SELF-DIAGNOSTIC FUNCTION

SERVICE MANUAL

BE-3D CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.
KV-29FX11A	RM-886	Italian	SCC-K05S-A
KV-29FX11B	RM-886	French	SCC-K01U-A
KV-29FX11D	RM-886	AEP	SCC-K07U-A
KV-29FX11E	RM-886	Spanish	SCC-K06U-A
KV-29FX11K	RM-886	OIRT	SCC-K20K-A
KV-29FX11R	RM-886	OIRT	SCC-K20L-A
KV-29FX11U	RM-886	UK	SCC-K04Q-A

MICROFILM

TRINITRON® COLOR TV

SONY®

ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
Italian	B/G/H	GERMAN Stereo	ITALIA VHF : A-H2 (C) UHF : 21-69 PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, D/K, L, I	GERMAN/NICAM Stereo	L VHF : F02-F10 UHF : F21-F60 CABLE : B-Q B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 I UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
AEP	B/G/H	GERMAN Stereo	PAL B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF : A-H2 (C) UHF : 21-69 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	KV-29FX11K GERMAN/NICAM Stereo KV-29FX11R GERMAN Stereo	B/G/H VHF : E2-E12 UHF : E21-E69 CABLE TV (1) : S1-S41 D/K VHF : R01-R12 UHF : R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
UK	I	NICAM Stereo	UHF : B21-B69	PAL NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	29FX11A	29FX11B	29FX11D	29FX11E	29FX11K	29FX11R	29FX11U
Power Consumption	89.3 W	98.5 W	98.5 W	98.5 W	98.5 W	98.5 W	149.5 W

[PICTURE TUBE] Super Trinitron
Approx. 72cm (29 inches)
(Approx. 68 cm picture measured diagonally)
110 degree deflection

Input/Output Terminals

[REAR]

1 21-pin Euro connector (CENELEC standard).
- Inputs for Audio and Video signals.
- Inputs for RGB.
- Outputs of TV Video and Audio signals.

2/S2 21-pin Euro connector.
- inputs for Audio and Video signals.
- inputs for S Video.
- outputs for Audio and Video signals (selectable).

Phono Jack
- Outputs for Audio Signals

[FRONT]

3 Video input - phono jack

3 Audio inputs - phono jacks

S3 S Video input 4 pin DIN

Headphone jacks : stereo minijack

Sound output	
Left/Right	2x15W (Music Power)
Subwoofer	2x30W (Music Power)
Power requirements	220 - 240V
Dimensions	Approx 746x569x526mm
Weight	Approx 51kg
Supplied accessories	RM-886 Remote Commander (1) IEC designated R6 battery (2)
Other features	2-Way Speaker, NICAM*****, FASTEXT, TOPTEXT *****(KV-29FX11B/29FX11E/29FX11K/ KV-29FX11U only)

[RM-886]

Remote control system	infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimensions	Approx 65x225x21mm (w/h/d)
Weight	Approx 157g (Not including battery)

Design and specifications are subject to change without notice.

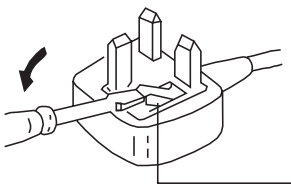
Model Name / Item	KV-29FX11A	KV-29FX11B	KV-29FX11D	KV-29FX11E	KV-29FX11K	KV-29FX11R	KV-29XF11U
Pal Comb	OFF	OFF	OFF	OFF	OFF	OFF	OFF
PIP	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Woofer Box	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	ON	ON	OFF
Norm I	OFF	ON	OFF	OFF	OFF	OFF	ON
Norm D/K	OFF	ON	OFF	ON	ON	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Teletext	ON	ON	ON	ON	ON	ON	ON
Nicam Stereo	OFF	ON	OFF	ON	ON	OFF	ON
Language Preset	Italian	French	German	Spanish	OIRT	OIRT	English

WARNING (KV-29FX11U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the ASTA mark.

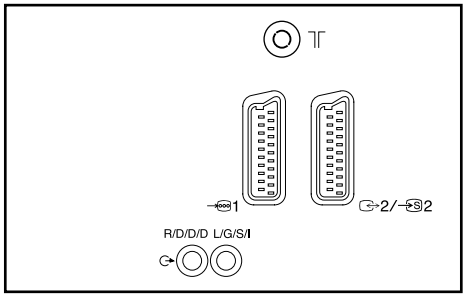
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR THE OUTLET SOCKETS IN YOUR HOME, IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE OUTLET SOCKET.

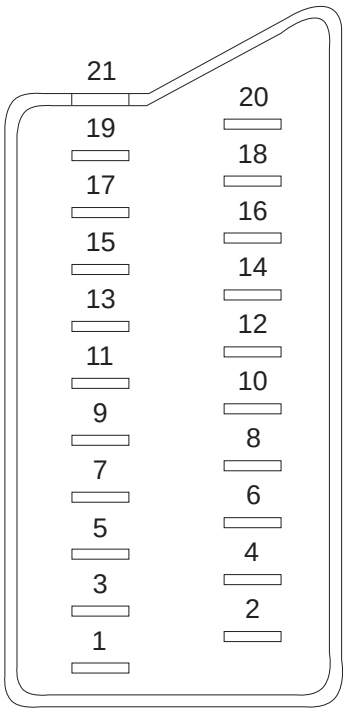
When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.



How to replace the fuse.
Open the fuse compartment with a screwdriver blade and replace the fuse.

21 pin connector (→1, ⇄ 2 / →S 2)





Pin No	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
2	○	○	○	Audio output B (right)	Standard level : 0.5V rms Output impedence : More than 10kohm*
3	○	○	○	Audio output A (left)	Standard level : 0.5V rms Output impedence : Less than 1kohm*
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedence : More than 10kohm*
7	○	●	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedence : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	–	–	Red input	0.7 +/- 3dB, 75 ohms, positive
	–	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedence : 75 ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
20	○	–	–	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	–	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V+/- 3dB 75 ohm, positive Sync 0.3V -3/+10dB
4	C (S signal) input	0.3V+/- 3dB 75 ohm, positive Sync

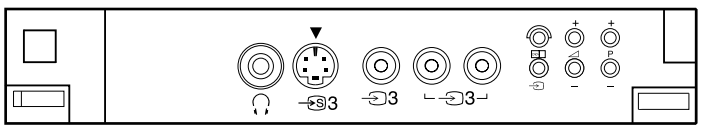


TABLE OF CONTENTS

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP

WARNING !!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE'LANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

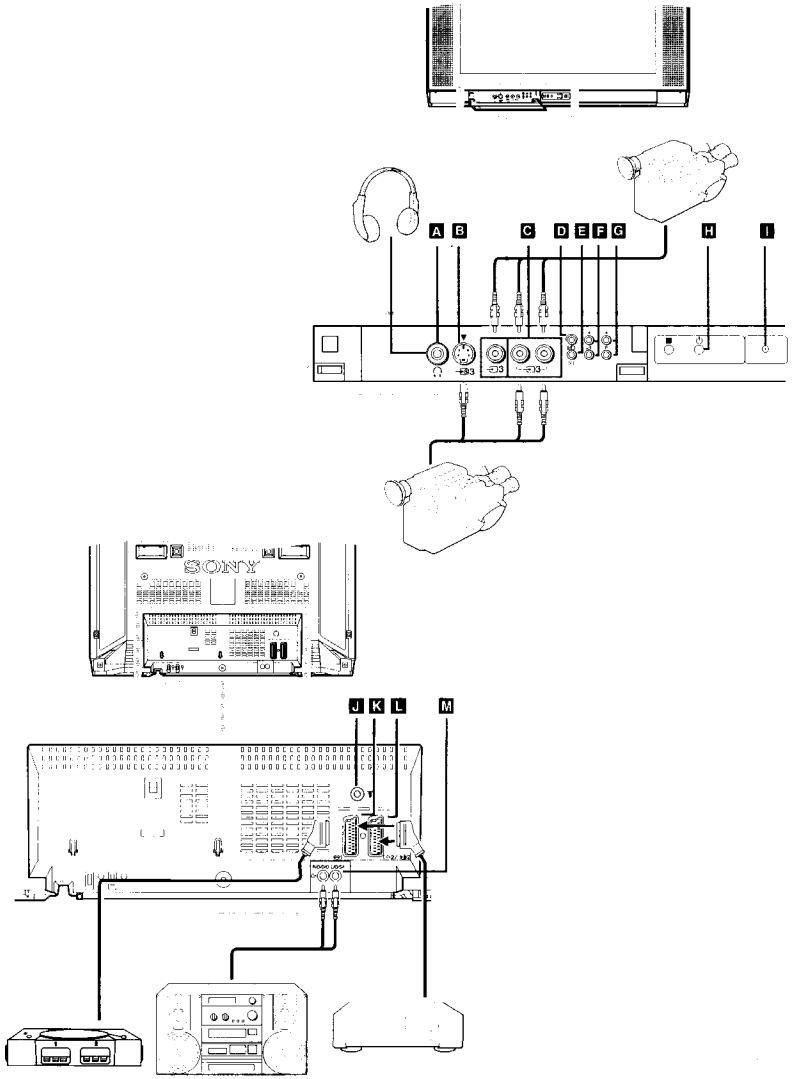
AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

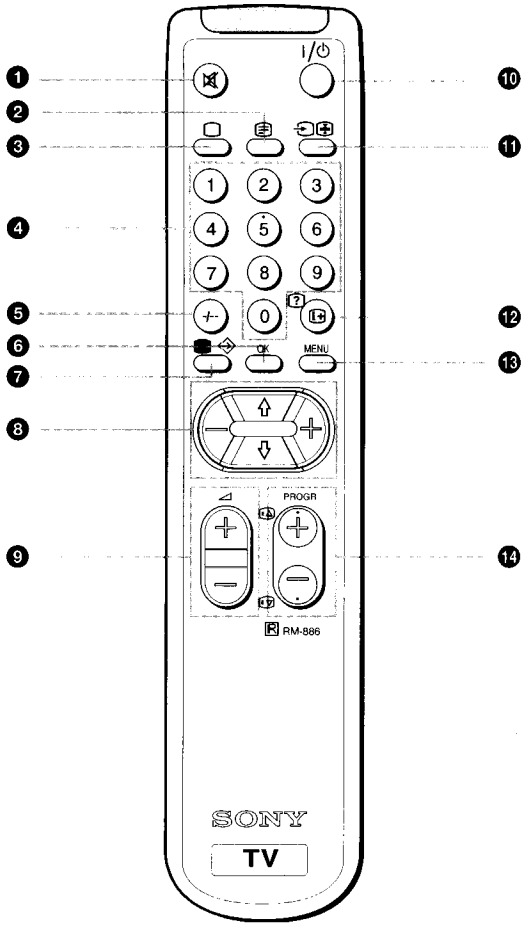
ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÈ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Manual. The page numbers of the Operating Instruction Manual remain as in the manual.





Overview

This section briefly describes the controls and the buttons on the TV set and on the Remote Commander. Please open the flap at the front of the instruction manual for illustrations of the TV set and the Remote Commander. Letters in boxes refer to the buttons on the TV set, numbers in circles to the buttons on the Remote Commander. For more information, refer to the page numbers given next to each description.

TV buttons and Terminals

Reference and Symbol	Name	Refer to Page
Front of the set		
A ∩	Headphones jack	29
B S 3	S video input jack	29
C 3, 3	Audio/video input jacks	29
D ▶▶□	Automatic Preset button	11
E	Input mode button	13
F +/-	Volume control	12
G P +/-	Programme button	12
H ⏻	Standby mode indicator	12
I ⏻	Main power switch	12
Rear of the set		
J	Aerial socket	10
K 1	21 pin Euro connector	29
L 2/ S 2	21 pin Euro connector	29
M	Audio outputs - phono jacks	29

Remote Commander Operation

Reference and Symbol	Name	Refer to Page
❶	Muting on/off button	12
❷	Teletext button	13
❸	TV power on/TV mode button	12, 13
❹ 1, 2, ... 9, 0	Number buttons	12
❺ - / - -	Double digit entering button	12
❻ OK	OK (Confirmation) button	14
❼	Picture mode button Teletext: Favourite pages button	12 28
❽	Menu control	14
❾ +/-	Volume control button	12
❿ I/⏻	TV standby ON-OFF button/TV power on	12
⓫	Input mode button Teletext: Freezing the subpage	13 27
⓬	On-screen display button Teletext: reveal button	12 27
⓭ **MENU**	Menu on/off button	14
⓮ **PROGR** +/-	Programme buttons Teletext: Page up/page down buttons	12 13

Step 1

Connecting the Aerial

(If you connect a VCR, skip to step 2)

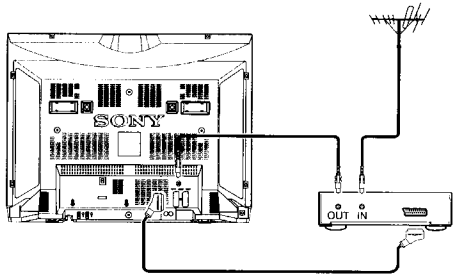
Insert the aerial plug tightly into the aerial socket ⊓ J. Use a good-quality aerial cable (not supplied), corresponding to the relevant regulations.

Step 2

Connecting a VCR

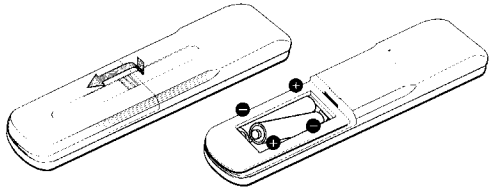
We recommend that you tune in the VCR signal to programme number "0". For details, see "Presetting Channels Manually" on page 16.

See "Connecting Optional Equipment" on page 29 for more information.



Step 3

Inserting the Batteries Into the Remote Commander



Respect your environment! Dispose of used batteries in an environmentally friendly way.

Step 4

Presetting Channels Automatically

With this function, the TV can automatically search and store up to 100 different channel numbers. If you prefer manual presetting, refer to "Presetting Channels Manually" on page 16.

1 Plug into mains.
Press the power switch ⏻ I on the TV set.

2 Press and hold the button ⏭ D on the TV set until the automatic menu is displayed and the search starts.

After all available channels are stored, the normal TV picture is shown.

Note: Channels are automatically stored as follows:

Programme 1 BBC1
Programme 2 BBC2
Programme 3 ITV
Programme 4 CH4 or S4C
Programme 5 CH5 (if available in your area)
Programme 6 -
Programme 7 -

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the remote commander (numbers in circles). All basic functions are also available on the TV set (letters in boxes). Open the flap at the front of the Instruction Manual to see the illustrations of the Remote Commander and the TV set.

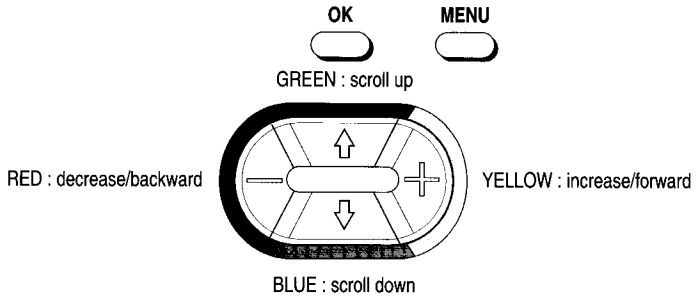
To	Press
Switch on	⏻ I on TV
Switch off temporarily	I/⏻ ⑩ TV is now in standby mode and ⏻ H indicator on TV lights up.
Switch on from standby mode	▭ ③, I/⏻ ⑩, PROGR +/- ⑭ G or any number button ④.
Switch off completely	⏻ I on TV To save energy, switch off your TV completely when TV is not in use.
Select programmes	PROGR +/- ⑭ G or number buttons ④ For double digit number, press -/- - ⑤ then the number e.g. For 23, press -/- - ⑤ then 2 and 3.
Display on screen indications	ⓘ ⑫. Press again to make the indications disappear.
Adjust the volume	◿ + or - ⑨ F
Mute the sound	🔇 ①. Press again to restore the sound.

To	Press
View video input picture (see page 30 for detailed information)	⮌ ⑪ E repeatedly until the desired video input appears. Press ▭ ③ to restore the TV picture.
View teletext (see page 27 for detailed information)	
Switch on teletext	▤ ②
Select a page	three number buttons ④ or ▤▲ ⑭ (for next page) or ▤▼ ⑭ (for previous page).
Use fastext	Blue, Green, Red or Yellow ⑧.
Switch off teletext	▭ ③ or press ▤ ② twice.

Adjusting and Setting the TV Using the Menu

You can adjust and set various functions on the TV using the following remote commander buttons:

1 Press MENU ⓭ to switch menu on/off.
2 Use the menu control buttons ❽ and OK button ❻ (confirm) as follows:

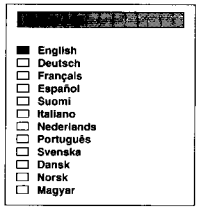


Choosing the Menu Language

This function enables you to change the language of the menu screens.

1 Press power switch ⏻ I on the TV. If the standby indicator ⏻ H on the TV is lit, press ▢ ❸ or a number button ❹ on the Remote Commander.

2 Press the MENU button ⓭ on the remote commander.



3 Press blue or green ❽ to select the language you want then press yellow ❽.

4 Press the MENU button ⓭ to restore the normal TV picture.

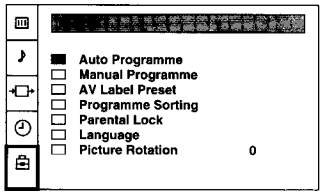
Note: If you wish to change your chosen language, press the MENU button to display the main menu, then select 'Language'.

Presetting Channels Automatically

You may have already preset the channels automatically by using the method shown on page 11. You can also preset channels automatically by using the remote commander as follows:

1 Press the MENU button ⓭.

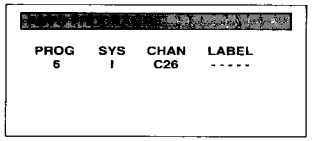
2 Press blue or green ❽ to select the symbol 🧰 on the menu screen then press yellow ❽.



3 Press blue or green ❽ to select 'Auto Programme'.

4 Press and hold yellow ❽ until the automatic menu is displayed and the search starts.

After all available channels have been preset, the normal TV picture is shown.



Note: Channels are automatically stored as follows:

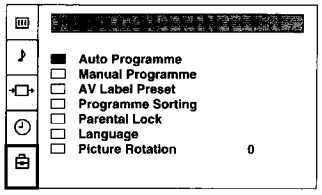
Programme 1 BBC1
Programme 2 BBC2
Programme 3 ITV
Programme 4 CH4 or S4C
Programme 5 CH5 (if available in your area)

Presetting Channels Manually

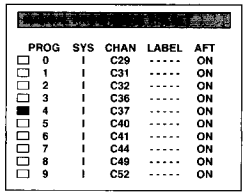
This function enables you to preset channels one by one to different programme numbers. This is also convenient for allocating programme numbers to various video input sources.

1 Press the MENU button ⓭.

2 Press blue or green ❽ to select the symbol 🧰 on the menu screen then press yellow ❽.



3 Press blue or green ❽ to select 'Manual Programme' then press yellow ❽.



4 Press blue or green ❽ to select on which programme number you want to preset a channel then press yellow ❽.

5 Press blue or green ❽ to select the TV broadcast system 'I' or a video input source (AV1,AV2 ...) then press yellow ❽.

6 Press yellow ❽.

7 Select the first number digit of 'CHAN' (channel) then the second number digit of 'CHAN' with the number buttons ❹ on the remote commander

or

Press blue or green ❽ to search for the next available channel.

8 If you want to store the channel, go to step 9. If not, select a new channel using the number buttons ❹ on the remote commander or press blue or green ❽ to resume the search.

9 Press OK ❻.

10 Repeat steps 4 to 9 to preset other channels.

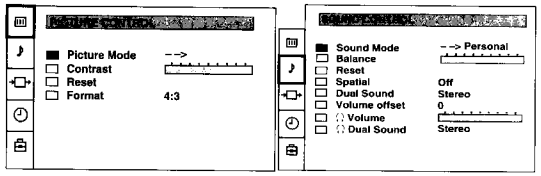
11 Press the MENU button ⓭ to restore the normal TV picture.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste.

1 Press the MENU button ⓭.

2 Press blue or green ❽ to select for picture control or ♪ for sound control then press yellow ❽.



3 Press blue or green ❽ to select the desired item then press yellow ❽.

4 Press red or yellow ❽ to alter the item then press OK ❻.
For the effect of each control, see the following tables.

5 Repeat steps 3 and 4 to adjust the other items.

6 Press the MENU button ⓭ to restore the normal TV picture.

PICTURE CONTROL	Effect
Picture Mode	• **Personal** (for individual settings) —> **Movie** (for films) —> **Live** (for programmes broadcast live or for use in bright room conditions) In 'Personal' mode, you can preset Brightness, Colour, Sharpness and Hue (NTSC signals only) as follows: **1** Press blue or green to select the desired item then press yellow. **2** Press red or yellow to adjust then press OK. **3** Press red to return to the PICTURE CONTROL menu.
Contrast	• Darker——I——Brighter (affects the chosen picture mode setting)
Reset	• Resets the selected picture mode to the factory preset levels.
Format	• Wide screen effect (16:9)

SOUND CONTROL	Effect
Sound Mode	• Personal —> Rock —> Jazz —> Pop In 'Personal' mode, you can preset Treble and Bass as follows: **1** Press blue or green to select the item then press yellow. **2** Press red or yellow to adjust then press OK. **3** Press red to return to the 'SOUND CONTROL' menu.
Balance	• Left——I——Right
Reset	• Resets sound to the factory preset levels.
Spatial	• Acoustic sound effect.
Dual Sound	• A: Left channel —> B: Right channel —> stereo —> mono
Volume Offset	• Presets the volume level for individual programmes. -12——0——+12
∩ Volume	• Adjusts the headphone volume.
∩ Dual Sound	• Selects the headphone channels. A: Left channel —> B: Right channel —> stereo —> mono

Changing Modes Quickly

You can quickly change the Picture Mode without entering the 'PICTURE CONTROL' menu.

1 Press ● ❼.
2 Press blue or green to select the desired mode
or
Press ● ❼ to select the desired mode.
3 Press the MENU button ⓭ to restore the normal TV picture.

Manual Fine-Tuning

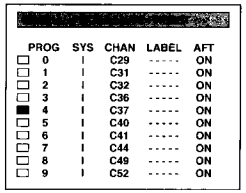
Normally, the automatic fine-tuning (AFT) function is operating.

If the picture is distorted however, you can manually fine-tune the TV to obtain a better picture reception.

1 Press the MENU button ⓭.

2 Press blue or green ❽ to select the symbol 🧰 on the menu screen then press yellow ❽.

3 Press blue or green ❽ to select 'Manual Programme' then press yellow ❽.



4 Press blue or green ❽ to select the programme number which corresponds to the channel you want to manually fine-tune.

5 Press yellow ❽ repeatedly until the AFT position changes colour..

6 Press blue or green ❽ to fine-tune the channel frequency (-15 to +15).

7 Press OK ❻.

8 Repeat steps 4 to 7 to fine-tune other channels.

9 Press the MENU button ⓭ to restore the normal TV picture.

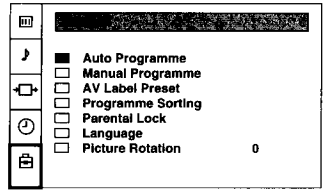
Sorting Programme Positions

This function enables you to exchange the programme positions.

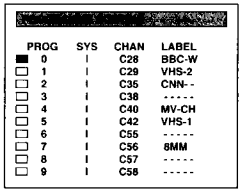
1 Press the MENU button ⓭.

2 Press blue or green ❽ to select the symbol 🧰 on the menu screen then press yellow ❽.

3 Press blue or green ❽ to select 'Programme Sorting' then press yellow ❽.



4 Press blue or green ❽ to select the channel you want to exchange then press yellow ❽.



5 Press blue or green ❽ to select the programme position of the channel you want exchanged then press yellow ❽.

6 Repeat steps 4 to 5 if you wish to exchange other programme positions.

7 Press the MENU button ⓭ to restore the normal TV picture.

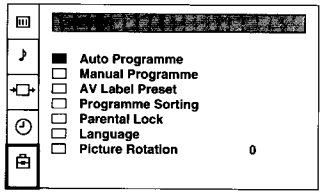
Using Parental Lock

This function enables you to prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

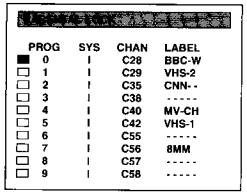
1 Press the MENU button ⓭.

2 Press blue or green ❽ to select the symbol on the menu screen then press yellow ❽.

3 Press blue or green ❽ to select 'Parental Lock' then press yellow ❽.



4 Press blue or green ❽ to select the channel you want to block then press yellow ❽. The symbol appears before the programme number to indicate that this channel is now blocked.



5 Repeat step 4 if you wish to block other channels.

6 Press the MENU button ⓭ to restore the normal TV picture.

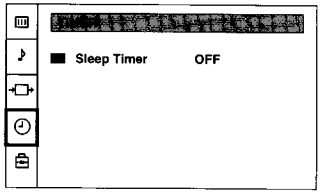
Note: To unblock, press yellow ❽ after selecting the channel to unblock in the ' PARENTAL LOCK' menu.

Using the Sleep Timer

This function enables you to select a time period after which the TV automatically switches into standby mode.

1 Press the MENU button ⓭.

2 Press blue or green ❽ to select the symbol on the menu screen then press yellow ❽.



3 Press yellow ❽.

4 Press red or yellow ❽ to set time delay and press OK ❻.

OFF 0:30 1:00 1:30 ..... 3:30 4:00

One minute before the TV switches into standby mode, a message is displayed on the screen.

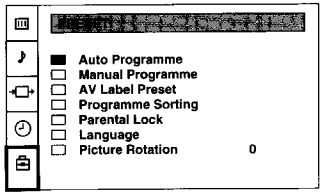
5 Press the MENU button ⓭ to restore the normal TV picture.

Adjusting the Picture Rotation

If, due to the earth magnetism, the picture slants, you can use the function 'Picture Rotation' to readjust the picture.

1 Press the MENU button ⓭.

2 Press blue or green ❽ to select the symbol on the menu screen then press yellow ❽.



3 Press blue or green ❽ to select 'Picture Rotation' then press yellow ❽.

4 Press red or yellow ❽ to adjust the picture rotation then press OK ❻. The adjusting range is -5 to +5.

5 Press the MENU button ⓭ to restore the normal TV picture.

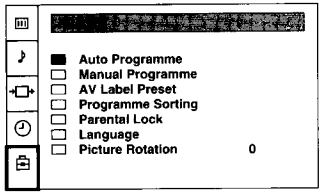
Skipping Programme Positions

This function enables you to skip unused programme positions when selecting them with the PROGR+/- buttons. However, you can still watch the channel of the skipped programme position by using the number buttons.

1 Press the MENU button ⓭.

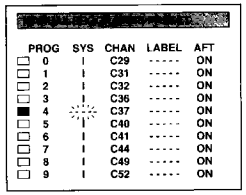
2 Press blue or green ❽ to select the symbol on the menu screen then press yellow ❽.

3 Press blue or green ❽ to select 'Manual Programme' then press yellow ❽.



4 Press blue or green ❽ to select the programme position you want to skip then press yellow ❽.

5 Press blue or green ❽ until '- - -' appears in the 'SYS' position.



6 Press OK ❻.

7 Repeat steps 4 to 6 to skip other programme positions.

8 Press the MENU button ⓭ to restore the normal TV picture.

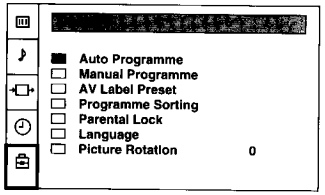
Captioning a Station Name

Names for channels are usually automatically taken from teletext if available. You can however name a channel or an input video source using up to five characters (letters or numbers).

1 Press the MENU button ⓭.

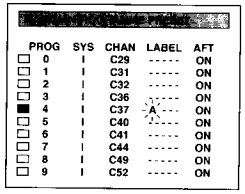
2 Press blue or green ❽ to select the symbol on the menu screen then press yellow ❽.

3 Press blue or green ❽ to select 'Manual Programme' then press yellow ❽.



4 Press blue or green ❽ to select the channel you wish to caption then press yellow ❽ repeatedly until the first element of the 'LABEL' position is highlighted.

5 Press ❽ blue or green to select a letter or number and press yellow ❽ (select '-' for a blank). Select the other four characters in the same way.



6 After selecting all the characters, press OK ❻.

7 Repeat steps 4 to 6 to caption names for other channels.

8 Press the MENU button ⓭ to restore the normal TV screen.

Teletext

Most TV channels broadcast information via teletext. The index page of the broadcaster (usually page 100) gives you information on how to use the service. Make sure you use a TV channel with a strong signal, otherwise teletext errors may occur.

Switching Teletext On and Off

1 Select the channel which carries the teletext service you wish to view.

2 Press ❷ to display teletext.
If no teletext signal is broadcast, the indication No Text is displayed on a black screen.

3 Input three digits for the page number using the number buttons ❹.
The page counter searches for the page and after some seconds the page is displayed.

4 Press ❸ or press ❷ twice to return to the normal TV picture.

Using Other Teletext Functions

To	Press
Access the next or preceding teletext page	⓮ for the next page or ⓮ for the preceding page
Mix the mode	❷ when in teletext mode. Now the teletext page is superimposed on the TV programme. Press again to return to the normal TV picture.
Freeze a teletext subpage	⓫. Press once again to cancel.
Reveal hidden information (eg: answers to a quiz)	⓬. Press once again to cancel.

Favourite page system

You can store up to four of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

Storing pages

1 Use the number buttons ❹ to select the page you would like to store.

2 Press ◈ ❼ twice.
The colour prompts at the bottom of the screen flash.

3 Press red, green, blue or yellow ❽ to store the selected page.
The page is now stored on this colour.

Repeat steps 1 to 3 for the other 3 pages.

Displaying the Favourite Pages

1 Press ◈ ❼.

2 Press red, green, blue or yellow ❽ to select the desired page.

Make sure you press ◈ ❼, otherwise the normal Fastext facility operates.

Using Fastext

(only available, if the TV station broadcasts Fastext signals)

With Fastext you can access pages with one key stroke . When Fastext is broadcast, a colour-coded menu appears at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue colours on the Remote Commander. Press the colour button ❽ that corresponds to the colour-coded menu. The selected page is displayed after some seconds.

Connecting Optional Equipment

There is a wide range of optional equipment you can connect to your TV. Refer to the illustrations on the front flap page of this manual.

Symbol	Acceptable input signals	Available output signals
1 K	Normal audio/video and RGB	Audio/video from TV tuner
2/S 2 L	Normal audio/video and S video	Audio/video from selected source
3, 3 B S 3 C	Normal audio/video and S video	No output
M	Normal audio/video and RGB	Audio/video from TV tuner

Connecting Headphones

Plug in the headphones to the ∩ socket A on the front of the TV.

About S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Separating the two signals prevents interference and thus improves the picture quality.

Notes on connections:

- If the picture or sound is distorted, move the VCR away from the TV.
- When connecting a monaural VCR, connect only the white jack to both the TV and VCR.
- Select 'TV' for output in the 'VIDEO CONNECTION' menu if you connect a decoder to 2/S 2 L (see page 30).

Selecting Input and Output Signals

This section explains how to select the output signal from 2/2 L and how to select and view the input. You can use direct access buttons 11 E to select the input or the menu system to select input and output.

Selecting Input Signals With Direct Access Buttons

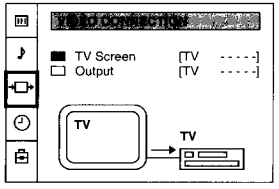
Press 11 E repeatedly.
Press 3 to restore the normal TV picture.

Symbol on the screen	Input Signal
1	Audio/video through Euro AV connector K
	RGB through Euro AV connector K
2	Audio/video through Euro AV connector L
2	S video through Euro AV connector L
3	Audio/video through the phono jacks C
3	S video through the 4 pin DIN B

Selecting With the Video Connection Menu

1 Press the MENU button 13.

2 Press blue or green 8 to select for "VIDEO CONNECTION" then press yellow 8.



3 Press blue or green to select input (for the TV screen) or output (for 2/2 L) then press yellow 8.

4 Press red or yellow repeatedly to select the desired input or output source then press OK 6.

5 Press the MENU button 13 to restore the normal TV picture.

Note: If you select 'AUTO' for output, the output source automatically becomes the same as the desired input source.

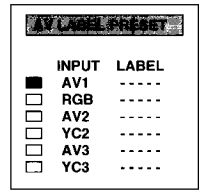
Using AV Label Preset

This function enables you to label the input sources using up to five characters (letters or numbers).

1 Press the MENU button 13.

2 Press blue or green 8 to select the symbol on the screen then press yellow 8.

3 Press blue or green 8 to select 'AV LABEL PRESET' then press yellow 8.



4 Press blue or green 8 to select the desired input source then press yellow 8.

5 Press blue or green 8 to select a letter or number then press yellow 8 (select '-' for a blank).
Select the other four characters in the same way.

6 After selecting all the characters, press OK 6.

7 Repeat steps 4 to 6 to label other input sources.

8 Press the MENU button 13 to restore the normal TV screen.

Troubleshooting

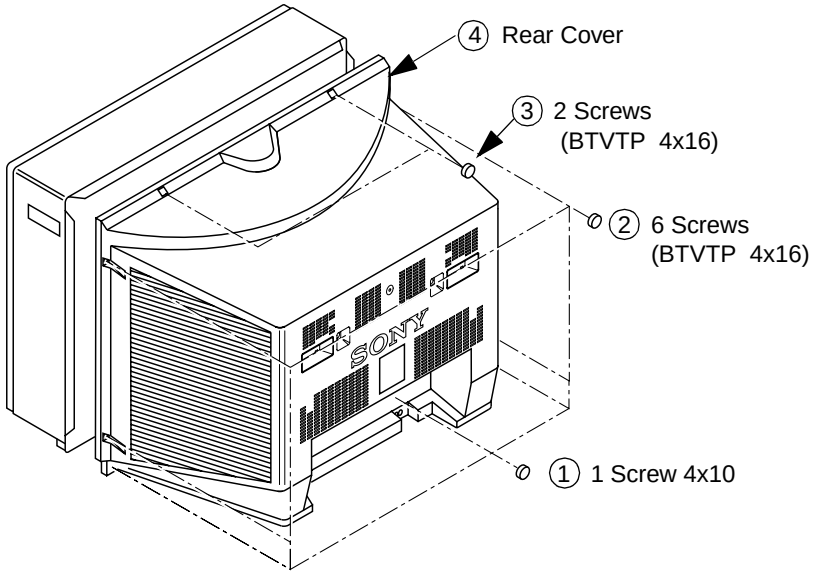
Here are some simple solutions to the problems which affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	• Plug the TV in. • Press ⏻ I on the TV. (If ⏻ indicator H is on, press 3 or a programme number 4 on the Remote Commander.) • Check the aerial connection. • Check if the selected video source is on. • Turn the TV off for 3 or 4 seconds then turn it on again using ⏻ I.
Poor or no picture (screen is dark), but good sound	• Press MENU 13 to enter the 'PICTURE CONTROL' menu and adjust 'Contrast', 'Brightness' and 'Colour'.
Poor picture quality when watching an RGB video source.	• Press 11 E repeatedly to select .
Good picture but no sound	• Press + 9 F. • If is displayed on the screen, press 1.
No colour for colour programmes	• Press MENU 13 to enter the 'PICTURE CONTROL' menu, select 'Reset' then press OK 6.
Remote Commander does not function.	• Replace the batteries.

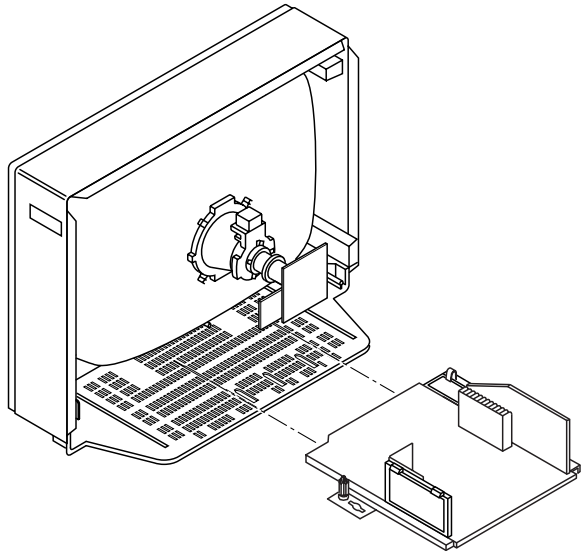
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2
DISASSEMBLY

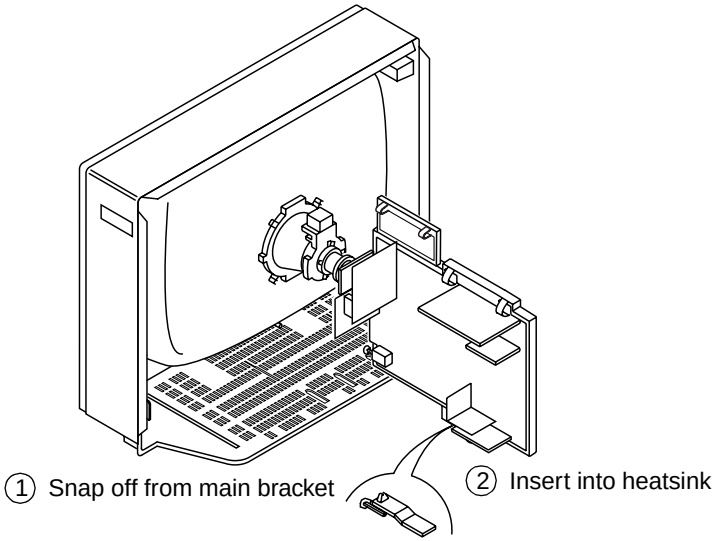
2-1. REAR COVER REMOVAL



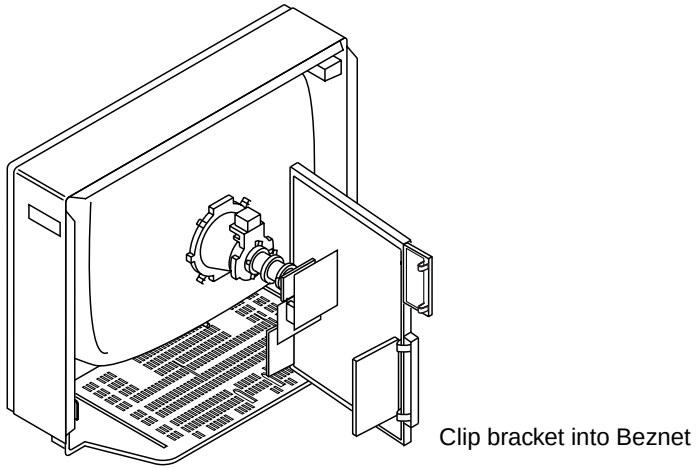
2-2. CHASSIS ASSY REMOVAL



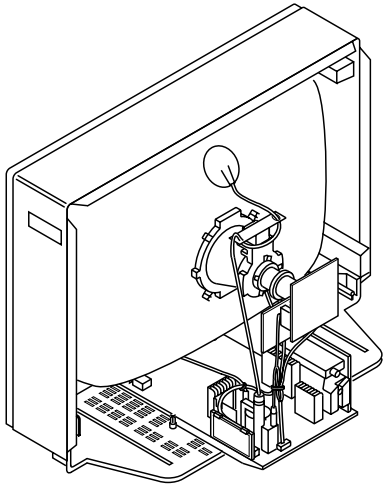
2-3-1. SERVICE POSITION (1)



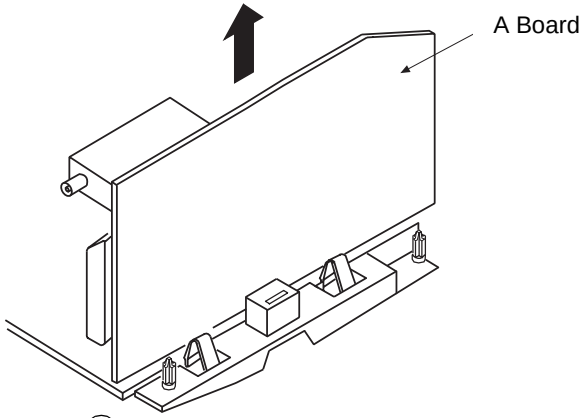
2-3-2. SERVICE POSITION (2)



2-4. WIRE DRESSING

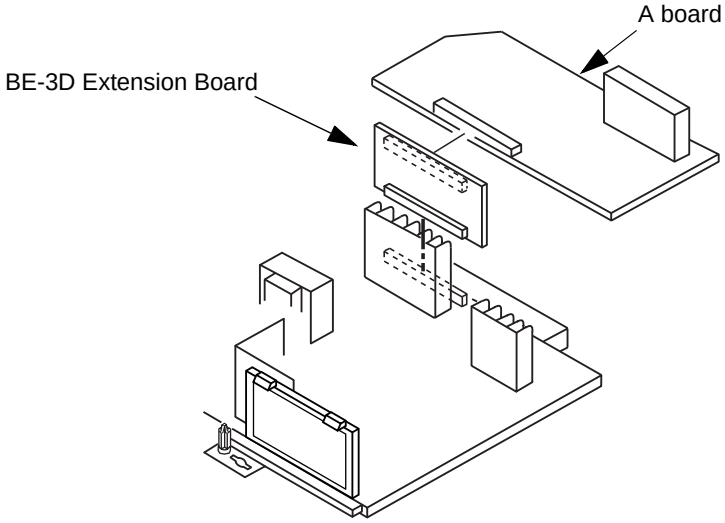


2-5. A BOARD REMOVAL

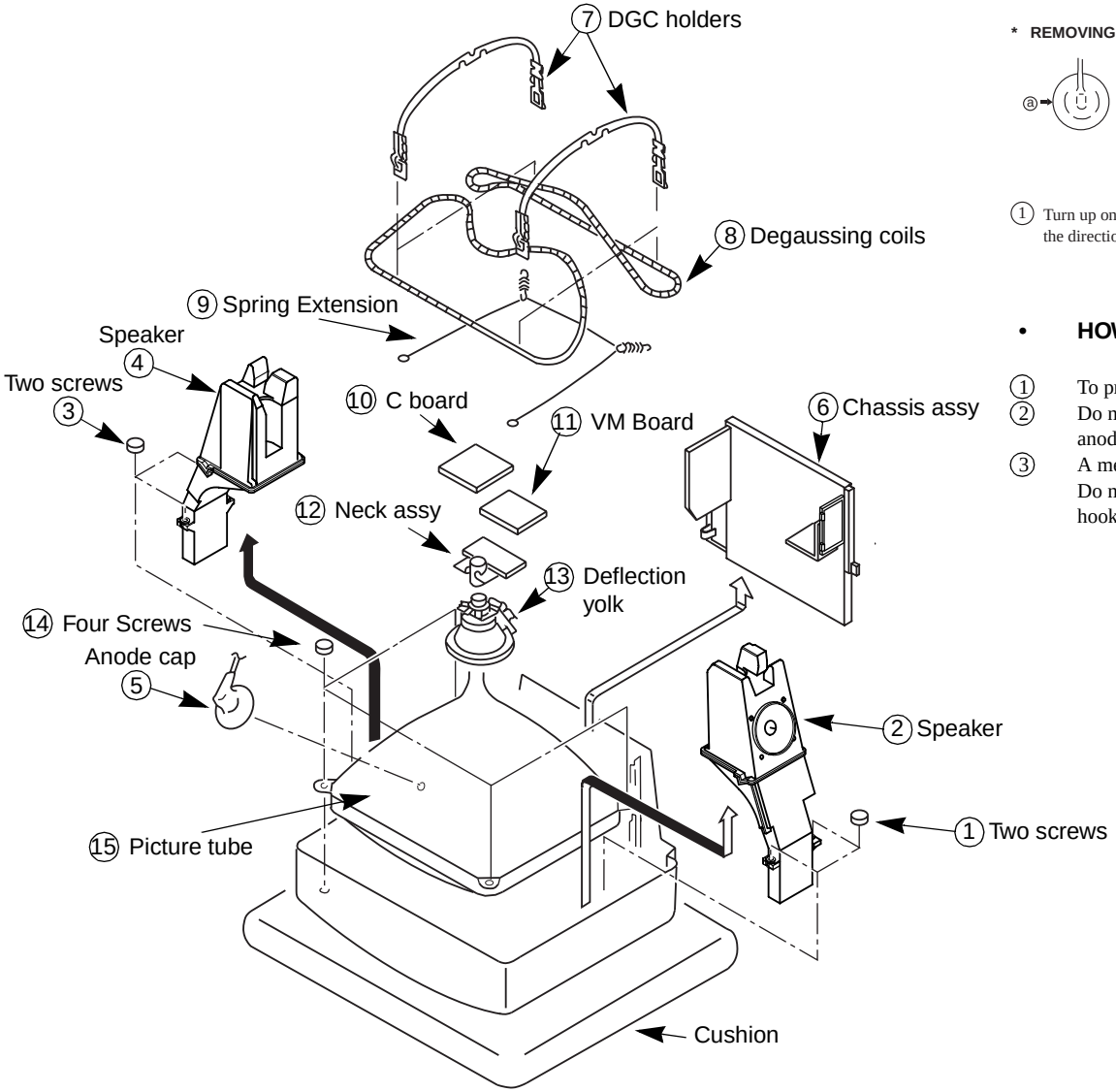


① Remove CN301 before removing A board

2-6. A EXTENSION BOARD



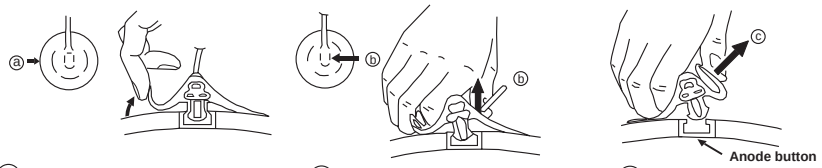
2-7. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

Note : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

*** REMOVING PROCEDURES.**



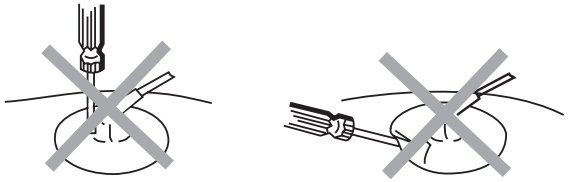
① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ

• HOW TO HANDLE THE ANODE-CAP

① To prevent damaging the surface of the anode-cap do not use sharp materials.
② Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
③ A metal fitting called a shatter hook terminal is fitted inside the rubber cap. Do not turn the rubber foot over excessively this may cause damage if the shatter hook sticks out.



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

For safety reasons, on no account should the plates be removed and not refitted after servicing.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the D Board printed circuit, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

Note : There are 5 plates fitted to the main bracket and secured by 4 or 6 gates. Only remove the necessary plate to gain access to the circuit board.

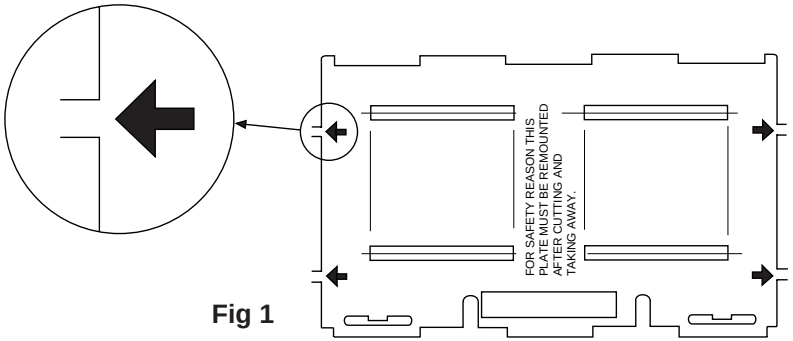


Fig 1

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.
The plates are identified by markings A-B-C-D-E on their top side.

1. Identify the plate by locating its marking.
2. Turn the plate over noting where the marking is located.
3. Locate the corresponding marking indicated on the main chassis bracket. See Fig 2.
4. Refit the plate as indicated in Fig 3 with the markings located next to each other.

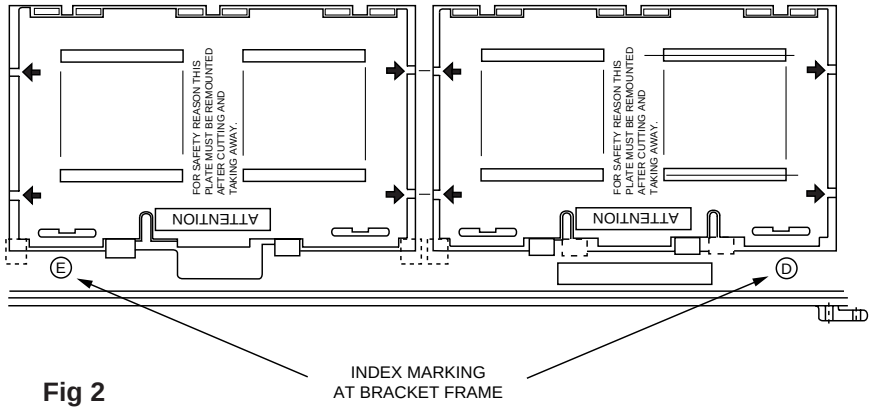


Fig 2

In the event of the plates requiring to be removed at a later stage, this can be achieved by inserting a screwdriver in the snap-recess indicated as in Fig 4 and lifting out.

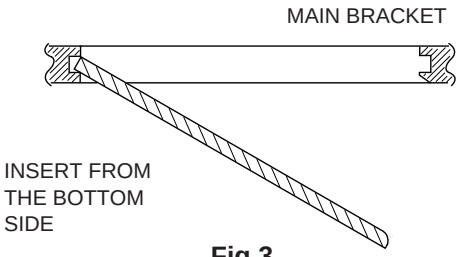


Fig 3

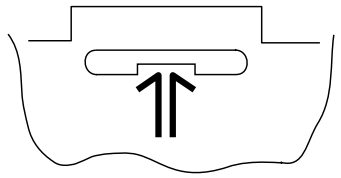


Fig 4

SECTION 3
SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings :

Contrast ..... 80% [or remote control normal]

Brightness 50%

Carry out the following adjustments in this order :
3-1. Beam Landing
3-2. Convergence
3-3. White balance
3-4. Focus

Note : Test equipment required
1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.
5. DC Power supply.

Preparation:

1. In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
2. Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input an all white signal from the pattern generator. Set the Contrast and Brightness to normal.
2. Set the pattern generator raster signal to Red.
3. Move the deflection yolk forward and adjust with the purity control so that the Red is at the centre and the Blue and Green take up equally sized areas on each side of the screen. [See Fig.3-1 - 3-3].
4. Move the deflection yolk forward and adjust so that the entire screen becomes Red. [See Fig.3-1]
5. Switch the raster signal to Blue, then to Green and verify the condition.
6. When the position of the deflection yolk has been determined, fasten the deflection yolk with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to correct it. [See Fig.3-4]

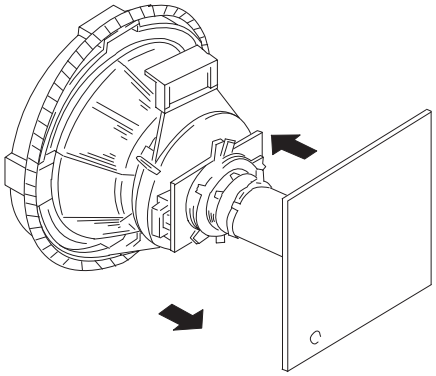


Fig. 3-1

Fig. 3-2

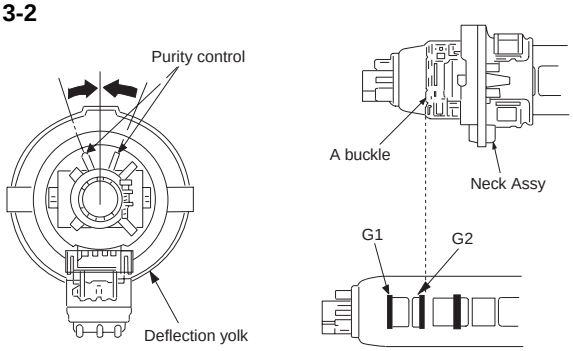
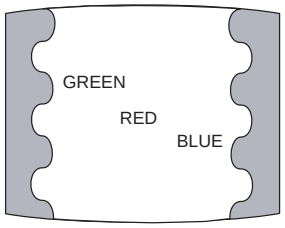


Fig. 3-3



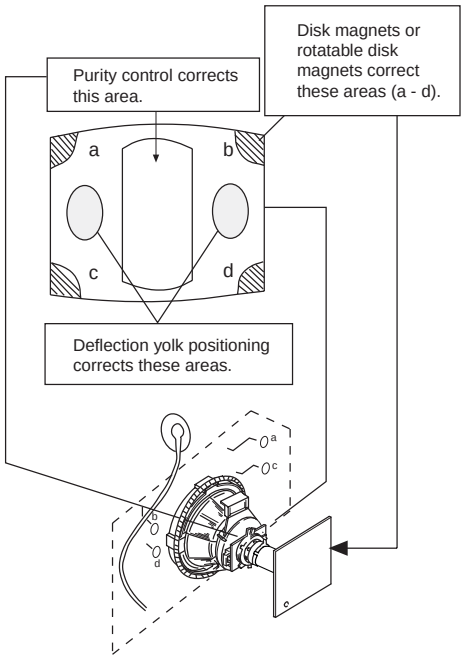


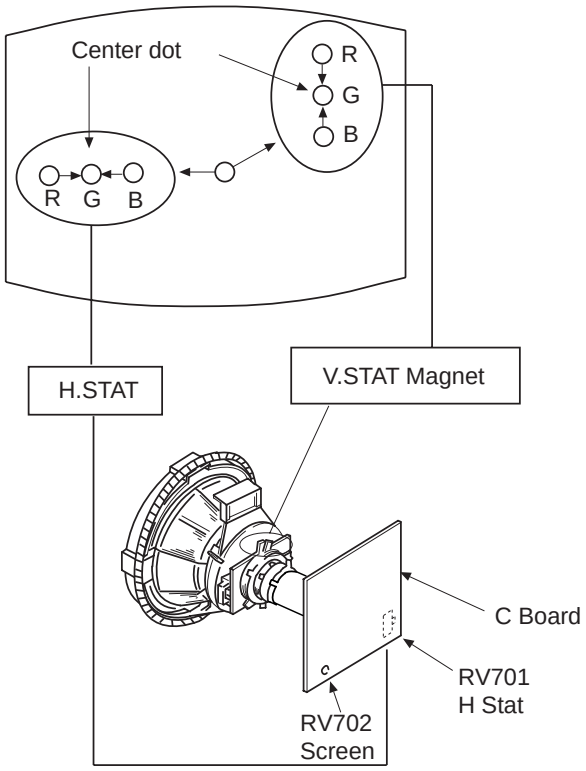
Fig. 3-4

3-2. CONVERGENCE

Preparation:

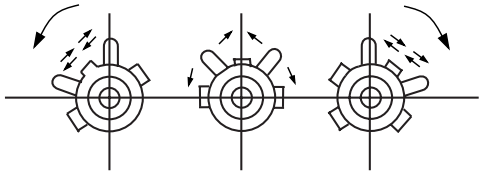
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the Brightness setting.
- Input a dot pattern from the pattern generator.

(1) Horizontal and vertical static convergence

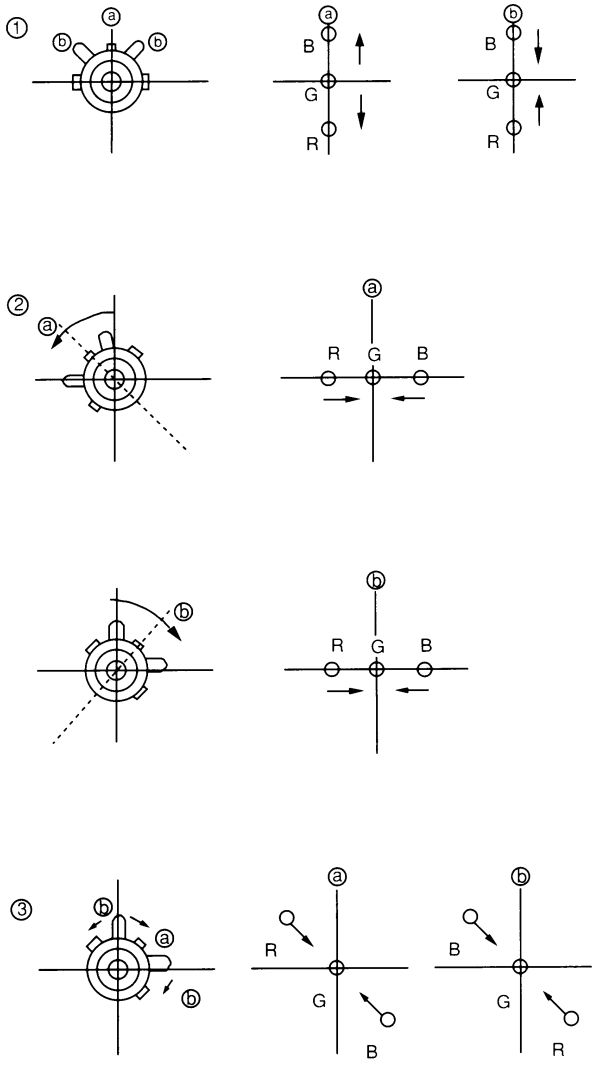


1. [Moving horizontally], adjust the H.STAT control so that the Red, Green and Blue points are on top of each other at the centre of the screen.
2. [Moving vertically], adjust the V.STAT magnet so that the Red, Green and Blue points are on top of each other at the centre of the screen.
3. If the H.STAT variable resistor is unable to bring the Red, Green and Blue points together at the centre of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner indicated below. [In this case, the H.STAT variable resistor and the V.STAT magnet influence each other].

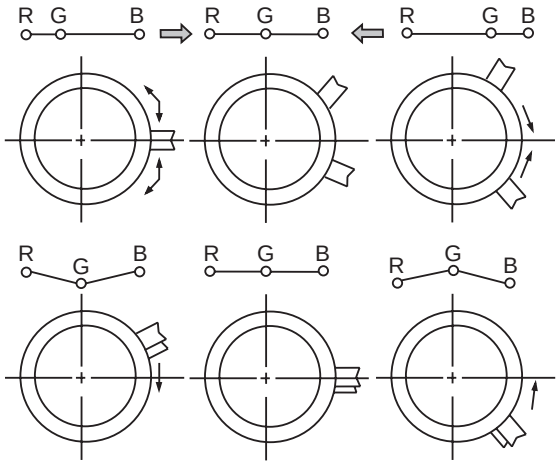
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

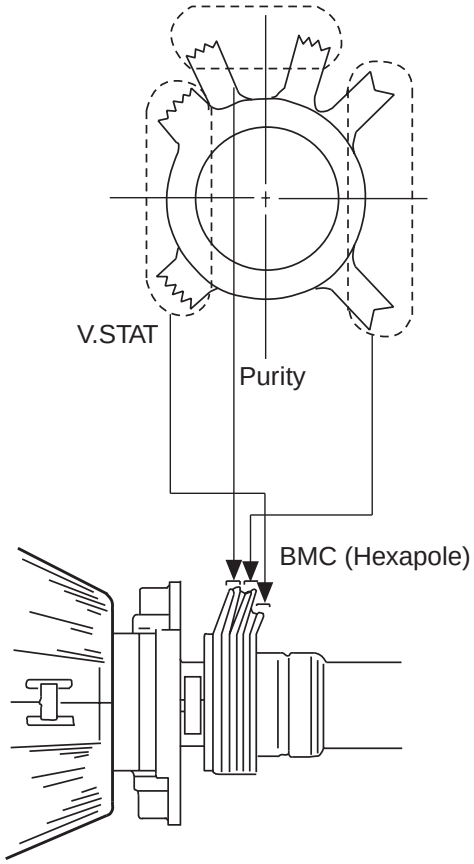


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the Red, Green and Blue points move as indicated below.



- Operation of the BMC (Hexapole) magnet.





- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment whilst tracking.
  Use the H.STAT VR to adjust the Red, Green and Blue dots so that they coincide at the centre of the screen
  (by moving the dots in the horizontal direction).

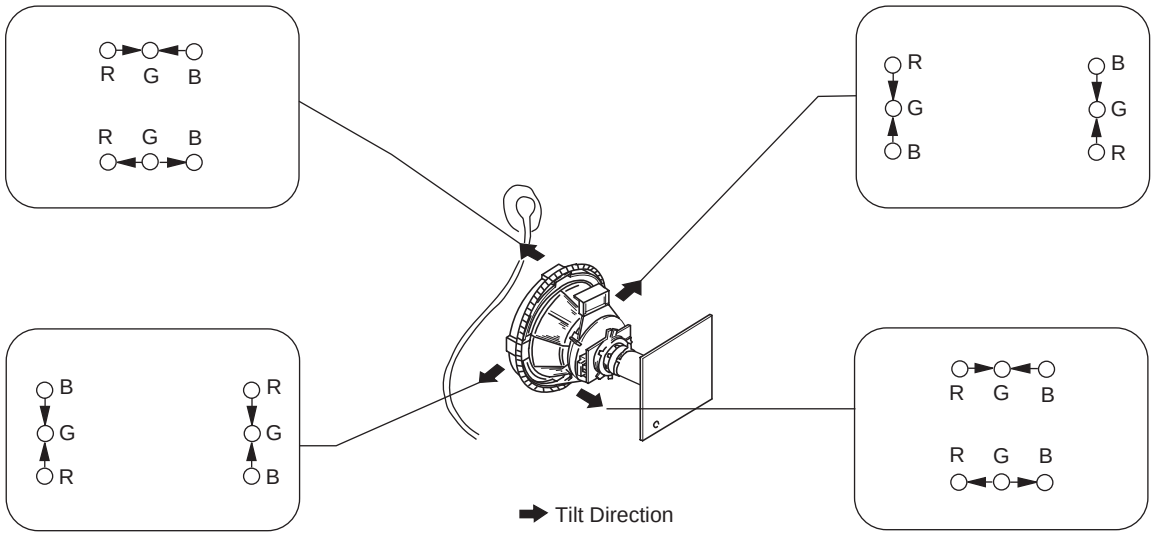
(2) Dynamic convergence adjustment.

Preparation:

- Before starting this adjustment, adjust the horizontal and vertical static convergence.

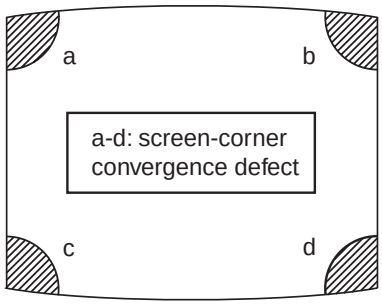
1. Remove the deflection yolk spacer.
2. Tilt the deflection yolk as indicated in the figure below and optimize the convergence.
3. Re-install the deflection yolk spacer.

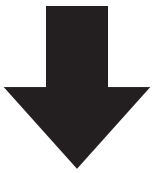
Note : This adjustment will affect the geometry of the display, therefore adjust to obtain the optimum setting.

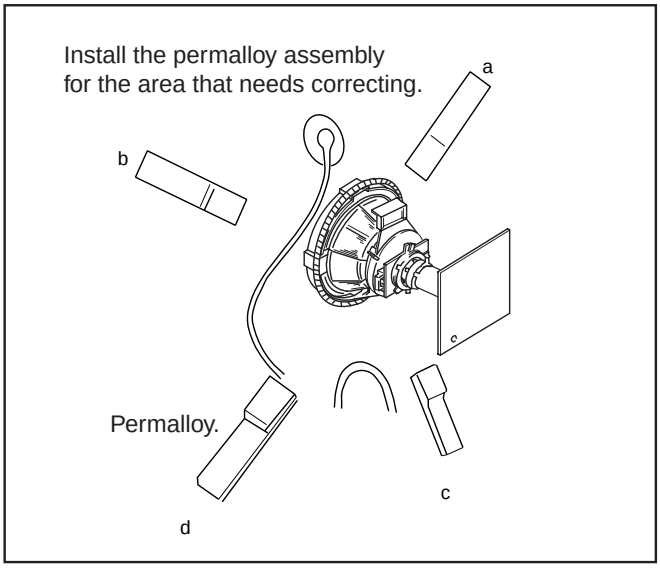


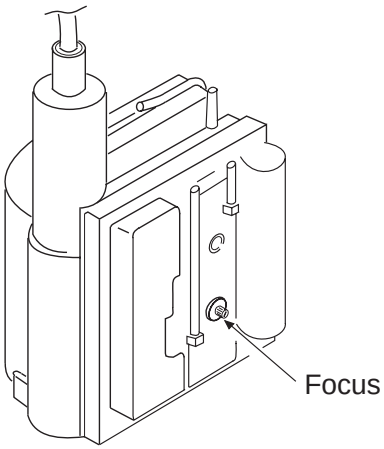
(3) Screen corner convergence.

- If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.









3-3. WHITE BALANCE

G2 Setting

1. Switch the TV set into AV mode [apply a cross-hatch signal].
2. Enter into the 'Service mode' and select 'Picture Control'.
3. Enter 'Picture Control' and select 'Personal' press OK.
4. Return to 'Picture Control' menu and select 'Reset'.
5. Measure the voltages on the 3 cathodes of the CRT, Kr,Kg and Kb using an oscilloscope with a 100:1 probe.
6. Connect the oscilloscope to the CRT cathode which recorded the highest voltage and adjust [RV702 SCREEN] to obtain a reading of 175V.

White balance adjustment

1. Input an all white signal from the pattern generator.
2. Enter into the Service Mode.
3. Enter into the 'Picture Adjustment' service menu.
4. Select 'Sub contrast' and adjust to 7.
5. Select the 'Green drive' and adjust so that the white balance becomes optimum.
6. Select the 'Blue drive' and adjust so that the white balance becomes optimum.
7. Press the 'TV' button on the remote commander to return to TV operation.

PICTURE ADJUSTMENT	
AFC mode	1
REF position	2
SCP BGR	1
SCP BGF	1
Trap fo	0
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Sub hue	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	3

3-4. FOCUS

1. Receive a television broadcast signal.
2. Normalise the picture setting.
3. Adjust the focus control on the flyback transformer for the best focus at the centre of the screen.
   Bring only the centre area of the screen into focus, the magenta ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.

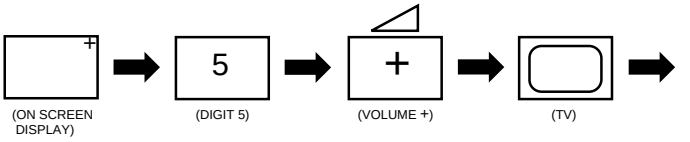
SECTION 4
CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustments to this model can be performed using the supplied Remote Commander RM-886.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch and enter into the stand-by mode.
2. Press the following sequence of buttons on the Remote Commander.



- 'TT--' will appear in the upper right corner of the screen.
  Other status information will also be displayed.

3. Press 'MENU' on the remote commander to obtain the following menu on the screen.

TEST MENU

> Picture Adjustment
  Geometry
  Wide
  IC status
  MSP
  Current TV status

4. Move to the corresponding adjustment using the button on the remote commander.
5. Press the + button to enter the selected adjustment.
6. Turn off the power to quit the service mode when adjustments have been completed.

PICTURE ADJUSTMENT

AFC mode	1
REF position	3
SCP BGR	1
SCP BGF	1
Trap fo	7
Sub contrast	Adj
Sub colour	Adj
Sub brightness	Adj
Green drive	Adj
Blue drive	Adj
Green cutoff	Adj
Blue cutoff	Adj
Gamma	0
Pre / overshoot	0
Y delay	5
D Pic	ON/OFF
D Colour	ON/OFF
DC Transfer	ON/OFF

GEOMETRY ADJUSTMENT - 4:3

V size	Adj
V position	Adj
S Correction	Adj
V Linearity	Adj
H size	Adj
H position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	1
EHT H	0
Lo Corn Pin	Adj
Up Corn Pin	Adj

WIDE ADJUSTMENT - 4:3

V Aspect	47
V Scroll	25
Upper V Lin	0
Lower V Lin	0
Left Blanking	1
Right Blanking	11

MSP	
AGC ON/OFF	ON
Constant gain CDB	0
FM prescale FMP	36
Zwei mono-st WHI	36
Zwei st-mono WLO	18
Zwei mono-bi WMH	36
Zwei bi-mono WLO	18
Time Zwei WML	41
Fawct limit	10
Fawct soll init FAW	12
Fawer tol	2
Nicam Err Max CCT	10
Nicam Err Min	0
Nicam Prescale NIP	97
Time Nicam	31
Carrier mute CRM	OFF
Audio clock ACO	HIZ
Scart prescale	25
Scart volume	64

IC STATUS (CXA2076 / CXA2040)	
CXA2076	
H lock	1
IKR	1
VNG	0
X-RAY	0
Colour system	3
CV1 sync	1
CXA2040	
Sync sep	1
S1 mode pin	01
S2 mode pin	01
TUNER	
Tuner status	01101011

TV STATUS BE3D	
Text system	C TEXT
Dolby	NO
Text language set	WEST/EAST/RUSSIAN
Menu language set	WEST/EAST/RUSSIAN
Destination	B/D/U/K/L/E/A/R
Scart 16:9	ON
RGB priority	ON
Ageing	OFF/ON
Size	29
Colour trap sw	SECAM/ALL
Velocity mod	ON/OFF
AFT STATUS	WINDOW/HIGH/LOW
Lumisponder Mode	OFF
Micro/Jungle	SDA30C263/CXA2076

SUB BRIGHTNESS ADJUSTMENT

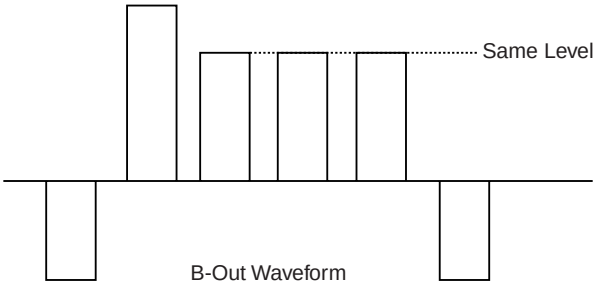
1. Input a Phillips pattern.
2. Set the picture control to minimum.
3. Enter into the 'Picture Adjustment' service menu.
4. Adjust the 'Sub-Brightness' data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains a small 100% area on a black background.
2. Set the picture control to maximum.
3. Connect an oscilloscope to Pin 3 of CN301 [A Board].
4. Enter into the 'Picture Adjustment' service menu.
5. Adjust the 'Sub-contrast' data to obtain a black to white amplitude of 2.50V.

SUB COLOUR ADJUSTMENT

1. Receive a PAL colour bar video signal.
2. Connect an oscilloscope to Pin 3 of CN301 [A Board].
3. Enter into the 'Picture Adjustment' service menu.
4. Adjust the 'Sub-colour' data so that the Cyan, Magenta and Blue colour bars are of equal height as indicated below.



Note: The data indicated in the 'TV STATUS' table is dependant on destination, screen size and country.

SYSTEM B/G, D/K, I & L I.F ADJUSTMENT

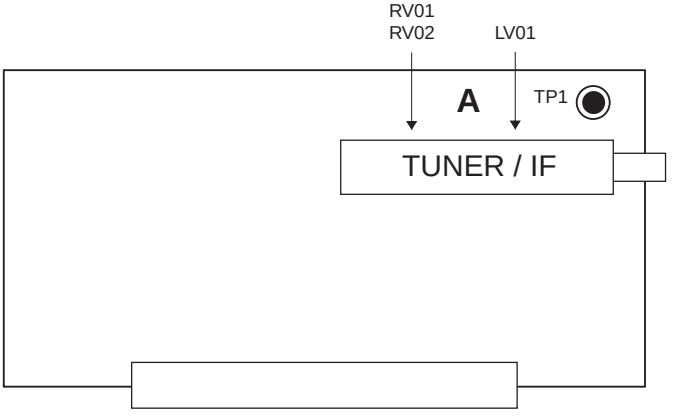
1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the 'IF Adjustment' service mode [i.e 'TT59'] to fix the I.F frequency to 39.9MHz.
3. Enter into the service mode and select 'Current TV status'.
4. Adjust the I.F coil [LV01] until the 'AFT Status' indicates a 'Window' condition.

SYSTEM L BAND 1 I.F ADJUSTMENT

1. Input an off air signal of between 60-100dBuV / 75 ohm terminated, via the tuner socket.
2. Enter into the 'IF Adjustment' service mode [i.e 'TT59'] to fix the I.F frequency to 34.2MHz.
3. Enter into the service mode and select 'Current TV status'.
4. Adjust the RV02 control until the 'AFT Status' indicates a 'Window' condition.

TUNER AGC ADJUSTMENT

1. Receive a signal of 63dBuV / 75 ohm terminated, via the tuner socket.
2. Measure the voltage at test point 1 [A Board].
3. Adjust RV01 control to obtain a voltage of 3.0V +/- 0.3V.

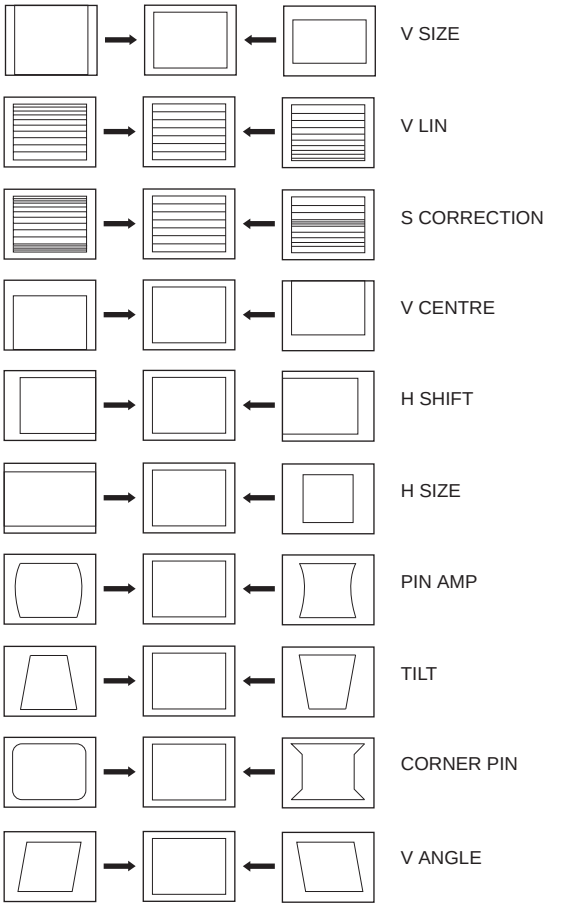


DEFLECTION SYSTEM ADJUSTMENT

1. Enter into the 'Geometry Adjustment' service menu.
2. Select and adjust each item in order to obtain the optimum image.

GEOMETRY ADJUSTMENT

V size	Adj
V position	Adj
S Correction	Adj
V Linearity	Adj
H size	Adj
H position	Adj
Pin Amp	Adj
Pin Phase	Adj
AFC Bow	Adj
AFC Angle	Adj
EHT V	1
EHT H	0
Lo Corn Pin	Adj
Up Corn Pin	Adj



4-2. TEST MODE 2:

Is available by pressing 'TEST' button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode.
Note : 'TT' modes 40 - 49 require the TV set to be in programme 59 before the command is accepted. Some test modes are dependant upon the model.

00	Carrier Test mode
01	Picture maximum
02	Picture minimum
03	Volume 30%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Ageing mode
08	Set shipping conditions
09	Reset language select menu on power up
10	No function
11	Clear & Disable OSD
12	Enable OSD
13	Scart 16:9 Enable / Disable
14	Display TV status
15	Picture reset
16	Set 32" chassis (Wide models only)
17	Set all AV labels to default
18	RGB priority Enable / Disable
19	Set all programme labels to default
20	No function
21	Sub picture adjustment (use red/yellow)
22	Sub colour adjustment (use red/yellow)
23	Sub brightness adjustment (use red/yellow)
24	Destination U
25	Destination D
26	Destination B
27	Destination K
28	Destination L
29	Destination E
30	No function
31	Destination A
32	Destination R
33	Sub Woofer Enable
34	Sub Woofer Disable
35	Set up trap switch
36	Rotation test
37	Set 25" (24" Wide models)
38	Set 29" (29" Wide models)
39	D/K Nicam enable
40	No function
41	Re-initialize the NVM

42	Default Programme info in NVM with manufacturing factory channel setup
43	Default Geometry settings
44	Default favourite pages to 100,101,102 and 103
45	Switch off all channel locks
46	Dealer commander mode (pending)
47	Default MSP settings
48	Restore NVM test byte Undo 'TT49'
49	Delete NVM test byte Sets virgin NVM
50	No function
51	Text interface odd (NON INTERLACED MODE = 3)
52	Text interface odd (NON INTERLACED MODE = 2)
53	Auto picture ON
54	Auto picture OFF
55	Auto cut off ENABLE
56	Auto cut off DISABLE
57	AV3 ENABLE
58	AV3 DISABLE (if TV Text) otherwise AV3 ENABLE
59	Auto IF Display
60	No function
61	Dolby Pro-Logic ON
62	Noise Left
63	Noise Right
64	Noise Centre
65	Noise Surround

66	DSP Bypass
67	D/K Nicam Disable
68	Diagnostics OFF
69	Diagnostics ON
70	No function
71	Lumisponder Curve 1
72	Lumisponder Curve 2
73	Jungle Select (CXA2000 or CXA2076)
74	Text H Position adjust
75	Picture reset
76	MSP BG filter enabled (h/w required)
77	Sound reset
78	MSP BG filter disabled (h/w required)
79	Wide set-up (Wide screen models only)
80	No function
81	Velocity mod ON
82	Velocity mod OFF
83	Picture Rise step 40ms
84	Picture Rise step 80ms
85	Picture Rise step 160ms
86	Picture Rise OFF
87	Select Shop Mode
88	Compact Text Acquisition Disable
89	Compact Text Acquisition Enable
90	No function
91	Sound Centre mode NORMAL
92	Sound Centre mode WIDE
93	Sound Centre mode PHANTOM
94	**Toggle Compact Text Acquisition Delay Bit 0**
95	**Toggle Compact Text Acquisition Delay Bit 1**
96	**Toggle Compact Text Acquisition Delay Bit 2**
97	**Toggle Compact Text Acquisition Delay Bit 3**
98	**Toggle Compact Text Acquisition Delay Bit 4**
99	Set test menu

The shaded test modes indicated in bold can set the delay byte to any value 0-31 which creates a (value x 20) mS delay.

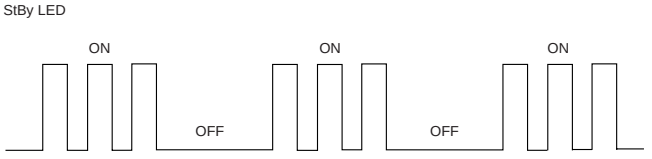
Note: Compact Text models only.

4-3. BE-3D SELF DIAGNOSTIC SOFTWARE

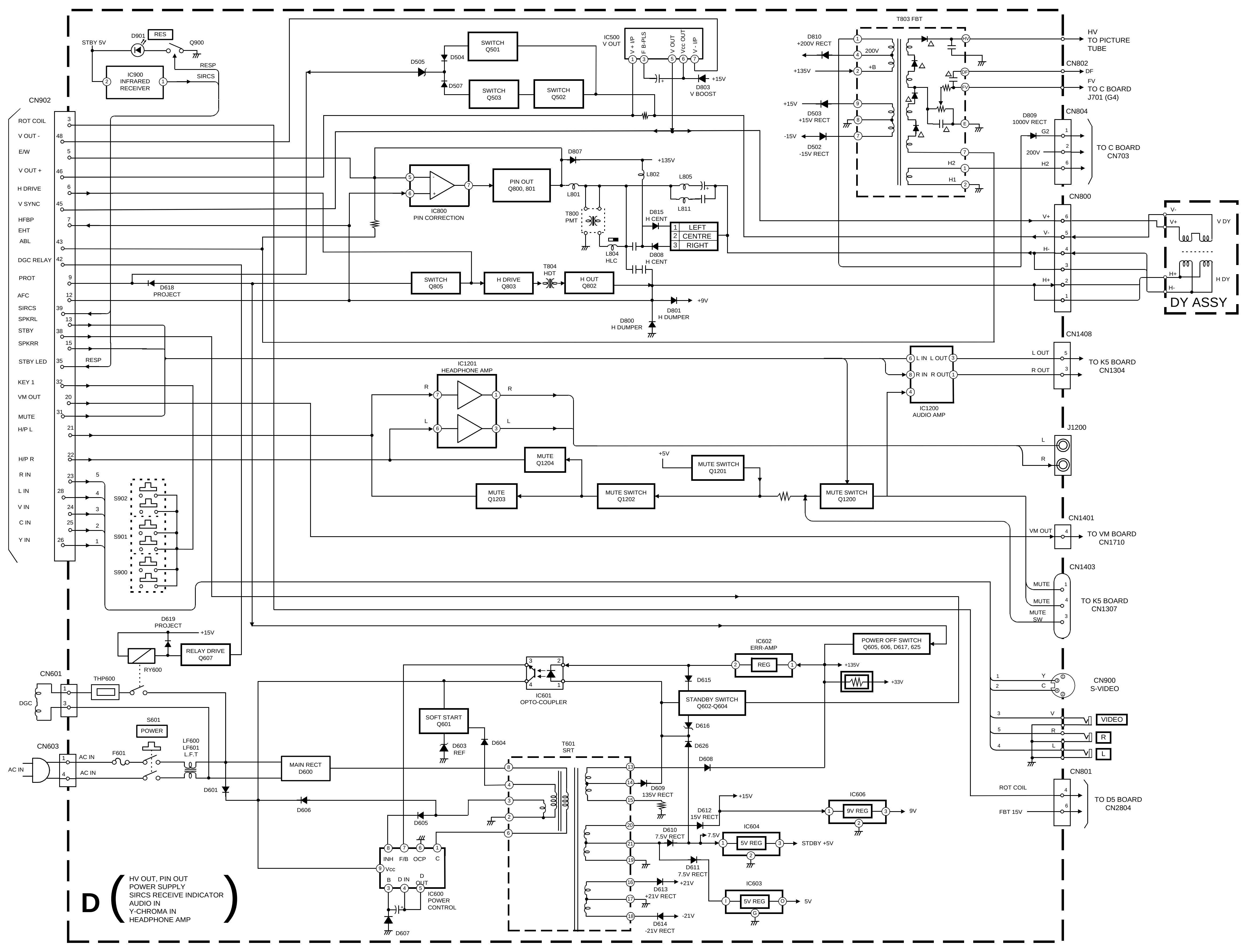
The identification of errors within the BE-3D chassis is triggered in one of two ways :- 1: Busy busy or 2: Device failure to respond to IIC. In the event of one of these situations arising the software will first try to release the bus if busy [Failure to do so will report with continuous flashing LED] and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED [Series of flashes which must be counted] See Table 1., non fatal errors are reported using this method.

ERROR	LED ERROR COUNT
No error	00
Not allowed (may be confused with Sircs response flash!)	01
Protection circuit trip < ANY TIME >	02
IIC SCL LOW < POWER UP ONLY >	03
IIC SDA LOW < POWER UP ONLY >	04
IIC SDA & SCL LOW < POWER UP ONLY >	05
Jungle / Chroma controller no acknowledge < POWER UP ONLY >	06
Video Switch no acknowledge < POWER UP ONLY >	07
Tuner no acknowledge	08
MSP no acknowledge	09
NVM no acknowledge	10
M3L TXD Low < POWER UP ONLY >	11
M3L RXD Low < POWER UP ONLY >	12
M3L ENABLE Low < POWER UP ONLY >	13
M3L TXD & RXD Low < POWER UP ONLY >	14
Compact Text test fail < POWER UP ONLY >	15
AV switch cannot power on reset < Chassis Initialisation >	16
Cannot initialise jungle (after initial power on checked out OK) - < Chassis initialisation >	17
NVM acknowledge fail after initialisation (STBY +5V same as micro!)	18
Multiple devices with no acknowledge < POWER UP ONLY >	19
Compact text run-time failure after power up check (+9V test)	20
AV SWITCH response failure after power up check (+9V test)	21
JUNGLE / CHROMA controller response failure after power up check (-9V test)	22
Compact text does not respond (-5V test)	23
MSP run-time failure < MAY NOT BE FATAL-DISPLAY ON ERROR READER >	24
M3L bus Clock low time out after data send (run-time failure)	25
M3L bus Clock low time out after data send (at power up check)	26
M3L bus Clock low time out after data send (at initialisation)	27
DSP run-time failure < MAY NOT BE FATAL-DISPLAY ON ERROR READER >	28

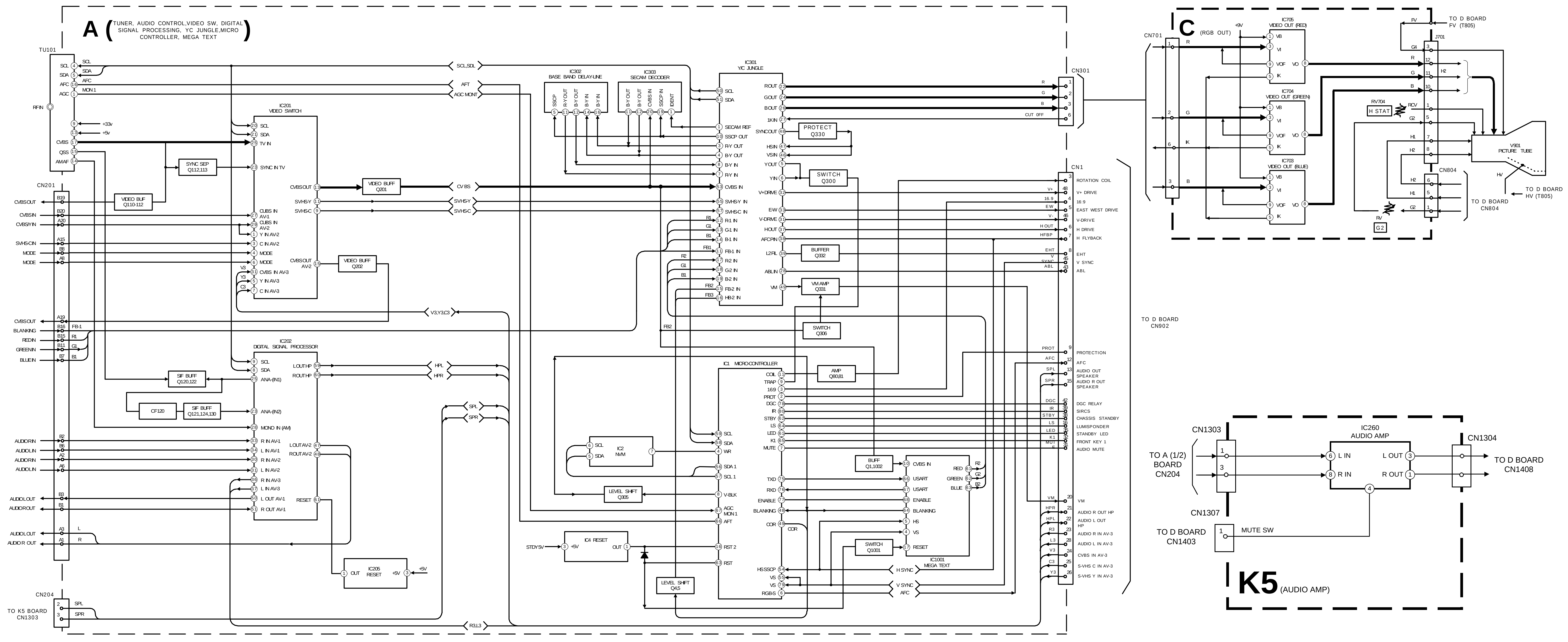
Flash Timing Example : e.g. error number 3



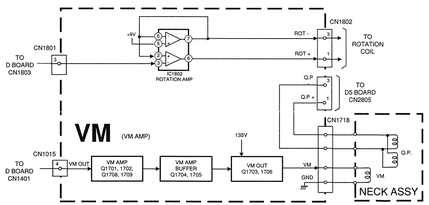
BLOCK DIAGRAM (1)

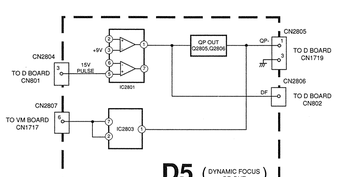


BLOCK DIAGRAM (2)

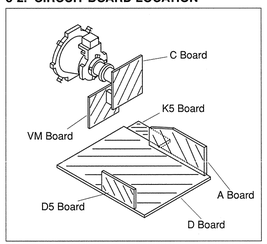


BLOCK DIAGRAM (3)





5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in µF unless otherwise noted.
- pF : µµF 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W

- Chip resistors are 1/10W
- All resistors are in ohms.
  k = 1000 ohms, M = 1000,000 ohms
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital mutimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerances.
- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

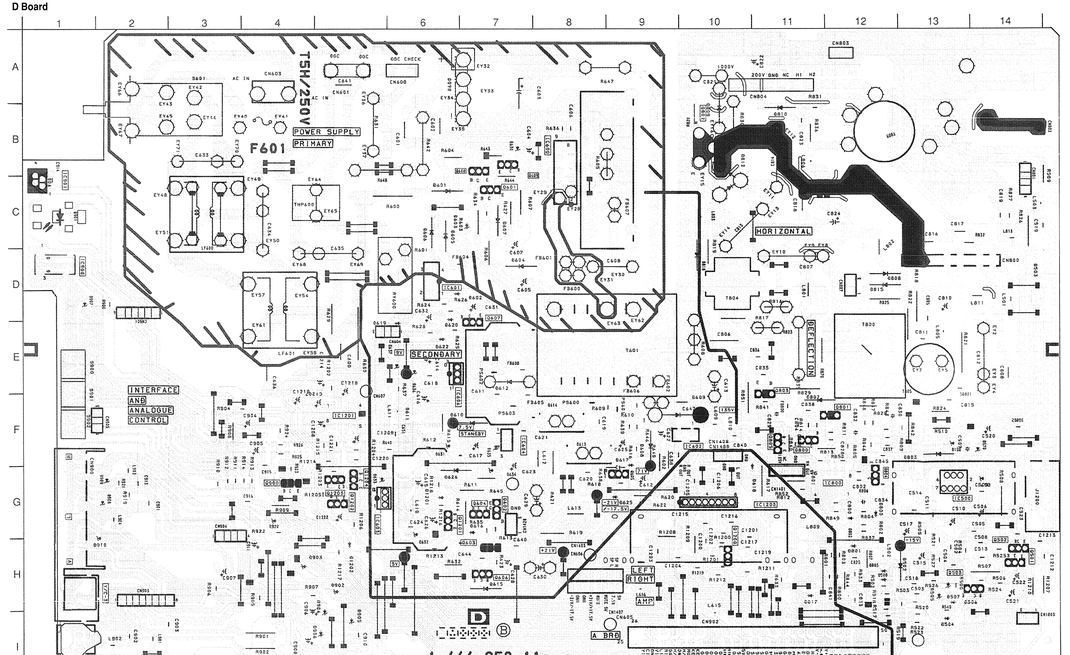
RESISTOR	**RN**	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
	※	: ADJUSTMENT RESISTOR
COIL	**LF-8L**	: MICRO INDUCTOR
CAPACITOR	**TA**	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié. specified.

D [HV OUT, PIN OUT, POWER SUPPLY, SIRCS RECEIVE INDICATOR, AUDIO IN, Y-CHROMA IN, HEADPHONE AMP]

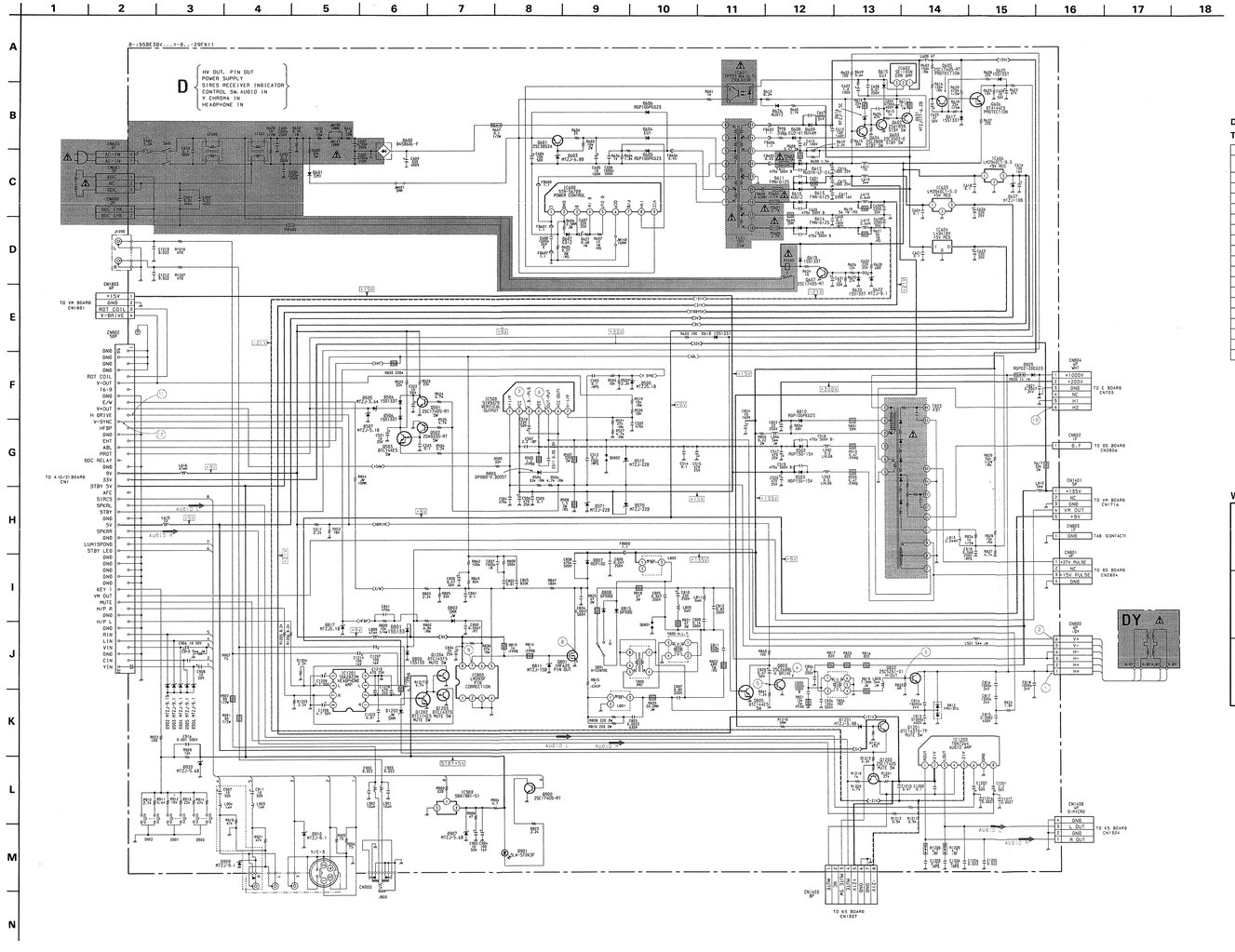
D Board



Note:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

D BOARD

IC		DIODE	
IC500	G - 13	D600	A - 7
IC600	B - 8	D601	C - 6
IC601	D - 6	D603	C - 7
IC602	F - 10	D604	D - 7
IC603	G - 5	D605	C - 6
IC604	F - 7	D606	C - 6
IC606	E - 6	D607	C - 7
IC800	F - 12	D608	F - 9
IC900	D - 1	D609	F - 9
IC1200	G - 10	D610	F - 7
IC1201	F - 5	D611	F - 6
		D612	E - 7
TRANSISTOR		D613	F - 8
Q501	H - 14	D614	F - 8
Q502	H - 14	D615	H - 7
Q503	H - 14	D616	G - 7
Q601	C - 7	D617	F - 9
Q602	G - 7	D618	F - 11
Q603	H - 7	D619	E - 6
Q604	G - 7	D620	E - 6
Q605	F - 9	D622	E - 6
Q606	H - 7	D625	G - 9
Q607	D - 7	D626	G - 6
Q800	F - 12	D631	F - 6
Q801	E - 12	D800	F - 12
Q802	A - 11	D801	G - 12
Q803	E - 11	D802	G - 12
Q805	F - 10	D803	F - 13
Q900	G - 4	D807	E - 12
Q1200	H - 10	D808	E - 14
Q1201	G - 6	D809	A - 14
Q1202	G - 5	D810	A - 13
Q1203	G - 5	D812	B - 11
Q1204	G - 5	D815	E - 14
DIODE		D817	H - 11
D500	H - 12	D901	C - 1
D502	H - 13	D902	I - 5
D503	I - 14	D903	H - 4
D504	H - 11	D904	H - 5
D505	H - 13	D905	I - 5
D506	I - 14	D906	I - 5
D507	H - 13	D1201	G - 6



D BOARD
TRANSISTOR VOLTAGE TABLE

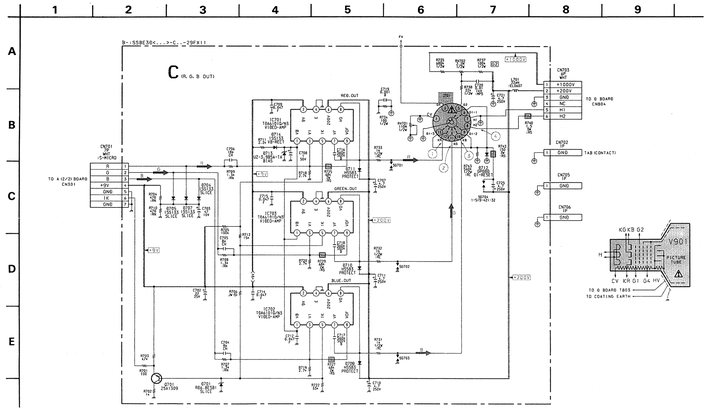
Transistor Voltage Table			
Ref No	(B) Base	(C) Collector	(E) Emitter
Q501	-0.1	0.2	-
Q502	0.1	-5.8	-
Q503	-5.8	-12.0	-12.0
Q602	72.0	7.5	72.7
Q603	0	72.0	-
Q604	0.7	-	-
Q605	0.5	-	0.3
Q606	-	-	12.0
Q607	-	12.0	-
Q800	0.2	3.1	-
Q801	0.3	17.0	-
Q802	-0.2	143.3	-
Q803	-0.6	99.8	-
Q805	-	3.6	-
Q900	-	5.4	-
Q1200	2.9	21.5	4.6
Q1201	3.4	5.0	3.0
Q1202	2.8	-	-

WAVEFORMS D BOARD

① 1.2K Vp-p (H)	② 56.0 Vp-p (V)	③ 13 Vp-p (H)	④ 178 Vp-p (H)
⑤ 2.6 Vp-p (H)	⑥ 56 Vp-p (V)	⑦ 31 Vp-p (V)	⑧ 140 Vp-p (H)
⑨ 1.0 Vp-p (H)	⑩ 28 Vp-p (H)	⑪ 3.0 Vp-p (H)	⑫ 5.5 Vp-p (V)

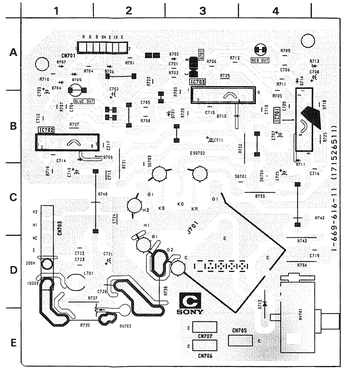
D BOARD
IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC500	1	1.5
	2	15.0
	3	-12.3
	4	-14.0
	5	0.1
	6	15.2
	7	1.4
IC600	1	170.0
	2	-62.4
	3	-62.6
	4	-62.2
	5	-62.0
	6	-62.6
	7	-62.4
	8	-62.0
	9	-58.0
IC601	1	64.3
	2	63.0
	3	-62.5
	4	-58.6
IC602	1	135.0
	2	63.2
	3	-0.1
IC800	3	0.9
	5	1.5
	6	2.0
	7	0.2
	8	9.0
IC1200	2	21.7
	4	21.5
	5	-21.7
IC1201	1	4.0
	2	9.0
	3	4.0
	5	0.5
	6	0.5



C [R, G, B OUT]

C Board



C BOARD
IC

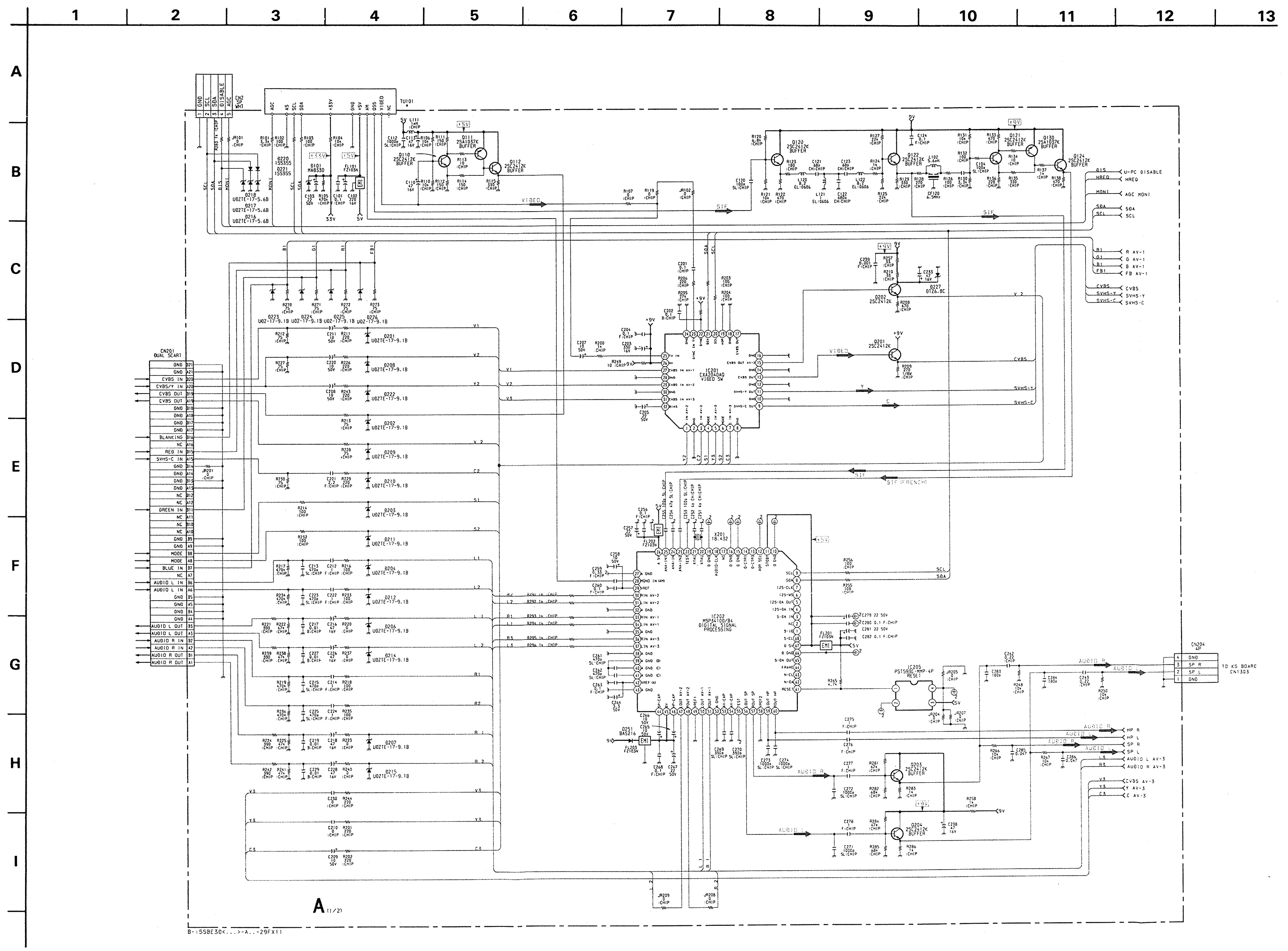
IC701	B - 4
IC702	B - 1
IC703	A - 3
TRANSISTOR	
Q701	A - 3
DIODE	
D701	B - 3
D704	A - 1
D705	A - 1
D707	A - 1
D709	B - 1
D710	B - 3
D711	B - 4
D712	D - 4
D713	A - 4
D714	A - 4

C BOARD
IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC703	1	3.6
	2	11.4
	3	3.6
	5	7.5
	6	195.0
	7	102.0
	8	104.0
	9	101.0
IC704	1	3.6
	2	11.4
	3	3.6
	5	7.5
	6	195.0
	7	103.0
	8	107.0
	9	102.0
IC705	1	3.6
	2	11.4
	3	3.6
	5	6.4
	6	195.0
	7	97.0
	8	100.0
	9	96.8

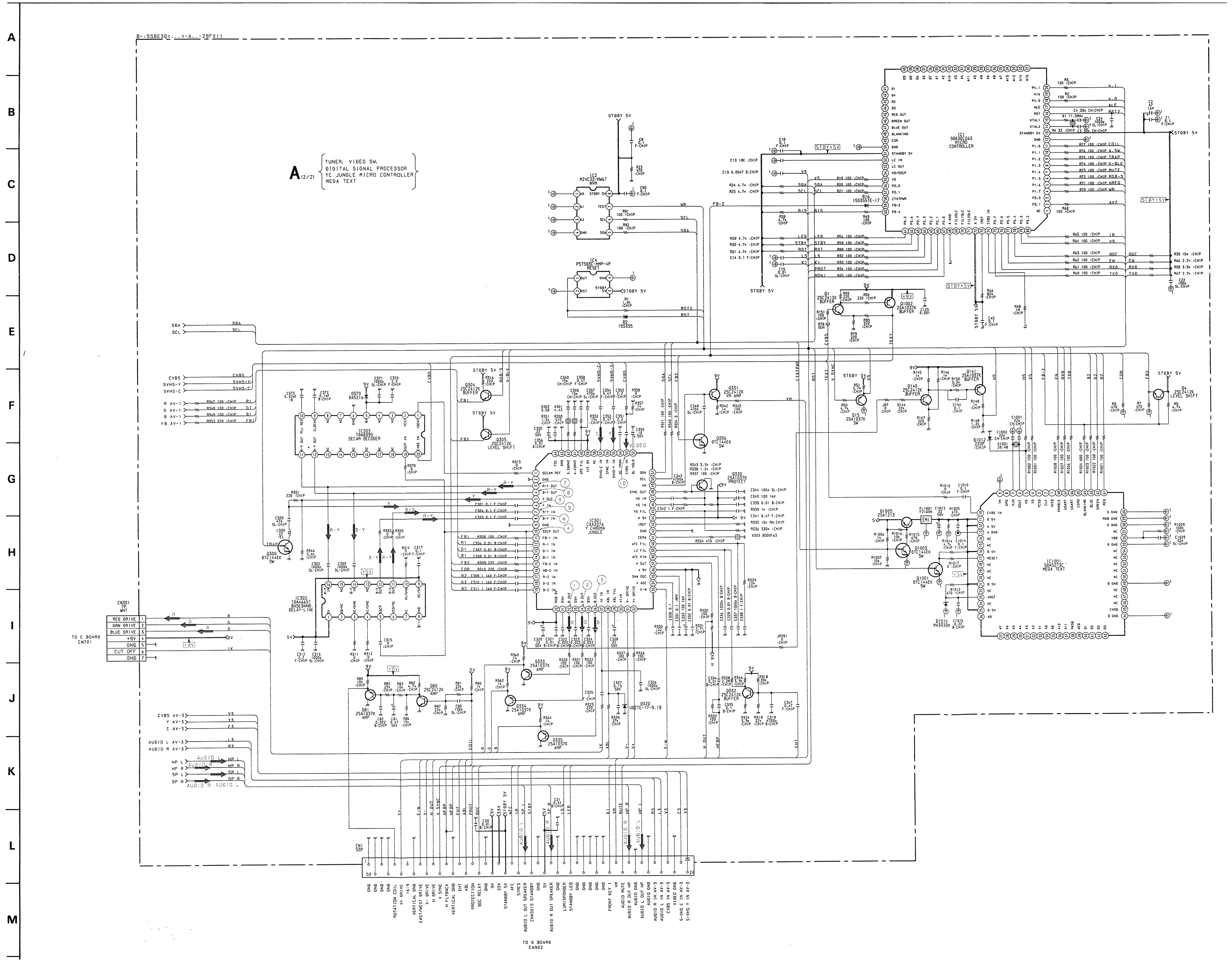
WAVEFORMS C BOARD

① 110 Vp-p (H)	② 108 Vp-p (H)	③ 90 Vp-p (H)	④ 21 Vp-p (H)



A BOARD * MARK

Ref	29FX11A	29FX11B	29FX11D	29FX11E	29FX11K	29FX11R	29FX11U
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (UK)



A (1/2) BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC201	13	4.4
	15	4.4
	20	3.5
	21	2.7
	22	4.9
	23	4.4
	24	0
	25	4.4
	26	8.8
	32	4.4
IC202	4	2.8
	6 - 7	0.1
	8	3.0
	9	3.6
	11	4.7
	13	4.7
	20 - 21	2.4
	23	0.2
	25	1.5
	26	4.8
	28	3.8
	29	2.6
	39 - 42	3.8
	44	7.1
	45	8.0
	46	7.1
	47 - 48	3.8
	53 - 54	3.8

A (1/2) BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	(B) Base	(C) Collector	(E) Emitter
Q110	1.8	8.2	1.2
Q112	1.5	8.8	0.8
Q113	1.8	-	-
Q114	5.4	6.0	-
Q120	84.3	8.8	3.7
Q121	1.5	5.4	0.9
Q122	5.4	8.8	4.7
Q124	-	8.8	-
Q201	4.4	8.8	3.7
Q202	4.4	8.8	3.7

A (2/2) BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	(B) Base	(C) Collector	(E) Emitter
Q1	3.7	4.8	3.1
Q4	0.1	4.8	-
Q15	-	4.3	-
Q80	2.6	2.2	-
Q81	2.4	-	3.0
Q304	-	4.8	-
Q305	-	4.8	-
Q330	4.5	-	5.1
Q331	6.3	8.8	5.7
Q332	3.1	8.8	2.5
Q1001	4.4	-	-

WAVEFORMS A BOARD

① 3.5 Vp-p (H)	② 3.0 Vp-p (H)	③ PAL/SECAM 3.0 Vp-p (H)	③ NTSC 2.3 Vp-p (H)	④ 5.1 Vp-p (H)
⑤ 1.0 Vp-p (H)	⑥ 1.4 Vp-p (H)	⑦ PAL/NTSC 0.6 Vp-p (H)	⑦ SECAM 0.5 Vp-p (H)	⑧ PAL 0.8 Vp-p (H)
⑧ SECAM 1.5 Vp-p (H)	⑧ NTSC 0.9 Vp-p (H)	⑨ PAL/SECAM 0.5 Vp-p (H)	⑨ NTSC 0.4 Vp-p (H)	⑩ 1.0 Vp-p (H)

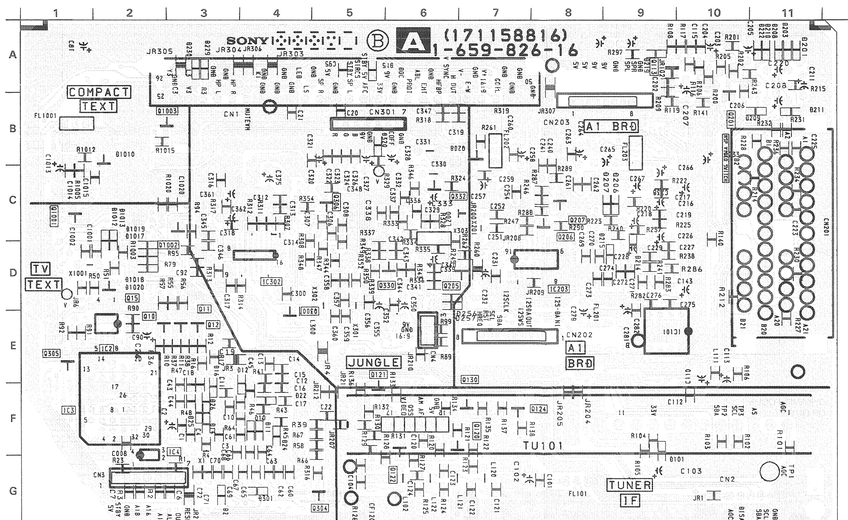
A (2/2) BOARD IC VOLTAGE TABLE

IC Voltage Table

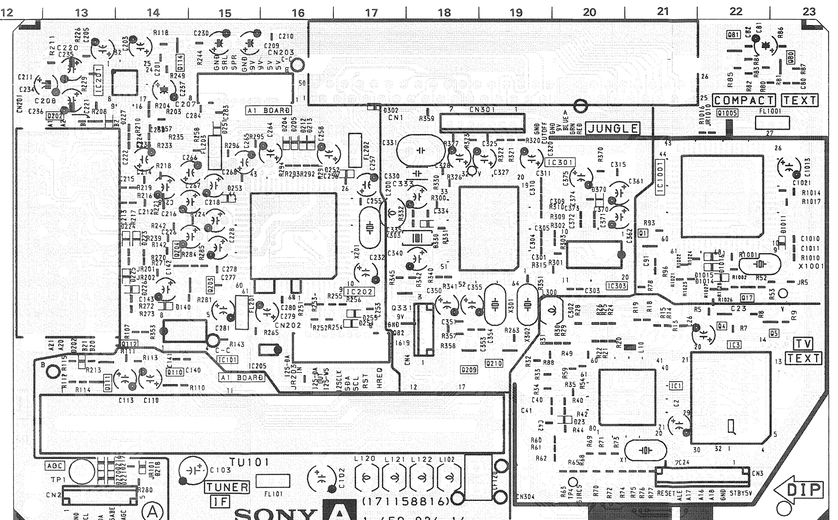
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC1	2	3.6	IC301	6	5.0	IC303	61	50
	3 - 4	4.8		7 - 8	5.4		62	7.6
	5	0.5		10	0.6		1	4.8
	7	4.8		12 - 14	5.4		5	0.7
	9	4.8		16	4.0	IC302	9	4.8
	11	2.4		17 - 19	5.4		11 - 12	3.0
	13	4.8		20	8.8		14	1.3
	14 - 15	2.3		22 - 23	2.2		16	1.3
	16 - 17	4.8		24	2.0		5	8.0
	48	4.0		25	2.4		3.2	10
	51	4.8		26	2.0		11	5.6
	52 - 53	2.4		27	4.0		0	19
	54	0.7		28	6.6		20	3.7
	55	0.2		29	8.8		4	0.2
	56 - 57	4.8		31 - 33	3.0		5	0.7
	58	2.8		34	4.0		4	0.2
	59	3.5		35	4.6		5	0.7
	60	2.4		36	8.8		6	1.7
	62	0.7		37	3.1		7	1.8
	63	4.4		38	3.4		10	0.4
	65	4.8		39	5.3		11 - 12	4.8
	66	2.1		40	4.2		16	4.8
	67	2.0		41	2.3		17	0
	69 - 71	2.3		43	1.7	IC1001	21	4.8
	72	4.8		44	8.8		23	3.0
	73	1.5		45	2.5		25	4.8
	74	1.2		46	3.9		56	0
	75 - 77	4.8		47	3.0		61	1.3
	79	0.2		48	4.4		62 - 63	1.4
	80	4.8		49	6.3		64	0
IC2	5 - 8	4.8		50 - 51	0.1		66	4.6
IC4	1	4.8		53	3.9		67	4.7
	3	4.8		54	5.0		68	4.0
IC301	1	1.5		55 - 56	4.2			
	3 - 4	5.6		58 - 59	8.8			
	5	3.6		60	5.3			

A [TUNER, AUDIO CONTROL, VIDEO SW, DIGITAL SIGNAL PROCESSING / YC JUNGLE, MICRO CONTROLLER, MEGA TEXT]

A Board < Conductor Side >

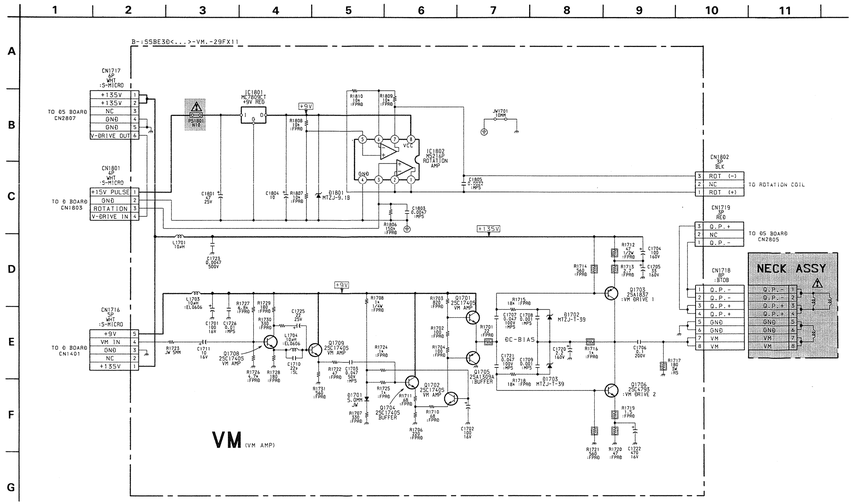


A Board < Component Side >



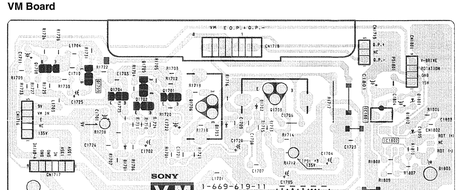
A BOARD

IC		Q1002	C - 3
IC1	F - 21	Q1003	D - 14
IC2	E - 2	**DIODE**	
IC4	G - 2	D2	G - 3
IC201	A - 14	D101	F - 9
IC202	C - 16	D201	A - 11
IC301	C - 19	D202	E - 13
IC302	D - 4	D203	A - 11
IC303	D - 21	D204	B - 16
IC1001	G - 14	D206	C - 9
TRANSISTOR		D207	C - 9
Q1	D - 21	D208	A - 11
Q4	E - 22	D209	B - 11
Q15	D - 2	D210	A - 11
Q80	A - 23	D211	B - 11
Q81	A - 22	D212	B - 16
Q110	F - 14	D214	D - 9
Q111	E - 14	D215	D - 9
Q112	E - 14	D216	G - 14
Q120	F - 7	D217	G - 14
Q121	F - 5	D218	G - 14
Q122	F - 6	D220	G - 14
Q124	F - 7	D221	D - 14
Q130	F - 7	D222	D - 14
Q201	B - 10	D223	D - 14
Q202	B - 13	D224	D - 14
Q203	D - 15	D225	D - 14
Q204	D - 15	D226	D - 14
Q300	E - 4	D227	B - 14
Q304	G - 5	D251	B - 15
Q305	E - 1	D320	C - 5
Q306	C - 5	D370	C - 21
Q330	D - 6	D1010	C - 10
Q331	D - 18		
Q332	C - 6		



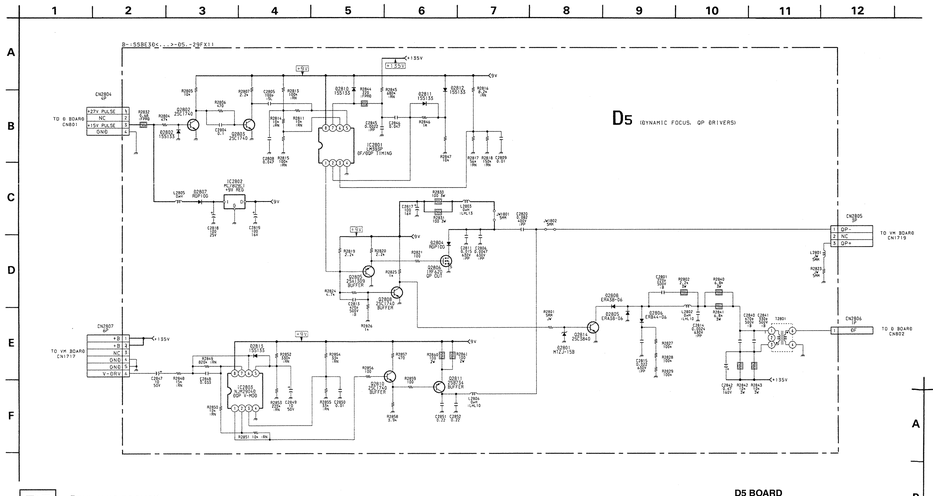
VM [VM AMP]

VM Board



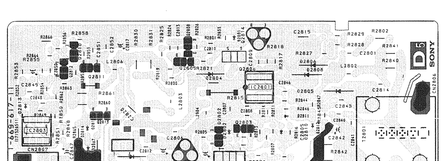
VM BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No.	(B) Base	(C) Collector	(E) Emitter
Q1701	2.5	8.8	1.8
Q1702	2.5	5.5	1.8
Q1703	134.3	71.8	134.8
Q1704	5.5	8.8	4.8
Q1706	1.0	71.8	0.4
Q1707	0.7	-	-
Q1708	2.9	6.6	2.2
Q1709	2.2	8.8	1.5
Q1840	0.6	-	-



D5 [DYNAMIC FOCUS, QP OUT]

D5 Board



D5 BOARD TRANSISTOR VOLTAGE TABLE

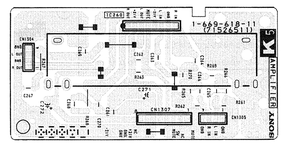
Transistor Voltage Table			
Ref No	(B) Base	(C) Collector	(E) Emitter
Q2802	0.4	0.1	-
Q2803	0.1	7.3	-
Q2805	4.6	-	5.0
Q2808	0.5	0.2	-
Q2810	5.3	8.4	5.0
Q2811	5.0	1.9	5.6
Q2814	0.2	138	-

D5 BOARD IC VOLTAGE TABLE

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC2801	1	4.6
	2	6.2
	3	7.5
	4	-
	5	4.6
	6	4.3
	7	2.5
	8	9.0
IC2803	1	5.3
	2	4.4
	3	4.4
	4	-
	5	3.5
	6	3.5
	7	3.5
	8	9.0

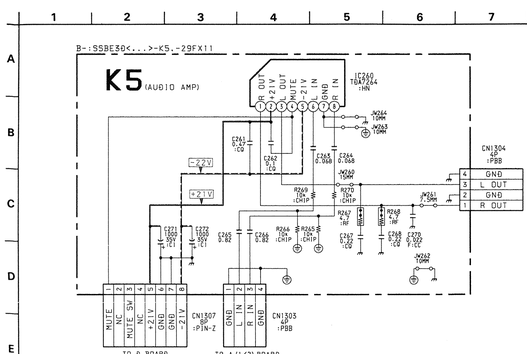
K5 [AUDIO AMP]

K5 Board

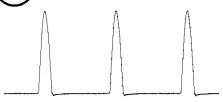
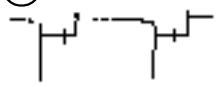
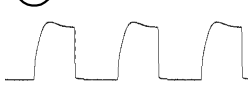
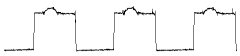
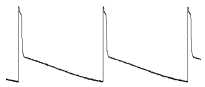
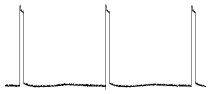
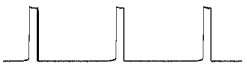
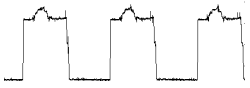
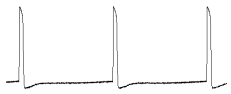


K5 BOARD IC VOLTAGE TABLE

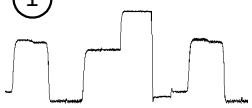
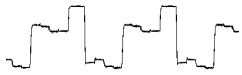
IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC240	1	-
	2	21.7
	3	-
	4	21.7
	5	-21.8
	6	-
	7	-
	8	-



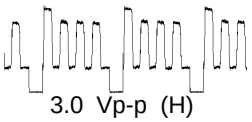
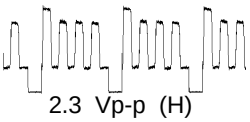
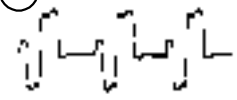
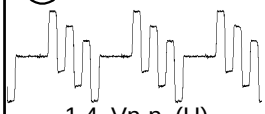
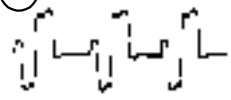
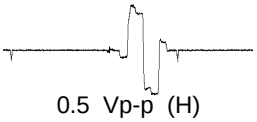
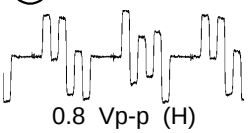
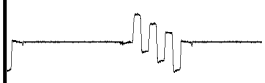
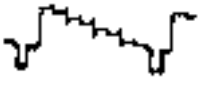
WAVEFORMS D BOARD

①  1.2K Vp-p (H)	②  56.0 Vp-p (V)	③  13 Vp-p (H)	④  178 Vp-p (H)
⑤  2.6 Vp-p (H)	⑥  56 Vp-p (V)	⑦  31 Vp-p (V)	⑧  140 Vp-p (H)
⑨  1.0 Vp-p (H)	⑩  28 Vp-p (H)	⑪  3.0 Vp-p (H)	⑫  5.5 Vp-p (V)

WAVEFORMS C BOARD

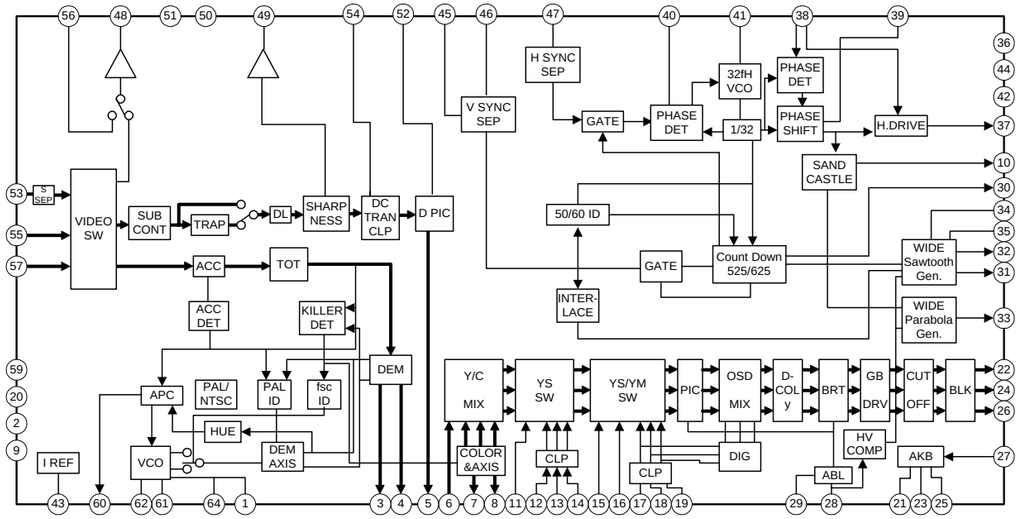
①  110 Vp-p (H)	②  108 Vp-p (H)	③  90 Vp-p (H)	④  21 Vp-p (H)

WAVEFORMS A BOARD

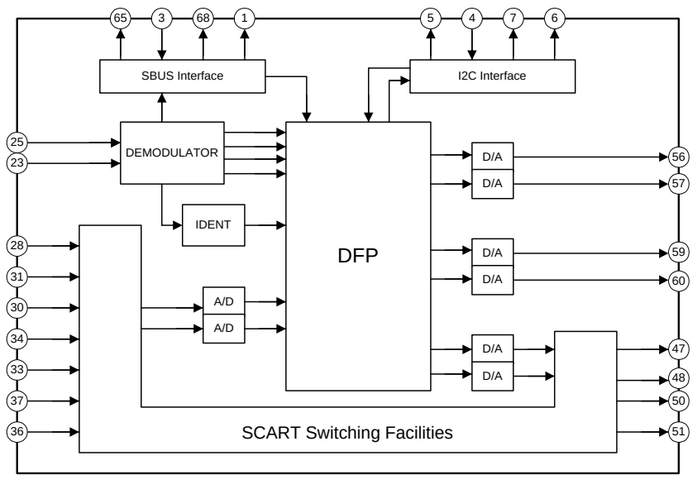
①  3.5 Vp-p (H)	②  3.0 Vp-p (H)	③ PAL/SECAM  3.0 Vp-p (H)	③ NTSC  2.3 Vp-p (H)	④  5.1 Vp-p (H)
⑤  1.0 Vp-p (H)	⑥  1.4 Vp-p (H)	⑦ PAL/NTSC  0.6 Vp-p (H)	⑦ SECAM  0.5 Vp-p (H)	⑧ PAL  0.8 Vp-p (H)
⑧ SECAM  1.5 Vp-p (H)	⑧ NTSC  0.9 Vp-p (H)	⑨ PAL/SECAM  0.5 Vp-p (H)	⑨ NTSC  0.4 Vp-p (H)	⑩  1.0 Vp-p (H)

IC BLOCK DIAGRAMS

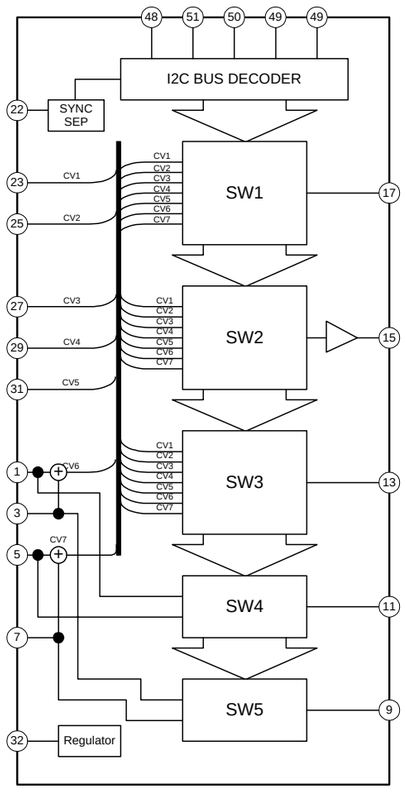
A BOARD IC301 CXA2076Q-TL



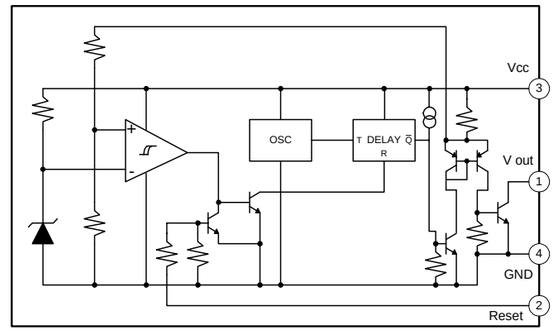
A BOARD IC202 MSP3410D



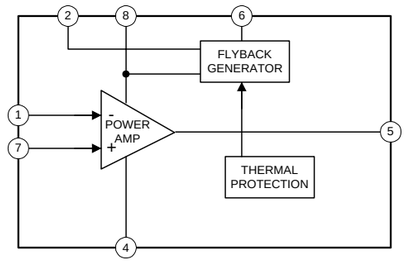
A BOARD IC201 CXA2040AQ



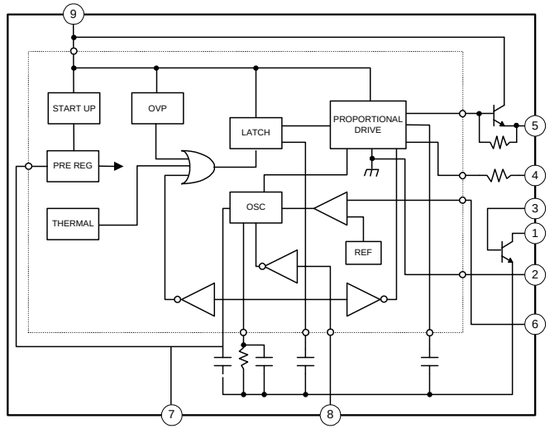
A BOARD IC4 PST593C



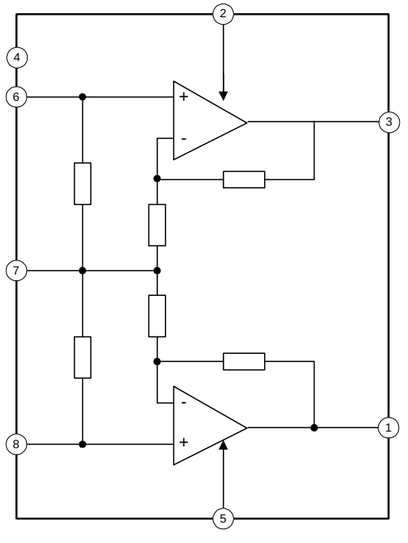
D BOARD IC500 STV9379



D BOARD IC600 STR-S6709

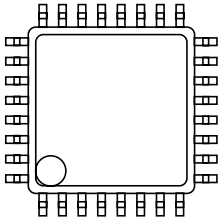


D BOARD IC1200 TDA7264



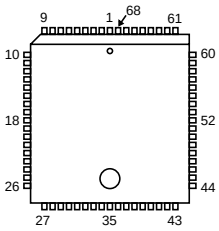
5-4 SEMICONDUCTORS

CXA2040Q-T4



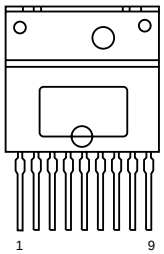
(TOP VIEW)

MSP3410D-PS-B4-T

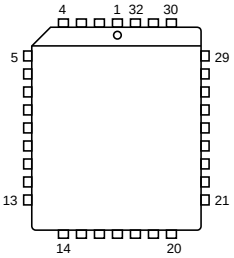


(TOP VIEW)

STR-S6709

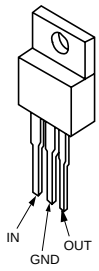


TMS27PC020-15FMBE201

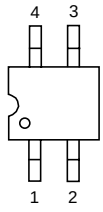


(TOP VIEW)

L4941BV
TEA7605

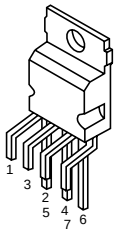


PST593C-MMP-4P

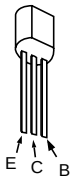


(TOP VIEW)

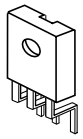
STV9379



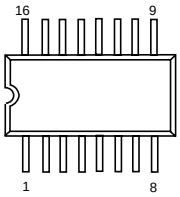
BF421L-AMMO
JA101TP-Q
2SA733-K
2SA933AS
2SA933S
2SA1091-O
2SC3502-E
2SC3601-E
2SC2808STP-R



SBX1981-51

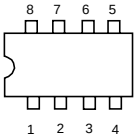


TDA4665T-T



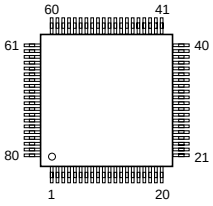
(TOP VIEW)

LM393P
M5216P
TDA2822M
µPC393C



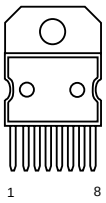
(TOP VIEW)

SDA5273M-CP-GEG

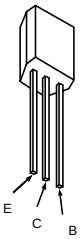


(TOP VIEW)

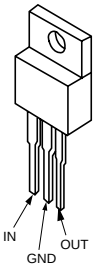
TDA7264



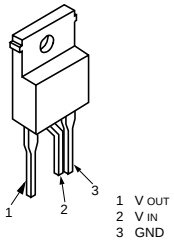
DTA144ES
DTC114ES
DTC143TS
DTC144ES
2SC1740S-RT



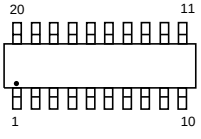
LM2940CT-5.0
LM2940CT
LM2940T-9.0
MCT7809CT
NJM78M09FA
µPC2405HF



SE135N

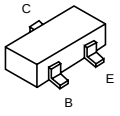


TDA8395T

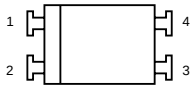


(TOP VIEW)

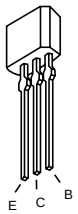
DTC144EK
2SA1037K
2SA1162-G
2SC2412K



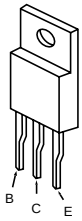
TLP721(D4-)



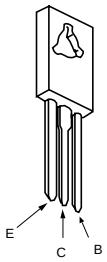
2SC2785-HFE



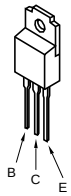
2SA1837



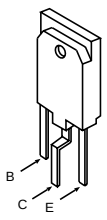
2SC2688-LK



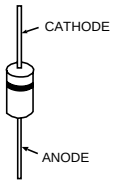
2SC4793



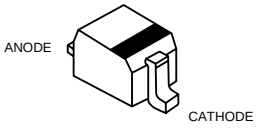
2SC4927-01



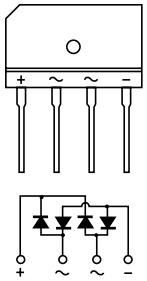
AU-01Z-V1	FML-G12S
EG-1Z-V1	GP08D
EGP20G	HSS83TD
EL1Z	RGP02
EM1-V1	RGP10GPKG23
ERB44-06TP1	RGP15GPKG23
EU-1-V1	RU3YX-V1
EU2A	RU4AM-T3
EU2-V1	RU4DS



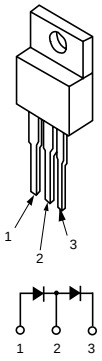
BAS216	MA8330
DTZ6.8C	1SS355
DTZ9.1	UDZ-TE-17-5.6B
DTZ33B	UDZ-TE-17-9.1B



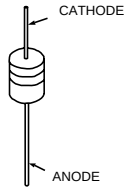
D4SB60L



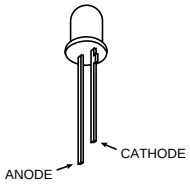
FMS-3FU



ERA38-06TP1	MTZJ-39
MTZJ-3.6A	RD3.9ESB2
MTZJ-3.9B	RD5.1ESB2
MTZJ-5.1B	RD5.6ESB2
MTZJ-5.6B	RD6.2ESB2
MTZJ-6.2BMTZJ-6.8C	RD6.8ESB2
MTJ-7.5C	RD7.5ESB2
MTZJ-9.1	RD10ESB2
MTZJ-T-77-9.1A	RD39ES-B2
MTZJ-10	1SS133T-77



SLA-570KT3F



SECTION 6
EXPLODED VIEWS

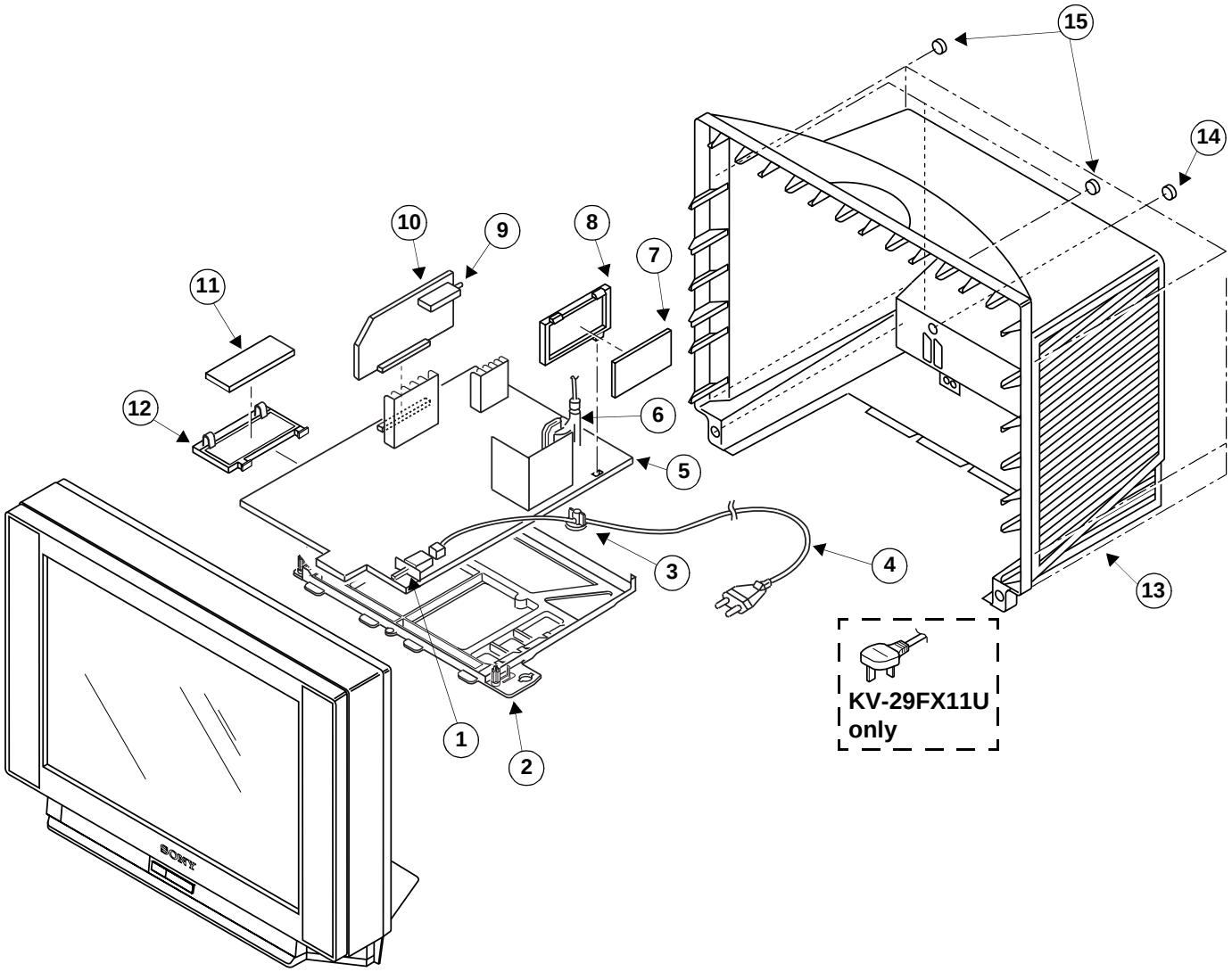
Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

NOTE :

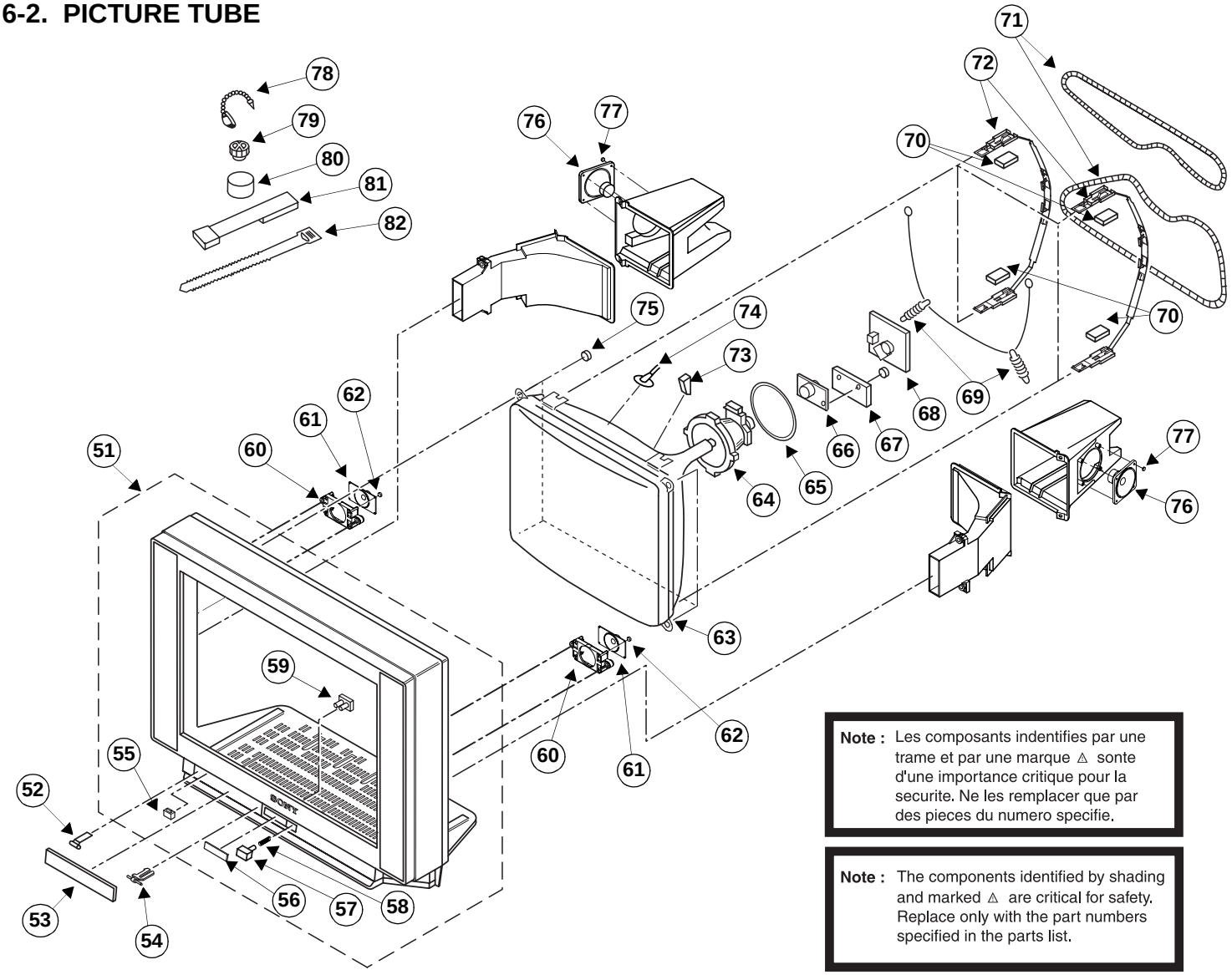
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

6-1. CHASSIS



REF. NO.		PART.NO	DESCRIPTION	REMARK
1	⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
2		*4-203-315-41	BRACKET, MAIN	
3		*4-202-531-01	AC CORD LOCK (SC)	
4	⚠	1-765-286-11	CORD POWER (KV-29FX11A/29FX11B/29FX11D/ KV-29FX11E/29FX11K)	
	⚠	1-574-062-61	CORD POWER (WITH CONNECTOR) (KV-29FX11R)	
	⚠	1-776-204-11	CORD POWER (FILTER) (KV-29FX11U)	
5		*A-1642-232-A	D BOARD, COMPLETE	
6	⚠	1-453-269-11	TRANSFORMER ASSY, FLYBACK (NA-4511/U2B4)	
7		*A-1640-307-A	D5 BOARD, COMPLETE	
8		*4-204-206-01	BRACKET, D5	
9		1-693-338-11	TUNER/VIF (AEP) (KV-29FX11A/29FX11D/29FX11E/29FX11K/ KV-29FX11R)	
		1-693-340-11	TUNER/VIF (FR) (KV-29FX11B)	
		1-693-339-11	TUNER/VIF (UK) (KV-29FX11U)	
10		*A-1632-783-A	A BOARD, COMPLETE (KV-29FX11A)	
		*A-1632-782-A	A BOARD, COMPLETE (KV-29FX11B)	
		*A-1632-769-A	A BOARD, COMPLETE (KV-29FX11D)	
		*A-1632-784-A	A BOARD, COMPLETE (KV-29FX11E)	
		*A-1632-785-A	A BOARD, COMPLETE (KV-29FX11K)	
		*A-1632-786-A	A BOARD, COMPLETE (KV-29FX11R)	
		*A-1632-781-A	A BOARD, COMPLETE (KV-29FX11U)	
11		*A-1649-022-A	K5 BOARD, COMPLETE	
12		*4-204-189-01	BRACKET, K5	
13		4-204-188-01	COVER, REAR	
14		7-685-904-21	SCREW +PTPWH 4X10 TYPE 2	
15		4-039-358-01	SCREW (4X16),(+)BV TAPPING	

6-2. PICTURE TUBE



Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

REF. NO.		PART.NO	DESCRIPTION	REMARK
51		X-4200-386-1	BEZNET ASSY	55-59
52		4-045-250-01	DAMPER	
53		4-204-190-11	DOOR (KV-29FX11A/29FX11D/29FX11R)	
		4-204-190-01	DOOR (KV-29FX11B/29FX11E/29FX11K/29FX11U)	
54		4-202-555-01	SHAFT DOOR	
55		4-042-192-11	CATCHER, PUSH	
56		4-204-195-01	WINDOW ORNAMENTAL	
57		4-204-194-01	BUTTON, POWER	
58		4-202-964-11	SPRING	
59		4-204-196-01	GUIDE LIGHT	
60		4-204-201-01	BRACKET, SPEAKER	
61		1-505-952-11	SPEAKER	
62		4-039-356-01	SCREW (3X12),(+) BV TAPPING	
63	⚠	8-735-041-05	PICTURE TUBE	
64	⚠	8-451-494-21	DEFLECTION YOKE (Y29RSA-M2)	
65		1-452-896-11	COIL, NA ROTATION (RT200)66	

REF. NO.		PART.NO	DESCRIPTION	REMARK
66	⚠	8-453-011-11	NECK ASSY, NA299-M	
67		*A-1644-091-A	VM BOARD, COMPLETE	
68		*A-1638-113-A	C BOARD, COMPLETE	
69		4-200-433-01	SPRING, EXTENSION	
70		4-052-452-01	CUSHION DGC	
71	⚠	1-406-807-11	COIL, DEMAGNETIZATION	
72		4-060-802-01	HOLDER, DGC	
73		3-704-495-01	SPACER, DY	
74	⚠	1-251-528-21	CAP ASSY, HIGH VOLTAGE	
75		4-302-404-03	SCREW (WASHER HEAD)(+P4x16)	
76		1-505-937-11	SPEAKER (10CM)	
77		4-039-358-01	SCREW (4x16),(+)BV TAPPING	
78		4-308-870-00	CLIP, LEAD WIRE	
79		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
80		1-425-032-00	MAGNET,DISK; 10MM Ø	
81		X-4387-214-1	PERMALLOY ASSY, CORRECTION	
80		3-701-007-00	BAND, BINDING	

SECTION 7
ELECTRICAL PARTS LIST

Note : Les composants indentifies par une trame et par une marque ⚠ sonte d'une importance critique pour la securite. Ne les remplacer que par des pieces du numero specifie.

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
-
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- RESISTORS
- All resistors are in ohms.
- F : nonflammable.

When indicating parts by reference number, please include the board name.

CAPACITORS MF : mF, PF : mmF

COILS MMH : mH , uH

A

REF. NO.	PART.NO	DESCRIPTION		REMARK
	*A-1632-783-A	A BOARD, COMPLETE		(KV-29FX11A)
		**********		
	*A-1632-782-A	A BOARD, COMPLETE		(KV-29FX11B)
		**********		
	*A-1632-769-A	A BOARD, COMPLETE		(KV-29FX11D)
		**********		
	*A-1632-784-A	A BOARD, COMPLETE		(KV-29FX11E)
		**********		
	*A-1632-785-A	A BOARD, COMPLETE		(KV-29FX11K)
		**********		
	*A-1632-786-A	A BOARD, COMPLETE		(KV-29FX11R)
		**********		
	*A-1632-781-A	A BOARD, COMPLETE		(KV-29FX11U)
		**********		
	1-750-797-11	SOCKET, PLCC		
		< CAPACITOR >		
C1	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C2	1-126-967-11	ELECT 47MF	20%	16V
C3	1-163-104-00	CERAMIC CHIP 30PF	5%	50V
C4	1-163-104-00	CERAMIC CHIP 30PF	5%	50V
C8	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C14	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C15	1-163-021-91	CERAMIC CHIP 0.01MF	10%	50V
C18	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C19	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C20	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C21	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C22	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C24	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C45	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C80	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C81	1-126-959-11	ELECT 0.47MF	20%	50V
C82	1-163-037-11	CERAMIC CHIP 0.022MF	10%	50V
C90	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C101	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C102	1-126-934-11	ELECT 220MF	20%	16V
C103	1-126-965-11	ELECT 22MF	20%	50V
C104	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C110	1-126-967-11	ELECT 47MF	20%	16V
C112	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C113	1-126-967-11	ELECT 47MF	20%	16V
C120	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C121	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C122	1-163-137-00	CERAMIC CHIP 680PF	5%	50V
C123	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C124	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C125	1-163-141-91	CERAMIC CHIP 1000PF	5%	50V
C144	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C201	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C202	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C203	1-104-661-91	ELECT 330MF	20%	16V
C204	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C205	1-126-965-11	ELECT 22MF	20%	50V
C207	1-126-964-11	ELECT 10MF	20%	50V
C208	1-126-964-11	ELECT 10MF	20%	50V
C209	1-126-964-11	ELECT 10MF	20%	50V
C210	1-216-295-00	SHORT 0		
C211	1-126-964-11	ELECT 10MF	20%	50V
C212	1-164-346-11	CERAMIC CHIP 1MF		16V
C213	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C214	1-164-346-11	CERAMIC CHIP 1MF		16V
C215	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C216	1-126-967-11	ELECT 47MF	20%	16V
C217	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C218	1-126-967-11	ELECT 47MF	20%	16V
C219	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C220	1-126-964-11	ELECT 10MF	20%	50V
C221	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C222	1-164-346-11	CERAMIC CHIP 1MF		16V
C223	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C224	1-164-346-11	CERAMIC CHIP 1MF		16V

A

REF. NO.	PART.NO	DESCRIPTION	REMARK
C225	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C226	1-126-967-11	ELECT 47MF 20% 16V	
C227	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C228	1-126-967-11	ELECT 47MF 20% 16V	
C229	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C230	1-216-295-00	SHORT 0	
C233	1-126-967-11	ELECT 47MF 20% 16V	
C238	1-126-967-11	ELECT 47MF 20% 16V	
C239	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C242	1-164-489-91	CERAMIC CHIP 0.22MF 10% 16V	
C243	1-164-489-91	CERAMIC CHIP 0.22MF 10% 16V	
C251	1-163-087-00	CERAMIC CHIP 4PF 0.25PF 50V	
C252	1-163-087-00	CERAMIC CHIP 4PF 0.25PF 50V	
C253	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C254	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C255	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C256	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C257	1-126-965-11	ELECT 22MF 20% 50V	
C258	1-126-964-11	ELECT 10MF 20% 50V	
C259	1-164-336-11	CERAMIC CHIP 0.33MF 25V	
C260	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C261	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C262	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C263	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C264	1-126-962-11	ELECT 3.3MF 20% 50V	
C265	1-126-964-11	ELECT 10MF 20% 50V	
C266	1-126-964-11	ELECT 10MF 20% 50V	
C267	1-126-965-11	ELECT 22MF 20% 50V	
C268	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C269	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C270	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C271	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C272	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C273	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C274	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C275	1-164-346-11	CERAMIC CHIP 1MF 16V	
C276	1-164-346-11	CERAMIC CHIP 1MF 16V	
C277	1-164-346-11	CERAMIC CHIP 1MF 16V	
C278	1-164-346-11	CERAMIC CHIP 1MF 16V	
C279	1-126-965-11	ELECT 22MF 20% 50V	
C280	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C281	1-126-965-11	ELECT 22MF 20% 50V	
C282	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C283	1-163-123-00	CERAMIC CHIP 180PF 5% 50V	
C284	1-163-123-00	CERAMIC CHIP 180PF 5% 50V	
C285	1-163-035-91	CERAMIC CHIP 4700PF 5% 50V	
C286	1-163-035-91	CERAMIC CHIP 4700PF 5% 50V	
C300	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C301	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C302	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C303	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C304	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C305	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C306	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C307	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C308	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C309	1-164-346-11	CERAMIC CHIP 1MF 16V	
C310	1-164-346-11	CERAMIC CHIP 1MF 16V	
C311	1-164-346-11	CERAMIC CHIP 1MF 16V	
C312	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C313	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C315	1-216-295-00	SHORT 0	
C317	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C319	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C320	1-126-965-11	ELECT 22MF 20% 50V	
C321	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C322	1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V	
C323	1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V	
C324	1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V	
C325	1-164-346-11	CERAMIC CHIP 1MF 16V	
C326	1-163-141-00	CERAMIC CHIP 0.001MF 5% 50V	
C327	1-136-167-91	FILM 0.15MF 5% 50V	
C328	1-126-965-11	ELECT 22MF 20% 50V	
C332	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C333	1-126-933-11	ELECT 100MF 20% 16V	
C334	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C335	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C336	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C337	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C338	1-164-346-11	CERAMIC CHIP 1MF 16V	
C339	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C340	1-126-933-11	ELECT 100MF 20% 16V	
C341	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C342	1-164-346-11	CERAMIC CHIP 1MF 16V	
C343	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C344	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C347	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C348	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C350	1-126-964-11	ELECT 10MF 20% 50V	
C351	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C352	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C353	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C354	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C355	1-126-965-11	ELECT 22MF 20% 50V	

REF. NO.	PART.NO	DESCRIPTION		REMARK
C356	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C357	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C358	1-164-005-11	CERAMIC CHIP 0.47MF		25V
C359	1-163-231-11	CERAMIC CHIP 15PF	5%	50V
C360	1-163-231-11	CERAMIC CHIP 15PF	5%	50V
C370	1-164-505-11	CERAMIC CHIP 2.2MF		16V
C371	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C372	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
C373	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V
C1001	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C1002	1-163-235-11	CERAMIC CHIP 22PF	5%	50V
C1010	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1013	1-126-965-11	ELECT 22MF	20%	50V
C1014	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C1015	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V
C1020	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
		< FILTER >		
CF120	1-409-327-00	TRAP, CERAMIC (6.5MHZ)		
		< CONNECTOR >		
CN1	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P		
CN2	*1-564-508-11	PLUG, CONNECTOR 5P		
CN201	1-766-296-11	CONNECTOR, DUAL SCART		
CN204	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		
CN301	*1-568-882-51	PIN, CONNECTOR 7P		
		< DIODE >		
D2	8-719-988-62	DIODE 1SS355		
D16	8-719-988-62	DIODE 1SS355		
D101	8-719-977-81	DIODE DTZ33B		
D201	8-719-977-22	DIODE DTZ9.1		
D202	8-719-977-22	DIODE DTZ9.1		
D203	8-719-977-22	DIODE DTZ9.1		
D204	8-719-977-22	DIODE DTZ9.1		
D206	8-719-977-22	DIODE DTZ9.1		
D207	8-719-977-22	DIODE DTZ9.1		
D208	8-719-977-22	DIODE DTZ9.1		
D209	8-719-977-22	DIODE DTZ9.1		
D210	8-719-977-22	DIODE DTZ9.1		
D211	8-719-977-22	DIODE DTZ9.1		
D212	8-719-977-22	DIODE DTZ9.1		
D214	8-719-977-22	DIODE DTZ9.1		
D215	8-719-977-22	DIODE DTZ9.1		
D216	8-719-158-15	DIODE RD5.6S-B		
D217	8-719-158-15	DIODE RD5.6S-B		
D218	8-719-158-15	DIODE RD5.6S-B		
D220	8-719-988-62	DIODE 1SS355		
D221	8-719-988-62	DIODE 1SS355		
D222	8-719-977-22	DIODE DTZ9.1		
D223	8-719-977-22	DIODE DTZ9.1		
D224	8-719-977-22	DIODE DTZ9.1		
D225	8-719-977-22	DIODE DTZ9.1		
D226	8-719-977-22	DIODE DTZ9.1		
D227	8-719-977-13	DIODE DTZ6.8C		
D251	8-719-047-16	DIODE BAS216		
D320	8-719-977-22	DIODE DTZ9.1		
D370	8-719-047-16	DIODE BAS216		
D1010	8-719-036-58	DIODE MA3030-H(TX)		
		< ENCAPSULATED FILTER >		
FL101	1-236-071-11	ENCAPSULATED COMPONENT		
FL201	1-236-071-11	ENCAPSULATED COMPONENT		
FL202	1-236-071-11	ENCAPSULATED COMPONENT		
FL203	1-236-071-11	ENCAPSULATED COMPONENT		
FL1001	1-236-071-11	ENCAPSULATED COMPONENT		
		< IC >		
IC1	8-759-376-77	IC SDA30C263-GEG		
IC2	8-759-524-94	IC M24C32-MW6T		
IC4	8-759-394-57	IC PST593C-MMP-4P		
IC201	8-752-081-26	IC CXA2040AQ-T4		
IC202	8-759-491-94	IC MSP3410D-PS-B4-T		
IC205	8-759-394-57	IC PST593C-MMP-4P		
IC301	8-752-081-43	IC CXA2076Q-TL		
IC302	8-759-288-85	IC TDA4665T-T		
IC303	8-759-430-79	IC TDA8395T/N3		
IC1001	8-759-376-76	IC SDA5273CP-GEG		
		< COIL >		
L102	1-410-506-11	INDUCTOR	5.6UH	
L111	1-410-993-11	INDUCTOR CHIP	1UH	
L120	1-408-602-31	INDUCTOR	8.2UH	
L121	1-408-591-11	INDUCTOR	1UH	
L122	1-408-602-31	INDUCTOR	8.2UH	
L300	1-408-607-31	INDUCTOR	22UH	
		< TRANSISTOR >		
Q1	8-729-620-06	TRANSISTOR 2SC3052-EF		
Q4	8-729-620-06	TRANSISTOR 2SC3052-EF		
Q15	8-729-216-22	TRANSISTOR 2SA1162-G		
Q80	8-729-620-06	TRANSISTOR 2SC3052-EF		
Q81	8-729-216-22	TRANSISTOR 2SA1162-G		
Q110	8-729-620-06	TRANSISTOR 2SC3052-EF		

A

REF. NO.	PART.NO	DESCRIPTION	REMARK
Q111	8-729-216-22	TRANSISTOR 2SA1162-G	
Q112	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q120	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q121	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q122	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q124	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q130	8-729-216-22	TRANSISTOR 2SA1162-G	
Q140	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q141	8-729-216-22	TRANSISTOR 2SA1162-G	
Q201	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q202	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q203	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q204	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q300	1-801-806-11	TRANSISTOR DTC144EKA	
Q304	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q305	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q306	1-801-806-11	TRANSISTOR DTC144EKA	
Q330	8-729-216-22	TRANSISTOR 2SA1162-G	
Q331	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q332	8-729-620-06	TRANSISTOR 2SC3052-EF	
Q333	8-729-216-22	TRANSISTOR 2SA1162-G	
Q334	8-729-216-22	TRANSISTOR 2SA1162-G	
Q335	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1001	1-801-806-11	TRANSISTOR DTC144EKA	
Q1002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1003	1-801-806-11	TRANSISTOR DTC144EKA	
Q1005	8-729-101-07	TRANSISTOR 2SB798-DL	
		< RESISTOR >	
JR7	1-216-295-00	SHORT 0	
JR101	1-216-295-00	SHORT 0	
JR102	1-216-295-00	SHORT 0	
JR201	1-216-295-00	SHORT 0	
JR204	1-216-295-00	SHORT 0	
JR205	1-216-295-00	SHORT 0	
JR207	1-216-295-00	SHORT 0	
JR208	1-216-295-00	SHORT 0	
JR209	1-216-295-00	SHORT 0	
JR391	1-216-295-00	SHORT 0	
R1	1-216-049-00	RES,CHIP 1K 5% 1/10W	
R2	1-216-025-00	RES,CHIP 100 5% 1/10W	
R3	1-216-025-00	RES,CHIP 100 5% 1/10W	
R4	1-216-013-00	RES,CHIP 33 5% 1/10W	
R5	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R7	1-216-041-00	RES,CHIP 470 5% 1/10W	
R9	1-216-041-00	RES,CHIP 470 5% 1/10W	
R19	1-216-025-00	RES,CHIP 100 5% 1/10W	

REF. NO.	PART.NO	DESCRIPTION	REMARK
R20	1-216-025-00	RES,CHIP 100 5% 1/10W	
R21	1-216-025-00	RES,CHIP 100 5% 1/10W	
R23	1-216-041-00	RES,CHIP 470 5% 1/10W	
R24	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R25	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R28	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R29	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R30	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R31	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R32	1-216-025-00	RES,CHIP 100 5% 1/10W	
R33	1-216-025-00	RES,CHIP 100 5% 1/10W	
R34	1-216-025-00	RES,CHIP 100 5% 1/10W	
R35	1-216-025-00	RES,CHIP 100 5% 1/10W	
R39	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R46	1-216-095-00	RES,CHIP 82K 5% 1/10W	
R48	1-216-121-91	RES,CHIP 1M 5% 1/10W	
R49	1-216-025-00	RES,CHIP 100 5% 1/10W	
R50	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R51	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
R54	1-216-025-00	RES,CHIP 100 5% 1/10W	
R59	1-216-025-00	RES,CHIP 100 5% 1/10W	
R60	1-216-025-00	RES,CHIP 100 5% 1/10W	
R61	1-216-025-00	RES,CHIP 100 5% 1/10W	
R62	1-216-025-00	RES,CHIP 100 5% 1/10W	
R63	1-216-025-00	RES,CHIP 100 5% 1/10W	
R64	1-216-025-00	RES,CHIP 100 5% 1/10W	
R65	1-216-025-00	RES,CHIP 100 5% 1/10W	
R66	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R67	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
R68	1-216-025-00	RES,CHIP 100 5% 1/10W	
R70	1-216-025-00	RES,CHIP 100 5% 1/10W	
R71	1-216-025-00	RES,CHIP 100 5% 1/10W	
R72	1-216-025-00	RES,CHIP 100 5% 1/10W	
R73	1-216-025-00	RES,CHIP 100 5% 1/10W	
R74	1-216-025-00	RES,CHIP 100 5% 1/10W	
R75	1-216-025-00	RES,CHIP 100 5% 1/10W	
R76	1-216-025-00	RES,CHIP 100 5% 1/10W	
R77	1-216-025-00	RES,CHIP 100 5% 1/10W	
R78	1-414-233-21	INDUCTOR CHIP 0UH	
R79	1-216-033-00	RES,CHIP 220 5% 1/10W	
R80	1-216-049-00	RES,CHIP 1K 5% 1/10W	
R81	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R82	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
R83	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R84	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R85	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R86	1-216-077-00	RES,CHIP 15K 5% 1/10W	

A

REF. NO.	PART.NO	DESCRIPTION			REMARK
R87	1-216-081-00	RES,CHIP	22K	5%	1/10W
R88	1-216-025-00	RES,CHIP	100	5%	1/10W
R91	1-216-025-00	RES,CHIP	100	5%	1/10W
R92	1-216-025-00	RES,CHIP	100	5%	1/10W
R93	1-216-033-00	RES,CHIP	220	5%	1/10W
R94	1-216-033-00	RES,CHIP	220	5%	1/10W
R95	1-216-033-00	RES,CHIP	220	5%	1/10W
R101	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R102	1-216-025-00	RES,CHIP	100	5%	1/10W
R103	1-216-025-00	RES,CHIP	100	5%	1/10W
R104	1-216-073-00	RES,CHIP	10K	5%	1/10W
R105	1-216-113-00	RES,CHIP	470K	5%	1/10W
R106	1-216-073-00	RES,CHIP	10K	5%	1/10W
R107	1-216-295-00	SHORT	0		
R110	1-216-073-00	RES,CHIP	10K	5%	1/10W
R111	1-216-029-00	RES,CHIP	150	5%	1/10W
R112	1-216-029-00	RES,CHIP	150	5%	1/10W
R113	1-216-001-00	RES,CHIP	10	5%	1/10W
R114	1-216-029-00	RES,CHIP	150	5%	1/10W
R115	1-216-037-00	RES,CHIP	330	5%	1/10W
R119	1-216-295-00	SHORT	0		
R120	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R121	1-216-073-00	RES,CHIP	10K	5%	1/10W
R122	1-216-041-00	RES,CHIP	470	5%	1/10W
R123	1-216-031-00	RES,CHIP	180	5%	1/10W
R124	1-216-049-00	RES,CHIP	1K	5%	1/10W
R125	1-216-081-00	RES,CHIP	22K	5%	1/10W
R126	1-216-025-00	RES,CHIP	100	5%	1/10W
R127	1-216-081-00	RES,CHIP	22K	5%	1/10W
R128	1-216-035-00	RES,CHIP	270	5%	1/10W
R129	1-216-037-00	RES,CHIP	330	5%	1/10W
R130	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R131	1-216-073-00	RES,CHIP	10K	5%	1/10W
R132	1-216-025-00	RES,CHIP	100	5%	1/10W
R133	1-216-041-00	RES,CHIP	470	5%	1/10W
R134	1-216-001-00	RES,CHIP	10	5%	1/10W
R135	1-216-037-00	RES,CHIP	330	5%	1/10W
R136	1-216-033-00	RES,CHIP	220	5%	1/10W
R137	1-216-049-00	RES,CHIP	1K	5%	1/10W
R138	1-216-041-00	RES,CHIP	470	5%	1/10W
R144	1-216-081-00	RES,CHIP	22K	5%	1/10W
R145	1-216-049-00	RES,CHIP	1K	5%	1/10W
R146	1-216-049-00	RES,CHIP	1K	5%	1/10W
R147	1-216-033-00	RES,CHIP	220	5%	1/10W
R148	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R149	1-216-049-00	RES,CHIP	1K	5%	1/10W
R150	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R151	1-216-025-71	RES,CHIP	100	5%	1/10W
R200	1-216-049-00	RES,CHIP	1K	5%	1/10W
R201	1-216-033-00	RES,CHIP	220	5%	1/10W
R202	1-216-033-00	RES,CHIP	220	5%	1/10W
R203	1-216-025-00	RES,CHIP	100	5%	1/10W
R204	1-216-025-00	RES,CHIP	100	5%	1/10W
R205	1-216-083-91	RES,CHIP	27K	5%	1/10W
R206	1-216-033-00	RES,CHIP	220	5%	1/10W
R208	1-216-041-00	RES,CHIP	470	5%	1/10W
R209	1-216-035-00	RES,CHIP	270	5%	1/10W
R210	1-216-013-00	RES,CHIP	33	5%	1/10W
R211	1-216-033-00	RES,CHIP	220	5%	1/10W
R212	1-216-022-00	RES,CHIP	75	5%	1/10W
R213	1-216-022-00	RES,CHIP	75	5%	1/10W
R214	1-216-025-00	RES,CHIP	100	5%	1/10W
R216	1-216-025-00	RES,CHIP	100	5%	1/10W
R217	1-216-113-00	RES,CHIP	470K	5%	1/10W
R218	1-216-025-00	RES,CHIP	100	5%	1/10W
R219	1-216-113-00	RES,CHIP	470K	5%	1/10W
R220	1-216-295-00	SHORT	0		
R221	1-216-039-00	RES,CHIP	390	5%	1/10W
R222	1-216-089-00	RES,CHIP	47K	5%	1/10W
R223	1-216-295-00	SHORT	0		
R224	1-216-039-00	RES,CHIP	390	5%	1/10W
R225	1-216-089-00	RES,CHIP	47K	5%	1/10W
R226	1-216-033-00	RES,CHIP	220	5%	1/10W
R227	1-216-022-00	RES,CHIP	75	5%	1/10W
R228	1-216-022-00	RES,CHIP	75	5%	1/10W
R229	1-216-033-00	RES,CHIP	220	5%	1/10W
R230	1-216-022-00	RES,CHIP	75	5%	1/10W
R232	1-216-025-00	RES,CHIP	100	5%	1/10W
R233	1-216-025-00	RES,CHIP	100	5%	1/10W
R234	1-216-113-00	RES,CHIP	470K	5%	1/10W
R235	1-216-025-00	RES,CHIP	100	5%	1/10W
R236	1-216-113-00	RES,CHIP	470K	5%	1/10W
R237	1-216-295-00	SHORT	0		
R238	1-216-089-00	RES,CHIP	47K	5%	1/10W
R239	1-216-039-00	RES,CHIP	390	5%	1/10W
R240	1-216-295-00	SHORT	0		
R241	1-216-089-00	RES,CHIP	47K	5%	1/10W
R242	1-216-039-00	RES,CHIP	390	5%	1/10W
R243	1-216-033-00	RES,CHIP	220	5%	1/10W
R244	1-216-033-00	RES,CHIP	220	5%	1/10W
R248	1-216-073-71	RES,CHIP	10K	5%	1/10W
R249	1-216-001-00	RES,CHIP	10	5%	1/10W
R250	1-216-073-71	RES,CHIP	10K	5%	1/10W
R255	1-216-025-00	RES,CHIP	100	5%	1/10W

A

REF. NO.	PART.NO	DESCRIPTION			REMARK
R256	1-216-025-00	RES,CHIP	100	5%	1/10W
R257	1-216-013-00	RES,CHIP	33	5%	1/10W
R258	1-216-049-00	RES,CHIP	1K	5%	1/10W
R265	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R266	1-216-073-71	RES,CHIP	10K	5%	1/10W
R267	1-216-073-71	RES,CHIP	10K	5%	1/10W
R270	1-216-022-00	RES,CHIP	75	5%	1/10W
R271	1-216-022-00	RES,CHIP	75	5%	1/10W
R272	1-216-022-00	RES,CHIP	75	5%	1/10W
R273	1-216-022-00	RES,CHIP	75	5%	1/10W
R280	1-216-049-00	RES,CHIP	1K	5%	1/10W
R281	1-216-089-00	RES,CHIP	47K	5%	1/10W
R282	1-216-093-00	RES,CHIP	68K	5%	1/10W
R283	1-216-049-00	RES,CHIP	1K	5%	1/10W
R284	1-216-089-00	RES,CHIP	47K	5%	1/10W
R285	1-216-093-00	RES,CHIP	68K	5%	1/10W
R286	1-216-049-00	RES,CHIP	1K	5%	1/10W
R291	1-216-049-71	RES,CHIP	1K	5%	1/10W
R292	1-216-049-71	RES,CHIP	1K	5%	1/10W
R293	1-216-049-71	RES,CHIP	1K	5%	1/10W
R294	1-216-049-71	RES,CHIP	1K	5%	1/10W
R295	1-216-049-71	RES,CHIP	1K	5%	1/10W
R296	1-216-049-71	RES,CHIP	1K	5%	1/10W
R300	1-216-025-00	RES,CHIP	100	5%	1/10W
R301	1-216-033-00	RES,CHIP	220	5%	1/10W
R302	1-216-295-00	SHORT	0		
R303	1-216-295-00	SHORT	0		
R308	1-216-025-00	RES,CHIP	100	5%	1/10W
R309	1-216-033-00	RES,CHIP	220	5%	1/10W
R310	1-216-033-00	RES,CHIP	220	5%	1/10W
R311	1-216-295-00	SHORT	0		
R312	1-216-295-00	SHORT	0		
R314	1-216-295-00	SHORT	0		
R315	1-216-295-00	SHORT	0		
R316	1-216-033-00	RES,CHIP	220	5%	1/10W
R318	1-216-689-11	RES,CHIP	39K	5%	1/10W
R319	1-216-081-00	RES,CHIP	22K	5%	1/10W
R320	1-216-025-00	RES,CHIP	100	5%	1/10W
R321	1-216-025-00	RES,CHIP	100	5%	1/10W
R322	1-216-025-00	RES,CHIP	100	5%	1/10W
R323	1-216-033-00	RES,CHIP	220	5%	1/10W
R324	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R326	1-216-025-00	RES,CHIP	100	5%	1/10W
R327	1-216-025-00	RES,CHIP	100	5%	1/10W
R328	1-216-129-00	RES,CHIP	2.2M	5%	1/10W
R329	1-216-083-00	RES,CHIP	27K	5%	1/10W
R330	1-216-025-00	RES,CHIP	100	5%	1/10W
R331	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R332	1-216-025-00	RES,CHIP	100	5%	1/10W
R333	1-216-075-00	RES,CHIP	12K	5%	1/10W
R334	1-216-041-00	RES,CHIP	470	5%	1/10W
R335	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R336	1-216-109-00	RES,CHIP	330K	5%	1/10W
R337	1-216-025-00	RES,CHIP	100	5%	1/10W
R338	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R339	1-216-049-00	RES,CHIP	1K	5%	1/10W
R340	1-216-025-00	RES,CHIP	100	5%	1/10W
R341	1-216-025-00	RES,CHIP	100	5%	1/10W
R342	1-216-049-00	RES,CHIP	1K	5%	1/10W
R343	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R344	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R345	1-216-025-00	RES,CHIP	100	5%	1/10W
R346	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R347	1-216-025-00	RES,CHIP	100	5%	1/10W
R348	1-216-025-00	RES,CHIP	100	5%	1/10W
R349	1-216-025-00	RES,CHIP	100	5%	1/10W
R350	1-216-042-00	RES,CHIP	510	5%	1/10W
R351	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R352	1-216-077-00	RES,CHIP	15K	5%	1/10W
R353	1-216-033-00	RES,CHIP	220	5%	1/10W
R354	1-216-295-00	SHORT	0		
R357	1-216-049-00	RES,CHIP	1K	5%	1/10W
R358	1-216-295-00	SHORT	0		
R360	1-216-049-00	RES,CHIP	1K	5%	1/10W
R362	1-216-049-00	RES,CHIP	1K	5%	1/10W
R364	1-216-049-00	RES,CHIP	1K	5%	1/10W
R370	1-216-295-00	SHORT	0		
R1001	1-216-025-00	RES,CHIP	100	5%	1/10W
R1002	1-216-025-00	RES,CHIP	100	5%	1/10W
R1005	1-216-041-00	RES,CHIP	470	5%	1/10W
R1006	1-216-049-00	RES,CHIP	1K	5%	1/10W
R1007	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1010	1-216-295-00	SHORT	0		
R1012	1-216-041-00	RES,CHIP	470	5%	1/10W
R1014	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R1015	1-216-041-00	RES,CHIP	470	5%	1/10W
R1016	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1017	1-216-295-00	SHORT	0		
R1020	1-216-097-00	RES,CHIP	100K	5%	1/10W
R1021	1-216-029-00	RES,CHIP	150	5%	1/10W
R1022	1-216-029-00	RES,CHIP	150	5%	1/10W
R1023	1-216-029-00	RES,CHIP	150	5%	1/10W
R1024	1-216-045-00	RES,CHIP	680	5%	1/10W
R1026	1-216-025-00	RES,CHIP	100	5%	1/10W

A **IF** (KV-29FX11A/29FX11D/29FX11E/ 29FX11K/29FX11R/29FX11U)

REF. NO.	PART.NO	DESCRIPTION	REMARK
R1027	1-216-025-00	RES,CHIP 100 5% 1/10W	
R1028	1-216-025-00	RES,CHIP 100 5% 1/10W	
		< TUNER >	
TU101	1-693-338-11	TUNER/VIF (AEP)	(KV-29FX11A/29FX11D/29FX11E/ KV-29FX11K/29FX11R)
	1-693-340-11	TUNER/VIF (FR)	(KV-29FX11B)
	1-693-339-11	TUNER/VIF (UK)	(KV-29FX11U)
		< CRYSTAL >	
X1	1-767-154-21	VIBRATOR, CERAMIC	
X201	1-760-628-11	VIBRATOR, CRYSTAL	
X301	1-567-504-11	OSCILLATOR, CRYSTAL	
X302	1-567-505-11	OSCILLATOR, CRYSTAL	
X303	1-767-127-11	VIBRATOR, CERAMIC	
X1001	1-579-965-21	VIBRATOR, CRYSTAL	
**********			
	A-1652-037-A	IF BOARD, COMPLETE **********	(KV-29FX11A/29FX11D/ KV-29FX11E/29FX11K/ KV-29FX11R)
	A-1652-038-A	IF BOARD, COMPLETE **********	(KV-29FX11U)
		< CAPACITOR >	
C01	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C02	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C03	1-104-957-11	ELECT 47MF 20% 16V	
C04	1-135-259-11	TANTAL. CHIP 10MF 20% 6.3V	
C05	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C06	1-164-005-11	CERAMIC CHIP 0.47MF 16V	
C08	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C09	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C10	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C11	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C15	1-124-282-00	ELECT 22MF 20% 25V	
C16	1-162-638-11	CERAMIC CHIP 1MF 16V	
C18	1-164-337-11	CERAMIC CHIP 2.2MF 16V	
C19	1-124-937-11	ELECT 10MF 20% 16V	
		< FILTER >	
CF01	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	(KV-29FX11A/29FX11D/29FX11E/ KV-29FX11K/29FX11R)
	1-409-333-21	TRAP, CERAMIC (6.0MHZ)	(KV-29FX11U)
SWF04	1-767-084-11	FILTER, SURFACE WAVE	

REF. NO.	PART.NO	DESCRIPTION	REMARK
		< IC >	
IC01	8-759-385-26	IC TDA4472-CFLG3	
		< COIL >	
L02	1-408-408-00	INDUCTOR 8.2UH	
L04	1-408-419-00	INDUCTOR 68UH	
L08	1-410-992-11	INDUCTOR CHIP 0.82UH	
		< VARIABLE COIL >	
LV01	1-411-874-11	COIL	
		< TRANSISTOR >	
Q01	8-729-216-22	TRANSISTOR 2SA1162-G	
		< RESISTOR >	
JR01	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR02	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR03	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR04	1-216-296-91	METAL GLAZE 0 5% 1/8W	
JR05	1-216-295-00	METAL GLAZE 0 5% 1/10W	
JR07	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R01	1-216-029-00	METAL GLAZE 150 5% 1/10W	
R02	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R03	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R04	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R05	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R06	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R07	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R08	1-216-174-00	METAL GLAZE 100 5% 1/8W	
R09	1-216-045-00	METAL GLAZE 680 5% 1/10W	(KV-29FX11A/29FX11D/29FX11E/ KV-29FX11K/29FX11R)
	1-216-049-91	METAL GLAZE 1K 5% 1/10W	(KV-29FX11U)
R10	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R11	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R23	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R24	1-216-295-91	METAL GLAZE 0 5% 1/10W	
R25	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R021	1-216-174-00	METAL GLAZE 100 5% 1/8W	
		< VARIABLE RESISTOR >	
RV01	1-226-703-11	RES, ADJ, METAL GLAZE 10K	

IF (KV-29FX11B)

REF. NO.	PART.NO	DESCRIPTION			REMARK
	A-1652-036-A	IF BOARD, COMPLETE (KV-29FX11B)			
		**********			
		< CAPACITOR >			
C01	1-162-638-11	CERAMIC CHIP 1MF			16V
C02	1-164-337-11	CERAMIC CHIP 2.2MF			16V
C03	1-104-957-11	ELECT 47MF		20%	16V
C04	1-135-259-11	TANTAL. CHIP 10MF		20%	6.3V
C05	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V
C06	1-164-005-11	CERAMIC CHIP 0.47MF			16V
C08	1-164-232-11	CERAMIC CHIP 0.01MF		10%	50V
C09	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V
C10	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V
C11	1-164-004-11	CERAMIC CHIP 0.1MF		10%	25V
C12	1-164-232-11	CERAMIC CHIP 0.01MF		10%	50V
C13	1-164-232-11	CERAMIC CHIP 0.01MF		10%	50V
C14	1-164-232-11	CERAMIC CHIP 0.01MF		10%	50V
C15	1-104-957-11	ELECT 47MF		20%	16V
C16	1-162-638-11	CERAMIC CHIP 1MF			16V
C17	1-163-243-11	CERAMIC CHIP 47PF		5%	50V
C18	1-164-337-11	CERAMIC CHIP 2.2MF			16V
C20	1-124-937-11	ELECT 10MF		20%	16V
C21	1-164-506-11	CERAMIC CHIP 4.7MF			16V
		< FILTER >			
CF01	1-409-430-11	TRAP, CERAMIC			
SWF01	1-579-273-11	FILTER, SURFACE WAVE			
SWF02	1-760-329-11	FILTER, SURFACE WAVE			
SWF03	1-767-083-11	FILTER, SURFACE WAVE			
		< TRIMMER >			
CT01	1-760-662-11	TRAP, CERAMIC			
		< IC >			
IC01	8-759-069-36	IC MC74HC4046AF			
		< COIL >			
L02	1-408-406-00	INDUCTOR 5.6UH			
L04	1-408-419-00	INDUCTOR 68UH			
L05	1-410-987-11	INDUCTOR CHIP 0.33UH			
L06	1-408-399-00	INDUCTOR 1.5UH			
		< VARIABLE COIL >			
LV01	1-411-874-11	COIL			

REF. NO.	PART.NO	DESCRIPTION			REMARK
		< TRANSISTOR >			
Q01	8-729-216-22	TRANSISTOR 2SA1162-G			
Q02	8-729-035-11	TRANSISTOR BF799-GEG			
Q03	8-729-035-11	TRANSISTOR BF799-GEG			
Q04	8-729-901-01	TRANSISTOR DTC144EK			
		< RESISTOR >			
JR01	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR02	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR03	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR04	1-216-296-91	METAL GLAZE	0	5%	1/8W
JR05	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR07	1-216-295-00	METAL GLAZE	0	5%	1/10W
R01	1-216-029-00	METAL GLAZE	150	5%	1/10W
R02	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R03	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R04	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R05	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R06	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R07	1-216-025-91	METAL GLAZE	100	5%	1/10W
R08	1-216-174-00	METAL GLAZE	100	5%	1/8W
R09	1-216-045-00	METAL GLAZE	680	5%	1/10W
R10	1-216-041-00	METAL GLAZE	470	5%	1/10W
R11	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R12	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R13	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R14	1-216-023-00	METAL GLAZE	82	5%	1/10W
R15	1-216-017-91	METAL GLAZE	47	5%	1/10W
R16	1-216-033-00	METAL GLAZE	220	5%	1/10W
R17	1-216-017-91	METAL GLAZE	47	5%	1/10W
R18	1-216-013-00	METAL GLAZE	33	5%	1/10W
R20	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R23	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R25	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R21	1-216-174-00	METAL GLAZE	100	5%	1/8W
		< VARIABLE RESISTOR >			
RV01	1-226-703-11	RES, ADJ, METAL GLAZE	10K		
RV02	1-226-703-11	RES, ADJ, METAL GLAZE	10K		

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

C

REF. NO.	PART.NO	DESCRIPTION			REMARK
	*A-1638-113-A	C BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C702	1-128-551-11	ELECT	22MF	20%	25V
C703	1-126-967-11	ELECT	47MF	20%	10V
C704	1-102-945-00	CERAMIC	8PF	0.5PF	50V
C705	1-102-945-00	CERAMIC	8PF	0.5PF	50V
C706	1-102-953-00	CERAMIC	18PF	5%	50V
C707	1-107-651-11	ELECT	4.7MF	20%	250V
C708	1-126-960-11	ELECT	1MF	20%	50V
C709	1-101-006-00	CERAMIC	0.047MF		50V
C710	1-107-651-11	ELECT	4.7MF	20%	250V
C711	1-107-651-11	ELECT	4.7MF	20%	250V
C712	1-101-006-00	CERAMIC	0.047MF		50V
C714	1-101-006-00	CERAMIC	0.047MF		50V
C715	1-101-006-00	CERAMIC	0.047MF		50V
C716	1-102-157-00	CERAMIC	560PF	10%	500V
C717	1-102-157-00	CERAMIC	560PF	10%	500V
C718	1-102-157-00	CERAMIC	560PF	10%	500V
C719	1-102-074-00	CERAMIC	0.001MF	10%	50V
C720	1-137-490-11	FILM	0.01MF	10%	1KV
C721	1-107-651-11	ELECT	4.7MF	20%	250V
C725	1-107-651-11	ELECT	4.7MF	20%	250V
		< CONNECTOR >			
CN701	*1-568-882-51	PIN, CONNECTOR 7P			
CN702	1-695-915-11	TAB (CONTACT)			
CN703	1-778-037-11	PIN, CONNECTOR 6P			
CN705	1-695-915-11	TAB (CONTACT)			
CN706	1-695-915-11	TAB (CONTACT)			
		< DIODE >			
D701	8-719-109-97	DIODE RD6.8ES-B2			
D704	8-719-991-33	DIODE 1SS133T-77			
D705	8-719-991-33	DIODE 1SS133T-77			
D707	8-719-991-33	DIODE 1SS133T-77			
D709	8-719-051-85	DIODE HSS83TD			
D710	8-719-051-85	DIODE HSS83TD			
D711	8-719-051-85	DIODE HSS83TD			
D712	8-719-908-03	DIODE GP08D			
D713	8-719-109-72	DIODE RD3.9ES-B2			
D714	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC701	8-759-346-42	IC TDA6101Q/N3			
IC702	8-759-346-42	IC TDA6101Q/N3			
IC703	8-759-346-42	IC TDA6101Q/N3			

REF. NO.		PART.NO	DESCRIPTION			REMARK
			< CRT SOCKET >			
J701	⚠	1-526-990-21	SOCKET, CRT			
			< COIL >			
L701		1-410-667-31	INDUCTOR	22UH		
			< TRANSISTOR >			
Q701		8-729-119-76	TRANSISTOR 2SA1175-HFE			
			< RESISTOR >			
R701		1-247-807-31	CARBON	100	5%	1/4W
R702		1-249-417-11	CARBON	1K	5%	1/4W
R703		1-249-437-11	CARBON	47K	5%	1/4W
R704		1-215-413-00	METAL	470	1%	1/4W
R705		1-249-441-11	CARBON	100K	5%	1/4W
R706		1-535-465-11	LEAD, JUMPER (5.0MM)			
R707		1-215-424-00	METAL	1.3K	1%	1/4W
R708		1-215-424-00	METAL	1.3K	1%	1/4W
R709		1-215-424-00	METAL	1.3K	1%	1/4W
R710		1-215-413-00	METAL	470	1%	1/4W
R711		1-249-421-11	CARBON	2.2K	5%	1/4W
R712		1-249-431-11	CARBON	15K	5%	1/4W
R718		1-249-422-11	CARBON	2.7K	5%	1/4W
R719		1-249-422-11	CARBON	2.7K	5%	1/4W
R720		1-249-422-11	CARBON	2.7K	5%	1/4W
R722		1-249-435-11	CARBON	33K	5%	1/4W
R725		1-215-903-11	METAL OXIDE	68K	5%	2W F
R727		1-215-903-11	METAL OXIDE	68K	5%	2W F
R729		1-215-903-11	METAL OXIDE	68K	5%	2W F
R731		1-202-818-00	SOLID	1K	20%	1/2W
R732		1-202-818-00	SOLID	1K	20%	1/2W
R733		1-202-818-00	SOLID	1K	20%	1/2W
R734		1-247-739-11	CARBON	100	5%	1/2W
R735		1-244-941-00	CARBON	680K	5%	1/2W
R737		1-249-496-11	CARBON	100K	5%	1/2W
R738		1-249-489-11	CARBON	22K	5%	1/2W
R740		1-216-391-11	METAL OXIDE	1.5	5%	3W F
R742		1-215-912-11	METAL OXIDE	150	5%	3W F
R743		1-202-847-00	SOLID	560K	20%	1/2W
			< VARIABLE RESISTOR >			
RV701		1-241-656-21	RES, ADJ, METAL FILM 110M			
RV702		1-230-641-11	RES, ADJ, METAL GLAZE 2.2M			

C D5

REF. NO.	PART.NO	DESCRIPTION				REMARK
		< SPARK GAP >				
SG701	1-517-712-31	GAP, SPARK				
SG702	1-517-712-31	GAP, SPARK				
SG703	1-517-712-31	GAP, SPARK				
SG704	1-519-421-11	GAP, DISCHARGE				
**********						
	*A-1640-307-A	D5 BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C2801	1-102-244-00	CERAMIC	220PF	10%	500V	
C2804	1-136-165-00	FILM	0.1MF	5%	50V	
C2805	1-164-070-11	CERAMIC	100PF	5%	50V	
C2806	1-136-347-11	FILM	0.0047MF	5%	630V	
C2808	1-130-491-00	MYLAR	0.047MF	5%	50V	
C2809	1-130-483-00	MYLAR	0.01MF	5%	50V	
C2811	1-129-716-00	FILM	0.015MF	5%	630V	
C2813	1-102-228-00	CERAMIC	470PF	10%	500V	
C2814	1-129-992-00	FILM	0.0024MF	5%	630V	
C2815	1-117-455-11	FILM	22000PF	5%	630V	
C2817	1-126-933-11	ELECT	100MF	20%	16V	
C2818	1-104-665-11	ELECT	100MF	20%	25V	
C2819	1-126-933-11	ELECT	100MF	20%	16V	
C2820	1-129-725-00	FILM	0.082MF	5%	400V	
C2840	1-102-228-00	CERAMIC	470PF	10%	500V	
C2841	1-102-030-00	CERAMIC	330PF	10%	500V	
C2842	1-109-954-11	ELECT	0.47MF	20%	160V	
C2845	1-130-728-00	FILM	0.0022MF	5%	50V	
C2846	1-130-491-00	MYLAR	0.047MF	5%	50V	
C2847	1-126-964-11	ELECT	10MF	20%	50V	
C2848	1-136-159-00	FILM	0.033MF	5%	50V	
C2849	1-126-964-11	ELECT	10MF	20%	50V	
C2850	1-130-483-00	MYLAR	0.01MF	5%	50V	
C2851	1-136-169-00	FILM	0.22MF	5%	50V	
C2852	1-136-169-00	FILM	0.22MF	5%	50V	
		< CONNECTOR >				
CN2804	*1-568-879-11	PIN, CONNECTOR 4P				
CN2805	1-568-878-51	PIN, CONNECTOR 3P				
CN2806	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P				
CN2807	*1-568-881-51	PIN, CONNECTOR 6P				
		< DIODE >				
D2801	8-719-110-41	DIODE RD15ES-B2				
D2802	8-719-991-33	DIODE 1SS133T-77				
D2804	8-719-302-43	DIODE EL1Z				
D2805	8-719-970-87	DIODE ERA38-06				
D2806	8-719-300-33	DIODE RU-3AM				
D2807	8-719-302-43	DIODE EL1Z				
D2808	8-719-970-87	DIODE ERA38-06				
D2810	8-719-991-33	DIODE 1SS133T-77				
D2811	8-719-991-33	DIODE 1SS133T-77				
D2812	8-719-991-33	DIODE 1SS133T-77				
D2813	8-719-991-33	DIODE 1SS133T-77				
		< IC >				
IC2801	8-759-103-93	IC UPC393C				
IC2802	8-759-701-59	IC NJM78M09FA				
IC2803	8-759-700-42	IC NJM2904D				
		< COIL >				
L2801	1-535-465-11	LEAD, JUMPER (5.0MM)				
L2802	1-406-677-11	INDUCTOR	0UH			
L2803	1-406-989-21	INDUCTOR	0UH			
L2805	1-406-667-11	INDUCTOR	0UH			
L2806	1-406-679-11	INDUCTOR	0UH			
		< TRANSISTOR >				
Q2802	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2803	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2805	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q2806	8-729-039-68	TRANSISTOR IRF620				
Q2808	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2810	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2811	8-729-140-97	TRANSISTOR 2SB734-34				
Q2814	8-729-043-95	TRANSISTOR 2SC3840				
		< RESISTOR >				
R2801	1-535-465-11	LEAD, JUMPER (5.0MM)				
R2802	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
R2804	1-249-437-11	CARBON	47K	5%	1/4W	
R2805	1-249-429-11	CARBON	10K	5%	1/4W	
R2806	1-249-413-11	CARBON	470	5%	1/4W	
R2807	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2811	1-215-445-00	METAL	10K	1%	1/4W	
R2813	1-215-469-00	METAL	100K	1%	1/4W	
R2814	1-215-445-00	METAL	10K	1%	1/4W	
R2815	1-215-469-00	METAL	100K	1%	1/4W	
R2816	1-215-443-00	METAL	8.2K	1%	1/4W	
R2817	1-215-463-00	METAL	56K	1%	1/4W	
R2818	1-215-473-91	METAL	150K	1%	1/4W	
R2819	1-249-421-11	CARBON	2.2K	5%	1/4W	
R2820	1-249-421-11	CARBON	2.2K	5%	1/4W	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION				REMARK
R2821	1-247-807-31	CARBON	100	5%	1/4W	
R2823	1-535-465-11	LEAD, JUMPER (5.0MM)				
R2824	1-249-425-11	CARBON	4.7K	5%	1/4W	
R2825	1-249-417-11	CARBON	1K	5%	1/4W	
R2826	1-249-417-11	CARBON	1K	5%	1/4W	
R2827	1-249-441-11	CARBON	100K	5%	1/4W	
R2828	1-249-441-11	CARBON	100K	5%	1/4W	
R2829	1-249-441-11	CARBON	100K	5%	1/4W	
R2830	1-215-911-11	METAL OXIDE	100	5%	3W	F
R2831	1-215-911-11	METAL OXIDE	100	5%	3W	F
R2832	1-249-379-11	CARBON	0.68	5%	1/4W	F
R2840	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R2841	1-215-922-11	METAL OXIDE	6.8K	5%	3W	F
R2842	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R2843	1-215-923-00	METAL OXIDE	10K	5%	3W	F
R2844	1-249-409-11	CARBON	220	5%	1/4W	F
R2845	1-215-489-00	METAL	680K	1%	1/4W	
R2846	1-247-903-00	CARBON	1M	5%	1/4W	
R2847	1-249-429-11	CARBON	10K	5%	1/4W	
R2848	1-215-449-00	METAL	15K	1%	1/4W	
R2849	1-215-491-00	METAL	820K	1%	1/4W	
R2850	1-215-445-00	METAL	10K	1%	1/4W	
R2851	1-215-445-00	METAL	10K	1%	1/4W	
R2852	1-215-481-00	METAL	330K	1%	1/4W	
R2853	1-215-477-00	METAL	220K	1%	1/4W	
R2854	1-215-457-00	METAL	33K	1%	1/4W	
R2855	1-215-457-00	METAL	33K	1%	1/4W	
R2856	1-247-807-31	CARBON	100	5%	1/4W	
R2857	1-249-413-11	CARBON	470	5%	1/4W	
R2858	1-249-424-11	CARBON	3.9K	5%	1/4W	
R2859	1-247-807-31	CARBON	100	5%	1/4W	
R2860	1-215-886-11	METAL OXIDE	100	5%	2W	F
R2861	1-215-886-11	METAL OXIDE	100	5%	2W	F
		< TRANSFORMER >				
T2801	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS				
**********						
	*A-1642-232-A	D BOARD, COMPLETE				
		**********				
	4-201-023-01	SPACER, INSULATING				
	4-202-373-01	SPRING, IC				
	4-202-373-01	SPRING, IC				
	4-202-710-01	SPACER, INSULATING				
	4-382-854-11	SCREW (M3X10), P, SW (+)				

REF. NO.		PART.NO	DESCRIPTION			
		< CAPACITOR >				
C502		1-102-824-91	CERAMIC	470PF	5%	50V
C503		1-136-165-00	FILM	0.1MF	5%	50V
C504		1-102-824-91	CERAMIC	470PF	5%	50V
C506		1-126-941-11	ELECT	470MF	20%	25V
C507		1-109-953-11	ELECT	2.2MF	20%	50V
C509		1-136-165-00	FILM	0.1MF	5%	50V
C510		1-126-969-11	ELECT	220MF	20%	50V
C511		1-136-202-11	FILM	0.33MF	5%	63V
C513		1-106-220-00	MYLAR	0.1MF	10%	100V
C514		1-136-165-00	FILM	0.1MF	5%	50V
C515		1-126-941-11	ELECT	470MF	20%	25V
C517		1-126-941-11	ELECT	470MF	20%	25V
C518		1-102-228-00	CERAMIC	470PF	10%	500V
C519		1-102-228-00	CERAMIC	470PF	10%	500V
C520		1-126-941-11	ELECT	470MF	20%	25V
C521		1-107-698-11	ELECT	10MF	20%	25V
C522		1-126-964-11	ELECT	10MF	20%	50V
C523		1-136-165-00	FILM	0.1MF	5%	50V
C600	⚠	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C601	⚠	1-162-599-12	CERAMIC	0.0047MF		250V
C602	⚠	1-162-599-12	CERAMIC	0.0047MF		250V
C603		1-125-555-11	ELECT(BLOCK)	330MF	20%	400V
C604		1-126-968-11	ELECT	100MF	20%	50V
C605		1-107-929-11	ELECT	10MF	20%	100V
C606		1-162-318-11	CERAMIC	0.001MF	10%	500V
C607		1-104-666-11	ELECT	220MF	20%	25V
C608		1-109-880-11	FILM	0.0015MF	3%	2KV
C611		1-102-228-00	CERAMIC	470PF	10%	500V
C612		1-111-160-11	ELECT	22MF	20%	100V
C613		1-124-347-00	ELECT	100MF	20%	160V
C614		1-126-933-11	ELECT	100MF	20%	16V
C615		1-115-789-11	ELECT	0.001F	20%	25V
C616		1-115-789-11	ELECT	0.001F	20%	25V
C617		1-128-339-11	ELECT	2200MF	20%	16V
C618		1-136-165-00	FILM	0.1MF	5%	50V
C619		1-102-228-00	CERAMIC	470PF	10%	500V
C620		1-102-228-00	CERAMIC	470PF	10%	500V
C621		1-136-165-00	FILM	0.1MF	5%	50V
C622		1-107-925-11	ELECT	1MF	20%	100V
C623		1-104-666-11	ELECT	220MF	20%	25V
C624		1-136-165-00	FILM	0.1MF	5%	50V
C625		1-126-967-11	ELECT	47MF	20%	50V
C626		1-104-666-11	ELECT	220MF	20%	25V
C628		1-126-964-11	ELECT	10MF	20%	50V
C629		1-111-097-11	ELECT	0.0022F	20%	35V

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

D

REF. NO.		PART.NO	DESCRIPTION			REMARK
C630		1-111-097-11	ELECT	0.0022F	20%	35V
C631		1-126-965-11	ELECT	22MF	20%	50V
C632		1-104-666-11	ELECT	220MF	20%	25V
C633	⚠	1-107-563-11	FILM	0.1MF	20%	300V
C635	⚠	1-107-563-11	FILM	0.1MF	20%	300V
C636	⚠	1-113-920-11	CERAMIC	0.0022MF	20%	250V
C638		1-136-203-11	FILM	0.01MF	10%	250V
C640		1-106-220-00	MYLAR	0.1MF	10%	100V
C641	⚠	1-161-744-00	CERAMIC	0.01MF		400V
C642	⚠	1-161-744-00	CERAMIC	0.01MF		400V
C644		1-137-043-11	FILM	0.0047MF	10%	400V
C647		1-162-116-00	CERAMIC	680PF	10%	2KV
C651		1-102-228-00	CERAMIC	470PF	10%	500V
C800		1-137-368-11	FILM	0.0047MF	5%	50V
C801		1-137-399-11	FILM	0.1MF	5%	50V
C802		1-137-370-11	FILM	0.01MF	5%	50V
C803		1-129-898-00	FILM	0.0022MF	5%	630V
C805		1-136-207-11	FILM	0.047MF	10%	250V
C806		1-104-999-11	MYLAR	0.1MF	10%	200V
C807		1-136-540-11	FILM	0.82MF	5%	200V
C808		1-136-104-00	FILM	0.16MF	5%	200V
C810		1-107-683-11	ELECT	2.2MF	0	250V
C811		1-102-212-00	CERAMIC	820PF	10%	500V
C812		1-136-540-11	FILM	0.82MF	5%	200V
C813		1-130-118-00	FILM	0.051MF	5%	400V
C814		1-136-617-11	FILM	0.019MF	3%	2KV
C815		1-137-046-11	FILM	0.0082MF	10%	400V
C816		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C817		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C818		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C819		1-136-208-11	FILM	0.068MF	10%	250V
C821		1-162-114-00	CERAMIC	0.0047MF		2KV
C822		1-107-662-11	ELECT	22MF	20%	250V
C824		1-123-024-21	ELECT	33MF		160V
C826		1-161-830-00	CERAMIC	0.0047MF		500V
C829		1-126-959-11	ELECT	0.47MF	20%	50V
C830		1-136-173-00	FILM	0.47MF	5%	50V
C834		1-128-551-11	ELECT	22MF	20%	25V
C835		1-162-318-11	CERAMIC	0.001MF	10%	500V
C836		1-162-117-00	CERAMIC	100PF	10%	500V
C837		1-102-119-00	CERAMIC	0.0015MF	10%	50V
C838		1-102-228-00	CERAMIC	470PF	10%	500V
C839		1-136-207-11	FILM	0.047MF	10%	250V
C841		1-102-114-00	CERAMIC	470PF	10%	50V
C845		1-247-901-11	CARBON	820K	5%	1/4W
C902		1-137-372-11	FILM	0.022MF	5%	50V
C903		1-137-372-11	FILM	0.022MF	5%	50V
C904		1-126-933-11	ELECT	100MF	20%	16V
C905		1-126-964-11	ELECT	10MF	20%	50V
C906		1-126-964-11	ELECT	10MF	20%	50V
C907		1-126-964-11	ELECT	10MF	20%	50V
C908		1-126-964-11	ELECT	10MF	20%	50V
C910		1-535-465-11	LEAD, JUMPER (5.0MM)			
C911		1-126-964-11	ELECT	10MF	20%	50V
C916		1-162-318-11	CERAMIC	0.001MF	10%	500V
C1200		1-136-165-00	FILM	0.1MF	5%	50V
C1201		1-109-953-11	ELECT	2.2MF	20%	50V
C1202		1-109-953-11	ELECT	2.2MF	20%	50V
C1203		1-136-169-00	FILM	0.22MF	5%	50V
C1204		1-136-169-00	FILM	0.22MF	5%	50V
C1205		1-101-005-00	CERAMIC	0.022MF		50V
C1206		1-101-005-00	CERAMIC	0.022MF		50V
C1207		1-126-933-11	ELECT	100MF	20%	16V
C1208		1-126-963-11	ELECT	4.7MF	20%	50V
C1209		1-126-963-11	ELECT	4.7MF	20%	50V
C1210		1-126-941-91	ELECT	470MF	20%	25V
C1212		1-137-372-11	FILM	0.022MF	5%	50V
C1213		1-137-372-11	FILM	0.022MF	5%	50V
C1214		1-126-933-11	ELECT	100MF	20%	16V
C1215		1-136-173-00	FILM	0.47MF	5%	50V
C1216		1-136-376-91	FILM	0.0027MF	5%	50V
C1217		1-136-376-91	FILM	0.0027MF	5%	50V
C1218		1-126-941-11	ELECT	470MF	20%	25V
C1223		1-102-129-91	CERAMIC	0.01MF	10%	50V

< CONNECTOR >

CN600	⚠	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN601	⚠	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN603	⚠	*1-580-844-11	PIN, CONNECTOR (POWER)	
CN800		*1-580-798-11	CONNECTOR PIN (DY) 6P	
CN801		*1-568-879-11	PIN, CONNECTOR 4P	
CN802		*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
CN803		1-695-915-11	TAB (CONTACT)	
CN804		1-778-037-11	PIN, CONNECTOR 6P	
CN900		1-779-947-21	TERMINAL BLOCK, S	
CN902		1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
CN1401		*1-568-880-51	PIN, CONNECTOR 5P	
CN1403		1-564-511-11	PIN, CONNECTOR 8P	
CN1408		*1-568-879-11	PIN, CONNECTOR 4P	
CN1803		*1-568-879-11	PIN, CONNECTOR 4P	

< DIODE >

D500		8-719-109-85	DIODE RD5.1ES-B2
D502		8-719-979-85	DIODE EGP20G

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

D

REF. NO.	PART.NO	DESCRIPTION	REMARK
D503	8-719-979-85	DIODE EGP20G	
D504	8-719-991-33	DIODE 1SS133T-77	
D505	8-719-982-03	DIODE MTZJ-3.6A	
D506	8-719-991-33	DIODE 1SS133T-77	
D507	8-719-109-85	DIODE RD5.1ES-B2	
D510	8-719-924-13	DIODE MTZJ-T-77-22B	
D570	8-719-924-13	DIODE MTZJ-T-77-22B	
D571	8-719-924-13	DIODE MTZJ-T-77-22B	
D600	8-719-510-53	DIODE D4SB60L	
D601	8-719-046-77	DIODE EM1-V1	
D603	8-719-109-97	DIODE RD6.8ES-B2	
D604	8-719-046-75	DIODE EU-1-V1	
D605	8-719-302-43	DIODE EL1Z	
D606	8-719-302-43	DIODE EL1Z	
D607	8-719-046-78	DIODE EG-1Z-V1	
D608	8-719-302-06	DIODE EU2A	
D609	8-719-312-10	DIODE RU4AM-T3	
D610	8-719-046-74	DIODE AU-01Z-V1	
D611	8-719-058-38	DIODE FMN-G12S	
D612	8-719-046-76	DIODE RU3YX-LF-C4	
D613	8-719-058-38	DIODE FMN-G12S	
D614	8-719-058-38	DIODE FMN-G12S	
D615	8-719-046-75	DIODE EU-1-V1	
D616	8-719-110-03	DIODE RD7.5ESB2	
D617	8-719-991-33	DIODE 1SS133T-77	
D618	8-719-991-33	DIODE 1SS133T-77	
D619	8-719-991-33	DIODE 1SS133T-77	
D620	8-719-991-33	DIODE 1SS133T-77	
D622	8-719-923-60	DIODE MTZJ-T-77-9.1A	
D625	8-719-991-33	DIODE 1SS133T-77	
D626	8-719-046-74	DIODE AU-01Z-V1	
D631	8-719-109-93	DIODE RD6.2ESB2	
D637	8-719-110-17	DIODE RD10ESB2	
D800	8-719-991-33	DIODE 1SS133T-77	
D801	8-719-991-33	DIODE 1SS133T-77	
D802	1-535-465-11	LEAD, JUMPER (5.0MM)	
D803	8-719-908-03	DIODE GP08D	
D807	8-719-302-43	DIODE EL1Z	
D808	8-719-908-03	DIODE GP08D	
D809	8-719-031-34	DIODE RGP02-20EG23	
D810	8-719-302-43	DIODE EL1Z	
D811	8-719-110-41	DIODE RD15ES-B2	
D812	8-719-038-49	DIODE FMS-3FU-LF027-103	
D815	8-719-908-03	DIODE GP08D	
D817	8-719-109-85	DIODE RD5.1ES-B2	
D901	8-719-030-11	DIODE SLA-570KT3F	
	*4-203-258-11	HOLDER, LED (D901)	
D902	8-719-923-60	DIODE MTZJ-T-77-9.1	
D903	8-719-923-60	DIODE MTZJ-T-77-9.1	
D904	8-719-923-60	DIODE MTZJ-T-77-9.1	
D905	8-719-923-60	DIODE MTZJ-T-77-9.1	
D906	8-719-923-60	DIODE MTZJ-T-77-9.1	
D907	8-719-109-89	DIODE RD5.6ESB2	
D910	8-719-923-60	DIODE MTZJ-T-77-9.1	
D920	8-719-109-89	DIODE RD5.6ESB2	
D1201	8-719-109-72	DIODE RD3.9ES-B2	
D1202	1-535-465-11	LEAD, JUMPER (5.0MM)	
		< FUSE >	
F601	⚠ 1-576-232-21	FUSE (H.B.C.) 5.0A/250V	
	⚠ *1-533-725-11	HOLDER, FUSE (F601)	
		< FERRITE BEAD >	
FB600	1-410-397-21	FERRITE 1.1UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB602	1-410-397-21	FERRITE 1.1UH	
FB604	1-410-396-41	FERRITE 0.45UH	
FB605	1-410-396-41	FERRITE 0.45UH	
FB606	1-410-397-21	FERRITE 1.1UH	
FB607	1-410-397-21	FERRITE 1.1UH	
FB608	1-410-396-41	FERRITE 0.45UH	
FB800	1-410-397-21	FERRITE 1.1UH	
		< IC >	
IC500	8-759-192-71	IC STV9379	
IC600	8-749-010-92	IC STR-S6709	
IC601	⚠ 8-749-013-21	IC TLP721(D4-G,T)	
IC602	8-749-920-61	IC SE-135N	
IC603	8-759-144-82	IC UPC2405HF	
IC604	8-759-510-52	IC L4941BV	
IC606	8-759-267-25	IC LM2940T-9.0	
IC800	8-759-103-93	IC UPC393C	
IC900	8-742-014-11	HYB IC SBX1981-51	
IC1200	8-759-250-68	IC TDA7264	
IC1201	8-759-502-21	IC TDA2822M	
		< SOCKET >	
J900	1-764-606-11	JACK	
J1200	1-770-218-11	JACK, PIN	
		< COIL >	
L501	1-535-465-11	LEAD, JUMPER (5.0MM)	
L502	1-412-519-11	INDUCTOR 3.3UH	
L503	1-412-519-11	INDUCTOR 3.3UH	

D

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
L609	1-412-533-21	INDUCTOR 47UH	
L610	1-535-465-11	LEAD, JUMPER (5.0MM)	
L611	1-412-527-11	INDUCTOR 15UH	
L612	1-412-522-41	INDUCTOR 5.6UH	
L613	1-412-522-41	INDUCTOR 5.6UH	
L615	1-412-529-11	INDUCTOR 22UH	
L616	1-412-533-21	INDUCTOR 47UH	
L801	1-459-111-00	INDUCTOR 0UH	
L802	1-459-104-00	COIL, WITH CORE	
L803	1-535-465-11	LEAD, JUMPER (5.0MM)	
L805	1-406-674-11	INDUCTOR 0UH	
L806	1-535-465-11	LEAD, JUMPER (5.0MM)	
L809	1-408-611-31	INDUCTOR 47UH	
L810	1-535-465-11	LEAD, JUMPER (5.0MM)	
L811	1-406-978-11	INDUCTOR 0UH	
L813	1-412-552-11	INDUCTOR 2.2MMH	
L901	1-408-603-31	INDUCTOR 10UH	
L902	1-408-603-31	INDUCTOR 10UH	
L903	1-408-591-41	INDUCTOR 1UH	
L904	1-408-591-41	INDUCTOR 1UH	
		< IC LINK >	
PS600 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-F75)	
PS601 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-F75)	
PS602 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-F75)	
PS603 ⚠	1-532-686-21	LINK, IC 2.7A (ICP-F75)	
		< TRANSISTOR >	
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q503	8-729-030-02	TRANSISTOR DTC144ESA	
Q601	8-729-025-04	TRANSISTOR 2SC3852A	
Q602	8-729-320-28	TRANSISTOR 2SA1667	
Q603	8-729-805-05	TRANSISTOR 2SC3601-E	
Q604	8-729-024-35	TRANSISTOR 2SC2808STP-R	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-900-65	TRANSISTOR DTA144ES	
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-039-68	TRANSISTOR IRF620	
Q802	8-729-042-86	TRANSISTOR 2SC5251-01	
Q803	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q805	8-729-030-02	TRANSISTOR DTC144ESA	
Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1200	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1201	8-729-029-94	TRANSISTOR DTC143TSA	
Q1202	8-729-029-66	TRANSISTOR DTC114ESA	
Q1203	8-729-029-94	TRANSISTOR DTC143TSA	
Q1204	8-729-029-94	TRANSISTOR DTC143TSA	

REF. NO.	PART.NO	DESCRIPTION				REMARK
		< RESISTOR >				
R500	1-215-457-00	METAL	33K	1%	1/4W	
R502	1-249-421-11	CARBON	2.2K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-215-457-00	METAL	33K	1%	1/4W	
R505	1-249-382-11	CARBON	1.2	5%	1/4W	F
R506	1-215-437-00	METAL	4.7K	1%	1/4W	
R507	1-215-888-00	METAL OXIDE	220	5%	2W	F
R508	1-216-371-00	METAL OXIDE	1.5	5%	2W	F
R509	1-249-443-11	CARBON	0.47	5%	1/4W	F
R510	1-249-443-11	CARBON	0.47	5%	1/4W	F
R519	1-215-445-00	METAL	10K	1%	1/4W	
R520	1-215-451-00	METAL	18K	1%	1/4W	
R521	1-215-455-00	METAL	27K	1%	1/4W	
R522	1-247-863-91	CARBON	22K	5%	1/4W	
R523	1-247-863-91	CARBON	22K	5%	1/4W	
R524	1-249-425-11	CARBON	4.7K	5%	1/4W	
R525	1-249-425-11	CARBON	4.7K	5%	1/4W	
R526	1-249-421-11	CARBON	2.2K	5%	1/4W	
R527	1-215-437-00	METAL	4.7K	1%	1/4W	
R600 ⚠	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R601	1-249-417-11	CARBON	1K	5%	1/4W	
R602	1-215-473-00	METAL	150K	1%	1/4W	
R603	1-215-898-11	METAL OXIDE	10K	5%	2W	F
R604	1-249-420-11	CARBON	1.8K	5%	1/4W	
R605	1-216-362-11	METAL OXIDE	0.27	5%	2W	F
R606	1-535-143-21	LEAD, JUMPER (12.5MM)				
R607	1-216-421-11	METAL OXIDE	12	5%	1W	F
R608	1-216-365-00	METAL OXIDE	0.47	5%	2W	F
R609	1-535-465-11	LEAD, JUMPER (5.0MM)				
R610	1-215-429-00	METAL	2.2K	1%	1/4W	
R611	1-216-354-11	METAL OXIDE	2.7	5%	1W	F
R612	1-249-428-11	CARBON	8.2K	5%	1/4W	
R613	1-249-417-11	CARBON	1K	5%	1/4W	
R614	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615	1-249-435-11	CARBON	33K	5%	1/4W	
R616	1-215-471-00	METAL	120K	1%	1/4W	
R617	1-215-901-00	METAL OXIDE	33K	5%	2W	F
R618	1-247-863-91	CARBON	22K	5%	1/4W	
R619	1-216-425-11	METAL OXIDE	56	5%	1W	F
R620	1-260-131-11	CARBON	470K	5%	1/2W	
R621	1-216-425-11	METAL OXIDE	56	5%	1W	F
R622	1-249-437-11	CARBON	47K	5%	1/4W	
R624	1-249-393-11	CARBON	10	5%	1/4W	F
R625	1-249-434-11	CARBON	27K	5%	1/4W	
R626	1-249-430-11	CARBON	12K	5%	1/4W	

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

D

REF. NO.		PART.NO	DESCRIPTION				
R627		1-216-347-11	METAL OXIDE	0.68	5%	1W	F
R628		1-249-415-11	CARBON	680	5%	1/4W	F
R629	⚠	1-260-135-11	CARBON	1M	5%	1/2W	
R630	⚠	1-218-265-11	METAL	8.2M	5%	1W	
R631	⚠	1-202-961-11	CEMENTED	1.8	5%	10W	F
R632		1-247-807-31	CARBON	100	5%	1/4W	
R633		1-247-807-31	CARBON	100	5%	1/4W	
R634		1-249-397-11	CARBON	22	5%	1/4W	F
R635		1-249-437-11	CARBON	47K	5%	1/4W	
R636		1-249-417-11	CARBON	1K	5%	1/4W	
R637		1-247-815-91	CARBON	220	5%	1/4W	
R638		1-247-863-91	CARBON	22K	5%	1/4W	
R639		1-215-425-00	METAL	1.5K	1%	1/4W	
R642	⚠	1-202-961-11	CEMENTED	1.8	5%	10W	F
R645		1-249-422-11	CARBON	2.7K	5%	1/4W	
R646		1-249-377-11	CARBON	0.47	5%	1/4W	F
R647		1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R649		1-249-426-11	CARBON	5.6K	5%	1/4W	
R800		1-249-429-11	CARBON	10K	5%	1/4W	
R802		1-215-441-00	METAL	6.8K	1%	1/4W	
R803		1-249-421-11	CARBON	2.2K	5%	1/4W	
R805		1-249-435-11	CARBON	33K	5%	1/4W	
R808		1-215-888-00	METAL OXIDE	220	5%	2W	F
R809		1-247-893-11	CARBON	390K	5%	1/4W	
R810		1-215-888-00	METAL OXIDE	220	5%	2W	F
R812		1-249-421-11	CARBON	2.2K	5%	1/4W	
R813		1-249-417-11	CARBON	1K	5%	1/4W	F
R814		1-249-381-11	CARBON	1	5%	1/4W	F
R815		1-249-381-11	CARBON	1	5%	1/4W	F
R816		1-216-456-21	METAL OXIDE	820	5%	2W	F
R817		1-216-456-21	METAL OXIDE	820	5%	2W	F
R818		1-215-884-11	METAL OXIDE	47	5%	2W	F
R819		1-535-143-71	LEAD, JUMPER (7.5MM)				
R820		1-249-403-11	CARBON	68	5%	1/4W	
R821		1-215-909-11	METAL OXIDE	47	5%	3W	F
R822		1-215-868-00	METAL OXIDE	680	5%	1W	F
R823		1-216-456-21	METAL OXIDE	820	5%	2W	F
R824		1-249-420-11	CARBON	1.8K	5%	1/4W	
R825		1-215-884-11	METAL OXIDE	47	5%	2W	F
R826		1-247-752-11	CARBON	1K	5%	1/2W	
R827		1-249-425-11	CARBON	4.7K	5%	1/4W	
R828		1-215-449-91	METAL	15K	1%	1/4W	
R829		1-214-907-00	METAL	56K	1%	1/2W	
R830		1-217-778-11	FUSIBLE	1K	5%	1W	F
R831		1-535-465-11	LEAD, JUMPER (5.0MM)				
R833		1-247-887-00	CARBON	220K	5%	1/4W	
R835		1-535-143-51	LEAD, JUMPER (20.0MM)				
R836		1-249-439-11	CARBON	68K	5%	1/4W	
R838		1-215-455-00	METAL	27K	1%	1/4W	
R840		1-247-807-31	CARBON	100	5%	1/4W	
R841		1-249-418-11	CARBON	1.2K	5%	1/4W	
R842		1-249-441-11	CARBON	100K	5%	1/4W	
R843		1-249-440-11	CARBON	82K	5%	1/4W	
R844		1-535-143-11	LEAD, JUMPER (10.0MM)				
R847		1-247-885-00	CARBON	180K	5%	1/4W	
R851		1-215-898-11	METAL OXIDE	10K	5%	2W	F
R852		1-249-432-11	CARBON	18K	5%	1/4W	
R853		1-216-361-00	METAL OXIDE	0.22	5%	2W	F
R900		1-247-815-91	CARBON	220	5%	1/4W	
R901		1-247-734-11	CARBON	39	5%	1/2W	
R902		1-247-734-11	CARBON	39	5%	1/2W	
R904		1-249-389-11	CARBON	4.7	5%	1/4W	F
R905		1-247-804-11	CARBON	75	5%	1/4W	
R906		1-247-804-11	CARBON	75	5%	1/4W	
R907		1-247-804-11	CARBON	75	5%	1/4W	
R908		1-249-401-11	CARBON	47	5%	1/4W	
R909		1-249-429-11	CARBON	10K	5%	1/4W	
R910		1-249-422-11	CARBON	2.7K	5%	1/4W	
R911		1-249-426-11	CARBON	5.6K	5%	1/4W	
R912		1-249-429-11	CARBON	10K	5%	1/4W	
R913		1-247-863-91	CARBON	22K	5%	1/4W	
R914		1-249-437-11	CARBON	47K	5%	1/4W	
R919		1-249-437-11	CARBON	47K	5%	1/4W	
R921		1-249-437-11	CARBON	47K	5%	1/4W	
R922		1-247-807-31	CARBON	100	5%	1/4W	
R923		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1200		1-249-425-11	CARBON	4.7K	5%	1/4W	
R1201		1-249-434-11	CARBON	27K	5%	1/4W	
R1202		1-249-389-11	CARBON	4.7	5%	1/4W	F
R1203		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1204		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1205		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1206		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1207		1-249-413-11	CARBON	470	5%	1/4W	
R1208		1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1209		1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R1210		1-249-413-11	CARBON	470	5%	1/4W	
R1211		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1212		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1213		1-249-421-11	CARBON	2.2K	5%	1/4W	
R1216		1-249-413-11	CARBON	470	5%	1/4W	
R1217		1-249-425-11	CARBON	4.7K	5%	1/4W	
R1218		1-535-465-11	LEAD, JUMPER (5.0MM)				
R1219		1-249-417-11	CARBON	1K	5%	1/4W	

D VM

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.		PART.NO	DESCRIPTION			REMARK
			< RELAY >			
RY600	⚠	1-755-018-11	RELAY			
			< SWITCH >			
S601	⚠	1-571-433-21	SWITCH, PUSH (AC POWER)			
S801		1-572-707-11	SWITCH, LEVER			
S900		1-692-979-21	SWITCH, TACTILE			
S901		1-692-979-21	SWITCH, TACTILE			
S902		1-692-979-21	SWITCH, TACTILE			
			< SPARK GAP >			
SG801		1-519-422-11	GAP, SPARK			
SG802		1-519-422-11	GAP, SPARK			
			< TRANSFORMER >			
LF600	⚠	1-431-402-11	TRANSFORMER, LINE FILTER			
LF601	⚠	1-431-402-11	TRANSFORMER, LINE FILTER			
T601	⚠	1-429-604-12	TRANSFORMER, CONVERTER			
T800		1-426-981-11	TRANSFORMER, FERRITE (PMT)			
T803	⚠	1-453-269-11	TRANSFORMER ASSY, FLYBACK (NX-4511/U2B4)			
T804		1-437-090-31	HDT			
T805		1-431-899-11	TRANSFORMER, HORIZONTAL LINEAR			
			< THERMISTOR >			
THP600	⚠	1-809-827-11	THERMISTOR, POSITIVE			
**********						
	*A	-1644-091-A	VM BOARD, COMPLETE			
			**********			
		4-382-854-01	SCREW (M3X8), P, SW (+)			
			< CAPACITOR >			
C1701		1-126-933-11	ELECT	100MF	20%	16V
C1702		1-126-933-11	ELECT	100MF	20%	16V
C1703		1-130-491-00	MYLAR	0.047MF	5%	50V
C1704		1-107-640-91	ELECT	100MF	20%	160V
C1705		1-107-638-11	ELECT	33MF	20%	160V
C1706		1-104-999-11	FILM	0.1MF	5%	200V
C1707		1-137-397-11	FILM	0.047MF	5%	100V
C1708		1-137-364-11	FILM	0.001MF	5%	50V
C1709		1-137-364-11	FILM	0.001MF	5%	50V
C1710		1-102-959-00	CERAMIC	22PF	5%	50V
C1711		1-126-157-11	ELECT	10MF	20%	16V
C1720		1-107-667-11	ELECT	2.2MF	20%	160V
C1721		1-137-397-11	FILM	0.047MF	5%	100V
C1722		1-126-935-11	ELECT	470MF	20%	16V
C1723		1-161-830-00	CERAMIC	0.0047MF		500V
C1725		1-128-551-11	ELECT	22MF	20%	25V
C1726		1-136-153-00	FILM	0.01MF	5%	50V
C1801		1-104-664-11	ELECT	47MF	20%	25V
C1803		1-137-368-11	FILM	0.0047MF	5%	50V
C1804		1-126-964-11	ELECT	10MF	20%	50V
C1805		1-137-366-11	FILM	0.0022MF	5%	50V
			< CONNECTOR >			
CN1716	*	1-568-880-51	PIN, CONNECTOR 5P			
CN1717	*	1-568-881-51	PIN, CONNECTOR 6P			
CN1718	*	1-770-723-11	CONNECTOR, BOARD TO BOARD 8P			
CN1719		1-568-878-51	PIN, CONNECTOR 3P			
CN1801	*	1-568-879-11	PIN, CONNECTOR 4P			
CN1802	*	1-568-878-51	PIN, CONNECTOR 3P			
			< DIODE >			
D1701		1-535-465-11	LEAD, JUMPER (5.0MM)			
D1702		8-719-110-88	DIODE RD39ES-B2			
D1703		8-719-110-88	DIODE RD39ES-B2			
D1801		8-719-929-15	DIODE HZS9.1NB2			
			< IC >			
IC1801		8-759-701-59	IC NJM78M09FA			
IC1802		8-759-603-37	IC M5216P			
			< COIL >			
L1701		1-414-183-41	INDUCTOR	10UH		
L1703		1-408-603-31	INDUCTOR	10UH		
L1704		1-408-603-31	INDUCTOR	10UH		
			< IC LINK >			
PS1801	⚠	1-532-605-91	LINK, IC 0.4A (ICP-N10)			
			< TRANSISTOR >			
Q1701		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1702		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1703		8-729-017-05	TRANSISTOR 2SA1837			
Q1704		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1705		8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q1706		8-729-017-06	TRANSISTOR 2SC4793			
Q1708		8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1709		8-729-119-78	TRANSISTOR 2SC2785-HFE			

REF. NO.	PART.NO	DESCRIPTION				REMARK
		< RESISTOR >				
R1701	1-249-397-11	CARBON	22	5%	1/4W	F
R1702	1-247-807-31	CARBON	100	5%	1/4W	
R1703	1-249-416-11	CARBON	820	5%	1/4W	
R1704	1-247-807-31	CARBON	100	5%	1/4W	
R1706	1-247-815-91	CARBON	220	5%	1/4W	
R1707	1-249-411-11	CARBON	330	5%	1/4W	
R1708	1-249-417-11	CARBON	1K	5%	1/4W	
R1710	1-249-403-11	CARBON	68	5%	1/4W	
R1711	1-249-403-11	CARBON	68	5%	1/4W	
R1712	1-212-974-00	FUSIBLE	47	5%	1/2W	F
R1713	1-249-452-11	CARBON	2.7	5%	1/4W	F
R1714	1-249-414-11	CARBON	560	5%	1/4W	F
R1715	1-249-432-11	CARBON	18K	5%	1/4W	
R1716	1-249-417-11	CARBON	1K	5%	1/4W	F
R1717	1-216-476-11	METAL OXIDE	180	5%	3W	F
R1718	1-249-432-11	CARBON	18K	5%	1/4W	
R1719	1-249-383-11	CARBON	1.5	5%	1/4W	F
R1720	1-247-696-11	CARBON	47	5%	1/4W	F
R1721	1-249-414-11	CARBON	560	5%	1/4W	F
R1722	1-249-401-11	CARBON	47	5%	1/4W	
R1723	1-535-465-11	LEAD, JUMPER (5.0MM)				
R1724	1-249-417-11	CARBON	1K	5%	1/4W	
R1725	1-249-417-11	CARBON	1K	5%	1/4W	
R1726	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1727	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1728	1-249-408-11	CARBON	180	5%	1/4W	
R1729	1-249-408-11	CARBON	180	5%	1/4W	
R1730	1-247-819-91	CARBON	330	5%	1/4W	
R1731	1-249-414-11	CARBON	560	5%	1/4W	
R1806	1-247-883-00	CARBON	150K	5%	1/4W	
R1807	1-249-429-11	CARBON	10K	5%	1/4W	
R1808	1-249-429-11	CARBON	10K	5%	1/4W	
R1809	1-249-429-11	CARBON	10K	5%	1/4W	
R1810	1-249-429-11	CARBON	10K	5%	1/4W	

****

	*A-1649-022-A	K5 BOARD, COMPLETE				
		**********				
	4-202-373-01	SPRING, IC				
	4-202-710-01	SPACER, INSULATING				
		< CAPACITOR >				
C261	1-136-173-00	FILM	0.47MF	5%	50V	
C262	1-136-165-00	FILM	0.1MF	5%	50V	
C263	1-136-495-11	FILM	0.068MF	5%	50V	
C264	1-136-495-11	FILM	0.068MF	5%	50V	
C265	1-136-176-00	FILM	0.82MF	5%	50V	
C266	1-136-176-00	FILM	0.82MF	5%	50V	
C267	1-136-169-00	FILM	0.22MF	5%	50V	
C268	1-136-169-00	FILM	0.22MF	5%	50V	
C270	1-101-005-00	CERAMIC	0.022MF		50V	
C271	1-126-952-11	ELECT	1000MF	20%	35V	
C272	1-126-952-11	ELECT	1000MF	20%	35V	
		< CONNECTOR >				
CN1303	*1-568-879-11	PIN, CONNECTOR 4P				
CN1304	*1-568-879-11	PIN, CONNECTOR 4P				
CN1307	*1-564-511-11	PLUG, CONNECTOR 8P				
		< IC >				
IC260	8-759-250-68	IC TDA7264				
		< RESISTOR >				
R265	1-249-429-11	CARBON	10K	5%	1/4W	
R266	1-249-429-11	CARBON	10K	5%	1/4W	
R267	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R268	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R269	1-216-073-00	RES,CHIP	10K	5%	1/10W	
R270	1-216-073-00	RES,CHIP	10K	5%	1/10W	

****

The components identified by shading and marked ⚠ are critical for safety
Replace only with the part number specified.

REF. NO.	PART.NO	DESCRIPTION	REMARK
		MISCELLANEOUS	
		**********	
⚠	1-406-807-11	COIL, DEMAGNETIZATION	
	1-452-032-00	MAGNET, DISC: 10MM Ø	
	1-452-094-00	MAGNET, ROTATABLE DISK: 15MM Ø	
⚠	1-453-269-11	TRANSFORMER ASSY, FLYBACK (NA-4511/U2B4)	
	1-505-937-11	SPEAKER (10CM)	
	1-505-952-11	SPEAKER	
⚠	1-571-433-21	SWITCH, PUSH (AC POWER)	
	1-693-338-11	TUNER/VIF (AEP)	(KV-29FX11A/29FX11D/ KV-29FX11E/29FX11K/ KV-29FX11R)
	1-693-340-11	TUNER/VIF (FR)	(KV-29FX11B)
	1-693-339-11	TUNER/VIF (UK)	(KV-29FX11U)
⚠	1-765-286-11	CORD, POWER	(KV-29FX11A/29FX11B/ KV-29FX11D/29FX11E/ KV-29FX11K)
⚠	1-574-062-61	CORD, POWER (WITH CONNECTOR)	(KV-29FX11R)
⚠	1-776-204-11	CORD, POWER (FILTER)	(KV-29FX11U)
⚠	8-451-494-21	DELECTION YOKE (Y29RSA-M2)	
⚠	8-453-011-11	NECK ASSY, NA299-M	
⚠	8-735-041-05	PICTURE TUBE	
	1-452-896-11	COIL, NA ROTATION (RT200)	
⚠	1-251-528-21	CAP ASSY, HIGH VOLTAGE	
		**********	
		ACCESSORIES AND PACKING MATERIALS	
		**********	
	4-204-202-41	MANUAL, INSTRUCTION (ITALIAN)	(KV-29FX11A)
	4-204-202-51	MANUAL, INSTRUCTION (FRENCH/GERMAN/ITALIAN/DUTCH)	(KV-29FX11B)
	4-204-202-11	MANUAL, INSTRUCTION (TURKISH/GERMAN/GREEK/ENGLISH)	(KV-29FX11D)
	4-204-202-71	MANUAL, INSTRUCTION (SPANISH)	(KV-29FX11E)
	4-204-202-81	MANUAL, INSTRUCTION (PORTUGUESE/FINNISH/DANISH/NORWEGIAN/ SWEDISH)	(KV-29FX11E)
	4-204-202-91	MANUAL, INSTRUCTION (CZECH/ENGLISH/POLISH/RUSSIAN/ BULGARIAN/HUNGARIAN)	(KV-29FX11K/29FX11R)
	4-204-202-61	MANUAL, INSTRUCTION (ENGLISH)	(KV-29FX11U)
	*4-204-164-01	INDIVIDUAL CARTON	
	*4-204-159-01	CUSHION (LOWER) (ASSY)	
	*4-204-158-01	CUSHION (UPPER) (ASSY)	
	*4-042-476-01	BAG, PROTECTION	
		REMOTE COMMANDER	
		**********	
	1-475-833-11	COMMANDER, STANDARD TYPE (RM-886)	

****

English
98BP7173-1
Printed in U.K.

Sony Corporation
Sony UK
Service Promotions Dept.

9-974-967-01