

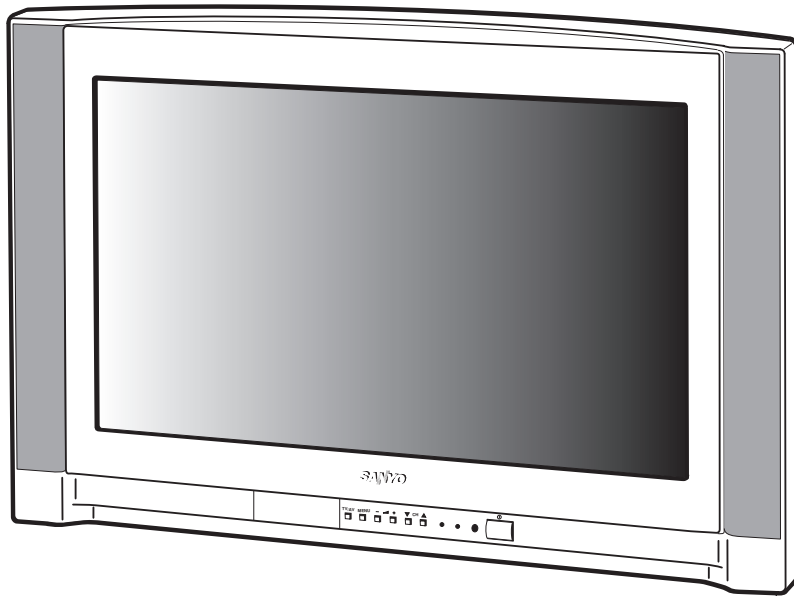
FILE NO.

SERVICE MANUAL Colour Television

Model No. CP28WF2

(Australia/New Zealand)

Service Ref. No. CP28WF2-00



Specifications

Power Source AC220-240V, 50/60Hz.
Colour System PAL, SECAM, NTSC4.43, NTSC
Television System B/G
Channel Coverage VHF: 0-11, 5A (Australia), 1-11 (New Zealand)
UHF: 28-69 (Australia), 21-69 (New Zealand)
CATV: S1-S41, X, Y, Z, Z+1, Z+2

Aerial Input Impedance 75Ω

Ext. Terminals

AV1 (Rear): CENELEC Standard
Input (Composite video, RGB and audio-L/R)
Output (TV-output with composite video and audio-L/R)
AV2 (Rear): Phone jack (Video input and Audio-L/R input)
S-Video Input (Din 4 pin, Separated Y/C signals input)
AV3 (Front): Phone jack (Video input and Audio-L/R input)
Monitor Output: Phone jack (Video monitor output and Audio-L/R monitor output)

Headphone Jack: Mini Stereo Jack

Speaker 5 cm × 12 cm × 2 pcs.

Sound Output 5W + 5W

Dimensions 774 (W) × 491 (H) × 508 (D)mm

Weight approx. 36.9 Kg

Product Code:111371200

Original Version

Chassis Series: FAW-1

Give complete "SERVICE REF. NO." for parts order or servicing. It is shown on the rating plate at the cabinet back of the unit.

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

Specifications subject to change without notice

REFERENCE NO. SM5110615

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Safety Notice

SAFETY PRECAUTIONS

- | | |
|--|---|
| <p>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.</p> <p>2: Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.</p> | <p>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.</p> |
|--|---|

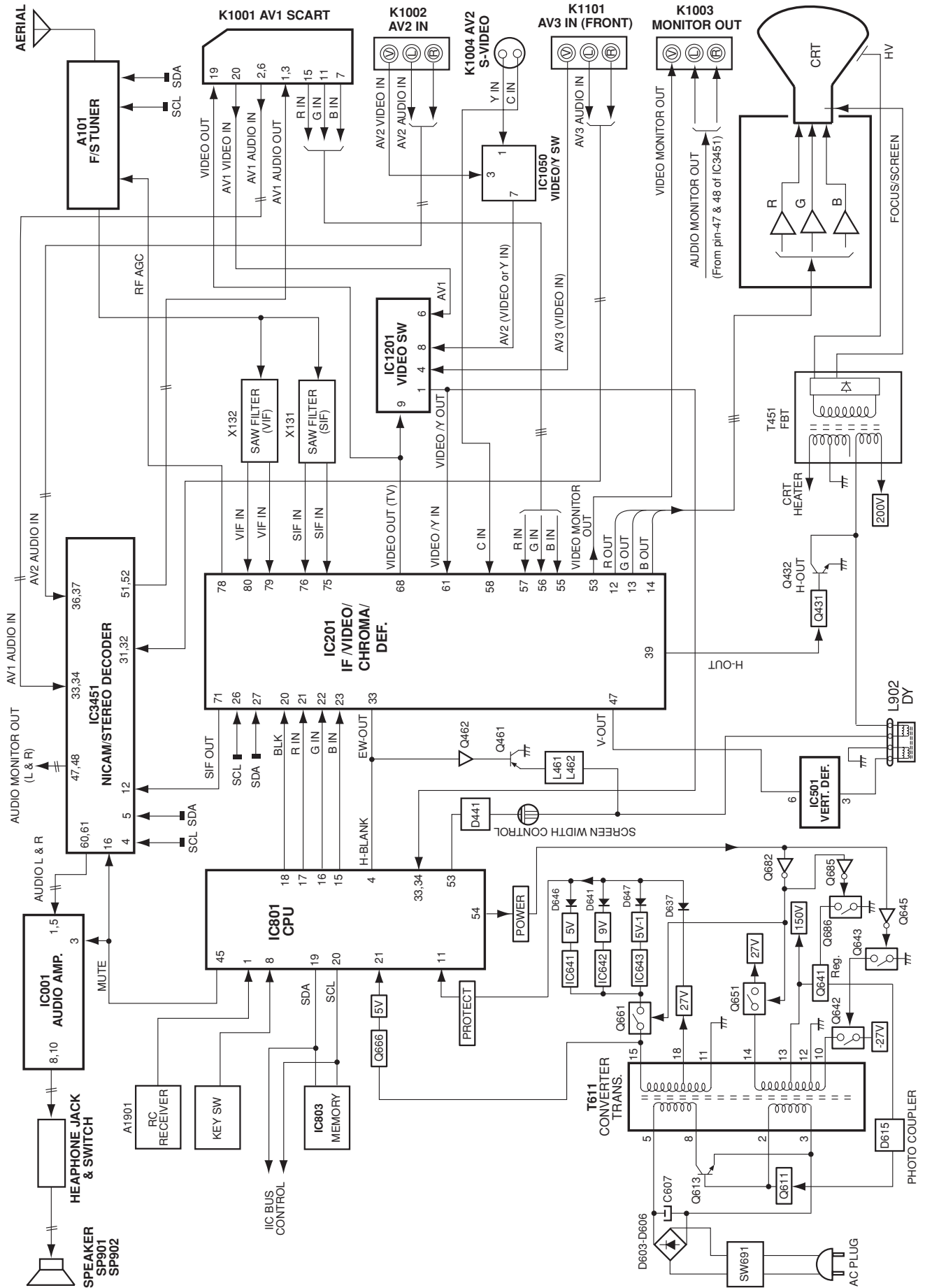
X-RADIATION PRECAUTION

The primary source of X-RADIATION in 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 check to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

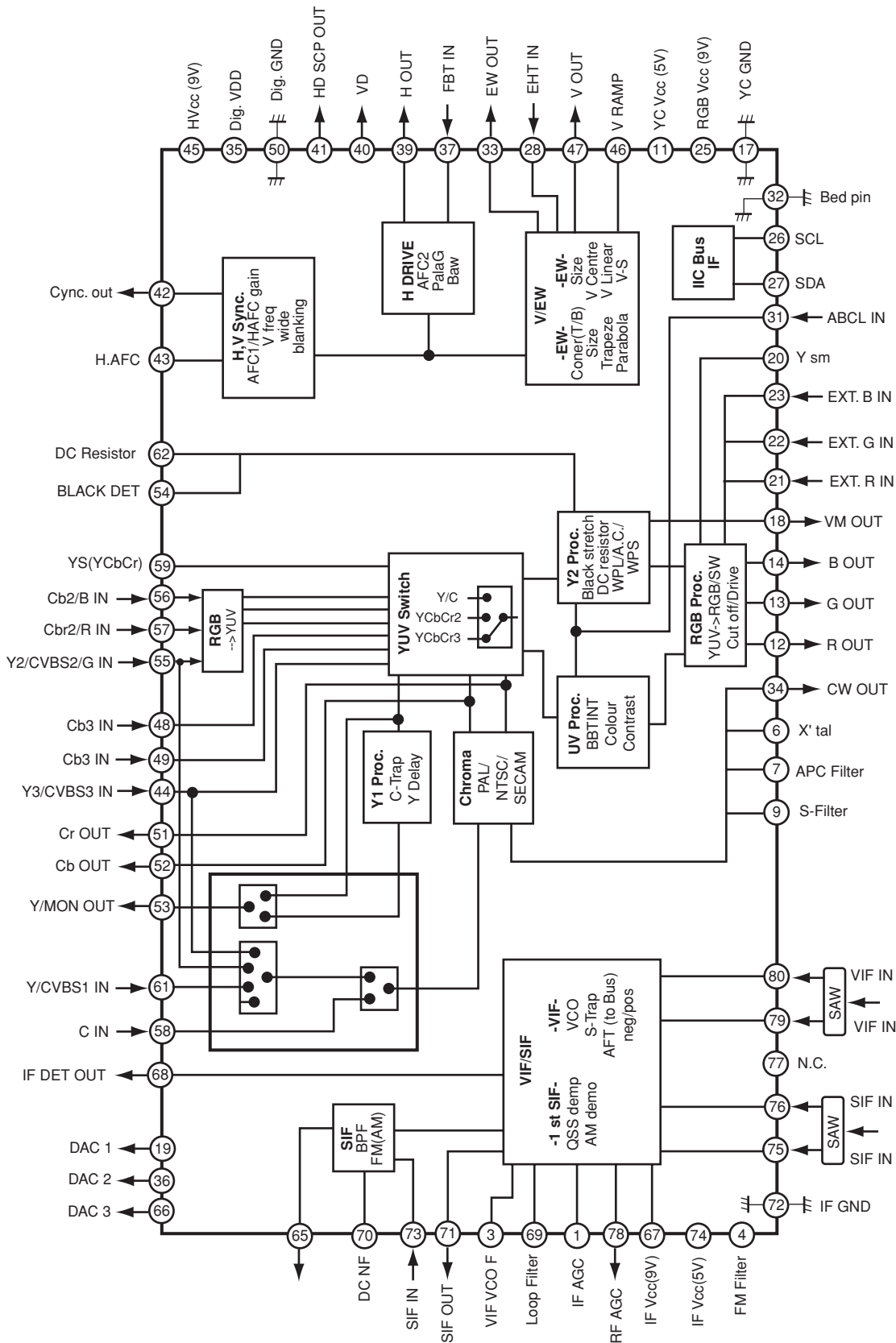
Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark \triangle in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated 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 .

Chassis Block Diagrams



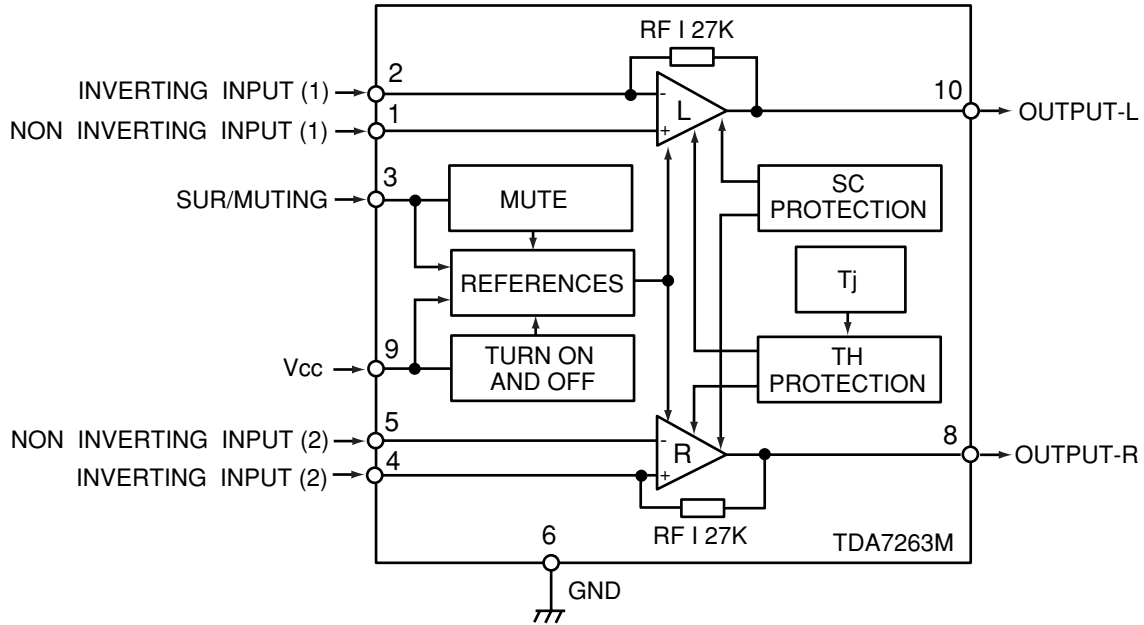
IC Block Diagrams

IC201 < IF/Video/Chroma/Def.> TB1262F

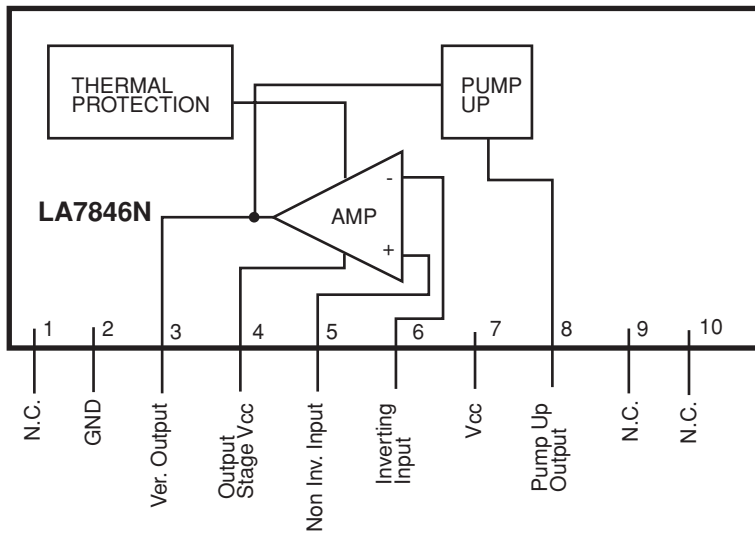


IC Block Diagrams

IC001 < Audio AMP.> TA8200AH

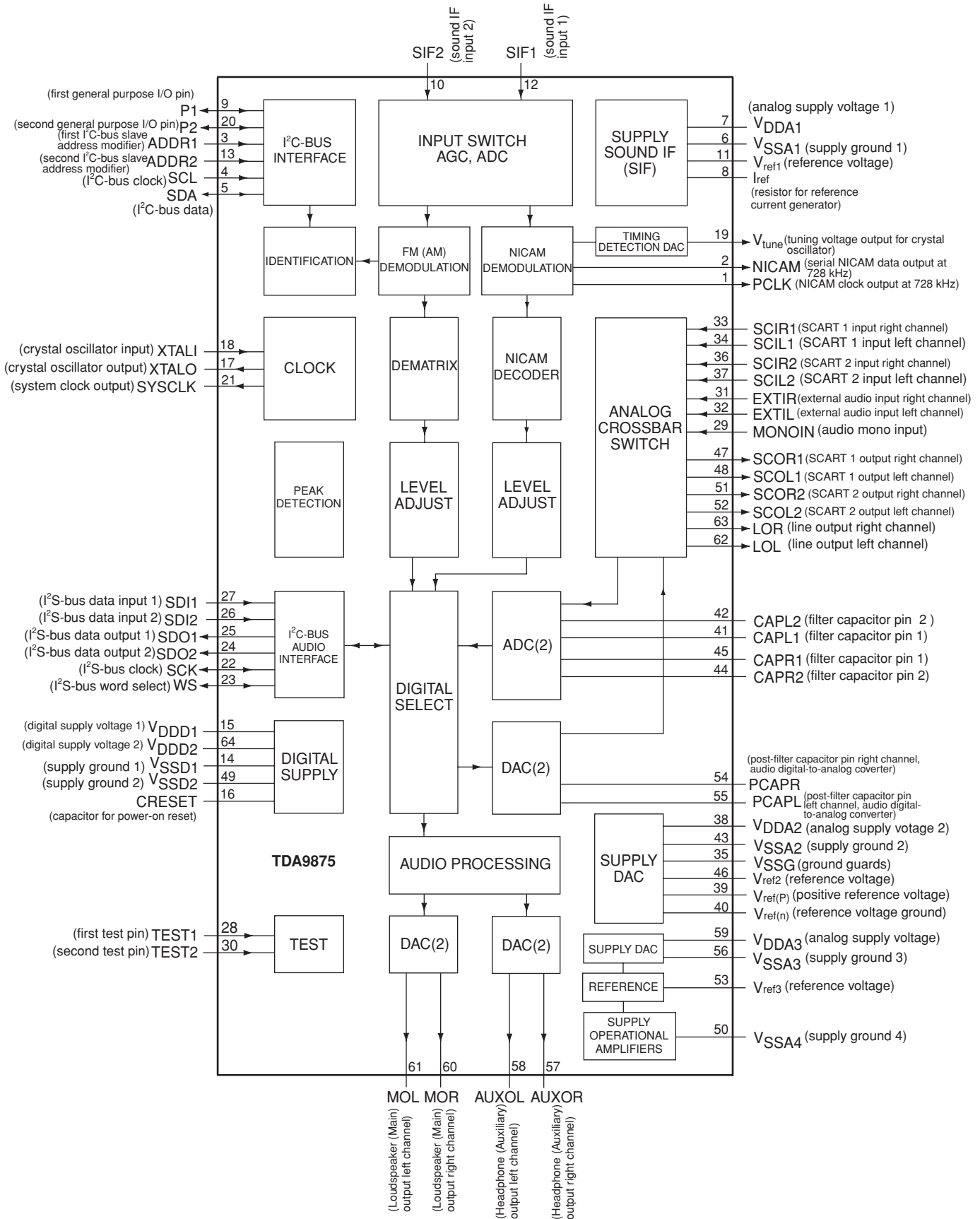


IC501 < Vertical Output > LA7846N



IC Block Diagrams

IC3451 < Digital TV Sound Processor > TDA9875A



CPU Port Functions

Pin No.	Function Name	Function	IN/OUT
1	RC IN	RC signal input	IN
2	RESET	Reset input	IN
3	50/60	50/60Hz output (50Hz=H)	OUT
4	H-BLK	H-Blank	OUT
5	V-BLK	V-Blank	OUT
6	AV SW2	Option SW2	OUT
7	AV SW1	Option SW1	OUT
8	KEY IN	Key switch signal input	IN
9	H-P	Headphone mute (not used)	OUT
10	RELAY	To operate degauss circuit	OUT
11	PROTECT	Power failure detect	IN
12	HP-mode	Headphone mute	OUT
13	BBE	BBE ON/OFF	OUT
14	W-P	White enable	OUT
15	B-OUT	Blue output	OUT
16	G-OUT	Green output	OUT
17	R-OUT	Red output	OUT
18	FB-OUT	Fast blanking output	OUT
19	SDA	SDA	IN/OUT
20	SCL	SCL	OUT
21	VDD	VDD	--
22	JDTO	Not used	--
23	N.C.	Not used	--
24	Vpp	Not used	--
25	AVDD3	Analog VDD of PLL	--
26	TEST0	Test pin	--
27	MCFM	Test pin	--
28	JTCK	Test pin	--
29	TXCF	Analog pin for the Teletext slicerline PLL	--
30	CVBSO	Not used	--
31	AVDD2	Analog power supplies	--
32	JTMS	Not used	--
33	CVBS2	Video input (H.F)	IN
34	CVBS1	Video input (L.F)	IN
35	AGND	Analog circuit ground	--
36	GND	Digital circuit ground	--
37	JTRSTO	Test pin	--
38	PXFM	Analog pin for the Display Pixel Frequency Multiplier	--
39	AVDD	Analog power supplies	--
40	H-SYNC	Horizontal Sync input	IN
41	V-SYNC	Vertical Sync input	IN
42	ACK	Answer for status	OUT
43	STATUS	Request for Bus open	IN
44	IGNOA	RGB on/off switch	OUT
45	AMP-MUTE	Sound mute on/off switch	OUT
46	L/L'	L/L' switch	OUT

Pin No.	Function Name	Function	IN/OUT
47	LED2	Brightness control of LED	OUT
48	S-VIDEO SW	S-video switch	OUT
49	H-Phase	H-Phase (not used)	OUT
50	OSC OUT	Oscillator (output)	OUT
51	OSC IN	Oscillator (input)	IN
52	RF AGC	RF Auto gain control	IN
53	PITTARI	PITTARI switch	OUT
54	POWER	TV power on/off switch	OUT
55	8PIN (SC2)	AV input detect	IN
56	8PIN (SC1)	AV input detect	IN

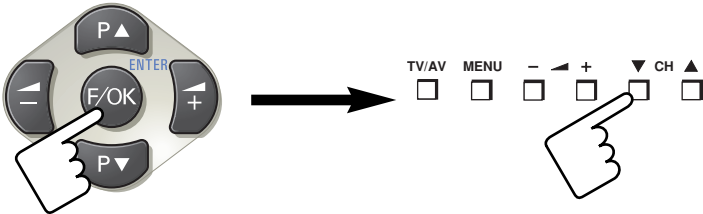
Option Setting

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 programmed to the following settings and “SERVICE ADJUSTMENT” on pages 9 to 12.

1) To enter to the Option Mode

Press and hold the **F/OK button** on the remote control and **Programme down button (CH▼)** on the front panel of the TV. The option window will appear on the screen.



ON-TIMER	ON
SORT MODE	Tuning
P&P	ON
Wel. Text	ON
Comb Filter	OFF
WSS-Aust	ON
Auto Volume	OFF
3D Surround	ON
Country	BG/DK/I/LL'
AV3	ON
CS/A,B	CS

Option Mode

2) To set the Option Mode

Select the desired option item by pressing the **Programme down** or **up button**.

To switch the option mode, use the **Level up** or **down** button.

The data which is set in the option mode is stored into the memory IC automatically.

The following table shows the available option items and default setting mode.

Option Mode	Mode	Description & Note
ON-TIMER	ON or OFF	On-timer available, default “ON”
SORT MODE	Sorting or Tuning	Tuning mode, default “TUNING”
P & P	ON or OFF	Plug & Play mode, default “ON”
WEL. TEXT	ON or OFF	Display message when first set up, default “ON”
Comb Filter	OFF or ON	For factory use, default “OFF”
WSS-Aust	ON or OFF	Default “ON”
Auto Volume	ON or OFF	Auto volume, default “OFF”
3D Surround	ON or OFF	Default “ON”
Country	UK or IRE or B/G, D/K, I, L/L'	TV system, default “ B/G, D/K, I, L/L ”
Wide	ON or OFF	Wide mode, default “ON”
AV3	ON or OFF	Front AV disable, default “ON”
CS/A,B	CS or A/B	Default “CS”

3) Exit from the Service Mode

Press the **Programme information call button** or turn off the TV set by using the mains switch.

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

Adjustable Service Adjustment

Regular

<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
01	AGC	AGC Adjustment
02	--	Cut-Off Drive Adjustment
03	GRY	G-Drive Adjustment (White Balance)
04	GRY	B-Drive Adjustment (White Balance)
05	CTR	Contrast Adjustment (use factory setting) (for factory use)
06	--	Screen Adjustment mode
08	OSD	OSD Positioning Adjustment

Image

<u>Item No.</u>	<u>OSD</u>	<u>Description</u>
01	P V-C	P Vertical Position Adjustment
02	P H-P	P Horizontal Position Adjustment
03	P V-L	P Vertical Linearity Adjustment
04	P VSC	P Vertical S-Correction Adjustment
05	P V-A	P Vertical Size Adjustment
06	P H-S	P Horizontal Size Adjustment
07	P E-P	P Pin Cushion Adjustment
08	P E-T	P Trapezoid Distortion Adjustment
11	P ECT	P Top Corner Correction Adjustment
12	P ECB	P Bottom Corner Correction Adjustment
13	P HPA	P Parallelogram Distortion Adjustment

Important Notice:

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

Service Adjustments

1) To enter to the Service Mode

Press and hold the **GREEN button** on the remote control and then press the **Programme down button (CH▼)** on the front panel of the TV.

Press the **Programme down button** to select the mode required (Regular, Image, others and TB12**). Then press the **F/OK button** to select the mode.

The available adjustment items are as follows;

Image :This can be adjusted for picture image/Shapes.

Regular :This can be adjusted for the service adjustment.

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

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

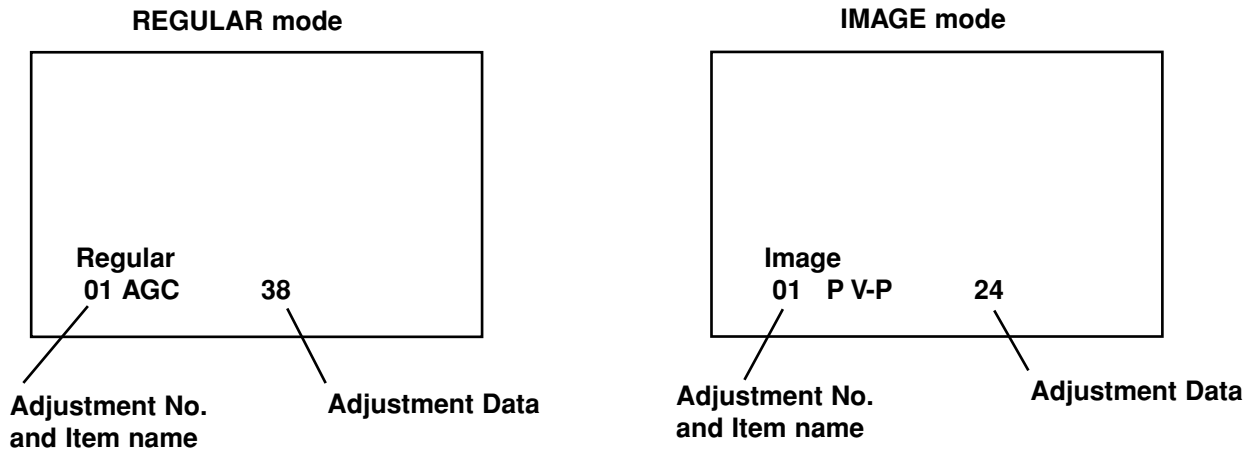
2) To select the mode and service item and change data value

Select the desired adjustment mode by pressing the **Programme down** or **up button** and press the **F/OK button**.

To select the adjustment item, use the **Programme down** or **up button**.

To change the service data, use the **Level up** or **down button**.

The data which is set in the service mode is stored into the memory IC automatically.



3) Exit from the Service Mode

Press the **Programme information call button**  or turn off the TV set by using the mains switch.

Initialisation of Memory IC (IC803)

To initialise the memory IC (IC803), press and hold the **Picture mode selection (→•←)** button on the remote control, then press the **Programme down button** on the front panel of the TV set and then turn the Mains switch off and on. The initialisation is now completed.

When initialised the memory IC and all of the setting data (option data and service adjustment data) stored in the IC are reset to the default value. It is necessary to set the option settings and readjust the service adjustments listed on page 9 and to re-tune all the channels.

Adjustments

IMPORTANT NOTICE

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

+B VOLTAGE ADJUSTMENT

- (1) Connect a DC voltmeter to TP-B and the ground.
- (2) Tune the receiver to an active channel and synchronized picture. Select NATURAL picture mode by pressing the **Picture mode selection** button on the remote control .
- (3) Adjust voltage to $150 \pm 0.5V$ DC by using VR641.

AGC ADJUSTMENT

NOTE: Do not attempt this adjustment with weak signal.

- (1) connect digital voltmeter to TP-A and GND.
- (2) Tune the receiver to most clearest (or strongest) VHF station in your area. Set the brightness and contrast controls to maximum. Set the colour control to minimum.
- (3) Enter to the service mode and select mode "Regular", and select item No. 01 "Regular 01 AGC"
- (4) Press the **Level up (+)** or **Level down (-)** button to adjust voltage to be $3.2 \pm 0.2V$ DC.

FOCUS ADJUSTMENT

- (1) Receive a monochrome circular pattern.
- (2) Set the brightness to normal and contrast to maximum.
- (3) By using FOCUS VR on the F.B.T., adjust focus control for well defined canning lines.

GREY SCALE ADJUSTMENT

SCREEN ADJUSTMENT

- (1) Receive black & white pattern.
- (2) Set the brightness and colour to normal, contrast to maximum.
- (3) Enter to the service mode and select mode "Regular", then select item No. 02 "Regular 02 CUT". The horizontal line will appear on the screen.
- (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, 3, 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 |

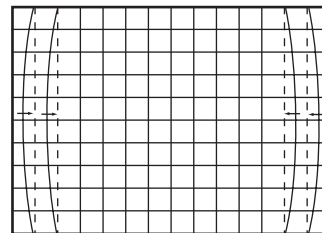
DRIVE ADJUSTMENT

- (6) Select item No. 3. "Regular 03 GRY" (G-Drive) or No.04 "Regular 04 GRY" (B-Drive) and adjust both initially to 40.
- (7) Change data value of each item by using **Level up(+)** or **Level down(-)** button to obtain the proper white balance.

PCC ADJUSTMENT

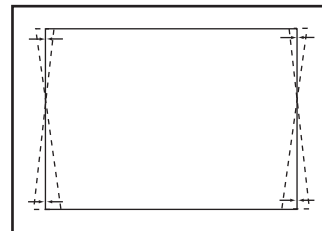
PCC ADJUSTMENT

- (1) Receive cross hatch pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No. 07 "Image 07 P E-P".
- (3) Press the **Level up (+)** or **Level down (-)** button to adjust the vertical line to be straight.



TRAPEZOID ADJUSTMENT

- (1) Receive cross hatch pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No. 08 "Image 08 P E-T".
- (3) Press the **Level up (+)** or **Level down (-)** button to correct the trapezium distortion of the vertical line.



CORNER ADJUSTMENT

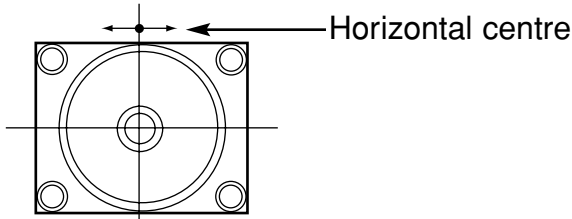
- (1) Receive cross hatch pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No.11 "Image 11 P ECT" for top corner adjustment or item No. 12 . "Image 12 P ECB" for bottom corner adjustment.
- (3) Press the **Level up (+)** or **Level down (-)**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

Adjustments

HORIZONTAL ADJUSTMENT

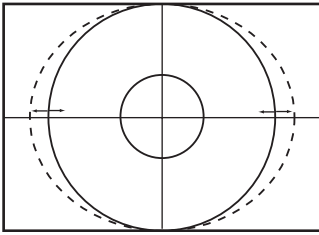
HORIZONTAL CENTRING ADJUSTMENT

- (1) Receive circular pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No. 02 "Image 02 P H-P".
- (3) Press the **Level up (+)** or **Level down (-)** button to adjust the horizontal centre.



HORIZONTAL WIDTH ADJUSTMENT

- (1) Receive circular pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No. 06 "Image 06 P H-S".
- (3) Press the **Level up (+)** or **Level down (-)** button to adjust the horizontal width.



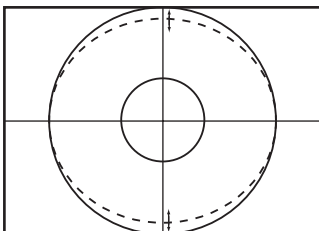
VERTICAL ADJUSTMENT

VERTICAL CENTRING ADJUSTMENT

- (1) Receive circular pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No. 01 "Image 01 P V-C".
- (3) Press the **Level up (+)** or **Level down (-)** button to adjust the vertical centre.

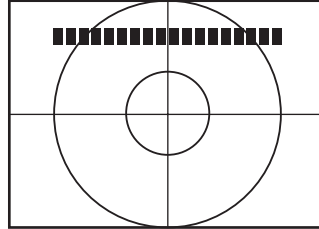
VERTICAL HEIGHT ADJUSTMENT

- (1) Receive circular pattern and set screen mode to "FULL".
- (2) Enter to the service mode and select mode "Image", and select item No. 05 "Image 05 P V-A".
- (3) Press the **Level up (+)** or **Level down (-)** button to adjust the vertical height.



OSA 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. 08 "Regular 08 OSD". The OSD test bar will appear on the top of screen.
- (3) Press the **Level up (+)** or **Level down (-)** button to adjust proper OSD positioning.



HIGH-VOLTAGE CONFIRMATION

Note: +B (+150V) Voltage Check and Grayscale Adjustment must be completed before attempting High Voltage Check.

- (1) Connect high-voltage meter to the anode of CRT and the ground.
- (2) Receive circular pattern and set screen mode to "FULL".
- (3) Set controls for brightness and contrast to maximum.
- (4) Confirm high voltage is within 28.5 KV and 30.5 KV at maximum beam current.

Purity and Convergence Adjustment

CAUTION: The Convergence and Purity adjustments have been made at the factory. Readjustment should be made only after picture tube or deflection yoke replacement, following the steps below:

Signals: Use a pattern generator which can output red, green, blue and white raster and crosshatch pattern signals.

Procedure: Carry out purity adjustment first, and then carry out convergence adjustment.

Preparation: The deflection yoke may have several correction magnets attached to its outer edge. If replacing the picture tube, the positions of the magnets can be changed and they can be re-used, so remove these magnets and keep them safely so that they do not get lost.

PURITY ADJUSTMENTS

1. Place the picture so that its front faces west.
2. Insert the power plug into a wall outlet, and then turn on the power for the TV and de-magnetize the TV using its own degaussing circuit.
3. Loosen the screw which is holding the deflection yoke (with integrated purity magnets), and then move the deflection yoke forward as far as it will go. Remove the rubber wedge at this time.
4. Turn off the red and blue raster so that only the green raster is on.
5. Adjust the angle between the tabs (wings) on purity magnets to centre the vertical green belt in the picture tube screen. (See Figures 2 and 3.)

NOTE: This adjustment can only be carried out by changing the angle, not by rotating the tabs up and down.

6. Gently move the deflection yoke back to the position where the green band fills the whole of the picture tube screen, and then tighten the screw to secure the deflection yoke in place.
7. If there is any colour distortion around the edges, correct it by attaching magnets to the outer edge of the deflection yoke. The magnets should be attached so that the line running from the position of the distortion to the centre of the picture tube intersects the deflection yoke. The colours on the magnets indicate the north and south poles of the magnets. Attach the magnets in whichever direction causes the distortion to disappear. (See Figures 1 and 4. The south and north pole positions are shown as a guide.)
8. Switch the screen to red and blue raster and check that there is no colour distortion. If there is any distortion, adjust the angles of purity magnets tabs or the forward-back position of the deflection yoke, or change the attachment positions of the correction magnets.

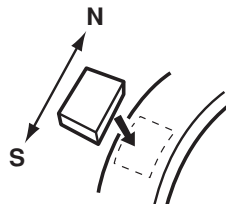
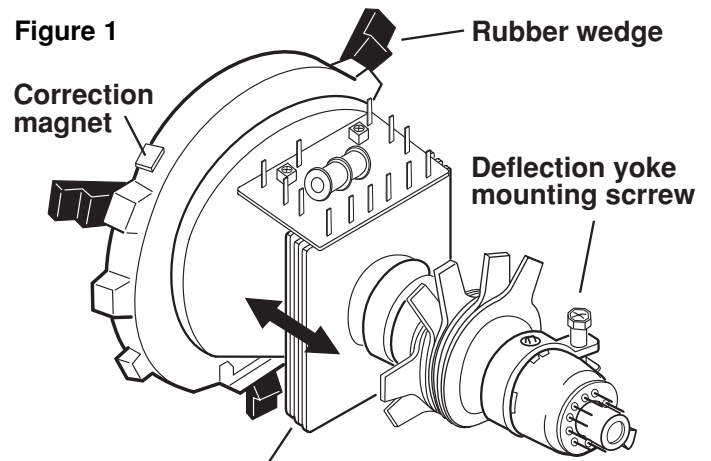


Figure 1



Move the deflection yoke back and forth to adjust the purity

Figure 2

Change the angle to adjust the green band so that it is centred in the screen.

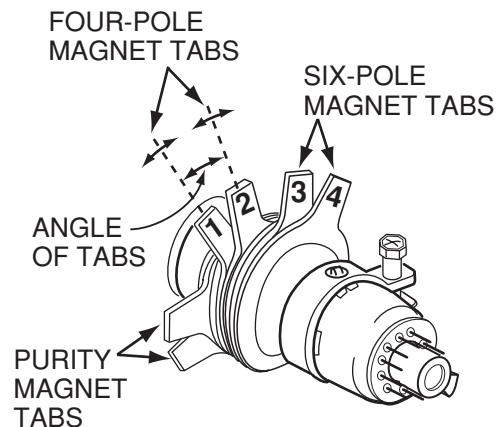


Figure 3

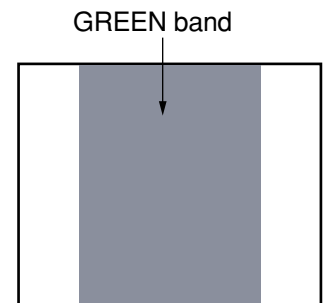
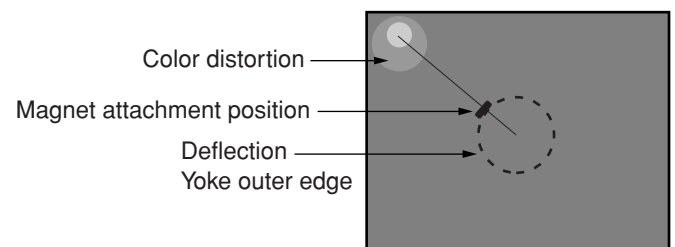


Figure 4



Purity and Convergence Adjustment

CONVERGENCE ADJUSTMENT

Preparation: After carrying out purity adjustment and before proceeding to convergence adjustment, provisionally insert the rubber wedge so that there is no vertical or sideways play in the deflection yoke.

Signals: Display a crosshatch pattern.

1. Red/blue centre adjustment

Adjust the angle between the tabs (1) and (2) in Figure 5 and rotate them together until the lines of the red and blue crosshatch patterns (vertical and horizontal lines) are superimposed in the centre of the screen.

2. Green and red/blue centre adjustment

Adjust the angle between the tabs (3) and (4) in Figure 5 and rotate them together until the lines of the green crosshatch pattern are superimposed with the red/blue crosshatch pattern (vertical and horizontal lines) which were superimposed in step 1).

3. Vertical lines at screen centre (Red and Blue)

Use the VR2 control (see Figure 8) at the top of the deflection yoke to correct the vertical line convergence at the centre of the screen. (See Figure 9.)

4. Vertical lines at screen top and bottom

Use the VR1 control (see Figure 8) at the top of the deflection yoke to correct the vertical line convergence at the top and bottom of the screen. (See Figure 10.)

5. Horizontal lines at screen top and bottom

Rotate the Deflection yoke to the left or right to correct the horizontal line convergence at the top and bottom of the screen. (See Figure 11.)

If vertical lines are intersecting at the top and bottom, use a screwdriver to adjust the Balance coil at the top of the deflection yoke. (See Figure 12.)

Figure 8

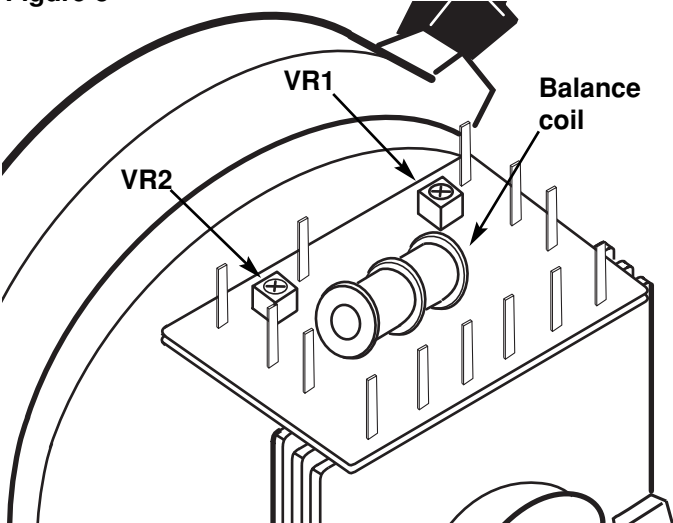


Figure 5

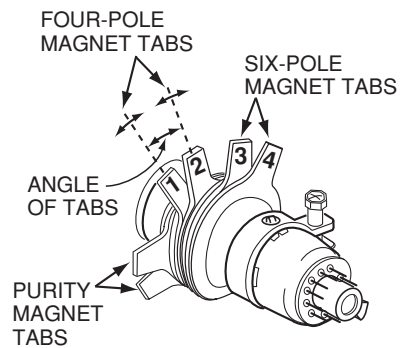
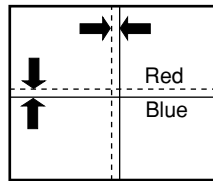
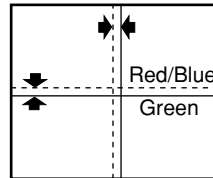


Figure 6



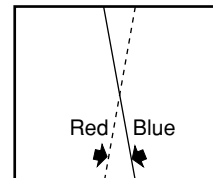
Adjust the angle rotation of tabs (1) and (2) to align the vertical and horizontal lines.

Figure 7



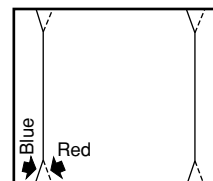
Adjust the angle and rotation of tabs (3) and (4) to align the vertical and horizontal lines.

Figure 9



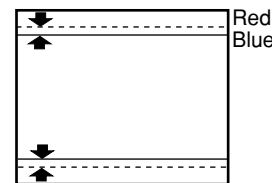
Use the VR2 control to correct.

Figure 10



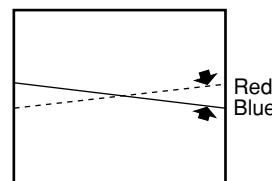
Use the VR1 control to correct.

Figure 11



Rotate the DY to correct.

Figure 12



Use the Balance coil to correct

Mechanical Disassembly

CABINET BACK REMOVAL

1. Refer to Figure 1, remove 14 screws.
2. Pull off cabinet back and remove.

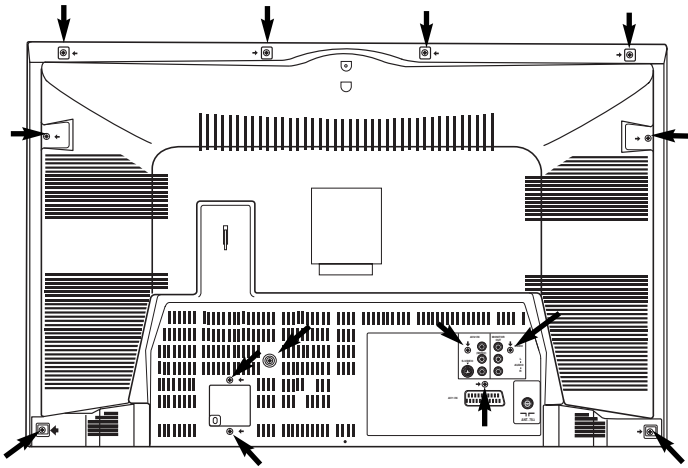


Figure 1. Cabinet Back Removal

Protection Circuit

This TV set has a built-in power supply protection circuit.

It is provided to protect the TV set in case of a power supply circuit malfunctions. When something abnormality occurs during TV reception, the TV set goes to the stand-by mode.

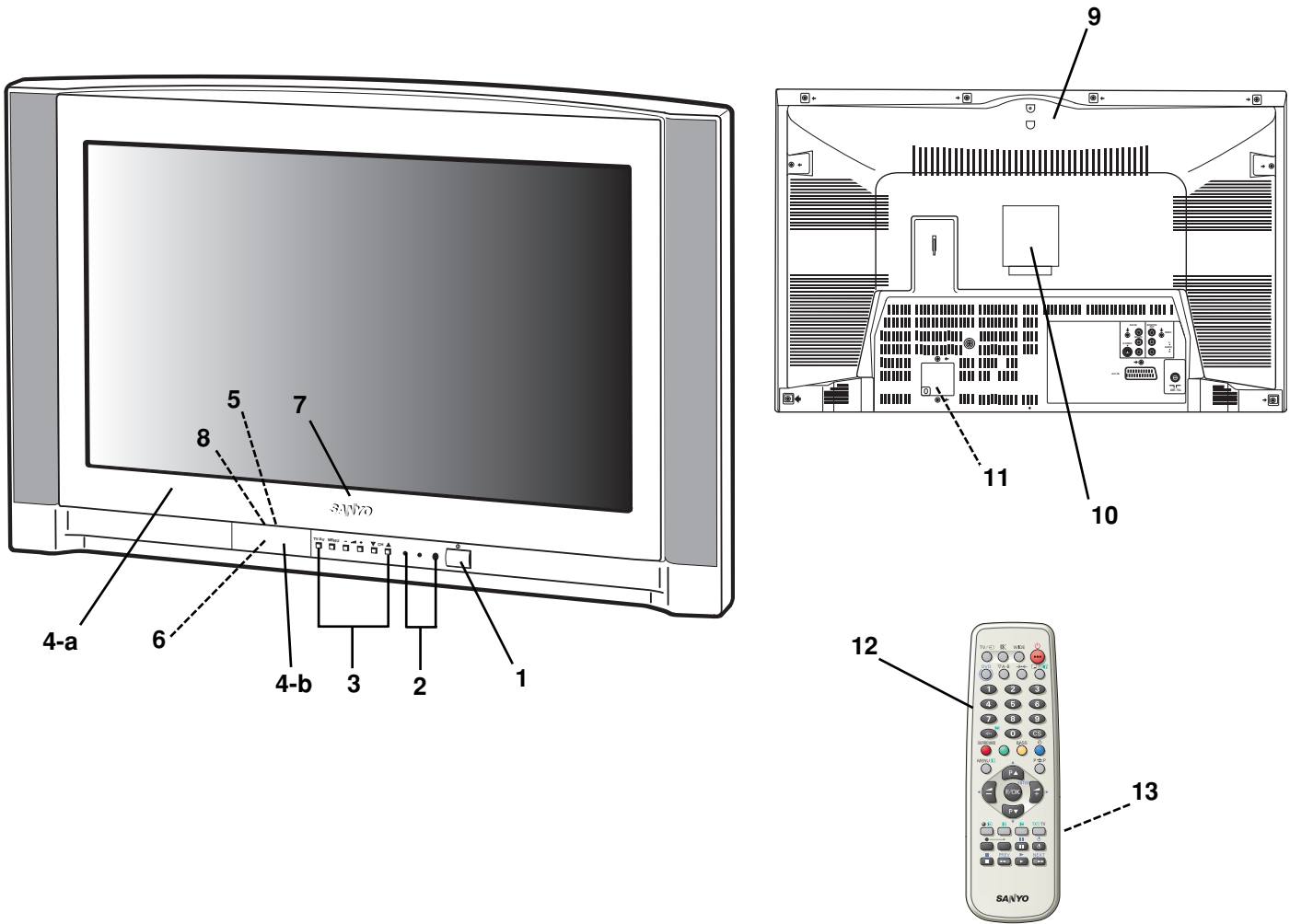
When an abnormality occurs during TV reception, it causes pin 11 of the CPU to go continually Low (less than 2.0V) for about 2 second. The CPU detects that this has occurred and outputs the signal from pin 54 to switch off the power supply lines.

■ Releasing the protective circuit and restoring power supply

To release the protective circuit and restore power supply, turn the power to the TV set OFF and then ON again via either the main power switch or the ON-OFF button on the remote control. This will work only if the power supply trouble was temporary. If there is permanent trouble such as a damaged circuit, power cannot be restored and the circuit will have to be repaired.

Cabinet Parts List

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



Key No.	Part No.	Description	Key No.	Part No.	Description
1	610 312 8320	ASSY,BUTTON POWER-F8WA			
	610 229 8406	SPRING-E3HA (for POWER BUTTON)			
2	610 291 6775	DEC IND-S6DK			
3	610 312 8313	ASSY,BUTTON UNIT-F8WA			
4	610 312 8405	ASSY,CABINET FRONT-F8WA			
4-a	610 312 8436	CABINET FRONT-F8WA			
4-b	610 312 8467	DOOR-F8WA			
5	610 312 8474	DEC SHEET DOOR-F8WA			
6	610 284 7741	DOOR COVER-C2SA			
7	645 040 4672	BADGE,SANYO			
or	645 041 7269	BADGE,SANYO			
8	610 291 6836	SPRING PLATE-S6DK			
9	610 312 8450	CABINET BACK-F8WA			
10	610 313 0309	LABEL RATING-AUS BIG			
11	610 273 7189	HOLDER CORD-S4KF			
12	645 052 2697	ASSY,REMOCON JXMTA			
13	610 297 9879	RC-BATTERY LID-JXMTA			
	610 312 7293	INSTRUCTION MANUAL-F8WA			

Chassis Electrical Parts List

F8WA

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.

Note: Parts order must contain Service Ref. No., Part No., and descriptions. The main PCB unit will be supplied without tuner and flyback transformer. They should be ordered separately.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
<p>NOTES: Read description in the Capacitor and Resistor as follows:</p> <p>CAPACITOR CERAMIC 100P K 50V</p> <p style="margin-left: 100px;">└─── Rated Voltage</p> <p style="margin-left: 100px;">└─── Tolerance Symbols: Less than 10pF A : Not specified B : $\pm 0.1\text{pF}$ C : $\pm 0.25\text{pF}$ D : $\pm 0.5\text{pF}$ F : $\pm 1\text{pF}$ G : $\pm 2\text{pF}$ R : $\pm 0.25\text{-}0\text{pF}$ S : $\pm 0\text{-}0.25\text{pF}$ E : $\pm 0\text{-}1\text{pF}$ 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 : $\pm 100\text{-}0\%$ Q : $\pm 30\text{-}10\%$ T : $\pm 50\text{-}10\%$ U : $\pm 75\text{-}10\%$ V : $\pm 20\text{-}10\%$ W : $\pm 100\text{-}10\%$ X : $\pm 40\text{-}20\%$ Y : $\pm 150\text{-}10\%$ Z : $\pm 80\text{-}20\%$</p> <p style="margin-left: 100px;">└─── Rated value: P=pico farad, U=micro farad</p> <p>Material: CERAMIC..... Ceramic MT-PAPER..... Metallized Paper POLYESTER..... Polyester MT-POLYEST.....Metallized Polyester POLYPRO..... Polypropylene MT-POLYPRO.....Metallized Polypropylene COMPO FILM..... Composite film MT-COMPO.....Metallized Composite STYRENE.....Styrene TA-SOLID..... Tantalum Solid AL-SOLID..... Aluminium Solid ELECT..... Electrolytic NP-ELECT..... Non-polarised Electrolytic OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic DL-ELECT..... Double Layered Electrolytic</p>			<p>OUT OF CIRCUIT BOARD</p> <p>PICTURE TUBE</p> <p>Δ Q901 414 012 7207 CRT ASSY W66QDS770X52S Δ A100 414 012 7306 CRT W66QDS770X00S Δ A200 645 066 4403 YOKE, DEFLECTION</p> <p>Q901A 610 003 1739 CG PURITY MAGNET 645 008 8674 MAGNET, CG. PR</p> <p>Q901B1 610 290 4154 DY SPACER-F8LZ 610 233 7891 DY SPACER E2HA</p> <p>Q901B2 610 290 4154 DY SPACER-F8LZ 610 233 7891 DY SPACER E2HA</p> <p>Q901B3 610 290 4154 DY SPACER-F8LZ 610 233 7891 DY SPACER E2HA</p> <p>Q901B4 610 290 4154 DY SPACER-F8LZ 610 233 7891 DY SPACER E2HA</p> <p>COIL</p> <p>Δ L901 645 067 6093 COIL, DEGAUSSING</p> <p>MISCELLANEOUS</p> <p>SP901 645 032 2037 SPEAKER, 8 652 001 0871 SPEAKER, 8</p> <p>SP902 645 032 2037 SPEAKER, 8 652 001 0871 SPEAKER, 8</p> <p>Δ W901 645 067 6604 CORD, POWER-2.4MK-A5003 W902 610 313 6042 ASSY, WIRE GND CONNECTOR F</p> <p>W902A 610 079 4085 GROUNDING SPRING-F W902B 610 079 4085 GROUNDING SPRING-F</p> <p style="text-align: center;">610 311 6334 ASSY, PWB, MAIN F8WA 1AA0B10E68600</p> <p>TRANSISTOR</p> <p>Q001 405 014 4509 TR 2SC2412K T146 R 405 014 4608 TR 2SC2412K T146 S 405 015 8704 TR 2SC2812-L6-TB 405 015 8902 TR 2SC2812-L7-TB 405 163 1602 TR 2SC2812N-L6-TB0 405 163 1701 TR 2SC2812N-L7-TB0 405 173 9803 TR 2SC3928A1R 405 173 9902 TR 2SC3928A1S</p> <p>Q043 405 134 5905 TR 2SA1037AK-T146-R 405 147 2205 TR 2SA1037AK-S-T146 405 002 0308 TR 2SA1037K T146 R 405 002 0407 TR 2SA1037K T146 S 405 002 6706 TR 2SA1179-M6-TB 405 002 6904 TR 2SA1179-M7-TB 405 163 1503 TR 2SA1179N-M6-TB 405 163 2708 TR 2SA1179N-M7-TB 405 173 9605 TR 2SA1235A1E 405 173 9704 TR 2SA1235A1F</p> <p>Q044 405 014 4509 TR 2SC2412K T146 R 405 014 4608 TR 2SC2412K T146 S 405 015 8704 TR 2SC2812-L6-TB 405 015 8902 TR 2SC2812-L7-TB</p>		
<p>RESISTOR CARBON 4.7K J A 1/4W</p> <p style="margin-left: 100px;">└─── Rated Wattage</p> <p style="margin-left: 100px;">└─── Performance Symbols: A: General B: Non flammable Z: Low noise Other: Temperature coefficient</p> <p style="margin-left: 100px;">└─── 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: $\pm 5\text{-}15\%$</p> <p style="margin-left: 100px;">└─── Rated value, ohms: K: 1,000, M: 1,000,000</p> <p>Material: CARBON..... Carbon MT-FILM..... Metal Film OXIDE-MT..... Oxide Metal Film SOLID..... Composition MT-GLAZE..... Metal Glaze WIRE WOUND... Wire Wound CERAMIC RES.. Ceramic FUSIBLE RES.... Fusible</p>					

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	
Q1951	405 163 1602	TR 2SC2812N-L6-TB0	Q651	405 089 0000	TR 2SA1707-S	
	405 163 1701	TR 2SC2812N-L7-TB0		405 089 0109	TR 2SA1707-T	
	405 173 9803	TR 2SC3928A1R		405 009 6907	TR 2SB985-S	
	405 173 9902	TR 2SC3928A1S		405 009 7003	TR 2SB985-T	
	405 014 4509	TR 2SC2412K T146 R		Q661	405 001 9302	TR 2SA1020-Y
	405 014 4608	TR 2SC2412K T146 S			405 008 4805	TR 2SB764-E
	405 015 8704	TR 2SC2812-L6-TB		Q666	405 058 0208	TR 2SC3807-R-CTV-YA
	405 015 8902	TR 2SC2812-L7-TB			Q682	405 014 4509
	405 163 1602	TR 2SC2812N-L6-TB0		405 014 4608		TR 2SC2412K T146 S
	405 163 1701	TR 2SC2812N-L7-TB0		405 015 8704	TR 2SC2812-L6-TB	
405 173 9803	TR 2SC3928A1R	405 015 8902	TR 2SC2812-L7-TB			
405 173 9902	TR 2SC3928A1S	405 163 1602	TR 2SC2812N-L6-TB0			
Q431	405 018 0507	TR 2SC3332-R	405 163 1701	TR 2SC2812N-L7-TB0		
	405 018 0606	TR 2SC3332-S	405 173 9803	TR 2SC3928A1R		
Q432	405 163 4306	TR 2SD2645-YB	405 173 9902	TR 2SC3928A1S		
Q451	405 148 1801	TR 2SK2638	Q685	405 014 4509	TR 2SC2412K T146 R	
Q461	405 052 7906	TR 2SB1274-Q		405 014 4608	TR 2SC2412K T146 S	
	405 052 8002	TR 2SB1274-R	405 015 8704	TR 2SC2812-L6-TB		
Q462	405 052 8101	TR 2SB1274-S	405 015 8902	TR 2SC2812-L7-TB		
	405 138 1309	TR 2SB1565-E	405 163 1602	TR 2SC2812N-L6-TB0		
Q462	405 138 1408	TR 2SB1565-F	405 163 1701	TR 2SC2812N-L7-TB0		
	405 039 3303	TR 2SC3114-R	405 173 9803	TR 2SC3928A1R		
Q611	405 039 3402	TR 2SC3114-S	405 173 9902	TR 2SC3928A1S		
	405 017 1901	TR 2SC3114-T	Q686	405 134 5905	TR 2SA1037AK-T146-R	
405 134 5905	TR 2SA1037AK-T146-R	405 147 2205		TR 2SA1037AK-S-T146		
Q612	405 147 2205	TR 2SA1037AK-S-T146	405 002 0308	TR 2SA1037K T146 R		
	405 002 0308	TR 2SA1037K T146 R	405 002 0407	TR 2SA1037K T146 S		
Q613	405 002 0407	TR 2SA1037K T146 S	405 002 6706	TR 2SA1179-M6-TB		
	405 002 6706	TR 2SA1179-M6-TB	405 002 6904	TR 2SA1179-M7-TB		
Q641	405 002 6904	TR 2SA1179-M7-TB	405 163 1503	TR 2SA1179N-M6-TB		
	405 163 1503	TR 2SA1179N-M6-TB	405 163 2708	TR 2SA1179N-M7-TB		
Q612	405 163 2708	TR 2SA1179N-M7-TB	405 173 9605	TR 2SA1235A1E		
	405 173 9605	TR 2SA1235A1E	405 173 9704	TR 2SA1235A1F		
Q613	405 173 9704	TR 2SA1235A1F	Q692	405 014 4509	TR 2SC2412K T146 R	
Q641	405 058 0208	TR 2SC3807-R-CTV-YA		405 014 4608	TR 2SC2412K T146 S	
	405 095 0407	TR 2SC4429-L-YB	405 015 8704	TR 2SC2812-L6-TB		
Q641	405 095 0308	TR 2SC4429-M-YB	405 015 8902	TR 2SC2812-L7-TB		
	405 014 4509	TR 2SC2412K T146 R	405 163 1602	TR 2SC2812N-L6-TB0		
Q642	405 014 4608	TR 2SC2412K T146 S	405 163 1701	TR 2SC2812N-L7-TB0		
	405 015 8704	TR 2SC2812-L6-TB	405 173 9803	TR 2SC3928A1R		
Q643	405 015 8902	TR 2SC2812-L7-TB	405 173 9902	TR 2SC3928A1S		
	405 163 1602	TR 2SC2812N-L6-TB0	INTEGRATED CIRCUIT			
Q642	405 163 1701	TR 2SC2812N-L7-TB0	IC001	409 301 4906	IC TDA7263M	
	405 173 9803	TR 2SC3928A1R	IC501	409 374 0607	IC LA7846N	
Q643	405 173 9902	TR 2SC3928A1S	IC641	409 241 5407	IC BA178M05T	
	405 089 3001	TR 2SC4487-S	409 265 4806	IC L78M05CV		
Q645	405 089 3100	TR 2SC4487-T	409 172 1509	IC MC78M05CT		
	405 022 2504	TR 2SD1347-S	409 320 5700	IC UPC78M05AHF		
Q643	405 022 2603	TR 2SD1347-T	IC642	409 367 2809	IC BA178M09T	
	405 134 5905	TR 2SA1037AK-T146-R		409 370 0007	IC MC78M09CT	
Q645	405 147 2205	TR 2SA1037AK-S-T146	409 366 7904	IC UPC78M09AHF		
	405 002 0308	TR 2SA1037K T146 R	IC643	409 241 5407	IC BA178M05T	
405 002 0407	TR 2SA1037K T146 S	409 265 4806		IC L78M05CV		
Q645	405 002 6706	TR 2SA1179-M6-TB	409 172 1509	IC MC78M05CT		
	405 002 6904	TR 2SA1179-M7-TB	409 320 5700	IC UPC78M05AHF		
Q645	405 163 1503	TR 2SA1179N-M6-TB	CAPACITOR			
	405 163 2708	TR 2SA1179N-M7-TB	C001	403 314 5905	CERAMIC 0.47U K 16V	
Q645	405 173 9605	TR 2SA1235A1E	403 307 8807	CERAMIC 0.47U K 16V		
	405 173 9704	TR 2SA1235A1F	C002	403 215 2300	CERAMIC 0.012U K 50V	
Q645	405 014 4509	TR 2SC2412K T146 R	C003	403 314 5905	CERAMIC 0.47U K 16V	
	405 014 4608	TR 2SC2412K T146 S	403 307 8807	CERAMIC 0.47U K 16V		
Q645	405 015 8704	TR 2SC2812-L6-TB	C004	403 215 2300	CERAMIC 0.012U K 50V	
	405 015 8902	TR 2SC2812-L7-TB	C005	403 046 3507	ELECT 33U M 25V	
Q645	405 163 1602	TR 2SC2812N-L6-TB0	C006	403 046 3507	ELECT 33U M 25V	
	405 163 1701	TR 2SC2812N-L7-TB0	C007	403 164 0204	CERAMIC 0.1U Z 25V	
Q645	405 173 9803	TR 2SC3928A1R				
	405 173 9902	TR 2SC3928A1S				

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C008	403 164 0204	CERAMIC 0.1U Z 25V		403 317 4608	CERAMIC 0.33U K 16V
C009	403 164 0204	CERAMIC 0.1U Z 25V	C505	403 036 6600	CERAMIC 8P D 500V
C010	404 089 7200	ELECT 100U M 25V	C506	403 067 7805	MT-COMPO 0.47U J 50V
	403 044 9501	ELECT 100U M 25V		403 256 0808	MT-COMPO 0.47U J 50V
C011	403 209 7205	ELECT 2200U M 25V	C511	403 064 1202	POLYESTER 0.1U K 100V
C012	403 209 7205	ELECT 2200U M 25V		403 276 9706	POLYESTER 0.1U K 100V
C013	403 164 0204	CERAMIC 0.1U Z 25V	C528	403 164 0204	CERAMIC 0.1U Z 25V
C015	404 087 4904	ELECT 47U M 25V	C529	404 084 8905	ELECT 10U M 50V
	403 047 3100	ELECT 47U M 25V		403 049 4204	ELECT 10U M 50V
C021	403 052 8503	ELECT 1000U M 35V	C603	403 076 6707	CERAMIC 1000P K 1K
C1102	403 113 3805	CERAMIC 1000P K 50V		403 312 8205	CERAMIC 1000P K 1K
C1901	404 089 7200	ELECT 100U M 25V	C604	403 076 6707	CERAMIC 1000P K 1K
	403 044 9501	ELECT 100U M 25V		403 312 8205	CERAMIC 1000P K 1K
C1922	403 215 2201	CERAMIC 0.01U K 50V	C607	404 096 1901	ELECT 270U M 400V
C1923	403 215 2201	CERAMIC 0.01U K 50V	C614	403 237 8007	MT-COMPO 0.1U J 50V
C1924	403 215 2201	CERAMIC 0.01U K 50V	C615	403 058 2604	POLYESTER 0.015U J 50V
C1925	403 215 2201	CERAMIC 0.01U K 50V		403 179 3207	POLYESTER 0.015U J 50V
C1926	403 258 8208	NP-ELECT 10U M 16V	C616	403 247 2101	CERAMIC 2200P K 2K
C1927	403 258 8208	NP-ELECT 10U M 16V		403 263 6800	CERAMIC 2200P K 2K
C1928	403 113 3805	CERAMIC 1000P K 50V	C617	403 060 8403	POLYESTER 0.033U K 50V
C1929	403 113 3805	CERAMIC 1000P K 50V		403 179 1609	POLYESTER 0.033U K 50V
C421	404 077 4600	MT-POLYPRO 7800P H 1.5K	C631	404 073 4505	CERAMIC 2200P K 250V
	403 343 8205	MT-POLYPRO 7800P H 1.5K		404 073 2907	CERAMIC 2200P M 250V
C422	403 084 0308	POLYPRO 0.022U J 630V		404 008 4105	CERAMIC 2200P M 400V
C423	404 077 4907	MT-POLYPRO 8200P H 1.5K		404 071 4101	CERAMIC 2200P M 400V
	403 343 8403	MT-POLYPRO 8200P H 1.5K	C633	404 087 5109	ELECT 470U M 25V
C424	403 083 8800	POLYPRO 0.012U J 630V		403 047 5005	ELECT 470U M 25V
C431	403 314 5905	CERAMIC 0.47U K 16V	C637	403 196 0203	ELECT 2200U M 35V
	403 307 8807	CERAMIC 0.47U K 16V	C640	403 209 7205	ELECT 2200U M 25V
C432	403 075 7101	CERAMIC 1000P K 500V	C641	403 331 6404	CERAMIC 1500P K 1K
C433	403 076 3102	CERAMIC 3900P K 500V	C642	404 055 9801	ELECT 220U M 200V
C434	404 087 6007	ELECT 47U M 35V	C645	404 084 8806	ELECT 1U M 50V
	403 054 0703	ELECT 47U M 35V		403 049 0008	ELECT 1U M 50V
C436	403 036 2206	CERAMIC 47P J 500V	C647	403 157 6800	CERAMIC 680P K 50V
C437	403 066 6106	MT-POLYEST 0.47U J 250V	C648	404 089 7200	ELECT 100U M 25V
	403 187 9208	MT-POLYEST 0.47U J 250V		403 044 9501	ELECT 100U M 25V
C438	403 113 3805	CERAMIC 1000P K 50V	C649	404 089 7200	ELECT 100U M 25V
C441	403 267 3201	MT-POLYPRO 0.18U J 400V		403 044 9501	ELECT 100U M 25V
	403 353 2200	MT-POLYPRO 0.18U J 400V	C650	404 089 7200	ELECT 100U M 25V
C442	403 193 0909	MT-POLYPRO 0.12U J 400V		403 044 9501	ELECT 100U M 25V
	403 359 1900	MT-POLYPRO 0.12U J 400V	C651	403 206 9004	ELECT 1000U M 6.3V
C443	403 079 0900	MT-POLYPRO 0.15U J 400V	C666	404 087 4904	ELECT 47U M 25V
	403 355 7609	MT-POLYPRO 0.15U J 400V		403 047 3100	ELECT 47U M 25V
C445	404 084 8905	ELECT 10U M 50V	C682	404 087 4904	ELECT 47U M 25V
	403 049 4204	ELECT 10U M 50V		403 047 3100	ELECT 47U M 25V
C446	403 358 7200	MT-POLYPRO 0.15U J 250V	C685	404 084 8806	ELECT 1U M 50V
	403 375 0604	MT-POLYPRO 0.15U J 250V		403 049 0008	ELECT 1U M 50V
	403 377 4501	MT-POLYPRO 0.15U J 250V	C686	404 087 5109	ELECT 470U M 25V
C450	404 056 5307	NP-ELECT 2.2U M 100V		403 047 5005	ELECT 470U M 25V
	404 084 9902	NP-ELECT 2.2U M 100V	C687	403 148 0404	ELECT 1000U M 25V
C451	404 056 5307	NP-ELECT 2.2U M 100V	△C691	404 071 2107	MT-POLYEST 0.1U K 250V
	404 084 9902	NP-ELECT 2.2U M 100V		404 072 5602	MT-POLYEST 0.1U M 250V
C463	403 274 4208	POLYESTER 6800P K 100V		404 060 7205	MT-POLYEST 0.1U M 250V
	403 289 0707	POLYESTER 6800P K 100V		404 066 1702	MT-POLYEST 0.1U M 275V
C465	403 188 0808	MT-POLYEST 2.2U J 100V		404 093 6107	MT-POLYEST 0.1U M 275V
C466	403 188 0808	MT-POLYEST 2.2U J 100V	C692	404 071 2107	MT-POLYEST 0.1U K 250V
C467	403 207 0307	CERAMIC 1U Z 16		404 072 5602	MT-POLYEST 0.1U M 250V
C468	404 087 5406	ELECT 22U M 50V		404 060 7205	MT-POLYEST 0.1U M 250V
	403 050 2800	ELECT 22U M 50V		404 066 1702	MT-POLYEST 0.1U M 275V
C470	403 179 2408	POLYESTER 0.022U K 50V		404 093 6107	MT-POLYEST 0.1U M 275V
C482	403 159 7409	MT-POLYEST 0.1U K 250V			
C486	403 259 8801	ELECT 0.47U M 160V	RESISTOR		
C501	403 148 0404	ELECT 1000U M 25V	R001	401 105 1105	MT-GLAZE 12K JA 1/16W
C502	404 084 9407	ELECT 220U M 35V	R002	401 105 2805	MT-GLAZE 2.2K JA 1/16W
	403 053 2104	ELECT 220U M 35V	R003	401 105 1105	MT-GLAZE 12K JA 1/16W
C503	403 215 2201	CERAMIC 0.01U K 50V	R004	401 105 2805	MT-GLAZE 2.2K JA 1/16W
C504	403 279 4302	CERAMIC 0.33U K 16V	R005	401 026 9303	CARBON 47 JA 1/6W

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R006	401 025 1605	CARBON 1.5K JA 1/6W	R516	401 027 5502	CARBON 6.8K JA 1/6W
R007	401 026 9303	CARBON 47 JA 1/6W	R517	401 105 3406	MT-GLAZE 27K JA 1/16W
R008	401 025 1605	CARBON 1.5K JA 1/6W	R518	401 105 5400	MT-GLAZE 47K JA 1/16W
R009	401 026 8108	CARBON 4.7 JA 1/6W	R534	401 053 4203	MT-FILM 5.6K FA 1/6W
R010	401 026 8108	CARBON 4.7 JA 1/6W	R537	401 105 0603	MT-GLAZE 10K JA 1/16W
R013	401 105 3307	MT-GLAZE 2.7K JA 1/16W	R542	401 105 0603	MT-GLAZE 10K JA 1/16W
R014	401 022 1905	CARBON 680 JA 1/4W	R602	402 074 8102	WIRE WOUND 3.9 KA 10W
R016	401 022 1905	CARBON 680 JA 1/4W		402 095 6002	WIRE WOUND 3.9 KA 10
R018	401 105 0603	MT-GLAZE 10K JA 1/16W	R611	401 105 6001	MT-GLAZE 5.6K JA 1/16W
R022	401 027 0309	CARBON 47K JA 1/6W	R615	401 105 2904	MT-GLAZE 2.2K JA 1/16W
R023	401 105 5905	MT-GLAZE 560 JA 1/16W	R617	401 105 1006	MT-GLAZE 1.2K JA 1/16W
R024	401 025 7805	CARBON 2.2K JA 1/6W	R619	401 010 2501	CARBON 47 JA 1/2W
R048	401 105 0603	MT-GLAZE 10K JA 1/16W	R620	401 007 5805	CARBON 120K JA 1/2W
R103	401 061 4400	OXIDE-MT 33K JA 1W	R621	401 007 5805	CARBON 120K JA 1/2W
R1101	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R622	401 014 5201	CARBON 15K JA 1/4W
R1106	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R623	401 105 1501	MT-GLAZE 1.5K JA 1/16W
R1921	401 007 7601	CARBON 150 JA 1/2W	R624	401 068 2607	OXIDE-MT 47 JA 2W
R1922	401 007 7601	CARBON 150 JA 1/2W	R625	401 066 5204	OXIDE-MT 22 JA 2W
R1950	401 105 4502	MT-GLAZE 390 JA 1/16W	R626	401 016 3304	CARBON 2.2K GA 1/4W
R1951	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R627	401 066 5204	OXIDE-MT 22 JA 2W
R1952	401 105 5400	MT-GLAZE 47K JA 1/16W	R628	401 068 6902	OXIDE-MT 56 JA 2W
R1953	401 025 4200	CARBON 1.8K JA 1/6W	△R631	402 000 8305	SOLID 5.6M KA 1/2W
R1954	401 105 1600	MT-GLAZE 15K JA 1/16W	△R632	402 000 8305	SOLID 5.6M KA 1/2W
R1955	401 105 7404	MT-GLAZE 8.2K JA 1/16W	R636	401 024 7400	CARBON 10K JA 1/6W
R1956	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R637	402 067 6207	WIRE WOUND 2.2 KA 5W
R1957	401 105 3307	MT-GLAZE 2.7K JA 1/16W		402 075 4004	WIRE WOUND 2.2 KA 5W
R1958	401 105 2805	MT-GLAZE 2.2K JA 1/16W	R641	401 113 6505	MT-GLAZE 6.2K JA 1/16W
R432	401 105 0504	MT-GLAZE 1K JA 1/16W	R642	401 043 2004	MT-FILM 150K FA 1/4W
R433	401 007 1104	CARBON 1K JA 1/2W	R644	401 065 9609	OXIDE-MT 18 JA 2W
R434	401 105 6001	MT-GLAZE 5.6K JA 1/16W	R645	401 016 4806	CARBON 22K JA 1/4W
R435	402 072 1204	WIRE WOUND 1.8 KA 7W	R646	401 014 6109	CARBON 150K JA 1/4W
	402 075 8309	WIRE WOUND 1.8 KA 7W	R647	401 011 2708	CARBON 68K JA 1/2W
R436	401 012 7009	CARBON 10K JA 1/4W	R648	401 066 5204	OXIDE-MT 22 JA 2W
R437	401 026 3905	CARBON 330 JA 1/6W	R649	401 024 7400	CARBON 10K JA 1/6W
R441	401 058 3706	OXIDE-MT 1K JA 1W	R650	401 024 7707	CARBON 100K JA 1/6W
R442	401 065 2808	OXIDE-MT 120 JA 2W	R651	401 012 7009	CARBON 10K JA 1/4W
R443	401 007 2309	CARBON 100K JA 1/2W	R652	401 019 1901	CARBON 3.9K JA 1/4W
R444	401 024 7400	CARBON 10K JA 1/6W	R653	401 105 2904	MT-GLAZE 22K JA 1/16W
R445	401 024 6700	CARBON 100 JA 1/6W	R654	401 105 6605	MT-GLAZE 6.8K JA 1/16W
R447	401 105 5301	MT-GLAZE 4.7K JA 1/16W	R655	401 016 3809	CARBON 2.2K JA 1/4W
R448	401 018 2800	CARBON 330 JA 1/4W	R656	401 024 7707	CARBON 100K JA 1/6W
R449	401 010 2501	CARBON 47 JA 1/2W	R657	401 062 3907	OXIDE-MT 5.6 JA 1W
R450	401 025 1902	CARBON 15K JA 1/6W	R658	401 024 7400	CARBON 10K JA 1/6W
R451	401 068 6209	OXIDE-MT 5.6 JA 2W	R659	401 105 0603	MT-GLAZE 10K JA 1/16W
R453	401 024 7004	CARBON 1K JA 1/6W	R660	401 024 7400	CARBON 10K JA 1/6W
R454	401 021 4105	CARBON 56K JA 1/4W	R661	401 105 0603	MT-GLAZE 10K JA 1/16W
R455	401 019 3004	CARBON 39K JA 1/4W	R663	401 009 9306	CARBON 390 JA 1/2W
R463	401 026 3905	CARBON 330 JA 1/6W	R666	401 008 6009	CARBON 22 JA 1/2W
R466	401 008 4500	CARBON 2.7 JB 1/2W	R667	401 027 2303	CARBON 560 JA 1/6W
R468	401 024 9305	CARBON 1.2K JA 1/6W	R681	401 105 0603	MT-GLAZE 10K JA 1/16W
R469	401 024 9701	CARBON 12K JA 1/6W	R686	401 105 3000	MT-GLAZE 220K JA 1/16W
R470	401 027 9005	CARBON 82K JA 1/6W	R687	401 105 6100	MT-GLAZE 560K JA 1/16W
R471	401 025 1605	CARBON 1.5K JA 1/6W	R688	401 105 0603	MT-GLAZE 10K JA 1/16W
R473	401 027 5205	CARBON 680 JA 1/6W	R689	401 105 2904	MT-GLAZE 22K JA 1/16W
R474	401 011 5501	CARBON 820 JA 1/2W	R691	401 008 8607	CARBON 220K JA 1/2W
R480	401 008 3800	CARBON 2.2 JB 1/2W	R694	401 027 8602	CARBON 8.2K JA 1/6W
R481	401 017 3808	CARBON 270K JA 1/4W			
R482	401 027 8602	CARBON 8.2K JA 1/6W	VARIABLE RESISTOR		
R486	401 010 4307	CARBON 47K JA 1/2W	VR641	645 003 5579	VR,SEMI,2.2K N
R488	401 105 6100	MT-GLAZE 560K JA 1/16W		645 017 2601	VR,SEMI,2K N
R502	402 061 0201	FUSIBLE RES 1.5 J- 1/2W			
R503	401 105 8104	MT-GLAZE 56K JA 1/16W	TRANSFORMER		
R510	401 057 6104	OXIDE-MT 0.56 JA 1W	T431	645 053 3341	TRANS,DRIVE
R512	401 065 2808	OXIDE-MT 120 JA 2W	△T451	645 055 8092	TRANS,FLYBACK
R513	401 105 7909	MT-GLAZE 0.000 ZA 1/16W	△T611	645 052 7371	TRANS,POWER,PULSE
R514	401 105 6605	MT-GLAZE 6.8K JA 1/16W			
R515	402 058 9606	FUSIBLE RES 5.6 J- 1W			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
COIL			D504	407 149 0807	DIODE 1SS355-TE-17
L1101	645 001 4567	INDUCTOR,10U K	D603	407 006 6300	DIODE ERC05-10BV1
L1106	645 001 4567	INDUCTOR,10U K		407 009 6901	DIODE RM11C
L1921	645 002 1787	CORE,PIPE	D604	407 006 6300	DIODE ERC05-10BV1
	645 033 2722	CORE,PIPE		407 009 6901	DIODE RM11C
L1922	645 007 9559	INDUCTOR,12U J	D605	407 006 6300	DIODE ERC05-10BV1
L1923	645 007 9559	INDUCTOR,12U J		407 009 6901	DIODE RM11C
L431	645 008 5628	INDUCTOR,1U M	D606	407 006 6300	DIODE ERC05-10BV1
	645 026 1084	INDUCTOR,1U K		407 009 6901	DIODE RM11C
	645 036 4198	INDUCTOR,1.0U,FILTER		407 012 4406	DIODE 1SS133
	645 052 5919	INDUCTOR,1.0U,FILTER	△D615	407 234 8701	PHOTO COUPLE PC123X5YFZ
L441	645 064 2654	COIL,LINEARITY		407 230 3908	PHOTO COUPLE PC123Y52
L443	610 211 3471	INDUCTOR		407 231 7707	PC TLP421F(D4-BL)
	645 005 5652	INDUCTOR,6800U K	D616	407 012 4406	DIODE 1SS133
L461	610 031 1367	INDUCTOR 202J	D617	407 124 6404	DIODE ERA18-04-V1
	610 211 3488	INDUCTOR		407 007 6606	DIODE ES1
	645 005 5645	INDUCTOR,2200U K		407 007 6903	DIODE ES1Z
	645 007 8361	INDUCTOR,2000U	D618	407 012 4406	DIODE 1SS133
L462	610 000 0186	COIL	D619	407 099 6409	ZENER DIODE MTZJ11B
	645 016 9144	INDUCTOR,650UH	D630	407 006 4009	DIODE ERB44-02V1
L611	645 007 8248	INDUCTOR,22U K		407 007 7603	DIODE EU2
	610 031 1572	INDUCTOR,22U K		407 007 7801	DIODE EU2Z
	645 005 5515	INDUCTOR,22U K	D633	407 166 2303	DIODE ERC91-02
L612	610 031 9998	PIPE CORE	D635	407 129 6706	DIODE RU4YX LF-L1
	645 018 7025	CORE,PIPE	D637	407 012 4406	DIODE 1SS133
	652 001 0475	PIPE CORE	D641	407 149 0807	DIODE 1SS355-TE-17
△L691C	645 067 2668	LINE FILTER	D642	407 129 7000	DIODE RU4AM LF-L1
L692	652 000 1817	CORE,PIPE	D643	407 149 0807	DIODE 1SS355-TE-17
	652 000 1749	CORE,PIPE	D644	407 149 0807	DIODE 1SS355-TE-17
	610 237 1000	PIPE CORE	D645	407 099 5402	ZENER DIODE MTZJ6.2B
L693	652 000 1817	CORE,PIPE	D646	407 149 0807	DIODE 1SS355-TE-17
	652 000 1749	CORE,PIPE	D647	407 149 0807	DIODE 1SS355-TE-17
	610 237 1000	PIPE CORE	D648	407 106 2806	DIODE RU3YX
			D666	407 099 5303	ZENER DIODE MTZJ5.6B
DIODE				408 047 7400	ZENER DIODE MTZJ5.6B
D041	407 012 4406	DIODE 1SS133	D683	407 149 0807	DIODE 1SS355-TE-17
D1102	407 012 4406	DIODE 1SS133	D685	407 099 5402	ZENER DIODE MTZJ6.2B
D1103	407 012 4406	DIODE 1SS133	D691	407 012 4406	DIODE 1SS133
D1951	407 116 6504	LED SLP-181B-51	MISCELLANEOUS		
D1951A	610 273 7929	HOLDER LED-S4KF	△F691	423 028 8603	FUSE 250V 4A
	610 303 9954	HOLDER LED-C4LA		423 024 8409	FUSE 250V 4A
D431	407 099 6003	ZENER DIODE MTZJ9.1B		423 007 2103	FUSE 250V 4A
	408 048 0103	ZENER DIODE MTZJ9.1B	F691-1	645 000 5077	HOLDER,FUSE
D438	407 095 8001	DIODE ERD07-15L		645 040 3576	HOLDER,FUSE
D439	407 006 4108	DIODE ERB44-04V1	F691-2	645 000 5077	HOLDER,FUSE
D441	407 104 2402	PHOTO COUPLE PC817C		645 040 3576	HOLDER,FUSE
	407 106 6101	PHOTO COUPLE PC817D	A1901	645 047 6228	UNIT,REMOCON RECEIVER
	407 002 6809	PHOTO COUPLE TLP521-1-BL	K1101	645 016 6426	JACK,RCA-3
D442	407 149 0807	DIODE 1SS355-TE-17	K1921	645 027 8761	JACK,PHONE D3.6
D445	407 149 0807	DIODE 1SS355-TE-17		645 006 4708	JACK,PHONE D3.6
D446	407 063 9504	ZENER DIODE MTZJ8.2B	△PS691	408 046 4301	THERMISTOR PTDAABF4R5Q20
D449	407 005 7308	DIODE EM01Z	△RL691	645 028 2713	RELAY
	407 005 8602	DIODE ERA15-02-V1		645 030 5597	RELAY
D461	407 012 4406	DIODE 1SS133	SW1951	645 003 4701	SWITCH,PUSH 1P-1TX1
D463	407 012 4406	DIODE 1SS133		645 019 4887	SWITCH,PUSH 1P-1TX1
D465	407 012 4406	DIODE 1SS133		645 027 7382	SWITCH,PUSH 1P-1TX1
D466	407 099 7901	ZENER DIODE MTZJ20B		645 003 4701	SWITCH,PUSH 1P-1TX1
	408 047 5901	ZENER DIODE MTZJ20B-52	SW1952	645 019 4887	SWITCH,PUSH 1P-1TX1
D469	407 005 9609	DIODE ERA22-04-V1		645 027 7382	SWITCH,PUSH 1P-1TX1
	407 007 7405	DIODE EU1		645 003 4701	SWITCH,PUSH 1P-1TX1
D481	407 005 9609	DIODE ERA22-04-V1		645 019 4887	SWITCH,PUSH 1P-1TX1
	407 007 7405	DIODE EU1		645 027 7382	SWITCH,PUSH 1P-1TX1
D482	407 012 4406	DIODE 1SS133		645 003 4701	SWITCH,PUSH 1P-1TX1
D501	407 005 7308	DIODE EM01Z	SW1954	645 019 4887	SWITCH,PUSH 1P-1TX1
	407 005 8602	DIODE ERA15-02-V1		645 027 7382	SWITCH,PUSH 1P-1TX1
D502	407 149 0807	DIODE 1SS355-TE-17		645 003 4701	SWITCH,PUSH 1P-1TX1
D503	407 063 9108	ZENER DIODE MTZJ6.8B	SW1955	645 003 4701	SWITCH,PUSH 1P-1TX1

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	645 019 4887	SWITCH,PUSH 1P-1TX1		405 002 6706	TR 2SA1179-M6-TB
	645 027 7382	SWITCH,PUSH 1P-1TX1		405 002 6904	TR 2SA1179-M7-TB
SW1956	645 003 4701	SWITCH,PUSH 1P-1TX1		405 163 1503	TR 2SA1179N-M6-TB
	645 019 4887	SWITCH,PUSH 1P-1TX1		405 163 2708	TR 2SA1179N-M7-TB
△SW691	645 027 7382	SWITCH,PUSH 1P-1TX1		405 173 9605	TR 2SA1235A1E
△VA691	645 059 0061	SWITCH, POWER 1P-1TX1		405 173 9704	TR 2SA1235A1F
	407 171 2008	VARISTOR ERZV14D471	Q242	405 134 5905	TR 2SA1037AK-T146-R
				405 147 2205	TR 2SA1037AK-S-T146
				405 002 0308	TR 2SA1037K T146 R
				405 002 0407	TR 2SA1037K T146 S
				405 002 6706	TR 2SA1179-M6-TB
				405 002 6904	TR 2SA1179-M7-TB
				405 163 1503	TR 2SA1179N-M6-TB
				405 163 2708	TR 2SA1179N-M7-TB
				405 173 9605	TR 2SA1235A1E
				405 173 9704	TR 2SA1235A1F
			Q243	405 134 5905	TR 2SA1037AK-T146-R
				405 147 2205	TR 2SA1037AK-S-T146
				405 002 0308	TR 2SA1037K T146 R
				405 002 0407	TR 2SA1037K T146 S
				405 002 6706	TR 2SA1179-M6-TB
				405 002 6904	TR 2SA1179-M7-TB
				405 163 1503	TR 2SA1179N-M6-TB
				405 163 2708	TR 2SA1179N-M7-TB
				405 173 9605	TR 2SA1235A1E
				405 173 9704	TR 2SA1235A1F
			Q244	405 134 5905	TR 2SA1037AK-T146-R
				405 147 2205	TR 2SA1037AK-S-T146
				405 002 0308	TR 2SA1037K T146 R
				405 002 0407	TR 2SA1037K T146 S
				405 002 6706	TR 2SA1179-M6-TB
				405 002 6904	TR 2SA1179-M7-TB
				405 163 1503	TR 2SA1179N-M6-TB
				405 163 2708	TR 2SA1179N-M7-TB
				405 173 9605	TR 2SA1235A1E
				405 173 9704	TR 2SA1235A1F
			Q3452	405 014 4509	TR 2SC2412K T146 R
				405 014 4608	TR 2SC2412K T146 S
				405 015 8704	TR 2SC2812-L6-TB
				405 015 8902	TR 2SC2812-L7-TB
				405 163 1602	TR 2SC2812N-L6-TB0
				405 163 1701	TR 2SC2812N-L7-TB0
				405 173 9803	TR 2SC3928A1R
				405 173 9902	TR 2SC3928A1S
			Q3453	405 014 4509	TR 2SC2412K T146 R
				405 014 4608	TR 2SC2412K T146 S
				405 015 8704	TR 2SC2812-L6-TB
				405 015 8902	TR 2SC2812-L7-TB
				405 163 1602	TR 2SC2812N-L6-TB0
				405 163 1701	TR 2SC2812N-L7-TB0
				405 173 9803	TR 2SC3928A1R
				405 173 9902	TR 2SC3928A1S
			Q3454	405 014 4509	TR 2SC2412K T146 R
				405 014 4608	TR 2SC2412K T146 S
				405 015 8704	TR 2SC2812-L6-TB
				405 015 8902	TR 2SC2812-L7-TB
				405 163 1602	TR 2SC2812N-L6-TB0
				405 163 1701	TR 2SC2812N-L7-TB0
				405 173 9803	TR 2SC3928A1R
				405 173 9902	TR 2SC3928A1S
			Q3455	405 014 4509	TR 2SC2412K T146 R
				405 014 4608	TR 2SC2412K T146 S
				405 015 8704	TR 2SC2812-L6-TB
				405 015 8902	TR 2SC2812-L7-TB
				405 163 1602	TR 2SC2812N-L6-TB0
				405 163 1701	TR 2SC2812N-L7-TB0
				405 173 9803	TR 2SC3928A1R
				405 173 9902	TR 2SC3928A1S
			Q211	405 134 5905	TR 2SA1037AK-T146-R
				405 147 2205	TR 2SA1037AK-S-T146
				405 002 0308	TR 2SA1037K T146 R
				405 002 0407	TR 2SA1037K T146 S

610 311 6341 ASSY,PWB,SUB F8WA 1AA0B10E6870A

TRANSISTOR

Q1202

405 014 4509 TR 2SC2412K T146 R
405 014 4608 TR 2SC2412K T146 S
405 015 8704 TR 2SC2812-L6-TB
405 015 8902 TR 2SC2812-L7-TB
405 163 1602 TR 2SC2812N-L6-TB0
405 163 1701 TR 2SC2812N-L7-TB0
405 173 9803 TR 2SC3928A1R
405 173 9902 TR 2SC3928A1S

Q1206

405 014 4509 TR 2SC2412K T146 R
405 014 4608 TR 2SC2412K T146 S
405 015 8704 TR 2SC2812-L6-TB
405 015 8902 TR 2SC2812-L7-TB
405 163 1602 TR 2SC2812N-L6-TB0
405 163 1701 TR 2SC2812N-L7-TB0
405 173 9803 TR 2SC3928A1R
405 173 9902 TR 2SC3928A1S

Q121

405 014 4509 TR 2SC2412K T146 R
405 014 4608 TR 2SC2412K T146 S
405 015 8704 TR 2SC2812-L6-TB
405 015 8902 TR 2SC2812-L7-TB
405 163 1602 TR 2SC2812N-L6-TB0
405 163 1701 TR 2SC2812N-L7-TB0
405 173 9803 TR 2SC3928A1R
405 173 9902 TR 2SC3928A1S

Q133

405 014 4509 TR 2SC2412K T146 R
405 014 4608 TR 2SC2412K T146 S
405 015 8704 TR 2SC2812-L6-TB
405 015 8902 TR 2SC2812-L7-TB
405 163 1602 TR 2SC2812N-L6-TB0
405 163 1701 TR 2SC2812N-L7-TB0
405 173 9803 TR 2SC3928A1R
405 173 9902 TR 2SC3928A1S

Q153

405 134 5905 TR 2SA1037AK-T146-R
405 147 2205 TR 2SA1037AK-S-T146
405 002 0308 TR 2SA1037K T146 R
405 002 0407 TR 2SA1037K T146 S
405 002 6706 TR 2SA1179-M6-TB
405 002 6904 TR 2SA1179-M7-TB
405 163 1503 TR 2SA1179N-M6-TB
405 163 2708 TR 2SA1179N-M7-TB
405 173 9605 TR 2SA1235A1E
405 173 9704 TR 2SA1235A1F

Q162

405 014 4509 TR 2SC2412K T146 R
405 014 4608 TR 2SC2412K T146 S
405 015 8704 TR 2SC2812-L6-TB
405 015 8902 TR 2SC2812-L7-TB
405 163 1602 TR 2SC2812N-L6-TB0
405 163 1701 TR 2SC2812N-L7-TB0
405 173 9803 TR 2SC3928A1R
405 173 9902 TR 2SC3928A1S

Q211

405 134 5905 TR 2SA1037AK-T146-R
405 147 2205 TR 2SA1037AK-S-T146
405 002 0308 TR 2SA1037K T146 R
405 002 0407 TR 2SA1037K T146 S

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description			
Q491	405 173 9902	TR 2SC3928A1S	C1200	404 084 8905	ELECT 10U M 50V			
	405 014 4509	TR 2SC2412K T146 R		403 049 4204	ELECT 10U M 50V			
	405 014 4608	TR 2SC2412K T146 S		C1202	404 087 4904	ELECT 47U M 25V		
	405 015 8704	TR 2SC2812-L6-TB			403 047 3100	ELECT 47U M 25V		
	405 015 8902	TR 2SC2812-L7-TB		C1203	403 215 2201	CERAMIC 0.01U K 50V		
	405 163 1602	TR 2SC2812N-L6-TB0		C1204	404 084 8905	ELECT 10U M 50V		
	405 163 1701	TR 2SC2812N-L7-TB0			403 049 4204	ELECT 10U M 50V		
	405 173 9803	TR 2SC3928A1R		C1205	404 084 8905	ELECT 10U M 50V		
	405 173 9902	TR 2SC3928A1S			403 049 4204	ELECT 10U M 50V		
	Q804	405 014 4509		TR 2SC2412K T146 R	C1206	403 145 9905	CERAMIC 22P J 50V	
405 014 4608		TR 2SC2412K T146 S	C121	403 215 2201		CERAMIC 0.01U K 50V		
405 015 8704		TR 2SC2812-L6-TB	C1213	404 084 8905		ELECT 10U M 50V		
405 015 8902		TR 2SC2812-L7-TB		403 049 4204		ELECT 10U M 50V		
405 163 1602		TR 2SC2812N-L6-TB0	C123	403 215 2201		CERAMIC 0.01U K 50V		
405 163 1701		TR 2SC2812N-L7-TB0		C124		404 084 8905	ELECT 10U M 50V	
405 173 9803		TR 2SC3928A1R	403 049 4204			ELECT 10U M 50V		
405 173 9902		TR 2SC3928A1S	C125	404 084 9001		ELECT 2.2U M 50V		
405 014 4509		TR 2SC2412K T146 R		403 049 9803		ELECT 2.2U M 50V		
Q805		405 014 4608	TR 2SC2412K T146 S	C126		403 314 5905	CERAMIC 0.47U K 16V	
	405 015 8704	TR 2SC2812-L6-TB	403 307 8807		CERAMIC 0.47U K 16V			
	405 015 8902	TR 2SC2812-L7-TB	C127		403 215 2201	CERAMIC 0.01U K 50V		
	405 163 1602	TR 2SC2812N-L6-TB0			C128	403 040 3701	ELECT 220U M 10V	
	405 163 1701	TR 2SC2812N-L7-TB0	C135		403 215 2201	CERAMIC 0.01U K 50V		
	405 173 9803	TR 2SC3928A1R			C137	403 215 2201	CERAMIC 0.01U K 50V	
	405 173 9902	TR 2SC3928A1S	C138			401 105 7909	MT-GLAZE 0.000 ZA 1/16W	
	405 134 5905	TR 2SA1037AK-T146-R			C139	404 087 4904	ELECT 47U M 25V	
	405 147 2205	TR 2SA1037AK-S-T146	403 047 3100			ELECT 47U M 25V		
	Q807	405 002 0308	TR 2SA1037K T146 R		C140	403 179 3801	POLYESTER 0.01U K 50V	
405 002 0407		TR 2SA1037K T146 S	C143	401 105 7909		MT-GLAZE 0.000 ZA 1/16W		
405 002 6706		TR 2SA1179-M6-TB		C144		403 323 8805	CERAMIC 2.2U Z 16V	
405 002 6904		TR 2SA1179-M7-TB	403 322 6109			CERAMIC 2.2U Z 16V		
405 163 1503		TR 2SA1179N-M6-TB	C145	401 105 7909		MT-GLAZE 0.000 ZA 1/16W		
405 163 2708		TR 2SA1179N-M7-TB		C146		404 087 4904	ELECT 47U M 25V	
405 173 9605		TR 2SA1235A1E	403 047 3100			ELECT 47U M 25V		
405 173 9704		TR 2SA1235A1F	C202	403 113 4109		CERAMIC 2200P K 50V		
405 014 4509		TR 2SC2412K T146 R		C203		403 314 5905	CERAMIC 0.47U K 16V	
405 014 4608		TR 2SC2412K T146 S	403 307 8807			CERAMIC 0.47U K 16V		
Q808	405 015 8704	TR 2SC2812-L6-TB	C206	403 215 2201	CERAMIC 0.01U K 50V			
	405 015 8902	TR 2SC2812-L7-TB		C207	403 215 2201	CERAMIC 0.01U K 50V		
	405 163 1602	TR 2SC2812N-L6-TB0			C208	404 087 4904	ELECT 47U M 25V	
	405 163 1701	TR 2SC2812N-L7-TB0		403 047 3100		ELECT 47U M 25V		
	405 173 9803	TR 2SC3928A1R		C209	403 207 0307	CERAMIC 1U Z 16		
	405 173 9902	TR 2SC3928A1S			C210	403 207 0307	CERAMIC 1U Z 16	
	INTEGRATED CIRCUIT			C212	403 157 7104	CERAMIC 2700P K 50V		
	IC1201	409 161 3408			IC LA7954	C213	404 087 4904	ELECT 47U M 25V
	IC201	409 559 3201			IC TB1262AF		403 047 3100	ELECT 47U M 25V
	IC3451	409 445 1403			IC TDA9875A/V2	C216	404 084 8905	ELECT 10U M 50V
IC801	410 508 8208	IC ST92195C8B1/MCY	403 049 4204		ELECT 10U M 50V			
IC803	409 495 7103	IC CAT24WC08P	C218		403 215 2201	CERAMIC 0.01U K 50V		
QM24C08-BN6-	410 495 7901	IC M24C08-BN6-			C219	403 155 2408	CERAMIC 5600P K 50V	
410 495 7901	IC AT24C08A-10PI-2.7	C220	404 084 8806			ELECT 1U M 50V		
409 383 6805	IC 24LC08B/P		403 049 0008		ELECT 1U M 50V			
CAPACITOR			C221		403 215 2201	CERAMIC 0.01U K 50V		
C056	403 157 6800	CERAMIC 680P K 50V		C222	403 215 2201	CERAMIC 0.01U K 50V		
C101	404 087 4904	ELECT 47U M 25V	C223		403 215 2201	CERAMIC 0.01U K 50V		
	403 047 3100	ELECT 47U M 25V		C230	403 269 5906	CERAMIC 0.22U K 16V		
C102	403 039 3507	ELECT 470U M 6.3V	C231		403 113 4109	CERAMIC 2200P K 50V		
C103	403 039 3507	ELECT 470U M 6.3V		C232	403 233 3808	CERAMIC 10P C 50V		
C104	404 084 8905	ELECT 10U M 50V	C233		404 087 4904	ELECT 47U M 25V		
	403 049 4204	ELECT 10U M 50V		403 047 3100	ELECT 47U M 25V			
C109	403 215 2201	CERAMIC 0.01U K 50V	C234	403 164 0204	CERAMIC 0.1U Z 25V			
C110	403 215 2201	CERAMIC 0.01U K 50V		C235	403 164 0204	CERAMIC 0.1U Z 25V		
C113	403 069 8305	CERAMIC 0.01U Z 50V	C236		403 164 0204	CERAMIC 0.1U Z 25V		
C120	404 087 4904	ELECT 47U M 25V		C237	403 164 0204	CERAMIC 0.1U Z 25V		
	403 047 3100	ELECT 47U M 25V	C238		403 139 6903	CERAMIC 1P C 50V		
				C241	403 067 7805	MT-COMPO 0.47U J 50V		
			403 256 0808		MT-COMPO 0.47U J 50V			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
C242	403 207 0307	CERAMIC 1U Z 16		403 322 6109	CERAMIC 2.2U Z 16V
C243	403 314 5905	CERAMIC 0.47U K 16V	C833	403 157 2505	CERAMIC 27P J 50V
	403 307 8807	CERAMIC 0.47U K 16V	C834	403 157 2505	CERAMIC 27P J 50V
C251	403 207 0307	CERAMIC 1U Z 16	C835	403 155 2309	CERAMIC 4700P K 50V
C261	403 164 0204	CERAMIC 0.1U Z 25V	C861	403 155 1302	CERAMIC 150P J 50V
C262	403 164 0204	CERAMIC 0.1U Z 25V			
C263	403 207 0307	CERAMIC 1U Z 16	RESISTOR		
C3129	403 215 2201	CERAMIC 0.01U K 50V	R101	401 105 0405	MT-GLAZE 100 JA 1/16W
C3401	404 084 9209	ELECT 4.7U M 50V	R102	401 105 0405	MT-GLAZE 100 JA 1/16W
	403 051 0607	ELECT 4.7U M 50V	R1201	401 105 3208	MT-GLAZE 270 JA 1/16W
C3409	404 084 9209	ELECT 4.7U M 50V	R1203	401 105 3208	MT-GLAZE 270 JA 1/16W
	403 051 0607	ELECT 4.7U M 50V	R1206	401 105 3208	MT-GLAZE 270 JA 1/16W
C3431	403 157 3601	CERAMIC 100P J 50V	R1207	401 027 6608	CARBON 75 JA 1/6W
C3432	403 157 3601	CERAMIC 100P J 50V	R1215	401 105 0405	MT-GLAZE 100 JA 1/16W
C3433	403 157 3601	CERAMIC 100P J 50V	R1217	401 105 5202	MT-GLAZE 470 JA 1/16W
C3434	403 157 3601	CERAMIC 100P J 50V	R1226	401 105 0504	MT-GLAZE 1K JA 1/16W
C3435	403 157 3601	CERAMIC 100P J 50V	R123	401 016 9801	CARBON 27 JB 1/4W
C3436	403 157 3601	CERAMIC 100P J 50V	R1230	401 105 3208	MT-GLAZE 270 JA 1/16W
C3441	403 279 4302	CERAMIC 0.33U K 16V	R124	401 105 3307	MT-GLAZE 2.7K JA 1/16W
	403 317 4608	CERAMIC 0.33U K 16V	R127	401 105 5905	MT-GLAZE 560 JA 1/16W
C3442	403 279 4302	CERAMIC 0.33U K 16V	R136	401 105 0405	MT-GLAZE 100 JA 1/16W
	403 317 4608	CERAMIC 0.33U K 16V	R137	401 105 5202	MT-GLAZE 470 JA 1/16W
C3443	403 279 4302	CERAMIC 0.33U K 16V	R138	401 105 5202	MT-GLAZE 470 JA 1/16W
	403 317 4608	CERAMIC 0.33U K 16V	R143	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
C3444	403 279 4302	CERAMIC 0.33U K 16V	R153	401 105 5202	MT-GLAZE 470 JA 1/16W
	403 317 4608	CERAMIC 0.33U K 16V	R154	401 105 0603	MT-GLAZE 10K JA 1/16W
C3446	403 279 4302	CERAMIC 0.33U K 16V	R157	401 105 0603	MT-GLAZE 10K JA 1/16W
	403 317 4608	CERAMIC 0.33U K 16V	R158	401 105 4700	MT-GLAZE 39K JA 1/16W
C3447	403 279 4302	CERAMIC 0.33U K 16V	R163	401 105 3307	MT-GLAZE 2.7K JA 1/16W
	403 317 4608	CERAMIC 0.33U K 16V	R164	401 105 0504	MT-GLAZE 1K JA 1/16W
C3452	403 314 5905	CERAMIC 0.47U K 16V	R201	401 105 5202	MT-GLAZE 470 JA 1/16W
	403 307 8807	CERAMIC 0.47U K 16V	R202	401 105 3406	MT-GLAZE 27K JA 1/16W
C3453	403 157 2901	CERAMIC 47P J 50V	R209	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
C3454	403 164 0204	CERAMIC 0.1U Z 25V	R212	401 026 0607	CARBON 270 JA 1/6W
C3458	403 157 2901	CERAMIC 47P J 50V	R213	401 105 0702	MT-GLAZE 100K JA 1/16W
C3461	403 207 0307	CERAMIC 1U Z 16	R214	401 024 6700	CARBON 100 JA 1/6W
C3476	403 314 5905	CERAMIC 0.47U K 16V	R215	401 024 6700	CARBON 100 JA 1/6W
	403 307 8807	CERAMIC 0.47U K 16V	R216	401 105 5301	MT-GLAZE 4.7K JA 1/16W
C3477	404 087 4904	ELECT 47U M 25V	R217	401 024 7400	CARBON 10K JA 1/6W
	403 047 3100	ELECT 47U M 25V	R218	401 105 0504	MT-GLAZE 1K JA 1/16W
C3480	404 087 4904	ELECT 47U M 25V	R230	401 105 4205	MT-GLAZE 33K JA 1/16W
	403 047 3100	ELECT 47U M 25V	R233	401 105 0603	MT-GLAZE 10K JA 1/16W
C3481	404 087 4904	ELECT 47U M 25V	R234	401 105 0405	MT-GLAZE 100 JA 1/16W
	403 047 3100	ELECT 47U M 25V	R238	401 105 2805	MT-GLAZE 2.2K JA 1/16W
C3482	403 215 2201	CERAMIC 0.01U K 50V	R239	401 105 0405	MT-GLAZE 100 JA 1/16W
C3483	403 215 2201	CERAMIC 0.01U K 50V	R240	401 105 2805	MT-GLAZE 2.2K JA 1/16W
C3484	404 087 4904	ELECT 47U M 25V	R241	401 105 0405	MT-GLAZE 100 JA 1/16W
	403 047 3100	ELECT 47U M 25V	R242	401 105 2805	MT-GLAZE 2.2K JA 1/16W
C3485	403 215 2201	CERAMIC 0.01U K 50V	R243	401 105 0405	MT-GLAZE 100 JA 1/16W
C3489	403 215 2201	CERAMIC 0.01U K 50V	R246	401 105 4700	MT-GLAZE 39K JA 1/16W
C3491	403 215 2201	CERAMIC 0.01U K 50V	R247	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
C3492	403 215 2201	CERAMIC 0.01U K 50V	R248	401 105 7503	MT-GLAZE 82K JA 1/16W
C3493	403 215 2201	CERAMIC 0.01U K 50V	R250	401 026 9907	CARBON 4.7K JA 1/6W
C801	403 215 2201	CERAMIC 0.01U K 50V	R251	401 105 1204	MT-GLAZE 120K JA 1/16W
C802	404 087 4904	ELECT 47U M 25V	R253	401 024 7707	CARBON 100K JA 1/6W
	403 047 3100	ELECT 47U M 25V	R254	401 024 7707	CARBON 100K JA 1/6W
C803	403 164 0204	CERAMIC 0.1U Z 25V	R255	401 105 8104	MT-GLAZE 56K JA 1/16W
C807	403 164 0204	CERAMIC 0.1U Z 25V	R256	401 105 0504	MT-GLAZE 1K JA 1/16W
C814	403 155 2200	CERAMIC 3300P K 50V	R257	401 105 0504	MT-GLAZE 1K JA 1/16W
C816	403 155 2309	CERAMIC 4700P K 50V	R258	401 105 0504	MT-GLAZE 1K JA 1/16W
C817	403 145 9905	CERAMIC 22P J 50V	R263	401 105 0603	MT-GLAZE 10K JA 1/16W
C818	403 155 2309	CERAMIC 4700P K 50V	R264	401 105 0405	MT-GLAZE 100 JA 1/16W
C819	403 145 9905	CERAMIC 22P J 50V	R271	401 024 6700	CARBON 100 JA 1/6W
C822	403 113 4109	CERAMIC 2200P K 50V	R272	401 024 6700	CARBON 100 JA 1/6W
C824	403 153 9300	CERAMIC 82P J 50V	R273	401 024 6700	CARBON 100 JA 1/6W
C826	403 259 0409	NP-ELECT 0.47U M 50V	R3415	401 105 1600	MT-GLAZE 15K JA 1/16W
C827	403 323 8805	CERAMIC 2.2U Z 16V	R3416	401 105 1600	MT-GLAZE 15K JA 1/16W

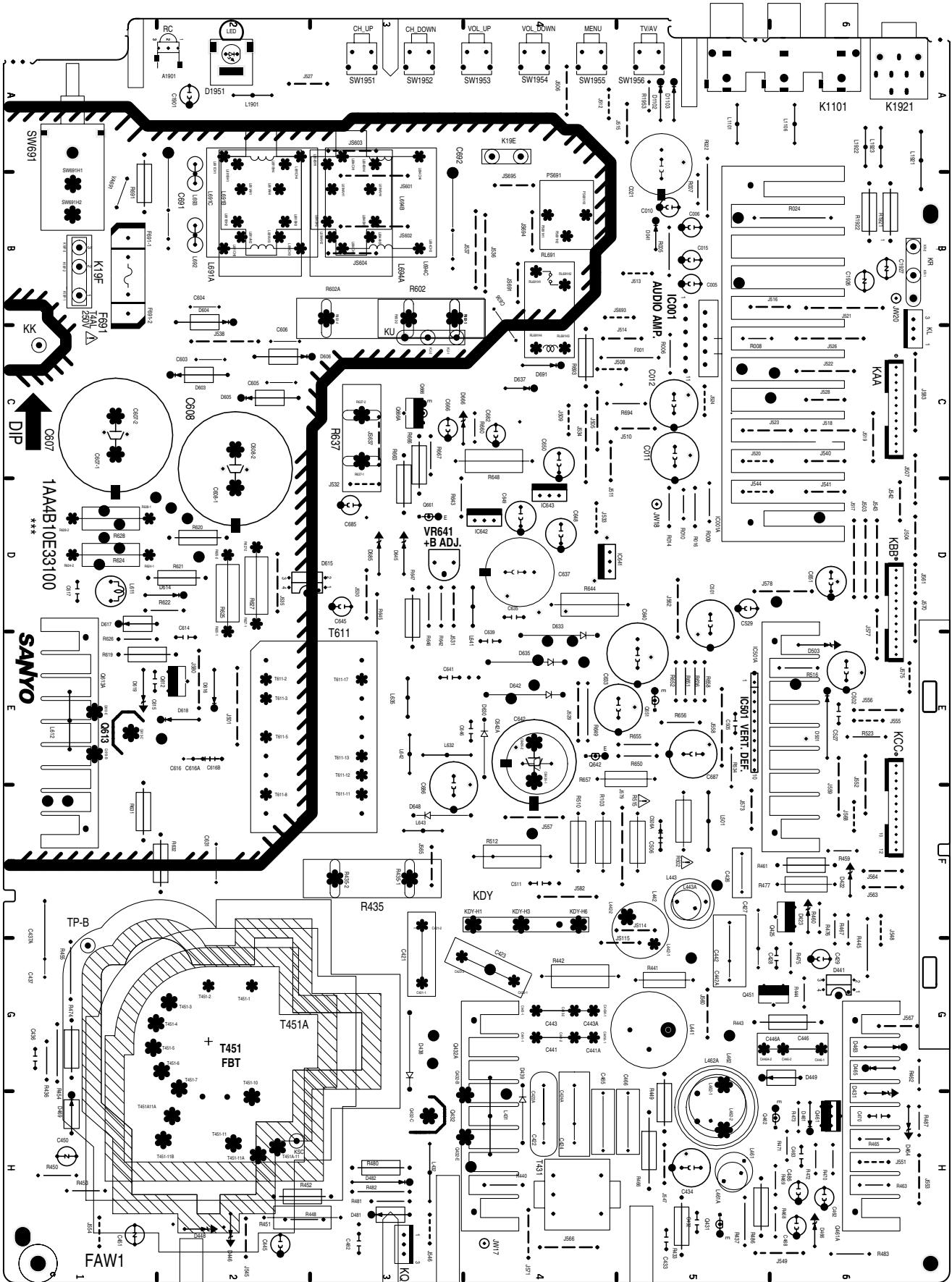
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
R3441	401 105 1600	MT-GLAZE 15K JA 1/16W	L3457	645 011 0252	INDUCTOR, 2.2U K
R3442	401 105 1600	MT-GLAZE 15K JA 1/16W	L3459	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R3443	401 105 1600	MT-GLAZE 15K JA 1/16W	L801	645 008 2894	INDUCTOR, 5.6U K
R3444	401 105 1600	MT-GLAZE 15K JA 1/16W	L802	645 008 2894	INDUCTOR, 5.6U K
R3451	401 024 6700	CARBON 100 JA 1/6W	L803	645 008 2894	INDUCTOR, 5.6U K
R3452	401 024 6700	CARBON 100 JA 1/6W	L861	645 008 2894	INDUCTOR, 5.6U K
R3453	401 105 0603	MT-GLAZE 10K JA 1/16W			DIODE
R3471	401 105 3208	MT-GLAZE 270 JA 1/16W	D101	407 100 0303	ZENER DIODE MTZJ36B
R3473	401 105 5202	MT-GLAZE 470 JA 1/16W	D1051	407 206 5608	ZENER DIODE UDZS-TE-1710B
R3474	401 105 2805	MT-GLAZE 2.2K JA 1/16W	D1202	407 206 5608	ZENER DIODE UDZS-TE-1710B
R3475	401 105 5202	MT-GLAZE 470 JA 1/16W	D1203	407 206 5608	ZENER DIODE UDZS-TE-1710B
R3476	401 105 2805	MT-GLAZE 2.2K JA 1/16W	D149	407 149 0807	DIODE 1SS355-TE-17
R3485	401 105 5202	MT-GLAZE 470 JA 1/16W	D3441	407 206 5608	ZENER DIODE UDZS-TE-1710B
R3486	401 105 2805	MT-GLAZE 2.2K JA 1/16W	D3442	407 206 5608	ZENER DIODE UDZS-TE-1710B
R3487	401 105 5202	MT-GLAZE 470 JA 1/16W	D3443	407 206 5608	ZENER DIODE UDZS-TE-1710B
R3488	401 105 2805	MT-GLAZE 2.2K JA 1/16W	D3444	407 206 5608	ZENER DIODE UDZS-TE-1710B
R464	401 024 6700	CARBON 100 JA 1/6W	D826	407 099 4801	ZENER DIODE MTZJ4.3B
R491	401 105 3307	MT-GLAZE 2.7K JA 1/16W	MISCELLANEOUS		
R492	401 105 0603	MT-GLAZE 10K JA 1/16W	A101	645 067 8394	TUNER,U/V
R808	401 024 6700	CARBON 100 JA 1/6W	X131A	421 007 8606	SAW F TSB5387P
R809	401 105 0603	MT-GLAZE 10K JA 1/16W	X132	421 002 2609	SAW F TSF5315
R815	401 024 6700	CARBON 100 JA 1/6W		421 003 3902	SAW F TSF5315U
R817	401 024 6700	CARBON 100 JA 1/6W	X231	645 042 3741	OSC,CRYSTAL 4.433619MHZ
R823	401 024 6700	CARBON 100 JA 1/6W	X3451	645 024 7484	OSC,CRYSTAL 24.576MHZ
R824	401 024 6700	CARBON 100 JA 1/6W		645 057 2265	OSC,CRYSTAL 24.576MHZ
R826	401 025 7409	CARBON 220 JA 1/6W	X801	610 282 0201	CRYSTAL OSCILLATOR
R829	401 105 4205	MT-GLAZE 33K JA 1/16W		610 012 0990	CRYSTAL OSCILLATOR
R830	401 105 4205	MT-GLAZE 33K JA 1/16W	610 311 6358 ASSY,PWB,BACK F8WA 1AA0B10E6870B		
R831	401 105 0603	MT-GLAZE 10K JA 1/16W	TRANSISTOR		
R832	401 105 0603	MT-GLAZE 10K JA 1/16W	Q1041	405 014 4509	TR 2SC2412K T146 R
R838	401 105 6001	MT-GLAZE 5.6K JA 1/16W		405 014 4608	TR 2SC2412K T146 S
R839	401 105 6001	MT-GLAZE 5.6K JA 1/16W		405 015 8704	TR 2SC2812-L6-TB
R840	401 105 0504	MT-GLAZE 1K JA 1/16W		405 015 8902	TR 2SC2812-L7-TB
R842	401 105 1600	MT-GLAZE 15K JA 1/16W		405 163 1602	TR 2SC2812N-L6-TB0
R843	401 026 1000	CARBON 2.7K JA 1/6W		405 163 1701	TR 2SC2812N-L7-TB0
R844	401 026 1000	CARBON 2.7K JA 1/6W		405 173 9803	TR 2SC3928A1R
R845	401 105 3307	MT-GLAZE 2.7K JA 1/16W		405 173 9902	TR 2SC3928A1S
R847	401 105 4601	MT-GLAZE 3.9K JA 1/16W	Q1042	405 134 5905	TR 2SA1037AK-T146-R
R848	401 105 4601	MT-GLAZE 3.9K JA 1/16W		405 147 2205	TR 2SA1037AK-S-T146
R849	401 105 4601	MT-GLAZE 3.9K JA 1/16W		405 002 0308	TR 2SA1037K T146 R
R852	401 105 3406	MT-GLAZE 27K JA 1/16W		405 002 0407	TR 2SA1037K T146 S
R853	401 105 2904	MT-GLAZE 22K JA 1/16W		405 002 6706	TR 2SA1179-M6-TB
R854	401 105 5301	MT-GLAZE 4.7K JA 1/16W		405 002 6904	TR 2SA1179-M7-TB
R855	401 105 0603	MT-GLAZE 10K JA 1/16W		405 163 1503	TR 2SA1179N-M6-TB
R856	401 105 5301	MT-GLAZE 4.7K JA 1/16W		405 163 2708	TR 2SA1179N-M7-TB
R857	401 105 4205	MT-GLAZE 33K JA 1/16W		405 173 9605	TR 2SA1235A1E
R860	401 105 3208	MT-GLAZE 270 JA 1/16W		405 173 9704	TR 2SA1235A1F
R861	401 105 6506	MT-GLAZE 680 JA 1/16W	INTEGRATED CIRCUIT		
R862	401 105 7404	MT-GLAZE 8.2K JA 1/16W	IC1050	409 424 4906	IC NJM2533M
R863	401 105 1600	MT-GLAZE 15K JA 1/16W	CAPACITOR		
R870	401 105 0405	MT-GLAZE 100 JA 1/16W	C1010	403 157 3601	CERAMIC 100P J 50V
R871	401 105 0603	MT-GLAZE 10K JA 1/16W	C1012	403 157 3601	CERAMIC 100P J 50V
R872	401 105 4601	MT-GLAZE 3.9K JA 1/16W	C1014	403 113 3805	CERAMIC 1000P K 50V
R873	401 105 4601	MT-GLAZE 3.9K JA 1/16W	C1015	403 049 4808	ELECT 10U M 50V
R874	401 026 9600	CARBON 470 JA 1/6W	C1016	403 113 3805	CERAMIC 1000P K 50V
R875	401 026 9600	CARBON 470 JA 1/6W	C1017	403 049 4808	ELECT 10U M 50V
R880	401 105 4700	MT-GLAZE 39K JA 1/16W	C1020	401 105 7909	MT-GLAZE 0.000 ZA 1/16W
R881	401 024 7004	CARBON 1K JA 1/6W	C1021	403 157 3601	CERAMIC 100P J 50V
R884	401 027 0309	CARBON 47K JA 1/6W	C1023	403 049 4808	ELECT 10U M 50V
R885	401 024 7004	CARBON 1K JA 1/6W	C1024	403 157 3601	CERAMIC 100P J 50V
COIL					
L242	645 011 0252	INDUCTOR, 2.2U K			
L243	645 011 0252	INDUCTOR, 2.2U K			
L244	645 011 0252	INDUCTOR, 2.2U K			
L3452	645 011 0252	INDUCTOR, 2.2U K			
L3456	645 011 0252	INDUCTOR, 2.2U K			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description			
C1028	403 215 2201	CERAMIC 0.01U K 50V	K1003	645 032 1979	JACK, RCA-3			
C1031	403 113 3805	CERAMIC 1000P K 50V	K1004	645 016 0806	SOCKET, DIN 4P			
C1034	403 157 3601	CERAMIC 100P J 50V	610 311 6365 ASSY, PWB, CRT F8WA 1AA0B10E6870C					
C1037	403 049 4808	ELECT 10U M 50V						
C1042	403 049 4808	ELECT 10U M 50V						
C1043	403 049 4808	ELECT 10U M 50V						
C1044	403 113 3805	CERAMIC 1000P K 50V						
C1045	403 113 3805	CERAMIC 1000P K 50V						
C1214	403 153 9300	CERAMIC 82P J 50V						
RESISTOR						TRANSISTOR		
R1002	401 027 6608	CARBON 75 JA 1/6W				Q701	406 009 9509	TR 2SC4544
R1003	401 027 6608	CARBON 75 JA 1/6W				Q711	406 009 9509	TR 2SC4544
R1005	401 027 6608	CARBON 75 JA 1/6W	Q721	406 009 9509	TR 2SC4544			
R1007	401 027 6608	CARBON 75 JA 1/6W	Q741	405 134 5905	TR 2SA1037AK-T146-R			
R1009	401 027 6608	CARBON 75 JA 1/6W		405 147 2205	TR 2SA1037AK-S-T146			
R1011	401 027 6608	CARBON 75 JA 1/6W		405 002 0308	TR 2SA1037K T146 R			
R1012	401 105 2805	MT-GLAZE 2.2K JA 1/16W		405 002 0407	TR 2SA1037K T146 S			
R1013	401 105 2805	MT-GLAZE 2.2K JA 1/16W		405 002 6706	TR 2SA1179-M6-TB			
R1014	401 105 5905	MT-GLAZE 560 JA 1/16W		405 002 6904	TR 2SA1179-M7-TB			
R1015	401 105 5905	MT-GLAZE 560 JA 1/16W		405 163 1503	TR 2SA1179N-M6-TB			
R1016	401 026 7408	CARBON 39K JA 1/6W		405 163 2708	TR 2SA1179N-M7-TB			
R1017	401 027 6608	CARBON 75 JA 1/6W	Q751	405 134 5905	TR 2SA1037AK-T146-R			
R1018	401 027 6608	CARBON 75 JA 1/6W		405 147 2205	TR 2SA1037AK-S-T146			
R1019	401 027 6608	CARBON 75 JA 1/6W		405 002 0308	TR 2SA1037K T146 R			
R1020	401 025 7805	CARBON 2.2K JA 1/6W		405 002 0407	TR 2SA1037K T146 S			
R1021	401 025 7805	CARBON 2.2K JA 1/6W		405 002 6706	TR 2SA1179-M6-TB			
R1023	401 027 6608	CARBON 75 JA 1/6W		405 002 6904	TR 2SA1179-M7-TB			
R1031	401 105 5905	MT-GLAZE 560 JA 1/16W		405 163 1503	TR 2SA1179N-M6-TB			
R1032	401 105 5905	MT-GLAZE 560 JA 1/16W		405 163 2708	TR 2SA1179N-M7-TB			
R1034	401 105 0603	MT-GLAZE 10K JA 1/16W		405 173 9605	TR 2SA1235A1E			
R1041	401 105 2904	MT-GLAZE 22K JA 1/16W		405 173 9704	TR 2SA1235A1F			
R1042	401 024 6700	CARBON 100 JA 1/6W	CAPACITOR					
R1043	401 026 9907	CARBON 4.7K JA 1/6W	C701	403 157 6701	CERAMIC 560P K 50V			
R1048	401 024 6700	CARBON 100 JA 1/6W	C710	403 260 0405	ELECT 22U M 250V			
R1050	401 025 8208	CARBON 22K JA 1/6W	C711	403 157 6701	CERAMIC 560P K 50V			
R1227	401 105 3208	MT-GLAZE 270 JA 1/16W	C721	403 157 6701	CERAMIC 560P K 50V			
COIL			C731	404 084 6505	CERAMIC 1000P K 2K			
L1010	645 001 4567	INDUCTOR, 10U K		403 077 2708	CERAMIC 1000P P 2K			
L1011	645 001 4567	INDUCTOR, 10U K		403 077 2807	CERAMIC 1000P Z 2K			
L1012	645 001 4567	INDUCTOR, 10U K		403 312 8304	CERAMIC 1000P Z 2K			
L1013	645 001 4567	INDUCTOR, 10U K	C751	403 046 5907	ELECT 330U M 25V			
L1018	645 001 4567	INDUCTOR, 10U K	RESISTOR					
L1019	645 001 4567	INDUCTOR, 10U K	R701	401 105 2706	MT-GLAZE 220 JA 1/16W			
L1020	645 001 4567	INDUCTOR, 10U K	R703	401 026 9600	CARBON 470 JA 1/6W			
L1021	645 001 4567	INDUCTOR, 10U K	R704	401 065 4604	OXIDE-MT 12K JA 2W			
L1204	645 008 2863	INDUCTOR, 4.7U K	R705	401 009 1508	CARBON 2.7K JA 1/2W			
DIODE			R711	401 105 2706	MT-GLAZE 220 JA 1/16W			
D1002	407 206 5608	ZENER DIODE UDZS-TE-1710B	R713	401 026 9600	CARBON 470 JA 1/6W			
D1003	407 206 5608	ZENER DIODE UDZS-TE-1710B	R714	401 065 4604	OXIDE-MT 12K JA 2W			
D1007	407 206 5608	ZENER DIODE UDZS-TE-1710B	R716	401 009 1508	CARBON 2.7K JA 1/2W			
D1008	407 206 5608	ZENER DIODE UDZS-TE-1710B	R717	401 009 1508	CARBON 2.7K JA 1/2W			
D1010	407 206 5608	ZENER DIODE UDZS-TE-1710B	R721	401 105 2706	MT-GLAZE 220 JA 1/16W			
D1021	407 206 5608	ZENER DIODE UDZS-TE-1710B	R723	401 026 9600	CARBON 470 JA 1/6W			
D1025	407 206 5608	ZENER DIODE UDZS-TE-1710B	R724	401 065 4604	OXIDE-MT 12K JA 2W			
D1026	407 206 5608	ZENER DIODE UDZS-TE-1710B	R732	401 024 6403	CARBON 10 JA 1/6W			
D1041	407 149 0807	DIODE 1SS355-TE-17	R741	401 105 1006	MT-GLAZE 1.2K JA 1/16W			
D1044	407 206 5608	ZENER DIODE UDZS-TE-1710B	R742	401 105 6001	MT-GLAZE 5.6K JA 1/16W			
D1046	407 206 5608	ZENER DIODE UDZS-TE-1710B	R744	401 105 6506	MT-GLAZE 680 JA 1/16W			
D1048	407 206 5608	ZENER DIODE UDZS-TE-1710B	R751	401 105 7909	MT-GLAZE 0.000 ZA 1/16W			
D1052	407 206 5608	ZENER DIODE UDZS-TE-1710B	R752	401 105 0603	MT-GLAZE 10K JA 1/16W			
MISCELLANEOUS			R753	401 105 0603	MT-GLAZE 10K JA 1/16W			
K1001	652 001 3537	SOCKET RGB 21P	COIL					
K1002	645 032 1979	JACK, RCA-3	L702A	652 000 1817	CORE, PIPE			
				652 000 1749	CORE, PIPE			

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	610 237 1000	PIPE CORE			
DIODE					
D741	401 105 7909	MT-GLAZE 0.000 ZA 1/16W			
D742	401 105 7909	MT-GLAZE 0.000 ZA 1/16W			
D751	407 149 0807	DIODE 1SS355-TE-17			
D752	407 149 0807	DIODE 1SS355-TE-17			
D753	407 149 0807	DIODE 1SS355-TE-17			
D754	407 149 0807	DIODE 1SS355-TE-17			
MISCELLANEOUS					
△K701-L	645 026 2005	SOCKET,CRT 8P			

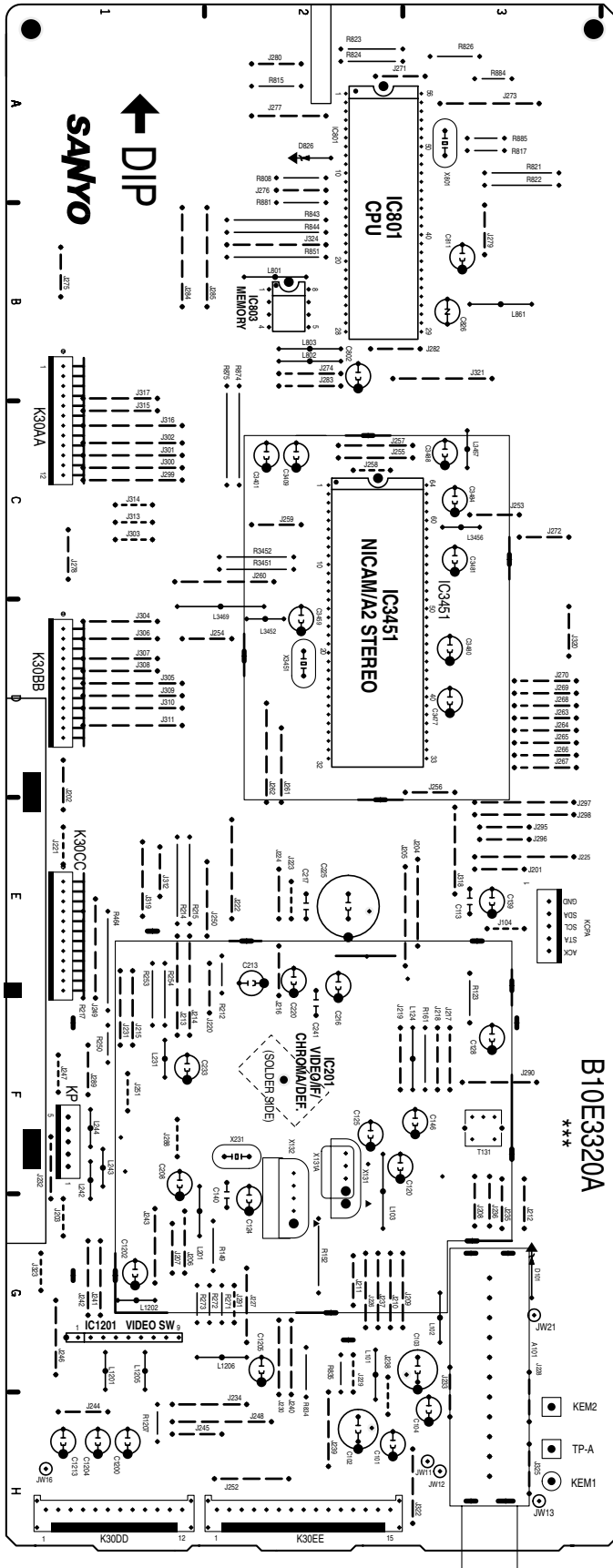
Component Locations

Main Board (Parts Side)

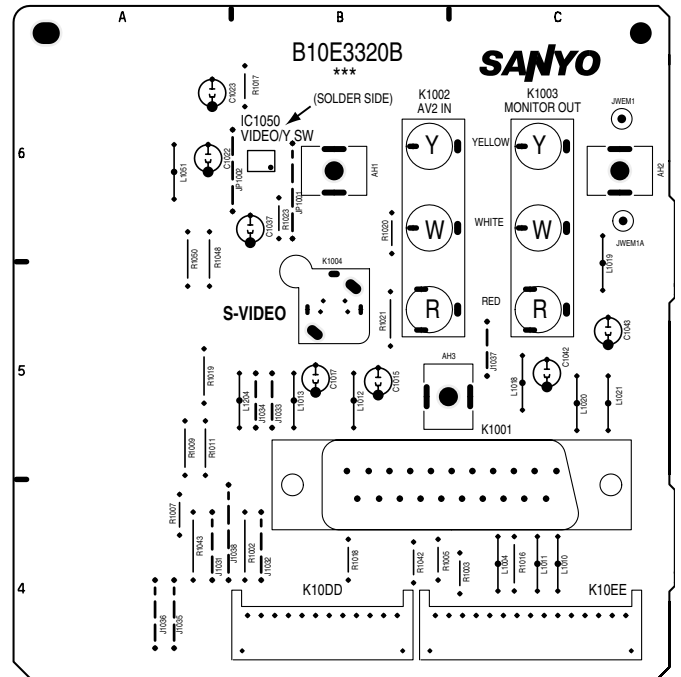


Component Locations

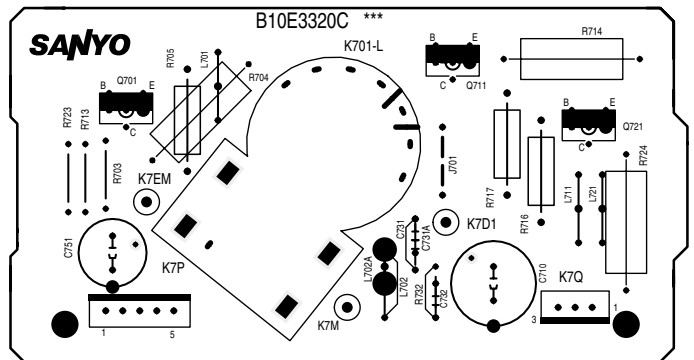
Sub Board (Parts Side)



BACK Board (Parts Side)



CRT Board (Parts Side)

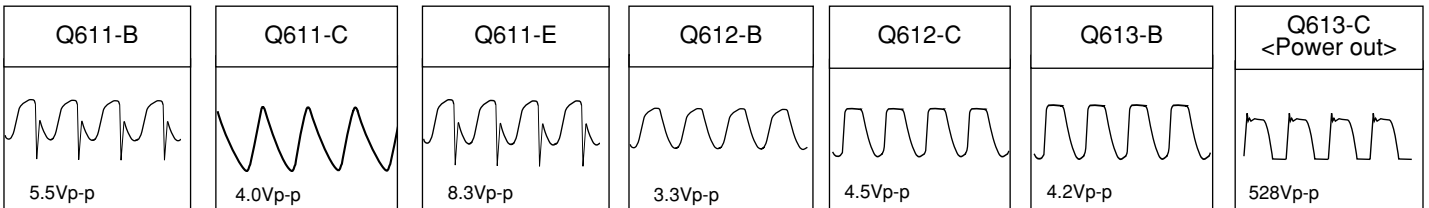
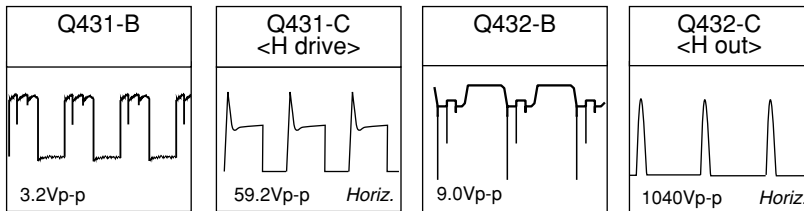


Voltages and Waveforms Charts

Note: Voltages and waveforms were measured with colour bar signal and controls adjusted for normal picture.

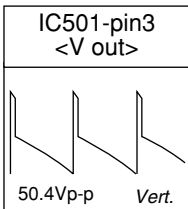
Main Board

Q001 B 1.7V C 16.3V E 0V	Q431 B -0.5V C 11.5V E 0V	Q432 B 0V C 152.5V E 0V	Q043 B 9.4V C -0.9V E 9.3V	Q044 B -0.4V C 5.0V E 0V	Q451 B 30.3V C 18.6V E 18.6V	Q461 B 16.8V C 0V E 17.3V	Q462 B 0.5V C 16.8V E 0V	Q611 B 12.4V C -1.0V E 12.8V	Q612 B 0V C -0.9V E -1.0V	Q613 B -0.9V C 320V E 0V	Q641 B 6.5V C 32.2V E 6.1V	Q642 B -15.3V C -15.9V E -16.0V
Q643 B -0.7V C -1.9V E 0V	Q645 B 0.7V C 0.9V E 0.8V	Q651 B 14.8V C 15.3V E 15.5V	Q661 B 12.5V C 12.2V E 11.7V	Q666 B 5.8V C 10.4V E 5.3V	Q682 B 0.8V C 0.2V E 0V	Q685 B 0.7V C 32.1V E 0.6V	Q686 B 32.1V C 0V E 32.2V					



IC001 (AUDIO AMP.)									
Pin-1 1.8V	2 1.8V	3 16.3V	4 1.8V	5 1.8V	6 GND	7 N.C.	8 14.9V	9 30.0V	
10 14.8V	11 N.C.								

IC501 (VERT. OUT)									
Pin-1 -14.5V	2 -14.5V	3 0.2V	4 13.8V	5 1.8V	6 1.8V	7 13.7V	8 -12.5V	9 -12.5V	
10 -12.5V									



IC641			
Pin-1 8.1V	2 GND	3 5.1V	

IC642			
Pin-1 12.3V	2 GND	3 9.4V	

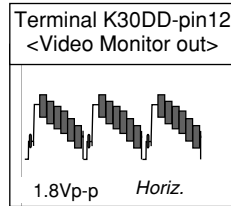
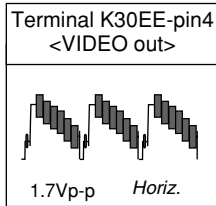
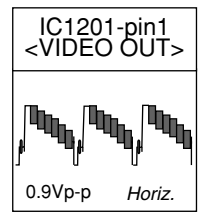
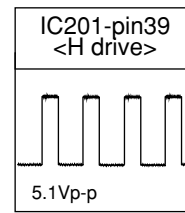
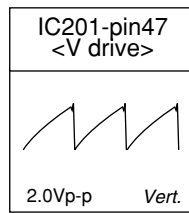
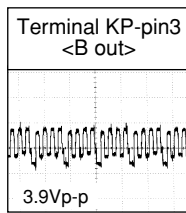
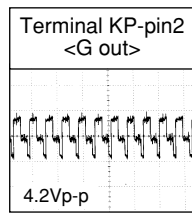
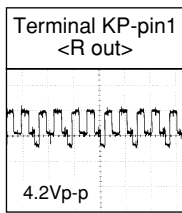
IC643			
Pin-1 9.2V	2 GND	3 5.1V	

Sub Board

Q1202 B 4.2V C 9.3V E 3.5V	Q1206 B 1.9V C 9.3V E 1.3V	Q121 B 3.7V C 8.7V E 3.1V	Q133 B 3.1V C 8.7V E 2.5V	Q153 B 1.3V C 0V E 1.9V	Q162 B 2.1V C 9.3V E 1.5V	Q211 B 1.3V C 0V E 1.9V	Q242 B 2.5V C 0V E 3.1V	Q243 B 2.5V C 0V E 3.2V	Q244 B 2.5V C 0V E 3.1V	Q491 B 0V C 1.0V E 0V	Q3452 B 2.5V C 5.0V E 1.9V	Q3453 B 2.4V C 5.0V E 1.8V
Q3454 B 2.4V C 5.0V E 1.8V	Q3455 B 2.5V C 5.0V E 1.8V	Q804 B 0.7V C 0.2V E 0V	Q805 B 0.2V C 5.2V E 0V	Q807 B 4.6V C 5.2V E 5.2V	Q808 B 0.8V C 0.2V E 0V							

IC1201 (AV-VIDEO SW)									
Pin-1 4.2V	2 0V	3 0V	4 4.9V	5 GND	6 4.9V	7 9.3V	8 4.9V	9 5.0V	

Voltages and Waveforms Charts



IC3451 (A2 STEREO & NICAM DECODER)

Pin-1: N.C.	2: N.C.	3: 0V	4: 4.2V	5: 4.1V	6: GND	7: 3.3V	8: 2.1V	9: N.C.
10: 2.0V	11: 2.0V	12: 2.0V	13: 0V	14: 0V	15: 4.9V	16: 4.9V	17: 0V	18: 1.6V
19: 1.7V	20: N.C.	21: N.C.	22: N.C.	23: N.C.	24: N.C.	25: N.C.	26: 0V	27: 0V
28: GND	29: 2.4V	30: 0V	31: 2.4V	32: 2.4V	33: 2.4V	34: 2.4V	35: 0V	36: 2.4V
37: 2.4V	38: 3.3V	39: 3.3V	40: 0V	41: 0V	42: 0V	43: 0V	44: 0V	45: 0V
46: 1.7V	47: 2.4V	48: 2.4V	49: 0V	50: GND	51: 2.4V	52: 2.4V	53: 2.4V	54: 2.4V
55: 2.4V	56: 0V	57: 2.4V	58: 2.4V	59: 4.9V	60: 2.4V	61: 2.4V	62: N.C.	63: N.C.
64: 5.0V								

IC801 (CPU)

Pin-1 5.1V	2 5.1V	3 N.C.	4 0V	5 N.C.	6 0V	7 0V	8 0V	9 N.C.
10 0V	11 4.3V	12 N.C.	13 N.C.	14 5.1V	15 0.2V	16 0.2V	17 0V	18 4.1V
19 4.3V	20 5.1V	21 0.6V	22 N.C.	23 N.C.	24 N.C.	25 5.1V	26 5.1V	27 1.8V
28 N.C.	29 2.2V	30 N.C.	31 5.1V	32 N.C.	33 0.4V	34 1.4V	35 GND	36 GND
37 GND	38 2.0V	39 5.1V	40 0.6V	41 0.2V	42 5.2V	43 5.2V	44 N.C.	45 0V
46 5.1V	47 0V	48 N.C.	49 N.C.	50 2.4V	51 2.4V	52 3.9V	53 5.1V	54 5.0V
55 0V	56 0V							

IC802 (MEMORY)

Pin-1 GND	2 GND	3 GND	4 GND	5 3.9V	6 4.1V	7 5.1V	8 5.2V
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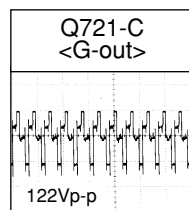
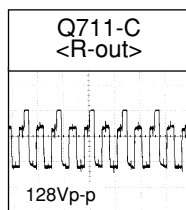
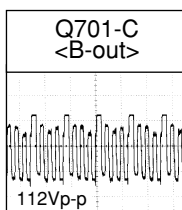
Back Board

Q1041	Q1042
B 0V	B 0V
C 0.6V	C 0V
E 0V	E 0.6V

IC1050 (VIDEO/Y SW)

Pin-1 4.8V	2 5.4V	3 4.8V	4 N.C.	5 N.C.	6 9.3V	7 4.0V	8 GND
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CRT Board



Q701
B 3.2V
C 152.2V
E 2.9V

Q711
B 3.2V
C 152.3V
E 2.9V

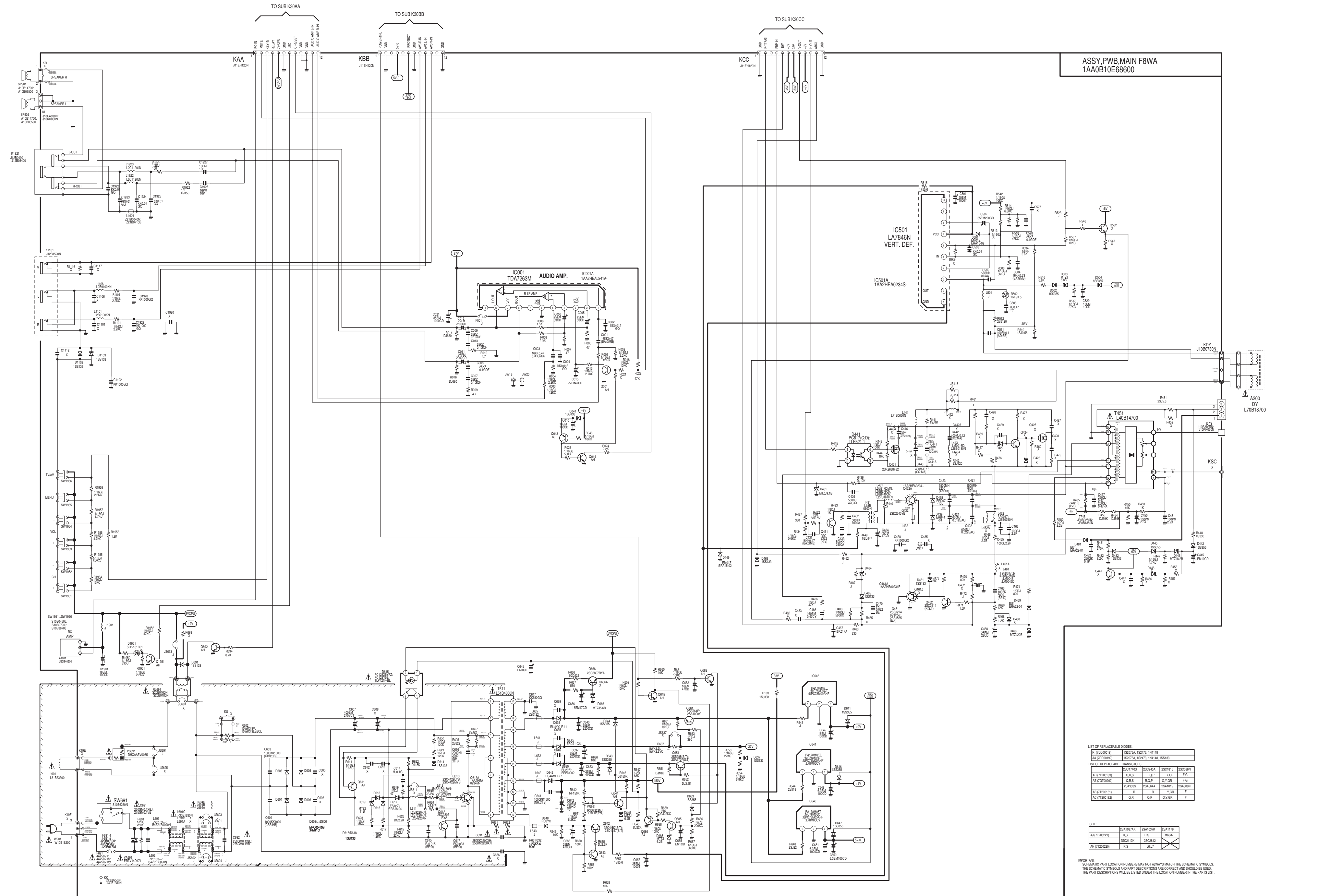
Q721
B 3.2V
C 148.3V
E 2.9V

Q741
B 1.1V
C 0V
E 1.8V

Q751
B 9.3V
C 0V
E 9.2V



SANYO Electric Co., Ltd.
Printed in Japan



ASSY.PWB.MAIN F8WA
1AA0B10E68600

LIST OF REPLACEABLE DIODES

R (7200019)	1S207A	1S2473	1M148
AA (7200019)	1S207A	1S2473	1M148

LIST OF REPLACEABLE TRANSISTORS

AD (7200019)	Q1.R.S	Q.P	Y.G.R	F.G
AE (7200019)	Q1.R.S	R.L.P	O.Y.G.R	F.G
AB (7200019)	2S4835S	2S4844A	2S41015	2S4808N
AC (7200019)	Q.R	Q.R	Q.Y.G.R	F

CHIP

AA (7200019)	2S41037AK	2S41037K	2S41179
AJ (7200019)	R.S	R.S	M.M.M7
AM (7200019)	2S2C170K	2S2C170	

IMPORTANT:
SCHEMATIC PART LOCATION NUMBERS MAY NOT ALWAYS MATCH THE SCHEMATIC SYMBOLS.
THE SCHEMATIC SYMBOLS AND PART DESCRIPTIONS ARE CORRECT AND SHOULD BE USED.
THE PART DESCRIPTIONS WILL BE LISTED UNDER THE LOCATION NUMBER IN THE PARTS LIST.

SANYO COLOUR TELEVISION
FAW-1 CHASSIS SERIES
SERVICE REF. NO. **CP28WF2-00**

F8WA

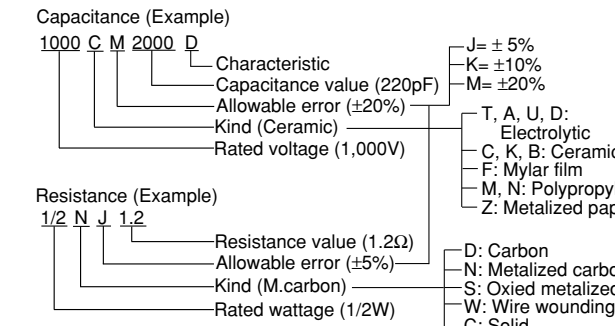
THE SERVICE PRECAUTION:
The area enclosed by this line () is directly connected with AC mains voltage. When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

PRODUCT SAFETY NOTICE:
Components indicated by a mark Δ in this circuit diagram show components whose values have special significance to product safety. It is particularly recommended that only parts specified on the part service manual be used for components replacement pointed out by the mark.

CIRCUIT DIAGRAM NOTICE:

- All resistance value are in ohms, K=1,000, M=1,000,000.
- All resistance rated wattages are 1/8W unless otherwise noted.
- Excepting electrolytic capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are pF.
- All capacitance rated voltages are 50V unless otherwise noted.
- All inductance values are in μH .
- Voltage readings take with a "VTVM" are from point indicated chassis ground. Voltage readings taken by using PAL colour bar signal are with all controls at normal position. Some voltage may vary with signal strength.
- Waveform were taken with PAL colour bar and controls adjusted for normal picture. Waveforms were taken by using a wide band oscillo-scope and a low capacity probe.
- This circuit diagram covers a basic or representative chassis only. There may be some components or partial circuit differences between the actual chassis and the circuit diagram.
- Parts specified with "X" are not installed in this model.
- Parts specified with "J" are just jumper wires.

11. Expression of capacitance and resistance in circuit diagram.



TRANSISTOR, DIODE AND INTEGRATED CIRCUIT TERMINAL GUIDE

C: COLLECTOR
B: BASE
E: EMITTER

A: ANODE
K: KATHODE

CHIP COMPONENTS
TRANSISTOR
DIODE
RESISTOR

PARTICULAR PARTS SYMBOL

FUSIBLE RESISTOR
NON POLE ELECTRIC CAPACITOR
POSTER

