



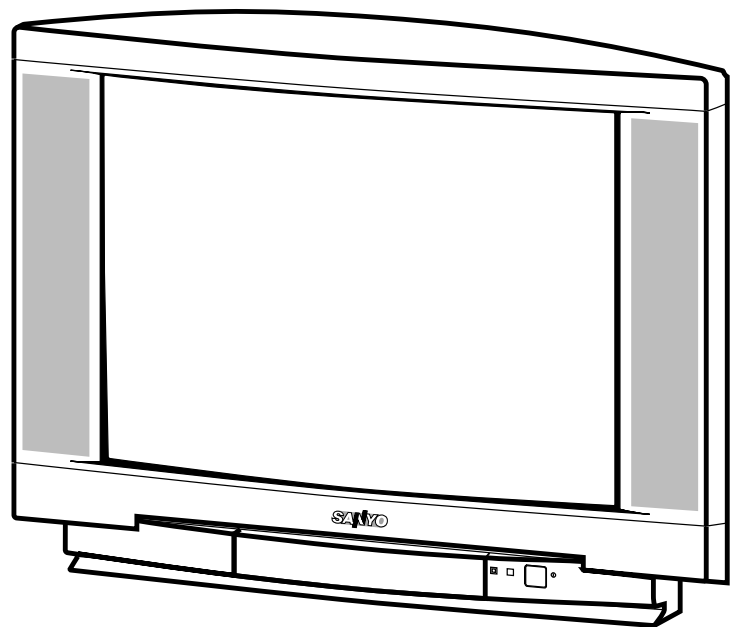
Colour Television Service Manual

CE21D5-c

Model CE21D5-C

Service Ref. No. CE21D5-C-00
CE21D5-C-01
CE21D5-C-02

PRODUCT CODE: 111351115
ORIGINAL VERSION: Chassis No. EB6-A



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

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SAFETY PRECAUTION

- 1: An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
- 3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc. Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

The primary source of X-RADIATION in the television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage adjustment to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark \triangle in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark \triangle . No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark \triangle .

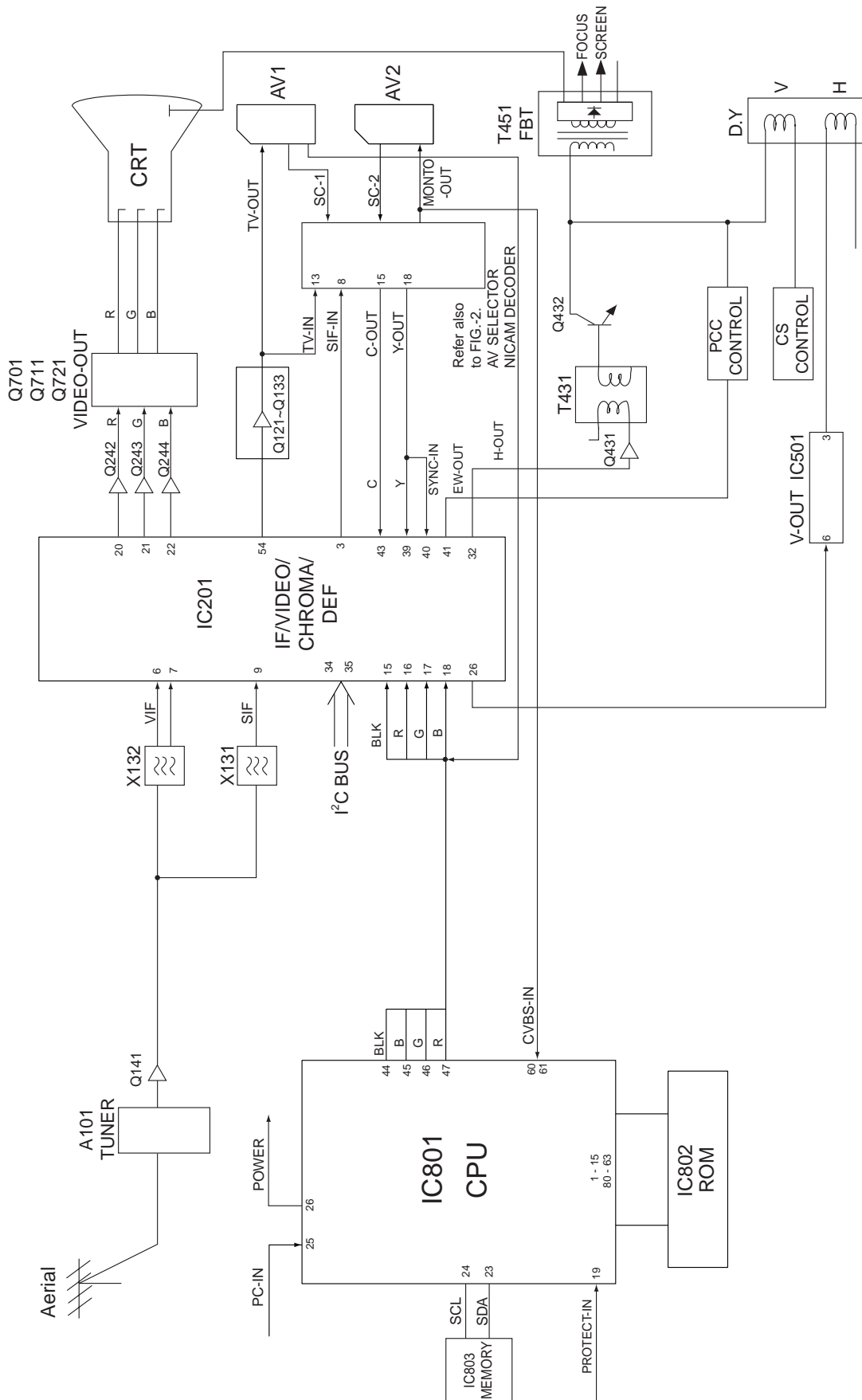
SPECIFICATIONS

Power source	AC 220~240V, 50Hz
Television system	System B/G
Colour system	PAL/NTSC4.43 (PAL/NTSC4.43/MTSC3.58 IN AV MODE)
Receiving channel	UHF: #21~69 VHF: E2-E12 CATV: X, Y, Z, S1-S41
Aerial input impedance	75ohm
AV terminal	
21 Pin SCART Terminal	AV1:CENELEC standard with RGB AV2:CENELEC standard with S-inputs AV3:RCA Terminal, Video and Audio (L/R)
Front AV	
Sound output(Music)	12W x 2
Dimensions (WxHxD)	612 x 476 x 482mm
Weight	21 Kg

BLOCK DIAGRAM

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

Outline



**AV Selector
NICAM DECODER**

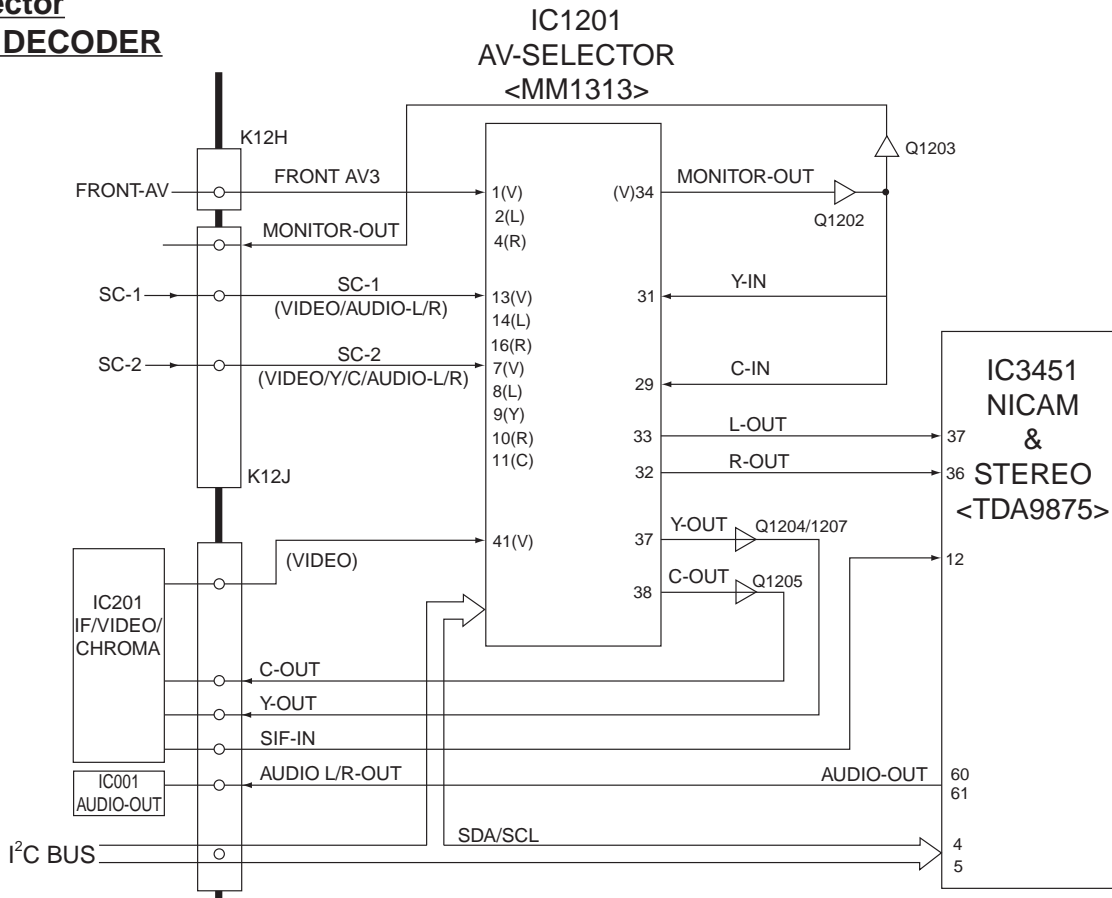


Fig.-2

System Control

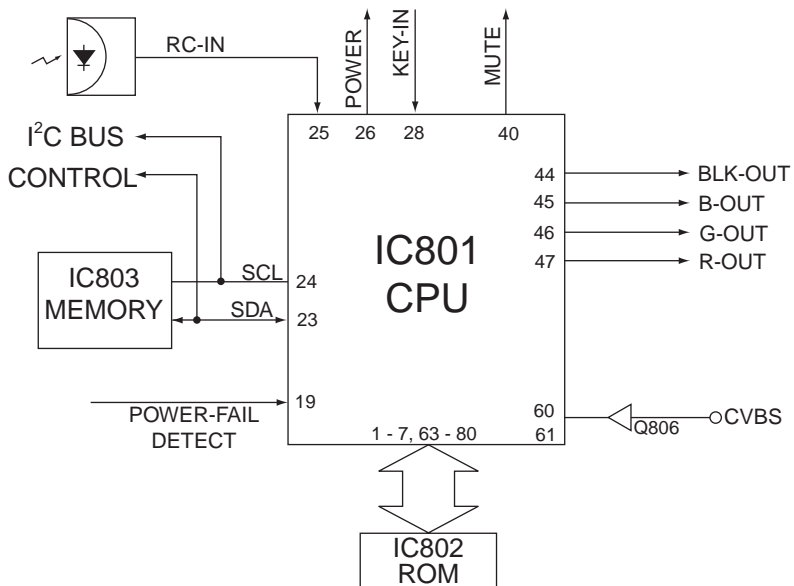
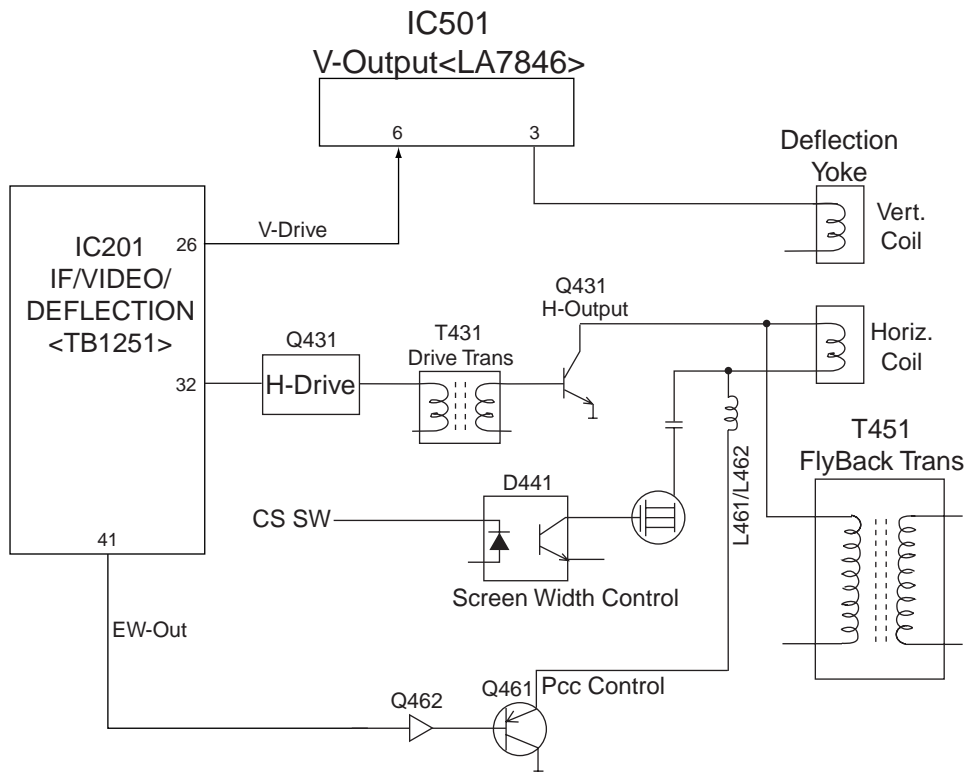


Fig.-3

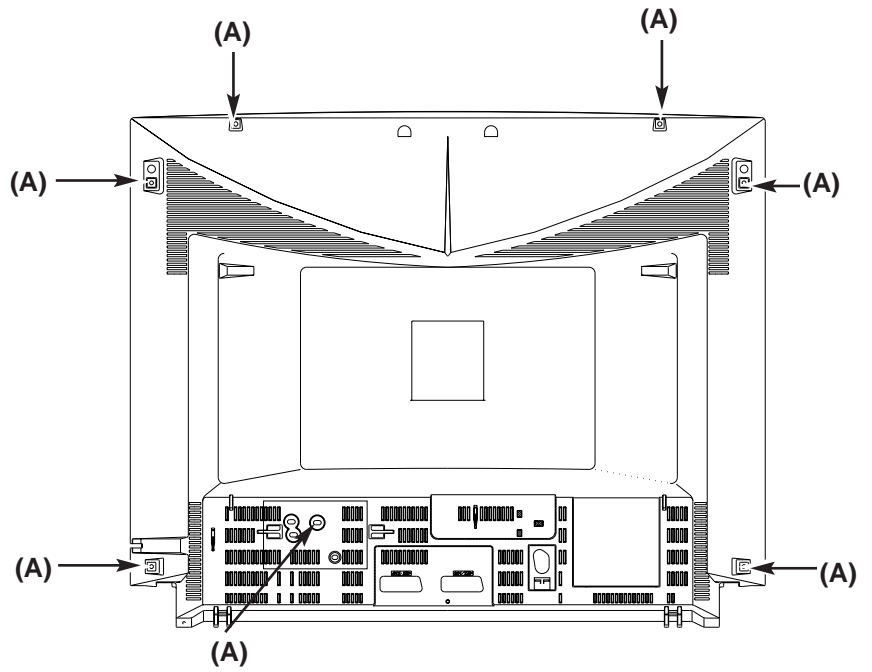
Deflection Control



CABINET DISASSEMBLY

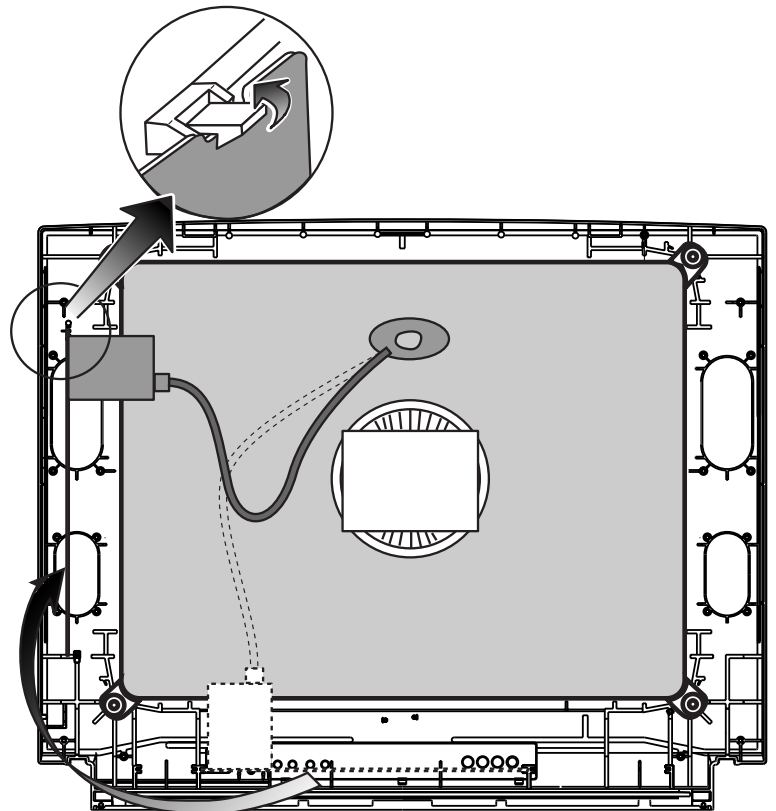
CABINET BACK DISASSEMBLY

1. Remove 7 screws(A).
2. Pull out the cabinet back.



PLACING THE CHASSIS TO SERVICE POSITION

1. Pullout the chassis and put it to the rails on the side cabinet.
2. Fix main board with hook on the top rail.



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. Set the options as shown below.

OPTION	
ON-TIMER	ON
SORT MODE	AUTO TUNING
PLUG & PLAY	ON
WELCOME TEXT	OFF
CODE TEST	OFF
WSS	ON
WIDE	OFF
OPTION	4 LANGUAGE
312/313 Mode	OFF
AV3 OPTION	ON
3D SURROUND	ON
SIF	BG ONLY
↑↓ ADJUST :↔ EXIT : RECALL	

SERVICE REF NO CE21D5-C-00

OPTION	
ON-TIMER	ON
SORT MODE	AUTO TUNING
PLUG & PLAY	ON
WELCOME TEXT	OFF
CODE TEST	OFF
WSS	ON
WIDE	OFF
OPTION	ALL LANGUAGE
312/313 Mode	OFF
AV3 OPTION	ON
3D SURROUND	ON
SIF	BG ONLY
↑↓ ADJUST :↔ EXIT : RECALL	

SERVICE REF NO CE21D5-C-01

OPTION	
ON-TIMER	ON
SORT MODE	ATS EURO PLUS
PLUG & PLAY	ON
WELCOME TEXT	OFF
CODE TEST	OFF
WSS	ON
WIDE	OFF
OPTION	ALL LANGUAGE
312/313 Mode	ON
AV3 OPTION	ON
3D SURROUND	ON
SIF	BG ONLY
↑↓ ADJUST :↔ EXIT : RECALL	

SERVICE REF NO CE21D5-C-02

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	AUTO TUNE or AUTO TUNING or ATS EURO PLUS	Tuning mode, default "AUTO TUNE/SORT"
PLUG & PLAY	ON or OFF	Plug & Play mode, default "ON"
WELCOME TEXT	ON or OFF	Display message when first set up, default "OFF"
CODE TEST	OFF or ON	For factory use, default "OFF"
WSS	ON or OFF	Wide Screen Signaling available, default "ON"
WIDE	ON or OFF	Wide mode, default "ON"
OPTION	UK or IRELAND	Destination option , default "4 LANGUAGE"
312/313 Mode	ON or OFF	Teletext mode, default "OFF"
AV3 OPTION	ON or OFF	Front AV disable, default "ON"
3D SURROUND	ON or OFF	3D Surround available, default "ON"
SIF OPTION	BG, I, L/L' or BG or BG, DK	Television system, Default "BG, I, L/L' "

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 performed "OPTION SETTING" on previous page and the following adjustments, refer to further adjustment on page 10.

ADJUSTABLE SERVICE ADJUSTMENT REGULAR

<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
1	AGC	AGC Adjustment
2	CUT	Cut-Off Drive Adjustment
3	GRY	G-Drive Adjustment
4	GRY	B-Drive Adjustment
7	HBP	H-Blanking Phase Adjustment
8	OSD	OSD Positioning Adjustment

WIDE

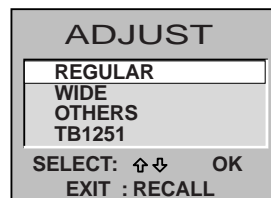
<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
1	P V-P	Vertical Centre Adjustment
2	P H-P	Horizontal Centre Adjustment
5	P V-S	Vertical Size Adjustment
6	P H-S	Horizontal Size Adjustment
7	P PCC	Pcc Adjustment
8	P TRP	Trapezoid Distortion Adjustment
10	P CNR	Corner Adjustment

IMPORTANT NOTICE

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

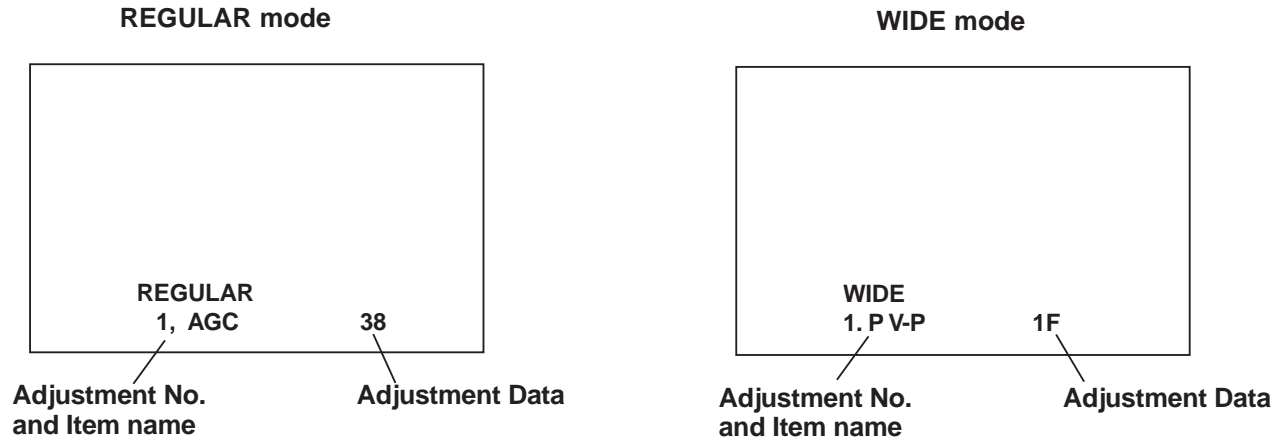
To enter to the Service Mode

+ Press and hold the **GREEN** button on the remote control and then press the **P▼** button inside of the door. The adjustment window will appear on the screen.



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** button on the remote control and then press the **P▲** button on the front panel of the TV set, and then turn the Mains switch Off and On. Now the initialisation is completed.

When initialised the memory IC, all of the setting data (option data and service adjustment data) stored in the IC are reset to the default value. So it is necessary to set the option settings and readjust the service adjustments listed on left page.

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 $130 \pm 0.5V$ by using VR641.

AGC ADJUSTMENT

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

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. 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.
4. Set the SCREEN VR for one colour to be just visible.

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 |

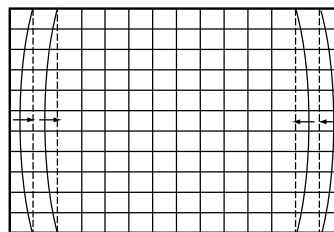
DRIVE ADJUSTMENT

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

PCC ADJUSTMENT

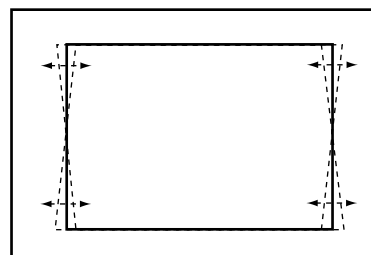
PCC ADJUSTMENT

1. Receive cross hatch pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "WIDE", and select item no. 7 "WIDE 7.P PCC".
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 "WIDE", and select item no. 8 "WIDE 8.P TRP".
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 "WIDE", and select item no. 10 "WIDE 10.P CNR".
3. Press the **LEVEL+** or **LEVEL -** button to correct the distortion of the vertical line around the corners.

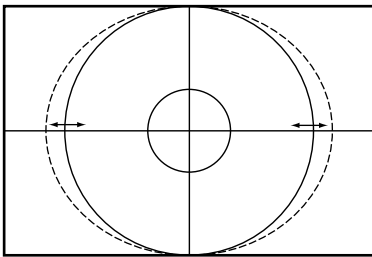
HORIZONTAL ADJUSTMENT

HORIZONTAL CENTRING ADJUSTMENT

1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "WIDE", and select item no. 2 "WIDE 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 "WIDE", and select item 6 "WIDE 6.P H-W".
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 to normal.
3. Connect high-voltage meter to the anode of CRT and GND.
4. Confirm that voltage is $28.0 \pm 1.0 \text{ kV}$ at 1.2mA for 21" model.

VERTICAL ADJUSTMENT

VERTICAL CENTRING ADJUSTMENT

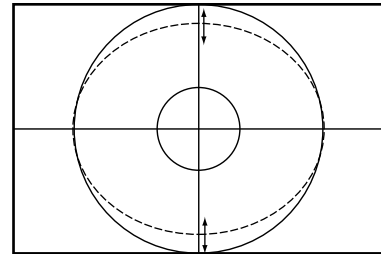
1. Receive circular pattern and set screen mode to "FULL".
2. Enter to the service mode and select mode "WIDE", and select item no. 1 "WIDE 1.P V-P".
3. Press the **LEVEL+** or **LEVEL -** button to adjust the vertical centre.

VERTICAL HEIGHT ADJUSTMENT

1. Receive circular pattern and set screen mode to

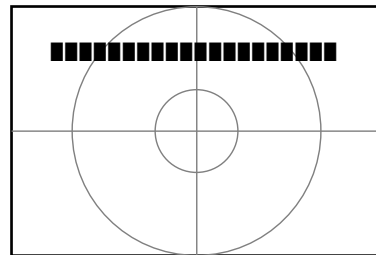
"FULL".

2. Enter to the service mode and select mode "WIDE", and select item no. 5 "WIDE 5.P V-S".
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.



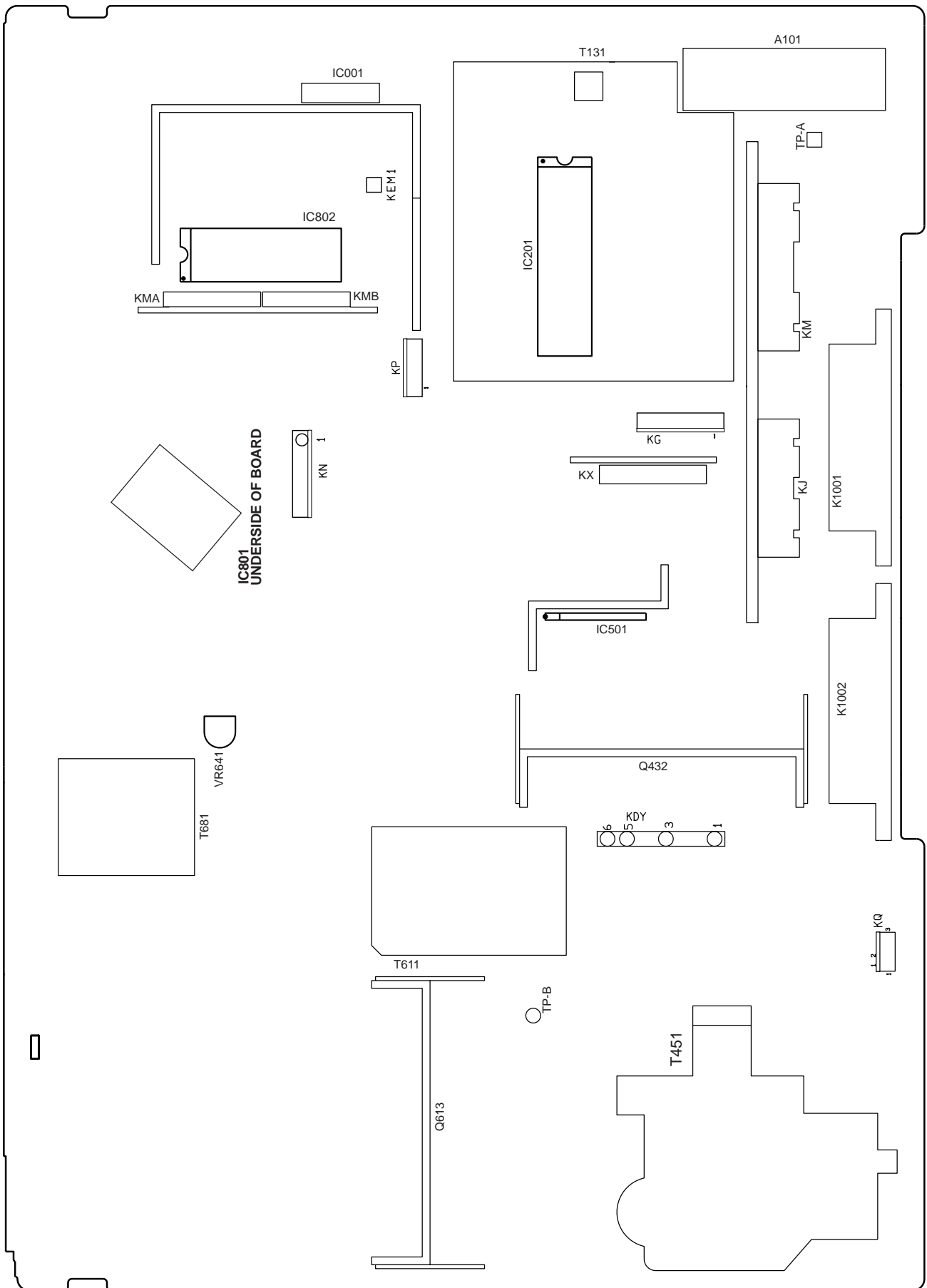
CPU PORT FUNCTIONS

Pin No.	Function Name	Function	IN/OUT
1	MMU0	External memory 0	OUT
2	MMU3	External memory 3	OUT
3	ADDR10	Address bus 10	OUT
4	DSN	Data Strobe	
5	ADDR11	Address bus 11	OUT
6	ADDR9	Address bus 9	OUT
7	ADDR8	Address bus 8	OUT
8	RWN	Read Write Strobe	
9	GND		
10	VDD	Power Supply	IN
11	OSC-IN	Clock Input	IN
12	OSC-OUT	Clock Output	OUT
13	ADDR13	Address bus 13	OUT
14	ADDR14	Address bus 14	OUT
15	MMU1	External memory 1	OUT
16	MMU2	External memory 2	OUT
17	MMU4	External memory 4	OUT
18	MMU5	External memory 5	OUT
19	P3.7/CSO	Protect - Power failure detect input	IN
20	P3.6/ASN	Dolby CLK(L/L')	OUT
21	P3.5	Dolby SO(Super 3D)	OUT
22	P3.4	PITTARI switch	OUT
23	P5.1	IIC BUS SDA	IN/OUT
24	P5.0	IIC BUS SCL	OUT
25	P2.0	Remote Control Signal Input	IN
26	P2.3	Power Relay & LED Drive On: L	OUT
27	P2.4	SUB CPU SO	OUT
28	P0.2	Key switch input	IN
29	P0.1	SUB CPU CLK	OUT
30	P0.0	SUB CPU SI	IN
31	P4.7	THRESHOLD switch	OUT
32	P4.6	JIMAKU(Caption) switch	OUT
33	P4.5	On-Timer LED Drive ON: L	OUT
34	VDD		IN
35	GND		
36	P2.1	AV1 Scart function input	IN
37	P2.2	AV2 Scart function input	IN
38	P2.5	RF AGC input	IN
39	P4.4	H-Blank On/Off	OUT
40	P4.3	AMP Mute Mute On: H	OUT
41	P4.2	Dolby RQ	OUT
42	P4.1	H-Blank Phase	OUT
43	P4.0	50/60Hz output 50Hz: H	OUT
44	FB	BLK Output for OSD (Active H)	OUT
45	B	Blue Output for OSD (Active H)	OUT
46	G	Green Output for OSD (Active H)	OUT
47	R	Red Output for OSD (Active H)	OUT
48	V-SYNC	V-Sync Input (Active H)	IN
49	H-SYNC	H-Sync Input (Active H)	IN
50	WSCR	VPS/WSS Slicer Line PLL	

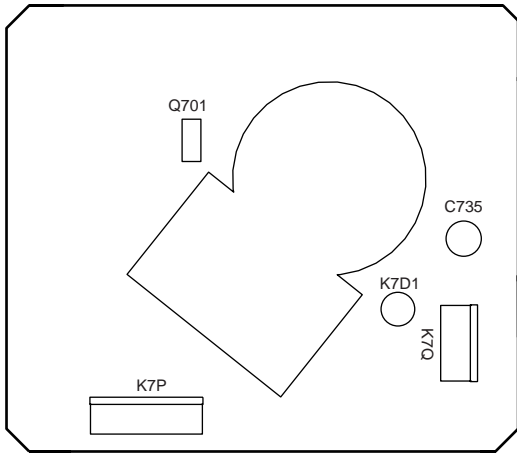
Pin No.	Function Name	Function	IN/OUT
51	WSCF	VPS/WSS Slicer Line PLL	
52	VDD-A	Analogue Power Supply	IN
53	PXFM	Pixel Frequency Multiplier	
54	RESET	Reset Input (Active L)	IN
55	MCFM	Pixel Frequency Multiplier	
56	JTRSTO		
57	TXCF		
58	CVBS0		
59	TEST0		
60	CVBS1	Video signal Input	IN
61	CVBS2	Video Signal Input	IN
62	GND-A		
63	DAT3	Data bus 3	IN
64	DAT4	Data bus 4	IN
65	DAT5	Data bus 5	IN
66	DAT6	Data bus 6	IN
67	DAT7	Data bus 7	IN
68	DAT2	Data bus 2	IN
69	DAT1	Data bus 1	IN
70	DAT0	Data bus 0	IN
71	ADDR0	Address bus 0	OUT
72	ADDR1	Address bus 1	OUT
73	ADDR2	Address bus 2	OUT
74	ADDR3	Address bus 3	OUT
75	ADDR4	Address bus 4	OUT
76	ADDR5	Address bus 5	OUT
77	ADDR6	Address bus 6	OUT
78	ADDR7	Address bus 7	OUT
79	ADDR12	Address bus 12	OUT
80	ADDR15	Address bus 15	OUT

COMPONENT LOCATIONS

MAIN BOARD

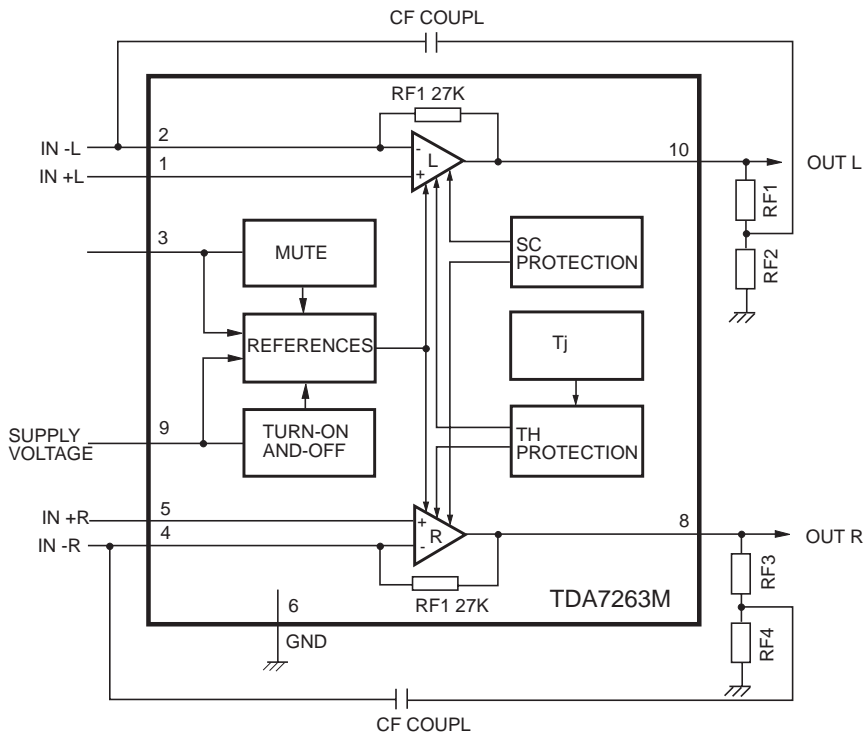


CRT BOARD

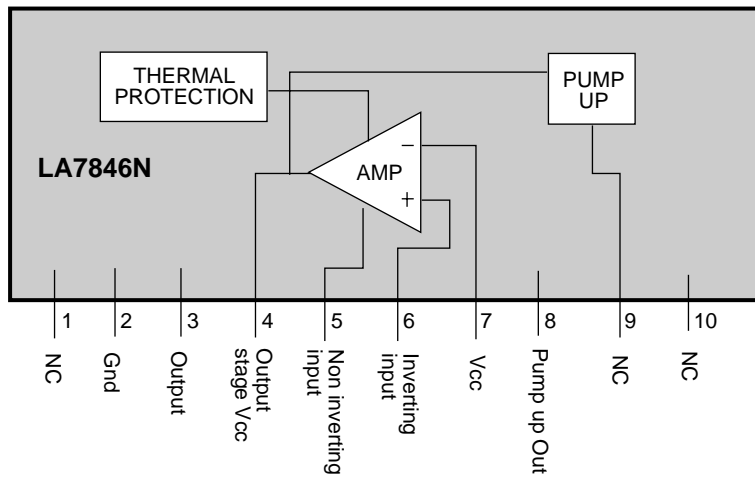


IC BLOCK DIAGRAMS

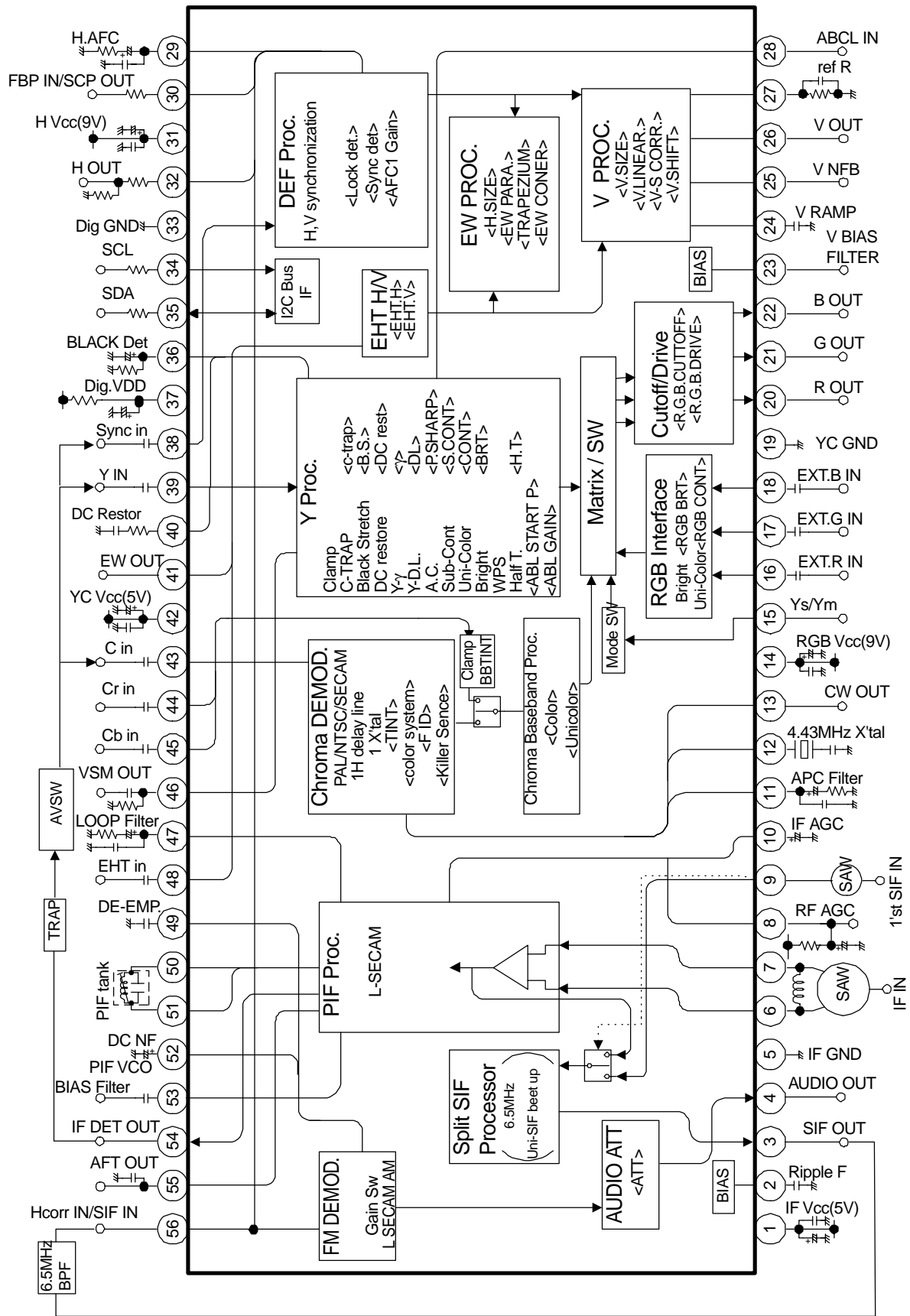
IC001 TDA7263M <Audio Output>



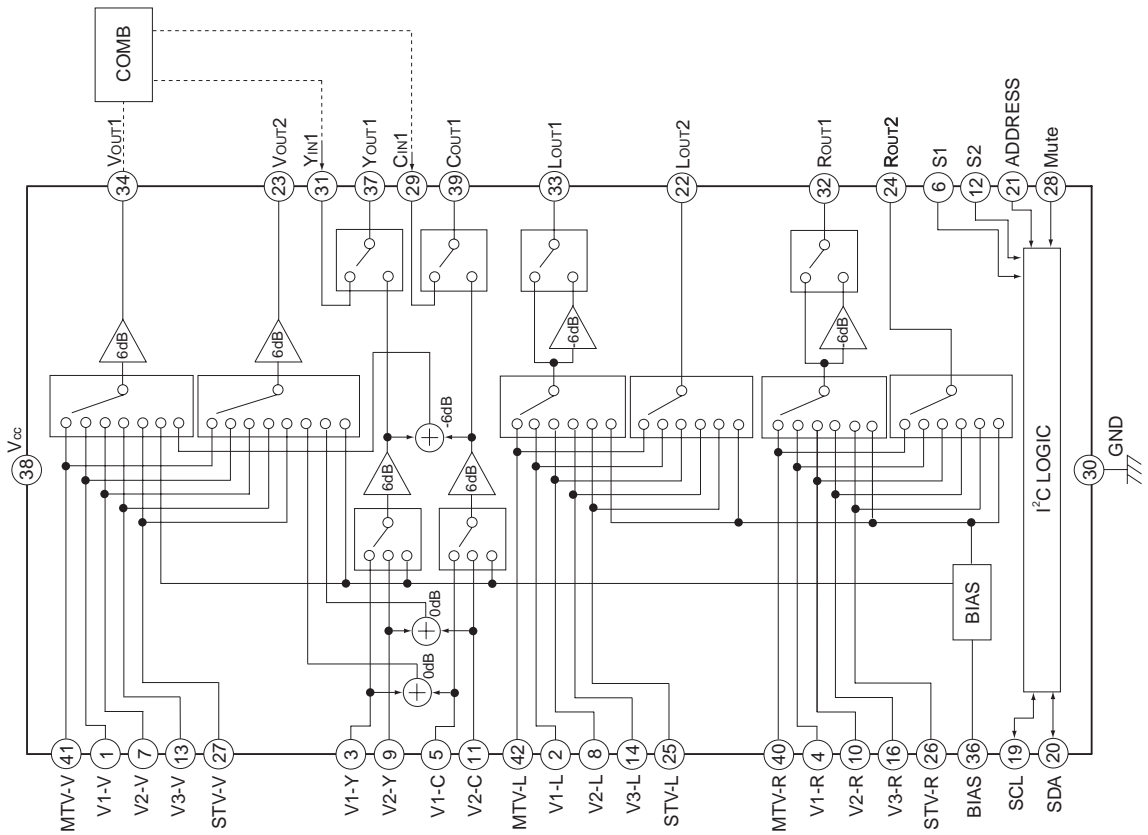
IC501 LA7846N <Vertical Output>



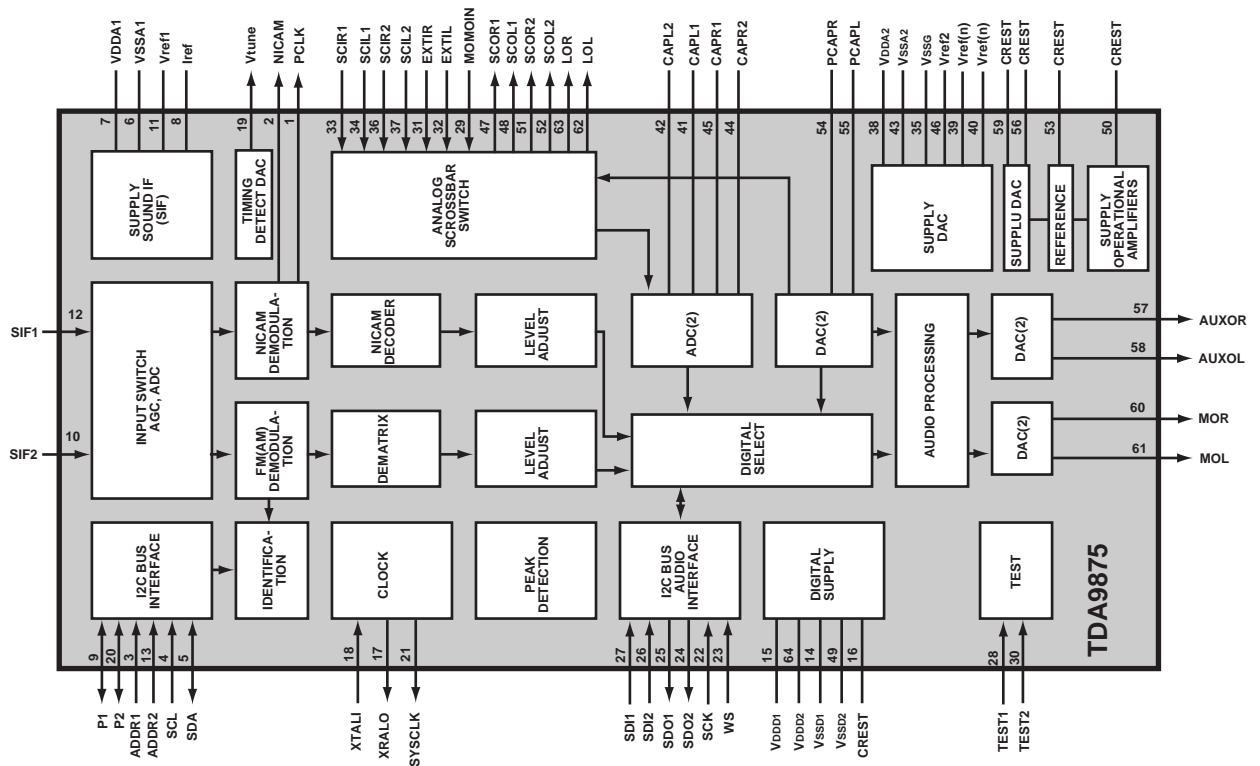
IC201 TB1251AN <IF/Video/Chroma/Def.>



IC1201 MM1313BD <AV Selector>

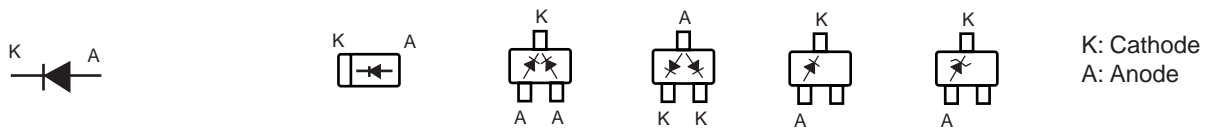


IC3451 TDA9875A <NICAM & Stereo Sound Decoder>

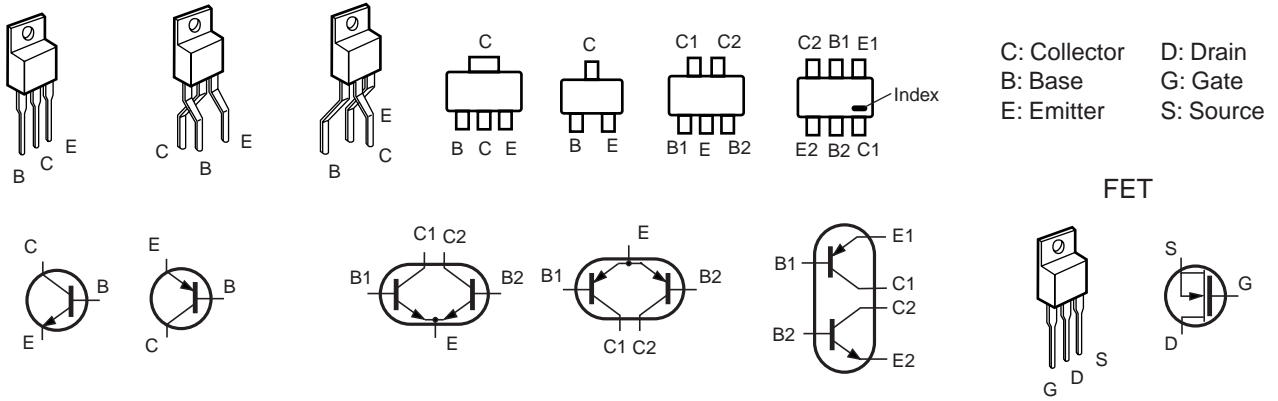


PIN DESCRIPTION OF SEMICONDUCTORS

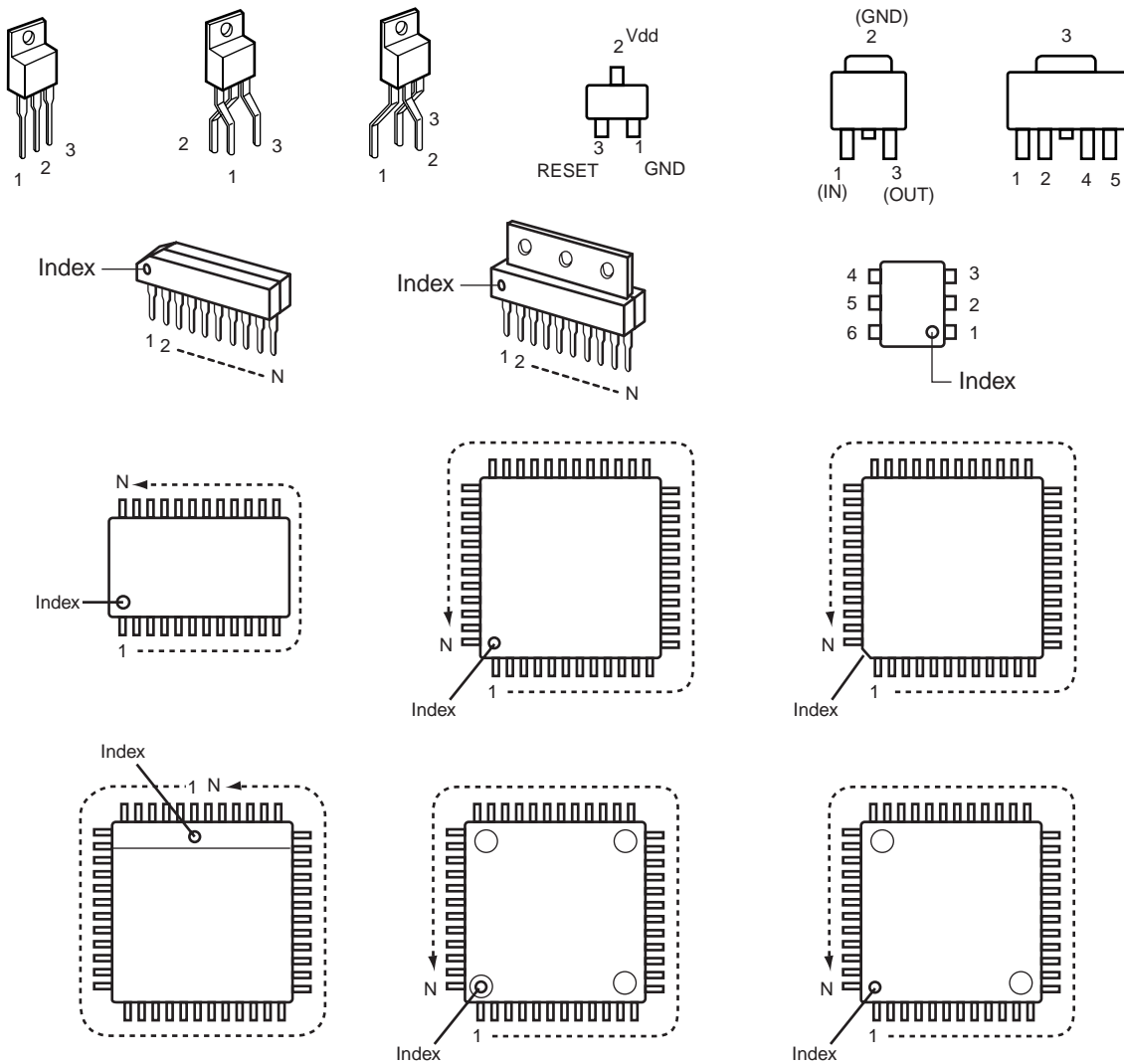
● Diode



● Transistor/FET



● IC



PARTS DESCRIPTION AND READING IN SCHEMATIC DIAGRAM

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video colour bar signal(1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmetre.

Capacitor Reading

Example 2000 K K 1000 BG

Example 160 E M 10

Characteristic

Capacitance value

Excepting electric capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are in pF.

Tolerance

Type

Rated voltage

Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-Polarised)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalised polypropylene
H	Metalised polypropylar
B	Ceramic (semiconductor)
G	Metalised polyester
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

Tolerance table

Mark	Tolerance
A	not specified
B	± 0.1
C	± 0.25
D	± 0.5
F	± 1
G	± 2
E	± 2.5
H	± 3
J	± 5
K	± 10
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

Coil Reading

Example L2 C1 4R7 K N

Tolerance

Inductance value

Manufacture code

Unique code

Mark	Tolerance (nH)	Mark	Tolerance (%)
C	± 0.25	G	± 2
D	± 0.5	J	± 5
S	± 0.3	K	± 10
A	± 0.2	L	± 15
		M	± 20

Resistor Reading

Example 1/2 D J 10K B

Example 6 W K 8.2

Example 1/2 C K 1M

Characteristic

Z (Carbon fuse)

B (Non-burnable)

K indicates in K Ω

M indicate in M Ω

Resistance value

Tolerance (see below table)

Material (see below table)

Rated wattage (W)

Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire winding or cement
H	Ceramic
F	Fusible

Tolerance table

Mark	Tolerance
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
Z	used in 0 ohm

Diode/Transistor Type Reading

Diode

Mark	Type number
--	1S1555,1S2473,1S2076,1SS133,DS442,1SS176
K	1S1555,1S2473,1S2076,DS442
L	1S1555,1S2076A,1S2471
M	1SS133,1SS176,GMA01
N	1S1555,1S2473,1S2076,1SS133,DS442,1SS176,1N4148
P	1S1555,1S2076A,1S2471,1N4148
R	1S1555,1S2076,1S2473,DS442,1N4148
AA	1S1555,1S2076,1S2473,1SS133,DS442,1SS176,1N4148,GMA01

Transistor (NPN type)

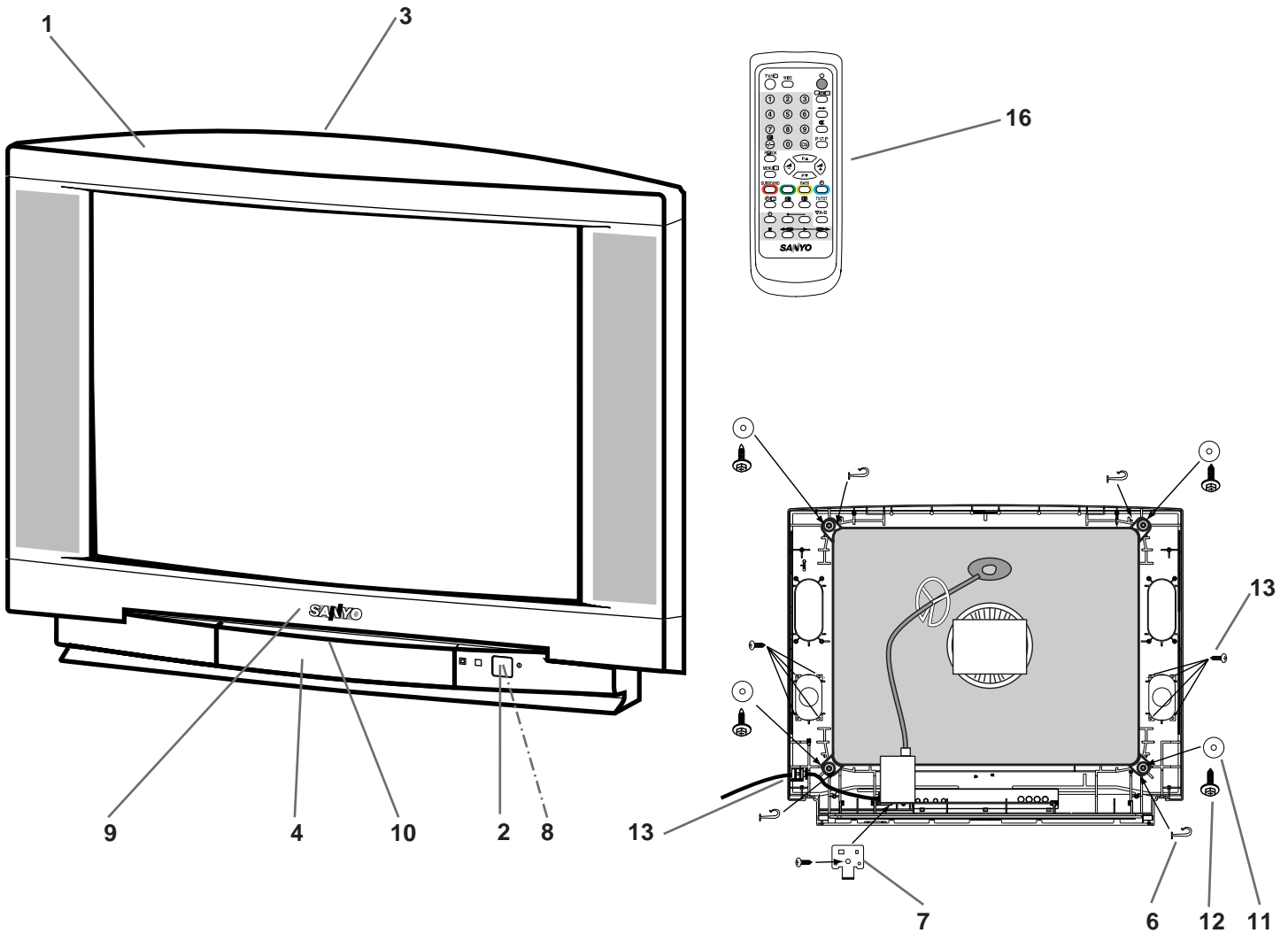
Mark	Type number					
--	2SC536	2SC945A	2SC1815	2SC1740	2SC1740S	KSC945C
A	E, F, G	P, Q, R	O, Y, G	Q, R, S	Q, R, S	
B	E, F, G	P, Q, R	O, Y, G	Q, R, S		
D	F, G	P, Q	Y, G	Q, R, S		
F	F, G	P	G	R, S		
H	F, G	P, Q	Y, G	Q, R, S		Y, G
I	E, F, G	P, Q, R	O, Y, G	Q, R, S		Y, G
G	F, G	P	G	R, S		G
AD	F, G	Q, R	Y, GR		Q, R, S	
AE	E, F, G	Q, R	O, Y, GR		Q, R, S	

Transistor (PNP type)

Mark	Type number					
--	2SA608	2SA564A	2SA1015	2SA933	2SA933S	KSA733C
Y	E, F	Q, R	O, Y, G	Q, R		
W	F	R	Y, G	R		
V	E, F	Q, R	O, Y, G	Q, R		Y, G
U	F	R	Y, G	R		G
Z	E, F	Q, R	O, Y, G	Q, R		
AB	F	R	Y		Q, R	
AE	E, F	Q, R	O, Y		R	

CABINET PARTS LIST FOR MODEL CE21D5-C-00

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



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
CABINET PARTS			15	4110761004	SCR TPG BRZ 4X12
1	6102867619	ASSY, CABINET FR- C2KTV	ACCESSORIES		
2	610 276 5618	BUTTON POWER- F7WC	16	JXMKD	RC TRANSMITTER
3	610 286 6612	CABINET BACK G- F7KC	6102849752		INST MANUAL C2KT/VT/WT(1)
4	6102869699	DOOR- C2WT	6102849769		INST MANUAL C2KT/VT/WT(2)
5	610 276 5656	DEC IND- F7WC	6102850222		INST MANUAL C2KT/VT/WT(3)
6	SKZZ0049	RC HOLDING CLIP- F2JE	6450276927		BATTERY
7	610 253 2449	AC CORD HOLDER- U- D4VA			
8	610 261 3032	COIL SPRING- E7GCS			
9	6450348228	BADGE, SANYO*53. 5X12 BROWN			
10	645 019 2449	LATCH PUSH, 7. 9X6. 9BK			
11	610 224 5721	CRT CUSHION- B3MY- UK			
12	412 009 3003	SPECIAL SCREW			
13	4110761301	SCR TPG BRZ 4X14			
14	610 265 4202	HOLDER DC GBR- F3SC			

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	
Chassis construction				
CE21D5-C-00				
<p>Read description in the Capacitor and Resistor as follows:</p> <p>CAPACITOR</p> <p>CERAMIC 100P K 50V</p> <p>Rated Voltage</p> <p>Tolerance Symbols: Less than 10PF A: Not specified B: $\pm 0.1PF$ C: $\pm 0.25PF$ D: $\pm 0.5PF$ F: $\pm 1PF$ G: $\pm 2PF$ R: $\pm 0.25-0PF$ S: $\pm 0-0.25PF$ E: $+0-1PF$ More than 10PF A: Not specified B: $\pm 0.1\%$ C: $\pm 0.25\%$ D: $\pm 0.5\%$ F: $\pm 1\%$ G: $\pm 2\%$ H: $\pm 3\%$ J: $\pm 5\%$ K: $\pm 10\%$ L: $\pm 15\%$ M: $\pm 20\%$ N: $\pm 30\%$ 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: $+80-20\%$</p> <p>Rated value: P=pico farad, U=Micro farad</p> <p>Material:</p> <p>CERAMICCeramic MT-PAPERMetallized Paper POLYESTER.....Polyester MT-POLYESTMetallized Polyester POLYPRO.....Polypropylene MT-POLYPRO.....Metallized Polypropylene COMPO FILM.....Composite film MT-COMPOMetallized Composite STYRENE.....Styrene TA-SOLIDTantalum Solid AL-SOLIDAluminium Solid ELECTElectrolytic NP-ELECTNon-polarised Electrolytic OS-SOLIDAluminium Solid with Organic Semiconductive Electrolytic DL-ELECTDouble Layered Electrolytic</p> <p>RESISTOR</p> <p>CARBON 4.7K J A 1/4W</p> <p>Rated Wattage</p> <p>Performance Symbols: A: General B: Non flammable Z: Low noise Other: Temperature coefficient</p> <p>Tolerance Symbols: A: $\pm 0.05\%$ B: $\pm 0.1\%$ C: $\pm 0.25\%$ D: $\pm 0.5\%$ F: $\pm 1\%$ G: $\pm 2\%$ J: $\pm 5\%$ K: $\pm 10\%$ M: $\pm 20\%$ P: $+5-15\%$</p> <p>Rated value, ohms: K: 1,000, M: 1,000,000</p> <p>Material:</p> <p>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</p>			1AA0B10H042A0 ASSY,PWB,MAIN C2KTV (Page 22-27) 1AA0B10E627A0 ASSY,PWB,TEXT, C2K 21" (Page 27) 1AA0B10E592A0 ASSY, PWB, A2-SW C2WT (Page 27-29) 1AA0B10E59500 ASSY,PWB,CRT C2WC (Page 29) OUT OF CIRCUIT 013C2KTV (Page 29)	
	CE21D5-C-01			
				1AA0B10H042A0 DIFFERENCES (Page 29) 1AA0B10E627A0 ASSY,PWB,TEXT, C2K 21" 1AA0B10E592A0 ASSY, PWB, A2-SW C2WT 1AA0B10E59500 ASSY,PWB,CRT C2WC OUT OF CIRCUIT 013C2KTV
	CE21D5-C-02			
				1AA0B10H042A0 DIFFERENCES (Page 30) 1AA0B10E592A0 ASSY, PWB, A2-SW C2WT 1AA0B10E59500 ASSY,PWB,CRT C2WC OUT OF CIRCUIT 013C2KTV
.....				
		1AA0B10H042A0	ASSY,PWB,MAIN C2KTV	
CAPACITOR				
		C001	403 314 5915 SMD CAP GRM40X7R474K16	
		C002	403 215 2310 CERAMIC 0.012U K 50V	
		C003	403 314 5915 SMD CAP GRM40X7R474K16	
		C004	403 215 2310 CERAMIC 0.012U K 50V	
		C005	403 258 3619 25 YK 33 M TA 0511	
		C006	403 258 3619 25 YK 33 M TA 0511	
		C007	403 164 0214 CERAMIC 0.1U Z 25V	
		C008	403 164 0214 CERAMIC 0.1U Z 25V	
		C009	403 164 0214 CERAMIC 0.1U Z 25V	
		C010	403 164 0214 CERAMIC 0.1U Z 25V	
		C011	403 190 4702 ELECT 1000U M 25V	
		C012	403 190 4702 ELECT 1000U M 25V	
		C015	403 047 5065 ELECT 470U M 25V	
		C021	403 154 1917 35 YK 1000 M TA K1220	
		C052	403 113 3815 CERAMIC 1000P K 50V	
		C053	403 149 9218 CERAMIC 0.01U Z 50V	
		C054	403 068 9016 CERAMIC 100P K 50V	
		C1001	403 070 0919 CERAMIC 0.1U K 50V	
		C101	403 233 1517 50 YK 4R7 M TA 0511	
		C1010	403 157 3611 CERAMIC 100P J 50V	
		C1011	403 279 4312 CERAMIC 0.33U K 16V	
		C1012	403 157 3611 CERAMIC 100P J 50V	
		C1013	403 279 4312 CERAMIC 0.33U K 16V	
		C1014	403 113 3815 CERAMIC 1000P K 50V	
		C1015	403 233 0817 ELECT 10U M 50V	
		C1016	403 113 3815 CERAMIC 1000P K 50V	
		C1017	403 189 2425 ELECT 16MS7 10M TZ 0407	
		C1018	403 256 2416 CERAMIC 0.22U Z 50V	
		C102	403 039 3527 ELECT 470U M 6.3V	

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C1020	403 149 9218	CERAMI C 0.01U Z 50V	C237	403 164 0214	CERAMI C 0.1U Z 25V
C1021	403 157 3611	CERAMI C 100P J 50V	C240	403 113 4119	CERAMI C 2200P K 50V
C1022	403 279 4312	CERAMI C 0.33U K 16V	C241	403 067 7895	MT- COMPO 0.47 J 50V
C1024	403 157 3611	CERAMI C 100P J 50V	C242	403 257 0817	50 YK OR47 M TA 0511
C1025	403 279 4312	CERAMI C 0.33U K 16V	C243	403 157 7015	CERAMI C 1800P K 50V
C1026	403 113 3815	CERAMI C 1000P K 50V	C244	403 215 2211	CERAMI C 0.01U K 50V
C1027	403 233 0817	ELECT 10U M 50V	C247	403 233 0817	ELECT 10U M 50V
C1028	403 113 3815	CERAMI C 1000P K 50V	C421	404 030 6702	MT- POLYPRO 8200P J 1.5K
C1029	403 233 0817	ELECT 10U M 50V	C425	403 078 4028	CERAMI C 330P K 3K
C103	403 039 3527	ELECT 470U M 6.3V	C432	403 075 7111	CERAMI C 1000P K 500V
C104	403 233 0817	ELECT 10U M 50V	C433	403 076 3112	CERAMI C 3900P K 500V
C106	403 149 9218	CERAMI C 0.01U Z 50V	C434	403 054 0703	ELECT 47U M 35V
C109	403 149 9218	CERAMI C 0.01U Z 50V	C437	403 066 6106	MT- POLYEST 0.47U J 250V
C110	403 149 9218	CERAMI C 0.01U Z 50V	C441	403 216 7601	POLYPRO 0.36U J 200V
C1102	403 113 3815	CERAMI C 1000P K 50V	C441-1	610 092 1887	EYELET
C1107	403 113 3815	CERAMI C 1000P K 50V	C441-2	610 092 1887	EYELET
C1108	403 233 0817	ELECT 10U M 50V	C445	403 233 0817	ELECT 10U M 50V
C1109	403 233 0817	ELECT 10U M 50V	C450	404 056 5208	NP- ELECT 100NW2R2MFA-6311
C1110	403 166 9215	CERAMI C 10P J 50V	C451	404 063 5703	NP- ELECT 100NW1ROMFA-6311
C1111	8YDX3R0	CUTTING WIRE	C481	403 076 1415	CERAMI C 2700P K 500V
C121	403 149 9218	CERAMI C 0.01U Z 50V	C482	403 159 7409	MT- POLYEST 0.1U K 250V
C122	403 164 0214	CERAMI C 0.1U Z 25V	C501	403 194 3800	ELECT 2200U M 25V
C124	403 157 1518	CER. GRM39COG3R0C50PT	C502	403 217 1103	ELECT 220U M 35V
C125	403 069 8315	CERAMI C 0.01U Z 50V	C503	403 139 7514	CERAMI C 39P J 50V
C128	403 241 3817	10 YK 220 M TA 0511	C512	403 190 4702	ELECT 1000U M 25V
C129	403 145 9915	CERAMI C 22P J 50V	C513	403 233 0817	ELECT 10U M 50V
C130	403 155 4214	CERAMI C 15P J 50V	C514	403 233 0817	ELECT 10U M 50V
C131	403 149 9218	CERAMI C 0.01U Z 50V	C600	403 076 4010	CERAMI C 4700P K 500V
C135	403 149 9218	CERAMI C 0.01U Z 50V	C601	404 060 7205	MT- POLYEST 0.1U M 250V
C136	403 149 9218	CERAMI C 0.01U Z 50V	C602	404 060 7205	MT- POLYEST 0.1U M 250V
C138	403 149 9218	CERAMI C 0.01U Z 50V	C603	403 076 7130	CERAMI C 1000P M 1K
C139	403 237 7941	MT- COMPO 0.22U J 50V	C604	403 076 7130	CERAMI C 1000P M 1K
C140	403 233 0817	ELECT 10U M 50V	C605	403 076 7130	CERAMI C 1000P M 1K
C141	403 207 0317	SMD 1MF GRM40Y5V105Z16PT	C606	403 076 7130	CERAMI C 1000P M 1K
C143	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C607	404 050 9509	ELECT 150U M 400V
C144	403 248 2813	50 YK 2R2 M TA 0511	C613	403 179 1213	POLYESTER 4700P J 50V
C145	403 149 9218	CERAMI C 0.01U Z 50V	C614	403 237 8057	MT- COMPO 0.1U J 50V
C146	403 248 1618	16 YK 47 M TA 0511	C615	403 179 3217	POLYESTER 0.015U J 50V
C1900TM	403 038 1633	ELECT 100U M 6.3V	C616	403 077 8928	CERAMI C 680P K 2K
C1921	403 149 9218	CERAMI C 0.01U Z 50V	C617	403 060 8007	POLYESTER 0.033U J 50V
C1922	403 149 9218	CERAMI C 0.01U Z 50V	△ C631	404 073 4505	CERAMI C DE1210-1 E 222M
C1923	403 149 9218	CERAMI C 0.01U Z 50V	C633	403 054 1502	ELECT 470U M 35V
C1924	403 149 9218	CERAMI C 0.01U Z 50V	C636	403 190 3705	ELECT 1000U M 16V
C1925	403 085 7405	NP- ELECT 10U M 16V	C637	403 053 3606	ELECT 2200U M 35V
C1926	403 085 7405	NP- ELECT 10U M 16V	C640	403 190 4702	ELECT 1000U M 25V
C201	403 149 9218	CERAMI C 0.01U Z 50V	C641	403 077 1216	CERAMI C 680P K 1K
C203	403 269 5916	CERAMI C 0.22U K 16V	C642	404 042 4505	ELECT 220U M 160V
C204	403 149 9218	CERAMI C 0.01U Z 50V	C643	403 194 4609	ELECT 470U M 16V
C205	403 149 9218	CERAMI C 0.01U Z 50V	C647	403 157 6810	CERAMI C 680P K 50V
C206	403 149 9218	CERAMI C 0.01U Z 50V	C648	403 039 3507	ELECT 470U M 6.3V
C207	403 149 9218	CERAMI C 0.01U Z 50V	C649	403 194 4609	ELECT 470U M 16V
C208	403 248 1618	16 YK 47 M TA 0511	C681	403 148 0424	ELECT 1000U M 25V
C209	403 164 0214	CERAMI C 0.1U Z 25V	C682	403 069 9510	CERAMI C CHIP 0.01Z 50V
C210	403 086 2300	NP- ELECT 1U M 50V	C683	403 039 9004	ELECT 1000U M 10V
C211	403 113 3815	CERAMI C 1000P K 50V	C684	403 135 7815	50 YK 3R3 M TA 0511
C212	403 086 2300	NP- ELECT 1U M 50V	C800	403 248 1618	16 YK 47 M TA 0511
C213	403 233 0817	ELECT 10U M 50V	C801	403 149 9218	CERAMI C 0.01U Z 50V
C214	403 149 9218	CERAMI C 0.01U Z 50V	C806	403 248 1618	16 YK 47 M TA 0511
C216	403 233 0817	ELECT 10U M 50V	C807	403 164 0214	CERAMI C 0.1U Z 25V
C217	403 160 0020	ELECT 470U M 10V	C810	403 269 5916	CERAMI C 0.22U K 16V
C218	403 149 9218	CERAMI C 0.01U Z 50V	C811	403 269 5916	CERAMI C 0.22U K 16V
C219	403 155 2418	CERAMI C 5600P K 50V	C812	403 157 4212	CERAMI C 220P J 50V
C220	403 207 0317	SMD 1MF GRM40Y5V105Z16PT	C814	403 155 2210	CERAMI C 3300P K 50V
C230	403 269 5916	CERAMI C 0.22U K 16V	C816	403 155 2319	CERAMI C 4700P K 50V
C231	403 113 4119	CERAMI C 2200P K 50V	C817	403 145 9915	CERAMI C 22P J 50V
C232	403 233 3818	CERAMI C 10P C 50V	C818	403 155 2319	CERAMI C 4700P K 50V
C233	403 248 1618	16 YK 47 M TA 0511	C819	403 145 9915	CERAMI C 22P J 50V
C234	403 164 0214	CERAMI C 0.1U Z 25V	C822	403 113 4119	CERAMI C 2200P K 50V
C235	403 164 0214	CERAMI C 0.1U Z 25V	C824	403 153 9310	CERAMI C 82P J 50V
C236	403 164 0214	CERAMI C 0.1U Z 25V	C826	403 086 1808	NP- ELECT 0.47U M 50V

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C827	403 314 5915	SMD CAP GRM40X7R474K16	INTERGRATED CIRCUITS		
C828	403 149 9218	CERAMIC 0.01U Z 50V	IC001	409 301 4906	IC TDA7263M
C829	403 248 1618	16 YK 47 M TA 0511	IC001-1	610 251 4186	AUDIO HEATSINK ASSY E7PC
C830	403 157 6711	CERAMIC 560P K 50V	IC201	409 483 9706	IC TB1251AN VER 5.2
C831	403 164 0214	CERAMIC 0.1U Z 25V	IC501	409 183 5008	IC LA7832
C832	403 248 1618	16 YK 47 M TA 0511	IC501-1	610 251 8153	VERTICAL RADIATOR-E7PC
C833	403 157 2515	CERAMIC 27P J 50V	IC641	409 241 5407	IC BA178M05T
C834	403 157 2515	CERAMIC 27P J 50V	IC642	409 367 2809	IC BA178M09T
C835	403 155 2319	CERAMIC 4700P K 50V	IC801	410 329 1600	IC ST92R195
DIODE			IC802	410 374 0207	C2WTV VP/P E77B
D1001	407 063 8319	ZENER DIODE MTZJ11C	IC803	409 343 6302	IC 24LC04B/P
D1002	407 063 8319	ZENER DIODE MTZJ11C	TRANSFORMER		
D1003	407 063 8319	ZENER DIODE MTZJ11C	T431	610 000 1053	DRIVE TRANS
D1004	407 063 8319	ZENER DIODE MTZJ11C	△ T451	645 035 5295	TRANS, FLYBACK
D1007	407 063 8319	ZENER DIODE MTZJ11C	△ T611	645 041 2257	TRANS, POWER, PULSE
D1008	407 063 8319	ZENER DIODE MTZJ11C	△ T681	610 033 3758	POWER TRANS
D1009	407 063 8319	ZENER DIODE MTZJ11C	COIL		
D101	407 100 0214	ZENER DIODE MTZJ36A	L1003	610 078 5946	PIPE CORE
D1010	407 063 8319	ZENER DIODE MTZJ11C	L1010	645 001 4550	PEAKING COIL 10UHK
D1011	407 012 4416	DIODE 1SS133-T-77	L1011	645 001 4550	PEAKING COIL 10UHK
D1012	407 012 4416	DIODE 1SS133-T-77	L1012	645 001 4550	PEAKING COIL 10UHK
D1013	407 012 4416	DIODE 1SS133-T-77	L1013	645 001 4550	PEAKING COIL 10UHK
D1020	407 063 8319	ZENER DIODE MTZJ11C	L1017	610 078 5946	PIPE CORE
D1021	407 063 8319	ZENER DIODE MTZJ11C	L1020	645 001 4550	PEAKING COIL 10UHK
D1022	407 063 8319	ZENER DIODE MTZJ11C	L1021	645 001 4550	PEAKING COIL 10UHK
D1023	407 063 8319	ZENER DIODE MTZJ11C	L1022	645 001 4550	PEAKING COIL 10UHK
D1024	407 063 8319	ZENER DIODE MTZJ11C	L1023	645 001 4550	PEAKING COIL 10UHK
D1025	407 063 8319	ZENER DIODE MTZJ11C	L1101	645 001 4550	PEAKING COIL 10UHK
D1026	407 063 8319	ZENER DIODE MTZJ11C	L1106	645 001 4550	PEAKING COIL 10UHK
D131	8YDX3R0	CUTTING WIRE	L121	645 001 4635	PEAKING COIL 15UH K
D1901	407 120 9706	LED LN28RPL	L122	645 002 1459	PEAKING COIL
D1901A	610 222 0322	LED HOLDER-G2CA-A	L123	401 016 9821	CARBON 27JA 1/4W FLAM-RET
D1906	407 063 9514	ZEN DIODE	L171	645 040 2715	TRANS, OSC 38.9MHZ
D431	407 063 9613	ZENER DIODE MTZJ9. 1A	L1921	645 008 5635	INDUCTOR, 12U K
D442	408 007 8607	DIODE 1N4148	L1922	645 008 5635	INDUCTOR, 12U K
D445	407 012 4416	DIODE 1SS133-T-77	L1923	645 002 4511	CORE, PIPE
D446	407 063 9415	ZENER DIODE MTZJ8. 2A	L240	645 001 4550	PEAKING COIL 10UHK
D463	407 012 4416	DIODE 1SS133-T-77	L241	645 001 4550	PEAKING COIL 10UHK
D481	407 007 7415	DIODE EU1	L242	645 001 4550	PEAKING COIL 10UHK
D482	407 012 4416	DIODE 1SS133-T-77	L431	610 078 4635	PIPECORE
D501	407 005 7328	DIODE EMO1Z	L432	645 002 4511	CORE, PIPE
D502	407 118 2217	ZENER DIODE 1Z75	L441	645 036 7441	COIL, LINEARITY 21"
D603	407 009 6921	DIODE RM11C	L422	610 000 0278	COIL 234UH
D604	407 009 6921	DIODE RM11C	L501	645 008 5642	INDUCTOR, 3.3U K
D605	407 009 6921	DIODE RM11C	L601	645 012 3337	LINE FILTER
D606	407 009 6921	DIODE RM11C	L607	610 237 1000	PIPE CORE
D613	407 012 4416	DIODE 1SS133-T-77	L608	610 237 1000	PIPE CORE
D614	408 007 8607	DIODE 1N4148	L641	610 078 6820	PIPE CORE
△ D615	407 173 2907	PHOTO COUPLE PC123F2	L645	645 007 8194	INDUCTOR 120UH SUGAMI
D616	408 007 8607	DIODE 1N4148	L646	645 007 8194	INDUCTOR 120UH SUGAMI
D617	407 007 6616	DIODE ES1	L801	645 003 8549	PEAKING COIL
D618	408 007 8607	DIODE 1N4148	L802	645 003 8549	PEAKING COIL
D619	407 099 6112	Z. DIODE MTZJ10BT-77	L803	645 003 8549	PEAKING COIL
D630	407 007 7613	DIODE EU2	L804	645 003 8549	PEAKING COIL
D633	407 166 2303	DIODE ERC-91-02L	L805	645 003 8549	PEAKING COIL
D634	407 007 7613	DIODE EU2	TRANSISTOR		
△ D635	407 129 6706	DIODE RU4YX LF-L1	Q001	405 014 4519	TR 2SC2412KT146/R
D637	407 012 4416	DIODE 1SS133-T-77	Q1001	405 014 4519	TR 2SC2412KT146/R
D641	407 012 4416	DIODE 1SS133-T-77	Q1002	405 002 0318	TR 2SA1037K-T96-R
△ D642A	407 007 7712	DIODE EU2A	Q1003	405 014 4519	TR 2SC2412KT146/R
△ D643	407 012 4416	DIODE 1SS133-T-77	Q1006	405 002 0318	TR 2SA1037K-T96-R
D645	407 099 5511	ZENER DIODE MTZJ6. 2C	Q1007	405 002 0318	TR 2SA1037K-T96-R
D681	407 005 7328	DIODE EMO1Z	Q1008	405 002 0318	TR 2SA1037K-T96-R
D682	407 063 8913	ZENER DIODE MTZJ5. 6C	Q121	405 014 4519	TR 2SC2412KT146/R
D683	407 005 7328	DIODE EMO1Z	Q122	405 014 4519	TR 2SC2412KT146/R
D684	408 007 8607	DIODE 1N4148	Q131	405 002 0318	TR 2SA1037K-T96-R
D685	407 012 4416	DIODE 1SS133-T-77	Q132	405 002 0318	TR 2SA1037K-T96-R
D826	407 065 1318	ZENER D. MTZJT-77-3. 6A			
D831	407 012 4416	DIODE 1SS133-T-77			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
Q133	405 014 4519	TR 2SC2412KT146/R	R1025	401 105 5311	MT- GLAZE 4. 7K JA 1/16W
Q141	405 015 9721	TR 2SC2814- F4- TB	R1026	401 105 0415	MT- GLAZE 100 JA 1/16W
Q153	405 002 0318	TR 2SA1037K- T96- R	R1027	401 105 0514	MT- GLAZE 1K JA 1/16W
Q1901	405 014 4519	TR 2SC2412KT146/R	R1028	401 105 4017	MT- GLAZE 330 JA 1/16W
Q1902	405 014 4519	TR 2SC2412KT146/R	△ R103	401 060 9307	OXIDE- MT 27K JA 1W
Q242	405 002 0318	TR 2SA1037K- T96- R	R1101	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
Q243	405 002 0318	TR 2SA1037K- T96- R	R1102	401 105 0712	MT- GLAZE 100K JA 1/16W
Q244	405 002 0318	TR 2SA1037K- T96- R	R1106	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
Q431	405 011 1808	TR 2SC1627- 0	R1107	401 105 0712	MT- GLAZE 100K JA 1/16W
Q432	405 157 1304	TR 2SD2634- YB	R1113	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
Q432- 1	610 251 0683	H HEAT SINK E7PC	R124	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
Q501	405 014 4519	TR 2SC2412KT146/R	R126	401 105 2716	MT- GLAZE 220 JA 1/16W
Q611	406 007 1901	TR JC556A	R127	401 105 5915	MT- GLAZE 560 JA 1/16W
Q612	405 058 0208	TR 2SC3807- R- CTV- YA	R128	401 105 0514	MT- GLAZE 1K JA 1/16W
Q613	405 018 9203	TR 2SC3895- T- CTV- YB	R129	401 105 2716	MT- GLAZE 220 JA 1/16W
Q613- 1	610 251 0683	H HEAT SINK E7PC	R130	401 105 0514	MT- GLAZE 1K JA 1/16W
Q641	405 014 4519	TR 2SC2412KT146/R	R131	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
Q652	405 014 4519	TR 2SC2412KT146/R	R132	401 105 0514	MT- GLAZE 1K JA 1/16W
Q681	405 059 9804	TR 2SD1913- Q- RA	R133	401 105 0514	MT- GLAZE 1K JA 1/16W
Q682	405 002 0318	TR 2SA1037K- T96- R	R134	401 105 0514	MT- GLAZE 1K JA 1/16W
Q803	405 014 4519	TR 2SC2412KT146/R	R135	401 105 5212	MT- GLAZE 470 JA 1/16W
Q804	405 014 4519	TR 2SC2412KT146/R	R136	401 105 0415	MT- GLAZE 100 JA 1/16W
Q805	405 014 4519	TR 2SC2412KT146/R	R137	401 105 5212	MT- GLAZE 470 JA 1/16W
Q806	405 014 4519	TR 2SC2412KT146/R	R138	401 105 5212	MT- GLAZE 470 JA 1/16W
Q807	405 002 0318	TR 2SA1037K- T96- R	R139	401 105 3119	MT- GLAZE 27 JA 1/16W
Q810	405 014 4519	TR 2SC2412KT146/R	R140	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R141	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
			R142	401 105 0514	MT- GLAZE 1K JA 1/16W
			R143	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R144	401 105 2716	MT- GLAZE 220 JA 1/16W
			R149	401 027 2125	CARBON 56 JA 1/6W
			R153	401 105 5212	MT- GLAZE 470 JA 1/16W
			R157	401 105 0613	MT- GLAZE 10K JA 1/16W
			R158	401 105 4710	MT- GLAZE 39K JA 1/16W
			R1901	401 105 1610	MT- GLAZE 15K JA 1/16W
			R1901A	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R1902	401 105 7414	MT- GLAZE 8. 2K JA 1/16W
			R1902A	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R1903	401 105 5311	MT- GLAZE 4. 7K JA 1/16W
			R1903A	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R1904	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
			R1905	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
			R1906	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R1907	401 025 7429	CARBON 220 JA 1/6W
			R1908	401 105 4017	MT- GLAZE 330 JA 1/16W
			R1909	401 105 1511	MT- GLAZE 1. 5K JA 1/16W
			R1910	401 024 7430	CARBON 10K JA 1/6W
			R1912	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
			R1916	401 105 0514	MT- GLAZE 1K JA 1/16W
			R1917	401 105 5915	MT- GLAZE 560 JA 1/16W
			R1921	401 007 7641	CARBON 150 JA 1/2W
			R1922	401 007 7641	CARBON 150 JA 1/2W
			R201	401 105 1412	MT- GLAZE 150 JA 1/16W
			R202	401 105 0514	MT- GLAZE 1K JA 1/16W
			R211	401 105 0415	MT- GLAZE 100 JA 1/16W
			R212	401 026 0627	CARBON 270 JA 1/6W
			R213	401 105 3010	MT- GLAZE 220K JA 1/16W
			R214	401 105 0415	MT- GLAZE 100 JA 1/16W
			R215	401 105 0415	MT- GLAZE 100 JA 1/16W
			R216	401 105 0613	MT- GLAZE 10K JA 1/16W
			R217	401 024 7430	CARBON 10K JA 1/6W
			R230	401 105 4215	MT- GLAZE 33K JA 1/16W
			R234	401 024 6720	CARBON 100 JA 1/6W
			R235	401 024 6720	CARBON 100 JA 1/6W
			R236	401 024 6720	CARBON 100 JA 1/6W
			R237	401 024 6720	CARBON 100 JA 1/6W
			R238	401 105 0415	MT- GLAZE 100 JA 1/16W
			R239	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
			R240	401 105 0415	MT- GLAZE 100 JA 1/16W
			R241	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
RESISTOR					
R001	401 024 7024	CARBON 1K JA 1/6W			
R002	401 105 2013	MT- GLAZE 1. 8K JA 1/16W			
R003	401 024 7024	CARBON 1K JA 1/6W			
R004	401 105 2013	MT- GLAZE 1. 8K JA 1/16W			
R005	401 026 9323	CARBON 47 JA 1/6W			
R006	401 025 1625	CARBON 1K5 JA 1/6W			
R007	401 026 9323	CARBON 47 JA 1/6W			
R008	401 025 1625	CARBON 1K5 JA 1/6W			
R009	401 026 8128	CARBON 4. 7 JA 1/6W			
R010	401 026 8128	CARBON 4. 7 JA 1/6W			
R013	401 105 0514	MT- GLAZE 1K JA 1/16W			
R014	401 022 1935	CARBON 680 JA 1/4W			
R015	401 025 7429	CARBON 220 JA 1/6W			
R016	401 022 1935	CARBON 680 JA 1/4W			
R018	401 105 0613	MT- GLAZE 10K JA 1/16W			
R021	401 105 0514	MT- GLAZE 1K JA 1/16W			
R022	401 105 5410	MT- GLAZE 47K JA 1/16W			
R1001	401 105 4710	MT- GLAZE 39K JA 1/16W			
R1002	401 027 6628	CARBON 75 JA 1/6W			
R1003	401 027 6628	CARBON 75 JA 1/6W			
R1005	401 027 6628	CARBON 75 JA 1/6W			
R1006	401 105 5212	MT- GLAZE 470 JA 1/16W			
R1007	401 027 6628	CARBON 75 JA 1/6W			
R1008	401 105 5212	MT- GLAZE 470 JA 1/16W			
R1009	401 027 6628	CARBON 75 JA 1/6W			
R101	401 105 0415	MT- GLAZE 100 JA 1/16W			
R1010	401 105 5212	MT- GLAZE 470 JA 1/16W			
R1011	401 027 6628	CARBON 75 JA 1/6W			
R1012	401 105 2815	MT- GLAZE 2. 2K JA 1/16W			
R1013	401 105 2815	MT- GLAZE 2. 2K JA 1/16W			
R1014	401 105 5915	MT- GLAZE 560 JA 1/16W			
R1015	401 105 5915	MT- GLAZE 560 JA 1/16W			
R1016	401 026 7428	CARBON 39K JA 1/6W			
R1017	401 027 6628	CARBON 75 JA 1/6W			
R1018	401 027 6628	CARBON 75 JA 1/6W			
R1019	401 027 6628	CARBON 75 JA 1/6W			
R102	401 105 0415	MT- GLAZE 100 JA 1/16W			
R1020	401 105 2815	MT- GLAZE 2. 2K JA 1/16W			
R1021	401 105 2815	MT- GLAZE 2. 2K JA 1/16W			
R1022	401 105 5915	MT- GLAZE 560 JA 1/16W			
R1023	401 105 5915	MT- GLAZE 560 JA 1/16W			
R1024	401 105 2914	MT- GLAZE 22K JA 1/16W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R242	401 105 0415	MT-GLAZE 100 JA 1/16W			
R243	401 105 2815	MT-GLAZE 2. 2K JA 1/16W			
R244	401 105 4017	MT-GLAZE 330 JA 1/16W			
R245	401 218 4614	MT-GLAZE 5. 6K FA 1/16W			
R246	401 105 4710	MT-GLAZE 39K JA 1/16W			
R247	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W			
R248	401 105 7513	MT-GLAZE 82K JA 1/16W			
R254	401 105 0712	MT-GLAZE 100K JA 1/16W			
R255	401 105 8114	MT-GLAZE 56K JA 1/16W			
R256	401 105 0514	MT-GLAZE 1K JA 1/16W			
R257	401 105 0514	MT-GLAZE 1K JA 1/16W			
R258	401 105 0514	MT-GLAZE 1K JA 1/16W			
△R430	401 065 2808	OXIDE-MT 120 JA 2W	△ R682	401 066 5204	OXIDE-MT 22 JA 2W
R432	401 105 4017	MT-GLAZE 330 JA 1/16W	R684	401 027 8622	CARBON 8K2 JA 1/6W
R433	401 010 3132	CARBON 470 JA 1/2W	R685	401 025 8228	CARBON 22K JA 1/6W
R434	401 105 0415	MT-GLAZE 100 JA 1/16W	R801	401 105 5410	MT-GLAZE 47K JA 1/16W
△R435	402 069 8704	WIRE WOUND 8. 2 KA 7W	R802	401 105 0613	MT-GLAZE 10K JA 1/16W
R436	401 021 3049	CARBON 5. 6K JA 1/4W	R803	401 105 0613	MT-GLAZE 10K JA 1/16W
R437	401 026 3925	CARBON 330 JA 1/6W	R804	401 105 0613	MT-GLAZE 10K JA 1/16W
△R441	401 058 3706	OXIDE-MT 1K JA 1W	R805	401 105 6011	MT-GLAZE 5. 6K JA 1/16W
R446	401 021 3049	CARBON 5. 6K JA 1/4W	R806	401 105 0613	MT-GLAZE 10K JA 1/16W
R447	401 026 9927	CARBON 4K7 JA 1/6W	R807	401 105 0613	MT-GLAZE 10K JA 1/16W
R448	401 067 0000	OXIDE-MT 270 JA 2W	R808	401 024 6720	CARBON 100 JA 1/6W
R450	401 025 1922	CARBON 15K JA 1/6W	R809	401 105 0613	MT-GLAZE 10K JA 1/16W
△R451	401 064 5701	OXIDE-MT 1. 8 JA 2W	R810	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W
R453	401 024 7024	CARBON 1K JA 1/6W	R815	401 105 0415	MT-GLAZE 100 JA 1/16W
R454	401 014 6149	CARBON 150K JA 1/4W	R817	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W
R461	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W	R818	401 105 5410	MT-GLAZE 47K JA 1/16W
R462	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W	R819	401 026 9927	CARBON 4K7 JA 1/6W
R481	401 016 5843	CARBON 220K JA 1/4W	R820	401 105 4215	MT-GLAZE 33K JA 1/16W
R482	401 027 5522	CARBON 6K8 JA 1/6W	R822	401 105 0613	MT-GLAZE 10K JA 1/16W
R504	401 105 8114	MT-GLAZE 56K JA 1/16W	R826	401 105 0613	MT-GLAZE 10K JA 1/16W
R505	401 025 4626	CARBON 18K JA 1/6W	R829	401 105 4215	MT-GLAZE 33K JA 1/16W
R506	401 024 7430	CARBON 10K JA 1/6W	R830	401 105 4215	MT-GLAZE 33K JA 1/16W
R507	401 027 8127	CARBON 82 JA 1/6W	R831	401 105 0613	MT-GLAZE 10K JA 1/16W
△R509	401 057 9907	OXIDE-MT 1. 5 JA 1W	R832	401 105 0613	MT-GLAZE 10K JA 1/16W
△R512	401 060 7402	OXIDE-MT 270 JA 1W	R833	401 105 0613	MT-GLAZE 10K JA 1/16W
△R513	401 059 3903	OXIDE-MT 1. 5K JA 1W	R836	401 105 6615	MT-GLAZE 6. 8K JA 1/16W
△R515	401 068 6209	OXIDE-MT 5. 6 JA 2W	R837	401 105 6011	MT-GLAZE 5. 6K JA 1/16W
R523	401 105 5311	MT-GLAZE 4. 7K JA 1/16W	R838	401 105 6011	MT-GLAZE 5. 6K JA 1/16W
R535	401 105 7919	MT-GLAZE 0. 000 ZA 1/16W	R839	401 105 6011	MT-GLAZE 5. 6K JA 1/16W
△R602	402 067 7709	WIRE WOUND 3. 9 KA 7W	R840	401 105 0514	MT-GLAZE 1K JA 1/16W
R611	401 027 2620	CARBON 5K6 JA 1/6W	R842	401 105 1610	MT-GLAZE 15K JA 1/16W
R612	401 026 9620	CARBON 470 JA 1/6W	R843	401 105 2716	MT-GLAZE 220 JA 1/16W
R615	401 025 8228	CARBON 22K JA 1/6W	R844	401 105 2716	MT-GLAZE 220 JA 1/16W
R617	401 024 9325	CARBON 1K2 JA 1/6W	R845	401 105 2716	MT-GLAZE 220 JA 1/16W
R619	401 016 1538	CARBON 22 JA 1/4W	R846	401 105 0415	MT-GLAZE 100 JA 1/16W
R620	401 007 5815	CARBON 120K JA 1/2W	R847	401 105 3317	MT-GLAZE 2. 7K JA 1/16W
R621	401 007 5815	CARBON 120K JA 1/2W	R848	401 105 3317	MT-GLAZE 2. 7K JA 1/16W
R622	401 014 5241	CARBON 15K JA 1/4W	R849	401 105 3317	MT-GLAZE 2. 7K JA 1/16W
R623	401 025 7825	CARBON 2K2 JA 1/6W	R850	401 105 0514	MT-GLAZE 1K JA 1/16W
△R625	401 067 4206	OXIDE-MT 33 JA 2W	R851	401 105 2815	MT-GLAZE 2. 2K JA 1/16W
R626	401 015 2209	CARBON 1. 8K GA 1/4W	R852	401 105 3416	MT-GLAZE 27K JA 1/16W
△R628	401 067 8204	OXIDE-MT 39 JA 2W	R853	401 105 2914	MT-GLAZE 22K JA 1/16W
△R631	402 000 8602	SOLID 5. 6M KA 1/2W	R854	401 105 5311	MT-GLAZE 4. 7K JA 1/16W
△R632	402 000 8602	SOLID 5. 6M KA 1/2W	R855	401 105 0613	MT-GLAZE 10K JA 1/16W
R633	401 007 6921	CAR RES 15JA	R856	401 105 6011	MT-GLAZE 5. 6K JA 1/16W
△R634	401 061 1706	OXIDE-MT 33 JA 1W	R857	401 105 4215	MT-GLAZE 33K JA 1/16W
△R638	402 067 3305	WIRE WOUND 4. 7 KA 5W	R858	401 026 3925	CARBON 330 JA 1/6W
R641	401 026 9927	CARBON 4K7 JA 1/6W	R859	401 105 5915	MT-GLAZE 560 JA 1/16W
R642	401 012 8145	CARBON 100K JA 1/4W	R861	401 105 1511	MT-GLAZE 1. 5K JA 1/16W
△R643	401 065 5809	OXIDE-MT 15 JA 2W	R862	401 105 7414	MT-GLAZE 8. 2K JA 1/16W
△R644	401 061 0006	OXIDE-MT 3. 3 JA 1W	R863	401 105 1610	MT-GLAZE 15K JA 1/16W
R645	401 016 4836	CARBON 22K JA 1/4W	R864	401 105 4017	MT-GLAZE 330 JA 1/16W
R646	401 014 6149	CARBON 150K JA 1/4W	R872	401 105 0613	MT-GLAZE 10K JA 1/16W
R647	401 010 4317	CARBON 47K JA 1/2W	R873	401 105 0613	MT-GLAZE 10K JA 1/16W
R648	401 027 0329	CARBON 47K JA 1/6W	R874	401 026 9620	CARBON 470 JA 1/6W
R653	401 105 2914	MT-GLAZE 22K JA 1/16W	R875	401 026 9620	CARBON 470 JA 1/6W
R654	401 105 0613	MT-GLAZE 10K JA 1/16W	R876	401 024 7430	CARBON 10K JA 1/6W
R681	401 008 1628	CARBON 1K8 JA 1/2W	R878	401 024 7430	CARBON 10K JA 1/6W
			R879	401 105 0613	MT-GLAZE 10K JA 1/16W
			R880	401 105 4710	MT-GLAZE 39K JA 1/16W
			R881	401 105 0514	MT-GLAZE 1K JA 1/16W
			R882	401 025 7429	CARBON 220 JA 1/6W
			R883	401 105 2716	MT-GLAZE 220 JA 1/16W
			MISCELLANEOUS		
			A101	645 040 4528	TUNER, U/V
			A1901	645 028 1044	REMO REC SPS-443-1-E
			△F601	423 022 2102	FUSE 250V 4. 0A
			F601A	645 000 5077	HOLDER, FUSE
			F601B	645 000 5077	HOLDER, FUSE

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
JS004	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	VR641	645 006 5514	VR, SEMI, 2. 2K N
JS005	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	X121	1AV4F32B0140N	EFC- S5R5MW3AS (5
JS006	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	X131	421 007 8606	SAW F TSB5387P
JS101	401 105 2716	MT- GLAZE 220 JA 1/16W	X132	421 002 2609	SAW F TSF5315
JS102	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	X231	645 042 3741	XTAL 4. 433MHZ 16PF KSS5MM
JS110	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	X801	610 282 0201	XTAL. OSC 4.00MHZ 5MM
J118	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	Z101	610 282 9693	SHIELD CASE C2HC- A
J150	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	Z102	610 282 9709	SHIELD CASE C2HC- B
J203	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	1AA0B10E627A0		ASSY,PWB,TEXT V C2K
J204	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	CAPACITOR		
J224	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C2301	403 072 4410	CERAMI C 270P K 50V
J229	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C2302	403 233 0817	ELECT 10U M 50V
J237	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C2303	403 067 6274	POLYESTER 0.15U J 50V
J240	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	DIODE		
J243	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	D2301	407 099 5214	ZENER DIODE MT'ZJ5. 1B
J245	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	INTERGRATED CIRCUIT		
J247	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	IC2301	409 185 5600	IC TC74HC74AP
J305	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	TRANSISTOR		
J325	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	Q2301	405 011 8510	TR 2SC1740S- DCTP- R
J332	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	Q2302	405 011 8510	TR 2SC1740S- DCTP- R
J333	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	RESISTOR		
J334	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2301	401 017 0847	CARBON 270 JA 1/4W
J335	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2302	401 027 0329	CARBON 47K JA 1/6W
J336	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2303	401 025 7429	CARBON 220 JA 1/6W
J340	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2304	401 024 9721	CARBON 12K JA 1/6W
J344	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2306	401 027 0329	CARBON 47K JA 1/6W
J346	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2307	401 026 7022	CARBON 3K9 JA 1/6W
J416	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	R2309	401 026 7022	CARBON 3K9 JA 1/6W
J434	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	MISCELLANEOUS		
J442	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	K23X	645 027 0192	PLUG, 10P
J454	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	PB2301	610 286 8739	PWB, TEXT- V C2HC X20
J500	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	1AA0B10E592A0		
J508	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	ASSY, PWB, A2-SW C2WT		
J525	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	CAPACITOR		
J617	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C1200	403 047 8402	ELECT 0. 1U M 50V
J623	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C1201	403 149 9218	CERAMI C 0.01U Z 50V
J629	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C1202	403 248 1618	ELECT 47U M 16V
KCPA	645 006 1905	HSG PLUG 5P S5B- XH- A JST	C1204	403 233 1111	ELECT 22U M 50V
KD	403 237 7941	MT- COMPO 0.22U J 50V	C1205	403 298 9619	CERAMI C 0. 1U K 16V
KDY- 1	645 008 4058	TERMI NAL PLUG	C1206	403 298 9619	CERAMI C 0. 1U K 16V
KDY- 3	645 008 4058	TERMI NAL PLUG	C1207	403 233 0817	ELECT 10U M 50V
KDY- 5	645 008 4058	TERMI NAL PLUG	C1208	403 157 3611	CERAMI C 100P J 50V
KDY- 6	645 008 4058	TERMI NAL PLUG	C1209	403 157 3611	CERAMI C 100P J 50V
△ KE- 1	645 008 4058	TERMI NAL PLUG	C1211	403 153 9310	CERAMI C 82P J 50V
△ KE- 2	645 008 4058	TERMI NAL PLUG	C1212	403 153 9310	CERAMI C 82P J 50V
KEMI	645 008 4058	TERMI NAL PLUG	C1213	403 153 9310	CERAMI C 82P J 50V
KF- 1	645 008 4058	TERMI NAL PLUG	C1214	403 153 9310	CERAMI C 82P J 50V
KF- 2	645 008 4058	TERMI NAL PLUG	C1215	403 153 9310	CERAMI C 82P J 50V
KH	645 008 7288	HOUSING PLUG 5P	C1216	403 233 0817	ELECT 10U M 50V
KJ	645 040 4627	SOCKET, PWB- PWB 15P	C1217	403 233 0817	ELECT 10U M 50V
KL	645 004 2881	PLUG, 2P	C1218	403 153 9310	CERAMI C 82P J 50V
KM	645 032 1924	SOCKET, PWB- PWB 20P	C3138	403 160 0020	ELECT 470U M 10V
KP	645 008 7288	HOUSING PLUG 5P	C3139	403 248 1618	ELECT 47U M 16V
KQ	645 008 7264	HOUSING PLUG 3P	C3452	403 314 5915	SMD CAP GRM40X5R474K1
KR- 1	645 008 4058	TERMI NAL PLUG	C3453	403 157 2911	CERAMI C 47P J 50V
KR- 2	645 008 4058	TERMI NAL PLUG	C3454	403 164 0214	CERAMI C 0. 1U Z 25V
K1001	645 005 5867	21- PIN SOCKET	C3456	403 298 9619	CERAMI C 0. 1U K 16V
K1002	645 005 5867	21- PIN SOCKET	C3458	403 157 2911	CERAMI C 47P J 50V
K1101	645 002 0568	TERMI NAL, BOARD	C3459	403 248 1618	ELECT 47U M 16V
K1921	645 005 5706	PHONE JACK HTJ- 035- 10AB	C3461	403 248 1410	ELECT 1U M 50V
PB101	610 282 2939	PWB, MAIN C2HC "B" SERIES	C3467	403 248 1410	ELECT 1U M 50V
PS601	408 003 6805	THERMI STOR 902P44E180MR14	C3468	403 164 0214	CERAMI C 0. 1U Z 25V
SW1901	610 011 4432	SWI TCH, PUSH			
SW1902	610 011 4432	SWI TCH, PUSH			
SW1903	610 011 4432	SWI TCH, PUSH			
SW1904	610 011 4432	SWI TCH, PUSH			
SW501	610 011 2728	SWI TCH, LEVER 1P- 3T			
△ SW601	645 024 0607	PUSH SW POWER SDDFC3			
TP- A	645 008 4058	TERMI NAL PLUG			
TP- B	645 008 4058	TERMI NAL PLUG			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C3468	403 164 0214	CERAMIC 0.1U Z 25V	Q3454	405 014 4519	TR 2SC2412KT146/R
C3469	403 164 0214	CERAMIC 0.1U Z 25V	Q3455	405 014 4519	TR 2SC2412KT146/R
C3473	403 279 4312	CERAMIC 0.33U K 16V	Q3501	405 014 4519	TR 2SC2412KT146/R
C3474	403 279 4312	CERAMIC 0.33U K 16V	Q3502	405 014 4519	TR 2SC2412KT146/R
C3476	403 314 5915	SMD CAP GRM40X5R474K16	Q3503	405 014 4519	TR 2SC2412KT146/R
C3477	403 248 1618	ELECT 47U M 16V			
C3480	403 248 1618	ELECT 47U M 16V			
C3481	403 248 1618	ELECT 47U M 16V			
C3482	403 149 9218	CERAMIC 0.01U Z 50V			
C3483	403 149 9218	CERAMIC 0.01U Z 50V			
C3484	403 248 1618	ELECT 47U M 16V			
C3485	403 149 9218	CERAMIC 0.01U Z 50V			
C3486	403 248 1410	ELECT 1U M 50V			
C3487	403 248 1410	ELECT 1U M 50V			
C3492	403 149 9218	CERAMIC 0.01U Z 50V			
C3493	403 149 9218	CERAMIC 0.01U Z 50V			
C3494	403 164 0214	CERAMIC 0.1U Z 25V			
C3495	403 164 0214	CERAMIC 0.1U Z 25V			
C3501	403 233 0817	ELECT 10U M 50V			
C3502	403 157 7312	CERAMIC 6800P K 50V			
C3503	403 313 8016	CERAMIC 1000P J 25V			
C3504	403 298 9619	CERAMIC 0.1U K 16V			
C3505	403 248 1618	ELECT 47U M 16V			
C3506	403 248 2813	50 YK 2R2 M TA 0511			
C3507	403 215 2211	CERAMIC 0.01U K 50V			
C3508	403 215 2211	CERAMIC 0.01U K 50V			
C3509	403 215 2211	CERAMIC 0.01U K 50V			
C3510	403 215 2211	CERAMIC 0.01U K 50V			
C3511	403 313 8016	CERAMIC 1000P J 25V			
C3512	403 298 9619	CERAMIC 0.1U K 16V			
C3513	403 157 7312	CERAMIC 6800P K 50V			
C3514	403 233 0817	ELECT 10U M 50V			
C3515	403 248 2813	50 YK 2R2 M TA 0511			
C3516	403 233 0817	ELECT 10U M 50V			
C3517	403 269 5916	CERAMIC 0.22U K 16V			
C3518	403 248 1618	ELECT 47U M 16V			
C3520	403 248 1618	ELECT 47U M 16V			
C3521	403 279 4312	CERAMIC 0.33U K 16V			
C3522	403 279 4312	CERAMIC 0.33U K 16V			
INTERGRATED CIRCUIT					
IC1201	409 419 5406	IC MM1313BD			
IC3102	409 241 5407	IC BA178M05T			
IC3451	409 445 1403	IC TDA9875A/V2			
IC3501	409 405 6004	IC MM1369BD			
COIL					
L1201	645 008 2467	PEAKING COIL			
L1202	645 008 2467	PEAKING COIL			
L1203	645 008 2467	PEAKING COIL			
L1204	645 008 2467	PEAKING COIL			
L1205	645 008 2467	PEAKING COIL			
L1206	645 008 2467	PEAKING COIL			
L3450	401 105 7919	MT-GLAZE 0.000 ZA 1/16W			
L3452	645 008 2214	PEAKING COIL 2.2UHK			
L3453	645 008 2214	PEAKING COIL 2.2UHK			
L3456	645 008 2214	PEAKING COIL 2.2UHK			
L3457	645 008 2214	PEAKING COIL 2.2UHK			
L3459	401 105 7919	MT-GLAZE 0.000 ZA 1/16W			
L3469	645 008 2467	PEAKING COIL			
TRANSISTOR					
Q1202	405 014 4519	TR 2SC2412KT146/R			
Q1203	405 014 4519	TR 2SC2412KT146/R			
Q1204	405 014 4519	TR 2SC2412KT146/R			
Q1205	405 014 4519	TR 2SC2412KT146/R			
Q1206	405 014 4519	TR 2SC2412KT146/R			
Q1207	405 002 0318	TR 2SA1037K-T96-R			
Q3452	405 014 4519	TR 2SC2412KT146/R			
Q3453	405 014 4519	TR 2SC2412KT146/R			
			RESISTOR		
			R1200	401 105 1412	MT-GLAZE 150 JA 1/16W
			R1201	401 105 3218	MT-GLAZE 270 JA 1/16W
			R1202	401 105 3218	MT-GLAZE 270 JA 1/16W
			R1203	401 105 3218	MT-GLAZE 270 JA 1/16W
			R1204	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1205	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1206	401 105 3218	MT-GLAZE 270 JA 1/16W
			R1207	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1208	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1211	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1212	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1213	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1214	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1215	401 105 0415	MT-GLAZE 100 JA 1/16W
			R1216	401 105 7919	MT-GLAZE 0.000 ZA 1/16W
			R1217	401 105 5212	MT-GLAZE 470 JA 1/16W
			R1219	401 105 1016	MT-GLAZE 1.2K JA 1/16W
			R1220	401 105 1016	MT-GLAZE 1.2K JA 1/16W
			R1221	401 105 5311	MT-GLAZE 4.7K JA 1/16W
			R1222	401 105 5311	MT-GLAZE 4.7K JA 1/16W
			R1223	401 105 5212	MT-GLAZE 470 JA 1/16W
			R1224	401 105 5311	MT-GLAZE 4.7K JA 1/16W
			R1225	401 105 5311	MT-GLAZE 4.7K JA 1/16W
			R1226	401 105 5212	MT-GLAZE 470 JA 1/16W
			R1227	401 105 3218	MT-GLAZE 270 JA 1/16W
			R1228	401 105 6011	MT-GLAZE 5.6K JA 1/16W
			R1229	401 105 2013	MT-GLAZE 1.8K JA 1/16W
			R1230	401 105 3218	MT-GLAZE 270 JA 1/16W
			R1231	401 105 1412	MT-GLAZE 150 JA 1/16W
			R1232	401 105 5212	MT-GLAZE 470 JA 1/16W
			R3451	401 105 0415	MT-GLAZE 100 JA 1/16W
			R3452	401 105 0415	MT-GLAZE 100 JA 1/16W
			R3453	401 105 0613	MT-GLAZE 10K JA 1/16W
			R3454	401 105 0415	MT-GLAZE 100 JA 1/16W
			R3455	401 105 0613	MT-GLAZE 10K JA 1/16W
			R3464	401 105 0415	MT-GLAZE 100 JA 1/16W
			R3465	401 105 0613	MT-GLAZE 10K JA 1/16W
			R3471	401 105 3218	MT-GLAZE 270 JA 1/16W
			R3473	401 105 5212	MT-GLAZE 470 JA 1/16W
			R3474	401 105 2815	MT-GLAZE 2.2K JA 1/16W
			R3475	401 105 5212	MT-GLAZE 470 JA 1/16W
			R3476	401 105 2815	MT-GLAZE 2.2K JA 1/16W
			R3477	401 105 4710	MT-GLAZE 39K JA 1/16W
			R3478	401 105 4710	MT-GLAZE 39K JA 1/16W
			R3479	401 105 1610	MT-GLAZE 15K JA 1/16W
			R3480	401 105 1610	MT-GLAZE 15K JA 1/16W
			R3485	401 105 5212	MT-GLAZE 470 JA 1/16W
			R3486	401 105 2815	MT-GLAZE 2.2K JA 1/16W
			R3487	401 105 5212	MT-GLAZE 470 JA 1/16W
			R3488	401 105 2815	MT-GLAZE 2.2K JA 1/16W
			R3501	401 261 0717	MT-GLAZE 7.5K FA 1/16W
			R3502	401 105 0415	MT-GLAZE 100 JA 1/16W
			R3503	401 105 7315	MT-GLAZE 820 JA 1/16W
			R3504	401 105 0514	MT-GLAZE 1K JA 1/16W
			R3505	401 105 7513	MT-GLAZE 82K JA 1/16W
			R3506	401 105 2112	MT-GLAZE 18K JA 1/16W
			R3507	401 105 2815	MT-GLAZE 2.2K JA 1/16W
			R3508	401 105 0514	MT-GLAZE 1K JA 1/16W
			R3509	401 105 6615	MT-GLAZE 6.8K JA 1/16W
			R3510	401 105 5311	MT-GLAZE 4.7K JA 1/16W
			R3511	401 105 3010	MT-GLAZE 220K JA 1/16W
			R3512	401 105 8114	MT-GLAZE 56K JA 1/16W
			R3513	401 105 8114	MT-GLAZE 56K JA 1/16W

Ref. No.	Part No.	Description
R3514	401 105 4611	MT- GLAZE 3. 9K JA 1/16W
R3515	401 105 0514	MT- GLAZE 1K JA 1/16W
R3516	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
R3517	401 105 0514	MT- GLAZE 1K JA 1/16W
R3518	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
X3451	645 024 7484	OSC, CRYSTAL 24. 576MHZ
Z1200	610 285 9614	SHIELD CASE- B- N- C2HC

MISCELLANEOUS

J1203	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J1204	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J1206	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J1207	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J1210	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3450	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3451	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3452	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3453	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3457	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3458	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3459	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3460	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3461	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3462	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3463	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3464	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3465	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3471	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3491	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
J3492	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
K12H	645 004 2713	HOUSING PLUG 5P
K12J	645 040 4610	PLUG, PWB- PWB 15P
K12M	645 039 9411	PLUG, PWB- PWB 20P

1AA0B10E59500

ASSY,PWB,CRT C2WC

CAPACITOR

C702	403 074 5712	CERAMIC 560P K 50V
C712	403 074 5712	CERAMIC 560P K 50V
C722	403 074 5712	CERAMIC 560P K 50V
C731	403 077 2728	CERAMIC 1000P P 2K
C732	403 074 5712	CERAMIC 560P K 50V
C735	CE2E220MMJALC	250 YXA 22 M TA K1220
C751	CE1C331MMFALC	16 YK 330 M TA K0811

DIODE

D701	407 012 4416	DIODE 1SS133- T- 77
D711	407 012 4416	DIODE 1SS133- T- 77
D721	407 012 4416	DIODE 1SS133- T- 77
D751	407 012 4416	DIODE 1SS133- T- 77

COIL

L701	645 007 9856	PEAKING COIL 220UH K
L711	645 007 9856	PEAKING COIL 220UH K
L712	645 007 9856	PEAKING COIL 220UH K

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

Ref. No.	Part No.	Description
RESISTOR		
R702	401 025 7825	CARBON 2K2 JA 1/6W
R704	401 007 2319	CARBON 100K JA 1/2W
△ R705	401 065 0804	OXIDE- MT 100K JA 2W
R712	401 025 9819	CARBON 2. 4K JA 1/6W
R714	401 007 8440	CARBON 1. 5K JA 1/2W
R715	401 007 8440	CARBON 1. 5K JA 1/2W
R722	401 024 7430	CARBON 10K JA 1/6W
R724	401 065 4604	OXIDE- MT 12K JA 2W
R725	401 009 6622	CARBON 3. 3K JA 1/2W
R741	401 024 9325	CARBON 1K2 JA 1/6W
R742	401 027 2620	CARBON 5K6 JA 1/6W
R744	401 027 5225	CARBON 680 JA 1/6W
R752	401 024 7430	CARBON 10K JA 1/6W
R753	401 024 7430	CARBON 10K JA 1/6W
R756	401 026 9620	CARBON 470 JA 1/6W
R758	401 026 9620	CARBON 470 JA 1/6W
R759	401 026 9620	CARBON 470 JA 1/6W

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 - 013C2KTV

COIL

L901	645 034 1267	DEGAUSS COIL 21" 42T*.425
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TRANSISTOR

Q901	414 007 9001	CRT A51EBV13X09
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MISCELLANEOUS

SP901	610 232 3986	SPEAKER
SP902	610 232 3986	SPEAKER
W901	645 012 7632	EURO PLUG +2P HOUSE @ 2.1
W902	610 286 1617	GND,WIRE CONEC.C2KAV

CE21D5-C-01

ALL PANELS ARE THE SAME AS CE21D5-C-00 EXCEPT FOR THE FOLLOWING DIFFERENCES

1AA0B10H042A0 ASSY, PWB, MAIN C2KTV

IC642	409 377 5401	C L78M09CV ST
IC801	QXXAVB690---P	C ST92R195B9/ENJTR GREEK
IC802	QXXAAJQ0214B-	C2WTV VP/P 3CAC GREEK
J211	401 024 6720	CARBON 100 JA 1/6W
J212	401 024 6720	CARBON 100 JA 1/6W
J213	401 024 6720	CARBON 100 JA 1/6W
J500		DELETED
RN1		R-RNBOURN1025 RESISTOR NETWORK 1K X5
R847		DELETED
R848		DELETED
R849		DELETED

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
CE21D5-C-02					
ALL PANELS ARE THE SAME AS CE21D5-C-00 EXCEPT FOR THE FOLLOWING DIFFERENCES					
1AA0B10H042A0 ASSY, PWB, MAIN C2KTV					
C814	403 157 7312	CERAMIC 6800P K 50V			
D826	407 099 4811	ZENER DIODE MTZJ4.3B			
IC201	409 490 4701	IC TB1251BN VER 5.3			
IC642	409 377 5401	IC L78M09CV ST			
IC801	QXXAVB690---P	IC ST92R195B9/ENJTR GREEK			
IC802	QXXAAJQ0214B-	C2WTV VP/P 3CAC GREEK			
J211	401 024 6720	CARBON 100 JA 1/6W			
J212	401 024 6720	CARBON 100 JA 1/6W			
J213	401 024 6720	CARBON 100 JA 1/6W			
J500		DELETED			
Q803		DELETED			
RN1	R-RNBURN1025	RESISTOR NETWORK 1K X5			
R847		DELETED			
R848		DELETED			
R849		DELETED			
R850		DELETED			
R851		DELETED			

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.



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