715	VRS-CY1JF154JY	R 150K	1/16W Metal Oxide	AA
R395	VRS-CY1JF103JY	R 10K	1/16W Metal Oxide	AA	R716	VRN-VV3DBR22J	R 0.22	2W Metal Film	AB
R396	VRS-CY1JF103JY	R 10K	1/16W Metal Oxide	AA	R717	VRS-VV3DB104J	R 100K	2W Metal Oxide	AB
R397	VRS-CY1JF333JY	R 33K	1/16W Metal Oxide	AA	R751	VRD-RM2HD102JY	R 1K	1/2W Carbon	AA
R501	VRS-CY1JF562JY	R 5.6K	1/16W Metal Oxide	AA	R752	VRS-VV3AB330J	R 33	1W Metal Oxide	AA
R502	VRS-CY1JF123JY	R 12K	1/16W Metal Oxide	AA	R753	VRD-RA2EE471JY	R 470	1/4W Carbon	AA
R503	VRD-RA2BE222JY	R 2.2K	1/8W Carbon	AA	R760	VRS-CY1JF102JY	R 1K	1/16W Metal Oxide	AA
R504	VRD-RA2BE222JY	R 8.2K	1/8W Carbon	AA	R761	VRS-CY1JF103JY	R 10K	1/16W Metal Oxide	AA
R505	VRS-CY1JF123JY	R 12K	1/16W Metal Oxide	AA	R762	VRS-VV3DB220J	R 22	2W Metal Oxide	AA
R507	VRN-RA2BK272FY	R 2.7K	1/8W Metal Film	AA	R763	VRD-RA2BE470JY	R 47	1/8W Carbon	AA
R508	VRD-RA2BE683JY	R 68K	1/8W Carbon	AA	R764	VRD-RA2BE102JY	R 1K	1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-B DUNTKC519WEA1 CRT Unit									
INTEGRATED CIRCUIT									
IC851	VHITDA6107A-1	R	TDA6107AJF/N1	AK	R1511	VRD-RA2BE683JY	R	68K 1/8W Carbon	AA
TRANSISTORS					R1512	VRD-RA2BE122JY	R	1.2K 1/8W Carbon	AA
Q1501	VS2SC3198-Y-1+	R	2SC3198-Y	AA	R1513	VRD-RA2BE123JY	R	12K 1/8W Carbon	AA
Q1502	VS2SA1266-Y-1+	R	2SA1266-Y	AA	△ R1514	VRS-VV3DB221J	R	220 2W Metal Oxide	AA
Q1503	VS2SA2005++1E	R	2SA2005	AE	R1515	VRD-RA2EE560JY	R	56 1/4W Carbon	AA
Q1504	VS2SC5511++1E	R	2SC5511	AE	R1516	VRD-RA2EE560JY	R	56 1/4W Carbon	AA
Q1505	VS2SC3198-Y-1+	R	2SC3198-Y	AA	R1517	VRD-RA2EE1R5JY	R	1.5 1/4W Carbon	AA
Q1506	VS2SC3198-Y-1+	R	2SC3198-Y	AA	R1518	VRD-RA2EE1R0JY	R	1 1/4W Carbon	AA
Q1507	VS2SC3198-Y-1+	R	2SC3198-Y	AA	△ R1519	VRS-VV3DB221J	R	220 2W Metal Oxide	AA
Q1508	VS2SC3198-Y-1+	R	2SC3198-Y	AA	R1520	VRD-RA2BE102JY	R	1K 1/8W Carbon	AA
DIODES					R1521	VRD-RA2BE223JY	R	22K 1/8W Carbon	AA
D851	RH-DX0220CEZZY	R	Diode	AB	R1522	VRD-RA2BE821JY	R	820 1/8W Carbon	AA
D852	RH-DX0220CEZZY	R	Diode	AB	R1523	VRD-RA2BE471JY	R	470 1/8W Carbon	AA
D853	RH-DX0220CEZZY	R	Diode	AB	R1524	VRD-RA2BE471JY	R	470 1/8W Carbon	AA
D854	RH-DX0220CEZZY	R	Diode	AB	R1525	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA
D855	RH-DX0220CEZZY	R	Diode	AB	R1526	VRD-RA2BE393JY	R	39K 1/8W Carbon	AA
D856	RH-DX0220CEZZY	R	Diode	AB	R1527	VRD-RA2BE182JY	R	1.8K 1/8W Carbon	AA
D1501	VHD1SS133++1Y	R	1SS133	AA	R1528	VRD-RA2BE331JY	R	330 1/8W Carbon	AA
D1506	VHD1SS133++1Y	R	1SS133	AA	R1529	VRD-RA2BE273JY	R	27K 1/8W Carbon	AA
D1507	VHD1SS133++1Y	R	1SS133	AA	R1530	VRD-RA2BE393JY	R	39K 1/8W Carbon	AA
D1508	RH-DX0487CEZZY	R	Diode	AC	R1531	VRD-RA2BE152JY	R	1.5K 1/8W Carbon	AA
D1509	RH-DX0487CEZZY	R	Diode	AC	R1532	VRD-RA2BE101JY	R	100 1/8W Carbon	AA
CAPACITORS					R1534	VRD-RA2BE221JY	R	220 1/8W Carbon	AA
C851	VCFYSB2EB823J	R	0.082 250V Mylar	AD	MISCELLANEOUS PARTS				
C852	VCEA0A2EW106M+R	10	250V Electrolytic	AD	FB852	RBLN-0091GEZZY	R	Balun	AB
C853	VCKYPA2HB221K+	R	220P 500V Ceramic	AB	FB1501	RBLN-0020CEZZ+	R	Balun	AB
C854	RC-KZ018JCEZZ	R	0.01 AC250V Ceramic	AC	P851	QTIPM0083CEZZ	R	Tip, 1pin	AB
C855	VCKYPA2HB221K+	R	220P 500V Ceramic	AB	P852	QTIPM0083CEZZ	R	Tip, 1pin	AB
C857	VCFYSB2EB823J	R	0.082 250V Mylar	AD	P854	QPLGN0261CEZZ	R	Plug, 2pin	AB
C858	VCQYTA1HM104J+	R	0.1 50V Mylar	AB	P855	QPLGN0761CEZZ	R	Plug, 7pin(H)	AD
C859	VCEA0A2AW106M+R	10	100V Electrolytic	AC	P860	QPLGN0878GEZZ	R	Plug, 8pin(KY)	AC
C1501	VCEA0A1EW476M+R	47	25V Electrolytic	AB	RDA851	PRDAR0248PEFW	R	Heat Sink	AF
C1502	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA	RDA1503	PRDAR0083PEFW	R	Heat Sink	AD
C1503	VCKYPA2HB472K+	R	4700P 500V Ceramic	AB	RDA1504	PRDAR0083PEFW	R	Heat Sink	AD
C1504	VCKYPA2HB472K+	R	4700P 500V Ceramic	AB	△ SC851	QSOCVA005WJZZ	R	Socket, 12pin	AE
C1505	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA	PWB-C DUNTKC517WEA2 FRONT Unit				
C1506	VCKYPA1HF103Z+	R	0.01 50V Ceramic	AA	INTEGRATED CIRCUITS				
C1507	VCEA0A1EW476M+R	47	25V Electrolytic	AB	IC4401	VHiKIA358P+-1	R	KiA358P	AD
C1508	VCCSPA2HL560K+	R	56P 500V Ceramic	AA	△ IC4701	VHiMIP0254/-1	R	MiP0254SPSCF	AL
C1510	VCEA4A2CN106M+R	10	160V Electrolytic	AC	TRANSISTORS				
C1511	VCEA0A1EW476M+R	47	25V Electrolytic	AB	Q4001	VS2SA1266-Y-1+	R	2SA1266-Y	AA
C1512	VCQYTA1HM822J+	R	8200P 50V Mylar	AA	Q4002	VS2SC3198-Y-1+	R	2SC3198-Y	AA
C1513	VCQYTA1HM103J+	R	0.01 50V Mylar	AB	Q4003	VS2SC3198-Y-1+	R	2SC3198-Y	AA
C1514	VCKYPA1HB391K+	R	390P 50V Ceramic	AA	Q4004	VS2SC3198-Y-1+	R	2SC3198-Y	AA
C1515	VCQYTA1HM103J+	R	0.01 50V Mylar	AB	Q4005	VS2SC3198-G-1+	R	2SC3198-G	AA
C1516	VCQYTA1HM104K+	R	0.1 50V Mylar	AC	Q4006	VS2SC3198-G-1+	R	2SC3198-G	AA
C1517	VCKYPA2HB102K+	R	1000P 500V Ceramic	AA	DIODES				
JB311	VCKYPA2HB102K+	R	1000P 500V Ceramic	AA	D4001	RH-PXA036WJZZ	R	PhotoDiode	AD
RESISTORS					D4002	RH-PXA036WJZZ	R	PhotoDiode	AD
R851	VRD-RM2HD101JY	R	100 1/2W Carbon	AA	D4003	RH-PX0037PEZZ	R	PhotoDiode	AD
R852	VRD-RM2HD101JY	R	100 1/2W Carbon	AA	D4301	VHD1SS133++1Y	R	1SS133	AA
R853	VRD-RM2HD101JY	R	100 1/2W Carbon	AA	D4401	VHD1SS133++1Y	R	1SS133	AA
R854	VRC-MA2HG152KY	R	1.5K 1/2W Solid	AA	D4402	VHD1SS133++1Y	R	1SS133	AA
R855	VRC-MA2HG152KY	R	1.5K 1/2W Solid	AA	D4701	RH-DX0407CEZZY	R	Diode	AD
R856	VRC-MA2HG152KY	R	1.5K 1/2W Solid	AA	D4706	RH-EX1329CEZZY	R	Zener Diode	AD
R858	VRS-SV2HC100J	R	10 1/2W Metal Oxide	AA	△ D4707	RH-DX0083GEZZ	R	Diode	AC
R861	VRD-RM2HD224JY	R	220K 1/2W Carbon	AA	△ IC4702	RH-FXA003WJZZ	R	PC123Y82	AD
R863	VRD-RA2BE221JY	R	220 1/8W Carbon	AA	R4702	RH-HXA014WJZZ+	R	Thermistor	AD
R864	VRD-RA2BE221JY	R	220 1/8W Carbon	AA	PACKAGED CIRCUIT				
R865	VRD-RA2BE221JY	R	220 1/8W Carbon	AA	△ VA4701	RH-VX0073CEZZ	R	Varistor	AD
R1503	VRD-RA2BE222JY	R	2.2K 1/8W Carbon	AA	△ ACC4701	QACCZA019WJPZ	R	AC Cord	AH
R1504	VRD-RA2BE100JY	R	10 1/8W Carbon	AA	COIL & TRANSFORMER				
R1506	VRD-RA2BE820JY	R	82 1/8W Carbon	AA	△ L4701	RCiLFA106WJZZ	R	Coil	AE
R1507	VRD-RA2BE820JY	R	82 1/8W Carbon	AA	L4903	RCiLP0195CEZZ+	R	Coil	AC
R1509	VRD-RA2BE122JY	R	1.2K 1/8W Carbon	AA	△ T4701	RTRNZ0190PEZZ	R	Transformer	AH
R1510	VRD-RA2BE683JY	R	68K 1/8W Carbon	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
CAPACITORS									
	C4001	VCEA0A1HW476M+R	47 50V Electrolytic	AB	△	S4701	QSW-P0612CEZZ	R Switch	AG
	C4002	VCKYPA1HF103Z+ R	0.01 50V Ceramic	AA	MISCELLANEOUS PARTS				
	C4372	VCEA0A1CW106M+R	10 16V Electrolytic	AB		FB4701	RBLN-0094GEZZY	R Balun	AB
	C4373	VCEA0A1CW106M+R	10 16V Electrolytic	AB		FB4702	RBLN-0094GEZZY	R Balun	AB
	C4376	VCKYPA1HF103Z+ R	0.01 50V Ceramic	AA	△	FH4701	QFSDH1013CEZZ+	R Fuse Holder	AC
	C4378	VCEA0A1CW106M+R	10 16V Electrolytic	AB	△	FH4702	QFSDH1014CEZZ+	R Fuse Holder	AC
	C4380	VCEA0A1HW105M+R	1 50V Electrolytic	AB	△	F4701	QFS-CA003WJZZ	R Fuse, 5A 250V	AC
	C4381	VCEA0A1HW105M+R	1 50V Electrolytic	AB		J4301	QJAKJ0101SEZZ	R Jack	AE
	C4401	VCQYTA1HM104K+R	0.1 50V Mylar	AC		J4901	QJAKG0023WJZZ	R Jack	AE
	C4701	RC-FZA097WJZZ	R 0.22 AC250VM. Polypro	AC		J4902	QSOCD023WJZZ	R Socket	AE
	C4702	VCKYPA2HB221K+ R	220P 500V Ceramic	AB		P4001	QPLGN0678GEZZ	R Plug, 6pin(CA)	AB
△	C4703	VCEA0A2GW475M R	4.7 400V Electrolytic	AE		P4002	QPLGN0461CEZZ	R Plug, 4pin(CB)	AB
△	C4704	VCQYTA1HM104K+R	0.1 50V Mylar	AC		P4003	QPLGN0761CEZZ	R Plug, 7pin(CC)	AD
	C4705	RC-KZ016SCEZZ	R 470P 4kV Ceramic	AD		P4004	QPLGN0778GEZZ	R Plug, 7pin(CD)	AC
	C4706	RC-EZA160WJZZ	R 470 16V Electrolytic	AC	△	P4701	QPLGN0269GEZZ	R Plug, 2pin	AB
	C4707	RC-KZ0069GEZZ	R 47P 2kV Ceramic	AC		P4702	QPLGN0269GEZZ	R Plug, 2pin(AC)	AB
	C4710	VCEA0A1CW476M+R	47 16V Electrolytic	AB		RMC4001	RRMCUA024WJZZ	R Remote Receiver	AG
	C4913	VCKYPA1HB102K+ R	1000P 50V Ceramic	AA					
	C4916	VCKYPA1HB102K+ R	1000P 50V Ceramic	AA					
	C4922	VCEA0A1HW106M+R	10 50V Electrolytic	AB					
	C4924	VCEA0A1HW106M+R	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-RA2BE472JY	R 4.7K 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					
	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-RA2BE680JY	R 68 1/8W Carbon	AA					
	R4370	VRD-RA2BE680JY	R 68 1/8W Carbon	AA					
	R4371	VRD-RA2BE682JY	R 6.8K 1/8W Carbon	AA					
	R4372	VRD-RA2BE682JY	R 6.8K 1/8W Carbon	AA					
	R4373	VRD-RA2BE151JY	R 150 1/8W Carbon	AA					
	R4374	VRD-RA2BE151JY	R 150 1/8W 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					

Ref. No. Part No. ★ Description Code

MISCELLANEOUS PARTS

VSP2204PB048A	R	Speaker	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-D348WJPZ	R	Connecting Cord	AM

Ref. No. Part No. ★ Description Code

CABINET PARTS

1	CCABAA689WEV0	R	Front Cabinet Ass'y	AC
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
1-10	GCOVHA045WJZZ	R	Tweeter Cover x 2	AC
2	CCABBA438WEV0	R	Rear Cabinet Ass'y	BL
2-1	<i>Not Available</i>	-	Rear Cabinet	-

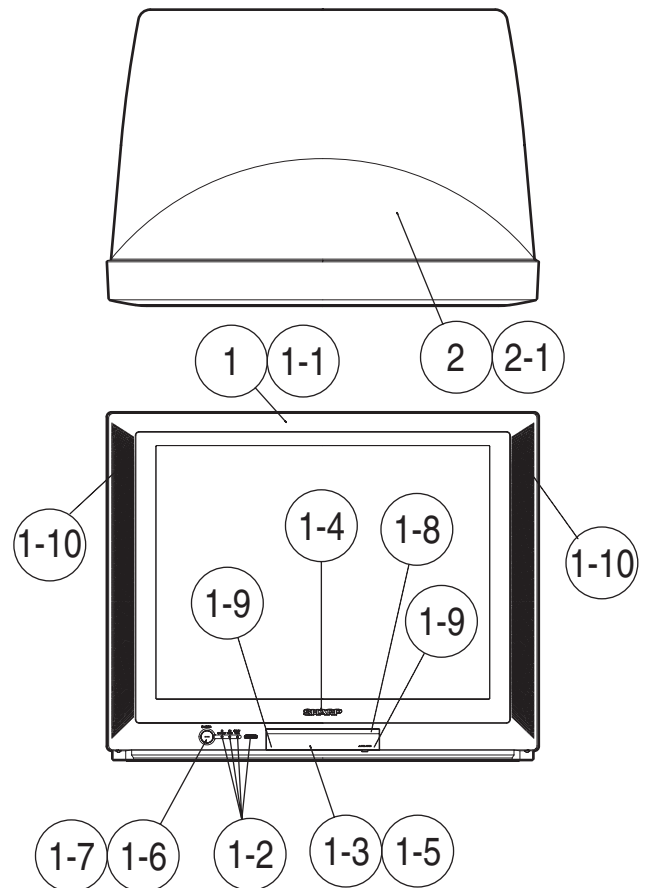
SUPPLIED ACCESSORIES

ACCESSORIES

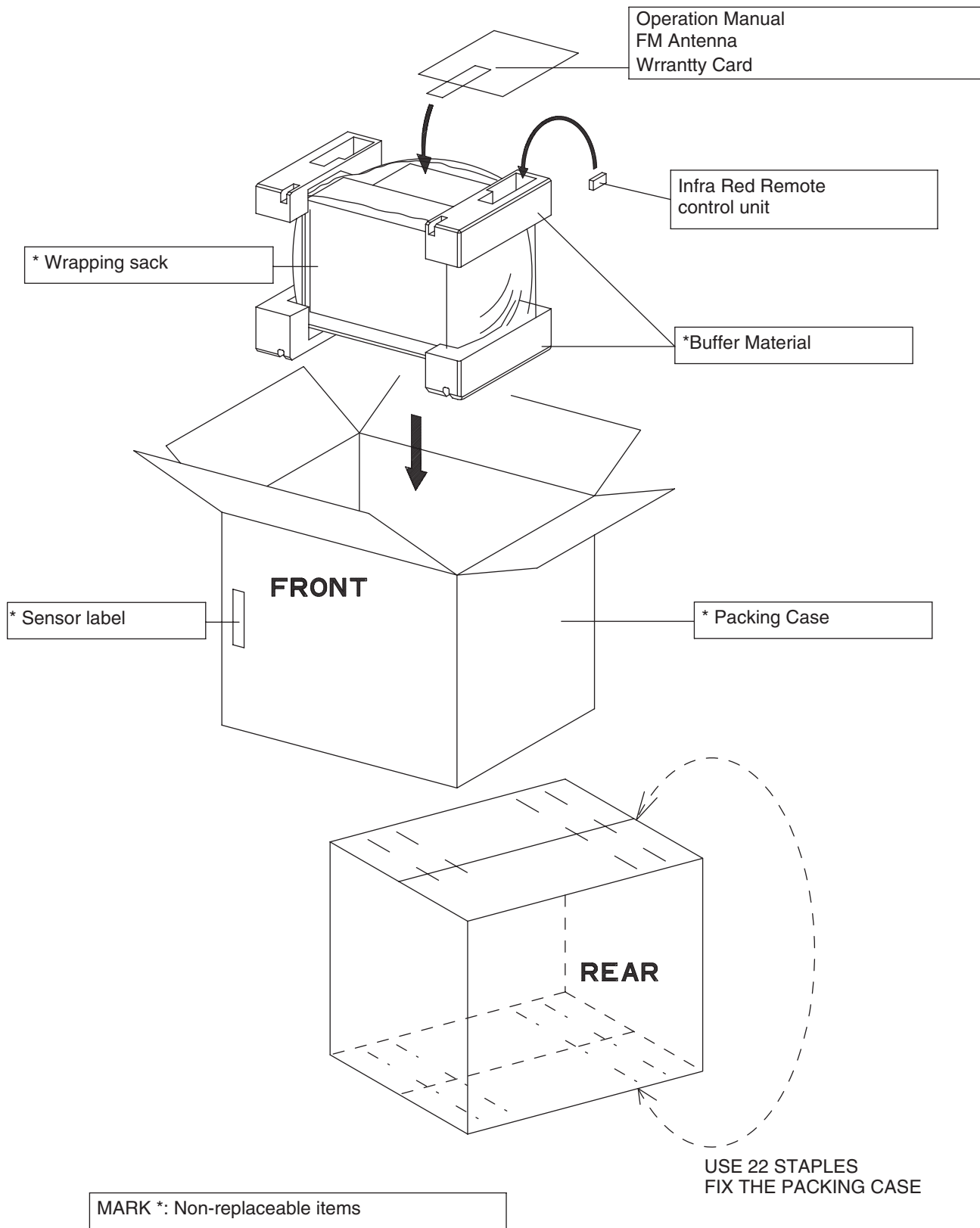
RRMCGA271WJSA	R	Infrared Remote Control Unit	AR
TINS-B442WJZZ	R	Opeation Manual	AK

PACKING PARTS

SPAKGB585WJZZ	-	Packing Case	-
SPAKXA414WJZZ	-	Buffer Material	-
SSAKA0031PEZZ	-	Polyethylene Bag	-
SSAKH0018PEZZ	-	Wrapping Paper	-
TLABKA008WJZZ	-	Label	-



PACKING OF THE SET



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