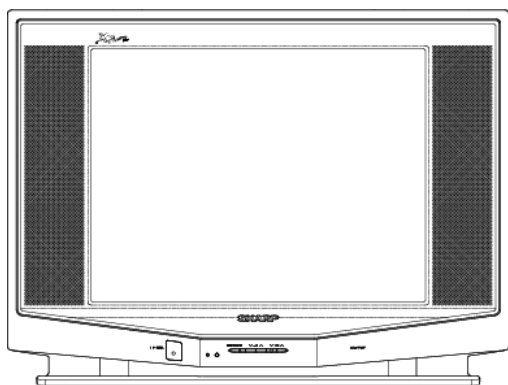


SHARP SERVICE MANUAL



No. S777721QFG1A
COLOUR TELEVISION
Chassis No.GA-7

MODEL 21Q-FG1A

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

- Multi 21 Systems
- Frequency Synthesizer Tuner
- Full Auto System
- 100-CH Program Memory
- CATV (Hyper Band Ready)
- Hotel Mode
- White Temperature Select
- Off Timer
- Blue Back Function
- Aperture Control Circuit
- Auto Fine Tuning
- NTSC Colour Comb Filter
- High Contrast Picture (Black Stretch Circuit)
- AV Stereo
- Multi Languages OSD (English/French/Arabic and Russian)
- Surround Sound Effect (With Bass/Treble/Balance)
- Rear AV IN / OUT Terminals
- Side AV-IN Terminal (Side of CAB-A)
- AV Mode (3 Mode)
- Child Lock

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Parts Guide

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.

Convergence	Self Convergence System
Focus	UNI-BI Focusing
Sweep Deflection	Magnetic

Power Input	110 ~ 240V AC 50/60 Hz
Power Consumption	88W
Audio Power Output Rating	3W(rms) x 2

Speaker
Size 9 x 5 cm Elliptic (2 pcs)
Voice Coil Impedance 16 ohms at 400 Hz

Aerial Input Impedance	
VHF/UHF	75 ohms Unbalanced
Receiving System	PAL I, B/G, D/K & SECAM B/G, K1 & NTSC M
Receiving Channel	
VHF-Channels	E2(48.25MHz) thru E12(224.25MHz) C1(49.75MHz) thru C12(216.25 MHz) S1(105.25MHz) thru S41(463.25MHz)
UHF-Channels	E21(471.25MHz) thru E69(855.25MHz) C13(471.25MHz) thru C57(863.25MHz)

Dimensions Width: 625mm
Height: 470mm
Depth: 498.2mm
Weight(approx): 22 kg

Cabinet material All Plastics

Specifications are subject to change without prior notice

CHAPTER 2. IMPORTANT SERVICE NOTES

[1] IMPORTANT SERVICE NOTES

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

1. 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.

2. 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 30.0kV (at beam 0 μ A).
- 2) To keep the set in a normal operation, please make sure it's function at 26.5kV \pm 1.0kV (at beam 1,100 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.

3. 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 materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators etc.

CHAPTER 3. ADJUSTMENT PRECAUTIONS

[1] ADJUSTMENT PRECAUTIONS

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.

CAUTION : MAKE SURE TV SET IN "NORMAL CONDITION" BEFORE SWITCH TO SERVICE MODE FOR ADJUSTMENT.

1. Setting the service mode by the microprocessor.

- (1) Press SERVICE key on the remote controller to set the TV set to SERVICE mode position, and the microprocessor is in input mode. (Adjustment through the I2C bus control).
Service Mode also can be reached by by connecting MCU Pin 5 to ground.
(JA483 connect to JA484)
- (2) Press the MENU key on the remote controller to get ready to select the mode
(Adjustment mode, Setting mode, Check mode and Option mode) one by one.
- (3) Press the CH DOWN / UP key on the remote controller to select the item in Adjustment mode, Setting mode or Option mode.
- (4) Using the VOLUME UP/ DOWN key on the remote controller, the data can be modified.
Please wait approximately 200 msec for data storage in EEPROM before select to another mode.
- (5) In Check mode the data cannot be changed.
- (6) Press the SERVICE key again, it will switch to the NORMAL mode position, and the microprocessor is out of the SERVICE mode.

2. Factory Presetting.

- (1) During POWER OFF (AC OFF), switch on service key (by connecting MCU Pin 5 to ground) then follow by AC ON. Initial values are automatically preset only when a new EEPROM is used. (Judge with the first 4 bytes).
- (2) The initial data are preset as listed in page 3-7 to 3-12.
- (3) Make sure the data need modification or not (Initial data).

Precaution: If haven't done this initialization, it may possibly generate excessive Beam current.

3. For reference please check with memory map RH-IXC080WJN1Q. (See Page 4-1 ~ 4-16).

1. ADJUSTMENT ITEM

***Below are the adjustment items that should be done, PLS FOLLOW THE PROCEDURE. Otherwise some adjustment items will not be accurate.

NO ***	ADJUSTMENT ITEM	EFFECTIVE MODEL	REVISION
1	BUS SET UP	ALL MODELS	
2	OPTION SET UP		
3			
4	VIF-VCO		
5	S-TRAP fo		
6	RF-AGC		
7	PURITY ADJ		
8	CONVERGENCE ADJ		
9	FOCUS ADJ		
10	V-SHIFT (50 Hz)		
11	H-SHIFT (50 Hz)		
12	V-SIZE (50 Hz)		
13	SCREEN		
14	WHITE BALANCE		
15	SUB-BRIGHTNESS		
16	SUB-CONTRAST		
17	SUB-COLOR		
18	SUB-TINT		
19	SECAM-OFFSET		
20	BEAM CURRENT CHECK		
21	BEAM PROTECTOR CHECK		
22	HV PROTECTOR CHECK		
23	OTHER PROTECTOR CHECK		
24	AV OUT CHECK		
25	AV IN CHECK		
26	CONTRAST CONTROL CHECK		
27	COLOR CONTROL CHECK		
28	BRIGHTNESS CONTROL CHECK		
29	TINT CONTROL CHECK		
30	SHARPNESS CONTROL CHECK		
31	CH DISPLAY COLOR CHECK		
32	NORMAL DISPLAY CHECK		
33	WHITE TEMP CONTROL CHECK		
34	COLOR SYSTEM CHECK		
35	SURROUND CHECK		
36	TREBLE CHECK		
37	BASS CHECK		
38	BALANCE CHECK		
39	SOUND SYSTEM CHECK		
40	NOISE MUTE CHECK		
41	OSD LANGUAGE QUANTITY CHECK		
42	SHOCK TEST CHECK		
43	ROM CORRECTION CHECKING		

2. USER DATA IN SERVICE MODE

- 1) While SERVICE mode ON, EEPROM DATA will switch to the service data. Also, once SERVICE mode OFF, EEPROM will switch back to previous USER DATA.
- 2) In the service mode, the user data establish as below,

	USER DATA
CONTRAST	MAX (60)
COLOUR	CENT (0)
BRIGHTNESS	CENT (0)
TINT	CENT (0)
SHARPNESS	CENT (0)
WHITE TEMP	STANDARD
S-VOLUME	MIN
SURROUND	OFF
TREBLE	CENT (0)
BASS	CENT (0)
BALANCE	CENT (0)
BLUE BACK	OFF
C SYSTEM	AUTO
S SYSTEM	*1

*1: For each CH, data is same as before switch to Service mode.

The flow of Mode list as following,

* Direct Key-in Mode for Service Items in Service Mode

RC CODE (HEX)	R/C KEY NAME	SERVICE-ITEM
80	POS 1	R-C UP (IN SERVICE MODE V00)
40	POS 2	G-C UP (IN SERVICE MODE V00)
C0	POS 3	B-C UP (IN SERVICE MODE V00)
20	POS 4	R-C DOWN (IN SERVICE MODE V00)
A0	POS 5	G-C DOWN (IN SERVICE MODE V00)
60	POS 6	B-C DOWN (IN SERVICE MODE V00)
E0	POS 7	R-D UP (IN SERVICE MODE V00)
10	POS 8	B-D UP (IN SERVICE MODE V00)
50	POS 0	B-D DOWN (IN SERVICE MODE V00)
E4	FLASHBACK	R-D DOWN (IN SERVICE MODE V00)
E4	FLASHBACK	Y-MUTE (BESIDES OF SERVICE MODE V00)
75	WHITE TEMP UP	RF-AGC (V01)
F5	WHITE TEMP DOWN	VIF-VC0 (V02)
C2	TUNE DOWN	H-VCO (V03)
8D	SHARPNESS DOWN	SUB-CON (V04)
D6	BALANCE LEFT	SUB-COL (V05)
0D	SHARPNESS UP	SUB-BRIGHT (V06)
36	BALANCE RIGHT	SUB-TINT (V07)
46	TREBLE UP	SUB-SHP (V08)
C6	TREBLE DOWN	SUB-COL-YUV (V09)
26	BASS UP	SUB-TINT-YUV (V10)
24	COLOUR UP	V-SIZE (V11), V-SIZE60 (V17)
54	BRIGHTNESS DOWN	V-SHIFT (V12), V-SHIFT60 (V18)
74	TINT DOWN	H-SHIFT (V13), H-SHIFT60 (V19)
66	SURROUND UP	SCM-BR (V14)
E6	SURROUND DOWN	SCM-BB (V15)
C4	CONTRAST DOWN	SUB-VOL (V16)
4C	PICTURE	S-TRAP-BG (V20)
CC	HOLD	S-TRAP-I (V21)
2C	TEXT	S-TRAP-DK (V22)
AC	CANCEL	S-TRAP-M (V23)
EC	SIZE	S-TRAP-574 (V24)
80	POS 1	R-C UP YUV (IN SERVICE MODE V25)
40	POS 2	G-C UP YUV (IN SERVICE MODE V25)
C0	POS 3	B-C UP YUV (IN SERVICE MODE V25)
20	POS 4	R-C DOWN YUV (IN SERVICE MODE V25)
A0	POS 5	G-C DOWN YUV (IN SERVICE MODE V25)

RC CODE (HEX)	R/C KEY NAME	SERVICE-ITEM
60	POS 6	B-C DOWN YUV (IN SERVICE MODE V25)
E0	POS 7	R-D UP YUV (IN SERVICE MODE V25)
10	POS 8	B-D UP YUV (IN SERVICE MODE V25)
50	POS 0	B-D DOWN YUV (IN SERVICE MODE V25)
E4	FLASHBACK	R-D DOWN YUV (IN SERVICE MODE V25)
C1		AUTO ADJ FOR V01, V02, V03, V20, V21, V22, V23, V24
CA		T-SET
81		SERVICE MODE

1) Please set the MCL to MCL1 as below:

2) After set the MCL, please set the INITIAL SETTING for each models.

INITIAL 3 : For Singapore (All Channel Sound System are set to B/G)

MCL1 (HEX AE)		
CH-No	Fv (MHz)	Sound Sys
0		
1	48.25	B/G
2	62.25	B/G
3	77.25	D/K
4	175.25	B/G
5	182.25	B/G
6	183.25	D/K
7	191.25	D/K
8	196.25	B/G
9	199.25	M
10	210.25	B/G
11	224.25	B/G
12	471.25	B/G
13	487.25	I
14	503.25	B/G
15	575.25	B/G
16	583.25	B/G
17	599.25	B/G
18	621.25	M
19	639.25	D/K
20	703.25	B/G
21	735.25	I
22	767.25	B/G
23	815.25	B/G
24	855.25	I
25	855.25	B/G
26	55.25	M
27	83.25	M
28	183.25	M
29	193.25	M
30	217.25	M
31	471.25	M
32	477.25	M
33	693.25	M
34	885.25	M
35	112.25	B/G
36	168.25	B/G
37		
38	294.25	B/G
39	463.25	B/G
40		
41	647.25	B/G
42	663.25	B/G
43	679.25	B/G
44	174.95	B/G
45	175.55	B/G
46		
47		
48		

MCL1 (HEX AE)		
CH-No	Fv (MHz)	Sound Sys
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		

NOTE: PLL DATA OF ABOVE FREQ SHOULD TAKE THE ACCOUNT OF PIF SETTING IN SERVICE OPTION 004 (VIF) BEFORE STORING INTO EEPROM.

SHIPPING SETTING & CHECKING

(1) The following default data has been factory-set for the E2PROM follow by INITIAL DATA selected.

ITEMS	DATA SETTING
LAST POWER	ON
LAST TV/AV MODE	TV MODE
LAST POSITION	CH 1
FLASHBACK CHANNEL	CH 1
1/2 DIGIT ENTRY	2 DIGIT ENTRY
VOLUME	0 (Min)
BLUE BACK	OFF
CHILD LOCK	OFF
OFF TIMER	--:--
PASSWORD	0000
AFT	ALL CH ON
COLOR SYSTEM	ALL CH AUTO
SKIP	ALL CH OFF
AV MODE	MOVIE
CONTRAST	60
COLOR	+6
BRIGHTNESS	0
TINT	0(CENTER)
SHARPNESS	+6
WHITE TEMP	0
SURROUND	OFF
TREBLE	0
BASS	+3
AVL	ON
BALANCE	0(CENTER)

INITIAL	LANGUAGE	SOUND SYSTEM
1	CHINESE	D/K
2	CHINESE	I
3	ENGLISH	B/G
4	ARABIC	B/G
5	RUSSIAN	D/K
6	MALAY	B/G
7	FRENCH	D/K

FACTORY SETTING BY MODEL

(Reference: Geomagnetism Adjustment)

MODEL	MAGNETIC FIELD(V, H) nT	BACKGROUND	LANG.	S-SYS	LANG QTY
SINGAPORE	-10.000 40.000	12300°K	ENGLISH	B/G	4

4: ENGLISH/FRENCH/ARABIC/RUSSIAN

**AFTER INITIALIZED THE EEPROM (REFER TO FACTORY PRESETTING), READ DATA FROM EEPROM ADDRESS 00H ~ 03H, AND COMPARE TO THE LIST BELOW, IF DIFFERENT, INITIALIZE THE EEPROM.

ADDRESS	DATA	ADDRESS	DATA
00H:	7CH	02H:	78H
01H:	70H	03H:	70H

*** There are four stages of service mode data. First stage data from V00~V32 (Adjustment Mode).

To go into second stage of service mode data, press MENU key. Second stage data from F01~F185 (Setting Mode).

To go into third stage of service mode data, press MENU key. Third stage data is Check Mode.

To go into fourth stage of service mode data, press MENU key. Fourth stage data from O01~O37 (Option Mode).


ADJUSTMENT MODE (FIRST STAGE)					
EEPROM ITEMS	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
R-DRIVE	V00	0~127	63	ADJ	PLS REFER TO
B-DRIVE	V00	0~127	63	ADJ	ADJ ITEM FOR
R-CUT	V00	0~255	127	ADJ	SCREEN AND
G-CUT	V00	0~255	127	ADJ	WHITE BALANCE
B-CUT	V00	0~255	127	ADJ	
RF-AGC	V01	0~127	50	AUTO	
VIF-VCO	V02	0~63	31	AUTO	
H-VCO	V03	0~7	3	AUTO	
SUB-CON	V04	0~127	100	ADJ	
SUB-COLOR	V05	0~127	63	ADJ	
SUB-BRIGHT	V06	0~255	127	ADJ	
SUB-TINT	V07	0~127	63	ADJ	
SUB-SHP PRE	V08	0~63	43	*FIX	BUS SETUP
SUB-COLOR-YUV	V09	0~127	90	FIX	
SUB-TINT-YUV	V10	0~127	63	FIX	
V-SIZE	V11	0~63	38	ADJ	
V-SHIFT	V12	0~7	3	ADJ	
H-SHIFT	V13	0~31	9	ADJ	
SCM-BR	V14	0~63	37	*ADJ	* ADD (+1) DATA, AFTER ADJ
SCM-BB	V15	0~63	22	*ADJ	* MINUS (-1) DATA, AFTER ADJ
SUB-VOL	V16	0~60	60	FIX	
V-SIZE60	V17	-31~0~+31	0	*FIX	BUS SETUP
V-SHIFT60	V18	-7~0~+7	-1	*FIX	IF NECESSARY, ADJ
H-SHIFT60	V19	-15~0~+15	+2	FIX	IF NECESSARY, ADJ
S-TRAP(BG)	V20	0~127	64	AUTO	
S-TRAP(I)	V21	0~127	64	AUTO	
S-TRAP(DK)	V22	0~127	64	AUTO	
S-TRAP(M)	V23	0~127	64	AUTO	
S-TRAP(574)	V24	0~127	64	AUTO	
CUTOFF/BKGD YUV	V25				
R-DRI YUV	V25	0...127	63	FIX	
B-DRI YUV	V25	0...127	63	FIX	
R-CUT YUV	V25	0...255	127	FIX	NO FUNCTION
G-CUT YUV	V25	0...255	127	FIX	NO FUNCTION
B-CUT YUV	V25	0...255	127	FIX	NO FUNCTION
SUB-CON YUV	V26	0~127	100	FIX	
SUB-BRIGHT YUV	V27	0~255	127	FIX	
VS-CORRECT	V28	0~63	32	*FIX	BUS SETUP
VS-CORRECT OFFSET	V29	-13~+13	0	*FIX	BUS SETUP
V LINEARITY	V30	0~63	32	*FIX	BUS SETUP
V LINEARITY OFFSET	V31	-13~+13	0	*FIX	BUS SETUP
SUB-SHP OV	V32	0~63	43	*FIX	BUS SETUP

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
C.CLIP-LVL	CLIP LEVEL CONTRAST CONTROL OF RGB INPUT	F01	0 (20H)/ 1(40H)	0	*FIX	BUS SETUP
RGB-CLIP	CLIPPING OF RGB CONTRAST CONTROL	F02	0 (enable)/ 1(disable)	0	FIX	
BS	BLACK STRETCH	F03	0 (enable)/ 1(disable)	0	FIX	
ABCL	ABCL PROCESSING (ACL PROCESSING)	F04	0 (ACL)/ 1(ABCL)	0	FIX	
ABCL-GAIN	ABCL PROCESSING GAIN	F05	0 (Lo)/ 1(Hi)	0	FIX	
S-OUT-LVL-NOT USED	AUDIO OUTPUT GAIN CONTROL	F06	0...127	95	FIX	NO FUNCTION
VIF-G	P-IF DETECTION GAIN OUTPUT	F07	0...7	4	*FIX	BUS SETUP
SHPG	SHARPNESS GAIN	F08	0 (soft)/ 1(sharp)	0	FIX	
SHPG-P	SHARPNESS GAIN PAL	F09	0 (soft)/ 1(sharp)	0	FIX	
SHPG-S	SHARPNESS GAIN SECAM	F10	0 (soft)/ 1(sharp)	0	FIX	
SHPG-N4	SHARPNESS GAIN N443	F11	0 (soft)/ 1(sharp)	0	FIX	
SHPG-N3	SHARPNESS GAIN N358	F12	0 (soft)/ 1(sharp)	1	FIX	
YDL	Y SIGNAL DELAY	F13	0...7	5	FIX	
YDL-P	Y SIGNAL DELAY PAL	F14	0...7	5	FIX	
YDL-S	Y SIGNAL DELAY SECAM	F15	0...7	7	FIX	
YDL-N4	Y SIGNAL DELAY N443	F16	0...7	5	FIX	
YDL-N3	Y SIGNAL DELAY N358	F17	0...7	5	FIX	
YDL-AV	Y SIGNAL DELAY AV	F18	0...7	6	FIX	
YDL-AV-P	Y SIGNAL DELAY PAL (AV)	F19	0...7	6	FIX	
YDL-AV-S	Y SIGNAL DELAY SECAM (AV)	F20	0...7	7	FIX	
YDL-AV-N4	Y SIGNAL DELAY N443 (AV)	F21	0...7	6	FIX	
YDL-AV-N3	Y SIGNAL DELAY N358 (AV)	F22	0...7	6	*FIX	BUS SETUP
YDL-YUV	Y SIGNAL DELAY YUV	F23	0...7	6	FIX	
COL-AV (OFFSET)	COLOUR OFFSET AV	F24	-31...0...+31	+10	*FIX	BUS SETUP
COL-P (OFFSET)	COLOUR OFFSET PAL	F25	-31...0...+31	0	*FIX	BUS SETUP
COL-S (OFFSET)	COLOUR OFFSET SECAM	F26	-31...0...+31	+9	FIX	
COL-N4 (OFFSET)	COLOUR OFFSET N443	F27	-31...0...+31	-8	FIX	
COL-N3 (OFFSET)	COLOUR OFFSET N358	F28	-31...0...+31	-7	*FIX	BUS SETUP
COL-ADJ (OFFSET)	COLOUR OFFSET ADJUST	F29	-31...0...+31	0	*FIX	BUS SETUP
SHP-PRE-AV (OFFSET)	SHARPNESS PRE OFFSET -AV	F30	-31...0...+31	+5	*FIX	BUS SETUP
SHP-PRE-YUV (OFFSET)	SHARPNESS PRE OFFSET -YUV	F31	-31...0...+31	-5	FIX	
SHP-PRE-P (OFFSET)	SHARPNESS PRE OFFSET -PAL	F32	-31...0...+31	-10	*FIX	BUS SETUP
SHP-PRE-S (OFFSET)	SHARPNESS PRE OFFSET - SECAM	F33	-31...0...+31	-15	*FIX	BUS SETUP
SHP-PRE-N4 (OFFSET)	SHARPNESS PRE OFFSET -N443	F34	-31...0...+31	-10	*FIX	BUS SETUP
SHP-PRE-N3 (OFFSET)	SHARPNESS PRE OFFSET -N358	F35	-31...0...+31	-10	*FIX	BUS SETUP
SHP-OV-AV (OFFSET)	SHARPNESS OV OFFSET -AV	F36	-31...0...+31	+5	*FIX	BUS SETUP
SHP-OV-YUV (OFFSET)	SHARPNESS OV OFFSET - YUV	F37	-31...0...+31	+5	FIX	
SHP-OV-P (OFFSET)	SHARPNESS OV OFFSET -PAL	F38	-31...0...+31	0	*FIX	BUS SETUP
SHP-OV-S (OFFSET)	SHARPNESS OV OFFSET - SECAM	F39	-31...0...+31	-5	*FIX	BUS SETUP
SHP-OV-N4 (OFFSET)	SHARPNESS OV OFFSET-N443	F40	-31...0...+31	0	*FIX	BUS SETUP
SHP-OV-N3 (OFFSET)	SHARPNESS OV OFFSET -N358	F41	-31...0...+31	0	*FIX	BUS SETUP
TINT-AV (OFFSET)	TINT OFFSET AV	F42	-63...0...+63	0	*FIX	BUS SETUP
TINT-ADJ (OFFSET)	TINT OFFSET ADJUST	F43	-63...0...+63	0	*FIX	BUS SETUP
TINT-YUV-ADJ (OFFSET)	TINT YUV OFFSET ADJUST	F44	-63...0...+63	0	FIX	
R-R (OFFSET)	R-DRIVE OFFSET WHEN WHITE TEMP IS RED	F45	-63...0...+63	+8	*FIX	BUS SETUP
B-R (OFFSET)	B-DRIVE OFFSET WHEN WHITE TEMP IS RED	F46	-63...0...+63	-10	*FIX	BUS SETUP
R-B (OFFSET)	R-DRIVE OFFSET WHEN WHITE TEMP IS BLUE	F47	-63...0...+63	-3	*FIX	BUS SETUP
B-B (OFFSET)	B-DRIVE OFFSET WHEN WHITE TEMP IS BLUE	F48	-63...0...+63	+13	*FIX	BUS SETUP
CTRAP-ADJ	CENTER VALUE OF CHROMA TRAP	F49	0...3	2	FIX	
CTRAP-ADJ-P	CENTER VALUE OF CHROMA TRAP PAL	F50	0...3	2	FIX	
CTRAP-ADJ-S	CENTER VALUE OF CHROMA TRAP SECAM	F51	0...3	2	FIX	
CTRAP-ADJ-N4	CENTER VALUE OF CHROMA TRAP N443	F52	0...3	2	FIX	
CTRAP-ADJ-N3	CENTER VALUE OF CHROMA TRAP N358	F53	0...3	2	FIX	

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
1W-TV	VERT SYNC DETECTION MODE FOR AV (1 WINDOW/2 WINDOW)	F54	0 (2W)/ 1(1W)	0	FIX	
1W-AV	VERT SYNC DETECTION MODE FOR TV (1 WINDOW/2 WINDOW)	F55	0 (2W)/ 1(1W)	1	FIX	
V-FREE (NO SYNC)	SET VERTICAL TO FORCED FREE RUN MODE	F56	0(NORMAL) / 1(FREERUN)	0	*FIX	BUS SETUP
AFC2 (NO SYNC)	HORIZONTAL AFC2 GAIN	F57	0(NORMAL) / 1(DOWN)	0	FIX	
GAMMA	GAMMA CORRECTION QTY	F58	0...3	0	*FIX	BUS SETUP
BS-D/C	BLACK STRETCH CONTROL LEVEL	F59	0...15	10	FIX	
BS-GAIN	BLACK STRETCH LEVEL	F60	0/1	0	FIX	
OM-DET	OVER MODULATION DETECT	F61	0 (disable)/ 1(enable)	0	FIX	
SL-TV	SLICE LEVEL OF SYNC DETECTION TV	F62	0...7	2	FIX	
SL-AV	SLICE LEVEL OF SYNC DETECTION AV	F63	0...7	4	*FIX	BUS SETUP
SL-YUV	SLICE LEVEL OF SYNC DETECTION YUV	F64	0...7	4	FIX	
AS/FBP-TV	AS-TV/AV/YUV SWITCH & CH CHANGE, FBP-FLYBACK PULSE SLICE LEVEL (TV)	F65	0...3	2	*FIX	BUS SETUP
AS/FBP-AV	AS-TV/AV/YUV SWITCH & CH CHANGE, FBP-FLYBACK PULSE SLICE LEVEL (AV)	F66	0...3	2	*FIX	BUS SETUP
AS/FBP-YUV	AS-TV/AV/YUV SWITCH & CH CHANGE, FBP-FLYBACK PULSE SLICE LEVEL (YUV)	F67	0...3	2	*FIX	BUS SETUP
VDL	COLOUR DIFF. INPUT PHASE ADJ	F68	0...3	0	FIX	
UDL	COLOUR DIFF. INPUT PHASE ADJ	F69	0...3	0	FIX	
AUTO-SCM-KIL-TV	SECAM COLOUR KILLER SENSITIVITY (TV)	F70	0...3	1	FIX	
SECAM-BGP	INTERNAL SECAM BGP TIMING	F71	0...3	0	FIX	
N45	INHIBIT 50Hz NTSC 4.43	F72	0 (enable)/ 1(disable)	0	FIX	
OSD-POS-V50	OSD VERTICAL POSITION (50Hz)	F73	1...55	36	FIX	
OSD-POS-V60	OSD VERTICAL POSITION (60Hz)	F74	1...50	31	FIX	
OSD-POS-H	OSD HORIZONTAL POSITION	F75	0...127	9	FIX	
CP	CHARGE PUMP	F76	0/1	1	FIX	
AVL LEVEL	AUTO VOLUME LIMIT LEVEL	F77	0 : 600mVrms 1 : 450mVrms	0	FIX	
AUTO-SCM-KIL-AV-YUV	SECAM COLOUR KILLER SENSITIVITY (AV/YUV)	F78	0...3	1	FIX	
AFC1-GAIN-TV	MSB OF HORIZONTAL AFC GAIN1 (TV)	F79	0...3	0	FIX	
AFC1-GAIN-AV	MSB OF HORIZONTAL AFC GAIN1 (AV)	F80	0...3	3	FIX	
AFC1-GAIN-YUV	MSB OF HORIZONTAL AFC GAIN1 (YUV)	F81	0...3	3	FIX	
OSD LEVEL	OSD LEVEL	F82	0 : 10% 1 : 30% 2 : 50% 3 : 70% 4 : 90%	3	*FIX	BUS SETUP
TAKE-OFF-TV	TAKEOFF/BPF OF CHROMA BPF PROCESSING TV	F83	0(BPF) / 1(TAKEOFF)	1	FIX	
TAKE-OFF-AV	TAKEOFF/BPF OF CHROMA BPF PROCESSING AV	F84	0(BPF) / 1(TAKEOFF)	0	FIX	
TAKE-OFF-YUV	TAKEOFF/BPF OF CHROMA BPF PROCESSING YUV	F85	0(BPF) / 1(TAKEOFF)	0	FIX	
C-ANGLE (103 DEG/ 95 DEG)	CHROMA MODULATION ANGLE	F86	0(103DEG) / 1(95DEG)	1	*FIX	BUS SETUP
AC-FAIL-WO-BRIGHT	PICTURE BLACK LEVEL (BRIGHT) CONTROL - AC FAILURE	F87	0...255	255	FIX	
FORCED-SCM-KIL-TV	FORCED SECAM COLOUR KILLER SENSITIVITY (TV)	F88	0...3	2	FIX	
FORCED-SCM-KIL-AV-YUV	FORCED SECAM COLOUR KILLER SENSITIVITY (AV/YUV)	F89	0...3	2	FIX	
CTI ADJ.	COLOUR EDGE IMPROVEMENT	F90	0 (normal)/ 1(improve)	1	FIX	
V-DEMUTE-DELAY	VIDEO DEMUTE DELAY	F91	0~255	0	*FIX	BUS SETUP
S-DEMUTE-DELAY	SOUND DEMUTE DELAY	F92	0~255	0	*FIX	BUS SETUP

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
MER	S-BOOSTER FREQ. CHARACTERISTIC CONTROL	F93	0~255	0	FIX	
MEL1	S-BOOSTER LEVEL1	F94	0~255	0	FIX	
MEL2	S-BOOSTER LEVEL2	F95	0~255	0	FIX	
MEL3	S-BOOSTER LEVEL3	F96	0~255	0	FIX	
MEL4	S-BOOSTER LEVEL4	F97	0~255	0	FIX	
MEL5	S-BOOSTER LEVEL5	F98	0~255	0	FIX	
MEL6	S-BOOSTER LEVEL6	F99	0~255	0	FIX	
S-ST-POINT	S-BOOSTER START POINT	F100	0~60	0	FIX	
S-SP-POINT	S-BOOSTER STOP POINT	F101	0~60	0	FIX	
S-STEP	S-BOOSTER STEP	F102	0~60	0	FIX	
POW-STORAGE	CONTRAST/BRIGHTNESS INCREASE GRADUALLY	F103	0(DISABLE) / 1(ENABLE)	1	FIX	
S-B-BASS	S-BOOSTER BASS LIMITER (WHEN S-BOOSTER ON)	F104	0 ... +10	+10	FIX	
S-B-TREB	S-BOOSTER TREBLE LIMITER (WHEN S-BOOSTER ON)	F105	0 ... +10	+10	FIX	
S-BASS	S-BOOSTER BASS LIMITER (WHEN S-BOOSTER OFF)	F106	0 ... +10	+10	FIX	
S-TREB	S-BOOSTER TREBLE LIMITER (WHEN S-BOOSTER OFF)	F107	0 ... +10	+10	FIX	
V-STD-TV	VERTICAL STANDARD SIGNAL DETECTOR SWITCH (TV)	F108	0(DISABLE) / 1(ENABLE)	0	FIX	
V-STD-AV	VERTICAL STANDARD SIGNAL DETECTOR SWITCH (AV)	F109	0(DISABLE) / 1(ENABLE)	0	FIX	
V-STD-YUV	VERTICAL STANDARD SIGNAL DETECTOR SWITCH (YUV)	F110	0(DISABLE) / 1(ENABLE)	0	FIX	
HVCO-FREERUN-SHIFT	HVCO-FREERUN-SHIFT	F111	0/1	0	FIX	
HVCO-PULLDOWN	HVCO PULLDOWN	F112	0/1	0	FIX	
HVCO-PULLUP	HVCO PULLUP	F113	0/1	0	FIX	
HVCO-PULLIN-UP	HVCO PULLIN UP	F114	0/1	0	FIX	
PEAK-ACL	PEAK ACL	F115	0/1	0	FIX	
APER-FREQ	APER FREQ	F116	0/1	0	FIX	
R-DRI YUV OFFSET	RGB OUTPUT RED GAIN OFFSET (YUV)	F117	-63...0...+63	0	FIX	
B-DRI YUV OFFSET	RGB OUTPUT BLUE GAIN OFFSET (YUV)	F118	-63...0...+63	0	FIX	
R-CUT YUV OFFSET	RGB OUTPUT-RED BIAS LEVEL OFFSET (YUV)	F119	-63...0...+63	0	FIX	
G-CUT YUV OFFSET	RGB OUTPUT-GREEN BIAS LEVEL OFFSET (YUV)	F120	-63...0...+63	0	FIX	
B-CUT YUV OFFSET	RGB OUTPUT-BLUE BIAS LEVEL OFFSET (YUV)	F121	-63...0...+63	0	FIX	
CON YUV OFFSET	SUB-CONTRAS OFFSET (YUV)	F122	-63...0...+63	0	FIX	
BRT YUV OFFSET	SUB-BRIGHT OFFSET (YUV)	F123	-63...0...+63	0	FIX	
SHP ANT-ONII OFFSET	SHARP ANT-ON II OFFSET FOR VIDEO TONE	F124	-31...0...+31	0	FIX	
WAIT MD TIME	SETTING CYCLE PROCESS TIME AT LOW POWER	F125	0..2	2	FIX	
Contrast OFFSET	CONTRAST (PICTURE LEVEL) OFFSET	F126	-63...0...+63	0	FIX	
Bright OFFSET	PICTURE BLACK LEVEL (BRIGHT) OFFSET	F127	-63...0...+63	0	FIX	
CR-PEDESTAL-ADJ	Cr SIGNAL LEVEL ADJUSTMENT	F128	0...15	8	FIX	
CB-PEDESTAL-ADJ	Cb SIGNAL LEVEL ADJUSTMENT	F129	0...15	8	FIX	
R MTX UP	R MATRIX GAIN UP FOR PAL MODE	F130	0(OFF)1(GAIN UP)	0	FIX	
AV2 BRIGHTNESS OFFSET	AV2 BRIGHT OFFSET	F131	-15...0...+15	+7	FIX	
BASS OFFSET	BASS OFFSET	F132	-4...0...+4	0	*FIX	BUS SETUP
TREBLE OFFSET	TREBLE OFFSET	F133	-4...0...+4	0	*FIX	BUS SETUP
AS-SPEED-DN	AUTO SLICE SPEED SWITCH (DOWN)	F134	0(DISABLE) / 1(ENABLE)	0	FIX	
AS-SPEED-UP	AUTO SLICE SPEED SWITCH (UP)	F135	0(DISABLE) / 1(ENABLE)	0	FIX	
SIF-BPF-WIDE	SIF BPF BANDWIDTH SELECTOR	F136	0...3	0	FIX	
SIF-BPF-WIDE-574	SIF BPF BANDWIDTH SELECTOR	F137	0...3	0	FIX	
ACC-AMP-ON	INCREASE CHROMA ACC AMP GAIN	F138	0(NORMAL) / 1(GAIN UP)	0	FIX	
TEST PATTERN	TEST PATTERN	F139	0...15	0	FIX	
FSC-FREE	FSC-FREE	F140	0(NORMAL) / 1(FREE RUN)	1	FIX	
MCUVOUT	MCUVOUT	F141	0/1	0	FIX	
HALF-H KILLER	HALF-H KILLER	F142	0/1	1	FIX	
V-AGC	V-AGC	F143	0/1	0	FIX	
CONT NEWS	CONTRAST SETTING- NEWS	F144	0..60	30	*FIX	BUS SETUP
CONT MUSIC	CONTRAST SETTING- MUSIC	F145	0..60	50	*FIX	BUS SETUP
CONT MOVIE	CONTRAST SETTING- MOVIE	F146	0..60	60	FIX	
BRIGHT NEWS	BRIGHTNESS SETTING- NEWS	F147	-30..0...+30	0	FIX	
BRIGHT MUSIC	BRIGHTNESS SETTING- MUSIC	F148	-30..0...+30	0	FIX	

SETTING MODE (SECOND STAGE)						
EEPROM ITEMS	FUNCTION	OSD	DATA LENGTH	INITIAL DATA	FIX/ADJ/AUTO	REMARK
BRIGHT MOVIE	BRIGHTNESS SETTING- MOVIE	F149	-30...0...+30	0	FIX	
COL NEWS	COLOUR SETTING- NEWS	F150	-30...0...+30	0	*FIX	BUS SETUP
COL MUSIC	COLOUR SETTING- MUSIC	F151	-30...0...+30	0	FIX	
COL MOVIE	COLOUR SETTING- MOVIE	F152	-30...0...+30	+10	*FIX	BUS SETUP
SHARP NEWS	SHARPNESS SETTING- NEWS	F153	-30...0...+30	-10	*FIX	BUS SETUP
SHARP MUSIC	SHARPNESS SETTING- MUSIC	F154	-30...0...+30	0	FIX	
SHARP MOVIE	SHARPNESS SETTING- MOVIE	F155	-30...0...+30	+5	*FIX	BUS SETUP
SURR NEWS	SURROUND SETTING- NEWS	F156	0(OFF) / 1(ONI) / 2(ONII)	0	FIX	
SURR MUSIC	SURROUND SETTING- MUSIC	F157	0(OFF) / 1(ONI) / 2(ONII)	0	FIX	
SURR MOVIE	SURROUND SETTING- MOVIE	F158	0(OFF) / 1(ONI) / 2(ONII)	0	FIX	
TREBLE NEWS	TREBLE SETTING- NEWS	F159	-10...0...+10	-10	*FIX	BUS SETUP
TREBLE MUSIC	TREBLE SETTING- MUSIC	F160	-10...0...+10	0	*FIX	BUS SETUP
TREBLE MOVIE	TREBLE SETTING- MOVIE	F161	-10...0...+10	+5	*FIX	BUS SETUP
BASS NEWS	BASS SETTING- NEWS	F162	-10...0...+10	-5	*FIX	BUS SETUP
BASS MUSIC	BASS SETTING- MUSIC	F163	-10...0...+10	0	*FIX	BUS SETUP
BASS MOVIE	BASS SETTING- MOVIE	F164	-10...0...+10	+10	*FIX	BUS SETUP
S-BOOST NEWS	S-BOOSTER SETTING- NEWS	F165	0(OFF) / 1(ON)	0	FIX	
S-BOOST MUSIC	S-BOOSTER SETTING- MUSIC	F166	0(OFF) / 1(ON)	1	FIX	
S-BOOST MOVIE	S-BOOSTER SETTING- MOVIE	F167	0(OFF) / 1(ON)	1	FIX	
R-R-C	R-GAIN OFFSET WHEN WHITE TEMP IS RED CENTER TONE	F168	-63...0...+63	+4	FIX	
B-R-C	B -GAIN OFFSET WHEN WHITE TEMP IS RED CENTER TONE	F169	-63...0...+63	-5	FIX	
R-B-C	R-GAIN OFFSET WHEN WHITE TEMP IS BLUE CENTER TONE	F170	-63...0...+63	-1	FIX	
B-B-C	B-GAIN OFFSET WHEN WHITE TEMP IS BLUE CENTER TONE	F171	-63...0...+63	+6	FIX	
TRE OFFSET SUR ONII	TREBLE OFFSET WHEN SURROUND ONII	F172	-7... 0 ...+7	+1	FIX	
VFREE2	V-FREE WHEN H LOCKED OUT	F173	0(OFF) / 1(ON)	0	FIX	
VD3 / VD2 / VD1-TV	VD2 & VD1-VERT SYNC DETECT MIN WIDTH MSB & LSB RESPECTIVELY (TV)	F174	0...7	1	FIX	
VD3 / VD2 / VD1-AV	VD2 & VD1-VERT SYNC DETECT MIN WIDTH MSB & LSB RESPECTIVELY (AV)	F175	0...7	3	FIX	
VD3 / VD2 / VD1-YUV	VD2 & VD1-VERT SYNC DETECT MIN WIDTH MSB & LSB RESPECTIVELY (YUV)	F176	0...7	3	FIX	
SL-TV (WEAK)	SL-TV (WEAK)	F177	0...7	7	FIX	
VIF-AGC THRESHOLD	VIF AGC THRESHOLD	F178	0...127	127	FIX	
AFT OFFSET	AFT OFFSET	F179	0 (OFF) 1 (-50kHz) 2 (-100kHz) 3 (-150kHz) 4 (-200kHz)	0	*FIX	BUS SETUP
VOL-START	VOLUME START POINT	F180	0...60	60	*FIX	BUS SETUP
VOL-STEP	VOLUME STEP	F181	0...60	0	*FIX	BUS SETUP
BASS-LIMIT1	BASS-LIMIT1	F182	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP
BASS-LIMIT2	BASS-LIMIT2	F183	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP
BASS-LIMIT3	BASS-LIMIT3	F184	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP
BASS-LIMIT4	BASS-LIMIT4	F185	0 (0000) 1 (1001) 2 (1010) 3 (1011) 4 (1100) 5 (1101) 6 (1110) 7 (1111)	7	*FIX	BUS SETUP

OPTION MODE (FOURTH STAGE)				
EEPROM ITEMS	OSD	DATA LENGTH	INITIAL DATA	REMARK
***HOTEL MODE	O01	0 (OFF) / 1 (ON)	0	OPTION SET UP
***HTL-POS	O02	0~99,--	--	OPTION SET UP
***HTL-VOL	O03	0~60,--	--	OPTION SET UP
HSYNC-JUDGE	O04	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
SECAM	O05	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
N443(RF)	O06	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
N358(RF)	O07	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
Force-Col	O08	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
S-SYS	O09	1(BG ONLY)~15(ALL)	15	OPTION SET UP
AV	O10	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
AV2	O11	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
YUV	O12	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
S-CTRL	O13	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
NICAM-NOT-USE	O14	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
A2-NOT-USE	O15	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
TEXT-NOT-USE	O16	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
BIL	O17	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
LANG	O18	1~255	63	OPTION SET UP
SERCH-SP	O19	1(350)~2(450)~3(550)~4(650)~5(750)	3	OPTION SET UP
R/C-MENU	O20	0 (ENABLE) / 1 (DISABLE)	0	OPTION SET UP
LED-CONT	O21	0 (ONE LED) / 1 (TWO LED)	0	OPTION SET UP
S-BOOSTER	O22	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
SHARP-LOGO	O23	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
TUNER BAND	O24	0 / 1	0	OPTION SET UP
WHITE BACK	O25	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
 BOOSTER	O26	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
250 CHANNEL	O27	0 : 100 channels (8k EEPROM) 1 : 250 channels (16k EEPROM)	0	OPTION SET UP
AVL	O28	0 : fix to 0 1 : fix to 1 2 : AVL in SOUND MENU	2	OPTION SET UP
**LNA TUNER	O29	0(Alps) / 1(Matsushita)	0	OPTION SET UP (ONLY FUNCTION IF ANTENNA BOOSTER O26 =1)
CHILD LOCK	O30	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
NORMAL KEY	O31	Set items to default for 0 : Picture and Sound 1 : Picture only	0	OPTION SET UP
AV MODE	O32	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
S-CTRL LIMIT	O33	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
MP-IN	O34	0 (DISABLE) / 1 (ENABLE)	1	OPTION SET UP
VIRGIN-MODE	O35	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP
WHITE-TEMP	O36	0 : 3 modes 1 : 5 modes	0	OPTION SET UP
LK MENU	O37	0 (DISABLE) / 1 (ENABLE)	0	OPTION SET UP

*** HOTEL MODE

OPERATION OF HOTEL MODE:

WHEN CHANGE SERVICE DATA O01 TO 1, HOTEL MODE IS ON

WHEN HOTEL MODE IS ON,

1. Max volume data is determined by option setting HTL-VOL (O03)
2. Channel position after POWER ON is determined by option setting HOTEL-POS (O02) (if option setting HOTEL-POS is not set, processing is according to last position data).
3. User data updates of EEPROM regarding the video and audio control is not allowed.
4. Preset mode is disable.
5. CH SETTING menu is not available.


** TUNER BAND

P-Freq	BAND	
	TUNER BAND = 0 (same as GA6)	TUNER BAND = 1
41.10MHz ~ 122.10MHz	VHF-L (0001)	VHF-L (0001)
122.15MHz ~ 143.10MHz		VHF-H (0010)
143.15MHz ~ 362.10MHz	VHF-H (0010)	
362.15MHz ~ 426.10MHz		UHF (1000)
426.15MHz ~ 871.10MHz	UHF (1000)	

ADJ ITEM: BUS SET UP (1 ST & 2ND STAGE SERVICE DATA)

SERVICE ITEMS		21Q-FG1A	REMARK
V08	SUB-SHP PRE	38	ADJUST IF NECESSARY TO IMPROVE
V17	V-SIZE60	+4	
V18	V-SHIFT60	-2	
V28	VS-CORRECT	44	
V29	VC-CORRECT OFFSET	-9	
V30	V LINEARITY	36	
V31	V LINEARITY OFFSET	+3	
V32	SUB-SHP 0V	38	
F01	C.CLIP-LVL	1	
F07	VIF-G	7	
F22	YDL-AV-N3	5	
F24	COL-AV	+4	
F25	COL-P	+12	
F28	COL-N3	+8	
F29	COL-ADJ	+14	
F30	SHP-PRE-AV	+1	
F32	SHP-PRE-P (OFFSET)	+7	
F33	SHP-PRE-S (OFFSET)	+2	
F34	SHP-PRE-N4 (OFFSET)	+7	
F35	SHP-PRE-N3 (OFFSET)	+7	
F36	SHP-OV-AV (OFFSET)	+1	
F38	SHP-OV-P (OFFSET)	+7	
F39	SHP-OV-S (OFFSET)	+2	
F40	SHP-OV-N4 (OFFSET)	+7	
F41	SHP-OV-N3 (OFFSET)	+7	
F42	TINT-AV	+1	
F43	TINT-ADJ	+2	
F45	R-R (OFFSET)	0	
F46	B-R (OFFSET)	-9	
F47	R-B (OFFSET)	-6	
F48	B-B (OFFSET)	+8	
F56	V-FREE (NO SYNC)	1	
F58	GAMMA	1	
F63	SL-AV	2	
F65	AS/FBP-TV	3	
F66	AS/FBP-AV	3	
F67	AS/FBP-YUV	3	
F82	OSD LEVEL	4	
F86	C-ANGLE (103 DEG/ 95 DEG)	0	
F91	V-DEMUTE-DELAY	25	
F92	S-DEMUTE-DELAY	40	
F132	BASS OFFSET	+4	
F133	TREBLE OFFSET	+3	
F144	CONT NEWS	50	
F145	CONT MUSIC	60	
F150	COL NEWS	-5	
F152	COL MOVIE	+6	
F153	SHARP NEWS	-6	
F155	SHARP MOVIE	+6	
F159	TREBLE NEWS	-3	
F160	TREBLE MUSIC	+2	
F161	TREBLE MOVIE	0	
F162	BASS NEWS	-4	
F163	BASS MUSIC	+2	
F164	BASS MOVIE	+3	
F179	AFT OFFSET	2	
F180	VOL-START	20	
F181	VOL-STEP	40	
F182	BASS-LIMIT1	5	
F183	BASS-LIMIT2	4	
F184	BASS-LIMIT3	4	
F185	BASS-LIMIT4	4	

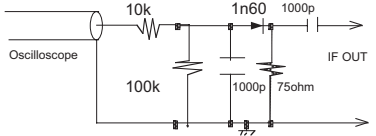
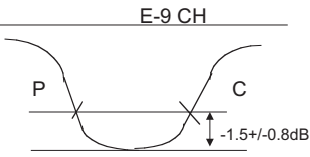
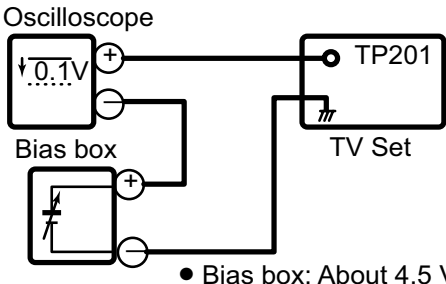
ADJ ITEM: OPTION SET UP (4TH STAGE SERVICE DATA)

SERVICE ITEMS		21Q-FG1A
O01	HTL MODE 0 (OFF) / 1 (ON)	0
O02	HTL-POS 0~99,--	--
O03	HTL-VOL 0~60,--	--
O04	VIF- NOT-USE FIX TO 38.9	0
O05	SECAM 0 (DISABLE) / 1 (ENABLE)	1
O06	N443(RF) 0 (DISABLE) / 1 (ENABLE)	1
O07	N358(RF) 0 (DISABLE) / 1 (ENABLE)	1
O08	FORCE-COL 0 (DISABLE) / 1 (ENABLE)	0
O09	S-SYS 1(BG ONLY)~15(ALL)	15
O10	AV 0 (DISABLE) / 1 (ENABLE)	1
O11	AV2 0 (DISABLE) / 1 (ENABLE)	1
O12	YUV 0 (DISABLE) / 1 (ENABLE)	0
O13	S-CTRL 0 (DISABLE) / 1 (ENABLE)	1
O14	NICAM-NOT-USE 0 (DISABLE) / 1 (ENABLE)	0
O15	A2-NOT-USE 0 (DISABLE) / 1 (ENABLE)	0
O16	TEXT-NOT-USE 0 (DISABLE) / 1 (ENABLE)	0
O17	BIL 0 (DISABLE) / 1 (ENABLE)	0
O18	LANG 1~255	45
O19	SEARCH-SP 1(350)~2(450)~3(550)~4(650)~5(750)	1
O20	R/C MENU 0 (ENABLE) / 1 (DISABLE)	0
O21	LED-CONT 0 (ONE LED) / 1 (TWO LED)	0
O22	S-BOOSTER 0 (DISABLE) / 1 (ENABLE)	0
O23	SHARP-LOGO 0 (DISABLE) / 1 (ENABLE)	0
O24	TUNER BAND 0 / 1	0
O25	WHITE BACK 0 (DISABLE) / 1 (ENABLE)	0
O26	 BOOSTER 0 (DISABLE) / 1 (ENABLE)	0
O27	250 CHANNEL 0(100 channels) /1(250 channels)	0
O28	AVL 0 (fix to 0)~ 1(fix to 1)~ 2 (AVL in SOUND MENU)	2
O29	LNA TUNER	0
O30	CHILD LOCK 0 (DISABLE) / 1 (ENABLE)	1
O31	NORMAL KEY 0 (PICTURE & SOUND) /1 (PICTURE ONLY)	0
O32	AV MODE 0 (DISABLE) / 1 (ENABLE)	1
O33	S-CTRL LIMIT 0 (DISABLE) / 1 (ENABLE)	1
O34	MP-IN 0 (DISABLE) / 1 (ENABLE)	0
O35	VIRGIN-MODE 0 (DISABLE) / 1 (ENABLE)	0
O36	WHITE-TEMP 0 (3 MODES) / 1 (5 MODES)	0
O37	LK MENU 0 (DISABLE) / 1 (ENABLE)	0

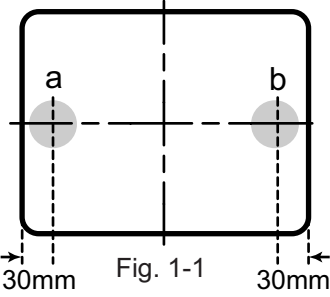
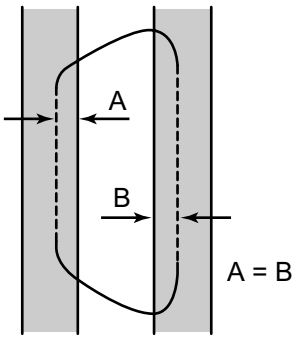
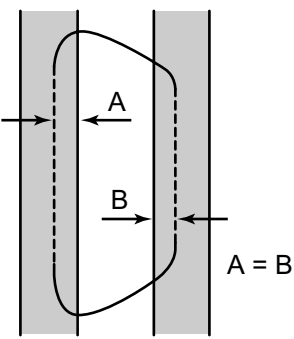
[2] ADJUSTMENT

ADJUSTMENT PRECAUTION: Make sure TV Set is in "Normal Condition" before switch to Service Mode for Adjustment.

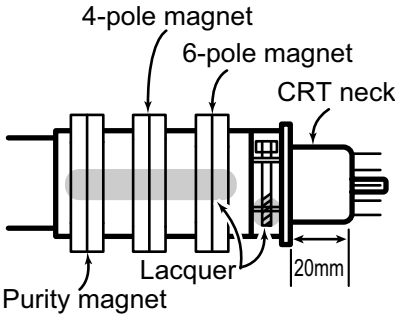
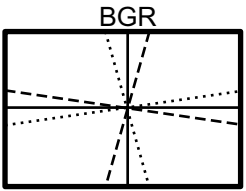
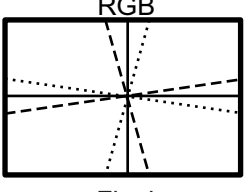
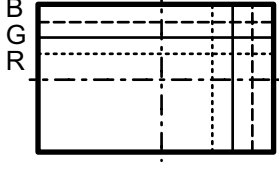
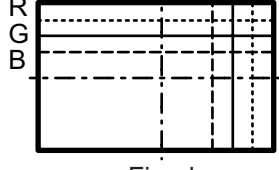
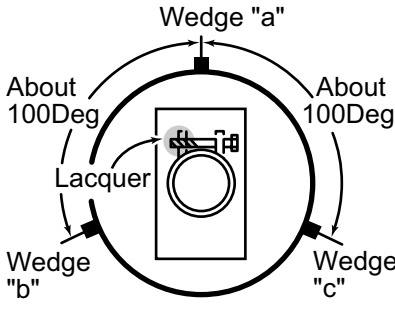
1. PIF ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	Tuner IFT (PRESET)	<ol style="list-style-type: none"> 1. Get the tuner ready to receive the CH. E - 9 signal, but with no signal input. Adjust the PLL data. 2. Connect the sweep generator's output cable to the tuner antenna. (RF SWEEP) 3. Adjust the sweep generator's to 80dBμV. 4. Connect the response lead (use LOW IMPEDANCE probe with wave detector ; see Fig.1) to the tuner's IF output terminal. (This terminal must have the probe alone connected). 5. Set the RF AGC to 0 - 6 V with no saturation with the waveform. 6. Adjust the tuner IF coil to obtain the waveform as shown in Fig. 2. <p>Note: Be sure to keep the tuner cover in position during this adjustment.</p>	 <p>Fig.1</p>  <p>Fig.2</p>
2	RF-AGC TAKE OVER POINT AD- JUSTMENT (I²C BUS CONTROL) (AUTO & MANUAL ADJ)	<ol style="list-style-type: none"> 1. Receive "PAL COLOUR BAR" signal. <ul style="list-style-type: none"> • Signal Strength: 56 ± 1 dBμV (75 ohm open) 2. Connect the oscilloscope to TP201 (Tuner's AGC Terminal) as shown in Fig. 3-1. <div data-bbox="548 1100 992 1381" data-label="Diagram">  <p>• Bias box: About 4.5 V</p> </div> 3. Call "V01" mode in service mode. Adjust the "V01" bus data to obtain the Tuner output pin drop 0.1~1.0V below maximum voltage. 4. Change the antenna input signal to 63~67dBμV, and make sure there is no noise. 5. Turn up the input signal to 90~95 dBμV to be sure that there is no cross modulation beat. 	<p>* for Auto ADJ</p> <ol style="list-style-type: none"> 1) Receive "PAL COLOUR BAR" signal. signal strength: 56 ± 1 dBμV (75 ohm open) 1) Go to service mode. 2) Go to service data V01, press R/C to operate auto key (Hex C1) and confirm the 'OK' display on the screen. 3) If appear NG, increase data some step and pls repeat step 2. 4) Proceed step 4 & 5 in manual mode.

2. PURITY ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	PURITY ADJ.	<ol style="list-style-type: none"> 1. Receive the GREEN-ONLY signal. Adjust the beam current to $\sim 700 \mu\text{A}$. 2. Degauss the CRT enough with the degaussing coil. Note: Follow the Job Instruction Sheet to adjust the magnetic field. (Reference: page 3-6) 3. Maintain the purity magnet at the zero magnetic field and keep the static convergence roughly adjusted. 4. Observe the points a, b, as shown in Fig. 1-1 through the microscope. Adjust the landings to A rank requirement. 5. Orient the raster rotation to 0 eastward. 6. Tighten up the deflection coil screws. • Tightening torque: $108 \pm 20 \text{ N}$ ($11\text{kgf} \pm 2 \text{ kgf}$) 7. Make sure the CRT corners landing meet the A rank requirements. If not, stick the magnet sheet to correct it. <p>Note: This adjustment must be done after warming up the unit for 30 minutes or longer with a beam current over $700 \mu\text{A}$.</p> <p>Note: Set to service mode by remote controller then press factory process R/C RGB key to change to RGB mono colour mode.</p> <p>* For the following colours press R/C RGB(Hex 7E) key to change.</p> <pre> graph LR A[GREEN ONLY] --> B[BLUE ONLY] B --> C[RED ONLY] C --> D[Signal-colour screen cleared] D --> A </pre>	 <p>Fig. 1-1</p>  <p>Fig. 1-2 Rank "A" (on the right of the CRT)</p>  <p>Fig. 1-3 Rank "A" (on the left of the CRT)</p> <p>* Press R/C RGB key for 1 second in NORMAL MODE, the colour will change to RGB mono colour mode.</p>

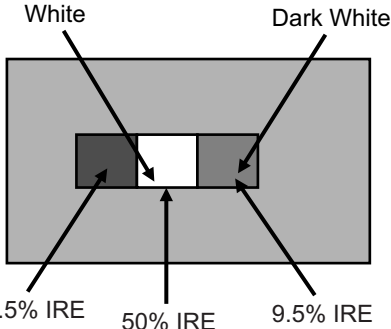
3. CONVERGENCE ADJUSTMENT

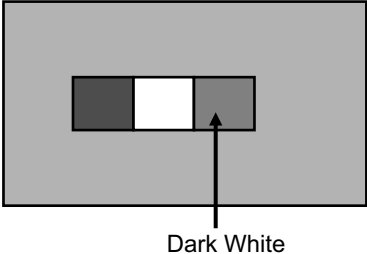
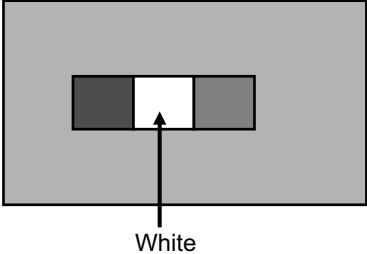
No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	CONVERGENCE ADJ. (To be done after the purity adjustment.)	<ol style="list-style-type: none"> 1. Receive the "Crosshatch Pattern" signal. 2. Using the remote controller, call NORMAL mode. <p>Static convergence</p> <ol style="list-style-type: none"> 1. Turn the 4-pole magnet to a proper opening angle in order to superpose the blue and red colours. 2. Turn the 6-pole magnet to a proper opening angle in order to superpose the green colour over the blue and red colours. <p>Dynamic convergence</p> <ol style="list-style-type: none"> 1. Adjust the convergence on the fringes of the screen in the following steps. <ol style="list-style-type: none"> a) Fig. a: Drive the wedge at point "a" and swing the deflection coil upward. b) Fig. b: Drive the wedge at point "b" and "c" and swing the deflection coil downward. c) Fig. c: Drive the "c" wedge deeper and swing the deflection coil rightward. d) Fig. d: Drive the "b" wedge deeper and swing the deflection coil leftward. 2. Fix all the wedges on the CRT and apply glass tape over them. 3. Apply lacquer to the deflection yoke lock screw, magnet unit (purity, 4-pole, 6-pole magnets) and magnet unit lock screw. <p>Finally received the Red-only and Blue-only signals to make sure there is no other colours on the screen.</p> 	 <p>Fig. a</p>  <p>Fig. b</p>  <p>Fig. c</p>  <p>Fig. d</p> 

4. H-VCO, VIF-VCO & S-TRAP fo ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	H-VCO ADJ (I ² C BUS CONTROL) (AUTO & MANUAL ADJ)	(MANUAL ADJ) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V03 . 3) Connect oscilloscope to IC801 pin13 (H-OUT) , adj V03 until freq become 15.625 ± 0.15 KHz (Auto Adj) 1) In No signal (RASTER) condition. 2) Go to service mode. 3) Choose service data V03 , by pressing R/C Auto (Hex C1) key, OSD will appear "OK" at screen. 4) If appear "NG" pls repeat step 3.	
2	VIF-VCO ADJ (I ² C BUS CONTROL) (AUTO & MANUAL ADJ)	(Manual ADJ) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V02 . 3) Connect oscilloscope to IC801 pin7 (AFT) , adj V02 until voltage become 2.5 ± 1 V . (Auto Adj) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V02 . 3) Press the R/C Auto (Hex C1) key, OSD will appear "OK" at screen. 4) If appear "NG" pls repeat step 3.	This adjustment must be done after aging at least 3 minutes.
3	S-TRAP fo ADJ (I ² C BUS CONTROL) (AUTO & MANUAL ADJ)	(Manual ADJ) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V21 . 3) Connect oscilloscope to TP 801 , adj V21 until voltage become Min (below 5 V). 4) After that pls adj service data V20 & V24 same as "V21", V22 to "V21+1", V23 to "V21-2" . (Auto Adj) 1) In No signal (RASTER) condition. 2) Go to service mode, choose service data V21 . 3) Press the R/C Auto (Hex C1) key, OSD will appear "OK" at screen. 4) If appear "NG" pls repeat step 3.	

5. SCREEN, WHITE BALANCE, SUB-BRIGHTNESS & SUB-CONTRAST ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others																				
1	SCREEN ADJUSTMENT (I ² C BUS CONTROL)	<p>1) In window pattern signal condition.</p> <p>2) Go to service mode, then select V00.</p> <p>3) By pressing R/C key S-Mute (Hex E8), R-D auto switch to 63, B-D auto switch to 63, R-C auto switch to 127, G-C auto switch to 127, B-C auto switch to 127, Sub-brightness V06 auto switch to 127. Y-mute & Vertical off, screen will be in vertical cut-off condition.</p> <p>4) Adjust the Screen so that cut-off line appear in low bright, then judge that whether the cut-off line appear in Red or Green or Blue color, in this condition between R-C & G-C & B-C, fix the data of the color appear in cut-off line and adj the other two cut-off data (Note 1) so that cut-off line color become white.</p> <p>5) Turn the screen VR of FBT so that cut-off line just disappear and use R/C by pressing key S-Mute (Hex E8) to disable the Y-mute & V-cut so that picture appear in normal mode.</p>	<table><tr><td>R-CUTOFF (R-C) UP</td><td>RC key "1" (HEX 80)</td></tr><tr><td>R-CUTOFF (R-C) DOWN</td><td>RC key "4" (HEX 20)</td></tr><tr><td>G-CUTOFF (G-C) UP</td><td>RC key "2" (HEX 40)</td></tr><tr><td>G-CUTOFF (G-C) DOWN</td><td>RC key "5" (HEX A0)</td></tr><tr><td>B-CUTOFF (B-C) UP</td><td>RC key "3" (HEX C0)</td></tr><tr><td>B-CUTOFF (B-C) DOWN</td><td>RC key "6" (HEX 60)</td></tr><tr><td>R-DRIVE (R-D) UP</td><td>RC key "7" (HEX E0)</td></tr><tr><td>R-DRIVE (R-D) DOWN</td><td>RC key "Flashback" (HEX E4)</td></tr><tr><td>B-DRIVE (B-D) UP</td><td>RC key "8" (HEX 10)</td></tr><tr><td>B-DRIVE (B-D) DOWN</td><td>RC key "0" (HEX 50)</td></tr></table>	R-CUTOFF (R-C) UP	RC key "1" (HEX 80)	R-CUTOFF (R-C) DOWN	RC key "4" (HEX 20)	G-CUTOFF (G-C) UP	RC key "2" (HEX 40)	G-CUTOFF (G-C) DOWN	RC key "5" (HEX A0)	B-CUTOFF (B-C) UP	RC key "3" (HEX C0)	B-CUTOFF (B-C) DOWN	RC key "6" (HEX 60)	R-DRIVE (R-D) UP	RC key "7" (HEX E0)	R-DRIVE (R-D) DOWN	RC key "Flashback" (HEX E4)	B-DRIVE (B-D) UP	RC key "8" (HEX 10)	B-DRIVE (B-D) DOWN	RC key "0" (HEX 50)
R-CUTOFF (R-C) UP	RC key "1" (HEX 80)																						
R-CUTOFF (R-C) DOWN	RC key "4" (HEX 20)																						
G-CUTOFF (G-C) UP	RC key "2" (HEX 40)																						
G-CUTOFF (G-C) DOWN	RC key "5" (HEX A0)																						
B-CUTOFF (B-C) UP	RC key "3" (HEX C0)																						
B-CUTOFF (B-C) DOWN	RC key "6" (HEX 60)																						
R-DRIVE (R-D) UP	RC key "7" (HEX E0)																						
R-DRIVE (R-D) DOWN	RC key "Flashback" (HEX E4)																						
B-DRIVE (B-D) UP	RC key "8" (HEX 10)																						
B-DRIVE (B-D) DOWN	RC key "0" (HEX 50)																						
2	WHITE BALANCE ADJ (to be done after screen adj) (I ² C BUS CONTROL)	<p>1) WHITE (HIGH BEAM) (In Window Pattern Signal) First use Minolta Color Analyzer CA100, let the gun point at Dark White position (as drawing attach), Adj V06 until LUMINANCE Y become 5 cd/m2, then let the gun point at White position (as drawing attach), Adj V04 until LUMINANCE Y become: 160 cd/m2. Adj the R-D & B-D until the axis of color temperature become</p> <p style="text-align: center;">12300°K X : 0.272 Y : 0.275</p> <p>2) DARK WHITE (LOW BEAM) (In Window Pattern Signal) Let the gun point at Dark White position, if the color temperature data shift away from the data adjusted in step 1, adjust R-C, G-C & B-C but between them, first color appears in Screen adj item 1)-4 is fixed, adj the other two so that to obtain the similar axis as above. ** Repeat step 1 & 2 to get a regulated position</p>	<p style="text-align: center;">WINDOW PATTERN SIGNAL</p>  <p style="text-align: center;">*Note : Signal using W/B Pattern Generator SX-1006 (IWATSU) or equivalent. Window Pattern Signal output level are as above:</p>																				

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
3	SUB-BRIGHTNESS (to be done after screen, white balance adj) (I ² C BUS CONTROL)	1) In Window Pattern Signal condition. 2) Using Minolta Color Analyzer CA-100, let the gun point at Dark White position (as attach drawing), adjust V06 Bus data until LUMINANCE Y = 3 ± 0.5 cd/m² .	WINDOW PATTERN SIGNAL 
4	SUB-CONTRAST (to be done after screen, white balance adj, sub-brightness adj) (I ² C BUS CONTROL)	1) In Window Pattern Signal condition. 2) Using Minolta Color Analyzer CA-100, let the gun point at White position (as attach drawing), adjust V04 Bus data until LUMINANCE Y = 160 ± 10 cd/m²	WINDOW PATTERN SIGNAL 
5	Beam Current Check	1) Receive the "Monoscope Pattern" signal. 2) Press R/C to set Picture NORMAL condition. 3) Connect the DC miliammeter between TP 603 (+) & TP 602 (-). (Full Scale: 3mA Range) 4) Beam current must be within $1100 \pm 100 \mu\text{A}$.	

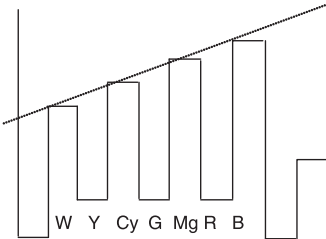
6. HORIZONTAL, VERTICAL, DEFLECTION LOOP and FOCUS ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	H-SHIFT (I ² C BUS CONTROL) (to be done after purity adj)	1) Receive Monoscope Pattern Signal (PAL 50Hz). 2) Choose the service data V13 . 3) Adjust the V13 bus data to have a balance position to spec of A=B (as attach drawing). 4) If cannot make it to A=B , adjust from the best point so that B slightly smaller than A.	
2	V-SHIFT (I ² C BUS CONTROL) (to be done after purity adj)	1) Receive Monoscope Pattern Signal (PAL 50Hz). 2) Choose the service data V12 . 3) Adjust the V12 bus data to have a most acceptable vertical position, the monoscope pattern should be Balance in vertical position. Note: B line (Monoscope middle line) must same or nearest higher position to the A mark (Tube middle mark), refer to the attach drawing.	Figure:
3	V-SIZE (I ² C BUS CONTROL) (to be done after purity, V-shift adj)	1) Receive Monoscope Pattern Signal (PAL 50Hz). 2) Choose the service data V11 . 3) Adjust V11 bus data until the overscan become 10 ± 1.5% . Caution 1: Pls aging TV more than 10 minutes before adjustment Caution 2: for H-shift & V-shift & V-size adj, after adj pls switch to Monoscope pattern signal (NTSC 60 Hz) to confirm all positions are the same.	
4	SUB-SHARPNESS	1) Confirm Service data V08 & V32 are 38 .	
5	FOCUS	1) Receive the "Monoscope Pattern" signal. 2) Press R/C to set Picture NORMAL condition. 3) Adjust the focus control to get the best focusing.	

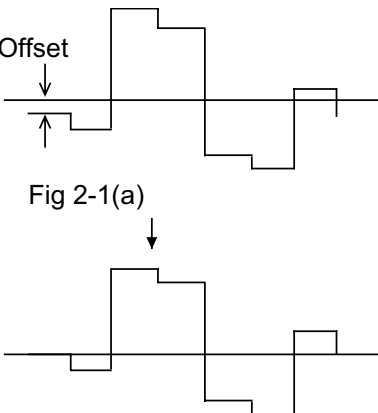
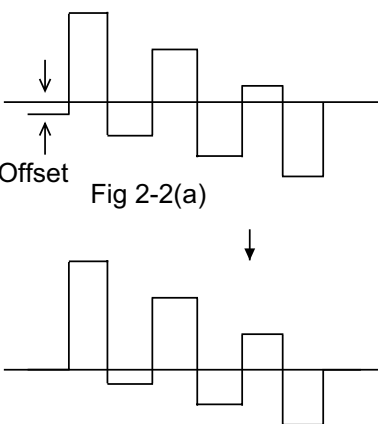
7. PAL CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SUB COLOUR (I ² C BUS CONTROL) (to be done after sub-picture, sub-tint adj)	1) Receive the "PAL Colour Bar" signal. 2) Press R/C to set Picture Normal condition. 3) Connect the oscilloscope to R-Amp Transistor Base(JUMPER 401) Range : 100mV/Div (AC) (Using 10:1 Probe) Sweep Time : 10 msec/Div 4) Using the R/C call V05 in SERVICE mode. Adjust V05 bus data, so that the 75% White & Red portions of PAL Colour Bar be at the same level shown as Fig 1-1. 5) Clear the SERVICE mode.	<p>Fig. 1-1</p>

8. NTSC CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SUB-TINT (I²C BUS CONTROL)	<ol style="list-style-type: none"> 1) Receive the "NTSC 3.58 Color Bar" signal thru AV in. 2) Connect the oscilloscope to B-Amp Transistor Base (JUMPER 410). <ul style="list-style-type: none"> • Range : 100mV/Div.(AC)(Use Probe 10:1) • Sweep time : 10 μsec/Div. 3) In Service mode, go to V07, press R/C Y-mute (Hex F4) or FLASHBACK Key. 4) Call the "V07" data in service mode. Adjust the "V07" bus data to obtain the waveform shown as Fig. 1-1. 5) Disable Y-Mute by pressing key (Hex E4) or FLASHBACK, then clear the SERVICE mode. 	 <p>Fig. 1-1</p>

9. SECAM CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SECAM BLACK LEVEL R-Y/B-Y (I²C BUS CONTROL)	<ol style="list-style-type: none"> 1) Receive "SECAM ALL WHITE" signal. 2) In the service mode, select service data V14. 3) Connect oscilloscope to TP 801. <ul style="list-style-type: none"> • Range : 20mV/Div. (AC)(Use Probe 10:1) • Sweep time : 20 msec/Div. 4) Adjust the V14 so that the offset of R-Y is minimum, shown in Fig 2-1(b), it means adjust the offset of between No signal line and Signal line to minimum . <p>*After adjust V14,please ADD (+1)data.</p> 5) In the service mode, select service data V15. 6) Connect oscilloscope to TP 801. <ul style="list-style-type: none"> • Range : 20mV/Div. (AC)(Use Probe 10:1) • Sweep time : 20 msec/Div. 7) Adjust the V15 so that the offset of B-Y to minimum, shown in Fig 2-2(b), it means adjust the offset of between No signal line and Signal line to minimum. <p>*After adjust V15,please MINUS (-1)data.</p> 	 <p>Fig 2-1(a)</p> <p>Fig 2-1(b)</p>  <p>Fig 2-2(a)</p> <p>Fig 2-2(b)</p>

10. PROTECTOR OPERATION CHECKING

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	BEAM PROTECTOR	1) Receive "Monoscope Pattern" signal. 2) Set CONTRAST MAX. 3) Set BRIGHT MAX. 4) During the Collector & Emitter of Q853/4/5 short, make sure the protector ON and switch to standby mode.	* Select one of Q853/4/5 to do each short.
2	H, V PROTECTOR	1) Receive "Monoscope Pattern" signal. 2) Connect output of Bias Box to D602 cathode (C602 positive). 3) Set voltage of Bias Box to 18V and make sure the protector is not working. 4) Set voltage of Bias Box to 27V , and make sure the protector is working.	
3	OTHER PROTECTOR	1) Once finish rectified Electrolytic Capacitor short testing in +B line, check all possible damaged components on +B line. (Use random selected set for inspection)	

11. A/V INPUT, OUTPUT CHECKING

NO	ADJUSTMENT POINT	ADJUSTMENT CONDITION / PROCEDURE	WAVEFORM OR OTHERS
1	VIDEO AND AUDIO OUTPUT CHECK	(1) Receive the "PAL Color Bar" signal (100% White Color Bar, Sound 400 Hz 100% Mod). (2) Terminate the Video output with a 75 ohm impedance. Make sure the output is as specified (1.0 V_{p-p} ± 3 dB). (3) Terminate the Audio output with a 10K ohm impedance. Make sure the O/P is as specified (1.5 V_{p-p} ± 3 dB)	
2	VIDEO AND AUDIO INPUT CHECK	(1) Using the TV/VIDEO key on the remote controller, make sure that the modes change in order of TV, AV1, AV2 & TV again and the video & audio output are according to the input terminal for each mode. (2) Video cross-talk AV to TV checking : a) When connect AV1 input, check TV also b) When connect AV2 input, check TV also	

12. FUNCTION OPERATION CHECKING (VIDEO AND AUDIO)

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	CONTRAST key	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select CONTRAST. 3) Press Volume Up/Down key to check whether the CONTRAST effect is OK or not.	
2	COLOUR key	1) Receive "Colour Bar" signal. 2) Set MENU, then go into PICTURE mode to select COLOUR. 3) Press Volume Up/Down key to check whether the COLOUR effect is OK or not.	
3	BRIGHTNESS key	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select BRIGHTNESS. 3) Press Volume Up/Down key to check whether the BRIGHTNESS effect is OK or not.	
4	TINT key	1) Receive the "NTSC Colour Bar" signal thru AV in. 2) Set MENU, then go into PICTURE mode to select TINT. 3) Press Volume Up/Down key to check TINT, UP for GREEN direction and DOWN for PURPLE direction whether is OK or not.	
5	SHARPNESS Key	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select SHARPNESS. 3) Press Volume Up/Down key to check whether the SHARPNESS effect is OK or not.	
6	CH DISPLAY COLOUR	1) All Ch (1~99) will have an OSD display of the channel number in green colour under AFT ON condition.	
7	NORMAL Key	1) Once in PICTURE or SOUND Mode, and the NORMAL key is pressed, all the settings will be preset to normal setting accordingly. (Normal setting value for every AV mode: NEWS/MUSIC/MOVIE) PICTURE MODE AV MODE NEWS MUSIC MOVIE CONTRAST 50 60 60 COLOUR -5 0 +6 BRIGHTNESS 0 0 0 TINT CENTER CENTER CENTER SHARPNESS -6 0 +6 WHITE TEMP Mid Mid Mid SOUND MODE SURROUND OFF OFF OFF TREBLE -3 +2 0 BASS -4 +2 +3 BALANCE Mid Mid Mid AVL ON ON ON	*Note: In NORMAL Mode, when press NORMAL key, will appear NORMAL OSD and all setting PICTURE, SOUND functions set to NORMAL.
8	WHITE TEMP	1) Receive "Monoscope Pattern" signal. 2) Set MENU, then go into PICTURE mode to select WHITE TEMP 3) Press Volume Up/Down key to check WHITE TEMP function The back ground will change to (shift right) bluish and (shift left) reddish.	

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
9	COLOUR SYSTEM	1)Receive the "PAL COLOUR BAR" signal, press MENU, choose CH-SETTING to select COLOR 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 MENU, choose CH-SETTING to select COLOR 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 MENU, choose CH-SETTING to select COLOR modes except N443, check the COLOUR is not working properly. Then, select the N443 mode. Check again its colour so that it is working properly. 4)Receive "NTSC 3.58" signal thru AV, press MENU, choose CH-SETTING to select COLOR modes except N358, check the COLOUR is not working properly. Then, select the N358 mode. Check again its colour so that it is working properly.	
10	SURROUND	1)Receive "music" sound signal. 2)Set MENU, then go into SOUND MENU to select SURROUND. 3)Press VOLUME UP/DOWN key to check SURROUND I, II and OFF effect.	Note: 1. IF SURROUND I/II ON, BALANCE FUNCTION CANNOT BE ADJUST.
11	TREBLE	1)Receive "music" sound signal. 2)Set MENU, then go into SOUND MENU to select TREBLE. 3)Press VOLUME UP/DOWN key to check whether the TREBLE effect is OK or not.	
12	BASS	1)Receive "music" sound signal. 2)Set MENU, then go into SOUND MENU to select BASS. 3)Press VOLUME UP/DOWN key to check whether the BASS effect is OK or not.	
13	BALANCE	1)Receive mono-tone signal. 2)Set MENU, then go into SOUND MENU to select BALANCE. 3)Press VOLUME UP/DOWN key to check whether the left to right BALANCE effect is OK or not.	Note: 1. IF BALANCE ARE ADJUSTED, SURROUND CANNOT BE ON.
14	NOISE MUTE CHECKING	1)Receive "PAL COLOUR BAR" signal. 2)Turn up the volume control to maximum, make sure the sound is heard from the speakers. Then put the unit in no signal state. 3)Check the sound mute is effective. 4)Finally turn sound level of CTV to minimum.	

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others														
15	SOUND SYSTEM	<p>1)Receive "PAL-D/K" signal, press MENU, choose CH-SETTING then go into SOUND mode 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.</p> <p>2)Receive "PAL-I" signal, press MENU, choose CH-SETTING then go into SOUND mode 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.</p> <p>3)Receive "PAL-B/G" signal, press MENU, choose CH-SETTING then go into SOUND mode 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.</p> <p>4)Receive "NTSC3.58-M" signal, press MENU, choose CH-SETTING then go into SOUND mode to select I, D/K. Check the sound output is not working properly. Select M and check the sound output to make sure it is working properly.</p>															
16	OSD LANGUAGE QUANTITY CHECK	<p>1)Check OSD LANGUAGE quantity and type.</p> <table><tr><td>QUANTITY</td><td>ENGLISH</td><td>RUSSIAN</td><td>CHINESE</td><td>FRENCH</td><td>ARABIC</td><td>MALAY</td></tr><tr><td>4</td><td>O</td><td>O</td><td>-</td><td>O</td><td>O</td><td>-</td></tr></table>	QUANTITY	ENGLISH	RUSSIAN	CHINESE	FRENCH	ARABIC	MALAY	4	O	O	-	O	O	-	
QUANTITY	ENGLISH	RUSSIAN	CHINESE	FRENCH	ARABIC	MALAY											
4	O	O	-	O	O	-											

13. SHOCK TEST CHECKING

No.	Adjustment point	Adjustment procedure/conditions	Waveform and others
1	SHOCK TEST	<p>1) Hit at the top of TV set for two time.</p> <p>2) Check TV set not damage and TV operation operate correctly.</p>	

14. ROM CORRECTION CHECKING

NO	ADJUSTMENT POINT	ADJUSTMENT CONDITION / PROCEDURE					WAVEFORM OR OTHERS												
1	ROM CORRECTION CHECK	(1) Go to SERVICE mode, press "MENU" key until the SERVICE mode display as in Figure 1 appeared.*					* OTHERS: <div><div>INFO</div><table><tr><td>SLV1</td><td>0</td><td>0</td></tr><tr><td>SLV2</td><td>0</td><td>0</td></tr><tr><td>SLV3</td><td>0</td><td>0</td></tr><tr><td>SLV8</td><td>0</td><td>0</td></tr></table><div>MICON : ZZ CHK1 :ACT SOFT : 1.00 CHK2 :ACT</div></div> <div>Figure 1</div>	SLV1	0	0	SLV2	0	0	SLV3	0	0	SLV8	0	0
		SLV1	0	0															
		SLV2	0	0															
		SLV3	0	0															
		SLV8	0	0															
		(2) Check the ROM CORRECTION status by monitoring the screen, follow the model's setting.																	
Model	Micon Version	CHK1	CHK2	FIGURE															
21Q-FG1A	RH-IXC080WJN1Q (Software Ver. 1.00)	ACT	ACT																
CHK1 : Change the output data for VCJ 35H address + Do not use C.Sync for judging Sync																			
CHK2 : AFT continue to process during AV MUTE condition + Change to 50/60Hz judge counter 3 times to 10 times																			

15. ROM CORRECTION DATA

MCU:	R2J10171GA-XXXFP (IXC080)										
Soft Ver.	V1.00										
Date	18/05/2007										
ROMCORRECT1 ...		Change the output data for VCJ 35H address + don't use C.Cync for judge Sync.									
ROMCORRECT2 ...		AFT + change to counter from 3times to 10 times for 50/60Hz.									
EEPROM Data											
Slave	Sub.	Data								Comment	
\$A2	\$76	A0								ROMCORRECT1 Permission	
	\$77	D3								ROMCORRECT1 Address(H)	
	\$78	E6								ROMCORRECT1 Address(L)	
	\$79	20								ROMCORRECT1 Code length	
	\$7A	AE								ROMCORRECT1 Checksum	
	\$7B	A0								ROMCORRECT2 Permission	
	\$7C	8D								ROMCORRECT2 Address(H)	
	\$7D	1A								ROMCORRECT2 Address(L)	
	\$7E	1E								ROMCORRECT2 Code length	
	\$7F	07								ROMCORRECT2 Checksum	
	\$80-\$87	DF	0F	E0	35	D0	09	27	01	ROMCORRECT1 Data	
	\$88-\$8F	06	C0	00	F0	02	A9	7F	17	ROMCORRECT1 Data	
	\$90-\$97	1F	0A	87	0A	05	8F	0A	3C	ROMCORRECT1 Data	
	\$98-\$9F	0A	38	80	1D	EA	4C	32	03	ROMCORRECT1 Data	
	\$A0-\$A7	37	01	02	80	05	20	4A	F3	ROMCORRECT2 Data	
	\$A8-\$AF	90	03	4C	AD	8D	E6	5F	4C	ROMCORRECT2 Data	
\$B0-\$B7	34	8D	97	0A	04	9F	0A	80	ROMCORRECT2 Data		
\$B8-\$BF	DE	A0	BA	4C	E8	D3	FF	FF	ROMCORRECT2 Data		

NOTE : IF CHANGE EEPROM (IC1005), ROM CORRECTION NEED TO DONE AGAIN
AS FOLLOW :

- (1) Go to Service Mode, Press "Menu" key 4 times until the Service Mode display
as below:

NVM EDIT

◆ ADDRESS (HEX) 000
DATA (HEX) 00

00 : 00001010
01 : 00101100
02 : 10111100
03 : 00000000

- (2) Go to ADDRESS (HEX) 176 by press VOL-UP key.
(3) Go to DATA (HEX) by press CH-DOWN key.
(4) Change DATA (HEX) to A0 as above ROM CORRECTION DATA by press VOL-UP or
VOL-DOWN key.
(5) Next change the data for ADDRESS(HEX) 177 TO ADDRESS (HEX) 1BF by follow step (1)
to (4).

CHAPTER 4. MEMORY MAP

[1] MEMORY MAP

EEPROM CHECK DATA LIST 1																	
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)																	
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
00	EEPROM INITIALIZATION JUDGEMENT BYTE-0								7C	00-FF							
01	EEPROM INITIALIZATION JUDGEMENT BYTE-1								70	00-FF							
02	EEPROM INITIALIZATION JUDGEMENT BYTE-2								78	00-FF							
03	EEPROM INITIALIZATION JUDGEMENT BYTE-3								70	00-FF						* depend on locale, current this model is IXC080 so set as 7C 70 78 70.	
04	ROM VERSION								00	00-FF							
05	SOFTWARE VERSION (HIGH BYTE)								00	00-FF							
06	SOFTWARE VERSION (LOW BYTE)								50	00-FF						*depend on final release version. If version 0.70 so it will become 00 & 46	
07																	
08	TUNING FREQUENCY (LOW BYTE)									00-FF							
09	TUNING FREQUENCY (HIGH BYTE)									00-FF						POS 0	
0A	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 1	
0B	TUNING FREQUENCY (HIGH BYTE)									00-FF							
0C	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 2	
0D	TUNING FREQUENCY (HIGH BYTE)									00-FF							
0E	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 3	
0F	TUNING FREQUENCY (HIGH BYTE)									00-FF							
10	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 4	
11	TUNING FREQUENCY (HIGH BYTE)									00-FF							
12	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 5	
13	TUNING FREQUENCY (HIGH BYTE)									00-FF							
14	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 6	
15	TUNING FREQUENCY (HIGH BYTE)									00-FF							
16	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 7	
17	TUNING FREQUENCY (HIGH BYTE)									00-FF							
18	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 8	
19	TUNING FREQUENCY (HIGH BYTE)									00-FF							
1A	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 9	
1B	TUNING FREQUENCY (HIGH BYTE)									00-FF							
1C	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 10	
1D	TUNING FREQUENCY (HIGH BYTE)									00-FF							
1E	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 11	
1F	TUNING FREQUENCY (HIGH BYTE)									00-FF							
20	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 12	
21	TUNING FREQUENCY (HIGH BYTE)									00-FF							
22	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 13	
23	TUNING FREQUENCY (HIGH BYTE)									00-FF							
24	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 14	
25	TUNING FREQUENCY (HIGH BYTE)									00-FF							
26	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 15	
27	TUNING FREQUENCY (HIGH BYTE)									00-FF							
28	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 16	
29	TUNING FREQUENCY (HIGH BYTE)									00-FF							
2A	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 17	
2B	TUNING FREQUENCY (HIGH BYTE)									00-FF							
2C	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 18	
2D	TUNING FREQUENCY (HIGH BYTE)									00-FF							
2E	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 19	
2F	TUNING FREQUENCY (HIGH BYTE)									00-FF							
30	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 20	
31	TUNING FREQUENCY (HIGH BYTE)									00-FF							
32	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 21	
33	TUNING FREQUENCY (HIGH BYTE)									00-FF							
34	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 22	
35	TUNING FREQUENCY (HIGH BYTE)									00-FF							
36	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 23	
37	TUNING FREQUENCY (HIGH BYTE)									00-FF							
38	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 24	
39	TUNING FREQUENCY (HIGH BYTE)									00-FF							
3A	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 25	
3B	TUNING FREQUENCY (HIGH BYTE)									00-FF							
3C	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 26	
3D	TUNING FREQUENCY (HIGH BYTE)									00-FF							
3E	TUNING FREQUENCY (LOW BYTE)									00-FF						POS 27	
3F	TUNING FREQUENCY (HIGH BYTE)									00-FF							
MODEL								MODEL									
LETTER NO.								LETTER NO.									

EEPROM CHECK DATA LIST 2

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
40				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 28
41				TUNING FREQUENCY (HIGH BYTE)						00-FF							
42				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 29
43				TUNING FREQUENCY (HIGH BYTE)						00-FF							
44				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 30
45				TUNING FREQUENCY (HIGH BYTE)						00-FF							
46				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 31
47				TUNING FREQUENCY (HIGH BYTE)						00-FF							
48				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 32
49				TUNING FREQUENCY (HIGH BYTE)						00-FF							
4A				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 33
4B				TUNING FREQUENCY (HIGH BYTE)						00-FF							
4C				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 34
4D				TUNING FREQUENCY (HIGH BYTE)						00-FF							
4E				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 35
4F				TUNING FREQUENCY (HIGH BYTE)						00-FF							
50				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 36
51				TUNING FREQUENCY (HIGH BYTE)						00-FF							
52				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 37
53				TUNING FREQUENCY (HIGH BYTE)						00-FF							
54				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 38
55				TUNING FREQUENCY (HIGH BYTE)						00-FF							
56				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 39
57				TUNING FREQUENCY (HIGH BYTE)						00-FF							
58				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 40
59				TUNING FREQUENCY (HIGH BYTE)						00-FF							
5A				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 41
5B				TUNING FREQUENCY (HIGH BYTE)						00-FF							
5C				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 42
5D				TUNING FREQUENCY (HIGH BYTE)						00-FF							
5E				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 43
5F				TUNING FREQUENCY (HIGH BYTE)						00-FF							
60				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 44
61				TUNING FREQUENCY (HIGH BYTE)						00-FF							
62				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 45
63				TUNING FREQUENCY (HIGH BYTE)						00-FF							
64				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 46
65				TUNING FREQUENCY (HIGH BYTE)						00-FF							
66				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 47
67				TUNING FREQUENCY (HIGH BYTE)						00-FF							
68				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 48
69				TUNING FREQUENCY (HIGH BYTE)						00-FF							
6A				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 49
6B				TUNING FREQUENCY (HIGH BYTE)						00-FF							
6C				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 50
6D				TUNING FREQUENCY (HIGH BYTE)						00-FF							
6E				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 51
6F				TUNING FREQUENCY (HIGH BYTE)						00-FF							
70				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 52
71				TUNING FREQUENCY (HIGH BYTE)						00-FF							
72				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 53
73				TUNING FREQUENCY (HIGH BYTE)						00-FF							
74				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 54
75				TUNING FREQUENCY (HIGH BYTE)						00-FF							
76				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 55
77				TUNING FREQUENCY (HIGH BYTE)						00-FF							
78				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 56
79				TUNING FREQUENCY (HIGH BYTE)						00-FF							
7A				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 57
7B				TUNING FREQUENCY (HIGH BYTE)						00-FF							
7C				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 58
7D				TUNING FREQUENCY (HIGH BYTE)						00-FF							
7E				TUNING FREQUENCY (LOW BYTE)						00-FF							POS 59
7F				TUNING FREQUENCY (HIGH BYTE)						00-FF							
MODEL										MODEL							
LETTER NO.										LETTER NO.							

MEMORY MAP (Continued)

EEPROM CHECK DATA LIST 3

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV/FINAL		LAST INITIAL SETTING DATA	REMARK	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE			
80	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 60	
81	TUNING FREQUENCY (HIGH BYTE)									00-FF								
82	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 61	
83	TUNING FREQUENCY (HIGH BYTE)									00-FF								
84	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 62	
85	TUNING FREQUENCY (HIGH BYTE)									00-FF								
86	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 63	
87	TUNING FREQUENCY (HIGH BYTE)									00-FF								
88	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 64	
89	TUNING FREQUENCY (HIGH BYTE)									00-FF								
8A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 65	
8B	TUNING FREQUENCY (HIGH BYTE)									00-FF								
8C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 66	
8D	TUNING FREQUENCY (HIGH BYTE)									00-FF								
8E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 67	
8F	TUNING FREQUENCY (HIGH BYTE)									00-FF								
90	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 68	
91	TUNING FREQUENCY (HIGH BYTE)									00-FF								
92	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 69	
93	TUNING FREQUENCY (HIGH BYTE)									00-FF								
94	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 70	
95	TUNING FREQUENCY (HIGH BYTE)									00-FF								
96	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 71	
97	TUNING FREQUENCY (HIGH BYTE)									00-FF								
98	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 72	
99	TUNING FREQUENCY (HIGH BYTE)									00-FF								
9A	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 73	
9B	TUNING FREQUENCY (HIGH BYTE)									00-FF								
9C	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 74	
9D	TUNING FREQUENCY (HIGH BYTE)									00-FF								
9E	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 75	
9F	TUNING FREQUENCY (HIGH BYTE)									00-FF								
A0	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 76	
A1	TUNING FREQUENCY (HIGH BYTE)									00-FF								
A2	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 77	
A3	TUNING FREQUENCY (HIGH BYTE)									00-FF								
A4	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 78	
A5	TUNING FREQUENCY (HIGH BYTE)									00-FF								
A6	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 79	
A7	TUNING FREQUENCY (HIGH BYTE)									00-FF								
A8	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 80	
A9	TUNING FREQUENCY (HIGH BYTE)									00-FF								
AA	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 81	
AB	TUNING FREQUENCY (HIGH BYTE)									00-FF								
AC	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 82	
AD	TUNING FREQUENCY (HIGH BYTE)									00-FF								
AE	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 83	
AF	TUNING FREQUENCY (HIGH BYTE)									00-FF								
B0	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 84	
B1	TUNING FREQUENCY (HIGH BYTE)									00-FF								
B2	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 85	
B3	TUNING FREQUENCY (HIGH BYTE)									00-FF								
B4	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 86	
B5	TUNING FREQUENCY (HIGH BYTE)									00-FF								
B6	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 87	
B7	TUNING FREQUENCY (HIGH BYTE)									00-FF								
B8	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 88	
B9	TUNING FREQUENCY (HIGH BYTE)									00-FF								
BA	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 89	
BB	TUNING FREQUENCY (HIGH BYTE)									00-FF								
BC	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 90	
BD	TUNING FREQUENCY (HIGH BYTE)									00-FF								
BE	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 91	
BF	TUNING FREQUENCY (HIGH BYTE)									00-FF								
MODEL									MODEL									
LETTER NO.									LETTER NO.									

EEPROM CHECK DATA LIST 4

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
C0	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 92
C1	TUNING FREQUENCY (HIGH BYTE)									00-FF							POS 93
C2	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 94
C3	TUNING FREQUENCY (HIGH BYTE)									00-FF							POS 95
C4	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 96
C5	TUNING FREQUENCY (HIGH BYTE)									00-FF							POS 97
C6	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 98
C7	TUNING FREQUENCY (HIGH BYTE)									00-FF							POS 99
C8	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 10
C9	TUNING FREQUENCY (HIGH BYTE)									00-FF							POS 20
CA	TUNING FREQUENCY (LOW BYTE)									00-FF							POS 30
CB	TUNING FREQUENCY (HIGH BYTE)									00-FF							POS 40
CC	TUNING FREQUENCY (LOW BYTE)									00-FF							
CD	TUNING FREQUENCY (HIGH BYTE)									00-FF							
CE	TUNING FREQUENCY (LOW BYTE)									00-FF							
CF	TUNING FREQUENCY (HIGH BYTE)									00-FF							
D0	FAVORITE CHANNEL 1								0A	00-FB							
D1	FAVORITE CHANNEL 2								14	00-FB							
D2	FAVORITE CHANNEL 3								1E	00-FB							
D3	FAVORITE CHANNEL 4								28	00-FB							
D4						CHILD LOCK PASSWORD 1				00	00-09						
D5						CHILD LOCK PASSWORD 2				00	00-09						
D6						CHILD LOCK PASSWORD 3				00	00-09						
D7						CHILD LOCK PASSWORD 4				00	00-09						
D8									LOCK TV	00	00-01						
D9									MP-IN	01	00-01						
DA									AV MODE	00	00-02						
DB																	
DC																	
DD																	
DE				1/3 DIGIT ENTRY					08	00-18							
DF																	
E0	POS 7	POS 6	POS 5	POS4	POS 3	POS 2	POS 1	POS 0	FF	00-FF							
E1	POS15	POS14	POS13	POS12	POS11	POS10	POS 9	POS 8	FF	00-FF							
E2	POS23	POS22	POS21	POS20	POS19	POS18	POS17	POS16	FF	00-FF							
E3	POS31	POS30	POS29	POS28	POS27	POS26	POS25	POS24	FF	00-FF							
E4	POS39	POS38	POS37	POS36	POS35	POS34	POS33	POS32	FF	00-FF							
E5	POS47	POS46	POS45	POS44	POS43	POS42	POS41	POS40	FF	00-FF							
E6	POS55	POS54	POS53	POS52	POS51	POS50	POS49	POS48	FF	00-FF							
E7	POS63	POS62	POS61	POS60	POS59	POS58	POS57	POS56	FF	00-FF							
E8	POS71	POS70	POS69	POS68	POS67	POS66	POS65	POS64	FF	00-FF							
E9	POS79	POS78	POS77	POS76	POS75	POS74	POS73	POS72	FF	00-FF							
EA	POS87	POS86	POS85	POS84	POS83	POS82	POS81	POS80	FF	00-FF							
EB	POS95	POS94	POS93	POS92	POS91	POS90	POS89	POS88	FF	00-FF							
EC	POS103	POS102	POS101	POS100	POS99	POS98	POS97	POS96	FF	00-0F							
ED																	
EE	Blue Back		TEXT (Not Use)				LANGUAGE		00	00-FF							
EF			LAST VOLUME						00	00-3C							
F0	POS 7	POS 6	POS 5	POS4	POS 3	POS 2	POS 1	POS 0	01	00-FF							
F1	POS15	POS14	POS13	POS12	POS11	POS10	POS 9	POS 8	00	00-FF							
F2	POS23	POS22	POS21	POS20	POS19	POS18	POS17	POS16	00	00-FF							
F3	POS31	POS30	POS29	POS28	POS27	POS26	POS25	POS24	00	00-FF							
F4	POS39	POS38	POS37	POS36	POS35	POS34	POS33	POS32	00	00-FF							
F5	POS47	POS46	POS45	POS44	POS43	POS42	POS41	POS40	00	00-FF							
F6	POS55	POS54	POS53	POS52	POS51	POS50	POS49	POS48	00	00-FF							
F7	POS63	POS62	POS61	POS60	POS59	POS58	POS57	POS56	00	00-FF							
F8	POS71	POS70	POS69	POS68	POS67	POS66	POS65	POS64	00	00-FF							
F9	POS79	POS78	POS77	POS76	POS75	POS74	POS73	POS72	00	00-FF							
FA	POS87	POS86	POS85	POS84	POS83	POS82	POS81	POS80	00	00-FF							
FB	POS95	POS94	POS93	POS92	POS91	POS90	POS89	POS88	00	00-FF							
FC	POS103	POS102	POS101	POS100	POS99	POS98	POS97	POS96	00	00-0F							
FD	POWER								AA	AA(On), 55(Off)							
FE																	
FF																	
MODEL								MODEL									
LETTER NO.								LETTER NO.									

1=AFT ON, 0=AFT OFF

1= SKIP ON, 0=SKIP OFF

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

4-5

EEPROM CHECK DATA LIST 6

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

SERIAL ADDRESS : A0(00-1F) / 2E(100-1F) / 7F(200-2F) / A0(300-3F)																	
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK
140	ANT-BOOSTER (POS64)		S-SYSTEM (POS64)		C-SYSTEM (POS64)				00	00-9C							
141	ANT-BOOSTER (POS65)		S-SYSTEM (POS65)		C-SYSTEM (POS65)				00	00-9C							
142	ANT-BOOSTER (POS66)		S-SYSTEM (POS66)		C-SYSTEM (POS66)				00	00-9C							
143	ANT-BOOSTER (POS67)		S-SYSTEM (POS67)		C-SYSTEM (POS67)				00	00-9C							
144	ANT-BOOSTER (POS68)		S-SYSTEM (POS68)		C-SYSTEM (POS68)				00	00-9C							
145	ANT-BOOSTER (POS69)		S-SYSTEM (POS69)		C-SYSTEM (POS69)				00	00-9C							
146	ANT-BOOSTER (POS70)		S-SYSTEM (POS70)		C-SYSTEM (POS70)				00	00-9C							
147	ANT-BOOSTER (POS71)		S-SYSTEM (POS71)		C-SYSTEM (POS71)				00	00-9C							
148	ANT-BOOSTER (POS72)		S-SYSTEM (POS72)		C-SYSTEM (POS72)				00	00-9C							
149	ANT-BOOSTER (POS73)		S-SYSTEM (POS73)		C-SYSTEM (POS73)				00	00-9C							
14A	ANT-BOOSTER (POS74)		S-SYSTEM (POS74)		C-SYSTEM (POS74)				00	00-9C							
14B	ANT-BOOSTER (POS75)		S-SYSTEM (POS75)		C-SYSTEM (POS75)				00	00-9C							
14C	ANT-BOOSTER (POS76)		S-SYSTEM (POS76)		C-SYSTEM (POS76)				00	00-9C							
14D	ANT-BOOSTER (POS77)		S-SYSTEM (POS77)		C-SYSTEM (POS77)				00	00-9C							
14E	ANT-BOOSTER (POS78)		S-SYSTEM (POS78)		C-SYSTEM (POS78)				00	00-9C							
14F	ANT-BOOSTER (POS79)		S-SYSTEM (POS79)		C-SYSTEM (POS79)				00	00-9C							
150	ANT-BOOSTER (POS80)		S-SYSTEM (POS80)		C-SYSTEM (POS80)				00	00-9C							
151	ANT-BOOSTER (POS81)		S-SYSTEM (POS81)		C-SYSTEM (POS81)				00	00-9C							
152	ANT-BOOSTER (POS82)		S-SYSTEM (POS82)		C-SYSTEM (POS82)				00	00-9C							
153	ANT-BOOSTER (POS83)		S-SYSTEM (POS83)		C-SYSTEM (POS83)				00	00-9C							
154	ANT-BOOSTER (POS84)		S-SYSTEM (POS84)		C-SYSTEM (POS84)				00	00-9C							
155	ANT-BOOSTER (POS85)		S-SYSTEM (POS85)		C-SYSTEM (POS85)				00	00-9C							
156	ANT-BOOSTER (POS86)		S-SYSTEM (POS86)		C-SYSTEM (POS86)				00	00-9C							
157	ANT-BOOSTER (POS87)		S-SYSTEM (POS87)		C-SYSTEM (POS87)				00	00-9C							
158	ANT-BOOSTER (POS88)		S-SYSTEM (POS88)		C-SYSTEM (POS88)				00	00-9C							
159	ANT-BOOSTER (POS89)		S-SYSTEM (POS89)		C-SYSTEM (POS89)				00	00-9C							
15A	ANT-BOOSTER (POS90)		S-SYSTEM (POS90)		C-SYSTEM (POS90)				00	00-9C							
15B	ANT-BOOSTER (POS91)		S-SYSTEM (POS91)		C-SYSTEM (POS91)				00	00-9C							
15C	ANT-BOOSTER (POS92)		S-SYSTEM (POS92)		C-SYSTEM (POS92)				00	00-9C							
15D	ANT-BOOSTER (POS93)		S-SYSTEM (POS93)		C-SYSTEM (POS93)				00	00-9C							
15E	ANT-BOOSTER (POS94)		S-SYSTEM (POS94)		C-SYSTEM (POS94)				00	00-9C							
15F	ANT-BOOSTER (POS95)		S-SYSTEM (POS95)		C-SYSTEM (POS95)				00	00-9C							
160	ANT-BOOSTER (POS96)		S-SYSTEM (POS96)		C-SYSTEM (POS96)				00	00-9C							
161	ANT-BOOSTER (POS97)		S-SYSTEM (POS97)		C-SYSTEM (POS97)				00	00-9C							
162	ANT-BOOSTER (POS98)		S-SYSTEM (POS98)		C-SYSTEM (POS98)				00	00-9C							
163	ANT-BOOSTER (POS99)		S-SYSTEM (POS99)		C-SYSTEM (POS99)				00	00-9C							
164		C-SYSTEM (AV2)				C-SYSTEM (AV1)			00	00-44							
165					SLV1 (HIGH)				00	00-FF							
166					SLV1 (LOW)				00	00-FF							
167					SLV2 (HIGH)				00	00-FF							
168					SLV2 (LOW)				00	00-FF							
169					SLV3 (HIGH)				00	00-FF							
16A					SLV3 (LOW)				00	00-FF							
16B					SLV4 (HIGH)				00	00-FF							
16C					SLV4 (LOW)				00	00-FF							
16D					SLV5 (HIGH)				00	00-FF							
16E					SLV5 (LOW)				00	00-FF							
16F					SLV6 (HIGH)				00	00-FF							
170					SLV6 (LOW)				00	00-FF							
171					SLV7 (HIGH)				00	00-FF							
172					SLV7 (LOW)				00	00-FF							
173								TV/AV	00	0(TV), 1(AV1), 2(AV2)							
174	LAST CHANNEL POSITION								01	00-F9							
175	FLASH BACK POSITION								01	00-FF							
176	ROM CORRECTION-1 ID									00-FF						Valid (A0)	
177	ROM CORRECTION-1 HIGH BYTE ADDRESS									00-FF							
178	ROM CORRECTION-1 LOW BYTE ADDRESS									00-FF							
179	ROM CORRECTION-1 DATA LENGTH									00-FF							
17A	ROM CORRECTION-1 CHECKSUM									00-FF							
17B	ROM CORRECTION-2 ID									00-FF						Valid (A0)	
17C	ROM CORRECTION-2 HIGH BYTE ADDRESS									00-FF							
17D	ROM CORRECTION-2 LOW BYTE ADDRESS									00-FF							
17E	ROM CORRECTION-2 DATA LENGTH									00-FF							
17F	ROM CORRECTION-2 CHECKSUM									00-FF							
MODEL									MODEL								
LETTER NO									LETTER NO								

MEMORY MAP (Continued)

EEPROM CHECK DATA LIST 7

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA							MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0			CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
180										00-FF						
181										00-FF						
182										00-FF						
183										00-FF						
184										00-FF						
185										00-FF						
186										00-FF						
187										00-FF						
188										00-FF						
189										00-FF						
18A										00-FF						
18B										00-FF						
18C										00-FF						
18D										00-FF						
18E										00-FF						
18F										00-FF						
190										00-FF						
191										00-FF						
192										00-FF						
193										00-FF						
194										00-FF						
195										00-FF						
196										00-FF						
197										00-FF						
198										00-FF						
199										00-FF						
19A										00-FF						
19B										00-FF						
19C										00-FF						
19D										00-FF						
19E										00-FF						
19F										00-FF						
1A0										00-FF						
1A1										00-FF						
1A2										00-FF						
1A3										00-FF						
1A4										00-FF						
1A5										00-FF						
1A6										00-FF						
1A7										00-FF						
1A8										00-FF						
1A9										00-FF						
1AA										00-FF						
1AB										00-FF						
1AC										00-FF						
1AD										00-FF						
1AE										00-FF						
1AF										00-FF						
1B0										00-FF						
1B1										00-FF						
1B2										00-FF						
1B3										00-FF						
1B4										00-FF						
1B5										00-FF						
1B6										00-FF						
1B7										00-FF						
1B8										00-FF						
1B9										00-FF						
1BA										00-FF						
1BB										00-FF						
1BC										00-FF						
1BD										00-FF						
1BE										00-FF						
1BF										00-FF						
MODEL									MODEL							
LETTER NO.									LETTER NO.							

EEPROM CHECK DATA LIST 8

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
1C0																	
1C1																	
1C2																	
1C3																	
1C4																	
1C5																	
1C6																	
1C7																	
1C8																	
1C9																	
1CA																	
1CB																	
1CC																	
1CD																	
1CE																	
1CF																	
1D0																	
1D1																	
1D2																	
1D3																	
1D4																	
1D5																	
1D6																	
1D7																	
1D8																	
1D9																	
1DA																	
1DB																	
1DC																	
1DD																	
1DE																	
1DF																	
1E0																	
1E1																	
1E2																	
1E3																	
1E4																	
1E5																	
1E6																	
1E7																	
1E8																	
1E9																	
1EA																	
1EB																	
1EC																	
1ED																	
1EE																	
1EF																	
1F0																	
1F1																	
1F2																	
1F3																	
1F4																	
1F5																	
1F6																	
1F7																	
1F8																	
1F9																	
1FA																	
1FB																	
1FC																	
1FD																	
1FE																	
1FF																	
MODEL										MODEL							
LETTER NO.										LETTER NO.							

MEMORY MAP (Continued)

EEPROM CHECK DATA LIST 9

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL	
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK
200					R-DRIVE (V00)				3F	00-7F							
201					B-DRIVE (V00)				3F	00-7F							
202					R-CUTOFF (V00)				7F	00-FF							
203					G-CUTOFF (V00)				7F	00-FF							
204					B-CUTOFF (V00)				7F	00-FF							
205					RF-AGC (V01)				32	00-7F							
206					VIF-VCO (V02)				1F	00-3F							
207									03	00-07							
208					SUB CONTRAST (V04)				64	00-7F							
209					SUB COLOUR (V05)				3F	00-7F							
20A					SUB BRIGHTNESS (V06)				7F	00-FF							
20B					SUB TINT (V07)				3F	00-7F							
20C					SUB SHARPNESS PRE (V08)				2B	00-3F							
20D					SUB-COLOUR-YUV (V09)				5A	00-7F							
20E					SUB-TINT-YUV (V10)				3F	00-7F							
20F					V-SIZE-50Hz (V11)				26	00-3F							
210									03	00-07							
211					H-SHIFT-50Hz (V13)				09	00-1F							
212					SECAM BR (V14)				25	00-3F							
213					SECAM BB (V15)				16	00-3F							
214					SUB VOLUME (V16)				3C	00-3C							
215					V-SIZE-60Hz (V17)				1F	00-3E							
216					V-SHIFT-60Hz (V18)				06	00-0E							
217					H-SHIFT-60Hz (V19)				11	00-1E							
218					S-TRAP-BG (V20)				40	00-7F							
219					S-TRAP-I (V21)				40	00-7F							
21A					S-TRAP-DK (V22)				40	00-7F							
21B					S-TRAP-M (V23)				40	00-7F							
21C					S-TRAP-574 (V24)				40	00-7F							
21D																	
21E																	
21F																	
220																	
221																	
222					SUB CONTRAST YUV (V26)				64	00-7F							
223					SUB BRIGHTNESS YUV (V27)				7F	00-FF							
224					VS-CORRECT (V28)				20	00-3F							
225					VS-CORRECT OFFSET (V29)				0D	00-1A							
226					V-LINEARITY (V30)				20	00-3F							
227					V-LINEARITY OFFSET (V31)				0D	00-1A							
228					SUB SHARPNESS OV (V32)				2B	00-3F							
229																	
22A																	
22B																	
22C					S-OUT-LEVEL (F06)				5F	00-7F							
22D					VIF-G (F07)				04	00-07							
22E					YDL (F13)				05	00-07							
22F					YDL-PAL (F14)				05	00-07							
230					YDL-SECAM (F15)				07	00-07							
231					YDL-N443 (F16)				05	00-07							
232					YDL-N358 (F17)				05	00-07							
233					YDL-AV (F18)				06	00-07							
234					YDL-AV-PAL (F19)				06	00-07							
235					YDL-AV-SECAM (F20)				07	00-07							
236					YDL-AV-N443 (F21)				06	00-07							
237					YDL-AV-N358 (F22)				06	00-07							
238					YDL-YUV (F23)				06	00-07							
239					COLOUR-AV (F24)				29	00-3E							
23A					COLOUR-PAL (F25)				1F	00-3E							
23B					COLOUR-SECAM (F26)				28	00-3E							
23C					COLOUR-N443 (F27)				17	00-3E							
23D					COLOUR-N358 (F28)				18	00-3E							
23E					COLUR-ADJ (F29)				1F	00-3E							
23F					SHARPNESS-PRE-AV (F30)				24	00-3E							
MODEL																	MODEL
LETTER NO.																	LETTER NO.

EEPROM CHECK DATA LIST 10

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS		DATA								MICON	EEPROM	EEPROM	CHASSIS		CTV FINAL		LAST INITIAL	
(HEX)	D7	D6	D5	D4	D3	D2	D1	D0	DEFAULT	RANGE	WRITE(CPU)	CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE	SETTING DATA	REMARK	
240					SHARPNESS-PRE-YUV (F31)				1A	00-3E								
241					SHARPNESS-PRE-PAL (F32)				15	00-3E								
242					SHARPNESS-PRE-SECAM (F33)				10	00-3E								
243					SHARPNESS-PRE-N443 (F34)				15	00-3E								
244					SHARPNESS-PRE-N358 (F35)				15	00-3E								
245					TINT-AV (F42)				3F	00-7E								
246					TINT-ADJ (F43)				3F	00-7E								
247					TINT-YUV-ADJ (F44)				3F	00-7E								
248					R-R DRIVE (F45)				47	00-7E								
249					B-R DRIVE (F46)				35	00-7E								
24A					R-B DRIVE (F47)				3C	00-7E								
24B					B-B DRIVE (F48)				4C	00-7E								
24C									TRAP (F49)	02	00-03							
24D									TRAP-PAL (F50)	02	00-03							
24E									TRAP-SECAM (F51)	02	00-03							
24F									TRAP-N443 (F52)	02	00-03							
250									TRAP-N358 (F53)	02	00-03							
251									GAMMA (F58)	00	00-03							
252					BS-D/C (F59)				0A	00-0F								
253					SL-TV (F62)				02	00-07								
254					SL-AV (F63)				04	00-07								
255					SL-YUV (F64)				04	00-07								
256									AS/FBP-TV (F65)	02	00-03							
257									AS/FBP-AV (F66)	02	00-03							
258									AS/FBP-YUV (F67)	02	00-03							
259									VDL (F68)	00	00-03							
25A									UDL (F69)	00	00-03							
25B									AUTO-SCM-KIL-TV (F70)	01	00-03							
25C									SECAM-BGP (F71)	00	00-03							
25D																		
25E																		
25F					OSD-POS (F75)				09	00-7F								
260					SHARPNESS-OVER-AV (F36)				24	00-3E								
261					SHARPNESS-OVER-YUV (F36)				24	00-3E								
262					SHARPNESS-OVER-PAL (F38)				1F	00-3E								
263					SHARPNESS-OVER-SECAM (F39)				1A	00-3E								
264					SHARPNESS-OVER-N443 (F40)				1F	00-3E								
265					SHARPNESS-OVER-N358 (F41)				1F	00-3E								
266									AFC2 GAIN (F57)	00	00-03							
267																		
268																		
269																		
26A																		
26B																		
26C																		
26D									AUTO-SCM-KIL-AV-YUV (F78)	01	00-03							
26E									AFC1-GAIN-TV (F79)	00	00-03							
26F									AFC1-GAIN-AV (F80)	03	00-03							
270									AFC1-GAIN-YUV (F81)	03	00-03							
271									OSD LEVEL (F82)	03	00-04							
272					AC-FAIL-WO-BRIGHT (F87)				FF	00-FF								
273									FORCED-SCM-KIL-TV (F88)	02	00-03							
274									FORCED-SCM-KIL-AV-YUV (F89)	02	00-03							
275					VIDEO-DEMUTE-DELAY (F91)				00	00-FF								
276					SOUND-DEMUTE-DELAY (F92)				00	00-FF								
277					MER (F93)				46	00-FF								
278					MEL1 (F94)				96	00-FF								
279					MEL2 (F95)				9C	00-FF								
27A					MEL3 (F96)				A3	00-FF								
27B					MEL4 (F97)				A5	00-FF								
27C					MEL5 (F98)				AA	00-FF								
27D					MEL6 (F99)				B4	01-FF								
27E					S-Start Point (F100)				15	00-3C								
27F					S-Stop Point (F101)				3C	00-3C								
MODEL									MODEL									

MEMORY MAP (Continued)

EEPROM CHECK DATA LIST 11

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
280					S-Step (F102)				07	00-3C							
281					S-B-BASS (F104)				0A	00-3C							
282					S-B-TREB (F105)				0A	00-3C							
283					S-BASS (F106)				0A	00-3C							
284					S-TREB (F107)				0A	00-3C							
285					R-R-C DRIVE (F168)				43	00-7E							
286					B-R-C DRIVE (F169)				3A	00-7E							
287					R-B-C DRIVE (F170)				3E	00-7E							
288					B-B-C DRIVE (F171)				45	00-7E							
289					TRE OFFSET SUR ONII (F172)				08	00-0F							
28A					R-DRI YUV OFFSET (F117)				3F	00-7E							
28B					B-DRI YUV OFFSET (F118)				3F	00-7E							
28C					R-CUT OFF YUV OFFSET (F119)				3F	00-7E							
28D					G-CUT OFF YUV OFFSET (F120)				3F	00-7E							
28E					B-CUT OFF YUV OFFSET (F121)				3F	00-7E							
28F					CONTRAST YUV OFFSET (F122)				3F	00-7E							
290					BRIGHT YUV OFFSET (F123)				3F	00-7E							
291					SHP ANT ON II OFFSET (F124)				1F	00-3E							
292								WAIT MODE TIME (F125)	02	00-02							
293					CONTRAST OFFSET (F126)				3F	00-7E							
294					BRIGHT OFFSET (F127)				3F	00-7E							
295					CR-PEDESTEL ADJ (F128)				08	00-0F							
296					CB-PEDESTEL ADJ (F129)				08	00-0F							
297					AV-BRIGHTNESS OFFSET (F131)				16	00-1E							
298					BASS OFFSET (F132)				04	00-08							
299					TREBLE OFFSET (F133)				04	00-08							
29A					OSD POS V50 (F73)				24	01-37							
29B					OSD POS V60 (F74)				1F	01-32							
29C								SIF BPF WIDE (F136)	00	00-03							
29D								SIF-BPF-WIDE-574 (F137)	00	00-03							
29E					TEST PATTERN (F139)				00	00-0F							
29F																	
2A0	HALF-H- KILLER (F142)	MCUVOUT (F141)	FSC FREE (F140)	ABCL-G (F05)	ABCL (F04)	BS OFF (F03)	RGB CLIP (F02)	C.CLIP-LVL (F01)	A0	00-FF							
2A1				SHP-G-N3 (F12)	SHP-G-N4 (F11)	SHP-G-SCM (F10)	SHP-G-PAL (F09)	SHP-G (F08)	10	00-1F							
2A2	PLL-CP (F76)	N45 (F72)	OM DET (F81)	BS GAIN (F80)	AFG2 (F82)	V-FREE (F86)	1W-AV (F55)	1W-TV (F54)	82	00-FF							
2A3		V-AGC (F143)	Pow-Storage (F103)	CTI Adj. (F90)	C-ANGLE (F86)	TAKE-OFF- YUV (F85)	TAKE-OFF- AV (F84)	TAKE-OFF- TV (F83)	39	00-7F							
2A4		AS-SPEED- UP (F135)	AS-SPEED- DN (F134)	SIF-PAL (F130)	AVL LEVEL (F77)	V-STD YUV (F110)	V-STD-AV (F109)	V-STD-TV (F108)	00	00-7F							
2A5	VFREE2 (F173)	ACC-AMP- ON (F138)	APER-FREQ (F116)	PEAK ACL (F115)	HVCO PULLIN UP (F114)	HVCO PULLUP (F113)	HVCO PULL DOWN (F112)	HVCO FREERUN SHIFT (F111)	00	00-7F							
2A6	AV2 (O11)	AV (O10)	Forced-Col (O08)	N358-TV (O07)	N443-TV (O06)	SECAM (O05)	VIF-Unused (O04)	HOTEL (O01)	DC	00-FF							
2A7	LED-CONT (O21)	R/C MENU (O20)	BIL (O17)	TEXT- Unused (O16)	A2-Unused (O15)	NICAM- Unused (O14)	S-CTRL (O13)	YUV (O12)	03	00-FF							
2A8	CHILD LOCK (O39)	LNA TUNER (O29)	250 CHANNEL (O27)	ANT- BOOSTER (O26)	WHITE BACK (O25)	TUNER BAND (O24)	Sharp-logo (O23)	S-Booster (O22)	88	00-FF							
2A9					M (O09)	D/K (O09)	I (O09)	B/G (O09)	0F	01-0F							
2AA			Arabic (O18)	Malay (O18)	Russian (O18)	French (O18)	Chinese (O18)	English (O18)	3F	01-3F							
2AB					SEARCH SPEED (O19)				03	01-05							
2AC					HOTEL CHANNEL POSITION (O02)				FF	00-F9, FF							
2AD					HOTEL VOLUME (O03)				FF	00-3C, FF							
2AE								AVL (O28)	02	00-02							
2AF																	
2B0		LK MENU (O37)	WHITE- TEMP (O36)	VIRGIN- MODE (O35)	NORMAL KEY (O31)	MP-IN (O34)	S-CTRL LIMIT (O33)	AV MODE (O32)	05	00-1F							
2B1					CONT NEWS (F144)				1E	00-3C							
2B2					CONT MUSIC (F145)				32	00-3C							
2B3					CONT MOVIE (F146)				3C	00-3C							
2B4					BRIGHT NEWS(F147)				1E	00-3C							
2B5					BRIGHT MUSIC (F148)				1E	00-3C							
2B6					BRIGHT MOVIE (F149)				1E	00-3C							
2B7					COL NEWS (F150)				1E	00-3C							
2B8					COL MUSIC (F151)				1E	00-3C							
2B9					COL MOVIE (F152)				28	00-3C							
2BA					SHARP NEWS (F153)				14	00-3C							
2BB					SHARP MUSIC (F154)				1E	00-3C							
2BC					SHARP MOVIE (F155)				23	00-3C							
2BD								SURR NEWS (F156)	00	00-02							
2BE								SURR MUSIC (F157)	00	00-02							
2BF								SURR MOVIE (F158)	00	00-02							
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EEPROM CHECK DATA LIST 12

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK		
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE				
2C0				TREBLE NEWS (F159)					00	00-14									
2C1				TREBLE MUSIC (F160)					0A	00-14									
2C2				TREBLE MOVIE (F161)					0F	00-14									
2C3				BASS NEWS (F162)					05	00-14									
2C4				BASS MUSIC (F163)					0A	00-14									
2C5				BASS MOVIE (F164)					14	00-14									
2C6						S-BOOST NEWS (F165)	S-BOOST MUSIC (F166)	S-BOOST MOVIE (F167)	03	00-07									
2C7						VD3VD2VD1-TV (F174)			01	00-07									
2C8						VD3VD2VD1-AV (F175)			03	00-07									
2C9						VD3VD2VD1-YUV (F176)			03	00-07									
2CA						SL-TV (WEAK) (F177)			07	00-07									
2CB			VIF-AGC THRESHOLD (F178)						7F	00-7F									
2CC							AFT OFFSET (F179)		00	00-04									
2CD			VOL-start (F180)						3C	00-3C									
2CE			VOL-step (F181)						00	00-3C									
2CF						BASS-LIMIT1			07	00-07									
2D0						BASS-LIMIT2			07	00-07									
2D1						BASS-LIMIT3			07	00-07									
2D2						BASS-LIMIT4			07	00-07									
2D3																			
2D4																			
2D5																			
2D6																			
2D7																			
2D8																			
2D9																			
2DA																			
2DB																			
2DC																			
2DD																			
2DE																			
2DF																			
2E0																			
2E1																			
2E2																			
2E3																			
2E4																			
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2E6																			
2E7																			
2E8																			
2E9																			
2EA																			
2EB																			
2EC																			
2ED																			
2EE																			
2EF																			
2F0																			
2F1																			
2F2																			
2F3																			
2F4																			
2F5																			
2F6																			
2F7																			
2F8																			
2F9																			
2FA																			
2FB																			
2FC																			
2FD																			
2FE																			
2FF																			
MODEL									MODEL										
LETTER NO.									LETTER NO.										

MEMORY MAP (Continued)

EEPROM CHECK DATA LIST 13																			
SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)																			
ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK		
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE				
300																			
301																			
302																			
303																			
304																			
305																			
306																			
307																			
308																			
309																			
30A																			
30B																			
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31A																			
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338																			
339																			
33A																			
33B																			
33C																			
33D																			
33E																			
33F																			
MODEL									MODEL										
LETTER NO									LETTER NO										

EEPROM CHECK DATA LIST 14

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA							MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0			CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
340									3C	00-3C						Used for Picture and Sound user setting storage when service option AV MODE (O32) = 0
341									28	00-3C						
342									1E	00-3C						
343									1E	00-3C						
344									23	00-3C						
345									02	00-04						
346									00	00-02						
347									0F	00-14						
348									14	00-14						
349									1E	00-3C						
34A									32	00-3C						
34B									1E	00-3C						
34C									1E	00-3C						
34D									1E	00-3C						
34E									1E	00-3C						
34F									02	00-04						
350									00	00-02						
351									0A	00-14						
352									0A	00-14						
353																
354									1E	00-3C						
355									1E	00-3C						
356									1E	00-3C						
357									1E	00-3C						
358									14	00-3C						
359									02	00-04						
35A									00	00-02						
35B									00	00-14						
35C									05	00-14						
35D									01	00-07						
35E									01	00-01						
35F																
360																
361																
362																
363																
364																
365																
366																
367																
368																
369																
36A																
36B																
36C																
36D																
36E																
36F																
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374																
375																
376																
377																
378																
379																
37A																
37B																
37C																
37D																
37E																
37F																
MODEL									MODEL							
LETTER NO.									LETTER NO.							

MEMORY MAP (Continued)

EEPROM CHECK DATA LIST 15

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
380																	
381																	
382																	
383																	
384																	
385																	
386																	
387																	
388																	
389																	
38A																	
38B																	
38C																	
38D																	
38E																	
38F																	
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392																	
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398																	
399																	
39A																	
39B																	
39C																	
39D																	
39E																	
39F																	
3A0																	
3A1																	
3A2																	
3A3																	
3A4																	
3A5																	
3A6																	
3A7																	
3A8																	
3A9																	
3AA																	
3AB																	
3AC																	
3AD																	
3AE																	
3AF																	
3B0																	
3B1																	
3B2																	
3B3																	
3B4																	
3B5																	
3B6																	
3B7																	
3B8																	
3B9																	
3BA																	
3BB																	
3BC																	
3BD																	
3BE																	
3BF																	
MODEL									MODEL								
LETTER NO.									LETTER NO.								

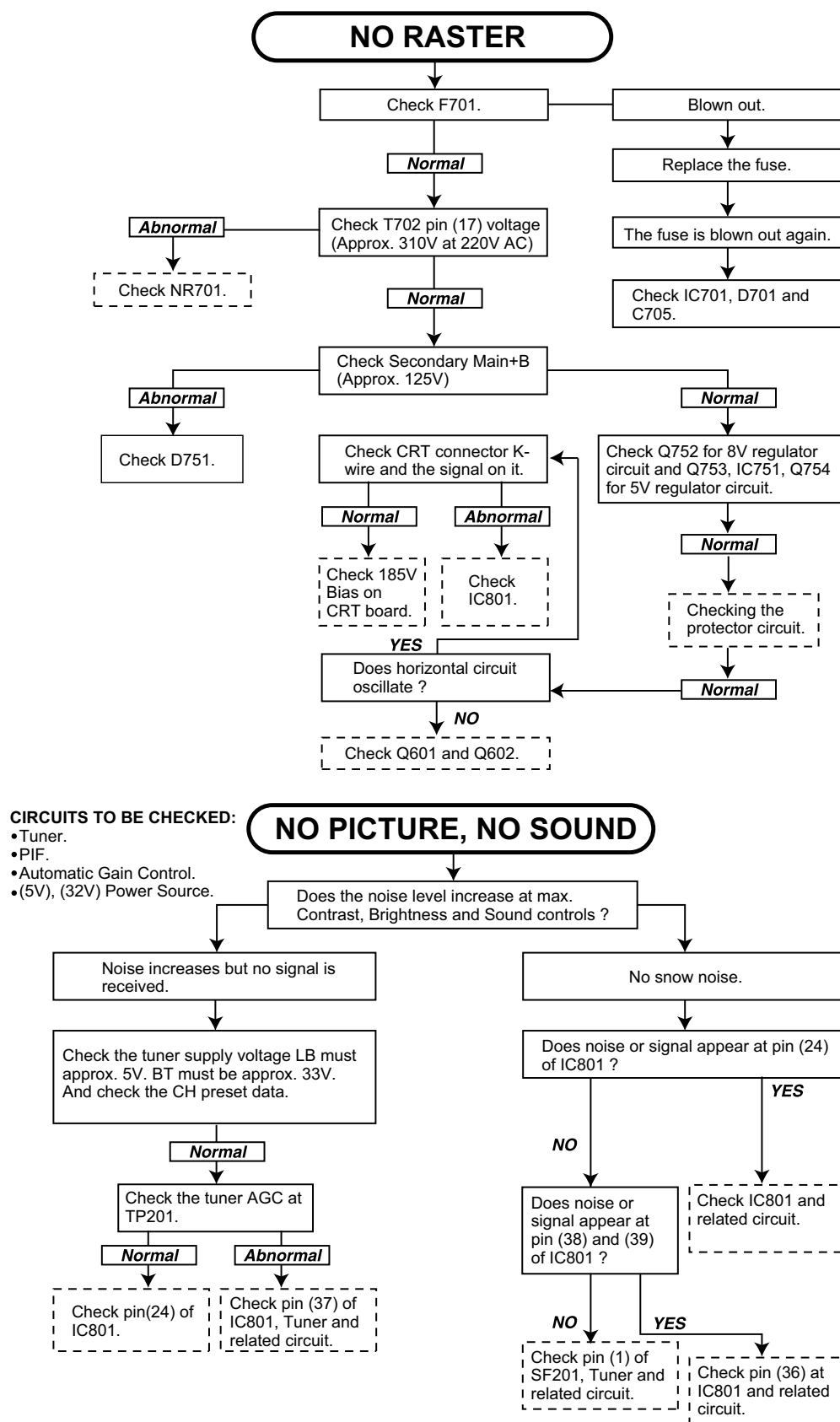
EEPROM CHECK DATA LIST 16

SLAVE ADDRESS : A0(00-FF) A2(100-1FF) A4(200-2FF) A6(300-3FF)

ADDRESS (HEX)	DATA								MICON DEFAULT	EEPROM RANGE	EEPROM WRITE(CPU)	CHASSIS		CTV FINAL		LAST INITIAL SETTING DATA	REMARK
	D7	D6	D5	D4	D3	D2	D1	D0				CHECK DATA	CHECK TYPE	CHECK DATA	CHECK TYPE		
3C0																	
3C1																	
3C2																	
3C3																	
3C4																	
3C5																	
3C6																	
3C7																	
3C8																	
3C9																	
3CA																	
3CB																	
3CC																	
3CD																	
3CE																	
3CF																	
3D0																	
3D1																	
3D2																	
3D3																	
3D4																	
3D5																	
3D6																	
3D7																	
3D8																	
3D9																	
3DA																	
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3DC																	
3DD																	
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3E0																	
3E1																	
3E2																	
3E3																	
3E4																	
3E5																	
3E6																	
3E7																	
3E8																	
3E9																	
3EA																	
3EB																	
3EC																	
3ED																	
3EE																	
3EF																	
3F0																	
3F1																	
3F2																	
3F3																	
3F4																	
3F5																	
3F6																	
3F7																	
3F8																	
3F9																	
3FA																	
3FB																	
3FC																	
3FD																	
3FE																	
3FF																	
MODEL									MODEL								
LETTER NO.									LETTER NO.								

CHAPTER 5. TROUBLE SHOOTING FLOWCHART

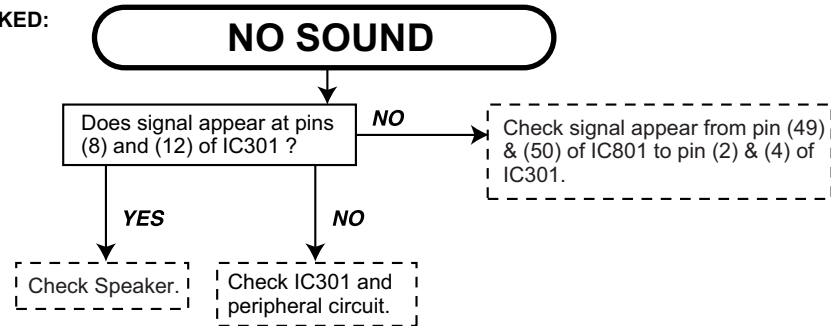
[1] TROUBLE SHOOTING FLOWCHART



TROUBLE SHOOTING FLOWCHART (Continued)

CIRCUITS TO BE CHECKED:

- Sound Detector Circuit.
- Sound Switch and Att. Control.
- Audio Output Circuit.

**NEITHER VERTICAL NOR HORIZONTAL SYNCHRONIZATION****CIRCUIT TO BE CHECKED:**

- Sync. Separator Circuit.

Check pins(9), (13) and (14) of IC801.

```

graph TD
    A([NEITHER VERTICAL NOR HORIZONTAL SYNCHRONIZATION]) --> B[Check pins(9), (13) and (14) of IC801.]
  
```

DEFECTIVE VERTICAL AMP. AND VERTICAL LINEARITY

Re-adjust vertical size.
(Bus Data)

Vertical linearity and size are abnormal.

Check R503, R506, R513, R520 and C515.

```

graph TD
    A([DEFECTIVE VERTICAL AMP. AND VERTICAL LINEARITY]) --> B[Re-adjust vertical size. (Bus Data)]
    B --> C[Vertical linearity and size are abnormal.]
    C --> D[Check R503, R506, R513, R520 and C515.]
  
```

NO VERTICAL SCAN

Check IC501 bias.

Normal

Check C511.

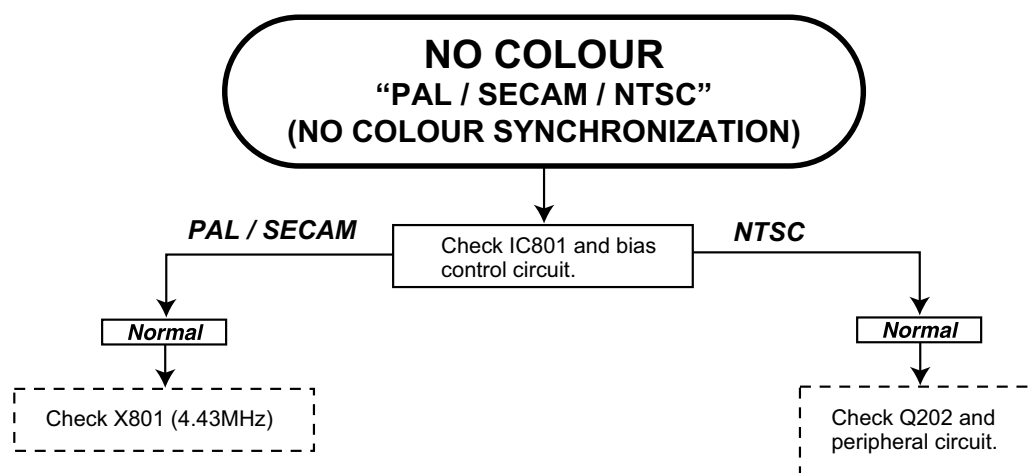
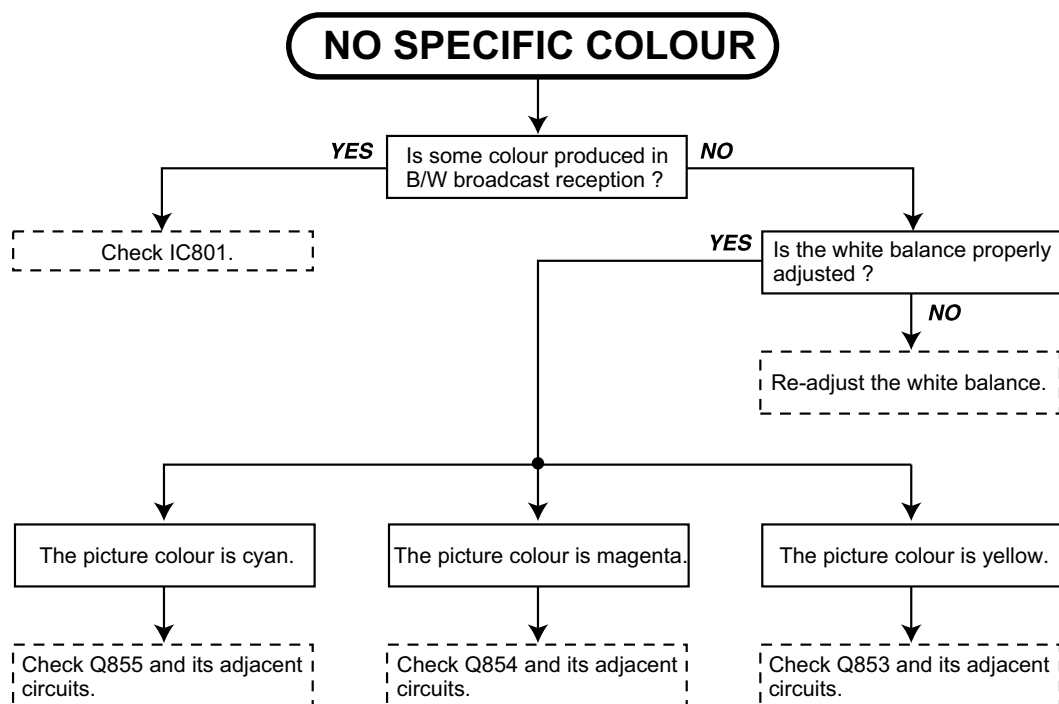
Abnormal

Check IC501.

```

graph TD
    A([NO VERTICAL SCAN]) --> B[Check IC501 bias.]
    B -- Normal --> C[Check C511.]
    B -- Abnormal --> D[Check IC501.]
  
```

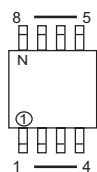
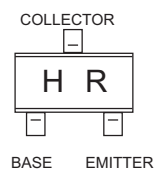
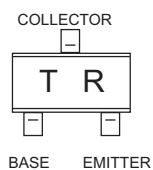
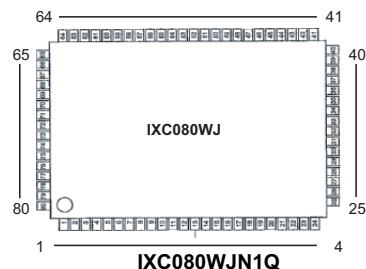
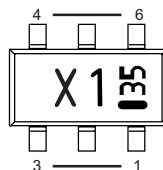

TROUBLE SHOOTING FLOWCHART (Continued)



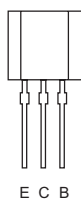
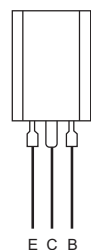
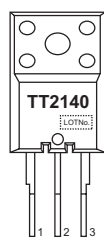
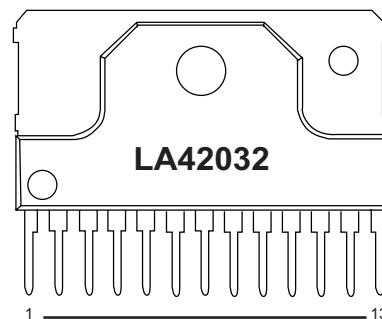
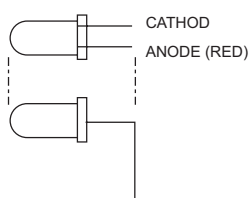
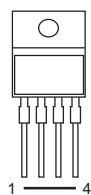
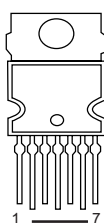
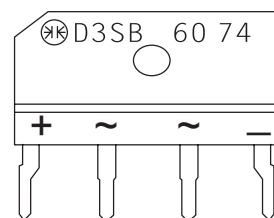
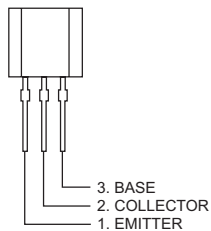
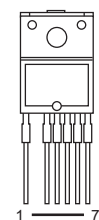
CHAPTER 6. SOLID STATE DEVICE BASE DIAGRAM

[1] SOLID STATE DEVICE BASE DIAGRAM

TOP VIEW

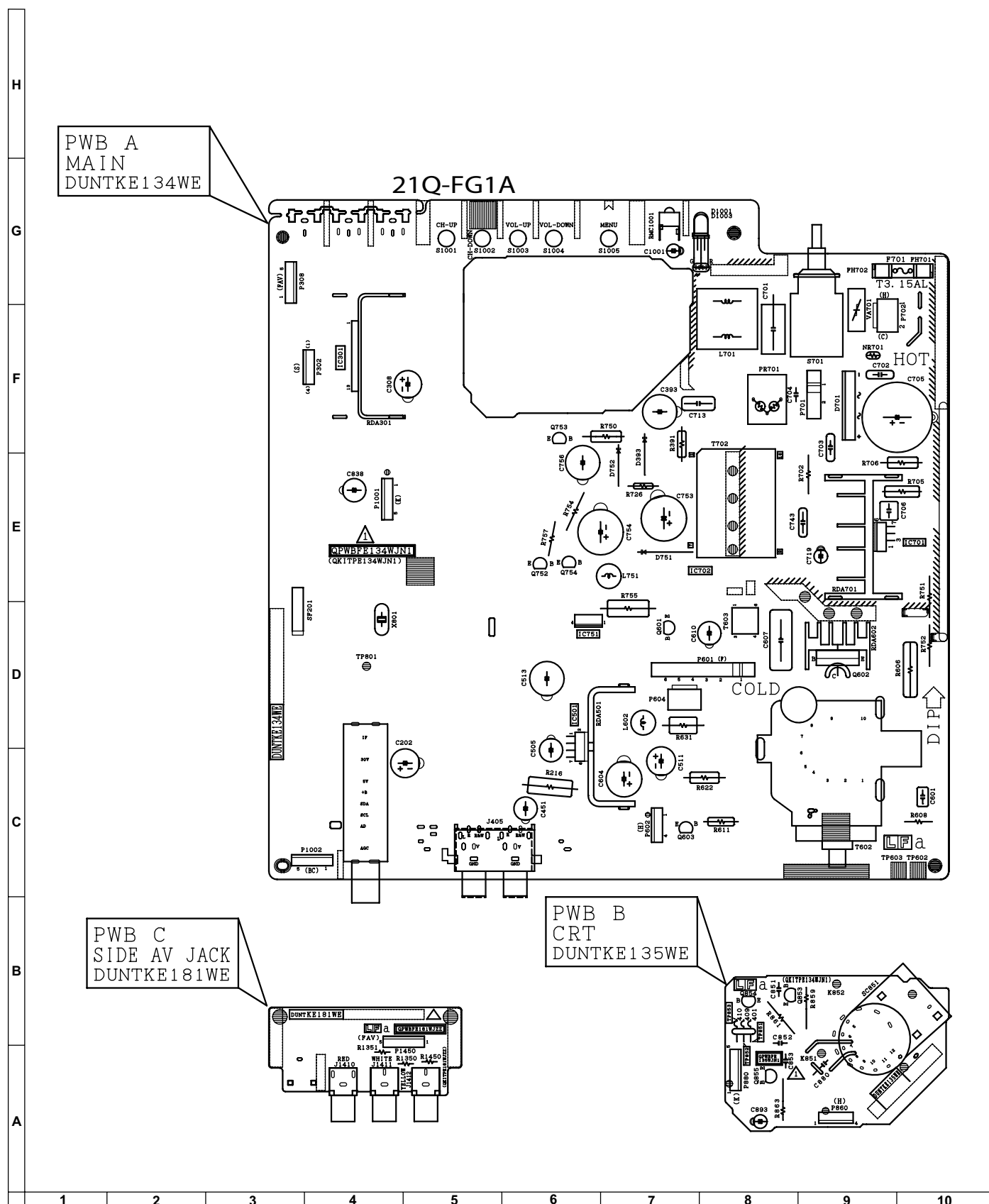
**M24C08****3928****A1530****EX1393C****EX0263T****IMX1C/C**

SIDE VIEW

**2SC3198****2SD468-C
2SC2235****TT2140****LA42032E****PX0013****PQ05RDA****STV9302B****DX0476CE****BF422****STRW5453**

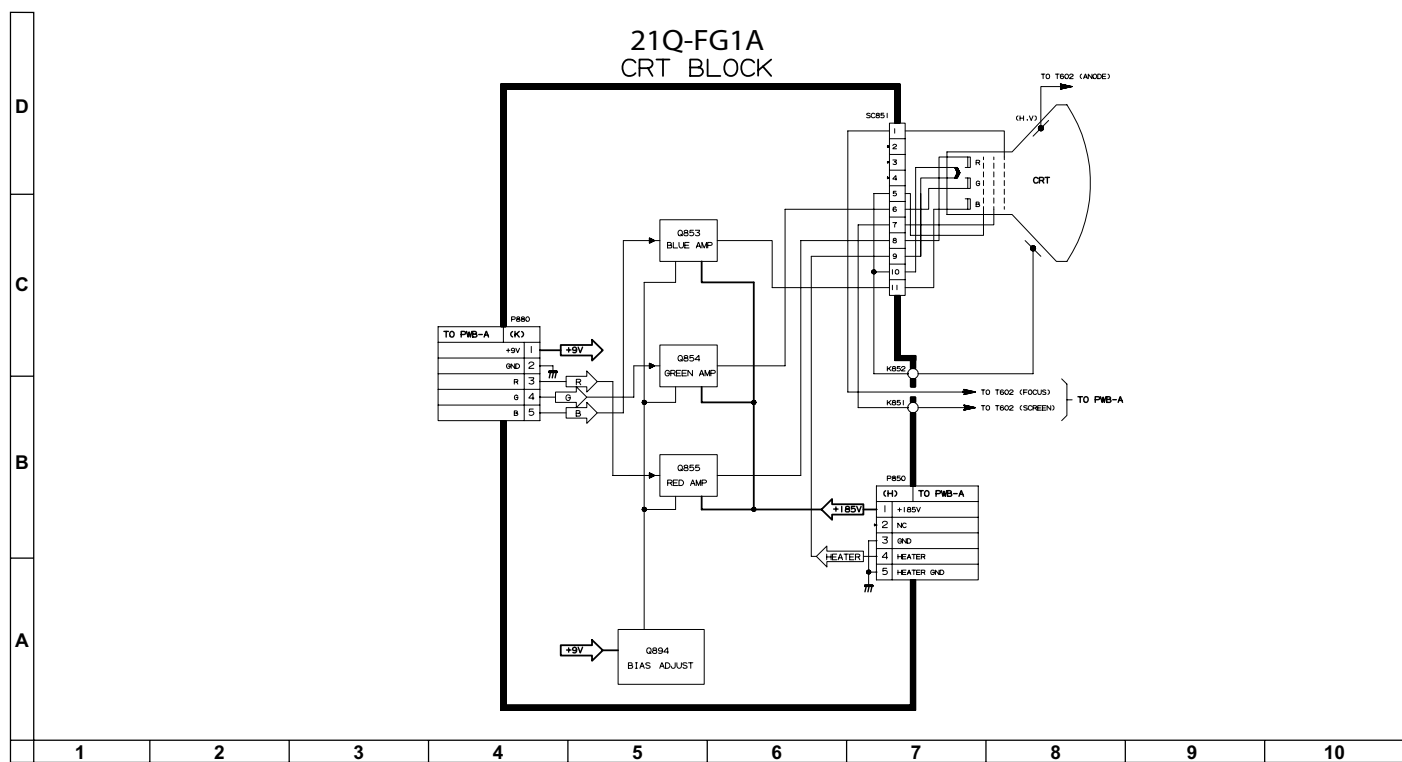
CHAPTER 7. CHASSIS LAYOUT

[1] CHASSIS LAYOUT

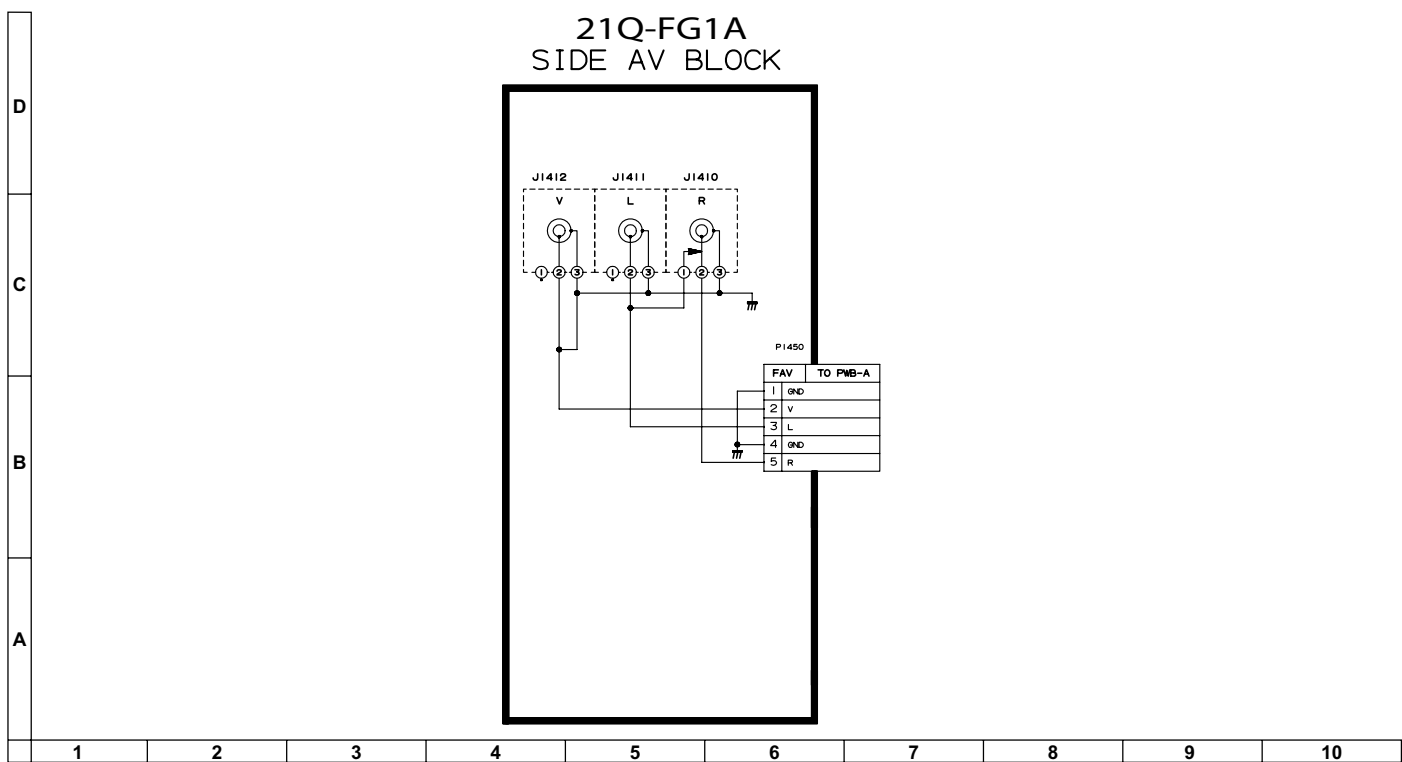




[2] BLOCK DIAGRAM: CRT UNIT



[3] BLOCK DIAGRAM: SIDE AV UNIT





CHAPTER 9. DESCRIPTION OF SCHEMATIC DIAGRAM

[1] 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.

CAUTION:

This circuit diagram is a standard one, prited circuits may be subject to change for product improvement without prior notice.

NOTES:

1. The unit of resistance "ohm" is omitted. (K = 1000 ohms, M = Mega 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. Voltages in parenthesis measured with no signal.
2. Voltages without parenthesis measured with 3mV B & W or Colour signal.
3. All the voltages in each point are measured with VTVM.

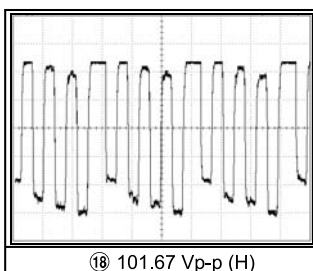
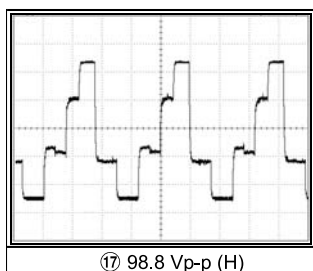
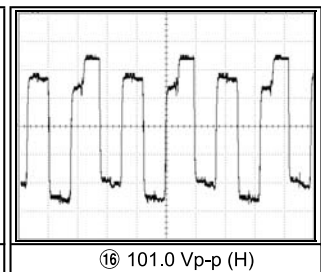
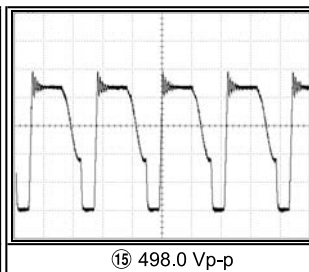
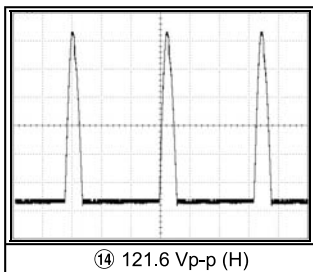
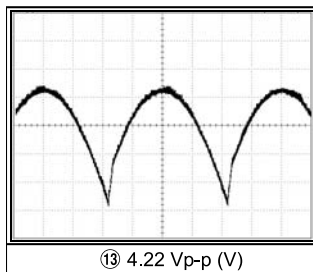
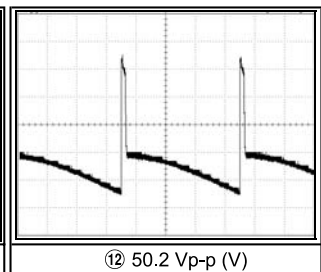
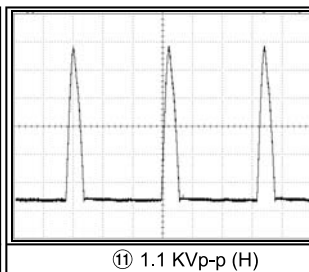
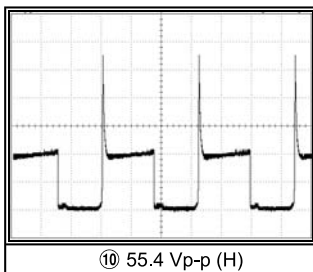
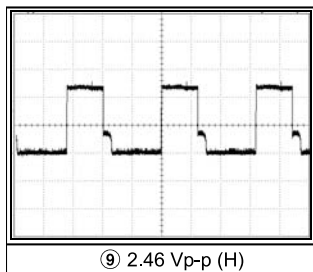
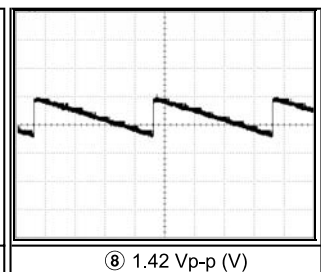
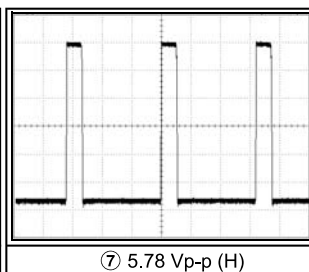
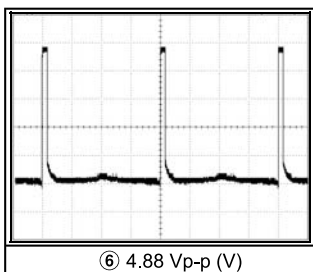
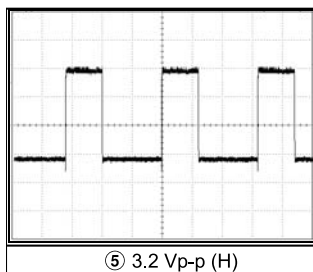
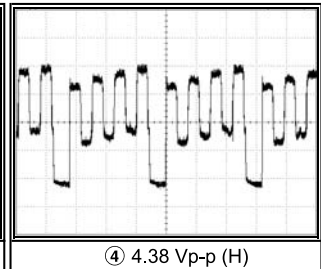
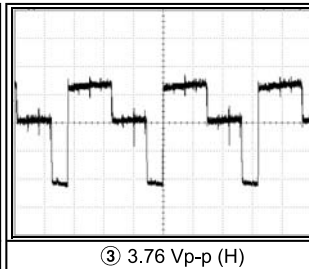
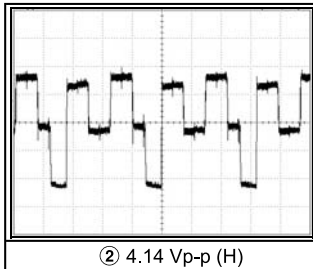
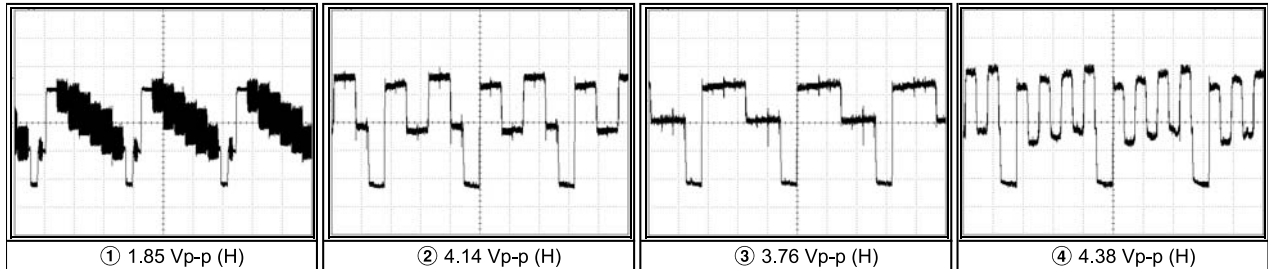
WAVEFORM MEASUREMENT CONDITIONS:

1. The colour bar generator signal of 1.0V peak applied at pin (25) of IC801.
2. Approximately 4V AGC bias.

CHAPTER 10. WAVEFORMS

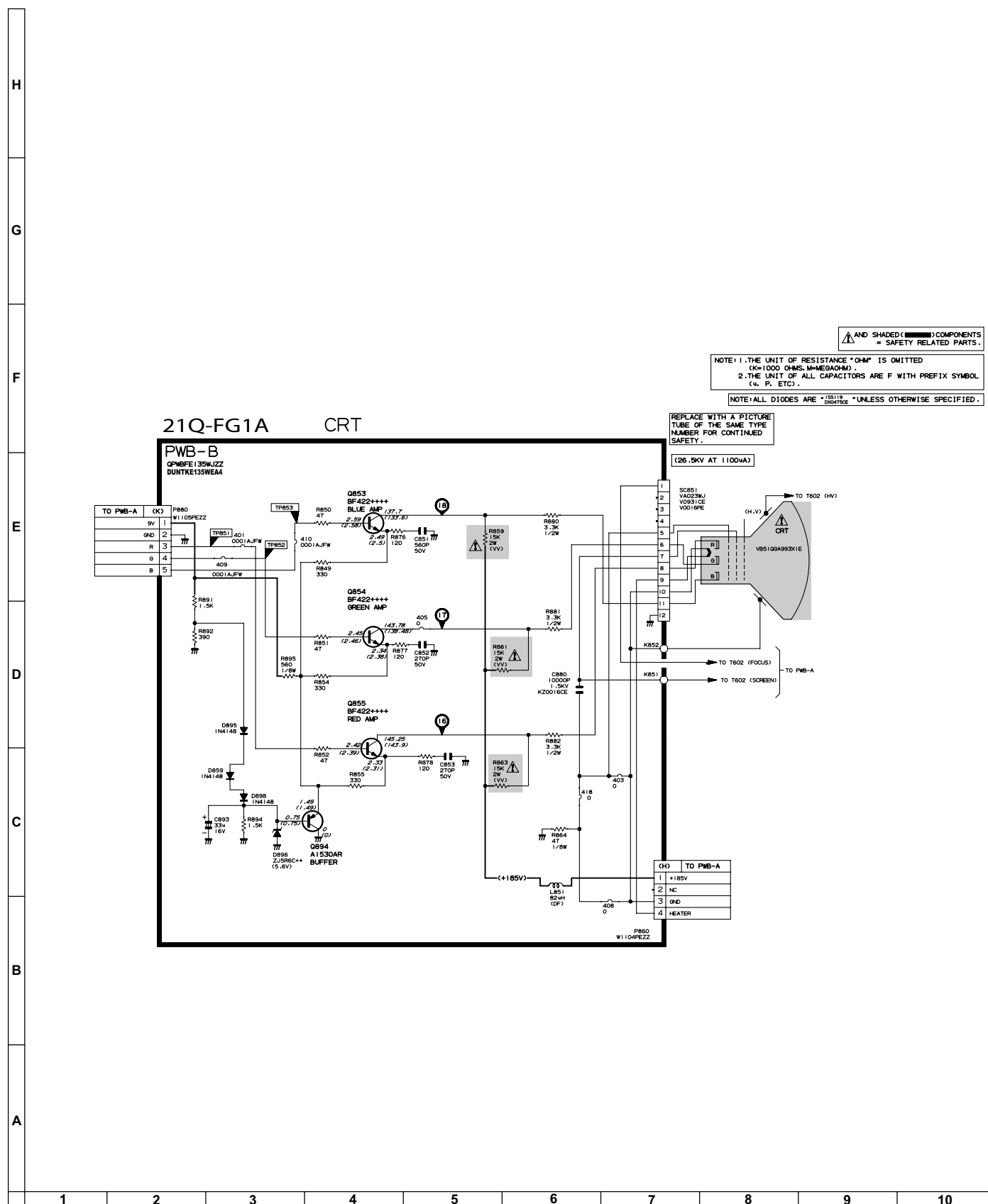
[1] WAVEFORMS

WAVEFORMS

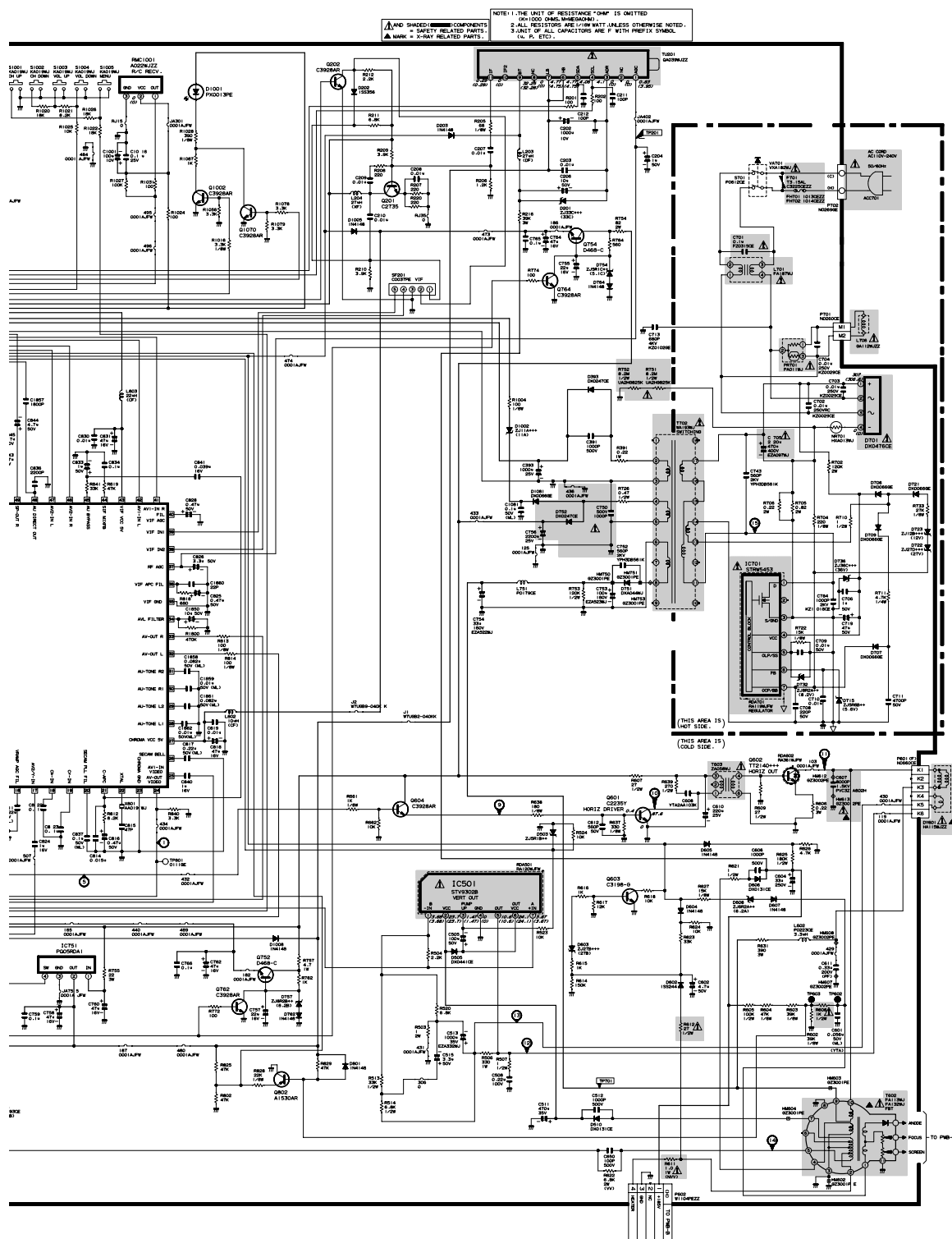


CHAPTER 11. SCHEMATIC DIAGRAM

[1] SCHEMATIC DIAGRAM: CRT UNIT

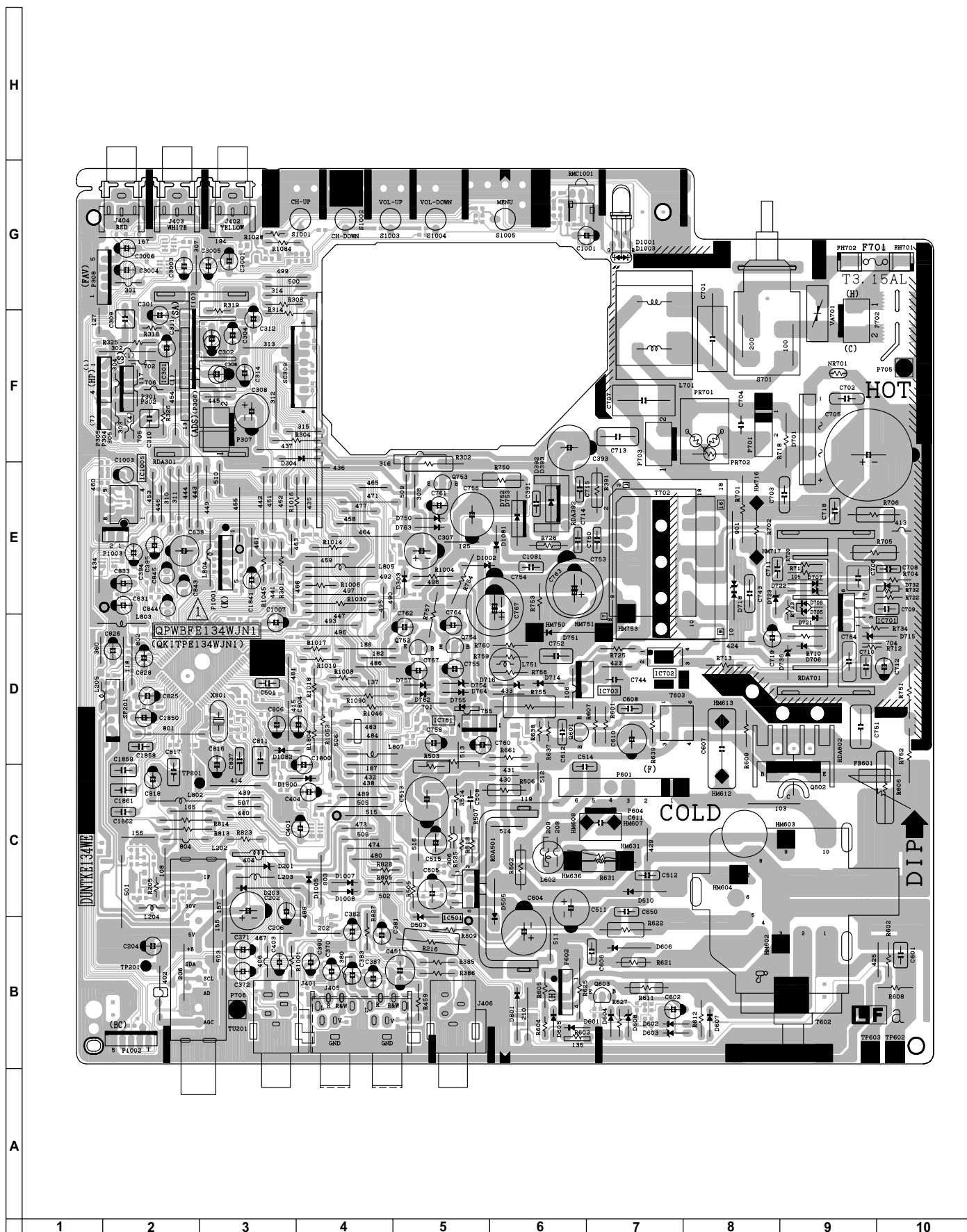




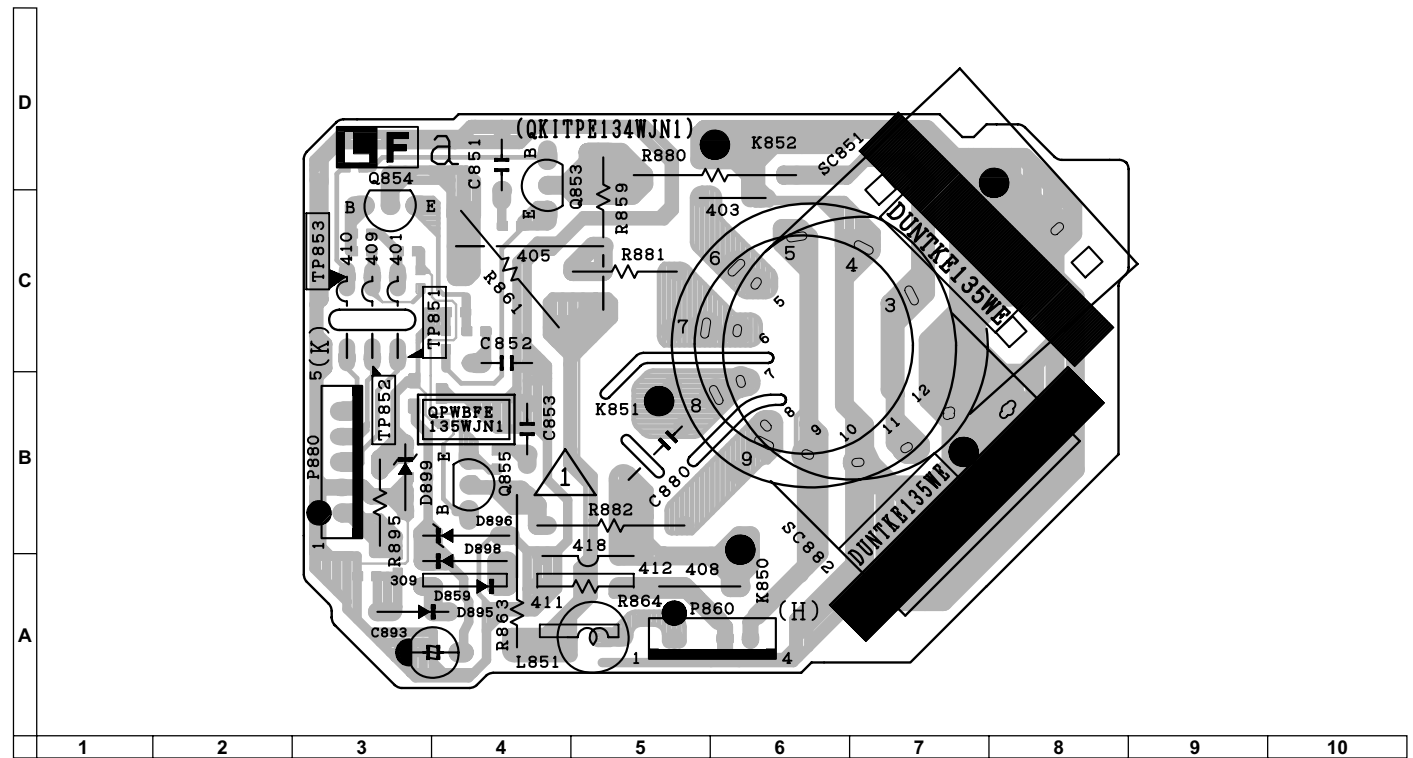
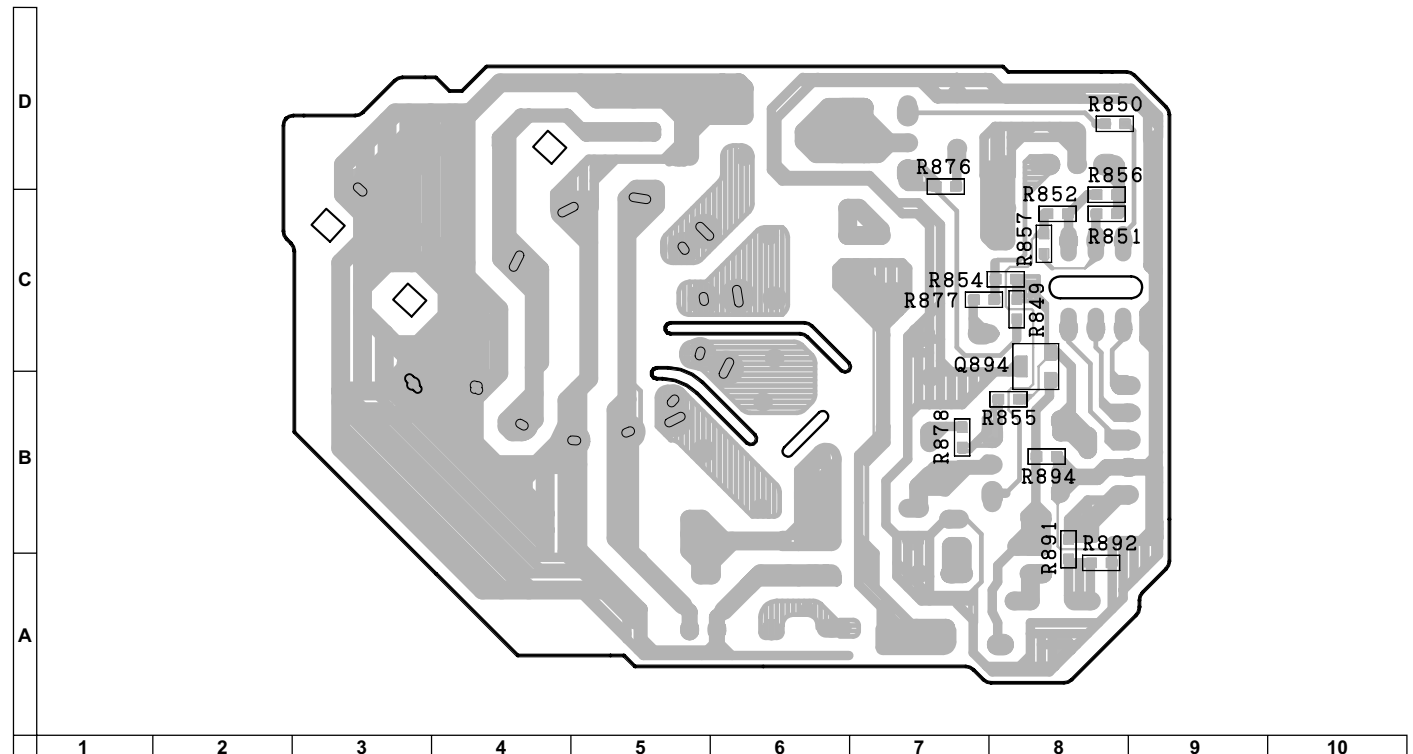


CHAPTER 12. PRINTED WIRING BOARD ASSEMBLIES

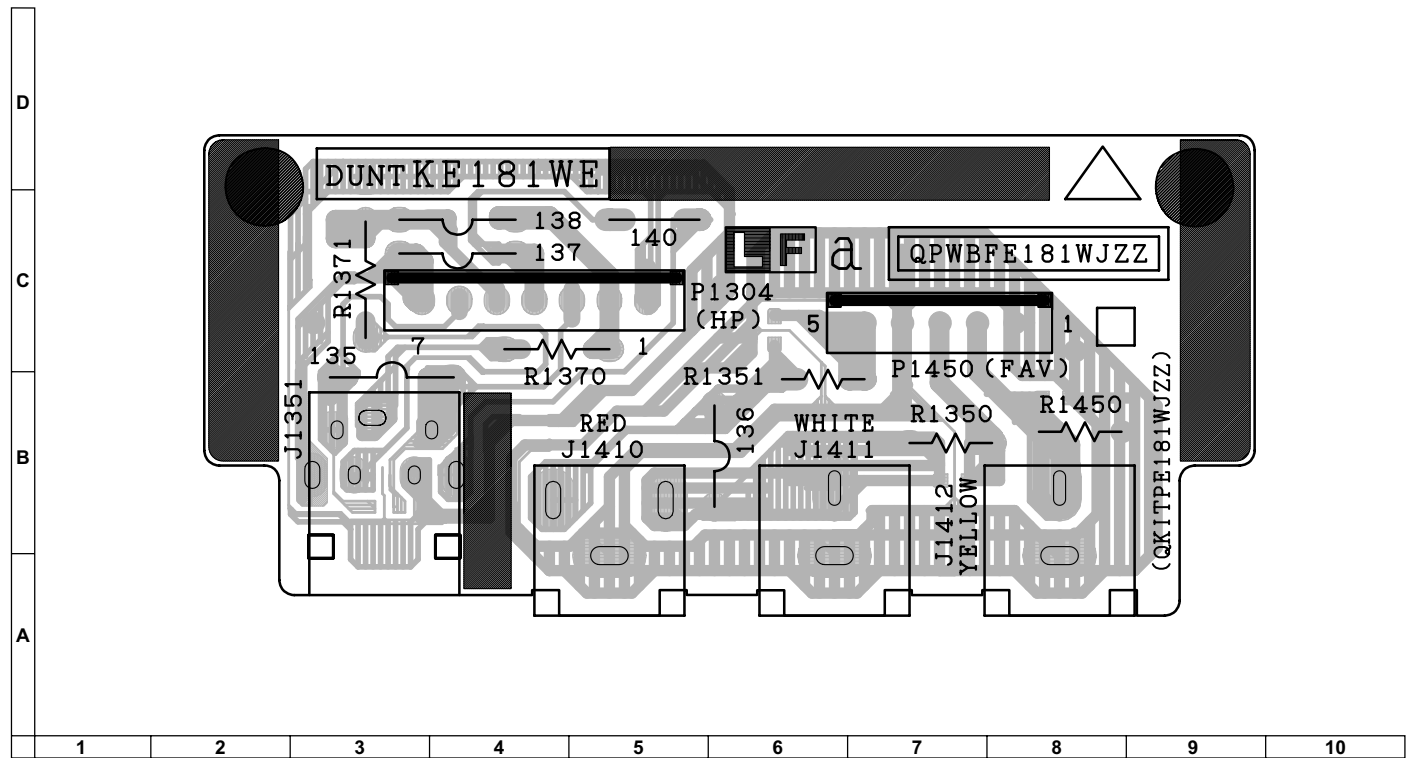
[1] PWB-A: MAIN COMPONENT SIDE



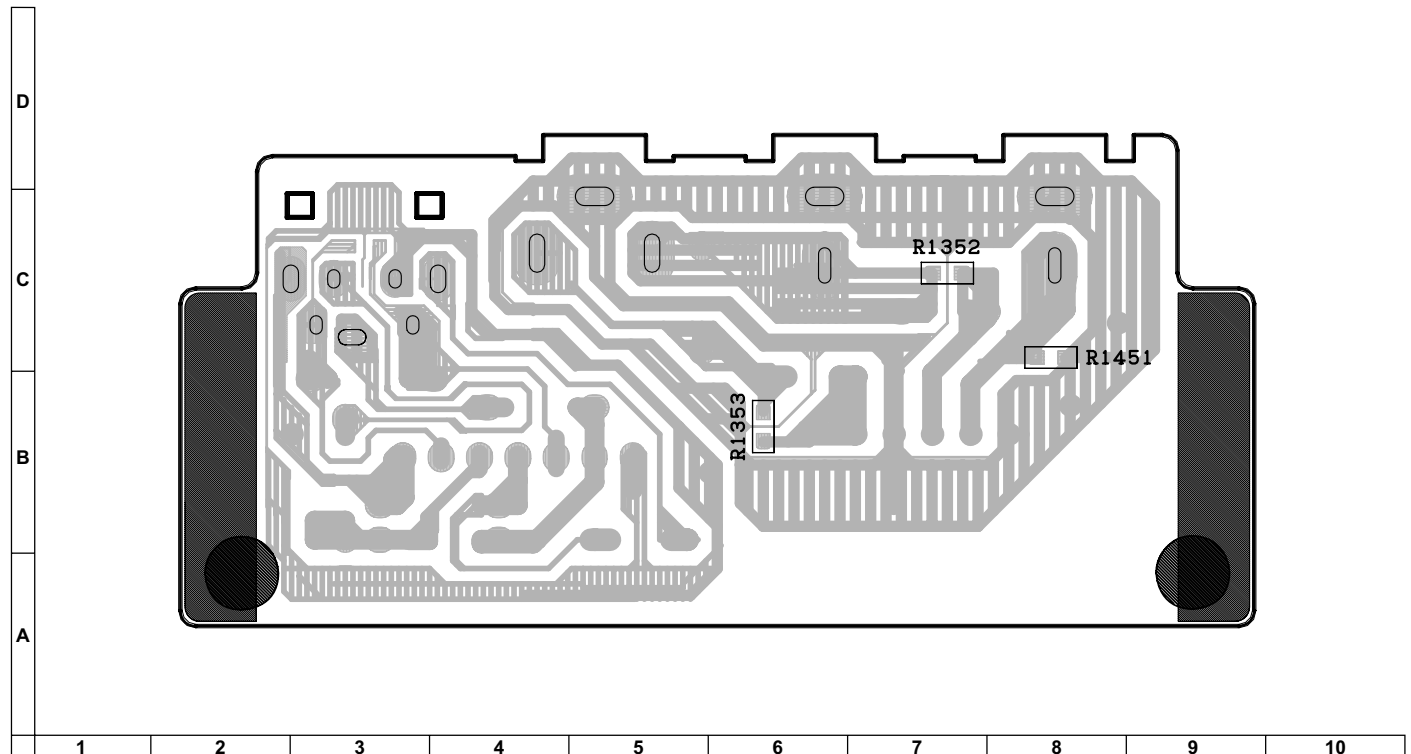


[3] PWB-B: CRT COMPONENT SIDE**[4] PWB-B: CRT CHIP SIDE**

[5] PWB-C: SIDE AV COMPONENT SIDE



[6] PWB-C: SIDE AV CHIP SIDE



SHARP PARTS GUIDE

NO.S777721QFG1A

MODEL **21Q-FG1A**

CONTENTS

- | | |
|----------------------------------------|--------------------------|
| [1] PICTURE TUBE | [6] MISCELLANEOUS PARTS |
| [2] PRINTED WIRING BOARD
ASSEMBLIES | [7] SUPPLIED ACCESSORIES |
| [3] MAIN UNIT | [8] CABINET PARTS |
| [4] CRT UNIT | [9] PACKING PARTS |
| [5] SIDE AV UNIT | ■ INDEX |

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.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[1] PICTURE TUBE					
△	-	VB51QGA993X1E		R	Picture Tube
△		RCiLGA115WJN1		R	Degaussing Coil
		QEARCA012WJZZ	AG	R	Ground-Part
		PMAGF3046CEZZ	AF	R	Magnet
[2] PRINTED WIRING BOARD ASSEMBLIES					
		DUNTKE134WEA4	-	-	MAIN Unit
		DUNTKE135WEA4	-	-	CRT Unit
		DUNTKE181WEA2	-	-	SIDE AV Unit
[3] MAIN UNIT					
△	TU201	RTUNQA039WJZZ	AT	R	Tuner
	IC301	VHiLA42032E-1		R	I.C.
△	IC501	VHiSTV9302B-1		R	STV9302B
△	IC701	VHiSTRW5453-1	AM	R	I.C.
	IC751	VHiPQ05RDA1-1		R	I.C.
	IC801	RH-iXC080WJN3Q		R	I.C.
	IC1003	VHiBR24L08F-1Y	AE	R	BR24L08F-WE2
	IC1007	VSIMX1C/C/-1Y		R	I.C.
	Q201	VS2SC2735/-1Y		R	2SC2735
	Q202	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q601	VS2SC2235Y/1E+	AE	R	2SC2235
	Q602	VSTT2140+++F	AG	R	TT2140
	Q603	VS2SC3198-G-1+	AA	R	2SC3198
	Q604	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q752	VS2SD468-C/-1+	AD	R	2SD468
	Q753	VS2SD468-C/-1+	AD	R	2SD468
	Q754	VS2SD468-C/-1+	AD	R	2SD468
	Q762	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q764	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q801	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q802	VS2SA1530AR-1Y	AB	R	2SA1530AR
	Q1002	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q1003	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q1070	VS2SC3928AR-1Y	AB	R	2SC3928AR
	Q1800	VS2SC3928AR-1Y	AB	R	2SC3928AR
	D201	VHEZJ33C+++1EY		R	
	D202	VHD1SS356/-1Y			
	D203	VHD1N4148/-1Y	AA	R	Diode
	D393	RH-DX0247CEZZ	AE	R	Diode, DX0247CE
	D503	VHEZJ5R1B+++1EY		R	
	D505	RH-DX0441CEZZY	AC	R	Diode, DX0441CE
	D510	RH-DX0131CEZZY	AC	R	Diode, DX0131CE
	D602	VHD1SS244/-1Y	AB	R	Diode, 1SS244
	D603	VHEZJ27B+++1EY		R	
	D604	VHD1N4148/-1Y	AA	R	Diode
	D605	VHD1N4148/-1Y	AA	R	Diode
	D606	RH-DX0131CEZZY	AC	R	Diode, DX0131CE
	D607	VHD1N4148/-1Y	AA	R	Diode
	D608	VHEZJ6R2A+++1EY		R	
△	D701	RH-DX0476CEZZ	AG	R	Diode, DX0476CE
	D706	RH-DX0066GEZZY	AC	R	Diode, DX0066GE
	D707	RH-DX0066GEZZY	AC	R	Diode, DX0066GE
	D709	RH-DX0066GEZZY	AC	R	Diode, DX0066GE
	D715	VHEZJ5R6B+++1EY		R	
	D721	RH-DX0066GEZZY	AC	R	Diode, DX0066GE
	D722	VHEZJ27D+++1EY		R	
	D723	VHEZJ12B+++1EY		R	
	D732	VHEZJ8R2A+++1EY		R	
	D736	VHEZJ36C+++1EY		R	
	D750	VHEZJ5R1A+++1EY		R	
	D751	RH-DXA006WJZZ	AD	R	Diode, DXA006WJ
	D752	RH-DX0247CEZZ	AE	R	Diode, DX0247CE
	D754	VHEZJ5R1C+++1EY		R	
	D757	VHEZJ8R2B+++1EY		R	
	D762	VHD1N4148/-1Y	AA	R	Diode
	D763	VHD1N4148/-1Y	AA	R	Diode
	D764	VHD1N4148/-1Y	AA	R	Diode
	D801	VHD1N4148/-1Y	AA	R	Diode
	D806	RH-EX1393CEZZY	AB	R	Zener Diode, 5.1V
	D807	VHD1SS390++-1Y		R	Diode, 1SS390
	D808	VHD1SS390++-1Y		R	Diode, 1SS390
	D809	VHD1SS390++-1Y		R	Diode, 1SS390
	D1001	RH-PX0013PEZZ	AC	R	Photodiode
	D1002	VHEZJ11A+++1EY		R	
	D1005	VHD1N4148/-1Y	AA	R	Diode
	D1006	RH-EX1393CEZZY	AB	R	Zener Diode, 5.1V
	D1008	VHD1N4148/-1Y	AA	R	Diode
	D1009	RH-EX1393CEZZY	AB	R	Zener Diode, 5.1V
	D1081	VHDHSS4148+-1Y	AA	R	Diode
	D1082	VHD1N4148/-1Y	AA	R	Diode
	D1800	VHD1N4148/-1Y	AA	R	Diode
	NR701	RH-HXA013WJZZ+		R	
	VA701	RH-VX0073CEZZ	AD	R	Varistor

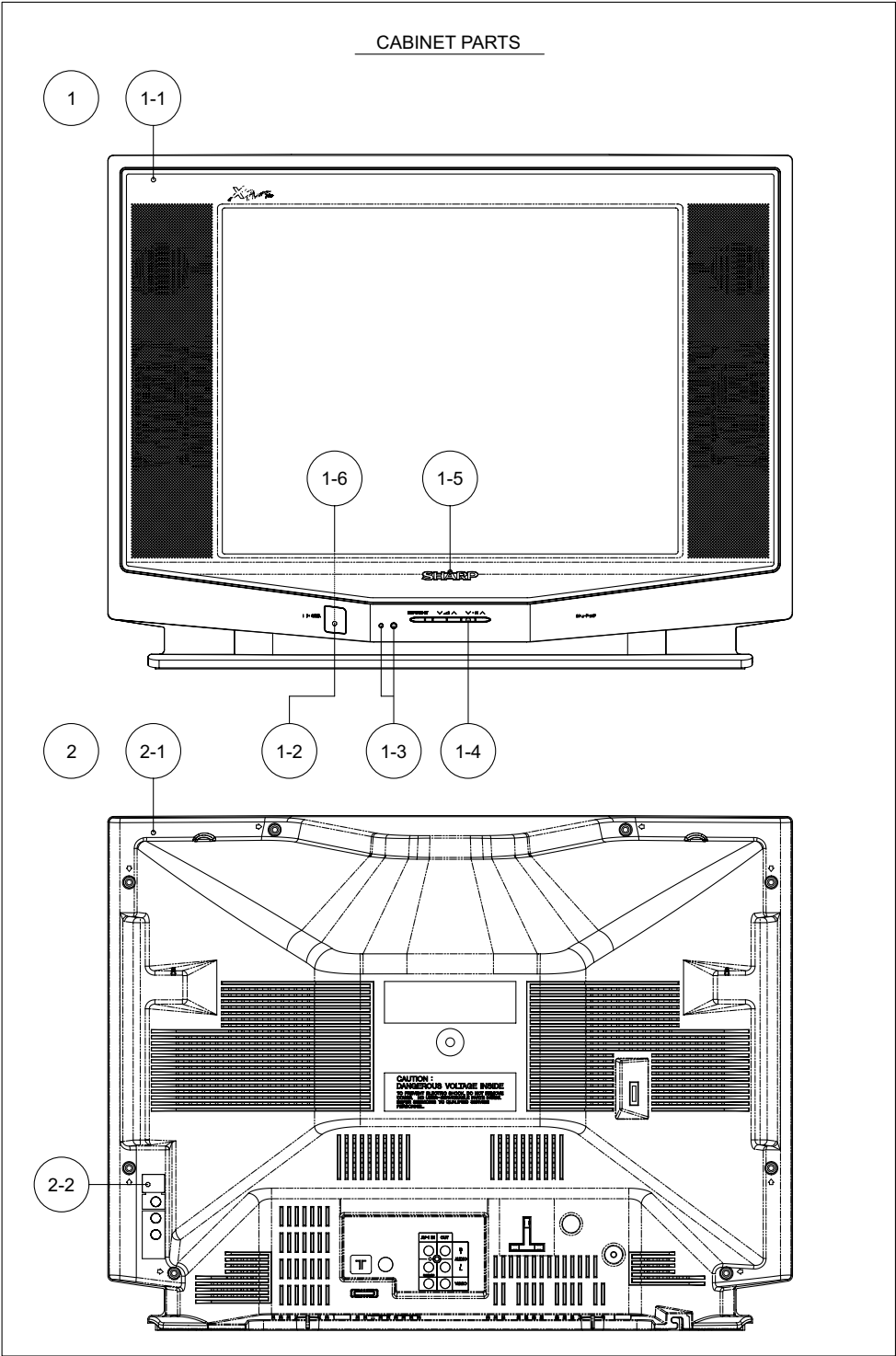
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
PR701	RMPTP0011CEZZ	AL		R	Packaged Circuit
X801	RCRSAA019WJZZ	AF		R	Crystal
L802	VP-CF100K0000Y	AB		R	Peaking 10mH
L203	VP-DF270K0000Y	AB		R	Peaking 27mH
L204	VP-XF270K0000Y	AB		R	Peaking 27mH
L602	RCiLP0223CEZZ+	AD		R	Coil
L701	RCiLFA187WJZZ	AD		R	Coil
L751	RCiLP0179CEZZ+	AD		R	Coil
L803	VP-CF220K0000Y	AB		R	Peaking 22mH
L804	VP-CF100K0000Y	AB		R	Peaking 10mH
L805	VP-CF100K0000Y	AB		R	Peaking 10mH
L807	VP-DF100K0000Y	AB		R	Peaking 10mH
SF201	RFiLC0037PEZZ			R	Filter
T602	RTRNFA113WJZZ	AV		R	H-Volt Transformer
T603	RTRNZA058WJZZ	AD		R	Transformer
T702	RTRNWA193WJZZ			R	Transformer
C202	VCEA0A1AW108M+	AC		R	1000 10V Electrolytic
C203	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C204	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C206	VCEA0A1HW106M+	AB		R	10 50V Electrolytic
C207	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C208	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C209	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C210	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C211	VCCCCY1HH101JY	AA		R	100p 50V Ceramic
C212	VCCCCY1HH101JY	AA		R	100p 50V Ceramic
C301	VCEA0A1EW476M+	AD		R	47 25V Electrolytic
C302	VCEA0A1HW224M+	AB		R	0.22 50V Electrolytic
C303	VCKYCY1HB682KY	AA		R	6800p 50V Ceramic
C304	VCEA0A1HW224M+	AB		R	0.22 50V Electrolytic
C305	VCKYCY1HB682KY	AA		R	6800p 50V Ceramic
C306	VCEA0A1CW226M+	AB		R	22 16V Electrolytic
C308	VCEA0A1EW477M+	AD		R	470 25V Electrolytic
C309	VCFYFA1HA474J+	AE		R	0.47 50V Mylar
C310	VCFYFA1HA474J+	AE		R	0.47 50V Mylar
C314	VCEA0A1HW475M+	AB		R	47 50V Electrolytic
C370	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C371	VCEA0A1HW225M+	AB		R	2.2 50V Electrolytic
C372	VCEA0A1HW225M+	AB		R	2.2 50V Electrolytic
C390	VCEA0A1CW106M+	AB		R	10 16V Electrolytic
C391	VCKYPA2HB102K+	AA		R	1000p 500V Ceramic
C393	VCEA0A1EW108M+	AD		R	1000 25V Electrolytic
C394	VCEA0A1HW225M+	AB		R	2.2 50V Electrolytic
C395	VCEA0A1HW225M+	AB		R	2.2 50V Electrolytic
C451	VCEA0A1CW477M+	AC		R	470 16V Electrolytic
C501	VCFYFA1HA104J+	AB		R	0.1 50V Mylar
C505	VCEA0A1HW107M+	AB		R	100 50V Electrolytic
C508	VCFYAA2AA224J+	AD		R	0.22 100V Mylar
C511	VCEA0A1VW477M+	AB		R	470 35V Electrolytic
C512	VCKYPA2HB102K+	AA		R	1000p 500V Ceramic
C513	RC-EZA332WJZZ+	AD		R	Capacitor
C515	VCEACA1HC335J+	AC		R	3.3 50V Electrolytic
C601	VCQYTA1HM563J+	AB		R	0.056 50 Mylar
C602	VCEA0A1HW475M+	AB		R	4.7 50V Electrolytic
C604	VCEA0A2EW336M+	AD		R	33 250V Electrolytic
C606	VCKYPA2HB102K+	AD		R	1000p 500V Ceramic
C607	VCFFVC3ZA962H	AD		R	9.6 1.8KV Metalized Polypro Film
C608	VCQYTA2AA103K+	AC		R	0.01 100V Mylar
C610	VCEA0A1EW227M+	AB		R	220 25V Electrolytic
C611	VCFFVC2DB334J	AD		R	0.33 200V Metalized Polypro Film
C612	VCKYPA1HB561K+	AB		R	560p 50V Ceramic
C650	VCKYPA2HB101K+	AB		R	100p 500V Ceramic
C701	RC-FZ031SCEZZ	AD		R	0.1
C702	RC-KZ0029CEZZ+	AC		R	0.01 250V Ceramic
C703	RC-KZ0029CEZZ+	AC		R	0.01 250V Ceramic
C704	RC-KZ0029CEZZ+	AC		R	0.01 250V Ceramic
C705	RC-EZA097WJZZ	AM		R	220 400V Electrolytic
C706	VCFYFA1HA105J+	AE		R	1 50V Mylar
C708	VCKYPA1HB221K+	AB		R	220p 50V Ceramic
C709	VCQYTA1HM103J+	AB		R	0.01 50V Mylar
C710	VCKYPA1HF103Z+	AB		R	0.01 50V Mylar
C711	VCKYPA1HB472K+	AB		R	4700p 50V Ceramic
C713	RC-KZ0102GEZZ	AE		R	680p 250V Ceramic
C719	VCEA0A1HW476M+	AB		R	47 50V Electrolytic
C743	VCKYPH3DB561K	AC		R	560p 2KV Ceramic
C750	VCKYPA2HB102K+	AC		R	1000p 500V Ceramic
C752	VCKYPH3DB561K	AC		R	560p 2KV Ceramic
C753	RC-EZA523WJZZ	AD		R	100 160V Electrolytic
C754	RC-EZA522WJZZ	AD		R	33 160V Electrolytic
C755	VCEA0A1CW226M+	AB		R	22 16V Electrolytic
C756	VCEA0A1EW228M+	AE		R	2200 25V Electrolytic
C757	VCEA0A1CW226M+	AB		R	22 16V Electrolytic
C758	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C759	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C760	VCEA0A1CW476M+	AB		R	47 16V Electrolytic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
C761	VCEA0A1CW226M+	AB		R	22 16V Electrolytic
C762	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C764	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C765	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C766	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C784	RC-KZ1018CEZZ+	AC		R	1000p 2kV Ceramic
C803	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C804	VCEA0A1HW474M+	AB		R	0.47 50V Electrolytic
C805	VCKYCY1HB153KY	AA		R	0.15 50V Ceramic
C806	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C807	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C811	VCIFYA1HA224J+	AD		R	0.22 50V Mylar
C814	VCKYCY1HB153KY	AA		R	0.15 50V Ceramic
C815	VCCCCY1HH470JY	AA		R	47p 50V Ceramic
C816	VCEA0A1HW474M+	AB		R	0.47 50V Electrolytic
C817	VCIFYA1HA224J+	AB		R	0.22 50V Mylar
C818	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C819	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C822	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C823	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C824	VCKYCY1CF105ZY	AB		R	1 16V Ceramic
C825	VCEA0A1HW474M+	AB		R	0.47 50V Electrolytic
C826	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C828	VCEA0A1HW474M+	AB		R	0.47 50V Electrolytic
C830	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C831	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C833	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C834	VCKYCY1HB104KY	AA		R	0.1 50V Ceramic
C836	VCKYCY1HB222KY	AA		R	2200p 50V Ceramic
C837	VCIFYA1HA104J+	AA		R	0.1 50V Mylar
C838	VCEA0A1CW477M+	AC		R	470 16V Electrolytic
C839	VCKYCY1HB103ZY	AA		R	0.01 50V Ceramic
C840	VCKYCY1CF105ZY	AB		R	1 16V Ceramic
C841	VCKYCY1CB393KY	AB		R	0.39 16V Ceramic
C843	VCEA9M1HW475M+	AB		R	4.7 50V Electrolytic
C844	VCEA9M1HW475M+	AB		R	4.7 50V Electrolytic
C845	VCEA9M1HW475M+	AB		R	4.7 50V Electrolytic
C851	VCKYPA1HB561K+	AA		R	560p 50V Ceramic
C852	VCKYPA1HB271K+	AA		R	270p 50V Ceramic
C853	VCKYPA1HB271K+	AA		R	270p 50V Ceramic
C880	RC-KZ0016CEZZ	AC		R	10000p 1.5KV Ceramic
C893	VCEA0A1CW336M+	AC		R	33 16V Electrolytic
C1001	VCEA0A1AW107M+	AB		R	100 10V Electrolytic
C1002	VCCCCY1HH101JY	AA		R	100p 50V Ceramic
C1003	VCEA9M1CW106M+	AB		R	10 16V Electrolytic
C1004	VCKYCY1CF474ZY	AB		R	0.47 16V Ceramic
C1007	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C1008	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C1013	VCKYCY1HF103ZY	AA		R	0.01 50V Ceramic
C1016	VCKYCY1EF104ZY	AA		R	0.1 25V Ceramic
C1081	VCQYTA1HM104J+	AB		R	0.1 50V Mylar
C1800	VCEA0A1CW336M+	AB		R	33 16V Electrolytic
C1841	VCEA0A1CW476M+	AB		R	47 16V Electrolytic
C1842	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
C1850	VCEA0A1HW105M+	AB		R	1 50V Electrolytic
C1857	VCKYCY1HB182KY	AA		R	1800p 50V Ceramic
C1858	VCIFYA1HA823J+	AB		R	0.82 50V Mylar
C1859	VCQYTA1HM103J+	AB		R	0.01 50V Mylar
C1860	VCCCCY1HH220JY	AA		R	22p 50V Ceramic
C1861	VCIFYA1HA823J+	AB		R	0.82 50V Mylar
C1862	VCQYTA1HM103J+	AB		R	0.01 50V Mylar
RJ13	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ15	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ16	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ18	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ19	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ35	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ39	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ42	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ43	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ45	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ46	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ49	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ50	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ57	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ62	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ66	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ67	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ68	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ69	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ70	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ71	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ72	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ73	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ74	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
RJ75	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
RJ76	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
R201	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R202	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R205	VRD-RA2BE680JY	AA		R	68 1/8W Carbon
R206	VRS-CY1JF122JY	AA		R	1.2K 1/16W Metal Oxide
R207	VRS-CY1JF221JY	AA		R	220 1/16W Metal Oxide
R208	VRS-CY1JF221JY	AA		R	220 1/16W Metal Oxide
R209	VRS-CY1JF392JY	AA		R	3.9K 1/16W Metal Oxide
R210	VRS-CY1JF392JY	AA		R	3.9K 1/16W Metal Oxide
R211	VRS-CY1JF682JY	AA		R	6.8K 1/16W Metal Oxide
R212	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R216	VRS-VV3LB393J+	AC		R	39K 3W Metal Oxide
R220	VRS-CY1JF221JY	AA		R	220 1/16W Metal Oxide
R301	VRD-RA2BE272JY	AA		R	2.7K 1/8W Carbon
R303	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R304	VRD-RA2BE223JY	AA		R	22K 1/8W Carbon
R305	VRS-CY1JF274JY	AA		R	270K 1/16W Metal Oxide
R307	VRS-CY1JF682JY	AA		R	6.8K 1/16W Metal Oxide
R308	VRD-RA2BE822JY	AA		R	8.2K 1/8W Carbon
R314	VRD-RA2BE822JY	AA		R	8.2K 1/8W Carbon
R315	VRS-CY1JF682JY	AA		R	6.8K 1/16W Metal Oxide
R325	VRD-RM2HD1R0JY	AA		R	1 1/2W Carbon
R326	VRD-RM2HD1R0JY	AA		R	1 1/2W Carbon
R362	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R366	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R391	VRN-RL3ABR22J+	AB		R	22 1W Metal Film
R458	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R459	VRD-RA2EE750JY	AA		R	75 1/4W Carbon
R461	VRS-CY1JF750JY	AA		R	75 1/16W Metal Oxide
R462	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R503	VRN-RL3DB1R0J+	AB		R	1 2W Metal Film
R504	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R506	VRS-RG3AB331J+	AB		R	330 1W Metal Film
R507	VRD-RM2HD1R0JY	AA		R	1 1/2W Carbon
R513	VRD-RM2HD333JY	AA		R	33K 1/2W Carbon
R514	VRD-RM2HD682JY	AA		R	6.8K 1/2W Carbon
R520	VRS-CY1JF682JY	AA		R	6.8K 1/16W Metal Oxide
R523	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R524	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R526	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R602	VRD-RA2BE393JY	AA		R	39K 1/8W Carbon
R603	VRD-RA2BE393JY	AA		R	39K 1/8W Carbon
R604	VRD-RA2BE473JY	AA		R	47K 1/8W Carbon
R605	VRD-RM2HD104JY	AA		R	100K 1/2W Carbon
R606	VRN-RL3LBR22J+	AD		R	22 3W Metal Oxide
R607	VRD-RM2HD270JY	AA		R	27 1/2W Carbon
R608	VRD-RM2HD102JY	AA		R	1K 1/2W Carbon
R609	VRD-RM2HD270JY	AA		R	27 1/2W Carbon
R611	VRN-RL3AB1R5J+	AB		R	1.5 1W Metal Film
R612	VRD-RM2HD270JY	AA		R	27 1/2W Carbon
R614	VRS-CY1JF154JY	AA		R	150K 1/16W Metal Oxide
R615	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R616	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R617	VRS-CY1JF123JY	AA		R	12K 1/16W Metal Oxide
R618	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R621	VRN-RL2HC1R0J+	AB		R	1 1/2W Metal Oxide
R622	VRS-RG3DB682J	AA		R	6.8K 2W Metal Oxide
R623	VRS-CY1JF333JY	AA		R	33K 1/16W Metal Oxide
R624	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R625	VRD-RM2HD184JY	AA		R	180K 1/2W Carbon
R626	VRS-CY1JF472JY	AA		R	4.7K 1/16W Metal Oxide
R627	VRD-RA2BE153JY	AA		R	15K 1/8W Carbon
R631	VRS-RG3LB391J+			R	390 3W Metal Oxide
R637	VRD-RA2BE331JY	AA		R	330 1/8W Carbon
R638	VRD-RA2BE181JY	AA		R	180 1/8W Carbon
R639	VRD-RM2HD271JY	AA		R	270 1/2W Carbon
R661	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R662	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R702	VRS-RG3DB124J	AA		R	120K 2W Metal Oxide
R704	VRD-RA2BE221JY	AA		R	220 1/8W Carbon
R705	VRN-RL3DBR82J+	AB		R	82 2W Metal Film
R706	VRN-RL3DBR22J+	AB		R	22 2W Metal Film
R710	VRD-RM2HD1R0JY	AA		R	1 1/2W Carbon
R711	VRD-RA2EE472JY	AA		R	4.7K 1/4W Carbon
R722	VRD-RA2BE153JY	AA		R	15K 1/8W Carbon
R726	VRN-RL2HCR47J+	AB		R	0.47 1/2W Metal Oxide
R733	VRD-RA2BE273JY	AA		R	27K 1/8W Carbon
R750	VRS-RG3DB100J+	AA		R	10 2W Metal Oxide
R751	VRC-UA2HG825KY	AA		R	8.2M 1/2W Solid
R752	VRC-UA2HG825KY	AA		R	8.2M 1/2W Solid
R753	VRD-RM2HD124JY	AA		R	120K 1/2W Carbon
R754	VRS-VV3DB820J+	AA		R	82 2W Metal Oxide
R755	VRS-VV3LB220J			R	22 3W Metal Oxide
R757	VRN-VV3AB4R7J	AB		R	4.7 1W Metal Film

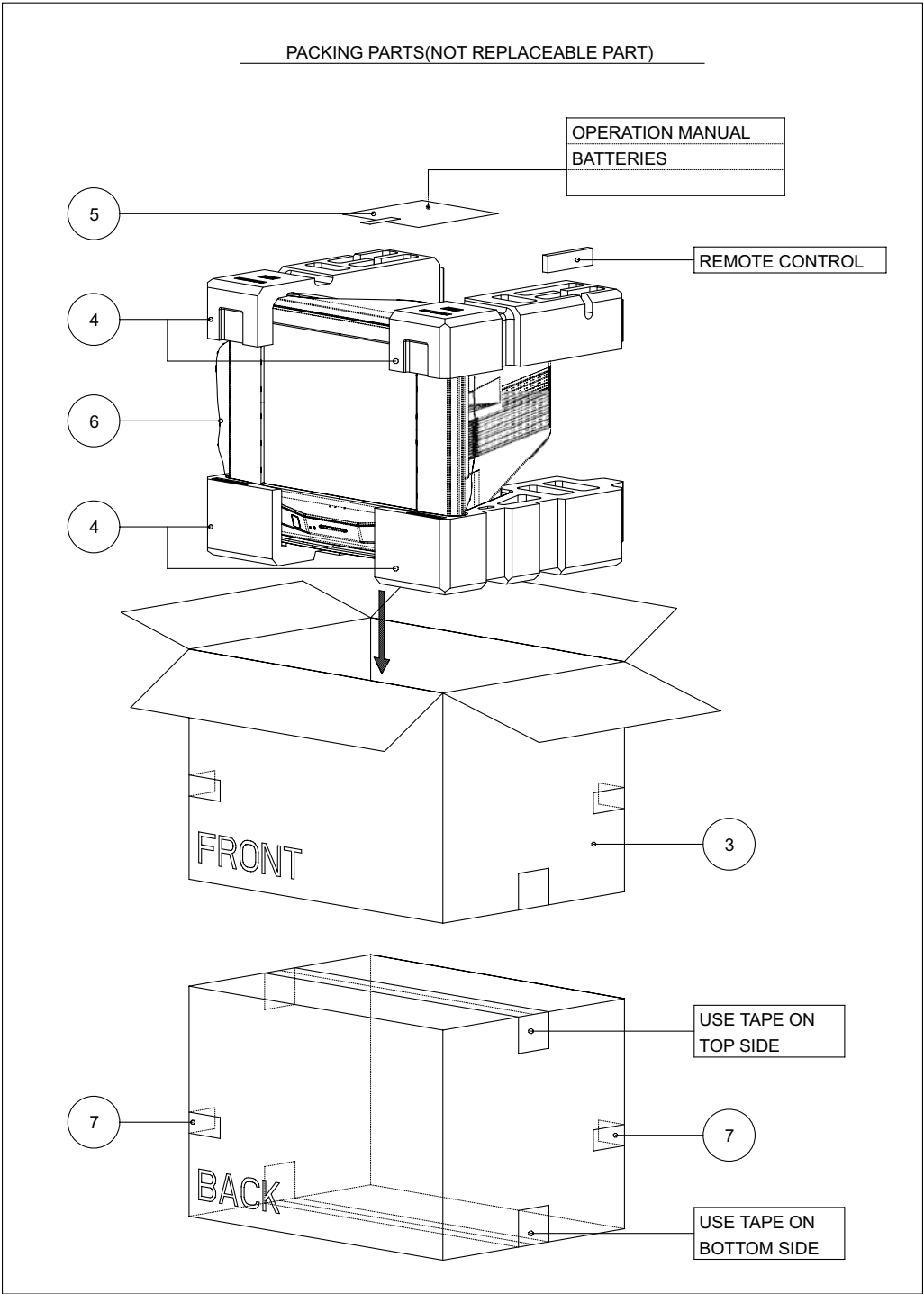
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
R762	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R763	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R764	VRS-CY1JF561JY	AA		R	560 1/16W Metal Oxide
R772	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R774	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R802	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R805	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R806	VRS-CY1JF822JY	AA		R	8.2K 1/16W Metal Oxide
R807	VRS-CY1JF124JY	AA		R	120K 1/16W Metal Oxide
R808	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R809	VRD-RA2BE123JY	AA		R	12K 1/8W Carbon
R810	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R811	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R812	VRS-CY1JF822JY	AA		R	8.2K 1/16W Metal Oxide
R813	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R814	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R818	VRS-CY1JF681JY	AA		R	680 1/16W Metal Oxide
R819	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R823	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R825	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R827	VRD-RM2HD151JY	AA		R	150 1/2W Carbon
R828	VRD-RA2BE223JY	AA		R	22K 1/8W Carbon
R829	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R832	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R833	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R834	VRS-CY1JF222JY	AA		R	2.2K 1/16W Metal Oxide
R835	VRS-CY1JF181JY	AA		R	180 1/16W Metal Oxide
R836	VRS-CY1JF181JY	AA		R	180 1/16W Metal Oxide
R837	VRS-CY1JF181JY	AA		R	180 1/16W Metal Oxide
R838	VRS-CY1JF472JY	AA		R	4.7K 1/16W Metal Oxide
R840	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R841	VRS-CY1JF333JY	AA		R	33K 1/16W Metal Oxide
R1003	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R1004	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1006	VRD-RA2BE332JY	AA		R	3.3K 1/8W Carbon
R1007	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1008	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1010	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R1011	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1012	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1013	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1014	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1015	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1016	VRD-RA2BE332JY	AA		R	3.3K 1/8W Carbon
R1017	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1019	VRD-RA2BE101JY	AA		R	100 1/8W Carbon
R1020	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1021	VRS-CY1JF822JY	AA		R	8.2K 1/16W Metal Oxide
R1022	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1024	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1025	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R1026	VRS-CY1JF183JY	AA		R	18K 1/16W Metal Oxide
R1027	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R1028	VRD-RA2BE391JY	AA		R	390 1/8W Carbon
R1030	VRD-RA2BE103JY	AA		R	10K 1/8W Carbon
R1031	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1032	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R1040	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1041	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1042	VRS-CY1JF101JY	AA		R	100 1/16W Metal Oxide
R1043	VCKYCY1HB103KY	AA		R	0.01 50V Ceramic
R1044	VRS-CY1JF104JY	AA		R	100K 1/16W Metal Oxide
R1046	VRD-RA2BE102JY	AA		R	1K 1/8W Carbon
R1056	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1074	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
R1078	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1079	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1087	VRS-CY1JF102JY	AA		R	1K 1/16W Metal Oxide
R1092	VRS-CY1JF000JY	AA		R	0 1/16W Metal Oxide
R1801	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R1802	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R1803	VRS-CY1JF473JY	AA		R	47K 1/16W Metal Oxide
R1804	VRD-RA2BE222JY	AA		R	2.2K 1/8W Carbon
R1805	VRS-CY1JF124JY	AA		R	120K 1/16W Metal Oxide
R1863	VRS-CY1JF103JY	AA		R	10K 1/16W Metal Oxide
S701	QSW-P0612CEZZ	AG		R	Switch , POWER
S1001	QSW-KA019WJZZ+	AC		R	Switch , CH UP
S1002	QSW-KA019WJZZ+	AC		R	Switch , CH DOWN
S1003	QSW-KA019WJZZ+	AC		R	Switch , VOL UP
S1004	QSW-KA019WJZZ+	AC		R	Switch , VOL DOWN
S1005	QSW-KA019WJZZ+	AC		R	Switch , MENU
F701	QFS-C3225CEZZ	AC		R	Fuse , 3.15A 250V
FH701	QFSDH1013CEZZ+	AC		R	Fuse Holder
FH702	QFSDH1014CEZZ+	AC		R	Fuse Holder
J1	VW7UGB2-040KK			R	Jumper Wire

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] MAIN UNIT					
J2	VW7UGB9-040KK			R	Jumper Wire
J405	QTANJA080WJZZ			R	Jack
P302	QPLGN0461CEZZ	AB		R	Plug , 4Pin (S)
P308	QPLGN0561CEZZ	AB		R	Plug , 5Pin
P601	QPLGN0660CEZZ	AC		R	Plug , 6Pin (F)
P602	LHLDW1104PEZZ	AB		R	Plug
P701	QPLGN0260CEZZ	AC		R	Plug ,2Pin (M)
P702	QPLGN0269GEZZ	AB		R	Plug ,2Pin
P1001	LHLDW1105PEZZ	AB		R	Plug
P1002	QPLGN0561CEZZ	AB		R	Plug , 5Pin (BC)
RMC1001	RRMCUA022WJZZ	AG		R	Remote Receiver
RDA301	PRDARA420WJFW	AC		R	Heat Sink for IC301
RDA501	PRDARA120WJFW	AD		R	Heat Sink for IC501
RDA602	PRDARA361WJFW			R	Heat Sink for Q602
RDA701	PRDARA119WJFW	AF		R	Heat Sink for IC701
TP801	QLUGP0111GEFW	AA		R	Lug
[4] CRT UNIT					
Q853	RH-TX0110BMZZ+	AC		R	TX0110
Q854	RH-TX0110BMZZ+	AC		R	TX0110
Q855	RH-TX0110BMZZ+	AC		R	TX0110
Q894	VS2SA1530AR-1Y	AB		R	2SA1530AR
D859	VHD1N4148//--1Y	AA		R	Diode
D895	VHD1N4148//--1Y	AA		R	Diode
D896	VHEZJ5R6C++1EY			R	
D898	VHD1N4148//--1Y	AA		R	Diode
L851	VP-MK820K0000+	AB		R	Peaking 82mH
C851	VCKYPA1HB561K+	AA		R	560p 50V Ceramic
C852	VCKYPA1HB391K+	AA		R	390p 50V Ceramic
C853	VCKYPA1HB271K+	AB		R	270p 50V Ceramic
C880	RC-KZ0016CEZZ	AC		R	10000p 1.5KV Ceramic
C893	VCEAOA1CW336M+	AB		R	33 16V Electrolytic
R849	VRS-CY1JF331JY	AA		R	330 1/16W Metal Oxide
R850	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R851	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R852	VRS-CY1JF470JY	AA		R	47 1/16W Metal Oxide
R854	VRS-CY1JF331JY	AA		R	330 1/16W Metal Oxide
R855	VRS-CY1JF331JY	AA		R	330 1/16W Metal Oxide
R859	VRS-VV3DB153J	AA		R	15K 12W Metal Oxide
R861	VRS-VV3DB153J	AA		R	15K 12W Metal Oxide
R863	VRS-VV3DB153J	AA		R	15K 12W Metal Oxide
R864	VRD-RA2BE470JY	AA		R	47 1/8W Carbon
R876	VRS-CY1JF121JY	AA		R	120 1/16W Metal Oxide
R877	VRS-CY1JF121JY	AA		R	120 1/16W Metal Oxide
R878	VRS-CY1JF121JY	AA		R	120 1/16W Metal Oxide
R880	VRD-RM2HD332JY	AA		R	3.3K 1/2W Carbon
R881	VRD-RM2HD332JY	AA		R	3.3K 1/2W Carbon
R882	VRD-RM2HD332JY	AA		R	3.3K 1/2W Carbon
R891	VRS-CY1JF152JY	AA		R	1.5K 1/16W Metal Oxide
R892	VRS-CY1JF391JY	AA		R	390 1/16W Metal Oxide
R894	VRS-CY1JF152JY	AA		R	1.5K 1/16W Metal Oxide
R895	VRD-RA2BE561JY	AA		R	560 1/8W Carbon
P860	LHLDW1104PEZZ	AB		R	Plug 4Pin (H)
P880	LHLDW1105PEZZ	AB		R	Plug 5Pin (K)
SC851	QSOCVA023WJZZ	AE		R	Socket , 12Pin
[5] SIDE AV UNIT					
J1410	QJAKEA070WJ02			R	JACK
J1411	QJAKEA056WJ09			R	JACK
J1412	QJAKEA056WJ04			R	JACK
P1450	QPLGN0561CEZZ	AB		R	Plug , 5Pin
R1352	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1353	VRS-CY1JF332JY	AA		R	3.3K 1/16W Metal Oxide
R1451	VRS-CY1JF750JY	AA		R	75 1/16W Metal Oxide
[6] MISCELLANEOUS PARTS					
ACC701	QACCZA048WJN1	AG		R	AC Cord
SP301	VSP9050PA02WA	AH		R	SPEAKER 4W 16 OHM
	QCWN-F201WJPZ			R	SP WIRE (+--+)
	QCWN-F787WJPZ			R	FAV WIRE
	QCWN-A230WJZZ	AD		R	H-WIRE
	QCWN-A788WJPZ	AD		R	K-WIRE
[7] SUPPLIED ACCESSORIES					
	RRMCGA296WJSA	AN		R	Infrared Remote Control Unit
	TINS-C843WJZZ	-		R	Operation Manual E/AR
	TINS-C844WJZZ	-		R	Operation Manual FR/UR
	UBATU0247AJZZ	-		R	Battery



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[8] CABINET PARTS					
1	CCABAB644WEV2	-		R	Front Cabinet Ass'y
1-1	Not Available	-		-	Front Cabinet
1-2	JB TN-A624WJSA	-		R	Power Button
1-3	GCOVAB963WJSA	-		R	RC Cover
1-4	JB TN-A625WJSA	-		R	Control Button
1-5	HBDGBA085WJSA	-		R	Sharp Badge
1-6	MSPRCA067WJFW	-		R	Spring For Power Button
2	CCABBB072WEV0	-		R	Rear Cabinet Ass'y
2-1	Not Available	-		-	Rear Cabinet
2-2	HiNDPC489WJZZ	-		R	Rear IND PLATE

[9] PACKING PARTS



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[9] PACKING PARTS					
3	SPAKCD165WJZZ	-		-	Packing Case
4	SPAKXB332WJZZ	-		-	Buffer Case
5	SSAKA0001PEZZ	-		-	Poly Bag For Accessory
6	SPAKPA771WJZZ	-		-	HOSO PP
7	TLABZB525WJZZ	-		-	Case Label

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PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
【 C 】				
CCABAB644WEV2	8-1	-		R
CCABBB072WEV0	8-2	-		R
【 D 】				
DUNTKE134WEA4	2-	-		-
DUNTKE135WEA4	2-	-		-
DUNTKE181WEA2	2-	-		-
【 G 】				
GCOVAB963WJSA	8-1-3	-		R
【 H 】				
HBDGBA085WJSA	8-1-5	-		R
HINDPC489WJZZ	8-2-2	-		R
【 J 】				
JBNTN-A624WJSA	8-1-2	-		R
JBNTN-A625WJSA	8-1-4	-		R
【 L 】				
LHLDW1104PEZZ	3-P602	AB		R
"	4-P860	AB		R
LHLDW1105PEZZ	3-P1001	AB		R
"	4-P880	AB		R
【 M 】				
MSPRCA067WJFW	8-1-6	-		R
【 N 】				
Not Available	8-1-1	-		-
"	8-2-1	-		-
【 P 】				
PMAGF3046CEZZ	1-	AF		R
PRDARA119WJFW	3-RDA701	AF		R
PRDARA120WJFW	3-RDA501	AD		R
PRDARA361WJFW	3-RDA602			R
PRDARA420WJFW	3-RDA301	AC		R
【 Q 】				
QACCZA048WJN1	6-ACC701	AG		R
QCNW-A230WJZZ	6-	AD		R
QCNW-A788WJPZ	6-	AD		R
QCNW-F201WJPZ	6-			R
QCNW-F787WJPZ	6-			R
QEARCA012WJZZ	1-	AG		R
QFS-C3225CEZZ	3-F701	AC		R
QFSHD1013CEZZ+	3-FH701	AC		R
QFSHD1014CEZZ+	3-FH702	AC		R
QJAKEA056WJ04	5-J1412			R
QJAKEA056WJ09	5-J1411			R
QJAKEA070WJ02	5-J1410			R
QLUGP0111GEFW	3-TP801	AA		R
QPLGN0260CEZZ	3-P701	AC		R
QPLGN0269GEZZ	3-P702	AB		R
QPLGN0461CEZZ	3-P302	AB		R
QPLGN0561CEZZ	3-P308	AB		R
"	3-P1002	AB		R
"	5-P1450	AB		R
QPLGN0660CEZZ	3-P601	AC		R
QSOCVA023WJZZ	4-SC851	AE		R
QSW-KA019WJZZ+	3-S1001	AC		R
"	3-S1002	AC		R
"	3-S1003	AC		R
"	3-S1004	AC		R
"	3-S1005	AC		R
QSW-P0612CEZZ	3-S701	AG		R
QTANJA080WJZZ	3-J405			R
【 R 】				
RC-EZA097WJZZ	3-C705	AM		R
RC-EZA332WJZZ+	3-C513	AD		R
RC-EZA522WJZZ	3-C754	AD		R
RC-EZA523WJZZ	3-C753	AD		R
RC-FZ031SCEZZ	3-C701	AD		R
RCILFA187WJZZ	3-L701	AD		R
RCILGA115WJN1	1-			R
RCILP0179CEZZ+	3-L751	AD		R
RCILP0223CEZZ+	3-L602	AD		R
RC-KZ0016CEZZ	3-C880	AC		R
"	4-C880	AC		R
RC-KZ0029CEZZ+	3-C702	AC		R
"	3-C703	AC		R
"	3-C704	AC		R
RC-KZ0102GEZZ	3-C713	AE		R
RC-KZ1018CEZZ+	3-C784	AC		R
RCRSAA019WJZZ	3-X801	AF		R
RFILC0037PEZZ	3-SF201			R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
RH-DX0066GEZZY	3-D706	AC		R
"	3-D707	AC		R
"	3-D709	AC		R
"	3-D721	AC		R
RH-DX0131CEZZY	3-D510	AC		R
"	3-D606	AC		R
RH-DX0247CEZZ	3-D393	AE		R
"	3-D752	AE		R
RH-DX0441CEZZY	3-D505	AC		R
RH-DX0476CEZZ	3-D701	AG		R
RH-DXA006WJZZ	3-D751	AD		R
RH-EX1393CEZZY	3-D806	AB		R
"	3-D1006	AB		R
"	3-D1009	AB		R
RH-HXA013WJZZ+	3-NR701			R
RH-IXC080WJN3Q	3-IC801			R
RH-PX0013PEZZ	3-D1001	AC		R
RH-TX0110BMZZ+	4-Q853	AC		R
"	4-Q854	AC		R
"	4-Q855	AC		R
RH-VX0073CEZZ	3-VA701	AD		R
RMPTP0011CEZZ	3-PR701	AL		R
RRMCGA296WJSA	7-	AN		R
RRMCUA022WJZZ	3-RMC1001	AG		R
RTRNFA113WJZZ	3-T602	AV		R
RTRNWA193WJZZ	3-T702			R
RTRNZA058WJZZ	3-T603	AD		R
RTUNQA039WJZZ	3-TU201	AT		R
【 S 】				
SSAKA0001PEZZ	9-5	-		-
SPAKCD165WJZZ	9-3	-		-
SPAKPA771WJZZ	9-6	-		-
SPAKXB332WJZZ	9-4	-		-
【 T 】				
TINS-C843WJZZ	7-	-		R
TINS-C844WJZZ	7-	-		R
TLABZB525WJZZ	9-7	-		-
【 U 】				
UBATU0247AJZZ	7-	-		R
【 V 】				
VB51QGA993X1E	1--			R
VCCCCY1HH101JY	3-C211	AA		R
"	3-C212	AA		R
"	3-C1002	AA		R
VCCCCY1HH220JY	3-C1860	AA		R
VCCCCY1HH470JY	3-C815	AA		R
VCEA0A1AW107M+	3-C1001	AB		R
VCEA0A1AW108M+	3-C202	AC		R
VCEA0A1CW106M+	3-C370	AB		R
"	3-C390	AB		R
VCEA0A1CW226M+	3-C306	AB		R
"	3-C755	AB		R
"	3-C757	AB		R
"	3-C761	AB		R
VCEA0A1CW336M+	3-C893	AC		R
"	3-C1800	AB		R
"	4-C893	AB		R
VCEA0A1CW476M+	3-C758	AB		R
"	3-C760	AB		R
"	3-C762	AB		R
"	3-C764	AB		R
"	3-C806	AB		R
"	3-C818	AB		R
"	3-C831	AB		R
"	3-C1007	AB		R
"	3-C1841	AB		R
VCEA0A1CW477M+	3-C451	AC		R
"	3-C838	AC		R
VCEA0A1EW108M+	3-C393	AD		R
VCEA0A1EW227M+	3-C610	AB		R
VCEA0A1EW228M+	3-C756	AE		R
VCEA0A1EW476M+	3-C301	AD		R
VCEA0A1EW477M+	3-C308	AD		R
VCEA0A1HW105M+	3-C204	AB		R
"	3-C826	AB		R
"	3-C833	AB		R
"	3-C1850	AB		R
VCEA0A1HW106M+	3-C206	AB		R
VCEA0A1HW107M+	3-C505	AB		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VCEA0A1HW224M+	3-C302	AB		R
"	3-C304	AB		R
VCEA0A1HW225M+	3-C371	AB		R
"	3-C372	AB		R
"	3-C394	AB		R
"	3-C395	AB		R
VCEA0A1HW474M+	3-C804	AB		R
"	3-C816	AB		R
"	3-C825	AB		R
"	3-C828	AB		R
VCEA0A1HW475M+	3-C314	AB		R
"	3-C602	AB		R
VCEA0A1HW476M+	3-C719	AB		R
VCEA0A1VW477M+	3-C511	AB		R
VCEA0A2EW336M+	3-C604	AD		R
VCEA9M1CW106M+	3-C1003	AB		R
VCEA9M1HW475M+	3-C843	AB		R
"	3-C844	AB		R
"	3-C845	AB		R
VCEACA1HC335J+	3-C515	AC		R
VCFPVC2DB334J	3-C611	AD		R
VCFPVC3ZA962H	3-C607	AD		R
VCFYAA2AA224J+	3-C508	AD		R
VCFYFA1HA104J+	3-C501	AB		R
"	3-C837	AA		R
VCFYFA1HA105J+	3-C706	AE		R
VCFYFA1HA224J+	3-C811	AD		R
"	3-C817	AB		R
VCFYFA1HA474J+	3-C309	AE		R
"	3-C310	AE		R
VCFYFA1HA823J+	3-C1858	AB		R
"	3-C1861	AB		R
VCKYCY1CB393KY	3-C841	AB		R
VCKYCY1CF105ZY	3-C824	AB		R
"	3-C840	AB		R
VCKYCY1CF474ZY	3-C1004	AB		R
VCKYCY1EF104ZY	3-C1016	AA		R
VCKYCY1HB103KY	3-C819	AA		R
"	3-C830	AA		R
"	3-C1842	AA		R
"	3-R1043	AA		R
VCKYCY1HB103ZY	3-C839	AA		R
VCKYCY1HB104KY	3-C759	AA		R
"	3-C765	AA		R
"	3-C766	AA		R
"	3-C803	AA		R
"	3-C822	AA		R
"	3-C823	AA		R
"	3-C834	AA		R
VCKYCY1HB153KY	3-C805	AA		R
"	3-C814	AA		R
VCKYCY1HB182KY	3-C1857	AA		R
VCKYCY1HB222KY	3-C836	AA		R
VCKYCY1HB682KY	3-C303	AA		R
"	3-C305	AA		R
VCKYCY1HF103ZY	3-C203	AA		R
"	3-C207	AA		R
"	3-C208	AA		R
"	3-C209	AA		R
"	3-C210	AA		R
"	3-C807	AA		R
"	3-C1008	AA		R
"	3-C1013	AA		R
VCKYPA1HB221K+	3-C708	AB		R
VCKYPA1HB271K+	3-C852	AA		R
"	3-C853	AA		R
"	4-C853	AB		R
VCKYPA1HB391K+	4-C852	AA		R
VCKYPA1HB472K+	3-C711	AB		R
VCKYPA1HB561K+	3-C612	AB		R
"	3-C851	AA		R
"	4-C851	AA		R
VCKYPA1HF103Z+	3-C710	AB		R
VCKYPA2HB101K+	3-C650	AB		R
VCKYPA2HB102K+	3-C391	AA		R
"	3-C512	AA		R
"	3-C606	AD		R
"	3-C750	AC		R
VCKYPH3DB561K	3-C743	AC		R
"	3-C752	AC		R
VCQYTA1HM103J+	3-C709	AB		R
"	3-C1859	AB		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	3-C1862	AB		R
VCQYTA1HM104J+	3-C1081	AB		R
VCQYTA1HM563J+	3-C601	AB		R
VCQYTA2AA103K+	3-C608	AC		R
VHD1N4148//-1Y	3-D203	AA		R
"	3-D604	AA		R
"	3-D605	AA		R
"	3-D607	AA		R
"	3-D762	AA		R
"	3-D763	AA		R
"	3-D764	AA		R
"	3-D801	AA		R
"	3-D1005	AA		R
"	3-D1008	AA		R
"	3-D1082	AA		R
"	3-D1800	AA		R
"	4-D859	AA		R
"	4-D895	AA		R
"	4-D898	AA		R
VHD1SS244//-1Y	3-D602	AB		R
VHD1SS356//-1Y	3-D202			
VHD1SS390++-1Y	3-D807			R
"	3-D808			R
"	3-D809			R
VHDHSS4148+-1Y	3-D1081	AA		R
VHEZJ11A+++1EY	3-D1002			R
VHEZJ12B+++1EY	3-D723			R
VHEZJ27B+++1EY	3-D603			R
VHEZJ27D+++1EY	3-D722			R
VHEZJ33C+++1EY	3-D201			R
VHEZJ36C+++1EY	3-D736			R
VHEZJ5R1A++1EY	3-D750			R
VHEZJ5R1B++1EY	3-D503			R
VHEZJ5R1C++1EY	3-D754			R
VHEZJ5R6B++1EY	3-D715			R
VHEZJ5R6C++1EY	4-D896			R
VHEZJ6R2A++1EY	3-D608			R
VHEZJ8R2A++1EY	3-D732			R
VHEZJ8R2B++1EY	3-D757			R
VHiBR24L08F-1Y	3-iC1003	AE		R
VHiLA42032E-1	3-iC301			R
VHiPQ05RDA1-1	3-iC751			R
VHiSTRW5453-1	3-iC701	AM		R
VHiSTV9302B-1	3-iC501			R
VP-CF100K0000Y	3-L802	AB		R
"	3-L804	AB		R
"	3-L805	AB		R
VP-CF220K0000Y	3-L803	AB		R
VP-DF100K0000Y	3-L807	AB		R
VP-DF270K0000Y	3-L203	AB		R
VP-MK820K0000+	4-L851	AB		R
VP-XF270K0000Y	3-L204	AB		R
VRC-UA2HG825KY	3-R751	AA		R
"	3-R752	AA		R
VRD-RA2BE101JY	3-R805	AA		R
"	3-R813	AA		R
"	3-R814	AA		R
"	3-R823	AA		R
"	3-R1004	AA		R
"	3-R1008	AA		R
"	3-R1014	AA		R
"	3-R1017	AA		R
"	3-R1019	AA		R
VRD-RA2BE102JY	3-R661	AA		R
"	3-R1046	AA		R
VRD-RA2BE103JY	3-R1030	AA		R
VRD-RA2BE123JY	3-R809	AA		R
VRD-RA2BE153JY	3-R627	AA		R
"	3-R722	AA		R
VRD-RA2BE181JY	3-R638	AA		R
VRD-RA2BE221JY	3-R704	AA		R
VRD-RA2BE222JY	3-R1804	AA		R
VRD-RA2BE223JY	3-R304	AA		R
"	3-R828	AA		R
VRD-RA2BE272JY	3-R301	AA		R
VRD-RA2BE273JY	3-R733	AA		R
VRD-RA2BE331JY	3-R637	AA		R
VRD-RA2BE332JY	3-R1006	AA		R
"	3-R1016	AA		R
VRD-RA2BE391JY	3-R1028	AA		R
VRD-RA2BE393JY	3-R602	AA		R
"	3-R603	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
VRD-RA2BE470JY	4-R864	AA		R
VRD-RA2BE473JY	3-R604	AA		R
VRD-RA2BE561JY	4-R895	AA		R
VRD-RA2BE680JY	3-R205	AA		R
VRD-RA2BE822JY	3-R308	AA		R
"	3-R314	AA		R
VRD-RA2EE472JY	3-R711	AA		R
VRD-RA2EE750JY	3-R459	AA		R
VRD-RM2HD102JY	3-R608	AA		R
VRD-RM2HD104JY	3-R605	AA		R
VRD-RM2HD124JY	3-R753	AA		R
VRD-RM2HD151JY	3-R827	AA		R
VRD-RM2HD184JY	3-R625	AA		R
VRD-RM2HD1R0JY	3-R325	AA		R
"	3-R326	AA		R
"	3-R507	AA		R
"	3-R710	AA		R
VRD-RM2HD270JY	3-R607	AA		R
"	3-R609	AA		R
"	3-R612	AA		R
VRD-RM2HD271JY	3-R639	AA		R
VRD-RM2HD332JY	4-R880	AA		R
"	4-R881	AA		R
"	4-R882	AA		R
VRD-RM2HD333JY	3-R513	AA		R
VRD-RM2HD682JY	3-R514	AA		R
VRN-RL2HC1R0J+	3-R621	AB		R
VRN-RL2HCR47J+	3-R726	AB		R
VRN-RL3AB1R5J+	3-R611	AB		R
VRN-RL3ABR22J+	3-R391	AB		R
VRN-RL3DB1R0J+	3-R503	AB		R
VRN-RL3DBR22J+	3-R706	AB		R
VRN-RL3DBR82J+	3-R705	AB		R
VRN-RL3LBR22J+	3-R606	AD		R
VRN-VV3AB4R7J	3-R757	AB		R
VRS-CY1JF000JY	3-RJ13	AA		R
"	3-RJ15	AA		R
"	3-RJ16	AA		R
"	3-RJ18	AA		R
"	3-RJ19	AA		R
"	3-RJ35	AA		R
"	3-RJ39	AA		R
"	3-RJ42	AA		R
"	3-RJ43	AA		R
"	3-RJ45	AA		R
"	3-RJ46	AA		R
"	3-RJ49	AA		R
"	3-RJ50	AA		R
"	3-RJ57	AA		R
"	3-RJ62	AA		R
"	3-RJ66	AA		R
"	3-RJ67	AA		R
"	3-RJ68	AA		R
"	3-RJ69	AA		R
"	3-RJ70	AA		R
"	3-RJ71	AA		R
"	3-RJ72	AA		R
"	3-RJ73	AA		R
"	3-RJ74	AA		R
"	3-RJ75	AA		R
"	3-RJ76	AA		R
"	3-R1092	AA		R
VRS-CY1JF101JY	3-R201	AA		R
"	3-R202	AA		R
"	3-R462	AA		R
"	3-R526	AA		R
"	3-R772	AA		R
"	3-R774	AA		R
"	3-R808	AA		R
"	3-R1013	AA		R
"	3-R1015	AA		R
"	3-R1024	AA		R
"	3-R1031	AA		R
"	3-R1042	AA		R
VRS-CY1JF102JY	3-R615	AA		R
"	3-R616	AA		R
"	3-R762	AA		R
"	3-R763	AA		R
"	3-R1003	AA		R
"	3-R1087	AA		R
VRS-CY1JF103JY	3-R458	AA		R
"	3-R523	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
"	3-R524	AA		R
"	3-R618	AA		R
"	3-R624	AA		R
"	3-R662	AA		R
"	3-R810	AA		R
"	3-R811	AA		R
"	3-R1025	AA		R
"	3-R1032	AA		R
"	3-R1074	AA		R
"	3-R1863	AA		R
VRS-CY1JF104JY	3-R1010	AA		R
"	3-R1027	AA		R
"	3-R1044	AA		R
VRS-CY1JF121JY	4-R876	AA		R
"	4-R877	AA		R
"	4-R878	AA		R
VRS-CY1JF122JY	3-R206	AA		R
VRS-CY1JF123JY	3-R617	AA		R
VRS-CY1JF124JY	3-R807	AA		R
"	3-R1805	AA		R
VRS-CY1JF152JY	4-R891	AA		R
"	4-R894	AA		R
VRS-CY1JF154JY	3-R614	AA		R
VRS-CY1JF181JY	3-R835	AA		R
"	3-R836	AA		R
"	3-R837	AA		R
VRS-CY1JF183JY	3-R1011	AA		R
"	3-R1012	AA		R
"	3-R1020	AA		R
"	3-R1022	AA		R
"	3-R1026	AA		R
VRS-CY1JF221JY	3-R207	AA		R
"	3-R208	AA		R
"	3-R220	AA		R
VRS-CY1JF222JY	3-R212	AA		R
"	3-R504	AA		R
"	3-R832	AA		R
"	3-R833	AA		R
"	3-R834	AA		R
VRS-CY1JF274JY	3-R305	AA		R
VRS-CY1JF331JY	4-R849	AA		R
"	4-R854	AA		R
"	4-R855	AA		R
VRS-CY1JF332JY	3-R362	AA		R
"	3-R366	AA		R
"	3-R840	AA		R
"	3-R1007	AA		R
"	3-R1040	AA		R
"	3-R1041	AA		R
"	3-R1056	AA		R
"	3-R1078	AA		R
"	3-R1079	AA		R
"	5-R1352	AA		R
"	5-R1353	AA		R
VRS-CY1JF333JY	3-R623	AA		R
"	3-R841	AA		R
VRS-CY1JF391JY	4-R892	AA		R
VRS-CY1JF392JY	3-R209	AA		R
"	3-R210	AA		R
VRS-CY1JF470JY	4-R850	AA		R
"	4-R851	AA		R
"	4-R852	AA		R
VRS-CY1JF472JY	3-R626	AA		R
"	3-R838	AA		R
VRS-CY1JF473JY	3-R303	AA		R
"	3-R802	AA		R
"	3-R819	AA		R
"	3-R825	AA		R
"	3-R829	AA		R
"	3-R1801	AA		R
"	3-R1802	AA		R
"	3-R1803	AA		R
VRS-CY1JF561JY	3-R764	AA		R
VRS-CY1JF681JY	3-R818	AA		R
VRS-CY1JF682JY	3-R211	AA		R
"	3-R307	AA		R
"	3-R315	AA		R
"	3-R520	AA		R
VRS-CY1JF750JY	3-R461	AA		R
"	5-R1451	AA		R
VRS-CY1JF822JY	3-R806	AA		R
"	3-R812	AA		R

PARTS CODE	No.	PRICE RANK	NEW MARK	PART RANK
//	3-R1021	AA		R
VRS-RG3AB331J+	3-R506	AB		R
VRS-RG3DB100J+	3-R750	AA		R
VRS-RG3DB124J	3-R702	AA		R
VRS-RG3DB682J	3-R622	AA		R
VRS-RG3LB391J+	3-R631			R
VRS-VV3DB153J	4-R859	AA		R
//	4-R861	AA		R
//	4-R863	AA		R
VRS-VV3DB820J+	3-R754	AA		R
VRS-VV3LB220J	3-R755			R
VRS-VV3LB393J+	3-R216	AC		R
VS2SA1530AR-1Y	3-Q802	AB		R
//	4-Q894	AB		R
VS2SC2235Y/1E+	3-Q601	AE		R
VS2SC2735// -1Y	3-Q201			R
VS2SC3198-G-1+	3-Q603	AA		R
VS2SC3928AR-1Y	3-Q202	AB		R
//	3-Q604	AB		R
//	3-Q762	AB		R
//	3-Q764	AB		R
//	3-Q801	AB		R
//	3-Q1002	AB		R
//	3-Q1003	AB		R
//	3-Q1070	AB		R
//	3-Q1800	AB		R
VS2SD468-C/-1+	3-Q752	AD		R
//	3-Q753	AD		R
//	3-Q754	AD		R
VSIMX1C/C// -1Y	3-IC1007			R
VSP9050PA02WA	6-SP301	AH		R
VSTT2140+++ -F	3-Q602	AG		R
VW7UGB2-040KK	3-J1			R
VW7UGB9-040KK	3-J2			R



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