



Colour Television Service Manual

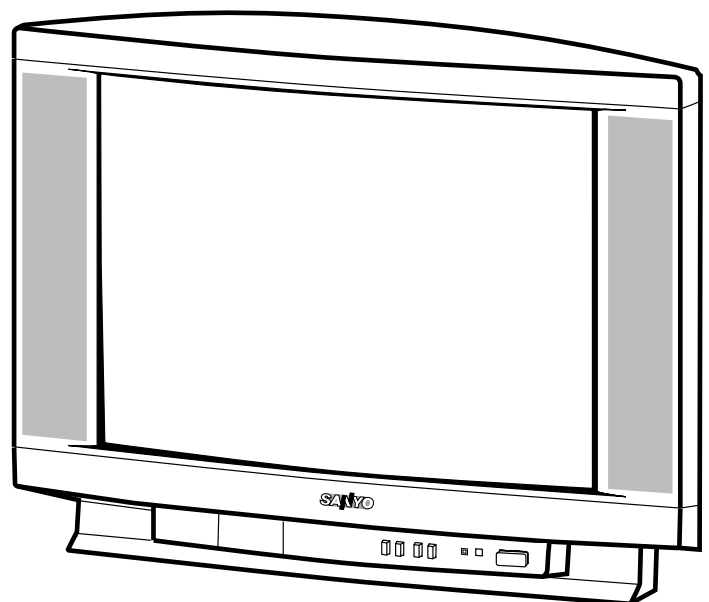
CE28CN7F-c

 **Model CE28CN7F-C**

Service Ref. No. CE28CN7F-C-00

PRODUCT CODE: 111361019

ORIGINAL VERSION: Chassis No. EB7-B



Please use Schematic Diagram SKP20395 with this Service Manual.

Give complete "SERVICE REF. NO." for parts order or servicing, it is shown on the rating sheet on the cabinet back of the TV set.

Note

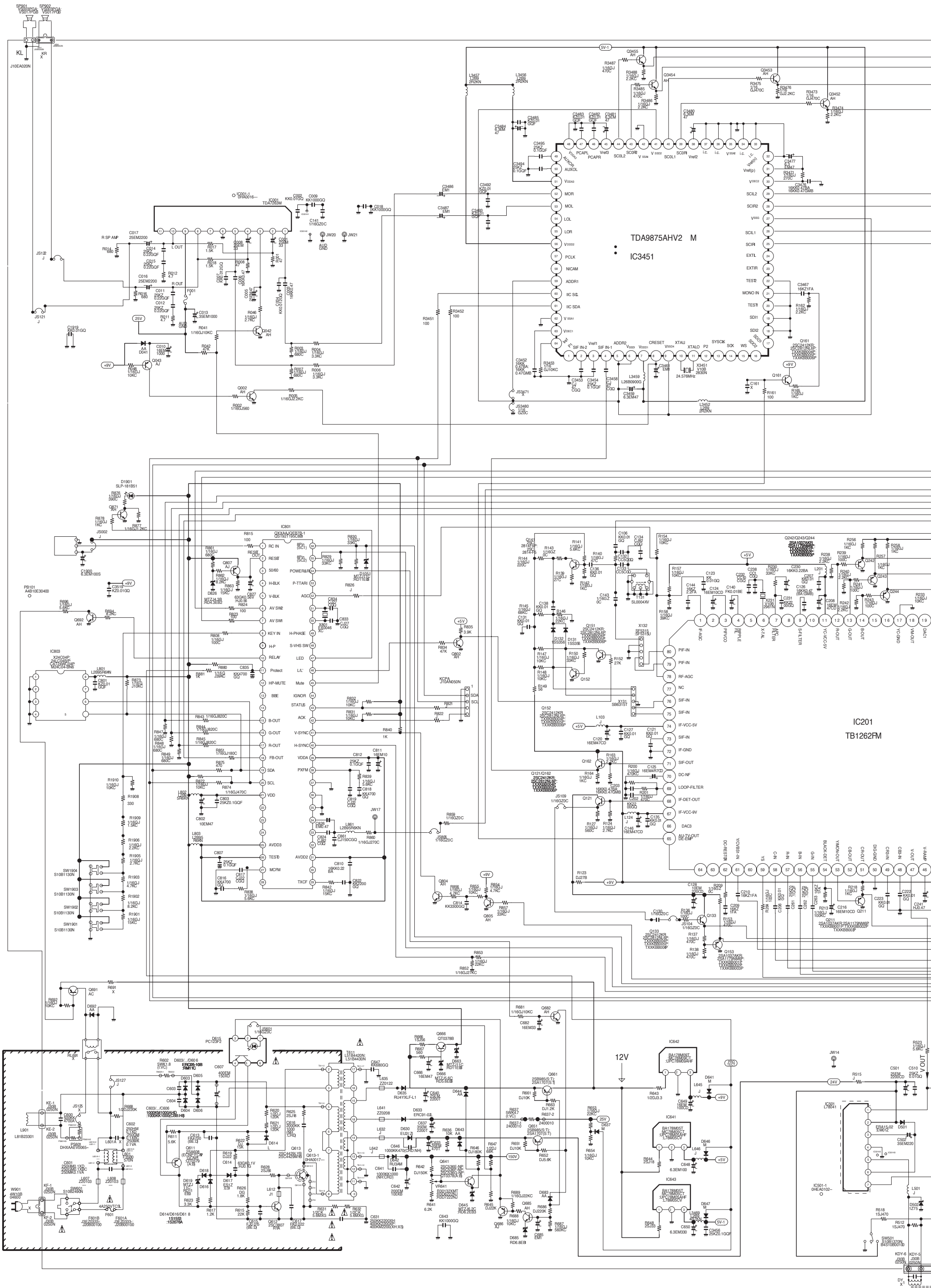
This TV receiver will not work properly in foreign countries where the television transmission system and power source differ from the design specifications. Refer to the specifications for the design specifications

Contents

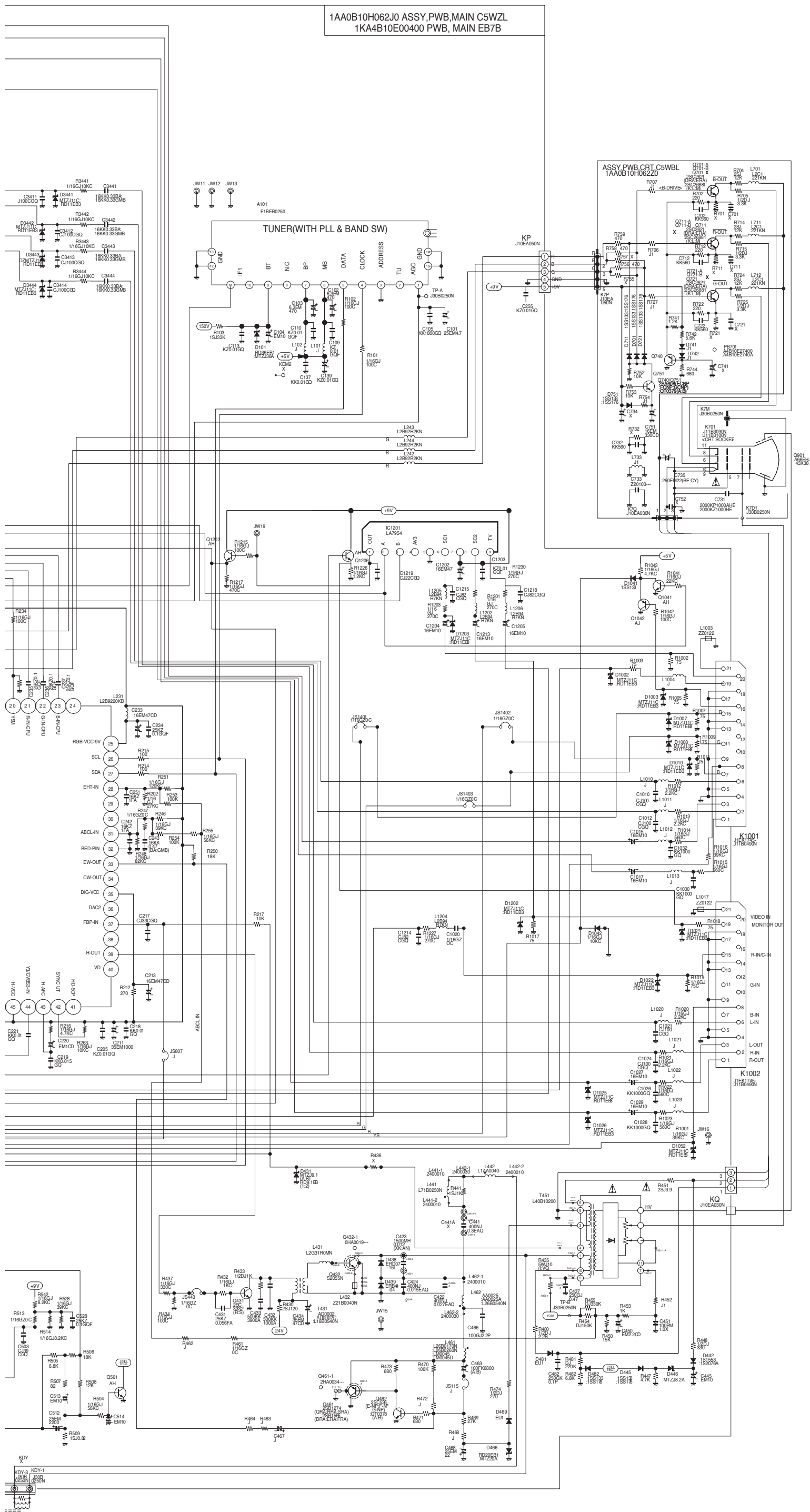
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This is a diagram for all models and therefore differs slightly from the actual block diagram.





1AA0B10H062J0 ASSY,PWB,MAIN C5WZL
1KA4B10E00400 PWB, MAIN EB7B



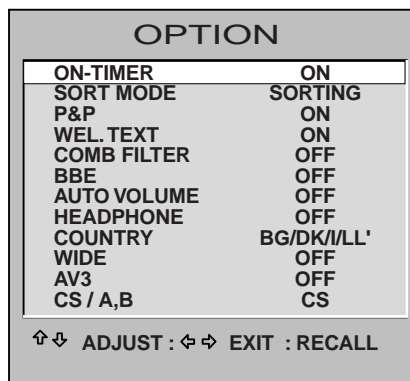
OPTION SETTING

[After replacing the Memory IC (IC803)]

The memory IC, IC803, stores the option data of TV set and service adjustments data for each circuit, therefore, when the memory IC is replaced, it should be performed following setting and "SERVICE ADJUSTMENT" on next page.

To enter to the Option Mode

- + Press and hold the **F/OK** button on the remote control and **P▼** button on the front panel of the TV. The option window will appear on the screen.



OPTION MODE FOR CE28CN7F-C-00

To set the option mode

- + Highlight the desired option item by using the **P▲** or **P▼** button .
- + To switch the option mode, use the **Volume - (LEFT)** or **Volume + (RIGHT)** button.
- + The data which is set in the option mode is stored into the memory IC automatically.

Following table shows the available option items and default setting mode.

<u>Option Mode</u>	<u>Mode</u>	<u>Description & Note</u>
ON-TIMER	ON or OFF	On-timer available, default "ON"
SORT MODE	SORTING or TUNING	Tuning mode, default "SORTING"
P & P	ON or OFF	Plug & Play mode, default "ON"
WEL. TEXT	ON or OFF	Display message when first set up, default "ON"
COMB FILTER	OFF or ON	For factory use, default "OFF"
BBE	ON or OFF	BBE sound mode, default "OFF"
AUTO VOLUME	ON or OFF	Default "OFF"
HEADPHONE	ON or OFF	Headphone control , default "OFF"
COUNTRY	UK, IRE BG/DK / I / LL'	TV system, default "UK"
WIDE	ON or OFF	Wide mode, default ON
AV3	ON or OFF	Front AV3 mode, default OFF
CS or A,B	CS or A.B	

Exit from the Service Mode

- + Press the **RECALL**  button.

SERVICE ADJUSTMENTS

Note: Some items of the service adjustments for this chassis are controlled by the CPU, IC801, and the adjustments are carried out by using the RC handset.

[After replacing the Memory IC (IC803)]

The memory IC, IC803, stores the service adjustments data for each circuit, therefore, when the memory IC is replaced, it should be programmed by using "OPTION SETTING" on previous page and the following adjustments.

ADJUSTABLE SERVICE ADJUSTMENT

REGULAR

<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
1	AGC	AGC Adjustment
2	--	Cut-Off Drive Adjustment
3	GRY	G-Drive Adjustment (white balance)
4	GRY	B-Drive Adjustment (white balance)
5	CTR	Contrast Adjustment (use factory setting)(for factory use)
6	--	Screen Adjustment mode
8	OSD	OSD Positioning Adjustment

IMAGE

<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
1	P V-C	P Vertical Position Adjustment
2	P H-P	P Horizontal Position Adjustment
3	P V-L	P Vertical Linearity Adjustment
4	P VSC	P Vertical S-Correction Adjustment
5	P V-A	P Vertical Size Adjustment
6	P H-S	P Horizontal Size Adjustment
7	P E-P	P Pin Cushion Adjustment
8	P E-T	P Trapezoid Distortion Adjustment
11	P ECT	P Top Corner Correction Adjustment
12	P ECB	P Bottom Corner Correction Adjustment
13	P HPA	P Parallelogram Distortion Adjustment

IMPORTANT NOTICE

Do not attempt to adjust service adjustments not listed on the above otherwise it may cause loss of performance and product safety.

To enter to the Service Mode

+ Press and hold the **GREEN** button on the remote control and then press the **P▼** button inside of the door. Press the **P▼** button to highlight the mode required (Regular, Image, others and TB12**). Then press the F/OK button to select the mode.

The available adjustment items are as follows;

Image : This can be adjusted for picture images/shapes.

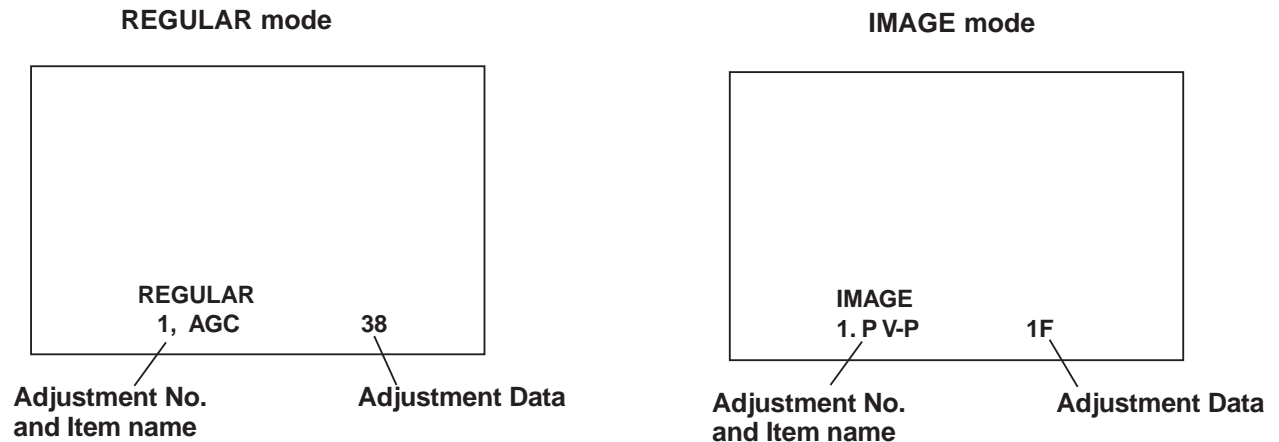
Regular : This can be adjusted for the service adjustment.

other : This is for factory setting. **DO NOT ADJUST.**

TB1251 : This is for the factory setting. **DO NOT ADJUST.**

To select the mode and service item and change data value

- + Highlight the desired adjustment mode by using the **P▲** or **P▼** button and then press the **F/OK** button.
- + To select the adjustment item, use the **P▲** or **P▼** button.
- + To change the service data, use the **Volume -(LEFT)** or **Volume + (RIGHT)** button.
- + The data which is set in the service mode is stored into the memory IC automatically.



Exit from the Service Mode

- + Press the **RECALL** button or turn off the TV set by using the Mains switch.

INITIALISATION OF MEMORY IC

To initialise the memory IC (IC803), press and hold the **NORMAL** $\rightarrow\bullet\leftarrow$ button on the remote control, then press the **P▼** button on the front panel of the TV set and then turn the Mains switch Off and On. The initialisation is now completed.

When initialised the memory IC and all of the setting data (option data and service adjustment data) stored in the IC are reset to the default value. It is necessary to set the option settings and readjust the service adjustments listed on page 6 and to re-tune all the channels.

ADJUSTMENTS

IMPORTANT NOTICE

Do not attempt to adjust the following service adjustments except when adjustments are required in servicing otherwise it may cause loss of performance and product safety.

+ B VOLTAGE ADJUSTMENT

1. Receive white raster pattern.
2. Set controls to normal.
3. Connect digital voltmeter to test point TP-B and GND.
4. Adjust voltage to $150 \pm 0.5V$ by using VR641.

AGC ADJUSTMENT

1. Input and tune an RF signal which is UHF to the clearest station.
2. Connect digital voltmeter to test point TP-A and GND.
4. Enter to the service mode and select mode "REGULAR", and select item no.1 "REGULAR 1, AGC".
5. Press the **LEVEL+** or **LEVEL -** button to adjust voltage to be 3.2Vdc.

FOCUS ADJUSTMENT

By using FOCUS VR, adjust focus control for well defined scanning lines.

GREY SCALE ADJUSTMENT

SCREEN ADJUSTMENT

1. Receive black & white pattern.
2. Enter to the service mode and select mode "REGULAR", and select item no. 2 "REGULAR 2, CUT". The horizontal line will appear on the screen.
3. Set the SCREEN VR for one colour to be just visible.
4. Using the numeric buttons shown set each colour to minimum by decreasing to the point where any further decrease resets the adjustment to maximum value.

BIAS ADJUSTMENT

5. By using the buttons 1, 2, 4, 5, 7, 8 on the remote control, adjust the line to be white.

The key allocation is as follows;

Button No. Operation

- | | |
|---|----------------|
| 1 | Increase Red |
| 2 | Decrease Red |
| 4 | Increase Green |
| 5 | Decrease Green |
| 7 | Increase Blue |
| 8 | Decrease Blue |

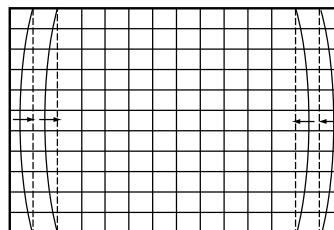
DRIVE ADJUSTMENT

6. Select item no.3 "REGULAR 3, GRY" (G-Drive) or 4 "REGULAR 4, GRY" (B-Drive) and adjust both initially to 40.
7. Change data value of each item by using **LEVEL +** or **LEVEL -** button to obtain the proper white balance.

PCC ADJUSTMENT

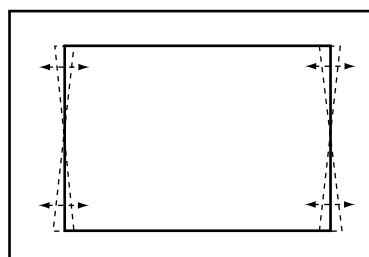
PCC ADJUSTMENT

1. Receive cross hatch pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item no. 7 "IMAGE 7.P E-P".
3. Press the **LEVEL+** or **LEVEL -** button to adjust the vertical line to be straight.



TRAPEZOID ADJUSTMENT

1. Receive cross hatch pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item no. 8 "IMAGE 8.P E-T".
3. Press the **LEVEL+** or **LEVEL -** button to correct the trapezoid distortion of the vertical line.



CORNER ADJUSTMENT

1. Receive cross hatch pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item no. 11 "IMAGE 11.P ECT" for top corner adjustment OR item no. 12 "IMAGE 12.P ECB" for bottom corner adjustment.
3. Press the **LEVEL+** or **LEVEL -** button to correct the distortion of the vertical line around the corners.

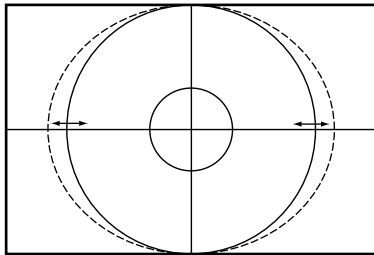
HORIZONTAL ADJUSTMENT

HORIZONTAL CENTRING ADJUSTMENT

1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item no. 2 "IMAGE 2.P H-P".
3. Press the **LEVEL+** or **LEVEL -** button to adjust the horizontal centre.

HORIZONTAL WIDTH ADJUSTMENT

1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item 6 "IMAGE 6.P H-S".
3. Press the **LEVEL+** or **LEVEL -** button to adjust the horizontal width.



HIGH-VOLTAGE CONFIRMATION

1. Receive circular pattern and set screen mode to "FULL".
2. Set controls for brightness and contrast to maximum.
3. Connect high-voltage meter to the anode of CRT and GND.
4. Confirm that voltage is $26 \pm 1.0 \text{ kV}$ for 28" model

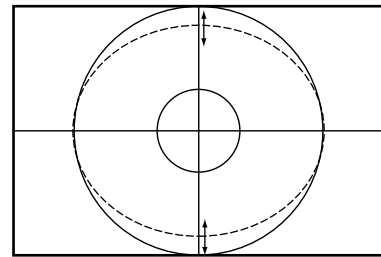
VERTICAL ADJUSTMENT

VERTICAL CENTRING ADJUSTMENT

1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item no. 1 "IMAGE 1.P V-C".
3. Press the **LEVEL+** or **LEVEL -** button to adjust the vertical centre.

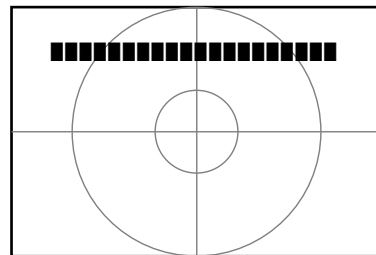
VERTICAL HEIGHT ADJUSTMENT

1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "IMAGE", and select item no. 5 "IMAGE 5.P V-A".
3. Press the **LEVEL+** or **LEVEL -** button to adjust the vertical height.



OSD POSITIONING ADJUSTMENT

1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "REGULAR", and select item no. 8 "REGULAR 8 OSD". The OSD test bar will appear on the top of screen.
3. Press the **LEVEL+** or **LEVEL -** button to adjust proper OSD positioning.



CHASSIS ELECTRICAL PARTS LIST

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by a Δ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark Δ .

Note: Parts order must contain Service Ref. No., Part No., and descriptions.

	Ref. No.	Part No.	Description
Read description in the Capacitor and Resistor as follows:	Chassis construction		
	CE28CN7F-C-00		
	1AA0B10H062J0	ASSY,PWB,MAIN,EB7B 28"	FRE (Page 19-24)
	1AA0B10H062Z0	ASSY,PWB,CRT C5WBL	(Page 24-25)
		OUT OF CIRCUIT-013C5WZL	(Page 25)
.....			
1AA0B10H062J0 ASSY,PWB,MAIN,EB7B 28" FRE			
CAPACITOR			
C001	403	258 3619	ELECT 33U M 25V
C002	403	215 2211	GRM188R71H103KA01D PT115
C003	403	314 5915	GRM21BR71C474KA01L PT297
C004	403	215 2310	GRM188R71H123KA01D PT115
C005	403	054 0703	ELECT 47U M 35V
C006	403	314 5915	GRM21BR71C474KA01L PT297
C007	403	215 2310	GRM188R71H123KA01D PT115
C008	403	258 3619	ELECT 33U M 25V
C009	403	113 3815	GRM188R71H102KA01D PT115
C010	403	042 4875	ELECT 1000U M 16V
C011	403	164 0214	GRM188F51E104ZA01D PT115
C012	403	164 0214	GRM188F51E104ZA01D PT115
C013	403	154 1917	ELECT 1000U M 35V
C014	403	164 0214	GRM188F51E104ZA01D PT115
C015	403	164 0214	GRM188F51E104ZA01D PT115
C016	403	194 3800	ELECT 2200U M 25V
C017	403	194 3800	ELECT 2200U M 25V
C018	403	113 3815	GRM188R71H102KA01D PT115
C101	403	051 0607	ELECT 4. 7U M 50V
C1010	403	157 3611	GRM1885C1H101JZ01D PT115
C1012	403	157 3611	GRM1885C1H101JZ01D PT115
C1015	403	233 0817	ELECT 10U M 50V
C1017	403	233 0817	ELECT 10U M 50V
C102	403	039 3507	ELECT 470U M 6. 3V
C1020	401	105 7919	MT- GLAZE 0. 000 ZA 1/16W
C1021	403	157 3611	GRM1885C1H101JZ01D PT115
C1024	403	157 3611	GRM1885C1H101JZ01D PT115
C1026	403	113 3815	GRM188R71H102KA01D PT115
C1027	403	233 0817	ELECT 10U M 50V
C1028	403	113 3815	GRM188R71H102KA01D PT115
C1029	403	233 0817	ELECT 10U M 50V
C103	403	039 3507	ELECT 470U M 6. 3V
C1030	403	113 3815	GRM188R71H102KA01D PT115
C1032	403	113 3815	GRM188R71H102KA01D PT115
C104	403	233 0817	ELECT 10U M 50V
C105	403	157 7015	GRM188R71H182KA01D PT115
C106	403	149 9218	GRM188F51H103ZA01D PT115
C109	403	149 9218	GRM188F51H103ZA01D PT115
C110	403	149 9218	GRM188F51H103ZA01D PT115
C113	403	149 9218	GRM188F51H103ZA01D PT115
C120	403	248 1618	16 YK 47 M TA 0511
C1202	403	248 1618	16 YK 47 M TA 0511
C1203	403	149 9218	GRM188F51H103ZA01D PT115
C1204	403	233 0817	ELECT 10U M 50V
C1205	403	233 0817	ELECT 10U M 50V
C121	403	215 2211	GRM188R71H103KA01D PT115
C1212	403	153 9310	GRM1885C1H820JZ01D PT115
C1213	403	233 0817	ELECT 10U M 50V
C1214	403	153 9310	GRM1885C1H820JZ01D PT115
C1215	403	153 9310	GRM1885C1H820JZ01D PT115
C1218	403	153 9310	GRM1885C1H820JZ01D PT115
C1219	403	018 0513	GRM2165C1H220JZ01D PT209

CAPACITOR			
CERAMIC	100P	K	50V
Rated Voltage			
Tolerance Symbols:			
Less than 10PF			
A: Not specified	B: ±0.1PF	C: ±0.25PF	
D: ±0.5PF	F: ±1PF	G: ±2PF	
R: ±0.25-0PF	S: ±0-0.25PF	E: +0-1PF	
More than 10PF			
A: Not specified	B: ±0.1%	C: ±0.25%	
D: ±0.5%	F: ±1%	G: ±2%	
H: ±3%	J: ±5%	K: ±10%	
L: ±15%	M: ±20%	N: ±30%	
P: +100-0%	Q: +30-10%	T: +50-10%	
U: +75-10%	V: +20-10%	W: +100-10%	
X: +40-20%	Y: +150-10%	Z: +80-20%	
Rated value: P=pico farad, U=Micro farad			
Material:			
CERAMIC	Ceramic		
MT-PAPER	Metallized Paper		
POLYESTER	Polyester		
MT-POLYEST	Metallized Polyester		
POLYPRO.....	Polypropylene		
MT-POLYPRO	Metallized Polypropylene		
COMPO FILM.....	Composite film		
MT-COMPO	Metallized Composite		
STYRENE.....	Styrene		
TA-SOLID	Tantalum Solid		
AL-SOLID	Aluminium Solid		
ELECT	Electrolytic		
NP-ELECT	Non-polarised Electrolytic		
OS-SOLID	Aluminium Solid with Organic Semiconductive Electrolytic		
DL-ELECT	Double Layered Electrolytic		
RESISTOR			
CARBON	4.7K	J	A 1/4W
Rated Wattage			
Performance Symbols:			
A: General B: Non flammable Z: Low noise			
Other: Temperature coefficient			
Tolerance Symbols:			
A: ±0.05%	B: ±0.1%	C: ±0.25%	D: ±0.5%
F: ±1%	G: ±2%	J: ±5%	K: ±10%
M: ±20%	P: +5-15%		
Rated value, ohms:			
K: 1,000, M: 1,000,000			
Material:			
CARBON	Carbon		
MT-FILM	Metal Film		
OXIDE-MT	Oxide Metal Film		
SOLID	Composition		
MT-GLAZE	Metal Glaze		
WIRE WOUND	Wire Wound		
CERAMIC RES.....	Ceramic		
FUSIBLE RES	Fusible		

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C123	403 215 2211	GRM188R71H103KA01D PT115	C3458	403 157 2911	GRM1885C1H470JZ01D PT115
C124	403 233 0817	ELECT 10U M 50V	C3459	403 248 1618	16 YK 47 M TA 0511
C125	403 195 8408	ELECT 2.2U M 50V	C3461	403 248 1410	ELECT 1U M 50V
C126	403 314 5915	GRM21BR71C474KA01L PT297	C3467	403 207 0317	GRM21BF51C105ZA01L PT297
C127	403 215 2211	GRM188R71H103KA01D PT115	C3476	403 314 5915	GRM21BR71C474KA01L PT297
C128	403 241 3817	ELECT 220U M 10V	C3477	403 248 1618	16 YK 47 M TA 0511
C130	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C3480	403 248 1618	16 YK 47 M TA 0511
C131	403 149 9218	GRM188F51H103ZA01D PT115	C3481	403 248 1618	16 YK 47 M TA 0511
C132	403 153 9112	GRM1885C1H5R0CD01D PT115	C3482	403 149 9218	GRM188F51H103ZA01D PT115
C133	403 153 9112	GRM1885C1H5R0CD01D PT115	C3483	403 149 9218	GRM188F51H103ZA01D PT115
C134	403 153 9310	GRM1885C1H820JZ01D PT115	C3484	403 248 1618	16 YK 47 M TA 0511
C135	403 215 2211	GRM188R71H103KA01D PT115	C3485	403 149 9218	GRM188F51H103ZA01D PT115
C136	403 215 2211	GRM188R71H103KA01D PT115	C3486	403 248 1410	ELECT 1U M 50V
C137	403 215 2211	GRM188R71H103KA01D PT115	C3487	403 248 1410	ELECT 1U M 50V
C138	403 215 2211	GRM188R71H103KA01D PT115	C3492	403 149 9218	GRM188F51H103ZA01D PT115
C139	403 069 8315	CERAMIC 0.01U Z 50V	C3493	403 149 9218	GRM188F51H103ZA01D PT115
C140	403 178 9319	POLYESTER 0.01U J 50V	C3494	403 164 0214	GRM188F51E104ZA01D PT115
C141	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C3495	403 164 0214	GRM188F51E104ZA01D PT115
C143	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C3519	403 149 9218	GRM188F51H103ZA01D PT115
C144	403 323 8815	GRM21BF51C225ZA01K PT115	C422	403 299 3210	POLYPRO 0.027U J 400V
C146	403 248 1618	16 YK 47 M TA 0511	C423	404 079 1607	DKRG1.5KV123HFC SHINEI
C161	403 215 2211	GRM188R71H103KA01D PT115	C424	403 299 3012	POLYPRO 0.015U J 400V
C1900	403 038 1633	ELECT 100U M 6.3V	C431	403 215 2518	GRM21BB11H563KA01L
C1919	403 215 2211	GRM188R71H103KA01D PT115	C432	403 075 7111	DD07-959B102K500 P333
C202	403 113 4119	GRM188R71H222KA01D PT115	C433	403 076 3112	DD11-959B392K500 P333
C203	403 314 5915	GRM21BR71C474KA01L PT297	C434	403 054 0703	ELECT 47U M 35V
C205	403 149 9218	GRM188F51H103ZA01D PT115	C437	403 066 6106	MT-POLYEST 0.47U J 250V
C206	403 215 2211	GRM188R71H103KA01D PT115	C441	403 309 2100	POLYPRO 0.3U J 400V
C207	403 215 2211	GRM188R71H103KA01D PT115	C445	403 233 0817	ELECT 10U M 50V
C208	403 248 1618	16 YK 47 M TA 0511	C450	403 195 8408	ELECT 2.2U M 50V
C209	403 207 0317	GRM21BF51C105ZA01L PT297	C451	404 063 5703	NP-ELECT 100NA1ROMTA-5X11
C210	403 207 0317	GRM21BF51C105ZA01L PT297	C463	408 173 8208	POLYESTER 6800P K 100V
C211	403 049 4204	ELECT 10U M 50V	C466	403 188 0818	MT-POLYEST 2.2U J 100V
C213	403 248 1618	16 YK 47 M TA 0511	C468	403 217 1103	ELECT 22U M 50V
C216	403 233 0817	ELECT 10U M 50V	C482	403 159 7409	MT-POLYEST 0.1U K 250V
C217	403 155 1619	GRM1885C1H330JZ01D PT115	C501	403 194 3800	ELECT 2200U M 25V
C218	403 215 2211	GRM188R71H103KA01D PT115	C502	403 217 1103	ELECT 220U M 35V
C219	403 215 2419	GRM188R71H153KA01D PT115	C503	403 139 7514	GRM1885C1H390JD01D PT115
C220	403 248 1410	50 YK 1R0 M TA 0511	C510	403 149 9218	GRM188F51H103ZA01D PT115
C221	403 215 2211	GRM188R71H103KA01D PT115	C512	403 194 3800	ELECT 2200U M 25V
C222	403 215 2211	GRM188R71H103KA01D PT115	C513	403 049 4204	ELECT 10U M 50V
C223	403 215 2211	GRM188R71H103KA01D PT115	C514	403 049 4204	ELECT 10U M 50V
C230	403 269 5916	GRM219R71C224KC01D PT115	C528	403 164 0214	GRM188F51E104ZA01D PT115
C231	403 113 4119	GRM188R71H222KA01D PT115	C600	403 076 4010	CERAMIC 4700P K 500V
C232	403 233 3818	GRM1885C1H100JD01D PT115	C601	403 360 5706	B81130-C1104M-000 M POLYE
C233	403 248 1618	16 YK 47 M TA 0511	C602	403 360 5706	B81130-C1104M-000 M POLYE
C234	403 164 0214	GRM188F51E104ZA01D PT115	C603	403 076 6727	DEBB33A102KP3A P335
C235	403 164 0214	GRM188F51E104ZA01D PT115	C604	403 076 6727	DEBB33A102KP3A P335
C236	403 164 0214	GRM188F51E104ZA01D PT115	C607	404 079 8002	ELECT LP5-400V151MS24Z1
C237	403 164 0214	GRM188F51E104ZA01D PT115	C613	403 179 1213	POLYESTER 4700P J 50V
C238	403 139 6913	GRM1885C1H1R0JD01D PT115	C614	403 237 8057	MT-COMPO 0.1U J 50V
C241	403 067 7895	MT-COMPO 0.47 J 50V	C615	403 179 3217	POLYESTER 0.015U J 50V
C242	403 207 0317	GRM21BF51C105ZA01L PT297	C616	403 246 8708	CERAMIC 1000P K 2K
C243	403 314 5915	GRM21BR71C474KA01L PT297	C617	403 179 2418	POLYESTER 0.022U K 50V
C251	403 207 0317	GRM21BF51C105ZA01L PT297	△ C631	404 073 4505	DE1E3KX222MB5BC05
C255	403 149 9218	GRM188F51H103ZA01D PT115	C633	403 214 4404	ELECT 470U M 35V
C261	403 164 0214	GRM188F51E104ZA01D PT115	C637	403 161 2607	ELECT 2200U M 35V
C262	403 164 0214	GRM188F51E104ZA01D PT115	C640	403 148 0701	ELECT 2200U M 25V
C263	403 207 0317	GRM21BF51C105ZA01L PT297	C641	403 222 1303	CERAMIC 1000P K 1K
C3411	403 157 3611	GRM1885C1H101JZ01D PT115	C642	404 085 6900	200YXF100MCA 100U M 200V
C3412	403 157 3611	GRM1885C1H101JZ01D PT115	C643	403 113 3815	GRM188R71H102KA01D PT115
C3413	403 157 3611	GRM1885C1H101JZ01D PT115	C647	403 157 6810	GRM188R71H681KD01D PT115
C3414	403 157 3611	GRM1885C1H101JZ01D PT115	C646	403 165 6126	DEHR33A471KP3A P335
C3441	403 279 4312	GRM21BR71C334KA01L PT297	C648	403 038 1603	ELECT 100V M 6.3V
C3442	403 279 4312	GRM21BR71C334KA01L PT297	C649	403 195 8804	ELECT 100U M 16V
C3443	403 279 4312	GRM21BR71C334KA01L PT297	C650	403 038 9708	ELECT 330U M 6.3V
C3444	403 279 4312	GRM21BR71C334KA01L PT297	C666	403 248 1618	16 YK 47 M TA 0511
C3452	403 314 5915	GRM21BR71C474KA01L PT297	C682	403 258 3619	ELECT 33U M 25V
C3453	403 157 2911	GRM1885C1H470JZ01D PT115	C685	403 248 1410	50 YK 1R0 M TA 0511
C3454	403 164 0214	GRM188F51E104ZA01D PT115	C801	403 149 9218	GRM188F51H103ZA01D PT115
C3456	403 164 0214	GRM188F51E104ZA01D PT115	C802	403 248 1618	16 YK 47 M TA 0511

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C803	403 164 0214	GRM188F51E104ZA01D PT115	D641	407 149 0817	DIODE 1SS355-TE-17
C807	403 164 0214	GRM188F51E104ZA01D PT115	△ D642	407 009 8915	DIODE RU3M
C810	403 269 5916	GRM219R71C224KC01D PT115	D643	407 149 0817	DIODE 1SS355-TE-17
C811	403 049 4204	ELECT 10U M 50V	D644	407 149 0817	DIODE 1SS355-TE-17
C812	403 164 0214	GRM188F51E104ZA01D PT115	D645	407 099 5521	ZENER DIODE MTZJ-T72-6. 2C
C814	403 155 2210	GRM188R71H332KA01D PT115	D646	407 149 0817	DIODE 1SS355-TE-17
C816	403 155 2319	GRM188R71H472KA01D PT115	D647	407 149 0817	DIODE 1SS355-TE-17
C817	403 145 9915	GRM1885C1H220JZ01D PT115	D663	407 063 8329	Z. DIODE MTZJ-T72-11C
C818	403 155 2319	GRM188R71H472KA01D PT115	D666	407 063 8923	ZENER DIODE MTZJ-T72-5. 6C
C819	403 145 9915	GRM1885C1H220JZ01D PT115	D683	407 149 0817	DIODE 1SS355-TE-17
C822	403 113 4119	GRM188R71H222KA01D PT115	D685	407 099 5620	ZENER DIODE MTZJ-T72-6. 8A
C824	403 153 9310	GRM1885C1H820JZ01D PT115	D692	407 012 4426	DIODE 1SS133-T-72
C826	403 051 0607	ELECT 4. 7U M 50V	D826	407 099 4821	Z DIODE MTZJ-T72-4. 3B
C827	403 260 3030	ECQ-V1H564JL3 0. 56U J 50V			
C833	403 157 2515	GRM1885C1H270JZ01D PT115	INTEGRATED CIRCUIT		
C834	403 157 2515	GRM1885C1H270JZ01D PT115	IC001	409 301 4906	IC TDA7263M
C835	403 155 2319	GRM188R71H472KA01D PT115	IC001-1	610 251 4186	AUDIO HEATSINK ASSY E7PC
C861	403 155 1312	GRM1885C1H151JZ01D PT115	IC1201	409 161 3408	IC
DIODE			IC201	409 535 4218	IC TB1262F (DRY) V2. 6
D041	408 007 8607	DIODE 1N4148	IC3451	409 476 5411	IC TDA9875AH/V2-557 TRAYS
D1002	407 206 5618	ZENER D. UDZS-TE-1710B	IC501	409 453 5905	IC LA78041
D1003	407 206 5618	ZENER D. UDZS-TE-1710B	IC501-1	610 299 1215	ASSY, HEAT SINK V -C3HF
D1007	407 206 5618	ZENER D. UDZS-TE-1710B	IC641	409 265 4806	IC L78M05CV
D1008	407 206 5618	ZENER D. UDZS-TE-1710B	IC642	409 377 5401	IC L78M09CV ST
D101	407 100 0333	Z DIODE MTZJ36B 52MM	IC643	409 265 4806	IC L78M05CV
D1010	407 206 5618	ZENER D. UDZS-TE-1710B	IC801-1	QST92T195C8B1	ST92T195C8B1/PFY
D1021	407 206 5618	ZENER D. UDZS-TE-1710B	IC803	409 383 6805	IC 24LC08B/P
D1022	407 206 5618	ZENER D. UDZS-TE-1710B	COIL		
D1025	407 206 5618	ZENER D. UDZS-TE-1710B	L1003	652 000 1718	PIPE CORE
D1026	407 206 5618	ZENER D. UDZS-TE-1710B	L1017	652 000 1718	PIPE CORE
D1041	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W	L1202	645 003 8525	P. COIL LAL02TB4R7K 52MM
D1042	401 105 0613	MT-GLAZE 10K JA 1/16W	L1204	645 003 8525	P. COIL LAL02TB4R7K 52MM
D1051	407 063 8329	Z. DIODE MTZJ-T72-11C	L1205	645 003 8525	P. COIL LAL02TB4R7K 52MM
D1052	407 206 5618	ZENER D. UDZS-TE-1710B	L1206	645 003 8525	P. COIL LAL02TB4R7K 52MM
D1202	407 206 5618	ZENER D. UDZS-TE-1710B	L231	645 003 8402	P. COIL LAL02TB220K 52MM
D1203	407 206 5618	ZENER D. UDZS-TE-1710B	L242	645 006 4340	P. COIL LAL02TB2R2K 52MM
D131	407 166 1118	DIODE 1SS356-TW11	L243	645 006 4340	P. COIL LAL02TB2R2K 52MM
D132	407 166 1118	DIODE 1SS356-TW11	L244	645 006 4340	P. COIL LAL02TB2R2K 52MM
D1901	407 116 6504	LED SLP-181B-51	L3452	645 006 4340	P. COIL LAL02TB2R2K 52MM
D1901A	610 269 4710	HOLDER LED A-G2CA	L3456	645 006 4340	P. COIL LAL02TB2R2K 52MM
D3441	407 206 5618	ZENER D. UDZS-TE-1710B	L3457	645 006 4340	P. COIL LAL02TB2R2K 52MM
D3442	407 206 5618	ZENER D. UDZS-TE-1710B	L3459	645 018 9999	INDUCTOR, 120U
D3443	407 206 5618	ZENER D. UDZS-TE-1710B	L3469	645 003 8525	P. COIL LAL02TB4R7K 52MM
D3444	407 206 5618	ZENER D. UDZS-TE-1710B	L431	645 052 5940	C9HB-1R0K-R INDUCT 1. 0UH
△ D431	407 063 9623	ZENER DIODE MTZJ-T72-9. 1A	L432	645 033 2722	BEAD CORE TAIYO YUDEN 52M
△ D438	407 095 8001	DIODE ERD07-15L	L441	645 036 7380	COIL, LINEARITY
D439	407 007 7613	DIODE EU2	L442	610 219 0342	COIL
D442	408 007 8607	DIODE 1N4148	L461	645 005 5645	AR635LY-1038K 2200UHK
D445	407 012 4426	DIODE 1SS133-T-72	L462	610 208 3781	COIL 349UH
D446	407 063 9425	ZENER DIODE MTZJ-T72-8. 2A	L601	645 050 3085	HF2836-163Y1R7-T01 TDK
D466	407 099 7822	ZENER DIODE MTZJ-T72-20A	L607	652 000 1817	PIPE CORE BF2030RTM TAPED
D469	407 007 7415	DIODE EU1 52MM	L608	652 000 1817	PIPE CORE BF2030RTM TAPED
D481	407 007 7415	DIODE EU1 52MM	L635	652 000 1718	PIPE CORE
D482	407 012 4426	DIODE 1SS133-T-72	L641	652 000 9943	PIPE CORE
D501	407 005 8632	DIODE ERA15-02-V1	L801	645 008 2887	P. COIL LAL02TB5R6K 52MM
D502	407 118 2217	ZENER DIODE 1Z75	L802	645 008 2887	P. COIL LAL02TB5R6K 52MM
D603	407 006 6310	DIODE ERC05-10B	L803	645 008 2887	P. COIL LAL02TB5R6K 52MM
D604	407 006 6310	DIODE ERC05-10B	L861	645 008 2887	P. COIL LAL02TB5R6K 52MM
D605	407 006 6310	DIODE ERC05-10B	TRANSISTOR		
D606	407 006 6310	DIODE ERC05-10B	Q002	406 017 2400	TR BC847B, 215 3000/REEL
D614	408 007 8607	DIODE 1N4148	Q042	406 017 2400	TR BC847B, 215 3000/REEL
△ D615	407 173 2907	PHOTO COUPLE PC123F2	Q043	406 017 2103	TR BC857B, 215 3000/REEL
D616	408 007 8607	DIODE 1N4148	Q1041	406 017 2400	TR BC847B, 215 3000/REEL
D617	407 007 6616	DIODE ES1	Q1042	406 017 2103	TR BC857B, 215 3000/REEL
D618	408 007 8607	DIODE 1N4148	Q1202	406 017 2400	TR BC847B, 215 3000/REEL
D619	407 063 8329	Z. DIODE MTZJ-T72-11C	Q1206	406 017 2400	TR BC847B, 215 3000/REEL
D630	407 007 7613	DIODE EU2	Q121	406 017 2400	TR BC847B, 215 3000/REEL
△ D633	407 166 2303	DIODE ERC-91-02L	Q133	406 017 2400	TR BC847B, 215 3000/REEL
△ D635	407 129 6706	DIODE RU4YX LF-L1	Q141	405 015 9721	TR 2SC2814-F4-TB
D637	407 012 4426	DIODE 1SS133-T-72			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q151	406 017 2400	TR BC847B, 215 3000/REEL	R1017	401 113 4412	MT- GLAZE 75 JA 1/16W
Q152	406 017 2400	TR BC847B, 215 3000/REEL	R1018	401 027 6638	CARBON 75 JA 1/6W 52MM
Q153	406 017 2103	TR BC857B, 215 3000/REEL	R1019	401 113 4412	MT- GLAZE 75 JA 1/16W
Q161	406 017 2400	TR BC847B, 215 3000/REEL	R102	401 105 0415	MT- GLAZE 100 JA 1/16W
Q162	406 017 2400	TR BC847B, 215 3000/REEL	R1020	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
Q211	406 017 2103	TR BC857B, 215 3000/REEL	R1021	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
Q242	406 017 2103	TR BC857B, 215 3000/REEL	R1022	401 105 5915	MT- GLAZ 560 JA 1/16W
Q243	406 017 2103	TR BC857B, 215 3000/REEL	R1023	401 105 5915	MT- GLAZE 560 JA 1/16W
Q244	406 017 2103	TR BC857B, 215 3000/REEL	△ R103	401 061 4400	OXI DE- MT 33K JA 1W
Q3452	406 017 2400	TR BC847B, 215 3000/REEL	R1041	401 105 2914	MT- GLAZE 22K JA 1/16W
Q3453	406 017 2400	TR BC847B, 215 3000/REEL	R1042	401 024 6730	CARBON 100 JA 1/6W 52MM
Q3454	406 017 2400	TR BC847B, 215 3000/REEL	R1043	401 105 5311	MT- GLAZE 4. 7K JA 1/16W
Q3455	406 017 2400	TR BC847B, 215 3000/REEL	R1201	401 105 3218	MT- GLAZE 270 JA 1/16W
Q431	405 018 0616	TR 2SC3332- S	R1203	401 105 3218	MT- GLAZE 270 JA 1/16W
Q432	405 171 4404	S2055N (LBSAN, M) LB303A	R1207	401 027 6638	CARBON 75 JA 1/6W 52MM
Q432- 1	610 252 1108	H HEAT SINK E7LC	R1215	401 105 0415	MT- GLAZE 100 JA 1/16W
Q461	405 052 8002	TR 2SB1274- R	R1217	401 105 5212	MT- GLAZE 470 JA 1/16W
Q461- 1	610 251 5916	HEAT SINK PCC E7LC	R1226	401 105 0514	MT- GLAZE 1K JA 1/16W
Q462	406 007 2007	TR JC546B	R1227	401 105 3218	MT- GLAZE 270 JA 1/16W
Q501	406 017 2400	TR BC847B, 215 3000/REEL	R123	401 016 9811	CARBON 27JA 1/4W FLAM-RET
Q611	406 007 1802	TR JC556B	R1230	401 105 3218	MT- GLAZE 270 JA 1/16W
Q612	405 058 0208	TR 2SC3807- R- CTV- YA	R124	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
Q613	405 095 0407	TR 2SC4429- L- YB	R127	401 105 5915	MT- GLAZE 560 JA 1/16W
Q613- 1	610 251 5893	POW HEAT SINK E7LC	R136	401 105 0415	MT- GLAZE 100 JA 1/16W
Q641	406 017 2400	TR BC847B, 215 3000/REEL	R137	401 105 5212	MT- GLAZE 470 JA 1/16W
Q651	405 009 7003	TR 2SB985- T	R138	401 105 5212	MT- GLAZE 470 JA 1/16W
Q661	405 009 7003	TR 2SB985- T	R139	401 105 3119	MT- GLAZE 27 JA 1/16W
Q666	406 007 2007	TR JC546B	R140	401 105 5113	MT- GLAZE 47 JA 1/16W
Q682	406 017 2400	TR BC847B, 215 3000/REEL	R141	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
Q685	406 017 2400	TR BC847B, 215 3000/REEL	R142	401 105 0514	MT- GLAZE 1K JA 1/16W
Q686	406 017 2103	TR BC857B, 215 3000/REEL	R143	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
Q691	406 017 2103	TR BC857B, 215 3000/REEL	R144	401 105 2716	MT- GLAZE 220 JA 1/16W
Q692	406 017 2400	TR BC847B, 215 3000/REEL	R145	401 105 8213	MT- GLAZE ERJ 3GEYJ683V
Q802	406 017 2400	TR BC847B, 215 3000/REEL	R146	401 105 2914	MT- GLAZE 22K JA 1/16W
Q804	406 017 2400	TR BC847B, 215 3000/REEL	R147	401 105 0613	MT- GLAZE 10K JA 1/16W
Q805	406 017 2400	TR BC847B, 215 3000/REEL	R148	401 105 0613	MT- GLAZE 10K JA 1/16W
Q807	406 017 2103	TR BC857B, 215 3000/REEL	R149	401 027 2135	CARBON 56 JA 1/6W 52MM
Q871	406 017 2400	TR BC847B, 215 3000/REEL	R150	401 105 4215	MT- GLAZE 33K JA 1/16W
RESISTOR			R152	401 026 1337	CARBON 27K JA 1/6W 52MM
R001	401 026 9333	CARBON 47 JA 1/6W 52MM	R153	401 105 5212	MT- GLAZE 470 JA 1/16W
R002	401 105 5915	MT- GLAZE 560 JA 1/16W	R154	401 105 0613	MT- GLAZE 10K JA 1/16W
R003	401 105 6516	MT- GLAZE 680 JA 1/16W	R157	401 105 0613	MT- GLAZE 10K JA 1/16W
R004	401 105 4116	MT- GLAZE 3. 3K JA 1/16W	R158	401 105 4710	MT- GLAZE 39K JA 1/16W
R005	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R161	401 024 6730	CARBON 100 JA 1/6W 52MM
R006	401 105 4116	MT- GLAZE 3. 3K JA 1/16W	R162	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
R007	401 105 6516	MT- GLAZE 680 JA 1/16W	R163	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
R008	401 026 9333	CARBON 47 JA 1/6W 52MM	R164	401 105 0514	MT- GLAZE 1K JA 1/16W
R011	401 026 8138	CARBON 4. 7 JA 1/6W 52MM	R165	401 105 0514	MT- GLAZE 1K JA 1/16W
R012	401 026 8138	CARBON 4. 7 JA 1/6W 52MM	R1901	401 105 1610	MT- GLAZE 15K JA 1/16W
R014	401 022 1945	CARBON 680 JA 1/4W 52MM	R1902	401 105 7414	MT- GLAZE 8. 2K JA 1/16W
R016	401 022 1945	CARBON 680 JA 1/4W 52MM	R1903	401 105 5311	MT- GLAZE 4. 7K JA 1/16W
R017	401 025 1635	CARBON 1K5 JA 1/6W 52MM	R1905	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
R018	401 025 1635	CARBON 1K5 JA 1/6W 52MM	R1906	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
R041	401 105 0613	MT- GLAZE 10K JA 1/16W	R1908	401 026 3935	CARBON 330 JA 1/6W 52MM
R042	401 105 5410	MT- GLAZE 47K JA 1/16W	R1909	401 105 1511	MT- GLAZE 1. 5K JA 1/16W
R046	401 026 1030	CARBON 2K7 JA 1/6W 52MM	R1910	401 105 0613	MT- GLAZE 10K JA 1/16W
R048	401 105 0613	MT- GLAZE 10K JA 1/16W	R200	401 105 5519	MT- GLAZE 470K JA 1/16W
R1001	401 105 4710	MT- GLAZE 39K JA 1/16W	R201	401 105 5212	MT- GLAZE 470 JA 1/16W
R1002	401 113 4412	MT- GLAZE 75 JA 1/16W	R202	401 105 3416	MT- GLAZE 27K JA 1/16W
R1003	401 027 6638	CARBON 75 JA 1/6W 52MM	R209	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R1005	401 113 4412	MT- GLAZE 75 JA 1/16W	R212	401 026 0637	CARBON 270 JA 1/6W 52MM
R1007	401 113 4412	MT- GLAZE 75 JA 1/16W	R213	401 105 0712	MT- GLAZE 100K JA 1/16W
R1009	401 113 4412	MT- GLAZE 75 JA 1/16W	R214	401 024 6730	CARBON 100 JA 1/6W 52MM
R101	401 105 0415	MT- GLAZE 100 JA 1/16W	R215	401 024 6730	CARBON 100 JA 1/6W 52MM
R1011	401 113 4412	MT- GLAZE 75 JA 1/16W	R216	401 105 5311	MT- GLAZE 4. 7K JA 1/16W
R1012	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R217	401 105 0613	MT- GLAZE 10K JA 1/16W
R1013	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R218	401 105 0514	MT- GLAZE 1K JA 1/16W
R1014	401 105 5915	MT- GLAZE 560 JA 1/16W	R230	401 105 4215	MT- GLAZE 33K JA 1/16W
R1015	401 105 5915	MT- GLAZE 560 JA 1/16W	R233	401 105 0613	MT- GLAZE 10K JA 1/16W
R1016	401 105 4710	MT- GLAZE 39K JA 1/16W	R234	401 105 0415	MT- GLAZE 100 JA 1/16W
			R238	401 105 2815	MT- GLAZE 2. 2K JA 1/16W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R239	401 105 0415	MT- GLAZE 100 JA 1/16W	R542	401 105 6615	MT- GLAZE ERJ 3GEYJ682V
R240	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	△ R602	402 067 8904	WIRE WOUND 3. 9 KA 5W
R241	401 105 0415	MT- GLAZE 100 JA 1/16W	R611	401 027 2630	CARBON 5K6 JA 1/6W 52MM
R242	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R615	401 025 8238	CARBON 22K JA 1/6W 52MM
R243	401 105 0415	MT- GLAZE 100 JA 1/16W	R617	401 024 9335	CARBON 1K2 JA 1/6W 52MM
R246	401 105 4710	MT- GLAZE 39K JA 1/16W	R619	401 016 1548	CARBON 22 JA 1/4W 52MM
R247	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R620	401 007 5815	CARBON 120K JA 1/2W
R248	401 105 7513	MT- GLAZE 82K JA 1/16W	R621	401 007 5815	CARBON 120K JA 1/2W
R250	401 026 9937	CARBON 4K7 JA 1/6W 52MM	R622	401 014 5251	CARBON 15K JA 1/4W 52MM
R251	401 105 1214	MT- GLAZE 120K JA 1/16W	R623	401 026 4338	CARBON 3K3 JA 1/6W 52MM
R253	401 024 7737	CARBON 100K JA 1/6W 52MM	△ R625	401 065 9609	OXIDE- MT 18 JA 2W
R254	401 024 7737	CARBON 100K JA 1/6W 52MM	R626	401 065 9609	OXIDE- MT 18 JA 2W
R255	401 105 8114	MT- GLAZE 56K JA 1/16W	△ R628	401 068 6902	OXIDE- MT 56 JA 2W
R256	401 105 0514	MT- GLAZE 1K JA 1/16W	△ R631	402 000 8602	SOLID 5. 6M KA 1/2W 52AMMO
R257	401 105 0514	MT- GLAZE 1K JA 1/16W	△ R632	402 000 8602	SOLID 5. 6M KA 1/2W 52AMMO
R258	401 105 0514	MT- GLAZE 1K JA 1/16W	R636	401 024 7440	CARBON 10K JA 1/6W 52MM
R263	401 105 0613	MT- GLAZE 10K JA 1/16W	△ R637	402 067 3305	WIRE WOUND 4. 7 KA 5W
R264	401 105 0415	MT- GLAZE 100 JA 1/16W	R641	401 113 6515	MT- GLAZE 6. 2K JA 1/16W
R3441	401 105 0613	MT- GLAZE 10K JA 1/16W	R642	401 014 6159	CARBON 150K JA 1/4W 52MM
R3442	401 105 0613	MT- GLAZE 10K JA 1/16W	R643	401 009 3116	CARBON 3. 3JA 1/2W 52MM
R3443	401 105 0613	MT- GLAZE 10K JA 1/16W	△ R644	401 065 9609	OXIDE- MT 18 JA 2W
R3444	401 105 0613	MT- GLAZE 10K JA 1/16W	R645	401 016 4846	CARBON 22K JA 1/4W 52MM
R3451	401 024 6730	CARBON 100 JA 1/6W 52MM	R646	401 015 4748	CARBON 180K JA 1/4W 52MM
R3452	401 024 6730	CARBON 100 JA 1/6W 52MM	R647	401 011 2718	CARBON 68K JA 1/2W
R3453	401 105 0613	MT- GLAZE 10K JA 1/16W	△ R648	401 067 4206	OXIDE- MT 33 JA 2W
R3471	401 105 3218	MT- GLAZE 270 JA 1/16W	R651	401 012 7059	CARBON 10K JA 1/4W 52MM
R3473	401 105 5212	MT- GLAZE 470 JA 1/16W	R652	401 021 3059	CARBON 5. 6K JA 1/4W 52MM
R3474	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R653	401 105 2914	MT- GLAZE 22K JA 1/16W
R3475	401 105 5212	MT- GLAZE 470 JA 1/16W	R654	401 105 0613	MT- GLAZE 10K JA 1/16W
R3476	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R661	401 105 0613	MT- GLAZE 10K JA 1/16W
R3485	401 105 5212	MT- GLAZE 470 JA 1/16W	R663	401 013 5351	CARBON 1K2 JA 1/4W 52MM
R3486	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R666	401 062 5109	OXIDE- MT 56 JA 1W
R3487	401 105 5212	MT- GLAZE 470 JA 1/16W	R667	401 027 2333	CARBON 560 JA 1/6W 52MM
R3488	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R668	401 008 8627	CARBON 220K JA 1/2W
△ R430	401 065 2808	OXIDE- MT 120 JA 2W	R681	401 105 0613	MT- GLAZE 10K JA 1/16W
R432	401 105 0514	MT- GLAZE 1K JA 1/16W	R686	401 016 5853	CARBON 220K JA 1/4W 52MM
R433	401 007 1134	CARBON 1K JA 1/2W	R687	401 105 6110	MT- GLAZE 560K JA 1/16W
R434	401 105 0415	MT- GLAZE 100 JA 1/16W	R688	401 105 0613	MT- GLAZE 10K JA 1/16W
△ R435	402 068 0204	WIRE WOUND 10 JA 5W	R689	401 105 2914	MT- GLAZE 22K JA 1/16W
R436	401 012 7059	CARBON 10K JA 1/4W 52MM	R691	401 013 4245	CARBON 120 JA 1/4W 52MM
R437	401 105 4017	MT- GLAZE 330 JA 1/16W	R692	401 024 7440	CARBON 10K JA 1/6W 52MM
△ R441	401 058 3706	OXIDE- MT 1K JA 1W	R694	401 027 8632	CARBON 8K2 JA 1/6W 52MM
R447	401 026 9937	CARBON 4K7 JA 1/6W 52MM	R696	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R448	401 009 5843	CARBON 330 JA 1/2W	R808	401 105 0415	MT- GLAZE 100 JA 1/16W
R450	401 025 1932	CARBON 15K JA 1/6W 52MM	R815	401 024 6730	CARBON 100 JA 1/6W 52MM
△ R451	401 067 3100	OXIDE- MT 3. 9 JA 2W	R821	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R453	401 024 7034	CARBON 1K JA 1/6W 52MM	R822	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R454	401 014 6159	CARBON 150K JA 1/4W 52MM	R823	401 024 6730	CARBON 100 JA 1/6W 52MM
R455	401 018 5841	CARBON 330K JA 1/4W 52MM	R824	401 024 6730	CARBON 100 JA 1/6W 52MM
R461	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R826	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R462	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R829	401 105 4215	MT- GLAZE 33K JA 1/16W
R464	401 026 9937	CARBON 4K7 JA 1/6W 52MM	R830	401 105 4215	MT- GLAZE 33K JA 1/16W
R469	401 026 1337	CARBON 27K JA 1/6W 52MM	R831	401 105 0613	MT- GLAZE 10K JA 1/16W
R470	401 025 0034	CARBON 120K JA 1/6W 52MM	R832	401 105 0613	MT- GLAZE 10K JA 1/16W
R471	401 027 5235	CARBON 680 JA 1/6W 52MM	R834	401 027 0339	CARBON 47K JA 1/6W 52MM
R473	401 027 5235	CARBON 680 JA 1/6W 52MM	R835	401 026 7032	CARBON 3K9 JA 1/6W 52MM
R474	401 009 0927	CARBON 270 JA 1/2W	R838	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R480	401 008 3810	CARBON 2. 2 JB . 5W FLAMPRO	R839	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R481	401 016 5853	CARBON 220K JA 1/4W 52MM	R840	401 105 0514	MT- GLAZE 1K JA 1/16W
R482	401 027 5532	CARBON 6K8 JA 1/6W 52MM	R842	401 105 1610	MT- GLAZE 15K JA 1/16W
R504	401 105 8114	MT- GLAZE 56K JA 1/16W	R843	401 105 7315	MT- GLAZE 820 JA 1/16W
R505	401 027 5532	CARBON 6K8 JA 1/6W 52MM	R844	401 105 7315	MT- GLAZE 820 JA 1/16W
R506	401 025 4636	CARBON 18K JA 1/6W 52MM	R845	401 105 7315	MT- GLAZE 820 JA 1/16W
R507	401 027 8137	CARBON 82 JA 1/6W 52MM	R847	401 105 6516	MT- GLAZE 680 JA 1/16W
R508	401 024 9731	CARBON 12K JA 1/6W 52MM	R848	401 105 6516	MT- GLAZE 680 JA 1/16W
R509	401 057 7507	OXIDE- MT 0. 82 JA 1W	R849	401 105 6516	MT- GLAZE 680 JA 1/16W
△ R512	401 062 1200	OXIDE- MT 470 JA 1W	R851	401 105 1917	MT- GLAZE 180 JA 1/16W
R513	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R852	401 105 3416	MT- GLAZE 27K JA 1/16W
R514	401 105 7414	MT- GLAZE 8. 2K JA 1/16W	R853	401 105 2914	MT- GLAZE 22K JA 1/16W
R518	401 062 1200	OXIDE- MT 470 JA 1W	R854	401 026 9937	CARBON 4K7 JA 1/6W 52MM
R523	401 105 6011	MT- GLAZE 5. 6K JA 1/16W	R855	401 105 6615	MT- GLAZE ERJ 3GEYJ682V
R528	401 105 4710	MT- GLAZE 39K JA 1/16W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R856	401 105 6011	MT- GLAZE 5. 6K JA 1/16W	J321	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R857	401 105 4215	MT- GLAZE 33K JA 1/16W	J336	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R859	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	J339	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R860	401 105 3218	MT- GLAZE 270 JA 1/16W	J342	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R861	401 105 6516	MT- GLAZE 680 JA 1/16W	J355	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R862	401 105 7414	MT- GLAZE 8. 2K JA 1/16W	J358	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R863	401 105 1610	MT- GLAZE 15K JA 1/16W	J408	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R872	401 105 0613	MT- GLAZE 10K JA 1/16W	J416	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R873	401 105 0613	MT- GLAZE 10K JA 1/16W	J430	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R874	401 026 9630	CARBON 470 JA 1/6W 52MM	J481	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R875	401 026 9630	CARBON 470 JA 1/6W 52MM	J617	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R876	401 105 4512	MT- GLAZE 390 JA 1/16W	J622	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R877	401 105 1016	MT- GLAZE 1. 2K JA 1/16W	J631	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R878	401 105 0514	MT- GLAZE 1K JA 1/16W	J691	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R880	401 105 4710	MT- GLAZE 39K JA 1/16W	J820	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R881	401 024 7034	CARBON 1K JA 1/6W 52MM	J821	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
TRANSFORMER			J822	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
T431	645 053 3341	TRANS, DRIVE TU- 16 L- 1490	J827	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
△ T451	645 038 7616	TRANS, FLYBACK EB6 4X3 28	J828	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
△ T611	645 060 2214	TRANS	J829	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
MISCELLANEOUS			J830	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
A101	645 052 6947	TUNER, U/V	KCPA	645 006 1905	HSG PLUG 5P S5B- XH- A JST
F601	423 022 2102	FUSE 250V 4. 0A	KDY- 1	645 008 4058	TERMI NAL PLUG
F601A	645 040 3576	HOLDER, FUSE EYF- 52BC PANA	KDY- 3	645 008 4058	TERMI NAL PLUG
F601B	645 040 3576	HOLDER, FUSE EYF- 52BC PANA	KDY- 5	645 008 4058	TERMI NAL PLUG
JS104	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KDY- 6	645 008 4058	TERMI NAL PLUG
JS109	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KE- 1	645 008 4058	TERMI NAL PLUG
JS121	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KE- 2	645 008 4058	TERMI NAL PLUG
JS122	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KEM2	645 008 4058	TERMI NAL PLUG
JS1401	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KF- 1	645 008 4058	TERMI NAL PLUG
JS1402	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KF- 2	645 008 4058	TERMI NAL PLUG
JS1403	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KL	645 004 2881	PLUG, 2P
JS121	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KP	645 008 7288	HOUSING PLUG 5P
JS122	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KQ	645 008 7264	HOUSING PLUG 3P
JS1401	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KR- 1	645 008 4058	TERMI NAL PLUG
JS1402	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	KR- 2	645 008 4058	TERMI NAL PLUG
JS1403	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	K1001	645 005 5867	21- PIN SOCKET
JS3471	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	K1002	645 005 5867	21- PIN SOCKET
JS3480	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	PS601	408 046 4301	PTDAA1BF4R5Q200 MURATA
JS443	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	QR1044	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
JS601	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	RL691	645 030 5597	RELAY
JS806	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	SW1901	610 011 2698	SWI TCH, PUSH
J004	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	SW1902	610 011 2698	SWI TCH, PUSH
J005	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	SW1903	610 011 2698	SWI TCH, PUSH
J006	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	SW1904	610 011 2698	SWI TCH, PUSH
J007	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	SW501	610 011 2728	LEVER SWI TCH
J102	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	SW601	645 050 4129	SW, PUSH POWER SDKVA30100
J106	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	TP- A	645 008 4058	TERMI NAL PLUG
J109	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	TP- B	645 008 4058	TERMI NAL PLUG
J110	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	T131	610 037 4508	S COIL
J1219	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	VR641	645 003 5579	VR, RH063MCJ3R 2K2 ALPS
J137	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	X131	421 008 0906	SAW F TSB6315T
J138	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	X132	421 002 2609	SAW F TSF5315
J204	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	X231	645 025 1139	XTAL4. 433619MHZ 16PF TAPE
J214	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	X3451	645 058 9898	XTAL 24. 576MHZ TAPED KSS
J215	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	X801	610 282 0201	XTAL. OSC 4. 00MHZ 5MM
J216	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	Z101	610 282 9693	SHD. CASE EB6 6 CUTT+5HOLE
J217	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	Z102	610 282 9709	SHI ELD CASE C2HC- B
J218	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	1AA0B10H062Z0 ASSY,PWB,CRT C5WBL		
J219	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	CAPACITOR		
J220	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	C702	403 074 5712	CERAMI C 560P K 50V
J224	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	C712	403 074 5712	CERAMI C 560P K 50V
J225	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	C722	403 074 5712	CERAMI C 560P K 50V
J235	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	C732	403 074 5712	CERAMI C 560P K 50V
J247	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	C733	610 237 2328	PIPE CORE
J251	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	C735	403 055 8401	ELECT 22U M 250V
J317	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W			
J320	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
DIODE					
D701	407 012 4426	DIODE 1SS133-T-72			
D711	407 012 4426	DIODE 1SS133-T-72			
D721	407 012 4426	DIODE 1SS133-T-72			
D751	407 012 4426	DIODE 1SS133-T-72			
TRANSISTOR					
Q701	405 041 6507	TR 2SC2621-D-RA			
Q711	405 041 6507	TR 2SC2621-D-RA			
Q721	405 041 6507	TR 2SC2621-D-RA			
Q740	406 007 1901	TR JC556A			
Q751	406 007 1901	TR JC556A			
RESISTOR					
R702	401 025 7439	CARBON 220 JA 1/6W 52MM			
△ R704	401 065 4604	OXIDE-MT 12K JA 2W			
R705	401 009 6622	CARBON 3.3K JA 1/2W			
R712	401 025 7439	CARBON 220 JA 1/6W 52MM			
△ R714	401 065 4604	OXIDE-MT 12K JA 2W			
R715	401 009 6622	CARBON 3.3K JA 1/2W			
R722	401 025 7439	CARBON 220 JA 1/6W 52MM			
△ R724	401 065 4604	OXIDE-MT 12K JA 2W			
R725	401 009 6622	CARBON 3.3K JA 1/2W			
R741	401 024 9335	CARBON 1K2 JA 1/6W 52MM			
R742	401 027 5532	CARBON 6K8 JA 1/6W 52MM			
R744	401 027 5235	CARBON 680 JA 1/6W 52MM			
R752	401 024 7440	CARBON 10K JA 1/6W 52MM			
R753	401 024 7440	CARBON 10K JA 1/6W 52MM			
R756	401 026 9630	CARBON 470 JA 1/6W 52MM			
R758	401 026 9630	CARBON 470 JA 1/6W 52MM			
R759	401 026 9630	CARBON 470 JA 1/6W 52MM			
MISCELLANEOUS					
K7D1	645 008 4058	TERMINAL PLUG			
K7M	645 008 4058	TERMINAL PLUG			
K7P	645 008 7288	HOUSING PLUG 5P			
K7Q	645 008 7264	HOUSING PLUG 3P			
△ K701	645 031 7699	CRT SKT. HPS-014103			
OUT OF CIRCUIT-013C5WZL					
COIL					
△ L901	645 060 9855	PRE-FORM, D-COIL, 28-TOTOKU			
PICTURE TUBE					
△ Q901	414 011 0308	PHILIPS A66EAK075X11 CLR			
MISCELLANEOUS					
△ SP901	652 000 0663	SPEAKER 8 OHM 3 WATT 5*9			
△ SP902	652 000 0663	SPEAKER 8 OHM 3 WATT 5*9			
△ W901	645 012 7632	EURO PLUG +2P HOUSE @ 2.1			
W902	610 204 6090	GROUNDING CONNECTOR-D8ZL			
<div>All information in this manual is correct at the start of production. Sanyo reserves the right to modify components and procedures in order to comply with their continuous improvement policy.</div>					