



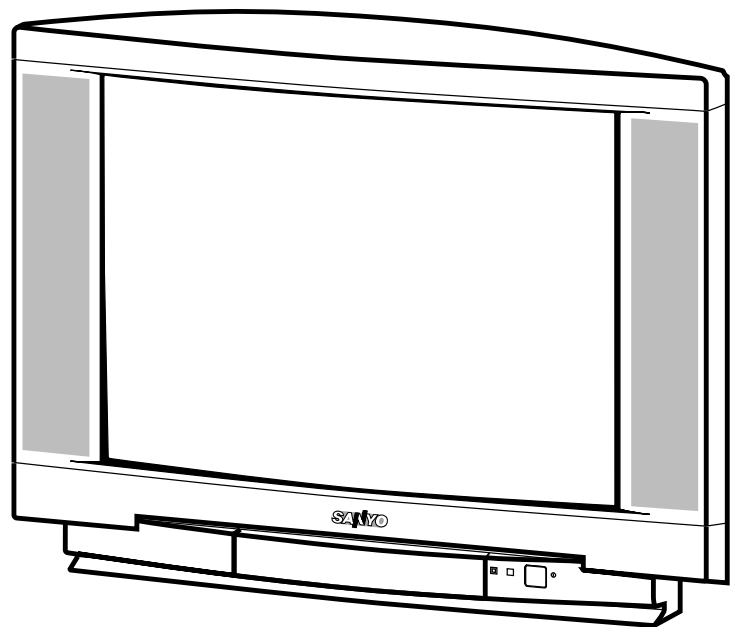
Colour Television Service Manual

CE28D6-c

Model CE28D6-C

Service Ref. No. CE28D6-C-00

PRODUCT CODE: 111351304
ORIGINAL VERSION: Chassis No. EB6-B



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 .

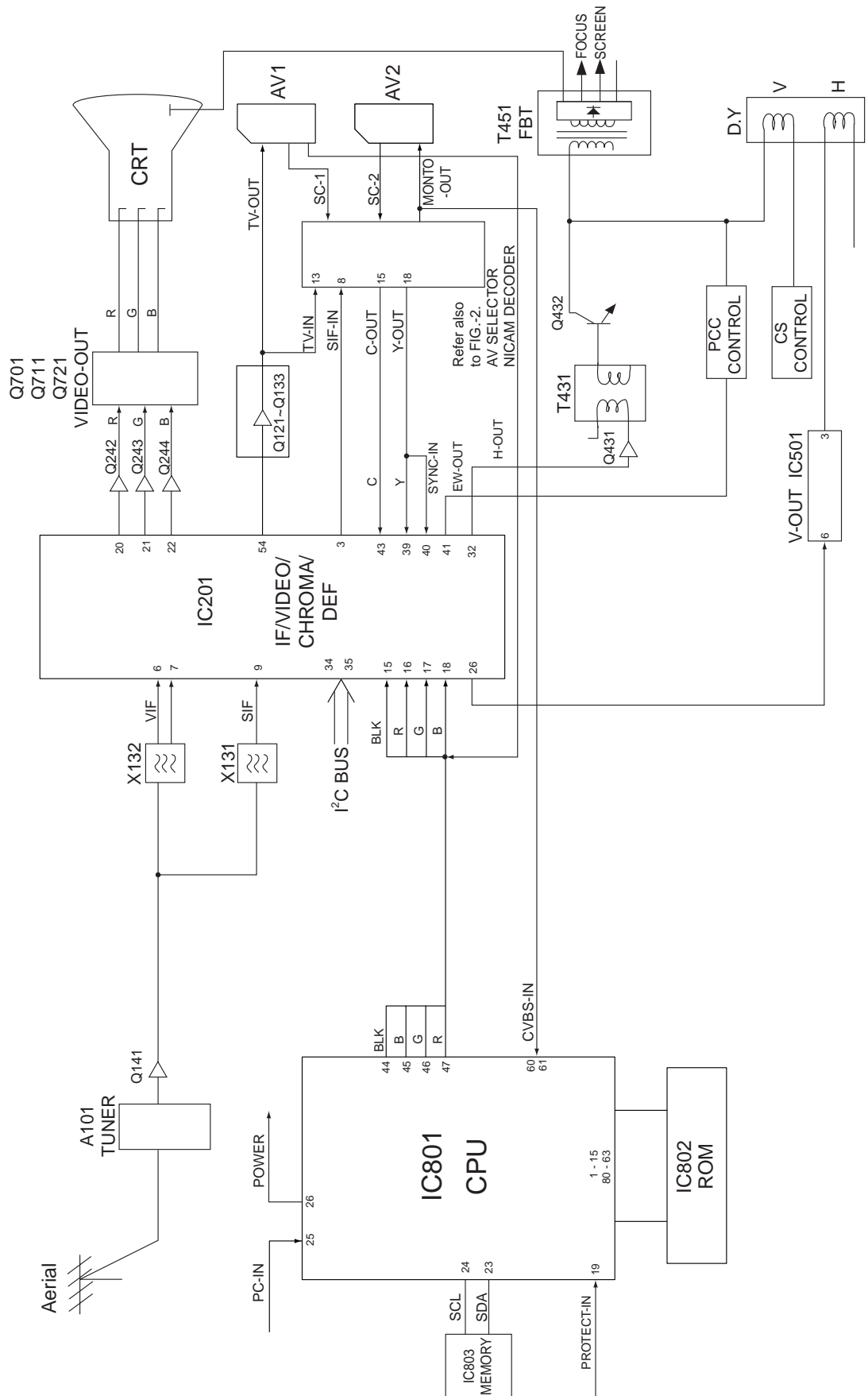
SPECIFICATIONS

Power source	AC 220~240V, 50Hz
Television system	System B/G, D/K
Colour system	PAL/NTSC4.43 (PAL/NTSC4.43/MTSC3.58 IN AV MODE)
Receiving channel	UHF: 21~69 VHF: E2-E12, R1-R12 CATV: X, Y, Z, Z+1, Z+2, S1-S41
Aerial input impedance	75ohm
AV terminal	
21 Pin SCART Terminal	AV1:CENELEC standard with RGB AV2:CENELEC standard with S-inputs
Front AV	AV3:RCA Terminal, Video and Audio (L/R)
Sound output(Music)	12W x 2
Dimensions (WxHxD)	736 x 597 x 494mm
Weight	32 Kg

BLOCK DIAGRAM

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

Outline



AV Selector NICAM DECODER

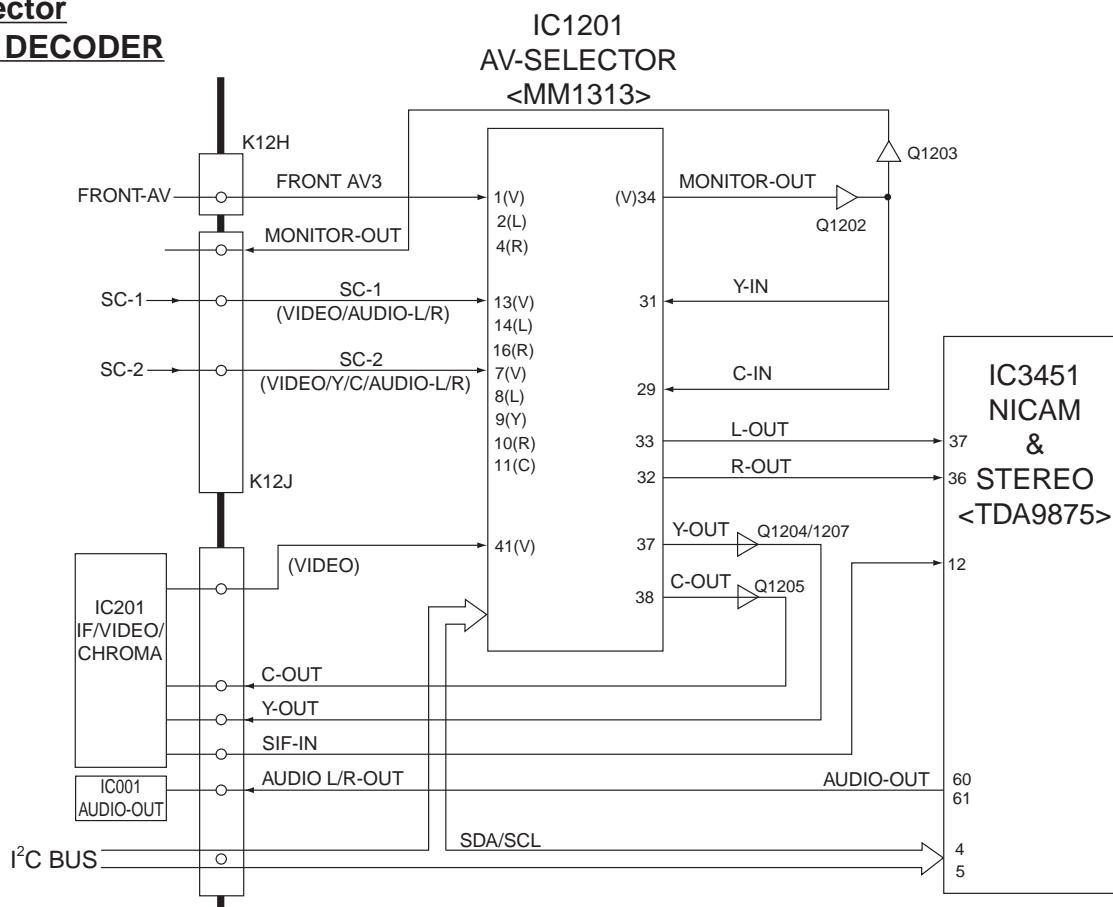


Fig.-2

System Control

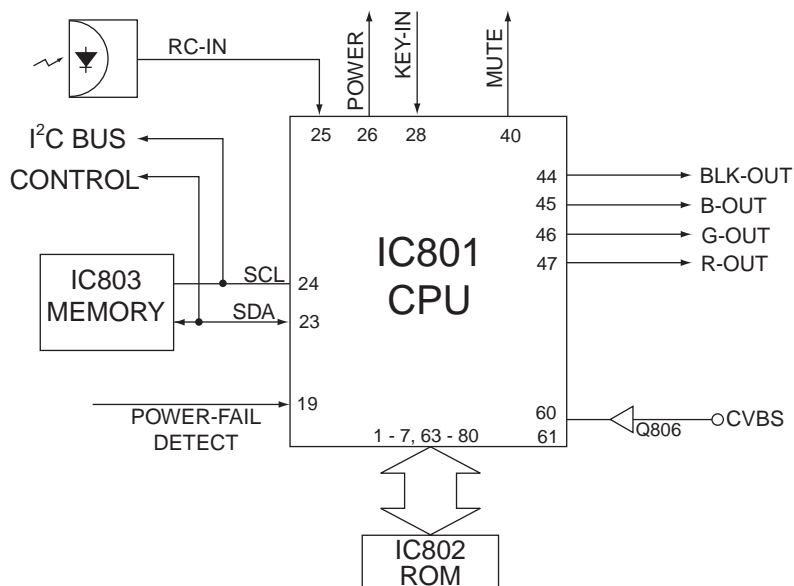
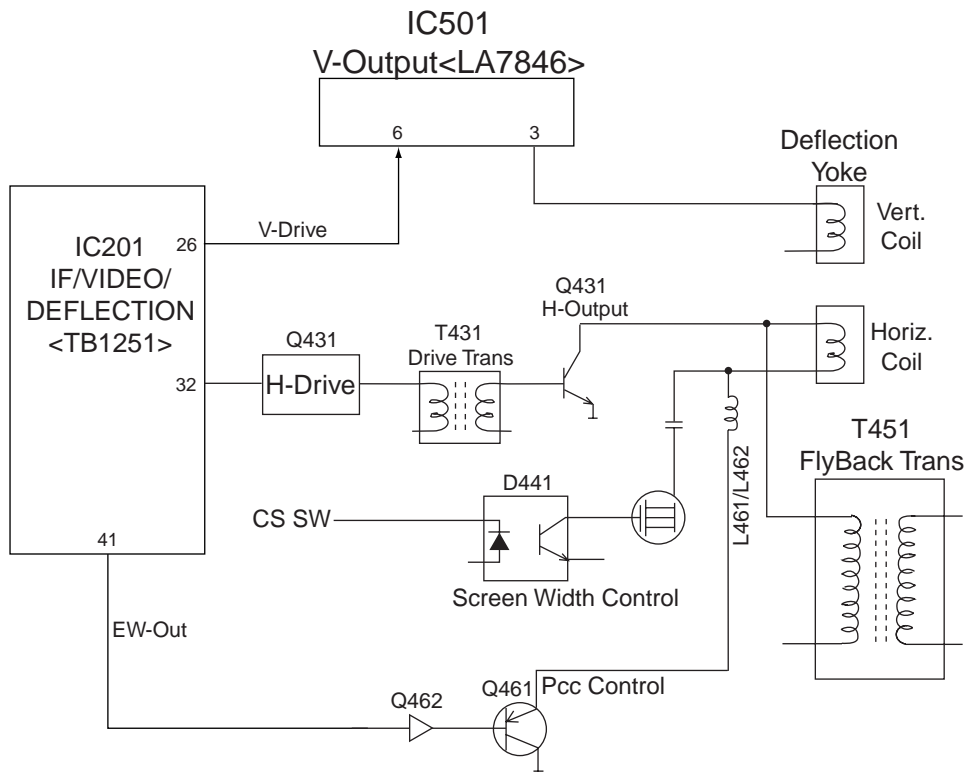


Fig.-3

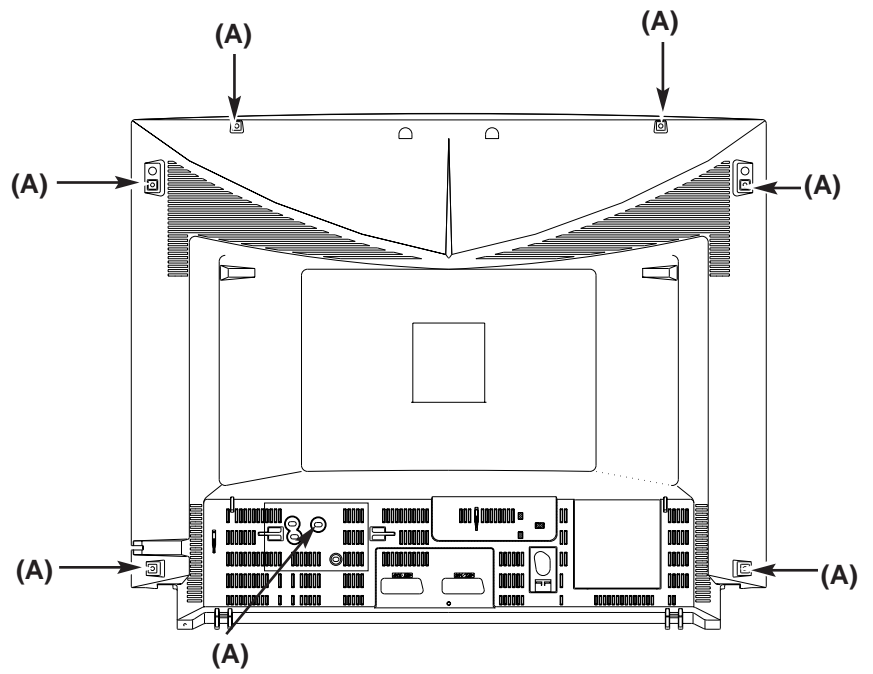
Deflection Control



CABINET DISASSEMBLY

CABINET BACK DISASSEMBLY

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



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	ATS EURO PLUS
PLUG & PLAY	ON
WELCOME TEXT	ON
CODE TEST	OFF
WSS	ON
WIDE	OFF
OPTION	ALL LANGUAGE
312/313 Mode	OFF
AV3 OPTION	ON
3D SURROUND	ON
SIF OPTION	BG ONLY

⬆ ⬇ ADJUST : ⬅ ➡ EXIT : RECALL

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/SORT or AUTO TUNE 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 "ON"
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 "UK"
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

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 14.

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

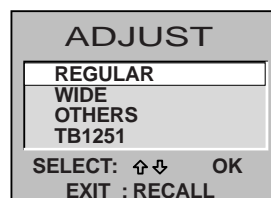
<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
1	P V-P	Vertical Centre Adjustment
2	P H-P	Horizontal Centre Adjustment
5	P V-S	Vertical Size Adjustment
6	P H-S	Horizontal Size Adjustment
7	P PCC	Pcc Adjustment
8	P TRP	Trapezoid Distortion Adjustment
10	P CNR	Corner Adjustment

IMPORTANT NOTICE

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

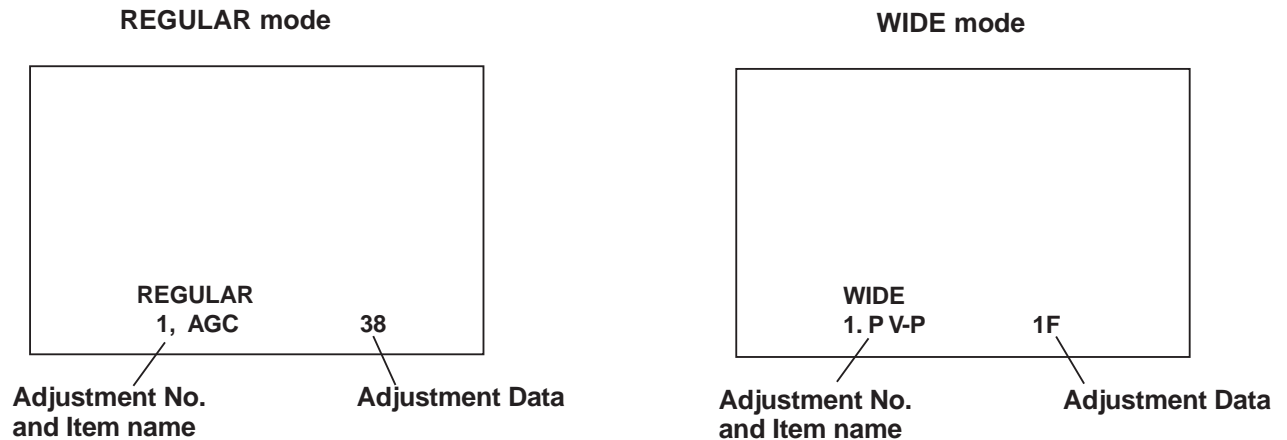
To enter to the Service Mode

+ 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 $150 \pm 0.5V$ 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 |

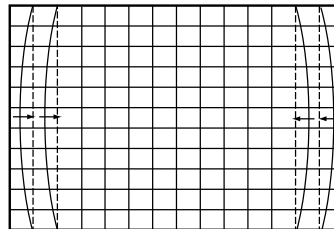
DRIVE ADJUSTMENT

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

PCC ADJUSTMENT

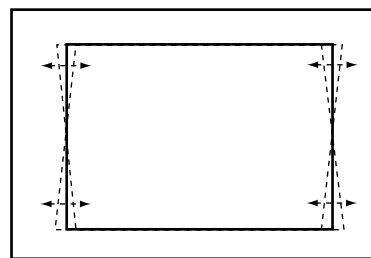
PCC ADJUSTMENT

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.

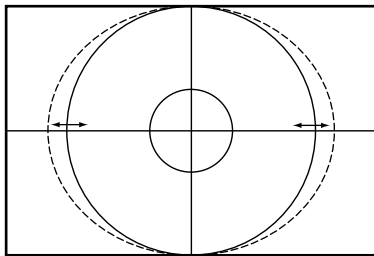
HORIZONTAL ADJUSTMENT

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 29.0 ± 1.0 kV at 1.4mA for 28" model.

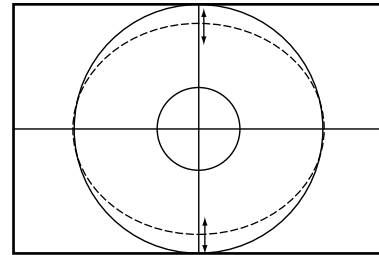
VERTICAL ADJUSTMENT

VERTICAL CENTRING ADJUSTMENT

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

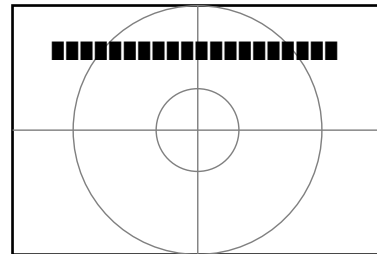
VERTICAL HEIGHT ADJUSTMENT

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.



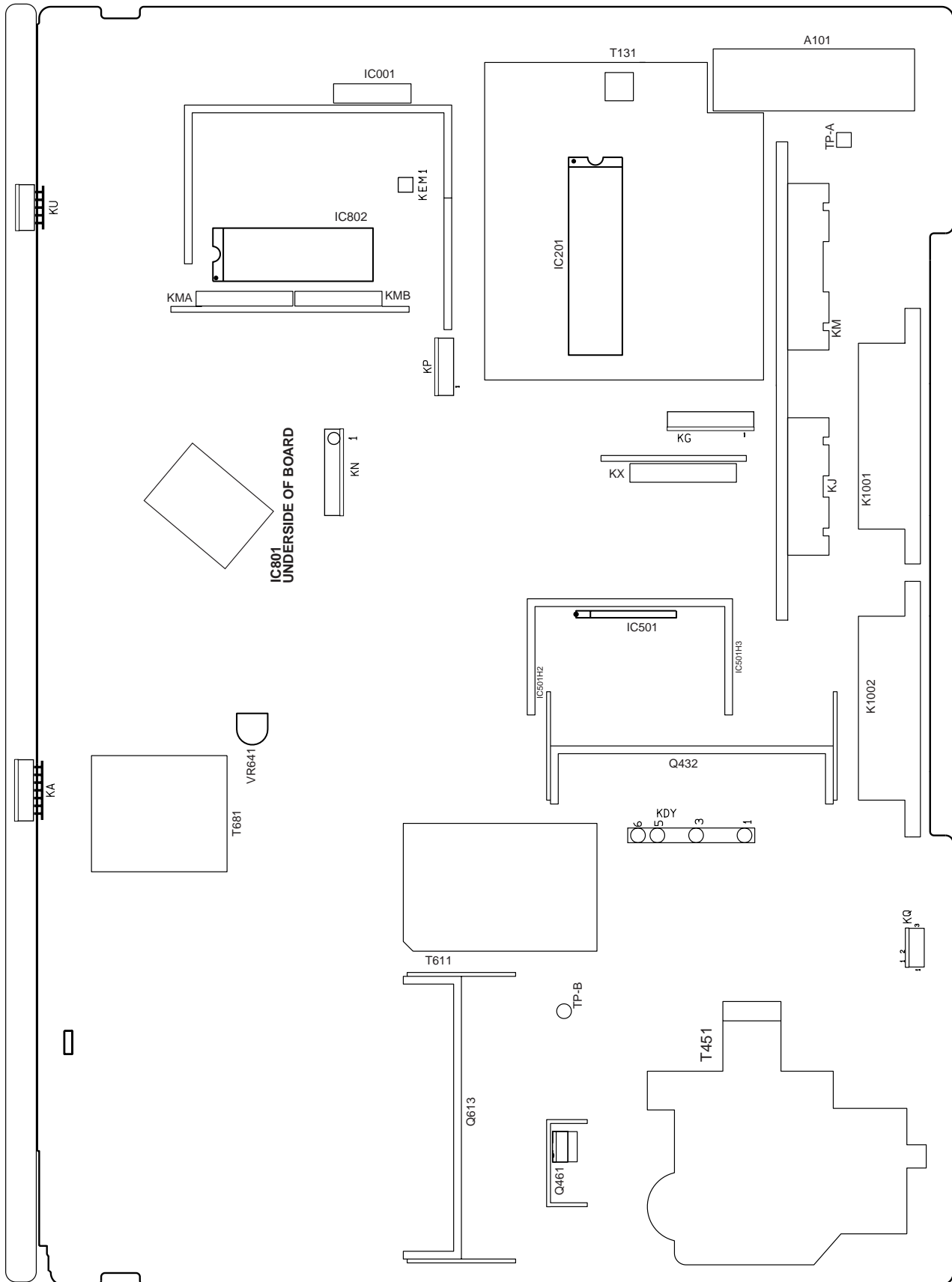
CPU PORT FUNCTIONS

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	

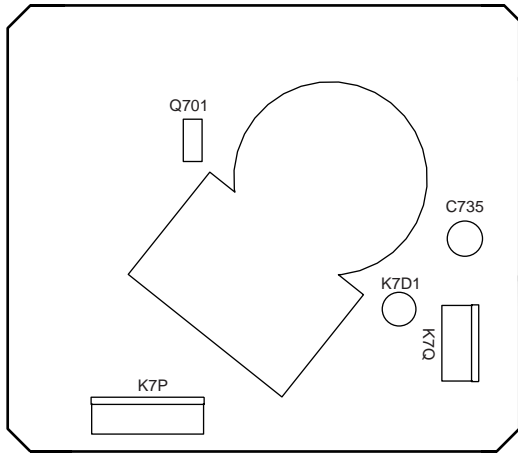
Pin No.	Function Name	Function	IN/OUT
51	WSCF	VPS/WSS Slicer Line PLL	
52	VDD-A	Analogue Power Supply	IN
53	PXFM	Pixel Frequency Multiplier	
54	RESET	Reset Input (Active L)	IN
55	MCFM	Pixel Frequency Multiplier	
56	JTRSTO		
57	TXCF		
58	CVBS0		
59	TEST0		
60	CVBS1	Video signal Input	IN
61	CVBS2	Video 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

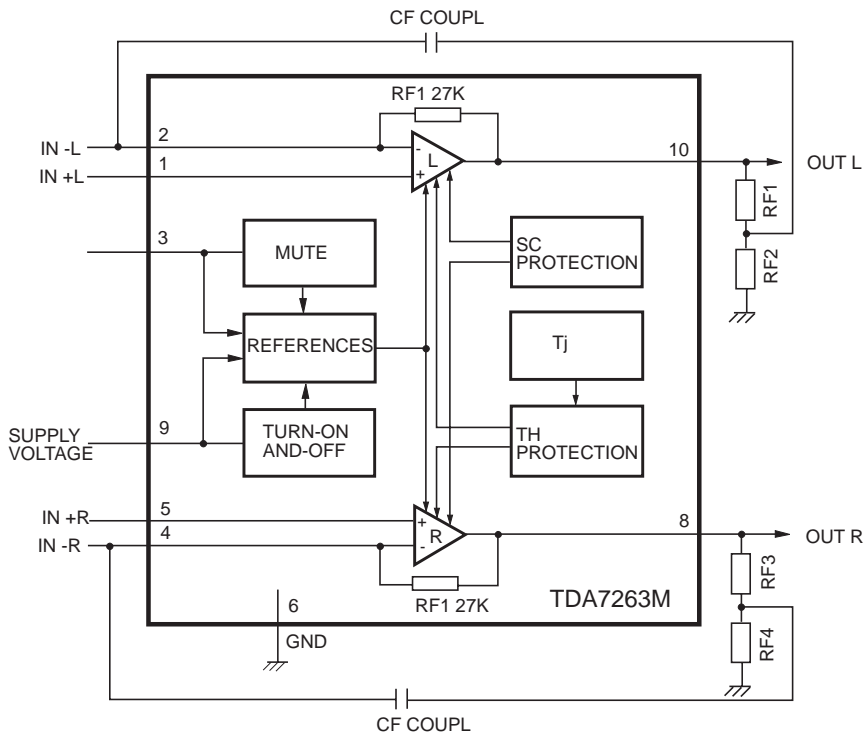


CRT BOARD

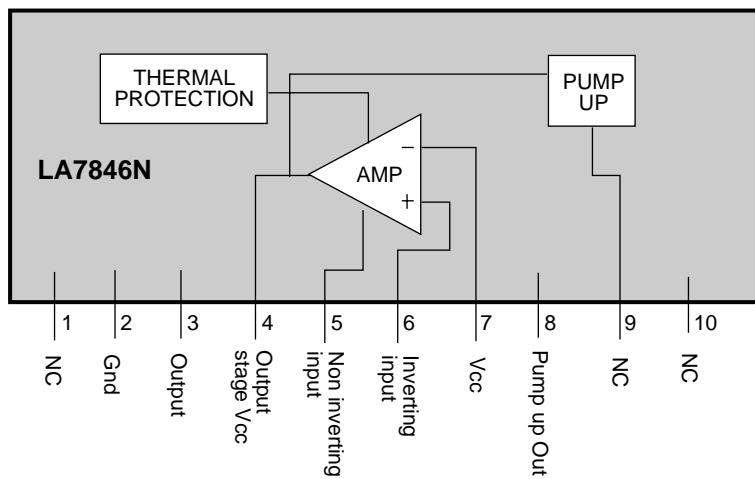


IC BLOCK DIAGRAMS

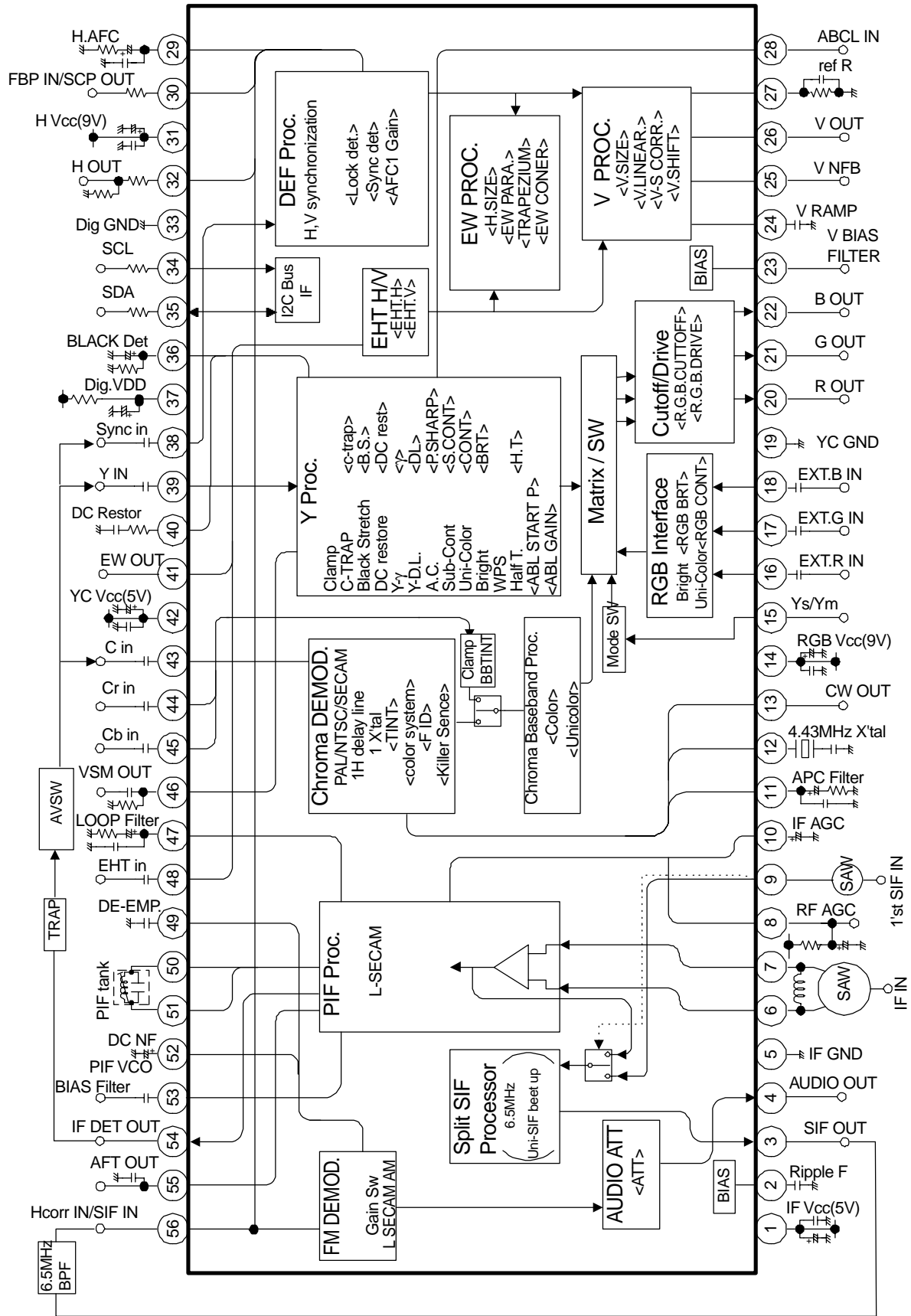
IC001 TDA7263M <Audio Output>



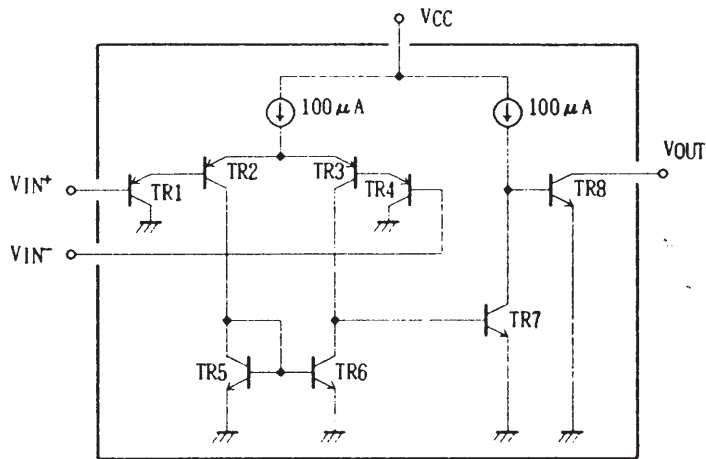
IC501 LA7846N <Vertical Output>



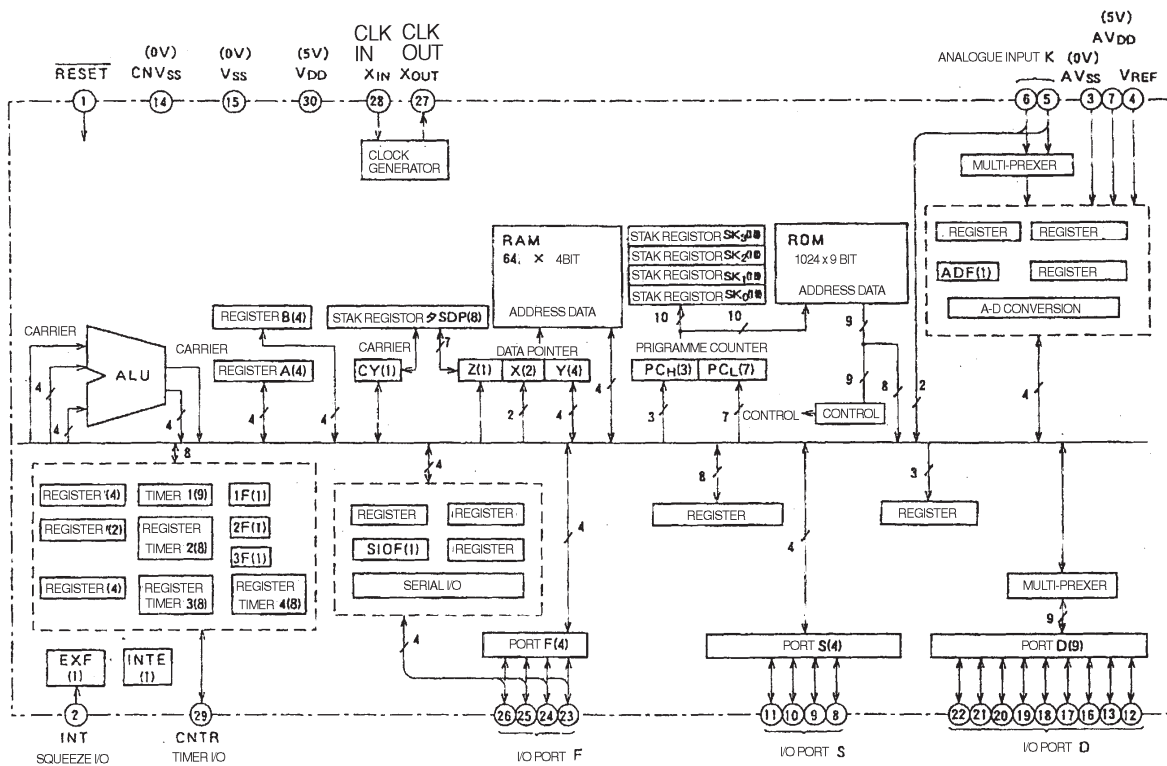
IC201 TB1251AN <IF/Video/Chroma/Def.>



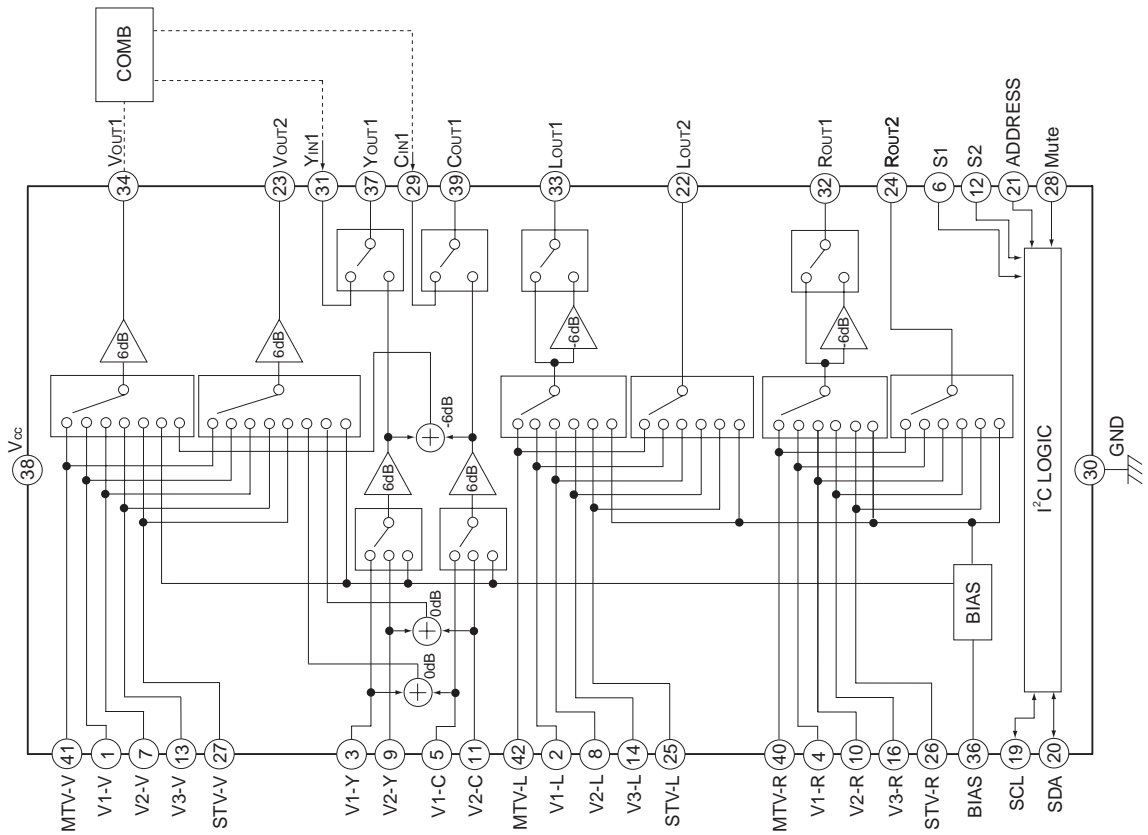
IC1301 LA6393D <Operation Amplifier>



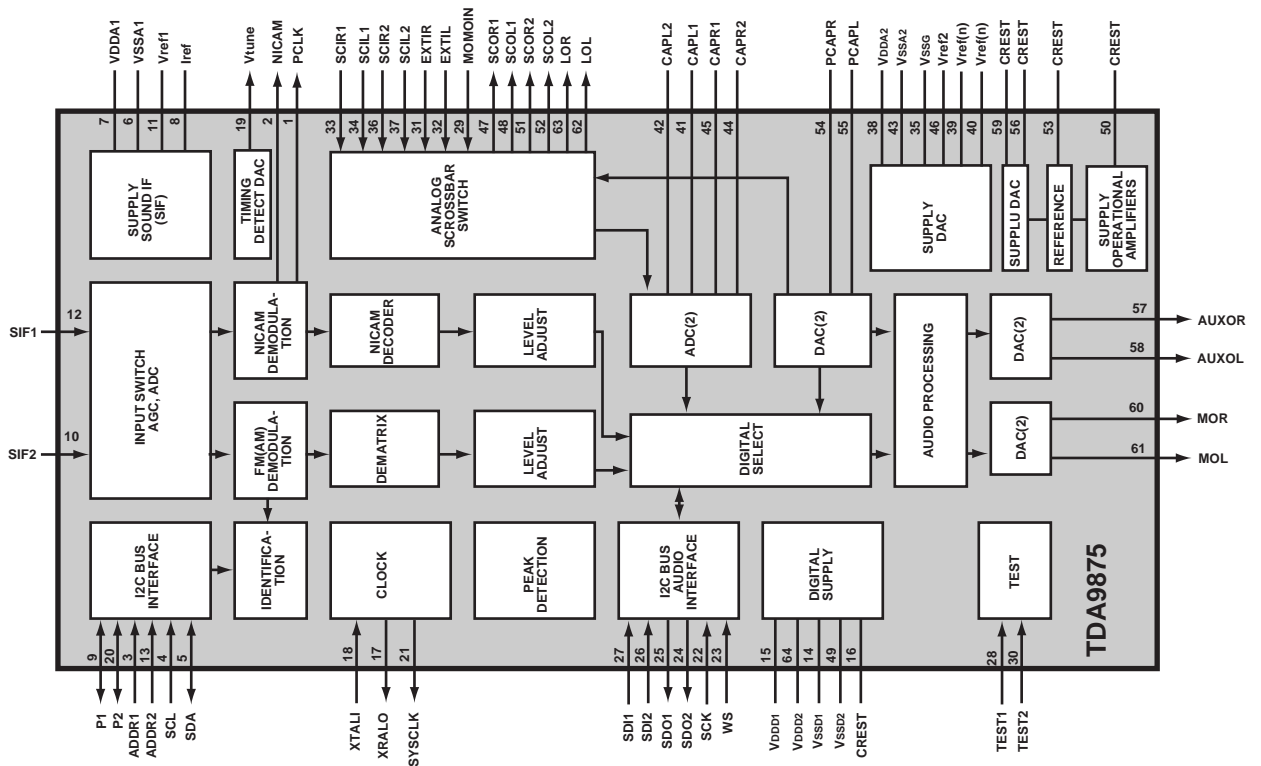
IC1303 M34225M1 <Single Chip Micro-computer>



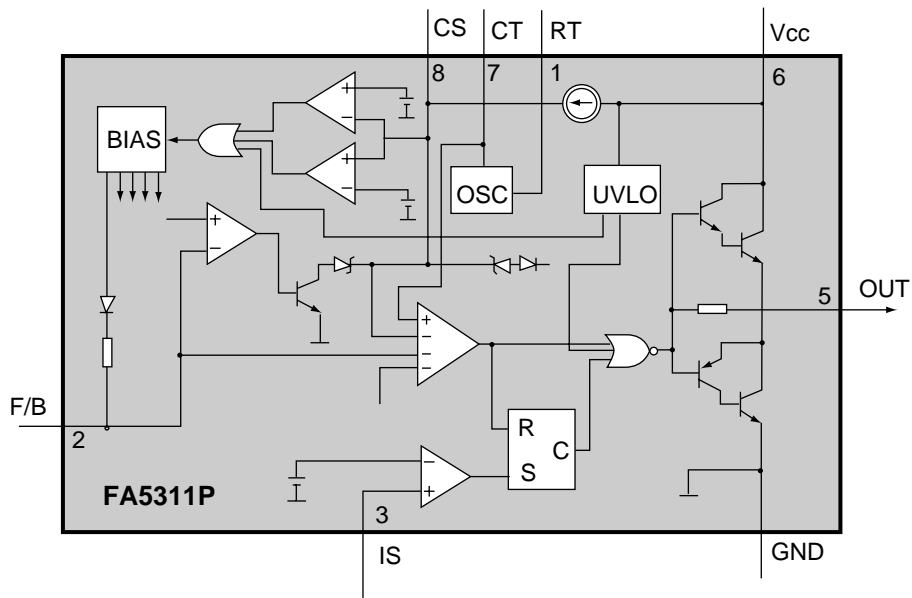
IC1201 MM1313BD <AV Selector>



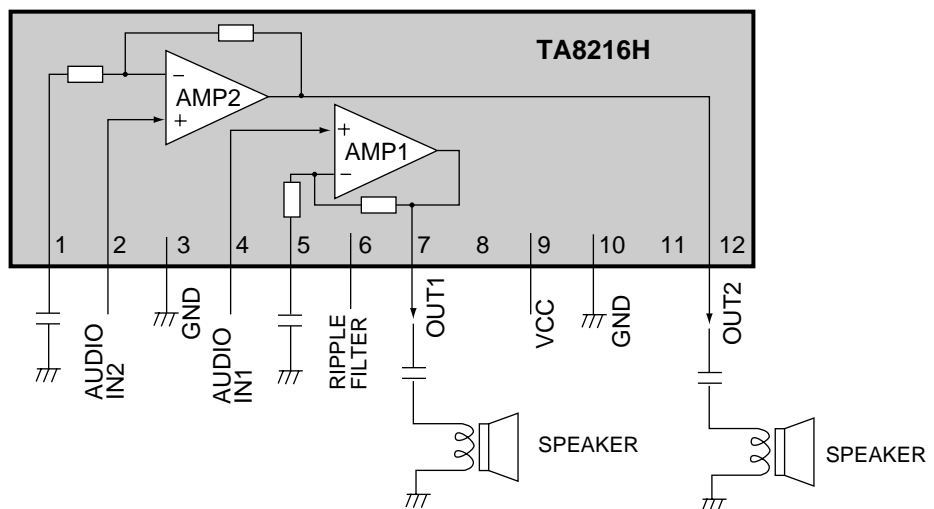
IC3451 TDA9875A <NICAM & Stereo Sound Decoder>



IC3001 FA5311P <Power Switching Controller>



IC3051 TA8216H <Audio Amplifier>



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 $\text{K}\Omega$

M indicate in $\text{M}\Omega$

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)

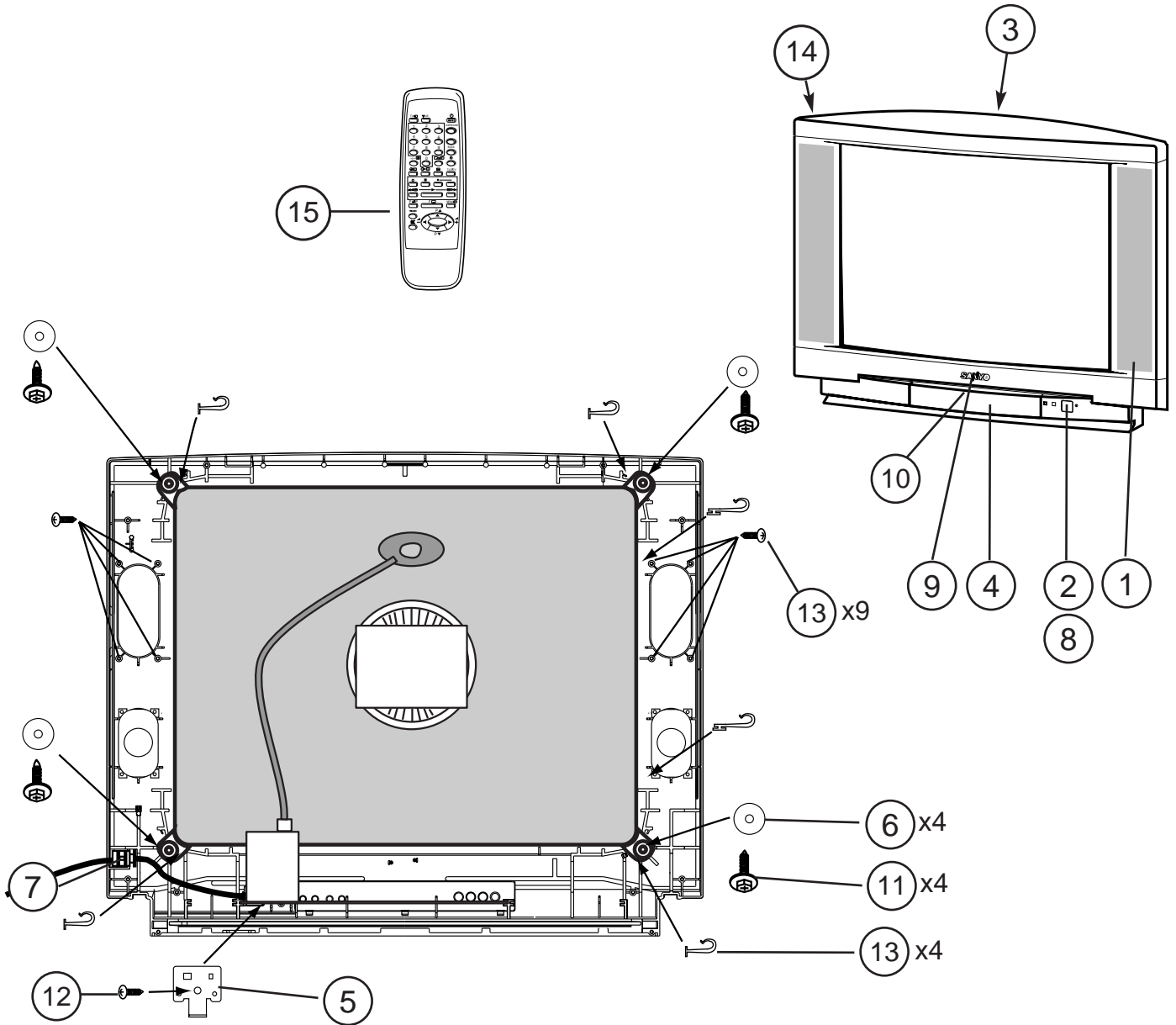
Mark	Type number					
--	2SC536	2SC945A	2SC1815	2SC1740	2SC1740S	KSC945C
A	E, F, G	P, Q, R	O, Y, G	Q, R, S	Q, R, S	
B	E, F, G	P, Q, R	O, Y, G	Q, R, S		
D	F, G	P, Q	Y, G	Q, R, S		
F	F, G	P	G	R, S		
H	F, G	P, Q	Y, G	Q, R, S		Y, G
I	E, F, G	P, Q, R	O, Y, G	Q, R, S		Y, G
G	F, G	P	G	R, S		G
AD	F, G	Q, R	Y, 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 CE28D6-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			ACCESSORIES		
1	1AAOCAM0258-F	ASSY, CABINET FR- C2WR	15	JXMKD	RC TRANSMITTER
2	610 276 5618	BUTTON POWER-F7WC		SKP10255	INST MANUAL- C2KE (1)
3	610 286 7725	CABINET BACK G- F7WA		SKP10256-A	INST MANUAL- C2KE/VE/WE(2)
4	1AA2DDM0092-U	DOOR- C2WE		SKP20308	SHEM DIAG -C2WEV-00
5	610 276 5656	DEC IND- F7WC		645 027 6927	BATTERY
6	645 034 8617	SPACER HOLDER- F7WC			
7	610 253 2449	HOLDER AC CORD-GBR- D4VA			
8	610 261 3032	COIL SPRING- E7GCS			
9	645 043 5058	BADGE, SANYO*53. 5X12L53. 3			
10	610 104 2505	LATCH PUSH, 7. 9X6. 9BK\			
11	412 059 7709	SPECIAL SCREW			
12	411 076 1004	SCR TPG BRZ 4X12			
13	610 265 4202	HOLDER DC GBR- F3SC			
14	411 076 1301	SCR TPG BRZ 4X14			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C1107	403 113 3815	CERAMIC 1000P K 50V	C434	403 054 0703	ELECT 47U M 35V
C1108	403 233 0817	ELECT 10U M 50V	C437	403 066 6106	MT- POLYEST 0.47U J 250V
C1109	403 233 0817	ELECT 10U M 50V	C441	403 309 2100	POLYPRO 0.3U J 400V
C1110	403 166 9215	CERAMIC 10P J 50V	C445	403 233 0817	ELECT 10U M 50V
C121	403 149 9218	CERAMIC 0.01U Z 50V	C450	404 056 5208	NP- ELECT 100NW2R2MFA- 6311
C122	403 164 0214	CERAMIC 0.1U Z 25V	C451	404 063 5703	NP- ELECT 100NW1ROMTA- 6311
C124	403 157 1518	CER. GRM39COG3R0C50PT	C463	403 307 6506	POLYESTER 6800P K 100V
C125	403 069 8315	CERAMIC 0.01U Z 50V	C466	403 188 0808	MT- POLYEST 2.2U J 100V
C128	403 241 3817	10 YK 220 M TA 0511	C468	403 233 1111	ELECT 22U M 50V
C129	403 145 9915	CERAMIC 22P J 50V	C481	403 076 1415	CERAMIC 2700P K 500V
C130	403 155 4214	CERAMIC 15P J 50V	C482	403 159 7409	MT- POLYEST 0.1U K 250V
C131	403 149 9218	CERAMIC 0.01U Z 50V	C501	403 194 3800	ELECT 2200U M 25V
C135	403 149 9218	CERAMIC 0.01U Z 50V	C502	403 217 1103	ELECT 220U M 35V
C136	403 149 9218	CERAMIC 0.01U Z 50V	C503	403 139 7514	CERAMIC 39P J 50V
C138	403 149 9218	CERAMIC 0.01U Z 50V	C512	403 218 8200	ELECT 2200U M 25V
C139	403 237 7941	MT- COMPO 0.22U J 50V	C513	403 233 0817	ELECT 10U M 50V
C140	403 233 0817	ELECT 10U M 50V	C514	403 233 0817	ELECT 10U M 50V
C141	403 207 0317	SMD 1MF GRM40Y5V105Z16PT	C600	403 076 4010	CERAMIC 4700P K 500V
C143	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	C601	404 060 7205	MT- POLYEST 0.1U M 250V
C144	403 248 2813	50 YK 2R2 M TA 0511	C602	404 060 7205	MT- POLYEST 0.1U M 250V
C145	403 149 9218	CERAMIC 0.01U Z 50V	C603	403 076 7130	CERAMIC 1000P M 1K
C146	403 248 1618	16 YK 47 M TA 0511	C604	403 076 7130	CERAMIC 1000P M 1K
C1900	403 038 1633	ELECT 100U M 6.3V	C605	403 076 7130	CERAMIC 1000P M 1K
C1921	403 149 9218	CERAMIC 0.01U Z 50V	C606	403 076 7130	CERAMIC 1000P M 1K
C1922	403 149 9218	CERAMIC 0.01U Z 50V	C607	404 050 9509	ELECT 150U M 400V
C1923	403 149 9218	CERAMIC 0.01U Z 50V	C613	403 179 1213	POLYESTER 4700P J 50V
C1924	403 149 9218	CERAMIC 0.01U Z 50V	C614	403 237 8057	MT- COMPO 0.1U J 50V
C1925	403 085 7405	NP- ELECT 10U M 16V	C615	403 179 3217	POLYESTER 0.015U J 50V
C1926	403 085 7405	NP- ELECT 10U M 16V	C616	403 165 6215	CERAMIC 1000P K 2K
C201	403 149 9218	CERAMIC 0.01U Z 50V	C617	403 179 2418	POLYESTER 0.022U K 50V
C203	403 269 5916	CERAMIC 0.22U K 16V	△ C631	404 073 4505	CERAMIC DE1210- 1 E 222M
C204	403 149 9218	CERAMIC 0.01U Z 50V	C633	403 054 1502	ELECT 470U M 35V
C205	403 149 9218	CERAMIC 0.01U Z 50V	C636	403 190 3705	ELECT 1000U M 16V
C206	403 149 9218	CERAMIC 0.01U Z 50V	C637	403 053 3606	ELECT 2200U M 35V
C207	403 149 9218	CERAMIC 0.01U Z 50V	C640	403 218 8200	ELECT 2200U M 25V
C208	403 248 1618	16 YK 47 M TA 0511	C641	403 076 6727	CERAMIC DE0607- 486B102K1K
C209	403 164 0214	CERAMIC 0.1U Z 25V	C642	404 055 9801	ELECT 220U M 200V
C210	403 086 2300	NP- ELECT 1U M 50V	C643	403 042 4875	ELECT 1000U M 16V
C211	403 113 3815	CERAMIC 1000P K 50V	C647	403 157 6810	CERAMIC 680P K 50V
C212	403 086 2300	NP- ELECT 1U M 50V	C648	403 039 3507	ELECT 470U M 6.3V
C213	403 233 0817	ELECT 10U M 50V	C649	403 194 4609	ELECT 470U M 16V
C214	403 149 9218	CERAMIC 0.01U Z 50V	C681	403 148 0424	ELECT 1000U M 25V
C216	403 233 0817	ELECT 10U M 50V	C682	403 069 9510	CERAMIC CHIP 0.01Z 50V
C217	403 160 0020	ELECT 470U M 10V	C683	403 039 9004	ELECT 1000U M 10V
C218	403 149 9218	CERAMIC 0.01U Z 50V	C684	403 135 7815	50 YK 3R3 M TA 0511
C219	403 155 2418	CERAMIC 5600P K 50V	C800	403 248 1618	16 YK 47 M TA 0511
C220	403 207 0317	SMD 1MF GRM40Y5V105Z16PT	C801	403 149 9218	CERAMIC 0.01U Z 50V
C230	403 269 5916	CERAMIC 0.22U K 16V	C806	403 248 1618	16 YK 47 M TA 0511
C231	403 113 4119	CERAMIC 2200P K 50V	C807	403 164 0214	CERAMIC 0.1U Z 25V
C232	403 233 3818	CERAMIC 10P C 50V	C810	403 269 5916	CERAMIC 0.22U K 16V
C233	403 248 1618	16 YK 47 M TA 0511	C811	403 269 5916	CERAMIC 0.22U K 16V
C234	403 164 0214	CERAMIC 0.1U Z 25V	C812	403 157 4212	CERAMIC 220P J 50V
C235	403 164 0214	CERAMIC 0.1U Z 25V	C814	403 155 2210	CERAMIC 3300P K 50V
C236	403 164 0214	CERAMIC 0.1U Z 25V	C816	403 155 2319	CERAMIC 4700P K 50V
C237	403 164 0214	CERAMIC 0.1U Z 25V	C817	403 145 9915	CERAMIC 22P J 50V
C240	403 113 4119	CERAMIC 2200P K 50V	C818	403 155 2319	CERAMIC 4700P K 50V
C241	403 067 7895	MT- COMPO 0.47 J 50V	C819	403 145 9915	CERAMIC 22P J 50V
C242	403 257 0817	50 YK OR47 M TA 0511	C822	403 113 4119	CERAMIC 2200P K 50V
C243	403 071 2912	CERAMIC 1800P K 50V	C824	403 153 9310	CERAMIC 82P J 50V
C244	403 215 2211	CERAMIC 0.01U K 50V	C826	403 086 1808	NP- ELECT 0.47U M 50V
C247	403 233 0817	ELECT 10U M 50V	C827	403 314 5915	SMD CAP GRM40X7R474K16
C251	403 314 5915	SMD CAP GRM40X7R474K16	C828	403 149 9218	CERAMIC 0.01U Z 50V
C252	403 314 5915	SMD CAP GRM40X7R474K16	C829	403 248 1618	16 YK 47 M TA 0511
C421	404 074 7802	MT- POLYPRO 4000P H 1.5K	C830	403 157 6711	CERAMIC 560P K 50V
C422	403 299 3210	POLYPRO 0.027U J 400V	C831	403 164 0214	CERAMIC 0.1U Z 25V
C423	404 074 3903	MT- POLYPRO 8000P J 1.5K	C832	403 248 1618	16 YK 47 M TA 0511
C424	403 083 3201	POLYPRO 0.012U J 400V	C833	403 157 2515	CERAMIC 27P J 50V
C431	403 068 5612	CERAMIC 0.056U Z 25V	C834	403 157 2515	CERAMIC 27P J 50V
C432	403 075 7111	CERAMIC 1000P K 500V	C835	403 155 2319	CERAMIC 4700P K 50V
C433	403 076 3112	CERAMIC 3900P K 500V			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
DIODE			IC801	QXXAVB690--P	IC ST92R195B9/ENT
D1002	407 063 8319	ZENER DIODE MTZJ11C	IC802	410 406 4906	C2KEV VP/P A3F8
D1003	407 063 8319	ZENER DIODE MTZJ11C	IC803	409 343 6302	IC 24LC04B/P
D1004	407 063 8319	ZENER DIODE MTZJ11C	TRANSFORMER		
D1007	407 063 8319	ZENER DIODE MTZJ11C	T431	610 000 1077	DRIVE TRANS
D1008	407 063 8319	ZENER DIODE MTZJ11C	△ T451	645 038 7616	TRANS, FLYBACK
D1009	407 063 8319	ZENER DIODE MTZJ11C	△ T611	645 041 2240	TRANS, POWER, PULSE
D101	407 100 0214	ZENER DIODE MTZJ36A	△ T681	610 033 3758	POWER TRANS
D1010	407 063 8319	ZENER DIODE MTZJ11C	COIL		
D1011	407 012 4416	DIODE 1SS133-T-77	L1003	610 078 5946	PIPE CORE
D1012	407 012 4416	DIODE 1SS133-T-77	L1010	645 001 4550	PEAKING COIL 10UHK
D1013	407 012 4416	DIODE 1SS133-T-77	L1011	645 001 4550	PEAKING COIL 10UHK
D1021	407 063 8319	ZENER DIODE MTZJ11C	L1012	645 001 4550	PEAKING COIL 10UHK
D1022	407 063 8319	ZENER DIODE MTZJ11C	L1013	645 001 4550	PEAKING COIL 10UHK
D1023	407 063 8319	ZENER DIODE MTZJ11C	L1017	610 078 5946	PIPE CORE
D1024	407 063 8319	ZENER DIODE MTZJ11C	L1020	645 001 4550	PEAKING COIL 10UHK
D1025	407 063 8319	ZENER DIODE MTZJ11C	L1021	645 001 4550	PEAKING COIL 10UHK
D1026	407 063 8319	ZENER DIODE MTZJ11C	L1022	645 001 4550	PEAKING COIL 10UHK
D1901	407 120 9706	LED LN28RPL	L1023	645 001 4550	PEAKING COIL 10UHK
D1901A	610 222 0322	LED HOLDER-G2CA-A	L1101	645 001 4550	PEAKING COIL 10UHK
D1906	407 063 9514	ZEN DIODE	L1106	645 001 4550	PEAKING COIL 10UHK
D431	407 063 9613	ZENER DIODE MTZJ9. 1A	L121	645 001 4635	PEAKING COIL 15UH K
D438	407 095 8001	DIODE ERD07- 15L	L122	645 002 1459	PEAKING COIL
D439	407 006 4128	DIODE ERB44- 04V1	L123	401 016 9821	CARBON 27JA 1/4W FLAM-RET
D442	408 007 8607	DIODE 1N4148	L171	645 040 2715	TRANS, OSC 38. 9MHZ
D445	407 012 4416	DIODE 1SS133-T-77	L1921	645 008 5635	INDUCTOR, 12U K
D446	407 063 9415	ZENER DIODE MTZJ8. 2A	L1922	645 008 5635	INDUCTOR, 12U K
D463	407 012 4416	DIODE 1SS133-T-77	L1923	645 002 4511	CORE, PIPE
D466	407 099 7812	ZENER DIODE MTZJT- 77- 20A	L240	645 001 4550	PEAKING COIL 10UHK
D469	407 007 7415	DIODE EU1	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	645 008 5628	INDUCTOR, 1U M
D501	407 005 7328	DIODE EM01Z	L432	645 002 4511	CORE, PIPE
D502	407 118 2217	ZENER DIODE 1Z75	L441	645 036 7380	COIL, LINEARITY 25"
D603	407 009 6921	DIODE RM11C	L442	610 000 0261	COIL 349UH
D604	407 009 6921	DIODE RM11C	L461	645 005 5645	INDUCTOR 222UH K
D605	407 009 6921	DIODE RM11C	L462	610 210 9689	COIL 550UH
D606	407 009 6921	DIODE RM11C	L501	645 008 5642	INDUCTOR, 3. 3U K
D613	407 012 4416	DIODE 1SS133-T-77	L601A	645 019 3873	LINE FILTER-SAMWHA TECOM
D614	408 007 8607	DIODE 1N4148	L607	610 237 1000	PIPE CORE
△ D615	407 173 2907	PHOTO COUPLE PC123F2	L608	610 237 1000	PIPE CORE
D616	408 007 8607	DIODE 1N4148	L641	610 078 6820	PIPE CORE
D617	407 007 6616	DIODE ES1	L645	645 007 8194	INDUCTOR 120UH SUGAM
D618	408 007 8607	DIODE 1N4148	L646	645 007 8194	INDUCTOR 120UH SUGAM
D619	407 063 8319	ZENER DIODE MTZJ11C	L801	645 003 8549	PEAKING COIL
D630	407 007 7613	DIODE EU2	L802	645 003 8549	PEAKING COIL
D633	407 166 2303	DIODE ERC- 91- 02L	L803	645 003 8549	PEAKING COIL
D634	407 007 7613	DIODE EU2	L804	645 003 8549	PEAKING COIL
△ D635	407 129 6706	DIODE RU4YX LF- L1	L805	645 003 8549	PEAKING COIL
D637	407 012 4416	DIODE 1SS133-T-77	TRANSISTOR		
D641	407 012 4416	DIODE 1SS133-T-77	Q001	405 014 4519	TR 2SC2412KT146/R
△ D642A	407 009 8816	DIODE RU3AM	Q1001	405 014 4519	TR 2SC2412KT146/R
D643	407 012 4416	DIODE 1SS133-T-77	Q1002	405 002 0318	TR 2SA1037K- T96- R
D645	407 099 5511	ZENER DIODE MTZJ6. 2C	Q1003	405 014 4519	TR 2SC2412KT146/R
D681	407 005 7328	DIODE EM01Z	Q1006	405 002 0318	TR 2SA1037K- T96- R
D682	407 063 8913	ZENER DIODE MTZJ5. 6C	Q1007	405 002 0318	TR 2SA1037K- T96- R
D683	407 005 7328	DIODE EM01Z	Q1008	405 002 0318	TR 2SA1037K- T96- R
D684	408 007 8607	DIODE 1N4148	Q1010	405 014 4519	TR 2SC2412KT146/R
D685	407 012 4416	DIODE 1SS133-T-77	Q1011	405 014 4519	TR 2SC2412KT146/R
D826	407 099 4811	Z DIODE MTZJ- T77- 4. 3B	Q121	405 014 4519	TR 2SC2412KT146/R
D831	407 012 4416	DIODE 1SS133-T-77	Q122	405 014 4519	TR 2SC2412KT146/R
INTERGRATED CIRCUITS			Q131	405 002 0318	TR 2SA1037K- T96- R
IC001	409 301 4906	IC TDA7263M	Q132	405 002 0318	TR 2SA1037K- T96- R
IC001- 1	610 251 4186	AUDIO HEATSI NKN ASSY E7PC	Q133	405 014 4519	TR 2SC2412KT146/R
IC201	409 504 3300	IC TB1251CN VER 6. 3	Q141	405 015 9721	TR 2SC2814- F4- TB
IC501	409 192 5709	IC LA7833	Q153	405 002 0318	TR 2SA1037K- T96- R
IC641	409 241 5407	IC BA178M05T			
IC642	409 377 5401	IC L78M09CV ST			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R241	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	△ R638	402 069 9800	WI RE WOUND 2. 7 KA 5W
R242	401 105 0415	MT- GLAZE 100 JA 1/16W	R641	401 027 4327	CARBON 6. 2K JA 1/6W
R243	401 105 2815	MT- GLAZE 2. 2K JA 1/16W	R642	401 014 6149	CARBON 150K JA 1/4W
R244	401 105 4017	MT- GLAZE 330 JA 1/16W	△ R643	401 065 5809	OXI DE- MT 15 JA 2W
R245	401 218 4614	MT- GLAZE 5. 6K FA 1/16W	△ R644	401 061 0006	OXI DE- MT 3. 3 JA 1W
R246	401 105 4710	MT- GLAZE 39K JA 1/16W	R645	401 016 4836	CARBON 22K JA 1/4W
R247	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R646	401 015 4738	CARBON 180K JA 1/4W
R248	401 105 7513	MT- GLAZE 82K JA 1/16W	R647	401 011 2718	CARBON 68K JA 1/2W
R251	401 105 1214	MT- GLAZE 120K JA 1/16W	R648	401 027 0329	CARBON 47K JA 1/6W
R253	401 025 8723	CARBON 220K JA 1/6W	R653	401 105 2914	MT- GLAZE 22K JA 1/16W
R254	401 105 0712	MT- GLAZE 100K JA 1/16W	R654	401 105 0613	MT- GLAZE 10K JA 1/16W
R255	401 105 8114	MT- GLAZE 56K JA 1/16W	R681	401 008 1628	CARBON 1K8 JA 1/2W
R256	401 105 0514	MT- GLAZE 1K JA 1/16W	△ R682	401 066 5204	OXI DE- MT 22 JA 2W
R257	401 105 0514	MT- GLAZE 1K JA 1/16W	R684	401 027 8622	CARBON 8K2 JA 1/6W
R258	401 105 0514	MT- GLAZE 1K JA 1/16W	R685	401 025 8228	CARBON 22K JA 1/6W
△ R430	401 065 2808	OXI DE- MT 120 JA 2W	R801	401 105 5410	MT- GLAZE 47K JA 1/16W
R432	401 105 0514	MT- GLAZE 1K JA 1/16W	R802	401 105 0613	MT- GLAZE 10K JA 1/16W
R433	401 007 1134	CARBON 1K JA 1/2W	R803	401 105 0613	MT- GLAZE 10K JA 1/16W
R434	401 105 0415	MT- GLAZE 100 JA 1/16W	R804	401 105 0613	MT- GLAZE 10K JA 1/16W
△ R435	402 068 0204	WI RE WOUND 10 JA 5W	R805	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R436	401 021 3049	CARBON 5. 6K JA 1/4W	R806	401 105 0613	MT- GLAZE 10K JA 1/16W
R437	401 026 3925	CARBON 330 JA 1/6W	R807	401 105 0613	MT- GLAZE 10K JA 1/16W
△ R441	401 058 3706	OXI DE- MT 1K JA 1W	R808	401 024 6720	CARBON 100 JA 1/6W
R446	401 021 3049	CARBON 5. 6K JA 1/4W	R810	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R447	401 026 9927	CARBON 4K7 JA 1/6W	R814	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R448	401 009 5843	CARBON 330 JA 1/2W	R815	401 105 0415	MT- GLAZE 100 JA 1/16W
△ R449	401 067 0000	OXI DE- MT 270 JA 2W	R817	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W
R450	401 025 1922	CARBON 15K JA 1/6W	R818	401 105 5410	MT- GLAZE 47K JA 1/16W
△ R451	401 064 5701	OXI DE- MT 1. 8 JA 2W	R819	401 026 9927	CARBON 4K7 JA 1/6W
R453	401 024 7024	CARBON 1K JA 1/6W	R820	401 105 4215	MT- GLAZE 33K JA 1/16W
R454	401 014 6149	CARBON 150K JA 1/4W	R822	401 105 0613	MT- GLAZE 10K JA 1/16W
R455	401 019 4031	CARBON 390K JA 1/4W	R826	401 105 0613	MT- GLAZE 10K JA 1/16W
R461	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R829	401 105 4215	MT- GLAZE 33K JA 1/16W
R462	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R830	401 105 4215	MT- GLAZE 33K JA 1/16W
R464	401 026 9927	CARBON 4K7 JA 1/6W	R831	401 105 0613	MT- GLAZE 10K JA 1/16W
R469	401 026 1327	CARBON 27K JA 1/6W	R832	401 105 0613	MT- GLAZE 10K JA 1/16W
R470	401 024 7727	CARBON 100K JA 1/6W	R836	401 105 6615	MT- GLAZE 6. 8K JA 1/16W
R471	401 027 5225	CARBON 680 JA 1/6W	R837	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R473	401 027 5225	CARBON 680 JA 1/6W	R838	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R474	401 009 0927	CARBON 270 JA 1/2W	R839	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R481	401 016 5843	CARBON 220K JA 1/4W	R840	401 105 0514	MT- GLAZE 1K JA 1/16W
R482	401 027 5522	CARBON 6K8 JA 1/6W	R842	401 105 1610	MT- GLAZE 15K JA 1/16W
R504	401 105 8114	MT- GLAZE 56K JA 1/16W	R843	401 105 2716	MT- GLAZE 220 JA 1/16W
R505	401 025 4626	CARBON 18K JA 1/6W	R844	401 105 2716	MT- GLAZE 220 JA 1/16W
R506	401 024 7430	CARBON 10K JA 1/6W	R845	401 105 2716	MT- GLAZE 220 JA 1/16W
R507	401 027 8127	CARBON 82 JA 1/6W	R846	401 105 0415	MT- GLAZE 100 JA 1/16W
△ R509	401 057 7507	OXI DE- MT 0. 82 JA 1W	R847	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
△ R512	401 062 1200	OXI DE- MT 470 JA 1W	R848	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
△ R513	401 062 1200	OXI DE- MT 470 JA 1W	R849	401 105 3317	MT- GLAZE 2. 7K JA 1/16W
△ R515	401 068 1600	OXI DE- MT 4. 7 JA 2W	R852	401 105 3416	MT- GLAZE 27K JA 1/16W
R523	401 105 5311	MT- GLAZE 4. 7K JA 1/16W	R853	401 105 2914	MT- GLAZE 22K JA 1/16W
R535	401 105 7919	MT- GLAZE 0. 000 ZA 1/16W	R854	401 105 5311	MT- GLAZE 4. 7K JA 1/16W
△ R602	402 071 0000	WI RE WOUND 5W	R855	401 105 0613	MT- GLAZE 10K JA 1/16W
R611	401 027 2620	CARBON 5K6 JA 1/6W	R856	401 105 6011	MT- GLAZE 5. 6K JA 1/16W
R612	401 026 9620	CARBON 470 JA 1/6W	R857	401 105 4215	MT- GLAZE 33K JA 1/16W
R615	401 025 8228	CARBON 22K JA 1/6W	R858	401 026 3925	CARBON 330 JA 1/6W
R617	401 024 9325	CARBON 1K2 JA 1/6W	R859	401 105 5915	MT- GLAZE 560 JA 1/16W
R619	401 016 1538	CARBON 22 JA 1/4W	R861	401 105 6516	MT- GLAZE 680 JA 1/16W
R620	401 007 5815	CARBON 120K JA 1/2W	R862	401 105 7414	MT- GLAZE 8. 2K JA 1/16W
R621	401 007 5815	CARBON 120K JA 1/2W	R863	401 105 1610	MT- GLAZE 15K JA 1/16W
R622	401 014 5241	CARBON 15K JA 1/4W	R864	401 105 4017	MT- GLAZE 330 JA 1/16W
R623	401 026 4328	CARBON 3K3 JA 1/6W	R872	401 105 0613	MT- GLAZE 10K JA 1/16W
△ R625	401 065 9609	OXI DE- MT 18 JA 2W	R873	401 105 0613	MT- GLAZE 10K JA 1/16W
R626	401 015 2209	CARBON 1. 8K GA 1/4W	R874	401 026 9620	CARBON 470 JA 1/6W
△ R628	401 068 6902	OXI DE- MT 56 JA 2W	R875	401 026 9620	CARBON 470 JA 1/6W
△ R631	402 000 8602	SOLI D 5. 6M KA 1/2W	R876	401 024 7430	CARBON 10K JA 1/6W
R632	402 000 8602	SOLI D 5. 6M KA 1/2W	R878	401 024 7430	CARBON 10K JA 1/6W
△ R634	401 059 1602	OXI DE- MT 15 JA 1W	R879	401 105 0613	MT- GLAZE 10K JA 1/16W
△ R637	402 069 8704	WI RE WOUND	R880	401 105 4710	MT- GLAZE 39K JA 1/16W
8. 2 KA 7W			R881	401 105 0514	MT- GLAZE 1K JA 1/16W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R882	401 025 7429	CARBON 220 JA 1/6W	SW1901	610 011 4432	SWITCH, PUSH
MISCELLANEOUS			SW1902	610 011 4432	SWITCH, PUSH
A101	645 040 4528	TUNER, U/V	SW1903	610 011 4432	SWITCH, PUSH
A1901	645 028 1044	REMO REC SPS-443-1-E	SW1904	610 011 4432	SWITCH, PUSH
△ F601	423 022 2102	FUSE 250V 4.0A	SW501	610 011 2728	SWITCH, LEVER 1P-3T
F601A	645 000 5077	HOLDER, FUSE	△ SW601	645 024 0607	PUSH SW POWER SDDFC3
F601B	645 000 5077	HOLDER, FUSE	TP-A	645 008 4058	TERMINAL PLUG
JS004	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	TP-B	645 008 4058	TERMINAL PLUG
JS005	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	VR641	645 006 5514	VR, SEMI, 2.2K N
JS006	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	X121	1AV4F32B0140N	EFC-S5R5MM3AS (5
JS101	401 105 2716	MT-GLAZE 220 JA 1/16W	X131	421 007 8606	SAW F TSB5387P
JS102	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	X132	421 002 2609	SAW F TSF5315
J118	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	X231	645 042 3741	XTAL 4.433MHZ 16PF KSS5MM
J150	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	X801	610 282 0201	XTAL. OSC 4.00MHZ 5MM
J203	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	Z101	610 282 9693	SHIELD CASE C2HC-A
J204	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	Z102	610 282 9709	SHIELD CASE C2HC-B
J224	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	1AA0B10H047B0 ASSY,PWB,HARMONICS EB6 AC COIL		
J228	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	△ L1601	645 042 6735	CHOKE, ETQR42T004B PANA
J237	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	MISCELLANEOUS		
J240	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	△ K16H-1	645 008 4058	TERMINAL PLUG
J243	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	△ K16H-2	645 008 4058	TERMINAL PLUG
J245	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	PB1601	610 286 8722	PWB, HARMONICS C2WVF
J247	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	1AA0B10H043M0 NO 3D. A2.SW.C2KEV CAPACITOR		
J305	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1200	403 049 4204	ELECT 10U M 50V
J325	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1201	403 149 9218	CERAMIC 0.01U Z 50V
J332	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1202	403 248 1618	ELECT 47U M 16V
J333	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1204	403 049 4204	ELECT 10U M 50V
J334	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1205	403 049 4204	ELECT 10U M 50V
J335	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1206	403 298 9619	CERAMIC 0.1U K 16V
J336	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1207	403 233 0817	ELECT 10U M 50V
J340	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1208	403 194 4609	ELECT 470U M 16V
J344	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1211	403 153 9310	CERAMIC 82P J 50V
J346	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1212	403 153 9310	CERAMIC 82P J 50V
J416	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1213	403 049 4204	ELECT 10U M 50V
J434	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1214	403 153 9310	CERAMIC 82P J 50V
J442	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1215	403 153 9310	CERAMIC 82P J 50V
J454	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1217	403 233 0817	ELECT 10U M 50V
J456	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1218	403 153 9310	CERAMIC 82P J 50V
J508	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1219	403 049 4204	ELECT 10U M 50V
J525	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1223	403 157 3611	CERAMIC 100P J 50V
J617	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C1224	403 157 3611	CERAMIC 100P J 50V
J623	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C3138	403 199 3102	ELECT 1000U M 10V
J629	401 105 7919	MT-GLAZE 0.000 ZA 1/16W	C3139	403 248 1618	ELECT 47U M 16V
KCPA	645 006 1905	HSG PLUG 5P S5B-XH-A JST	C3452	403 314 5915	SMD CAP GRM40X5R474K16
KDY-1	645 008 4058	TERMINAL PLUG	C3453	403 157 2911	CERAMIC 47P J 50V
KDY-3	645 008 4058	TERMINAL PLUG	C3454	403 164 0214	CERAMIC 0.1U Z 25V
KDY-5	645 008 4058	TERMINAL PLUG	C3456	403 298 9619	CERAMIC 0.1U K 16V
KDY-6	645 008 4058	TERMINAL PLUG	C3458	403 157 2911	CERAMIC 47P J 50V
△ KE-1	645 008 4058	TERMINAL PLUG	C3459	403 248 1618	ELECT 47U M 16V
KE-2	645 008 4058	TERMINAL PLUG	C3461	403 248 1410	ELECT 1U M 50V
KEM1	645 008 4058	TERMINAL PLUG	C3467	403 248 1410	ELECT 1U M 50V
△ KF-1	645 008 4058	TERMINAL PLUG	C3468	403 164 0214	CERAMIC 0.1U Z 25V
KF-2	645 008 4058	TERMINAL PLUG	C3469	403 164 0214	CERAMIC 0.1U Z 25V
KGG-1	645 008 4058	TERMINAL PLUG	C3473	403 279 4312	CERAMIC 0.33U K 16V
KGG-2	645 008 4058	TERMINAL PLUG	C3474	403 279 4312	CERAMIC 0.33U K 16V
KH	645 008 7288	HOUSING PLUG 5P	C3476	403 314 5915	SMD CAP GRM40X5R474K16
KJ	645 040 4627	SOCKET, PWB-PWB 15P	C3477	403 248 1618	ELECT 47U M 16V
KL	645 004 2881	PLUG, 2P	C3480	403 248 1618	ELECT 47U M 16V
KM	645 032 1924	SOCKET, PWB-PWB 20P	C3481	403 248 1618	ELECT 47U M 16V
KP	645 008 7288	HOUSING PLUG 5P	C3482	403 149 9218	CERAMIC 0.01U Z 50V
KQ	645 008 7264	HOUSING PLUG 3P	C3483	403 149 9218	CERAMIC 0.01U Z 50V
KR-1	645 008 4058	TERMINAL PLUG	C3484	403 248 1618	ELECT 47U M 16V
KR-2	645 008 4058	TERMINAL PLUG			
K1001	645 005 5867	21-PIN SOCKET			
K1002	645 005 5867	21-PIN SOCKET			
K1101	645 002 0568	TERMINAL, BOARD			
K1921	645 005 5706	PHONE JACK HTJ-035-10AB			
PB101	610 282 2939	PWB, MAIN C2HC "D" SERIES			
PS601	408 013 3801	TH PTH451C262BF140M270			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C3485	403 149 9218	CERAMIC 0.01U Z 50V	R1229	401 105 7414	MT- GLAZE 8. 2K JA 1/16W
C3486	403 248 1410	ELECT 1U M 50V	R1230	401 105 0415	MT- GLAZE 100 JA 1/16W
C3487	403 248 1410	ELECT 1U M 50V	R1231	401 105 1412	MT- GLAZE 150 JA 1/16W
C3492	403 149 9218	CERAMIC 0.01U Z 50V	△ R1232	401 060 6405	OXIDE- MT 27 JA 1W
C3493	403 149 9218	CERAMIC 0.01U Z 50V	R1235	401 105 1412	MT- GLAZE 150 JA 1/16W
C3494	403 164 0214	CERAMIC 0.1U Z 25V	R1238	401 105 5212	MT- GLAZE 470 JA 1/16W
C3495	403 164 0214	CERAMIC 0.1U Z 25V	R3451	401 105 0415	MT- GLAZE 100 JA 1/16W
DIODE			R3452	401 105 0415	MT- GLAZE 100 JA 1/16W
D1201	407 099 6716	Z. DIODE MIZJT- 7713A	R3453	401 105 0613	MT- GLAZE 10K JA 1/16W
INTERGRATED CIRCUIT			R3471	401 105 3218	MT- GLAZE 270 JA 1/16W
IC1201	409 116 1800	IC LA7952	R3473	401 105 5212	MT- GLAZE 470 JA 1/16W
IC1202	409 268 8504	IC NJM2233BD	R3474	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
IC1203	409 009 2501	IC HD14052BP	R3475	401 105 5212	MT- GLAZE 470 JA 1/16W
IC3102	409 241 5407	IC BA178M05T	R3476	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
IC3451	409 476 9300	IC TDA9870A/V2	R3479	401 105 4116	MT- GLAZE 3. 3K JA 1/16W
COIL			R3480	401 105 4116	MT- GLAZE 3. 3K JA 1/16W
L1201	645 008 2467	PEAKING COIL	R3485	401 105 5212	MT- GLAZE 470 JA 1/16W
L1202	645 008 2467	PEAKING COIL	R3486	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
L1204	645 008 2467	PEAKING COIL	R3487	401 105 5212	MT- GLAZE 470 JA 1/16W
L1205	645 008 2467	PEAKING COIL	R3488	401 105 2815	MT- GLAZE 2. 2K JA 1/16W
L1206	645 008 2467	PEAKING COIL	MISCELLANEOUS		
L3450	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	J1205	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
L3452	645 011 0252	INDUCTOR, 2. 2U K	J1215	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
L3456	645 011 0252	INDUCTOR, 2. 2U K	J1223	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
L3457	645 011 0252	INDUCTOR, 2. 2U K	J1224	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
L3459	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	J3450	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
L3469	645 008 2467	PEAKING COIL	J3451	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
TRANSISTOR			J3452	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q1201	405 134 5925	TR 2SA1037AK- T146- R	J3457	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q1202	405 014 4519	TR 2SC2412KT146/R	J3458	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q1203	405 014 4519	TR 2SC2412KT146/R	J3459	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q1205	405 014 4519	TR 2SC2412KT146/R	J3460	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q1206	405 134 5925	TR 2SA1037AK- T146- R	J3461	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q1207	405 134 5925	TR 2SA1037AK- T146- R	J3462	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q3452	405 014 4519	TR 2SC2412KT146/R	J3463	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q3453	405 014 4519	TR 2SC2412KT146/R	J3464	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q3454	405 014 4519	TR 2SC2412KT146/R	J3471	401 105 7919	MT- GLAZE 0.000 ZA 1/16W
Q3455	405 014 4519	TR 2SC2412KT146/R	K12H	645 004 2713	HOUSING PLUG 5P
RESISTOR			K12J	645 040 4610	PLUG, PWB- PWB 15P
R1200	401 105 0415	MT- GLAZE 100 JA 1/16W	K12M	645 039 9411	PLUG, PWB- PWB 20P
R1201	401 105 0415	MT- GLAZE 100 JA 1/16W	PB3450	610 286 5141	PWB, NI CAM&SW C2WAVX4
R1202	401 105 2112	MT- GLAZE 18K JA 1/16W	X3451	645 024 7484	OSC, CRYSTAL 24. 576MHZ
R1203	401 105 0415	MT- GLAZE 100 JA 1/16W	1AA0B10E59500		ASSY,PWB,CRT C2WC
R1204	401 105 0415	MT- GLAZE 100 JA 1/16W	CAPACITOR		
R1205	401 105 0415	MT- GLAZE 100 JA 1/16W	C702	403 074 5712	CERAMIC 560P K 50V
R1206	401 105 0415	MT- GLAZE 100 JA 1/16W	C712	403 074 5712	CERAMIC 560P K 50V
R1207	401 105 0415	MT- GLAZE 100 JA 1/16W	C722	403 074 5712	CERAMIC 560P K 50V
R1209	401 105 2112	MT- GLAZE 18K JA 1/16W	C731	403 077 2728	CERAMIC 1000P P 2K
R1210	401 105 2112	MT- GLAZE 18K JA 1/16W	C732	403 074 5712	CERAMIC 560P K 50V
R1211	401 105 0514	MT- GLAZE 1K JA 1/16W	C735	403 281 1108	ELECT 22U M 250V
R1212	401 105 0415	MT- GLAZE 100 JA 1/16W	C751	403 248 1608	ELECT 47U M 16V
R1215	401 105 0415	MT- GLAZE 100 JA 1/16W	DIODE		
R1216	401 105 5212	MT- GLAZE 470 JA 1/16W	D701	407 012 4416	DIODE 1SS133- T- 77
R1217	401 105 5212	MT- GLAZE 470 JA 1/16W	D711	407 012 4416	DIODE 1SS133- T- 77
R1218	401 105 1610	MT- GLAZE 15K JA 1/16W	D721	407 012 4416	DIODE 1SS133- T- 77
R1219	401 105 1016	MT- GLAZE 1. 2K JA 1/16W	D751	407 012 4416	DIODE 1SS133- T- 77
R1220	401 105 1016	MT- GLAZE 1. 2K JA 1/16W	INTERGRATED CIRCUIT		
R1221	401 105 7919	MT- GLAZE 0.000 ZA 1/16W	IC701	409 468 8403	IC TDA6103Q/N3
R1222	401 105 0613	MT- GLAZE 10K JA 1/16W	IC701- 1	610 283 8657	ASSY, CRT HEAT SINK C2HC
R1224	401 105 1115	MT- GLAZE 12K JA 1/16W	COIL		
R1225	401 105 0613	MT- GLAZE 10K JA 1/16W	L701	645 007 9856	PEAKING COIL 220UH K
R1226	401 105 1115	MT- GLAZE 12K JA 1/16W	L711	645 007 9856	PEAKING COIL 220UH K
R1227	401 105 3218	MT- GLAZE 270 JA 1/16W	L712	645 007 9856	PEAKING COIL 220UH K
R1228	401 105 0514	MT- GLAZE 1K JA 1/16W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
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 7429	CARBON 220 JA 1/6W			
△ R704	401 065 4604	OXIDE-MT 12K JA 2W			
R705	401 009 6622	CARBON 3.3K JA 1/2W			
R712	401 025 7429	CARBON 220 JA 1/6W			
△ R714	401 065 4604	OXIDE-MT 12K JA 2W			
R715	401 009 6622	CARBON 3.3K JA 1/2W			
R722	401 025 7429	CARBON 220 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					
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			
PB701	610 285 1540	PWB, CRT C2WA X 12			
OUT OF CIRCUIT-013C2WTV					
COIL					
△ L901	645 037 4210	COIL, DEGAUSSING 28-TOTOKU			
TRANSISTOR					
△ Q901	414 011 5501	A66EHJ13X38 50HZ, 52%CHINA			
MISCELLANEOUS					
SP901	610 232 3986	SPEAKER			
SP902	610 232 3986	SPEAKER			
△ W901	645 012 7632	EURO PLUG +2P HOUSE @ 2.1			
W902	610 286 1594	GND, WIRE CONEC. C2WAV			

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.

SANYO

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