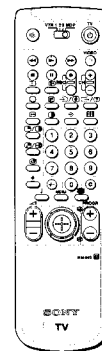
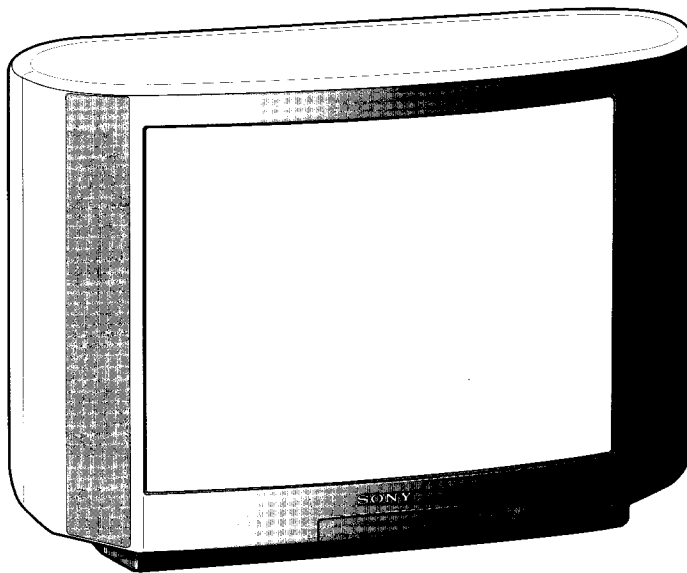


SERVICE MANUAL

AE-4 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
<i>KV-29C3A</i>	<i>RM-862</i>	<i>Italian</i>	<i>SCC-K43A-A</i>	<i>KV-29C3E</i>	<i>RM-862</i>	<i>Spanish</i>	<i>SCC-K42A-A</i>
<i>KV-29C3B</i>	<i>RM-862</i>	<i>French</i>	<i>SCC-K45A-A</i>	<i>KV-29C3K</i>	<i>RM-862</i>	<i>OIRT</i>	<i>SCC-K44A-A</i>
<i>KV-29C3D</i>	<i>RM-862</i>	<i>AEP</i>	<i>SCC-K41A-A</i>	<i>KV-29C3R</i>	<i>RM-862</i>	<i>OIRT</i>	<i>SCC-K44B-A</i>



TRINITRON® COLOR TV
SONY®



ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, PAL+, SECAM NTSC3.58/4.43 (video input only)
French	B/G/H, D/K, L, I	L SECAM VHF: F2-F10 UHF: F21-F69 TV CABLE TV (1) VHF: B-Q UHF: S21-S44 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-H, H1, H2 PAL I UHF: B21-B69 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, SECAM NTSC3.58/4.43 (video input only)
AEP	B/G/H, D/K	B/G/H VHF: E2-E12 UHF: S1-S20 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10 ITALIA VHF: A-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, PAL+, SECAM NTSC3.58/4.43 (video input only)
Spanish	B/G/H, D/K	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-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, PAL+, SECAM NTSC3.58/4.43 (video input only)
OIRT	B/G/H, D/K	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-H, H1, H2 D/K VHF: R01-R12 UHF: R21-R69 CABLE TV VHF: S1-S41, UHF: S01-S05	PAL, PAL+, SECAM NTSC3.58/4.43 (video input only)

SPECIFICATIONS

Picture Tube Hi-Black Trinitron
Approx. 55 cm (21 inches)
(Approx. 51 cm picture measured
diagonally) 100° deflection

Rear/Front Terminals

[REAR]

21-pin Euro connector (CENELEC standard)
- Including audio/video input, RGB input

[FRONT]

2 Video input - phono jack
Audio inputs - phono jacks
Headphone jack - stereo minijack

Sound output 14Wx2 (music power)
7Wx2 (RMS)

Dimensions 517x472x489 mm approx.

Weight Approx. 21.0 kg

Supplied accessories RM-836 Remote Commander (1)
IEC designated batteries (2)

Other features TELETEXT, Fasttext
TOP text (KV-21R1A and 21R1D only) 2 —
NICAM (KV-21R1E only)

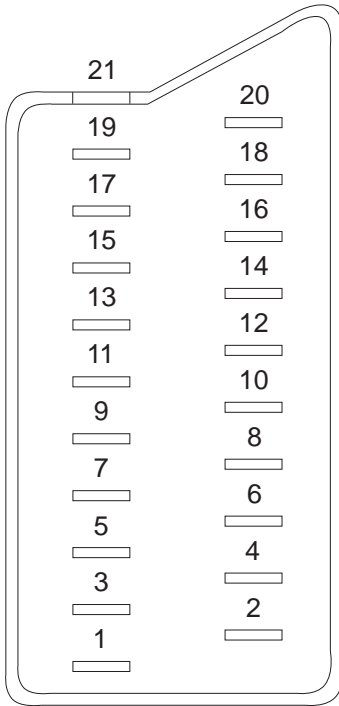
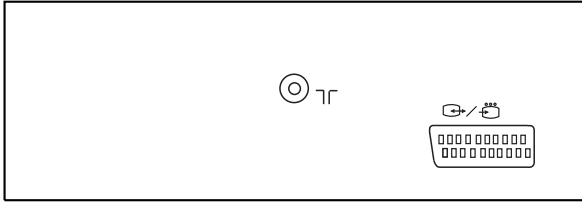
[RM-862]

Remote control system	Infrared control
Power requirements	3V dc (2 batteries) R6 (size AA)
Dimensions	Approx. 210x56x24 mm (w/h/d)
Weight	Approx. 110g (Not including battery)

Design and specifications are subject to change without notice.

Item	Model name					
	KV-28WS4A	KV-28WS4B	KV-28WS4D	KV-28WS4E	KV-28WS4K	KV-28WS4R
PIP	OFF	OFF	OFF	OFF	OFF	OFF
MPIP	ON	ON	ON	ON	ON	ON
Rotation Coil	ON	ON	ON	ON	ON	ON
VM Set (Velocity Modulation)	ON	ON	ON	ON	ON	ON
PAL +	ON	ON	ON	ON	ON	ON
Scart 1	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON
Front in (3)	ON	ON	ON	ON	ON	ON
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON
TXT	ON	ON	ON	ON	ON	ON
FLOF	ON	ON	ON	ON	ON	ON
TOP	ON	ON	ON	ON	ON	ON
Norm B/G/H	ON	ON	ON	ON	ON	ON
Norm I	OFF	ON	OFF	OFF	OFF	OFF
Norm D/K	ON	ON	ON	ON	ON	ON
Norm L	OFF	ON	OFF	OFF	OFF	OFF
Language Preset	Italian	French	German	Spanish	OIRT	OIRT

21 pin connector ( 1)



Pin No.	1	2	4	Signal	Signal Level
1	○	○	○	Audio output B (Right)	Standard level : 0.5V rms Output impedance : Less than 1k ohms*
2	○	○	○	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	○	○	○	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	○	○	○	Ground (Audio)	
5	○	○	○	Ground (Blue)	
6	○	○	○	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
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 impedance : More10k ohms Input capacitance : Less than 2nF
9	○	○	○	Ground (Green)	
10	○	○	○	Open	
11	○	●	●	Green	
12	○	○	○	Open	
13	○	○	○	Ground (Red)	
14	○	○	○	Ground (Blanking)	
15	○	—	—	Red input	0.7 ± 3dB, 75 ohms, positive
	—	○	○	(S signal) cromia input	0.7 ± 3dB, 75 ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 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, sheild)	

○ 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 75ohm, positive Sync.

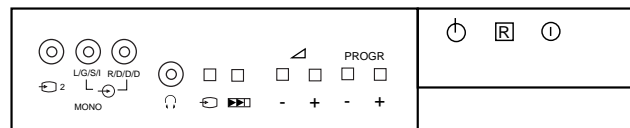


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4-3.	Test Mode 2:	29			

CAUTION

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

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK  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 L'ANODE, 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 !!

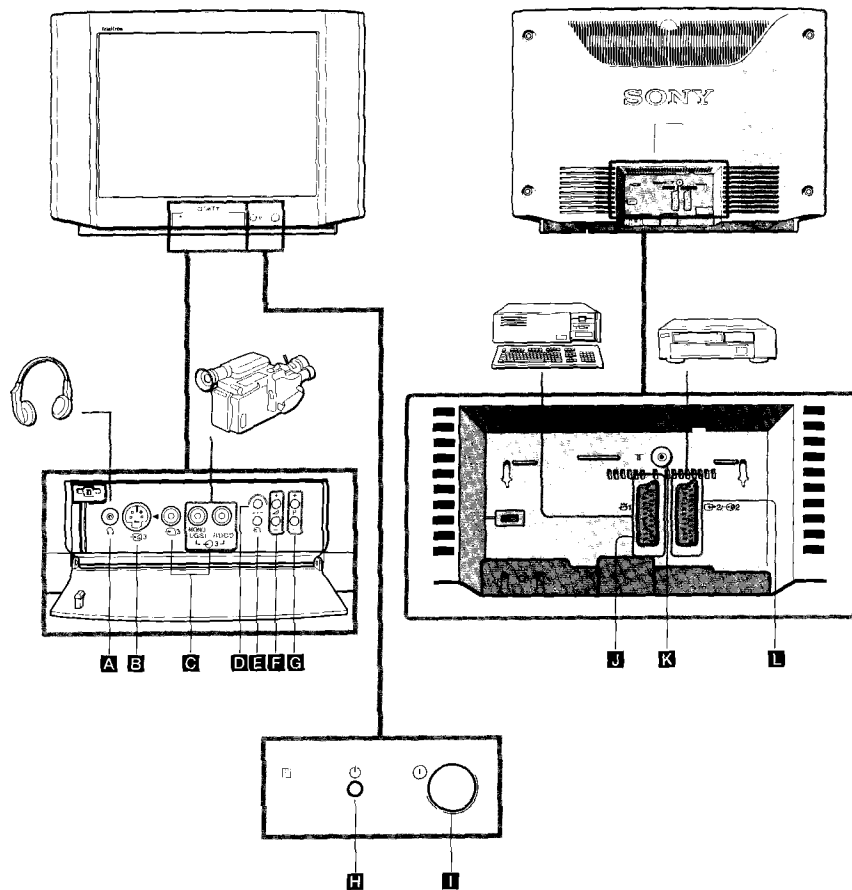
AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES VUES EXPLOSÉES ET LES LISTES DE PIÉCES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

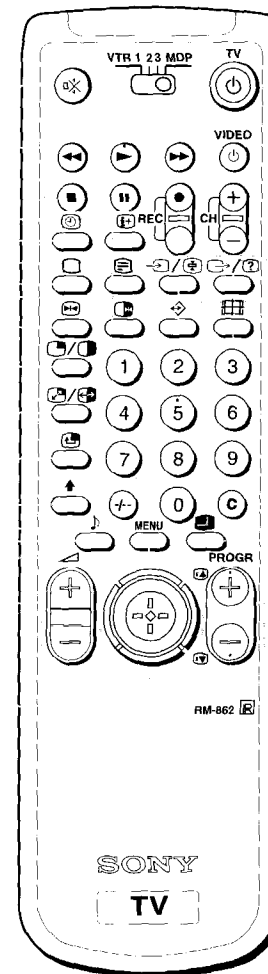
SECTION 1 GENERAL

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



- 1
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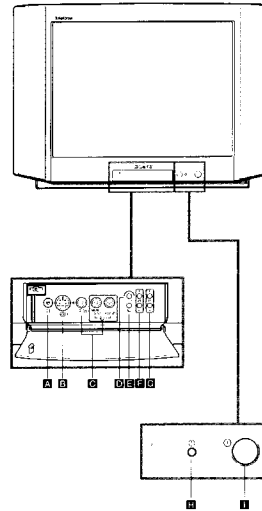


Overview

This section briefly describes the buttons and controls on the TV set and on the Remote Commander. Please open the flaps at the front and at the back of the Instruction Manual for detailed illustrations of the Remote Commander and the TV set. Letters in boxes refer to the buttons and connectors on the TV set, numbers in circles to the buttons on the Remote Commander. For more information, refer to the pages given next to each description.

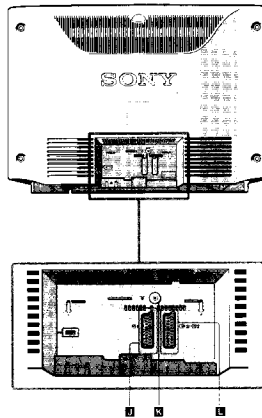
TV set – front

Reference and Symbol	Name	Refer to page
A	Headphones jack	35
B	S video input jack	40
C	Input jacks (video, audio)	40
D	Reset button	28
E	Input mode button	28
F	Volume control	28
G	Programme buttons	28
H	Standby mode indicator	28
I	Main power switch	28



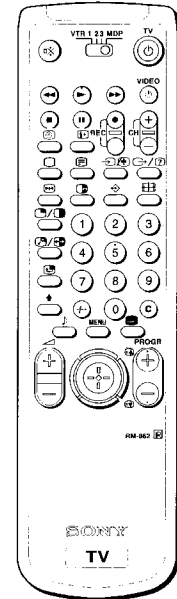
TV set – rear

Reference and Symbol	Name	Refer to page
J	21-pin Euro connector	40
K	Aerial socket	26
L	21-pin Euro connector	40



Remote Commander

Reference and Symbol	Name	Refer to page
1	Muting on/off button	28
2	VCR operation	41
VTR 123 MDP	Video equipment selector	41
	Video equipment operation buttons	41
VIDEO	VIDEO \uparrow , CH +/-	
3	On-screen display button	28
4	Time display button	28
5	Teletext button	28, 37
6	TV power on/TV mode button	28
7	No function on this set	
8	Freeze button	28
9	PIP on/off button	36
10	PIP Swap button	36
11	PIP position button	36
12	PIP source selector	36
13	Double digit entering button	28
14	Sound mode button	34
15 MENU	Menu on/off button	29
16	Volume control buttons	28
17	Joystick for Menu selection	29
	Press to confirm selection (OK function)	
18	TV standby button	28
19	Output mode selector	40
	Teletext: Reveal button	37
20	Input mode selector	28
	Teletext: Freezing the subpage	37
21	Teletext: Favourite pages button	39
22	No function on this set	
23 1, 2, ..., 9, 0	Number buttons	28
24 C	Direct channel entering button	28
25	Picture mode button	34
26 PROGR +/-	Programme buttons	28
	Teletext: Page up/page down buttons	37

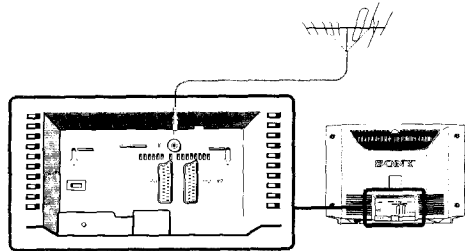


Basic Operation

Step 1 Installation

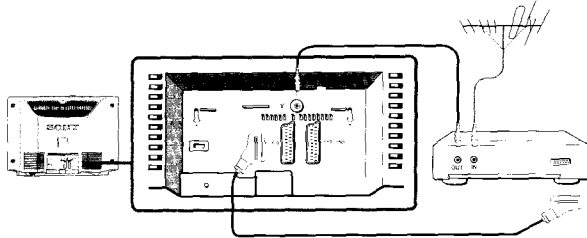
A Connecting the Aerial

(If you connect a VCR, skip to step B)
Insert the aerial plug of the supplied aerial cable tightly into the aerial socket **T**.



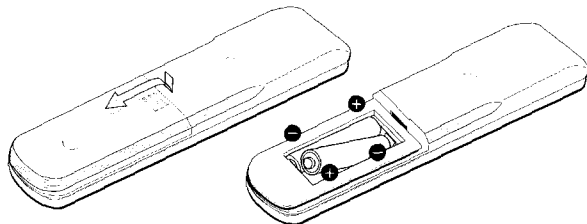
B Connecting a VCR

We recommend that you tune in the VCR signal to the programme position »0«.
Use the preset function »Manual Programme Preset« (page 29) to do this.



C Inserting the batteries into the Remote Commander

Insert the batteries checking the correct polarities.



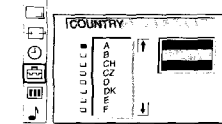
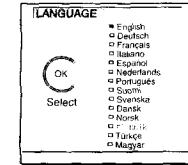
! Respect your environment! Dispose of used batteries in an environmental friendly way.

Step 2 Basic Presetting

A Choosing the Menu Language and the Country


Using this function you select the language of the menu screens. Also you select the country in which you will use the TV. In this way the channels of the selected country will automatically get the top positions during automatic presetting.

- 1 Press the power switch **1** on the TV. If the standby indicator **H** on the TV is lit, press **0** or a number button **2** on the Remote Commander. Press the MENU button **15** on the Remote Commander. The menu LANGUAGE appears.
- 2 Push the joystick **17** to blue or green to select the language. Press the joystick **17** to confirm your selection. The menu COUNTRY appears.
- 3 Push the joystick **17** to blue or green to select the country in which you wish to operate the TV. Press the joystick **17** to confirm the selection.
- 4 Press MENU **15** to restore the normal TV picture.



B Presetting Channels Automatically

With this function the TV automatically searches and stores up to 100 channels onto programme positions. If you prefer »Manual Presetting of channels« please refer to page 29 in Advanced Operation.

- 1 Press MENU **15**.
- 2 Push the joystick **17** to blue or green to select the symbol  on the menu screen, then push to yellow.
- 3 Push the joystick **17** to blue or green to select »Auto Programme«, then push to yellow. The menu AUTO PROGRAMME appears.
- 4 a) All items shown on the menu screen are as wanted: Press joystick **17** to select START. Now the automatic channel presetting starts from programme position 1.
or
4 b) You wish to change items as shown on the menu screen: Push the joystick **17** to blue or green. Push to yellow repeatedly until the desired item is highlighted.

Push the joystick **17** to blue or green to select the following possibilities:

ACI
(Automatic Channel Installation, depending on availability of service in your country)
on: fast channel presetting by special networks using the channel frequency (e.g. F055)
TV-system and station label
off: ACI is not active, only ITP (Intelligent Tuner Preset)

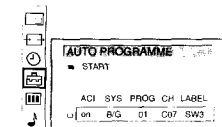
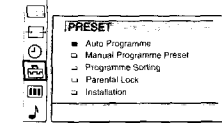
SYS (TV Broadcast System)
B/G for Western European Countries
D/K for Eastern European Countries

PROG (Programme Position)
Presetting automatically starts from position 1.

CH (channel)
C to start presetting with terrestrial channels
S to start presetting with cable channels

Press the joystick **17** as soon as the automatic presetting should start.

5 After presetting the normal TV picture reappears.



Joystick



Advanced Presetting

7a) Direct Input

For channel numbers you need to input a two digit number, for the frequency a three digit number.

- Push to blue or green to select the first digit of the channel number or frequency. Push to yellow to confirm.
- Push to blue or green to select the second digit of the number or frequency. Push to yellow to confirm. In case of the channel number the search starts.
- Push to blue or green to select the third digit of the frequency number. Push to yellow to start the search of the frequency.
- To continue search for another channel: Push to blue or green.
- To store the selected channel: Press the joystick **1**.
- Repeat steps 4 to 7a) to preset other channels.

7b) Search

- Push repeatedly to yellow until a blue and a green arrow appear in the section SEARCH.
- Push to blue or green to search for the next available channel.
- To continue search for another channel: Push to blue or green.
- To store the selected channel: Press the joystick **1**.
- Repeat steps 4 to 7b) to preset other channels.

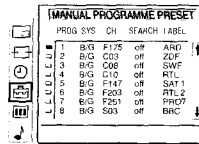
Joystick



Captioning a Station Name

Channels are usually automatically labelled during presetting. You can, however, individually name a channel or a video source using up to five characters.

- 1 Press MENU **1**.
- 2 Push joystick **1** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »Manual Programme Preset«. Push to yellow to confirm.
- 4 Push to blue or green to select the programme position with the channel you want to label. Push to yellow repeatedly until the first element of the position LABEL is highlighted.
- 5 Push to blue or green to select a letter or a number (select »-« for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- 6 After selecting all characters, press the joystick **1**.
- 7 Repeat steps 4 to 6 to label other channels or video sources.
- 8 Press MENU **1** to restore the normal TV picture.



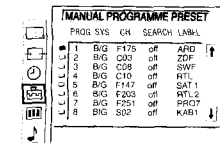
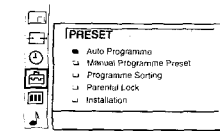
Advanced Presetting

Skipping Programme Positions

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

- 1 Press MENU **1**.
- 2 Push joystick **1** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »Manual Programme Preset«. Push to yellow to confirm.
- 4 Push to blue or green to select the programme position you want to skip. Push to yellow to confirm.
- 5 Push to blue or green to select »---« in the position SYS (system). Press the joystick **1** to confirm.
- 6 Repeat steps 4 and 5 to skip other programme positions.
- 7 Press MENU **1** to restore the normal TV picture.

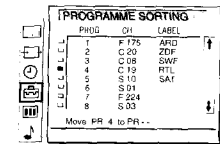
Joystick



Sorting Programme Positions

This function enables you to sort the programme positions to a preferable order.

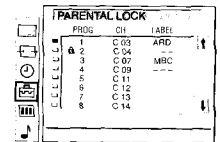
- 1 Press MENU **1**.
- 2 Push joystick **1** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »Programme Sorting«. Push to yellow to confirm.
- 4 Push to blue or green to select the programme position of the channel you want to exchange. Press joystick **1** to confirm.
- 5 Push to blue or green to select the programme position of the second channel. Press joystick **1** to confirm. Now the two programme positions are swapped and sorted.
- 6 Repeat steps 4 and 5 to sort other programme positions.
- 7 Press Menu **1** to restore the normal TV picture.



Using Parental Lock

This function enables you to prevent children watching undesirable broadcasts.

- 1 Press MENU **1**.
 - 2 Push joystick **1** to blue or green to select the symbol on the menu screen. Push to yellow to confirm.
 - 3 Push to green or blue to select »Parental Lock«. Push to yellow to confirm.
 - 4 Push to green or blue to select the channel you want to block. Press the joystick **1** to confirm. The symbol appears before the programme position to indicate that this channel is now blocked.
 - 5 Repeat step 4 to block other channels.
 - 6 Press MENU **1** to restore the normal TV picture.
- !** To unblock: Select the channel to unblock in the menu »Parental Lock«. Press the joystick **1**. The symbol disappears.




Advanced Presetting

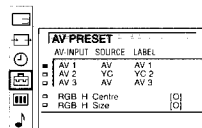
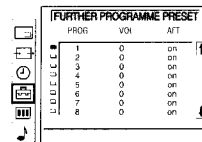
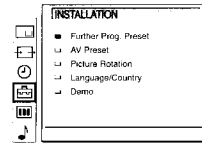
Using »Further Programme Preset«

Using the menu »Further Programme Preset« you can

- individually adjust and store the volume level of each channel (Volume offset).
- in case of picture distortions use manual fine tuning to obtain a better picture quality. The factory setting is »on« for AFT (Automatic Fine Tuning).

- Press MENU **15**.
- Push joystick **17** to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- Push to blue or green to select »Installation«. Push to yellow to confirm.
- Push to blue or green to select »Further Programme Preset«. Push to yellow to confirm.
- Push to blue or green to select the programme position you want. Push to yellow repeatedly to select:
 - VOL (Volume Offset) or b) AFT (Automatic Fine Tuning). The selected item changes colour.
- 6a) VOL**
Push to blue or green to adjust the volume for the selected programme position within a range of -7 to +7. Press the joystick **17** to confirm. Repeat step 6 to set the volume level for other programme positions.
- b) AFT**
Push to blue or green to fine-tune the channel within a range of -15 to +15. Press the joystick **17** to confirm. Repeat step 6 to fine-tune other channels.
- Press MENU **15** to restore the normal TV picture.


Joystick



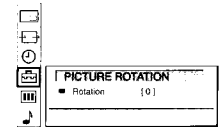
Advanced Presetting

Adjusting the Picture Rotation


If, due to the earth magnetism, the picture slants, you can use this function to readjust the picture.


- Press MENU **15**.
- Push joystick **17** to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- Push to blue or green to select »Installation«. Push to yellow to confirm.
- Push to blue or green to select »Picture Rotation«. Push to yellow to confirm.
- Push to yellow. Push to blue or green to adjust the picture rotation. The adjusting range is -4 to +4. Press the joystick **17** to confirm.
- Press MENU **15** to restore the normal TV picture.

Joystick



Using »AV Preset«

Using this function you can preset the desired input source (e.g. , RGB signal) to the respective AV input (AV1). In this way a connected VCR switches automatically to the RGB signal. Also you can label the input sources.

- Press MENU **15**.
- Push joystick **17** to blue or green to select the symbol  on the menu screen. Push to yellow to confirm.
- Push to blue or green to select »Installation«. Push to yellow. Push to blue or green to select »AV Preset«. Push to yellow to confirm.
- Push to blue or green to select the desired AV input. Push to yellow to confirm.
- Push to blue or green to select the desired source. Push to yellow to confirm. For the respective AV inputs you have the following choice:
AV1: RGB or AV
AV2: YC2 or AV
AV3: YC3 or AV
- To label a source: Push to blue or green to select the first character (letter or number, »-« for a blank). Push to yellow to confirm. Select the other four characters in the same way.
- Press the joystick **17** to store.
- Repeat steps 4 to 7 for the other AV inputs.
- For RGB input source only: Push to blue or green to select RGB H Centre.
 - Push to yellow to confirm.
 - Push to blue or green to adjust the centre of the picture in a range of -5 to +5. Press the joystick **17** to store.
 - Repeat step 9 to adjust RGB H Size.
- Press MENU **15** to restore the normal TV picture.

Advanced TV operation

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 **⏏** (for Picture) or **🎵** (for Sound)

or
Press MENU **⏏**.

Push joystick **⬅** to blue or green to select **⏏** for Picture Control or **🎵** for Sound Control. Push to yellow to confirm. The menu PICTURE CONTROL or SOUND CONTROL appears.

2 Push to blue or green to select the desired item. Push to yellow to confirm.

3 Push to red or yellow to adjust the selected item. Press the joystick **⬅** to confirm. For the effect of each control, see the following tables.

4 Repeat steps 2 and 3 to adjust other items.

5 Press MENU **⏏** to restore the normal TV picture.

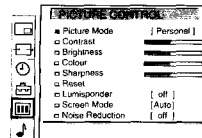
Picture Control

Item	Effect
Picture Mode	• Personal → Economy (energy saving setting) → Live → Sports → Movie → Game
Contrast	• Less — — More
Brightness*	• Darker — — Brighter
Colour*	• Less — — More
Hue**	• Greenish — — Reddish
Sharpness*	• Softer — — Sharper
Reset	• Resets picture to the factory preset levels
Lumisponder	• Off: Normal On: Automatic optimization of picture level according to the surrounding lighting level
Screen Mode	• Auto (automatic selection of 16:9 broadcasts decoded in 4:3) → 4:3 → 16:9
Noise Reduction	• Off: Normal On: Reduction of picture noise in case of weak signals

* Only if »Personal« or »Economy« is selected in »Picture Mode«.

** Available for NTSC colour system only.

Joystick



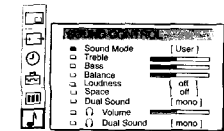
Advanced TV operation

Sound Control

Item	Effect
Sound Mode	• Choice between different sound effects User → Pop → Jazz → Rock
Treble*	• Less — — More
Bass*	• Less — — More
Balance	• More left — — More right
Loudness*	• Off: normal On: for music broadcasts
Space	• Off: normal On: special acoustic effect
Dual Sound	• A: channel 1 or B: channel 2 Stereo → Mono
Headphones	
Volume	• Less — — More
Dual Sound	• A: channel 1 or B: channel 2 → PIP (if PIP is switched on, you can select the PIP sound for the headphones) → Stereo → Mono

* Only if »User« is selected in »Sound Mode«

Joystick



Using the Sleep Timer

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

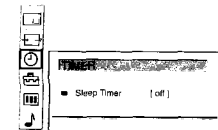
1 Press MENU **⏏**.

2 Push joystick **⬅** to blue or green to select the symbol **⌚** on the menu screen. Push to yellow to confirm.

3 Push to yellow. Push to blue or green to select the time.
OFF → 10 min → 20 min 80 min → 90 min.
Press the joystick **⬅** to confirm.

4 Press MENU **⏏** to restore the normal TV picture.

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



Teletext

Using the Teletext Menu

Your TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the buttons for menu operation to operate the teletext menu. Select the teletext menu functions as follows:

- 1 Press MENU **5**. The menu is superimposed on the teletext display.
- 2 Push the joystick **7** to blue or green to select the teletext function you want. Push to yellow to confirm the selection.

USER PAGES/PRESET USER PAGES

See page 39 for information about presetting and operating the user pages.

INDEX

The index gives you an overview of the contents of the teletext you are using.

TOP/BOTTOM/FULL

For convenient reading of a teletext page you can enlarge the teletext page. After selecting the function, an information line »Top Bottom OK Full« is displayed. Push joystick **7** to green to enlarge the upper half, push to blue to enlarge the lower half. Press the joystick **7** to resume the normal display. Press **5** to resume normal teletext reception.

TEXT CLEAR

After selecting the function, you can watch a TV programme while waiting for a requested teletext page to be captured. When the page is available, the symbol **5** changes colour. Press **5** to view the requested page.

SUBTITLES

Check with your teletext service for information about subtitled TV programmes. After selecting the function the subtitles are displayed.

TIME PAGE

Check with your teletext service about the availability of time coded pages. If available, you can call up a page (e.g. an alarm page) at a certain time.

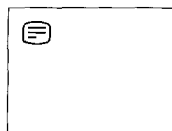
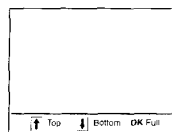
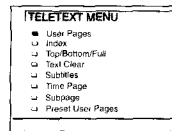
- 1 Select TIME PAGE in the teletext menu. Push joystick **7** to yellow. An information window is displayed. Push to blue or green to select »On«. Push to yellow.
- 2 Use the number buttons **2** to enter the three digits of the page you want (e.g. 301). Push to yellow after each digit.
- 3 Use the number buttons **2** to enter the four digits of the desired time (e.g. 18-54). Push to yellow after each digit. Press joystick **7** to confirm. Press MENU **5**. The time is displayed in the top left-hand corner of the screen. At the requested time the page is displayed.

SUBPAGE

Using this function you can select a particular teletext page from several subpages (e.g. page 2 of 6 pages in total). After selecting the function an information line is displayed. Use the number buttons **2** to enter the four digits (e.g. enter 0002 for the second page of a sequence).

To cancel the request: Push joystick **7** to red and then to yellow.

Joystick



Teletext

User Page Bank System

You can store up to 6 of your favourite teletext pages per Teletext service. In this way you have quick access to the pages you frequently use.

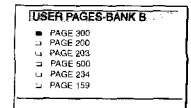
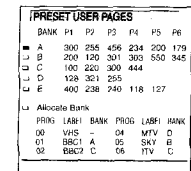
Storing pages

- 1 Press **5** to switch Teletext on. Press MENU **5**.
- 2 Push joystick **7** to blue or green to select »Preset User Pages«. Push to yellow to confirm.
- 3 Push to blue or green to select the bank (from A to E) you want. Push to yellow to confirm.
- 4 Push to blue or green to select the three digits of your first favourite page. Push to yellow after each digit. Push to yellow to confirm.
- 5 Repeat step 4 for the other 5 favourite pages. If you do not want to preset all 6 page numbers push to yellow without inserting any number. After finishing the presetting, press the joystick **7**.
- 6 Push to blue or green to select »Allocate Bank«. Push to yellow to confirm.
- 7 Push to blue or green to select the programme position of the channel which carries the teletext service for which you have selected your favourite pages. Push to yellow to confirm.
- 8 Push to blue or green to select the bank from step 3. Press the joystick **7** to confirm.
- 9 Repeat steps 3 to 8 for the other 4 banks available.

Displaying User Pages

- 1 Press MENU **5**.
 - 2 Push joystick **7** to blue or green to select »User Pages«. Push to yellow to confirm.
 - 3 Push to blue or green to select the page you want. Press the joystick **7**. The page is displayed after some seconds.
- or
- 1 Press **5**.
 - 2 Push joystick **7** to blue or green to select the page you want. Press the joystick **7**. The page is displayed after some seconds.

Joystick



Optional Equipment

Connecting Optional Equipment

You can connect a wide range of optional equipment to your TV. Refer to the illustrations on the back lap page of this Instruction Manual.

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

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.

Tips:

- 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.

Selecting Input and Output Signals

a) Direct Access Buttons

Selecting the Input

Press **20** **E** repeatedly to select one of the following input modes:

Symbol on the screen	Input signals	
1	Audio/video through Euro AV connector	J
	RGB through Euro AV connector	J
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

Press **0** to restore the normal TV picture.

Selecting the Output from Euro AV connector 2/2 **L**

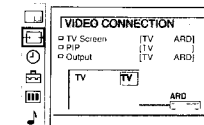
Press **2** **0** repeatedly to select one of the following output sources for the connector 2/2 **L**:

Symbol on the screen	2/2 L connector output signal	
1	Audio/video from Euro AV connector	J
2	Audio/video from Euro AV connector	L
2	Audio/video from Euro AV connector	L
3	Audio/video from the phono jacks	C
3	Audio/video from the 4 pin DIN	B
TV	Audio/video from the aerial terminal T	K

Optional Equipment

b) Using the Menu »Video Connection«

- 1 Press MENU **0**.
- 2 Push joystick **0** to blue or green to select the symbol **000** on the menu screen. Push to yellow to confirm.
- 3 Push to blue or green to select »TV screen« (input source for TV-screen), PIP (source for PIP screen), or »Output« (output source for 2/2 **L**). Push to yellow to confirm.
You can select between the following sources:
• TV: TV-tuner • YC: S video signal • AV: Audio/Video
TV screen: TV, AV1, RGB, AV2, YC2, AV3, YC3
PIP: TV, AV1, AV2, YC2, AV3, YC3
Output: TV, AV1, AV2, YC2, AV3, YC3
- 4 Push to blue or green to select the desired source. Press joystick **0** to store.
- 5 Press MENU **0** to restore the normal TV picture.



Joystick



Remote Control of other Sony Equipment

Using the buttons **0** on the Remote Commander you can control other Sony equipment.

- 1 Set the selector VTR 1 2 3 MDP according to the equipment you want to control.
VTR 1: Beta VCR
VTR 2: 8mm VCR
VTR 3: VHS VCR
MDP: Video Disk Player
- 2 Use the buttons **0** on the Remote Commander to operate the equipment.

Tips

- If your video equipment has a COMMAND MODE selector, set this selector to the same position as the VTR 1 2 3 MDP selector on the TV Remote Commander.
- If the equipment does not have a certain function, the corresponding button on the Remote Commander does not work.

Additional Information

Troubleshooting

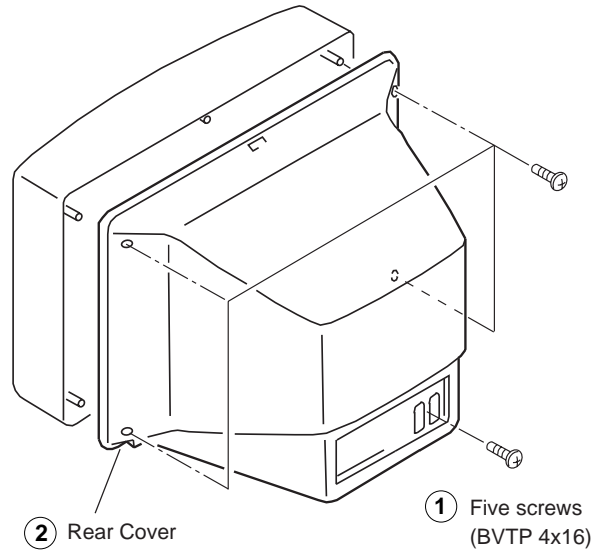
Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none">• Plug the TV in.• Press 0 1 on the TV. (If 0 indicator 1 is on, press 0 6 or a programme number 2 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 and then turn it on again using 0 1.
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none">• Press 0 2 to enter the PICTURE CONTROL menu and adjust »Brightness«, »Contrast« and »Colour«.
Poor picture quality when watching an RGB video source	<ul style="list-style-type: none">• Press 0 2 repeatedly to select 2.
Good picture but poor or no sound	<ul style="list-style-type: none">• Press 0 + 0.• If 0 is displayed on the screen, press 0 1.
No colour for colour programmes	<ul style="list-style-type: none">• Press 0 2 to enter the PICTURE CONTROL menu, select RESET, then press joystick 0.
Remote Commander does not function.	<ul style="list-style-type: none">• Replace batteries.

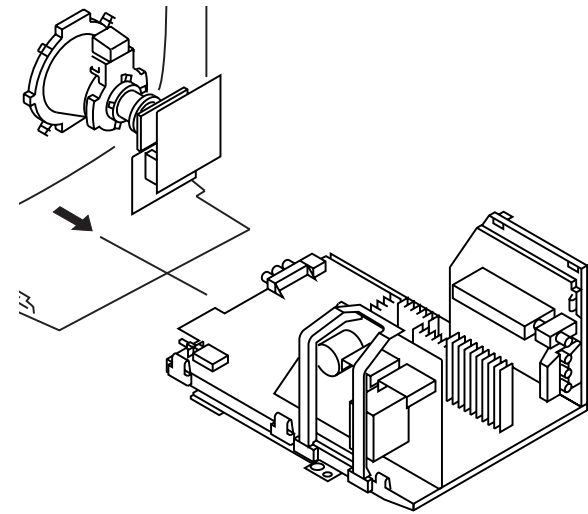
If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

SECTION 2 DISASSEMBLY

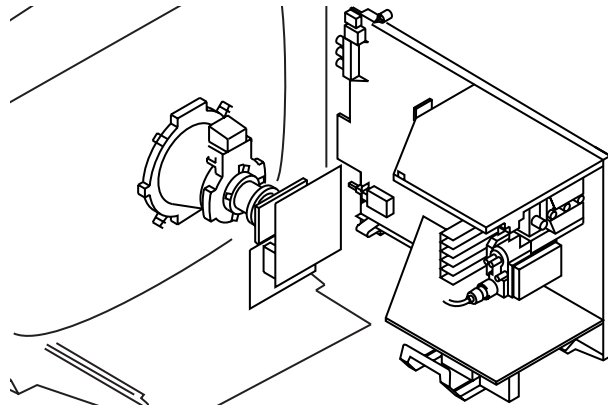
2-1. REAR COVER REMOVAL



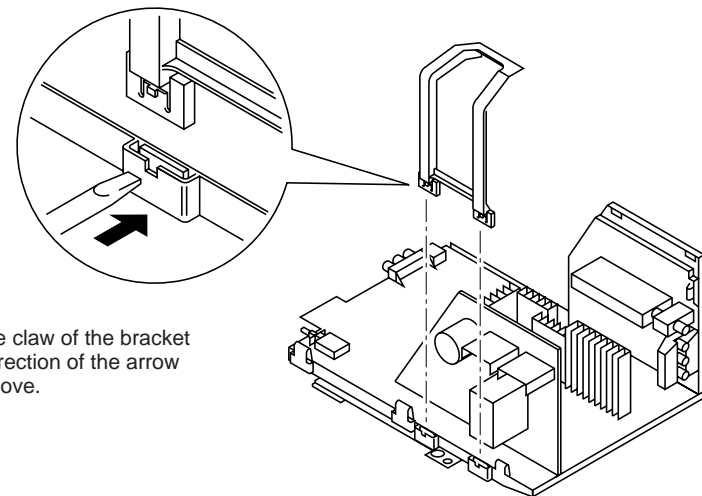
2-2. CHASSIS ASSY REMOVAL



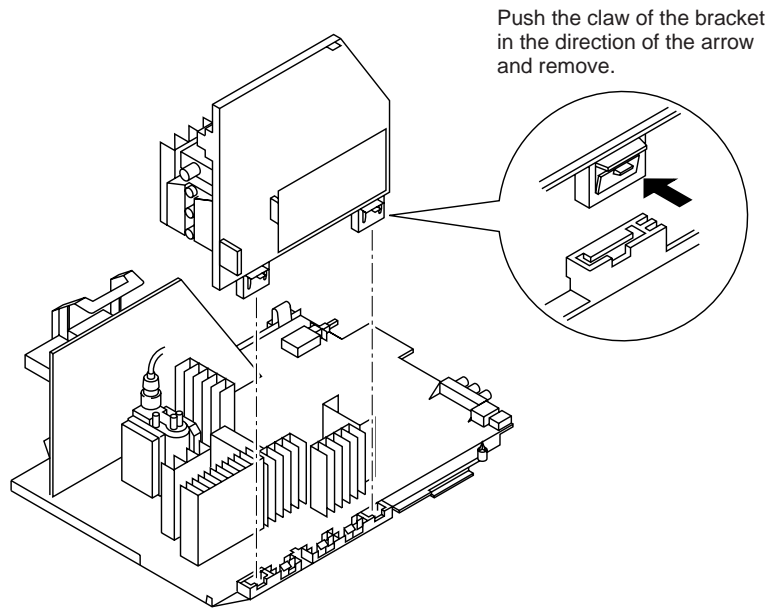
2-3. SERVICE POSITION



2-4. G BOARD REMOVAL



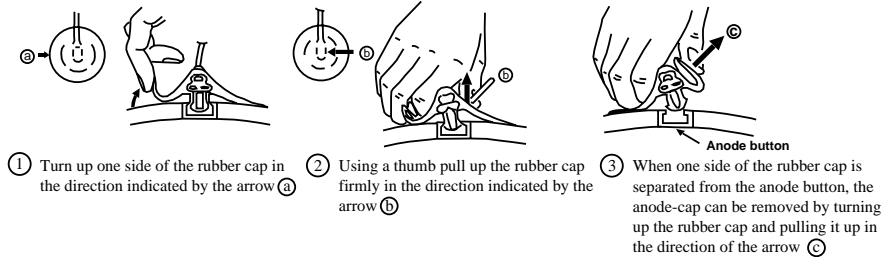
2-5. A BOARD REMOVAL



• REMOVAL OF ANODE-CAP

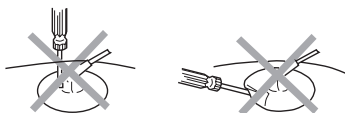
Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.

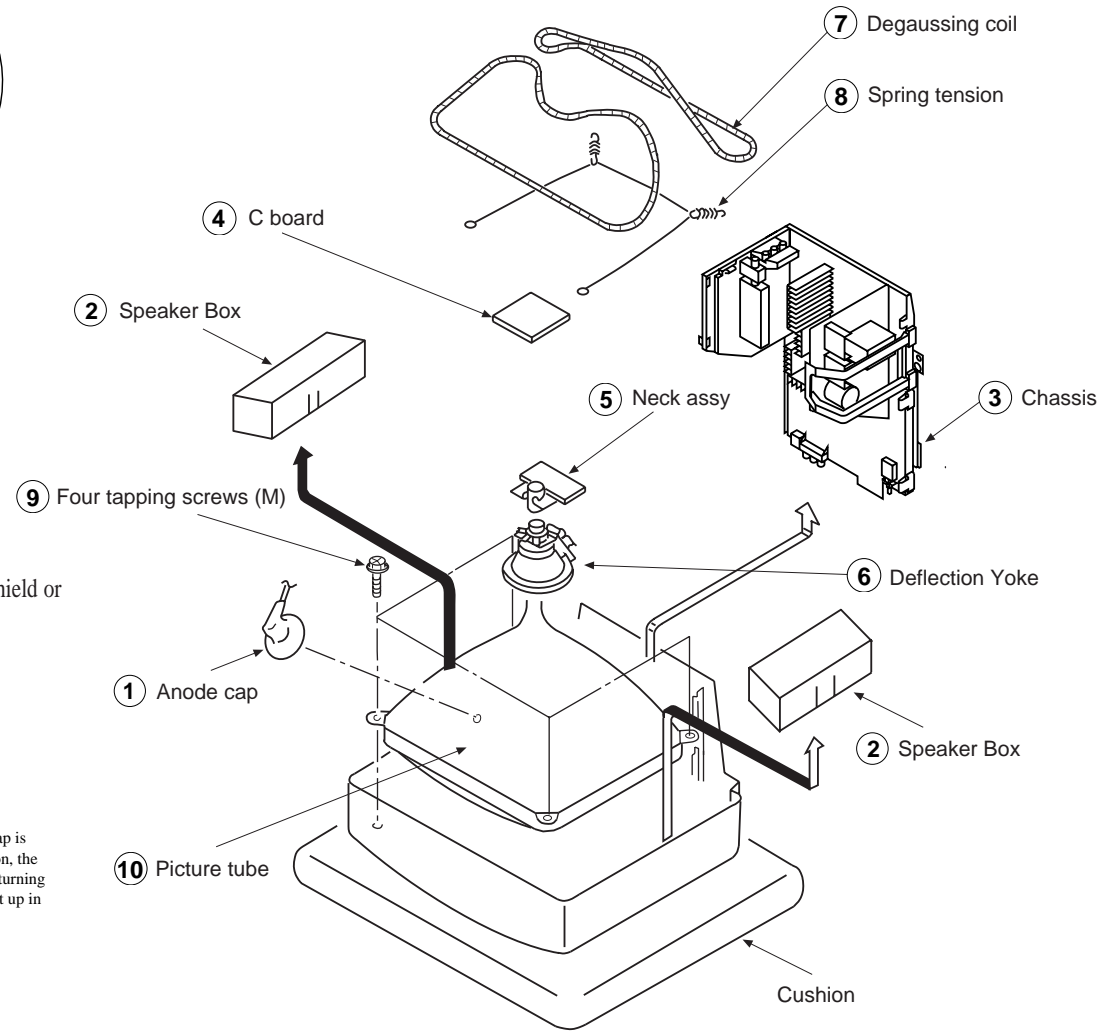


• HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps ! A metal fitting called as shatter-hook terminal is built into the rubber.
- ③ Don't turn the foot of rubber over hardly ! The shatter-hook terminal will stick out or damage the rubber.



2-6. PICUTRE TUBE REMOVAL



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

(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.

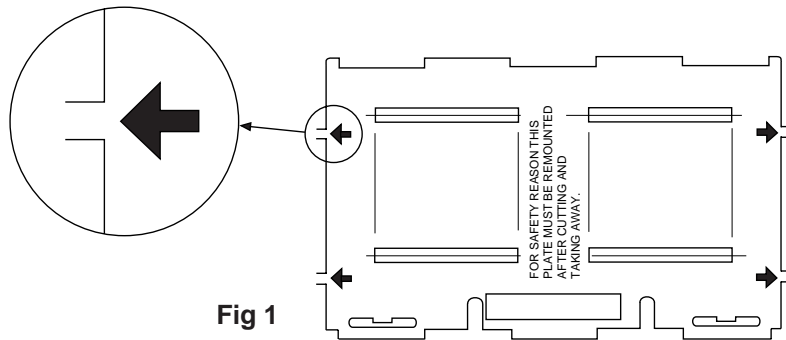


Fig 1



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

(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.

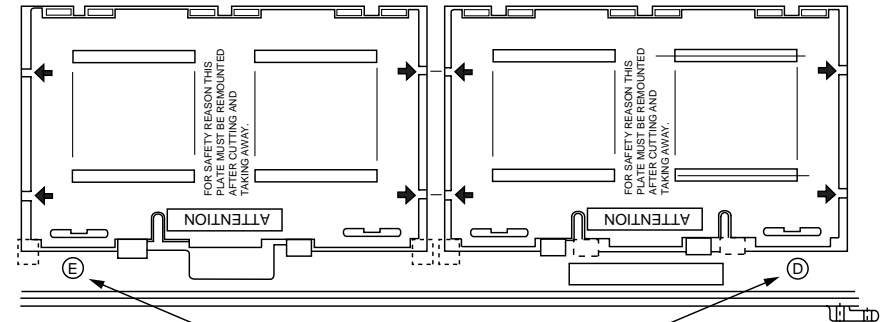


Fig 2

INDEX MARKING
AT BRACKET FRAME

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.

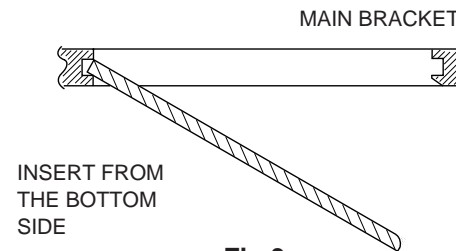


Fig 3

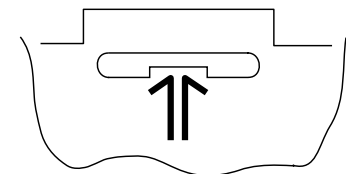


Fig 4

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 adjustment with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches as follows.

Contrast normal
 Brightness normal

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

Note: Testing equipment required.

1. Color bar/pattern generator
2. Degausser
3. Vector scope

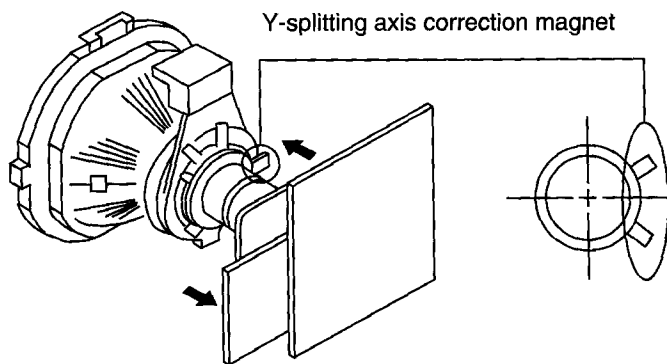
3-1. BEAM LANDING

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.

(1) Adjustment of Correction Magnet for Y-Splitting Axis

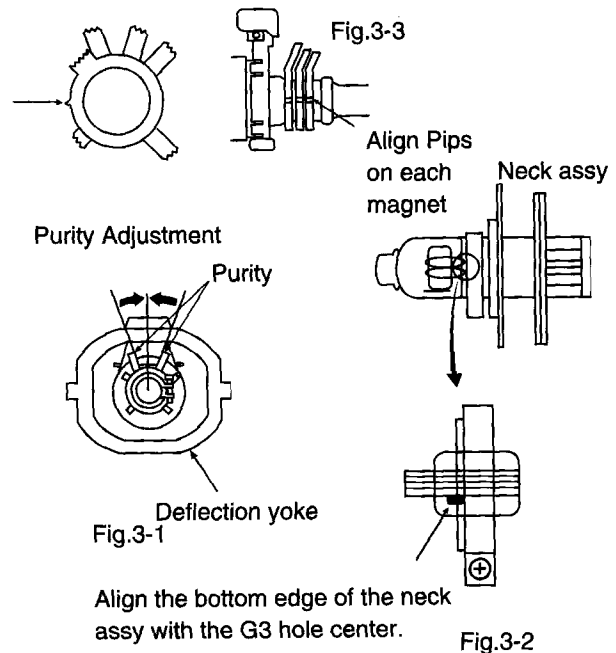
1. Input a crosshatch signal from the pattern generator.
2. Picture control is minimum and brightness control is still normal.
3. Position the neck assy as shown in Fig. 3-2.
4. Move the deflection yoke forward to touch the CRT and it stands up rightly.
5. Adjust the upper pin and the lower pin symmetrically by opening or closing the Y-splitting axis correction magnets on the neck assy.
6. Return the deflection yoke to its original position.



(2) Landing

Note: Before carrying out the following adjustments adjust the magnets as indicated below (See Fig. 3-3).

1. Input an all-white signal from the pattern generator. Maximize the picture setting and adjust the brightness setting.
2. Rough-adjust the focus and horizontal convergence.
3. Loosen the deflection yoke screws, align the purity adjustment knob to the central position. (See Fig. 3-1)
4. Switch from the all-white pattern to an all-green pattern.
5. Move the deflection yoke backwards and adjust with the purity magnet so that the green is at the center and it aligns symmetrically. (See Fig. 3-4)
6. Move the deflection yoke forward and adjust so that entire screen becomes green.
7. Switch the raster signal to red, then to blue and verify the landing condition.
8. When the position of the deflection yoke has been determined, fasten the deflection yoke with the screw.
9. If the beam does not land correctly in all the corners, use magnets to correct it. (See Fig. 3-5)



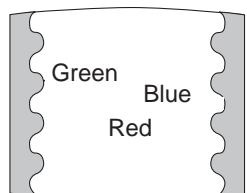


Fig.3-4

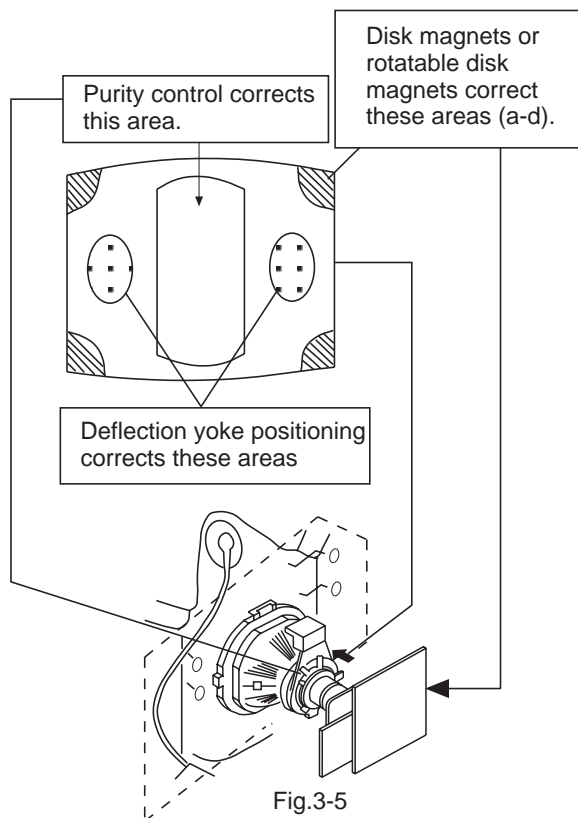
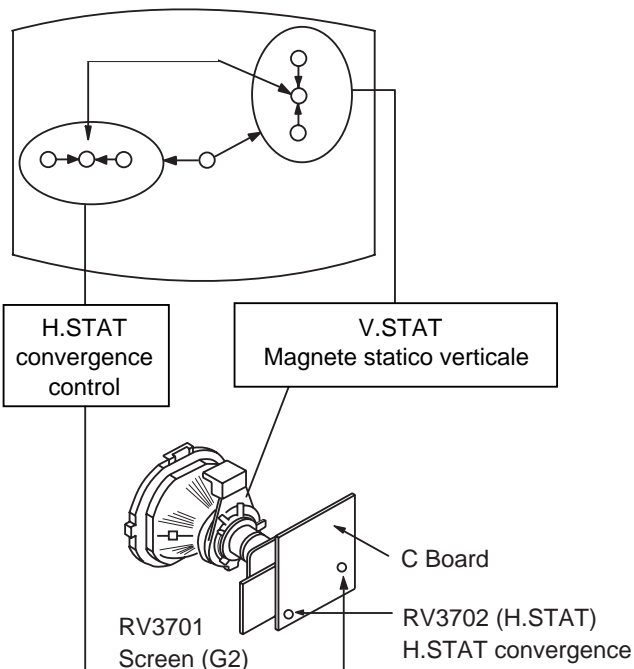
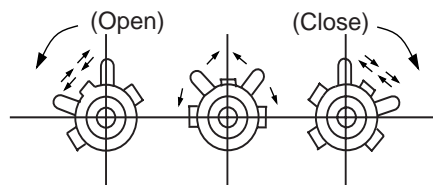


Fig.3-5



- If the horizontal dots are unable to coincide with the variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking. (Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)



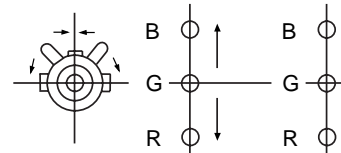
3-2. CONVERGENCE

(1) Screen center convergence (Static convergence)

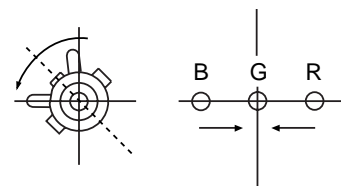
1. Input a dot signal from the pattern generator. Normalize the picture setting.
2. (Moving horizontally), adjust the H.STAT control so that the horizontal red, green and blue dots coincide at the center of screen.
3. (Moving vertically), adjust the V.STAT magnet so that the vertical red, green and blue points coincide at the center of screen.

4. Movement of the red, green and blue dots by tilting the V.STAT magnet and by opening or closing the V.STAT magnet.

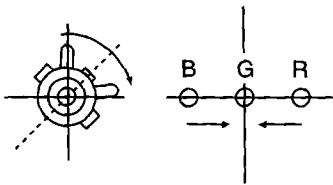
- ① By opening or closing the V.STAT magnet, the red, green and blue points move as shown below



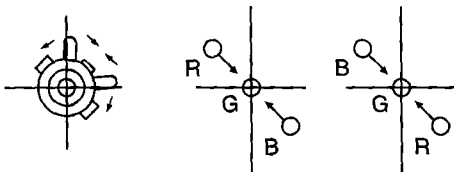
- ② By rotating the V. STAT magnet counterclockwise, the red, green and blue dots move as shown below.



③ By rotating the V.STAT magnet clockwise, the red, green and blue dots move as shown below.



④ By opening or closing the V.STAT magnet, the red, green and blue dots move as shown below.

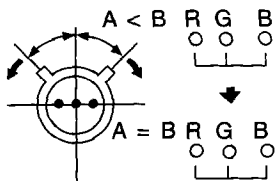


• If the blue dot does not coincide with the red and green points, correct the points by using the BMC (Hexapole) magnet.

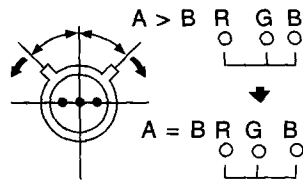
⑤ Correction for HMC (horizontal mis-convergence) and VMC (vertical mis-convergence) by using the BMC (Hexapole) magnet.

① HMC correction by BMC (Hexapole) magnet and movement of the electronic beam.

HMC correction(A)

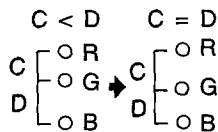
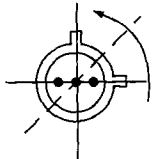


HMC correction(B)

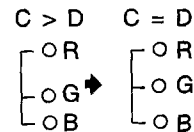
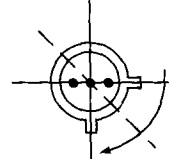


② VMC correction by BMC (Hexapole) magnet and movement of the electronic beam.

VMC correction(A)



VMC correction(B)



Layout of each control

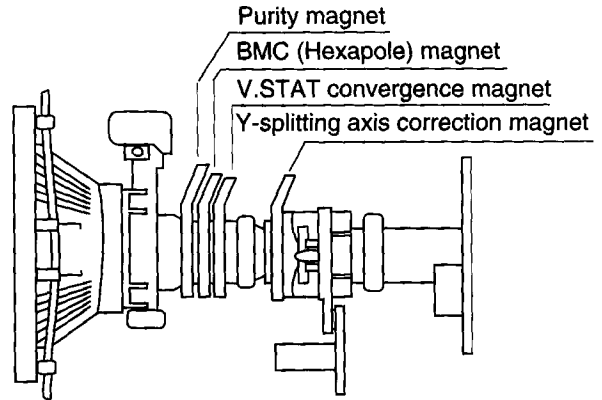
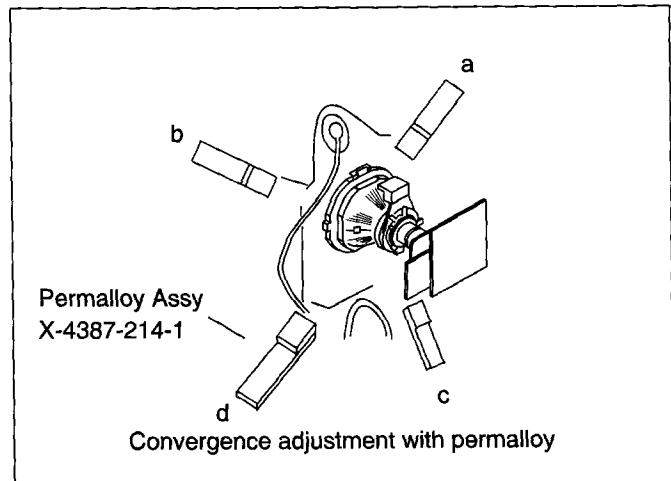
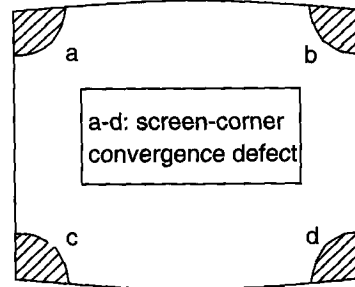


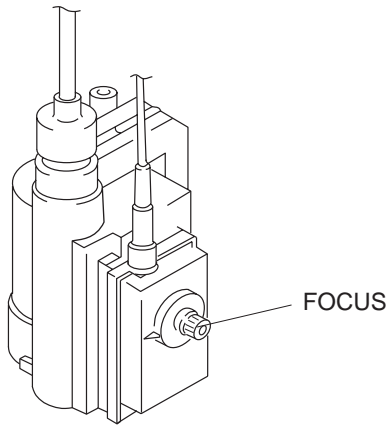
Fig.3-5

2. If you are unable to adjust the corner convergence properly, correct them with the use of permalloys.



3-3. Focus

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



Video Proc. TDA4780

Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	31
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	63
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF

3-4. Screen (G2), White balance (Adjustment in the service mode with remote commander)

G2 adjustment (RV3701)

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170V DC from an external power supply to the R, G and B cathodes of the CRT.
4. While watching the picture, adjust the G2 control RV3701 [SCREEN] on the C board to the point just before the return lines disappear.

White balance adjustment

1. Receive an all-white signal.
2. Enter into the Service Mode by pressing ' TEST ', ' TEST ' and ' MENU ' on the Service Commander.
3. Select ' VIDEO PROC. ' from the on screen menu display and press OK .
4. The ' VIDEO PROC TDA4780 ' menu will appear on the screen.

5. Set picture to MAX.
6. Set the ' R GAIN ' to 25.
7. Adjust the ' G GAIN ' and ' B GAIN ' so that the white balance becomes optimum.
8. Press the OK button to write the data for each item.
9. Set picture to MIN.
10. Set the ' R LVL REF ' to 31.
11. Adjust ' G LVL REF ', and ' B LVL REF ' with the left and right buttons so that the white balance becomes optimum.
12. Press the OK button to write the data for each item.

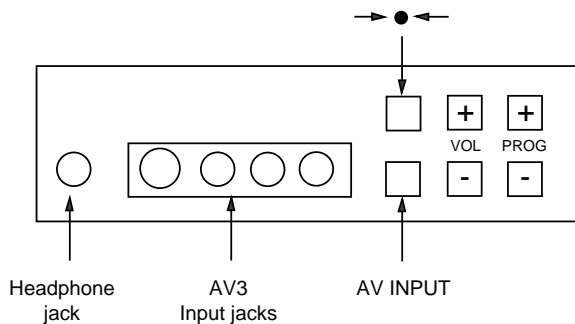
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-862.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing the PROG + (plus) and PROG - (minus) buttons on the front panel.



2. "TT" will appear on the upper right corner of the screen.
3. Press "MENU" on the commander to get the service menu on screen.

DEVICES

Init TV	
Pip, Lumisponder & Autoside	
Sub Adjust	
Video Proc	TDA4780
Col Dec Main	TDA9143
Deflect. Cont	SDA9361
Feature Box	S87C654
DA	SDA9280
Single PIP	SDA9288
Sound	
Line23 det	

4. Push the joystick up (green) or down (blue) on the remote commander to select the adjustment item.
5. Press the center button to proceed to the next menu.
6. If the adjustment item is 'Video Proc.', push the down button to move to 'Video Proc.'.
7. The Menu as indicated in Fig 4-3 will appear on the screen.
8. Move the joystick up or down to move to the adjustment item and press the center (OK) button.
9. Change the data in order to comply with each standard.

Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	31
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	63
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF
15	DATA BUFF	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DIS	OFF
21	FSW 2	OFF
22	FSW 1 DIS	OFF
23	FSW 1	OFF
24	ADAPT BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	OFF
29	PEAK DRV ABS	ON
30	TIME CNST PEAK LIMIT	OFF

Fig. 4-3

SDA9361 (VIDEO PROC.)

Item No	Adjustment item	Data Amount
1	HDE	ON
2	VR	0
3	RABL	ON
4	BLK DIS	OFF
5	2FH 2*LINE FRQ	ON
6	STANDBY MODE	OFF
7	VERTICAL	ON
8	BSE BLK SELECT	OFF
9	SSE START SCAN	OFF
10	SRSE START RED SCAN	OFF
11	GBE GUARD BAND	OFF
12	STE SCAN TIME TABLE	OFF
13	NSA SELF ADAPTION	ON
14	V SHIFT	ADJ
15	V SIZE	ADJ
16	V LIN	ADJ
17	V S-COR	ADJ
18	V EHT COMP	25" = 78 29" = 100 28" = 36 32" =
19	H SIZE	ADJ
20	PIN PHASE	ADJ
21	PIN AMP	ADJ
22	UP COR PIN	ADJ
23	LOW COR PIN	ADJ
24	H EHT COMP	25" = 78 29" = 100 28" = 36 32" =
25	H SHIFT	ADJ
26	V ANGLE	ADJ
27	V BOW	ADJ
28	PWM START	0

Item No	Adjustment item	Data Amount
29	D/A	0
30	V BLK TIME	0
31	H BLK TIME	0
32	STAR V SCAN	0
33	H BLK PHASE	0
34	V SCAN WIDTH 0	0
35	V SCAN WIDTH 1	0
36	GUARD BAND	0
37	START RED SCAN	0
38	NUMBER FIELDS	1
39	NI NON INTERLACE	OFF
40	NR VSYNC NOISE RED	ON
41	SCC WITH VBL	ON
42	MIN LINES/FIELD	0
43	MAX LINES/FIELD	0
44	AFC EHT COMP	0
45	PLL FREQ	6
46	VCR	ON
47	GEN MOD	OFF
48	HSWID	ON
49	INT H PHASE	239
50	PWM WIDTH	0
51	NOISY VCR	OFF
52	KILLZIP	OFF
53	TC3RD	OFF
54	BANDGAP 4 OFF	OFF
55	BANDGAP OFF	OFF
56	BANDGAP	0

TDA4780 (VIDEO PROC.)

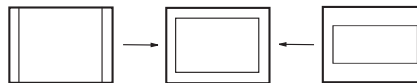
Item No	Adjustment item	Data Amount
1	BRT	USER CONTROL
2	COL	USER CONTROL
3	PIC	USER CONTROL
4	HUE	USER CONTROL
5	R GAIN	25
6	G GAIN	Adj
7	B GAIN	Adj
8	R LVL REF	31
9	G LVL REF	Adj
10	B LVL REF	Adj
11	PEAK DRV LIMIT	0
12	GAMMA	31
13	SCP ON = 3LEV OFF = 2LEV	ON
14	DELAY	OFF
15	DATA BUFF	OFF
16	NTSC MATRIX	OFF
17	HDTV	OFF
18	FSBL	OFF
19	AUTO CUT OFF	ON
20	FSW 2 DIS	OFF
21	FSW 2	OFF
22	FSW 1	OFF
23	FSW 1	OFF
24	ADAPT BLACK	OFF
25	Y HIGH 1V	OFF
26	MOD2	OFF
27	BLUE STRETCH	OFF
28	VM OUT	OFF
29	PEAK DRV ABS	ON
30	TIME CNST PEAK LIMIT	OFF

DEFLECTION SYSTEM ADJUSTMENT

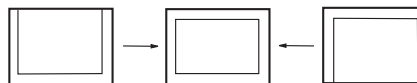
1. Enter into the service mode and select 'Deflect cont.'.The 'Deflect cont. SDA9361' adjustment menu will be displayed.
2. Select and adjust each item in order to get an optimum image.

Item No	Adjustment item	Data Amount
1	HDE	ON
2	VR	0
3	RABL	ON
4	BLK DIS	OFF
5	2FH 2*LINE FRQ	ON
6	STANDBY MODE	OFF
7	VERTICAL	ON
8	BSE BLK SELECT	OFF
9	SSE START SCAN	OFF
10	SRSE START RED SCAN	OFF
11	GBE GUARD BAND	OFF
12	STE SCAN TIME TABLE	OFF
13	NSA SELF ADAPTION	ON
14	V SHIFT	ADJ
15	V SIZE	ADJ
16	V LIN	ADJ
17	V S-COR	ADJ
18	V EHT COMP	25" = 78 29" = 100 28" = 36
19	H SIZE	ADJ
20	PIN PHASE	ADJ
21	PIN AMP	ADJ
22	UP COR PIN	ADJ
23	LOW COR PIN	ADJ
24	H EHT COMP	25" = 78 29" = 100 28" = 36
25	H SHIFT	ADJ
26	V ANGLE	ADJ
27	V BOW	ADJ
28	PWM START	0

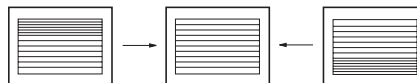
V SIZE



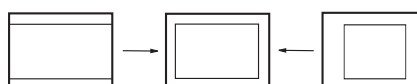
V POS



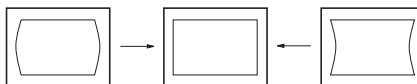
V LIN



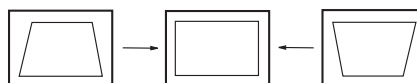
H SIZE



H PIN CUSH



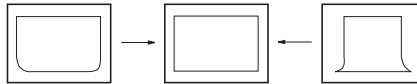
H TILT



H UP COR



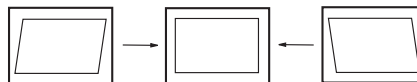
H LOWER COR



AFC V BOW



AFC V ANGLE



H POS



4-2. VOLUME ELECTRICAL ADJUSTMENTS

Sub Brightness Adjustment

1. Enter Service Mode (Device Menu).
2. Select 'SUB ADJUST MENU'.

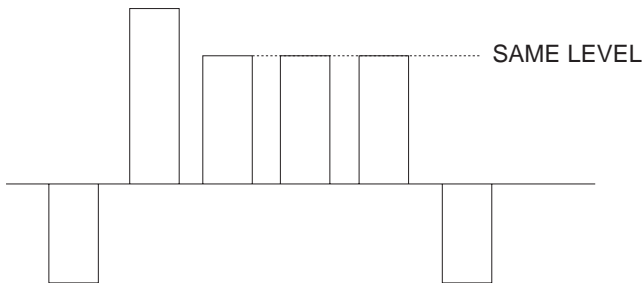
Sub adjustment

Sub Picture Sub Color Sub Brightness 4/3 Center PAP H-Center PAP HWE-Offset
--

3. Adjust the value according to the following advice.

Sub Color Adjustment

1. Input a PAL color bar signal.
2. Connect an oscilloscope to CN3703.
3. Enter into 'SERVICE MODE'.
4. Choose 'SUB ADJUST'.
5. Enter into Sub Color mode.
6. Adjust data so that the right sides of the waveforms are of equal height.



4-3. TEST MODE 2:

Is available by pressing the Test button twice, OSD "TT" appears. The functions described below are available by pressing the two numbers. To release Test Mode 2, press 0, 10, 20 ... twice or switch the TV into Standby Mode. Pressing the two Local Control buttons (+ and -) during Power ON will also switch into "TT" mode.

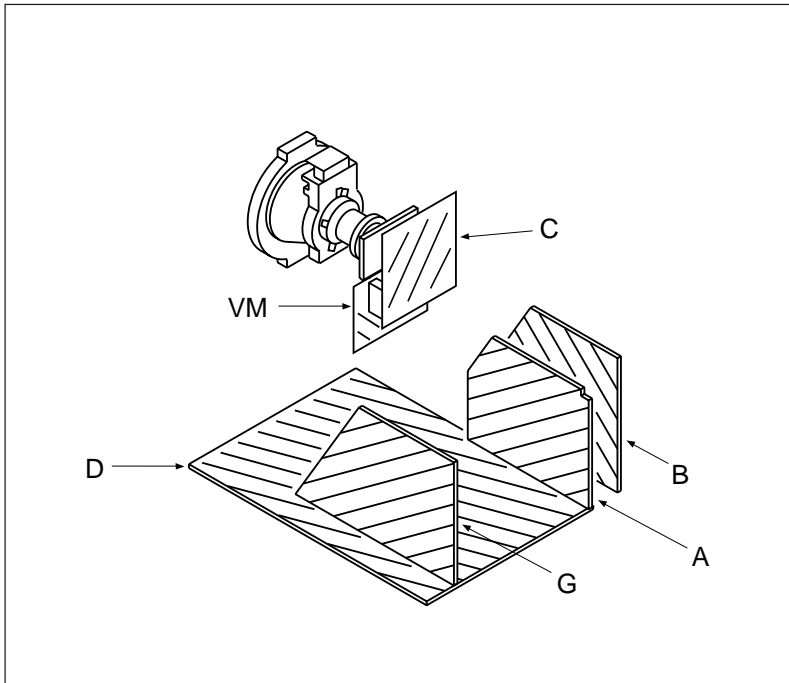
In TT mode, it is possible to remove the Menu from the screen by pressing the Speaker Off button once. Pressing the Speaker OFF button a second time will cause the menu to reappear. The Function is kept even when the menu is not displayed!!

00	Switch back to normal mode - TT mode off
01	Switch service menu on
02	Direct access to Noise reduction
03	Set volume to 30%
04	Service menu in "Service Mode"
05	Service menu in "Production Mode"
06	Set Volume to 80%
07	Aging Mode
08	Shipping Condition
09	Language Reset
10	The TT number will be deleted
11	Direct access to Balance
12	Direct access to Hue
13	Display of TV set configuration
14	Production Info Display
15	Read Analog from ROM
16	Save Analog F in NVM
17	This function presets the Labels for the AV sources: AV1, RGB, AV2, YC2, AV3, YC3, AV4, YC4.
18	No function
19	No function
20	See TT10
21	Picture Rotation automatic function: (-4) -> (+4) -> 0
22	Error Monitor Display
23	Direct access to Sub Brightness Adjustment.
24	Direct access to Sub Colour.
25	Status Menu Display
26	Text Character selection (Char set 06 -> West Europe)
27	Text Character selection (Char set 38 -> East Europe)
28	Text Character selection (Char set 40 -> West Europe) US English
29	Text Character selection (Char set 55 -> West Europe) Turkish
30	See TT10

31	no function
32	no function
33	no function
34	no function
35	no function
36	no function
37	no function
38	Screen Position
39	Reset Programme Table
40	See TT10
41	Picture Min
42	no function
43	no function
44	no function
45	Set NVM to Protect mode
46	IR Channel Pressetting Mode. The channel pressetting can be done by a Special transmitter. Sequence: TT46 -> --PR Number select display appears Select Prog. No. from where the channel shall be stored. --> Now TV is waiting for IR sequence <-- --> If no IR transmission starts TT46 is released after 20 secs <--! Note: when TT46 is active, any transmission will be interpreted as PROG data !
47	no function
48	no function
49	New Initialize
50	See TT10
51	Strobo mode is activated.
52	no function
53	no function
54	Direct access to Velocity Modulation VM (Production use)
55	Slicer High
56	Slicer No
57	Megatext Service Menu on
58	MTX Small Framing Code Window

59	MTX Wide Framing Code Window
60	See TT10
61	no function
62	no function
63	no function
64	Reset all IIC Slave commands (Production use)
65	Reset stored error codes in NVM
66	Feature box and Pal Plus
67	no function
68	Ignore Errors - on
69	Ignore errors - off
70	See TT10
71	no function
72	no function
73	Megatext RGB textlevel one step decreased.
74	Megatext RGB textlevel one step decreased (max 1 steps down starting from E0h) (Production use)
75	no function
76	SDA9361
77	SDA9280
78	PIP
79	no function
80	See TT10
81	S87C654 Default data setting
82	no function
83	no function
84	TDA4780 Default data setting
85	TDA9143 Default data setting
86	TDA9143 Default data setting
87	SDA9288 Default data setting
88	Char set Russian
89	Char set Russian (esc)
90	See TT10

5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$
50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
k = 1000 , M = 1000K
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5 mm
Rating electrical power $\frac{1}{4}$ W

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- \perp : earth - ground.
- /// : earth - chassis.
- ⊕ : no mounted.

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

Note : Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

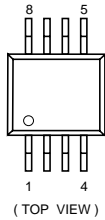
Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
COIL	:	ADJUSTABLE RESISTOR
	: 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	

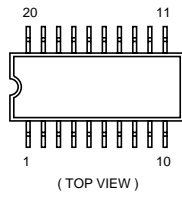
- Readings are taken with a colour-bar signal input.
- Readings are taken with 10M Ω digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.
- : B+ bus.
- : signal path. (RF)

5-4. SEMICONDUCTORS

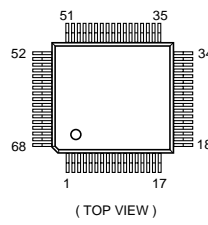
BA7046F
BA7046F-T1
MB3793-42PNF
MB3793-42PNF-ER



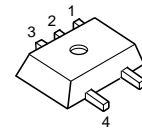
MC74F240DWR2



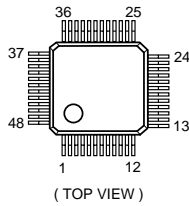
P83C654EBA/560
SDA9280A41



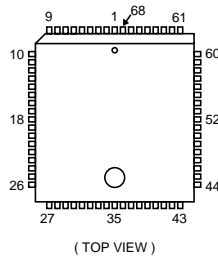
TC4S66F
TC4S66F-TE85L



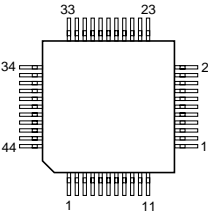
CXA1855Q-T6



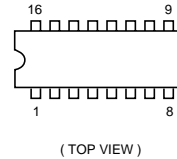
MSP3400C-PS-C6-T-ND
MSP3410B-PS-F7-T-ND
SDA30C164-GEG
SDA5273-C126-GEG



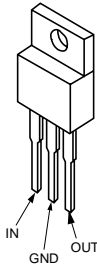
SAA4945H/V1
SDA9361



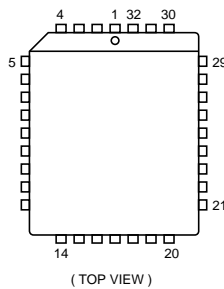
TDA4665T-T



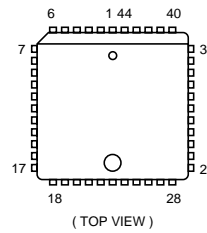
LM2940CT-9.0
LM2940T-8.0
LM2940T-9.0
L4941BV
TEA7605



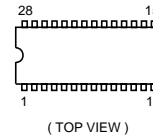
M27C4001-15C1
M27C4001-15C1-AE401



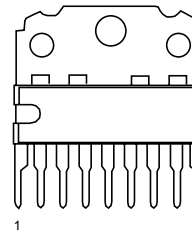
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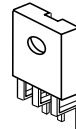
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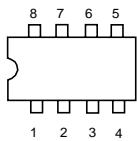
TDA6111Q
TDA6111Q/N4



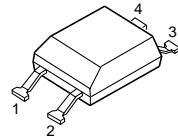
SBX1981-51



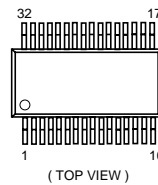
LM393P
M5216P
ST24C16FB6
TDA2822M
UPC393C



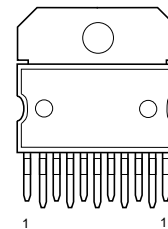
PC123F2
PC123FY2



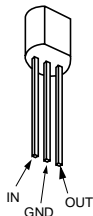
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TDA8755T-T



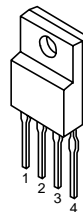
TDA7265



LM78L05ACZ
LM78L12ACZ
L78L05ACZ-AP
L78L12ACZ-AP

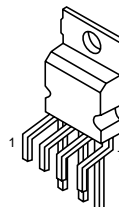


PQ05RF21

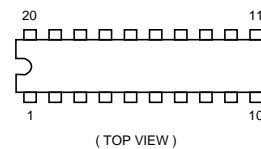


1 : V IN
2 : V OUT
3 : GND
4 : ON/OFF CONTROL

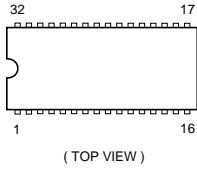
STV9379



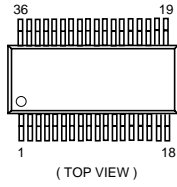
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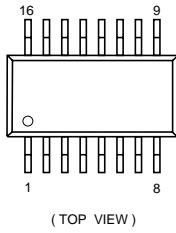
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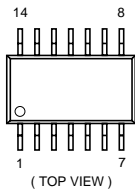
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TMS4C2972-28DTR



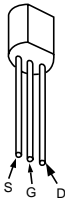
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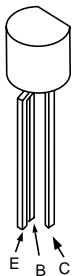
74LVC08D



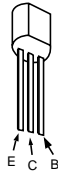
BC546B
BC556B



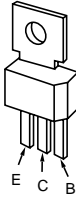
BF199
BF199-AMMO



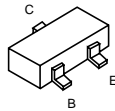
BF421L-AMMO
2SC2500-B
2SC2551-O
2SC2551O-TPE2



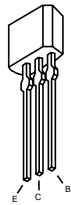
BF871-127



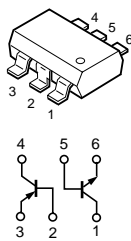
DTA144EK DTC144EK
DTA144EK-T146 DTC144EK-T146
DTC114EK DTC144EKA-T146
DTC114EKA-T146 2SA1037K-T-146-R
DTC123EK 2SA1162-G
DTC123EK-T146 2SC2412K-QR
DTC124EKA-T146 2SC2412K-T-146-R



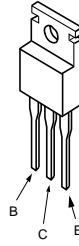
DTA144ESA 2SA933AS-RT
DTA144ESA-TP 2SA933AS-QRT
DTC114ESA-TP 2SA933S-RT
DTC144ESA-TP 2SC1740S-RT
2SA1175-HFE 2SC2785-HFE
2SA733-K



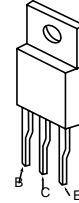
IMZ1A-T109



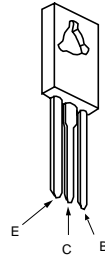
IRF620



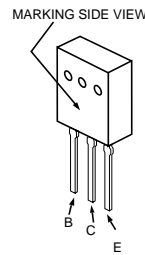
2SA1837



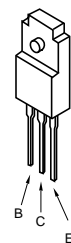
2SC2611
2SC2688-LK
2SC3271-N



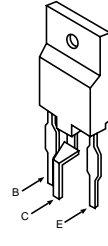
2SC3997CA



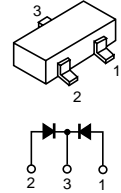
2SC4793



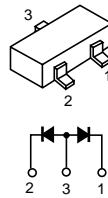
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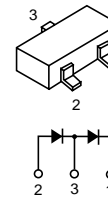
DAN202K
DAN202K-T-146



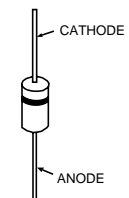
DAP202K
DAP202K-T-146



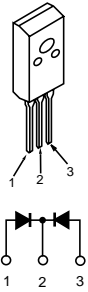
DA204K
DA204K-T-146



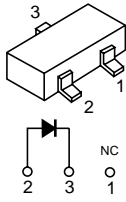
D1NL20 R2K-V1
D1NL20-TA RGP02-20EG23
D1NL20-TR RGP02-20EL-6394
EGP20G RGP10GPKG23
EL1Z RGP15GPKG23
GP08D S2LA20F
GP08DPKG23 1SS133T-77
MTZJ-T-77-9.1 1SS83
MTZJ-T-77-9.1A 1SS83TD



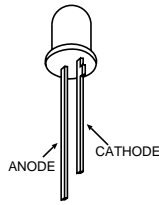
D10SC4M



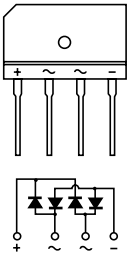
MA3030-H(TX) MA3056M-TX
 MA3033-L MA3062M-TX
 MA3033L-TX RD5.6M-B2



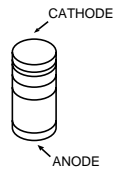
SLA-570KT3F



D4SB60L
 D4SB60L-F
 RBA-402L

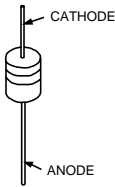
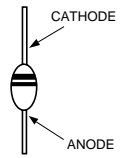


MA3051L-TX

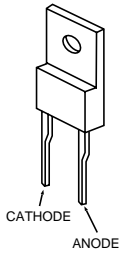


MTZJ-T-77-13B MTZJ-33C
 MTZJ-T-77-15B MTZJ-39C
 MTZJ-T-77-2.2A RD15ES-B2
 MTZJ-T-77-33C RD5.6ESB2
 MTZJ-T-77-39C RD9.1ESB2
 MTZJ-T-77-5.6B 1SS119-25
 MTZJ-T-77-9.1B 1SS119-25TD
 MTZJ-13B

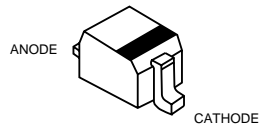
ERC38-06



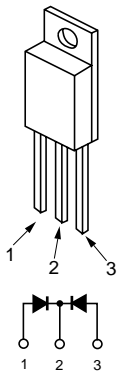
ERD08M-15



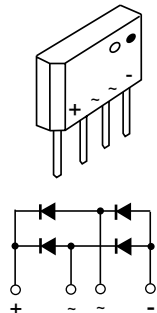
RD12SB2
 UDZ-TE-17-12B



ESAD39M-06C
 ESAD39M-06CF38

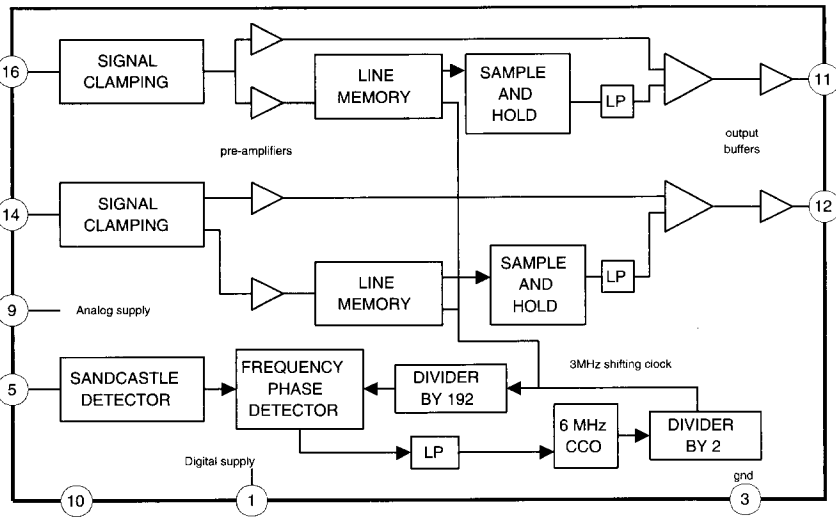


S1VB20-S
 S1VB40

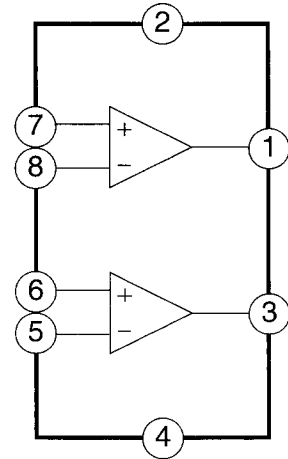


5-5. IC BLOCK DIAGRAMS

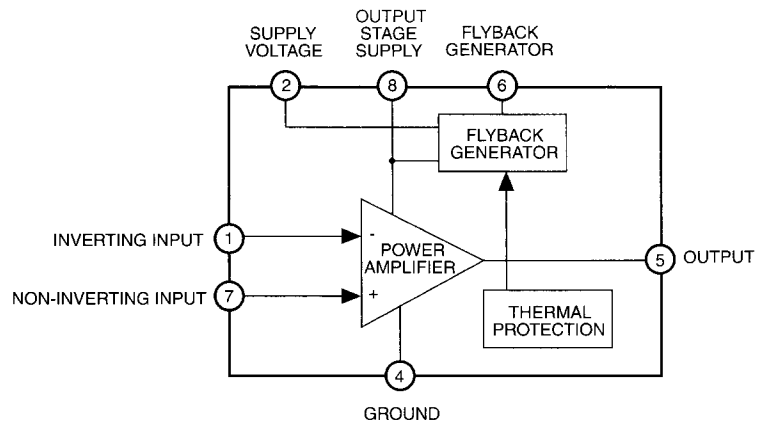
A Board IC303, TDA4665T-T



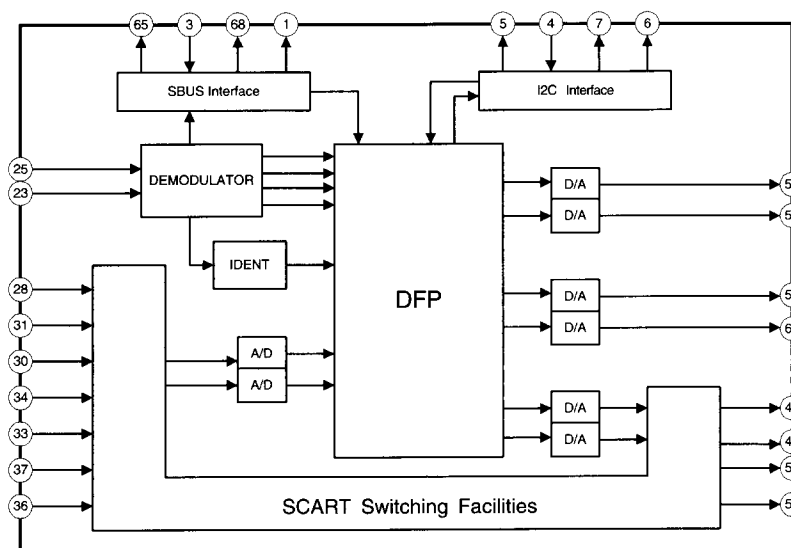
D Board IC261 TDA2822M



D Board IC802 STV9379



A Board IC201 MSP3400C-PS-C6-T/MSP3410B-PS-F7-T





SECTION 6

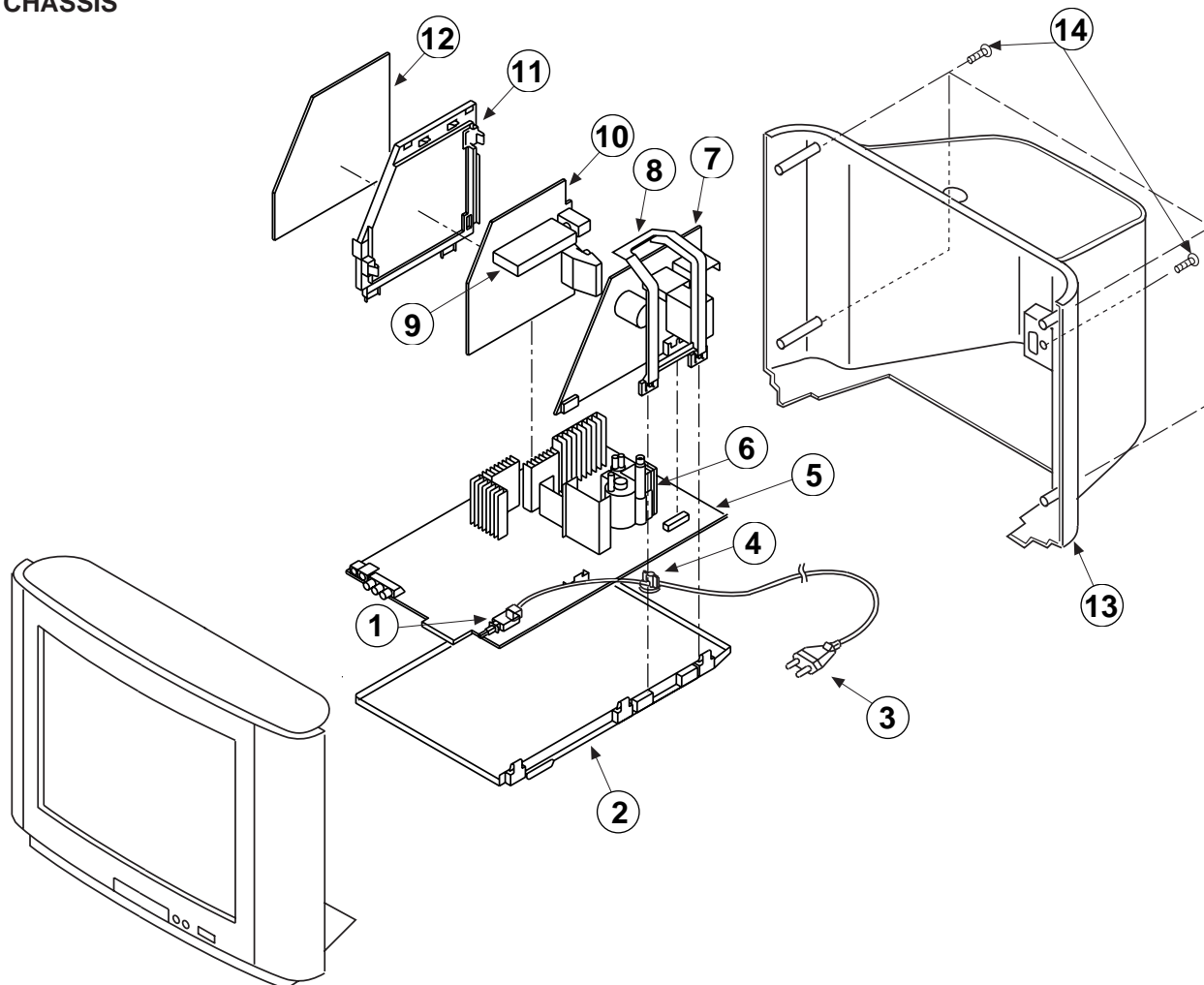
EXPLODED VIEWS




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.

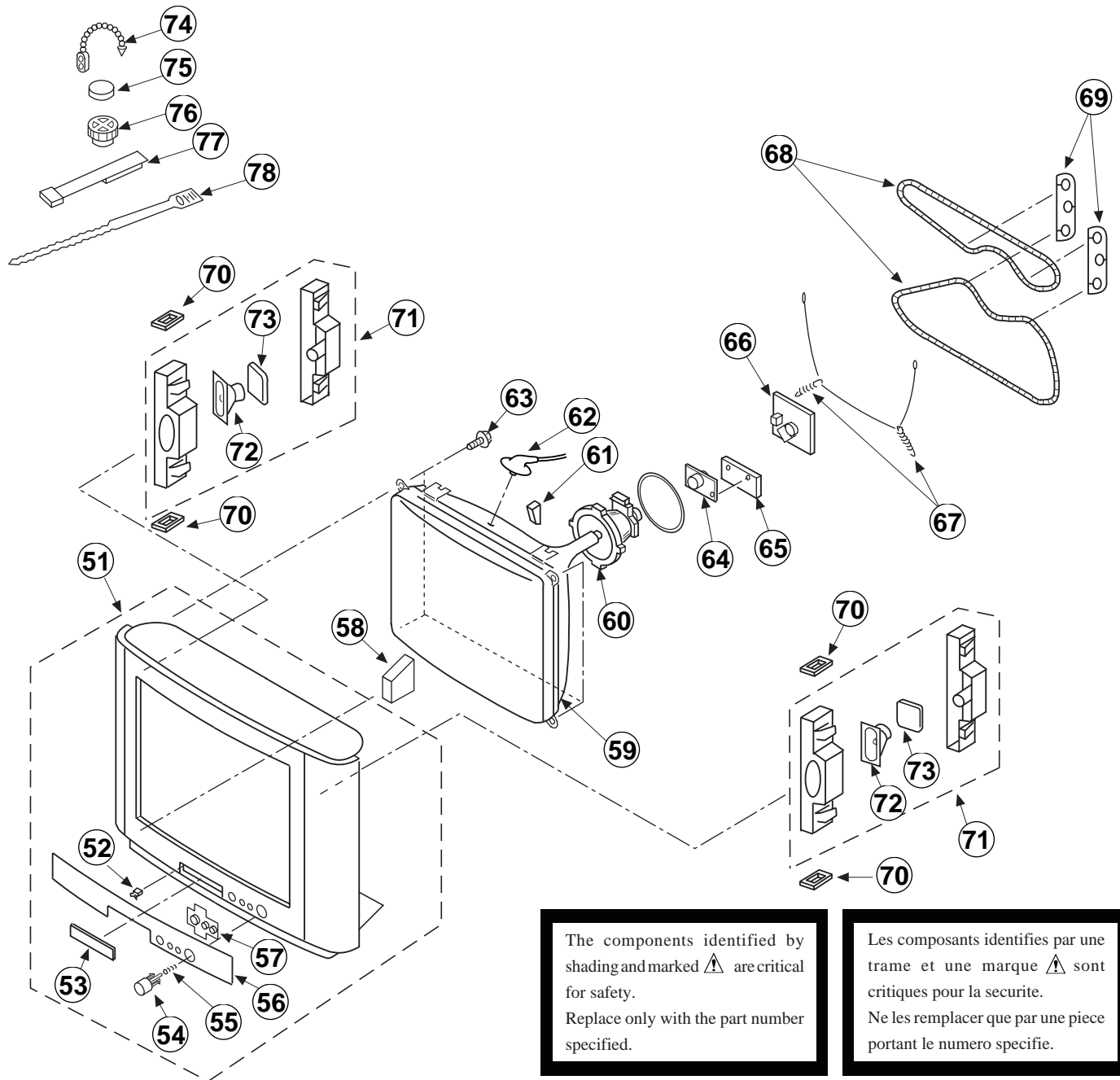
The components identified by shading and marked  are critical for safety. Replace only with the part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	 1-571-433-21	SWITCH, PUSH (AC POWER)		11	*4-203-612-01	BRACKET, A-B	
2	*4-203-415-01	BRACKET, MAIN		12	*A-1620-080-A	B BOARD, COMPLETE	
3	 1-751-680-11	CORD, POWER (WITH NOISE FILTER) 2.5A/250V		13	4-202-993-11	COVER, REAR	
4	*4-202-531-01	AC CORD LOCK (SC)		14	4-039-358-01	SCREW (4X16), (+) BV TAPPING	
5	*A-1640-246-A	D BOARD, COMPLETE					
6	 1-453-222-11	TRANSFORMER ASSY, FLYBACK (NX-4003/U2B4)					
7	*A-1636-021-A	G BOARD, COMPLETE					
8	*4-203-613-01	SUPPORTER, G					
9	1-693-338-11	TUNER (TUVIF) (AEP) (KV-29C3A/29C3D/29C3E/29C3K/29C3R)					
	1-693-340-11	TUNER (TUVIF) (FR) (KV-29C3B)					
10	*A-1632-572-A	A BOARD, COMPLETE (KV-29C3A)					
	*A-1632-570-A	A BOARD, COMPLETE (KV-29C3B)					
	*A-1632-498-A	A BOARD, COMPLETE (KV-29C3D)					
	*A-1632-571-A	A BOARD, COMPLETE (KV-29C3E)					
	*A-1632-574-A	A BOARD, COMPLETE (KV-29C3K)					
	*A-1632-573-A	A BOARD, COMPLETE (KV-29C3R)					

6-2. PICTURE TUBE



REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	X-4200-293-1	BEZNET ASSY (M)	52-57	63	4-203-043-01	SCREW (M), PT	
	X-4200-295-1	BEZNET ASSY (M-N)	52-57	64	\triangle 8-453-005-21	NECK ASSY PICTURE TUBE (NA297-M2)	
		(KV-29C3A/29C3D/29C3K/29C3R)		65	*A-1644-077-A	VM BOARD, COMPLETE	
		(KV-29C3B/29C3E)		66	*A-1638-097-A	C BOARD, COMPLETE	
52	4-392-036-01	CATCHER PUSH		67	4-369-318-51	SPRING, TENSION	
53	4-203-013-31	DOOR (PAINTED)		68	\triangle 1-406-807-11	COIL DEGAUSSING	
54	4-202-992-01	BUTTON, POWER		69	4-202-749-01	HOLDER, D.G.C. (29"/32")	
55	4-202-964-01	SPRING		70	*4-202-988-01	CUSHION, BOX	
56	X-4200-294-1	PANEL ASSY (M)		71	*A-1678-087-A	BOX ASSY	72-73
		(KV-29C3A/29C3D/29C3K/29C3R)		72	1-504-146-11	SPEAKER (5X11CM)	
	X-4200-296-1	PANEL ASSY (M-N)		73	4-200-999-01	STOPPER	
		(KV-29C3B/29C3E)		74	4-308-870-00	CLIP, LEAD WIRE	
57	4-203-524-01	WINDOW ORNAMENTAL		75	1-452-032-00	MAGNET, DISK; 10MM \emptyset	
58	4-203-098-01	SUPPORTER, CRT		76	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM \emptyset	
59	\triangle 8-733-856-05	PICTURE TUBE (SD-269) (M68LCT60X)		77	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
60	\triangle 8-451-466-11	DEFLECTION YOKE (Y29GXC2B)		78	3-701-007-00	BAND, BINDING	
61	3-704-495-01	SPACER, DY					
62	\triangle 1-251-317-31	CAP ASSY, HIGH-VOLTAGE					

SECTION 7

ELECTRICAL PARTS LIST

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

CAPACITORS

COILS

MF : mF, PF : mmF

MMH : mH, μH : mH

B

- 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

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

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1620-080-A	B BOARD, COMPLETE *****		C1806	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V
	< CAPACITOR >			C1807	1-126-963-11	ELECT 4.7MF	20% 50V
C407	1-126-969-11	ELECT 220MF	20% 50V	C1808	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C408	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1809	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C409	1-162-638-11	CERAMIC CHIP 1MF	16V	C1810	1-162-638-11	CERAMIC CHIP 1MF	16V
C410	1-162-638-11	CERAMIC CHIP 1MF	16V	C1811	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C411	1-162-638-11	CERAMIC CHIP 1MF	16V	C1812	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C412	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C1813	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
C413	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C1814	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C414	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C1815	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C415	1-162-638-11	CERAMIC CHIP 1MF	16V	C1816	1-126-963-11	ELECT 4.7MF	20% 50V
C416	1-162-638-11	CERAMIC CHIP 1MF	16V	C1817	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C417	1-162-638-11	CERAMIC CHIP 1MF	16V	C1818	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C418	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1819	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C419	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1820	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C420	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1821	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C421	1-162-568-11	CERAMIC CHIP 0.33MF	10% 16V	C1822	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C422	1-162-638-11	CERAMIC CHIP 1MF	16V	C1823	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C427	1-126-963-11	ELECT 4.7MF	20% 50V	C1824	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C428	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1825	1-126-964-11	ELECT 10MF	20% 50V
C429	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	C1826	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C430	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	C1827	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C431	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1828	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C432	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1829	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C433	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1830	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C434	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C1831	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
C435	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V	C1850	1-163-111-00	CERAMIC CHIP 56PF	5% 50V
C438	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1851	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C439	1-126-964-11	ELECT 10MF	20% 50V	C1852	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C440	1-126-964-11	ELECT 10MF	20% 50V	C1856	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C441	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C1857	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C446	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	C1858	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
C450	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1859	1-164-005-11	CERAMIC CHIP 0.47MF	16V
C451	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1860	1-126-961-11	ELECT 2.2MF	20% 50V
C452	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	C1861	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C453	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1862	1-163-097-00	CERAMIC CHIP 15PF	5% 50V
C454	1-162-568-11	CERAMIC CHIP 0.33MF	10% 16V	C1864	1-163-002-11	CERAMIC CHIP 270PF	10% 50V
C455	1-126-964-11	ELECT 10MF	20% 50V	C1866	1-126-964-11	ELECT 10MF	20% 50V
C1801	1-126-963-11	ELECT 4.7MF	20% 50V	C1867	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1802	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C1868	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1803	1-126-964-11	ELECT 10MF	20% 50V	C1869	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1804	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1870	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1805	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V	C1871	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C1872	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C1873	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1874	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			< ENCAPSULATED FILTER >	
C1875	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C1879	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1801	1-239-882-11	FILTER, LOW PASS	
C1880	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1803	1-415-940-11	DELAY LINE	
				FL1807	1-236-071-11	ENCAPSULATED COMPONENT	
C1881	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1808	1-236-071-11	ENCAPSULATED COMPONENT	
C1882	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	FL1809	1-236-071-11	ENCAPSULATED COMPONENT	
C1883	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V			< IC >	
C1886	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC402	8-759-275-36	IC TDA4780/V3	
C1887	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC403	8-759-421-42	IC SDA9361	
				IC1801	8-759-257-59	IC TDA8755T-T	
C1889	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1802	8-759-439-63	IC SAA4945H/V1	
C1890	1-126-964-11	ELECT 10MF	20% 50V	IC1803	8-759-439-27	IC TMS4C2972-28DTR	
C1891	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C1892	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1809	8-759-438-63	IC SDA9280A41	
C1893	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1812	8-759-444-24	IC 74HCT4046AD/S470	
				IC1814	8-759-438-64	IC SAA4952WP/V1	
C1894	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1815	8-759-444-24	IC 74HCT4046AD/S470	
C1897	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C1898	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	IC1816	8-759-444-25	IC P83C654EBA/560	
C1899	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	IC1823	8-759-991-41	IC LM78L05ACZ	
C1903	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	IC1824	8-759-991-41	IC LM78L05ACZ	
				IC1825	8-759-234-77	IC TC4S66F	
C1904	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V			< COIL >	
C1910	1-126-964-11	ELECT 10MF	20% 50V	L401	1-408-429-00	INDUCTOR 470UH	
C1912	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L402	1-408-429-00	INDUCTOR 470UH	
C1947	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L407	1-410-999-11	INDUCTOR CHIP 3.3UH	
C1948	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	L1801	1-410-435-21	INDUCTOR 220UH	
				L1802	1-410-435-21	INDUCTOR 220UH	
JR426	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
		< CONNECTOR >		L1803	1-408-403-00	INDUCTOR 3.3UH	
CN412	*1-564-513-11	PLUG, CONNECTOR 10P		L1804	1-408-409-00	INDUCTOR 10UH	
CN413	*1-564-511-11	PLUG, CONNECTOR 8P		L1805	1-410-999-11	INDUCTOR CHIP 3.3UH	
CN417	*1-564-596-11	PLUG, CONNECTOR 15P		L1808	1-408-403-00	INDUCTOR 3.3UH	
CN419	*1-564-512-11	PLUG, CONNECTOR 9P		L1811	1-408-403-00	INDUCTOR 3.3UH	
CN1810	*1-564-512-11	PLUG, CONNECTOR 9P					
CN1815	*1-564-512-11	PLUG, CONNECTOR 9P		L1813	1-408-403-00	INDUCTOR 3.3UH	
		< DIODE >				< TRANSISTOR >	
D401	8-719-914-43	DIODE DAN202K-T-146		Q415	8-729-900-53	TRANSISTOR DTC114EKA	
D402	8-719-914-43	DIODE DAN202K-T-146		Q416	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D403	8-719-028-00	DIODE MA3033L-TX		Q1801	8-729-216-22	TRANSISTOR 2SA1162-G	
D410	8-719-401-63	DIODE MA3062M-TX		Q1802	8-729-901-01	TRANSISTOR DTC144EK	
D411	8-719-914-43	DIODE DAN202K-T-146		Q1804	8-729-901-01	TRANSISTOR DTC144EK	
				Q1805	8-729-216-22	TRANSISTOR 2SA1162-G	
D412	8-719-914-43	DIODE DAN202K-T-146		Q1808	8-729-901-01	TRANSISTOR DTC144EK	
D415	8-719-914-43	DIODE DAN202K-T-146		Q1809	8-729-901-01	TRANSISTOR DTC144EK	
		< FERRITE BEAD >		Q1810	8-729-901-01	TRANSISTOR DTC144EK	
FB401	1-414-234-11	INDUCTOR, FERRITE BEAD		Q1812	8-729-920-74	TRANSISTOR 2SC2412K-QR	
FB402	1-414-234-11	INDUCTOR, FERRITE BEAD				< RESISTOR >	
FB403	1-414-234-11	INDUCTOR, FERRITE BEAD		C1916	1-216-043-91	METAL GLAZE 560 5% 1/10W	
FB404	1-414-234-11	INDUCTOR, FERRITE BEAD					
FB405	1-414-234-11	INDUCTOR, FERRITE BEAD		JR401	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR402	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB406	1-414-234-11	INDUCTOR, FERRITE BEAD		JR403	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB407	1-414-234-11	INDUCTOR, FERRITE BEAD		JR404	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB1801	1-414-234-11	INDUCTOR, FERRITE BEAD		JR405	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB1802	1-414-234-11	INDUCTOR, FERRITE BEAD					
FB1803	1-414-234-11	INDUCTOR, FERRITE BEAD		JR406	1-216-295-91	METAL GLAZE 0 5% 1/10W	
				JR407	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB1804	1-414-234-11	INDUCTOR, FERRITE BEAD		JR408	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB1805	1-414-234-11	INDUCTOR, FERRITE BEAD		JR409	1-216-295-91	METAL GLAZE 0 5% 1/10W	
FB1806	1-414-234-11	INDUCTOR, FERRITE BEAD		JR414	1-216-295-91	METAL GLAZE 0 5% 1/10W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
JR415	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1897	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR417	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1898	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR418	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1899	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR420	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1901	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR421	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1904	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR422	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1905	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR423	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1910	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR424	1-216-295-91	METAL GLAZE	0 5% 1/10W	JR1911	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1814	1-216-295-91	METAL GLAZE	0 5% 1/10W	R408	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
JR1815	1-216-295-91	METAL GLAZE	0 5% 1/10W	R409	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
JR1816	1-216-295-91	METAL GLAZE	0 5% 1/10W	R439	1-216-093-00	METAL GLAZE	68K 5% 1/10W
JR1817	1-216-295-91	METAL GLAZE	0 5% 1/10W	R443	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1818	1-216-295-91	METAL GLAZE	0 5% 1/10W	R444	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1819	1-216-295-91	METAL GLAZE	0 5% 1/10W	R445	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1820	1-216-295-91	METAL GLAZE	0 5% 1/10W	R446	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1821	1-216-295-91	METAL GLAZE	0 5% 1/10W	R447	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1822	1-216-295-91	METAL GLAZE	0 5% 1/10W	R448	1-216-043-91	METAL GLAZE	560 5% 1/10W
JR1823	1-216-295-91	METAL GLAZE	0 5% 1/10W	R449	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1824	1-216-295-91	METAL GLAZE	0 5% 1/10W	R450	1-216-099-00	METAL GLAZE	120K 5% 1/10W
JR1825	1-216-295-91	METAL GLAZE	0 5% 1/10W	R451	1-216-101-00	METAL GLAZE	150K 5% 1/10W
JR1826	1-216-295-91	METAL GLAZE	0 5% 1/10W	R452	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1827	1-216-295-91	METAL GLAZE	0 5% 1/10W	R453	1-216-017-91	METAL GLAZE	47 5% 1/10W
JR1828	1-216-295-91	METAL GLAZE	0 5% 1/10W	R454	1-216-017-91	METAL GLAZE	47 5% 1/10W
JR1829	1-216-295-91	METAL GLAZE	0 5% 1/10W	R455	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W
JR1830	1-216-295-91	METAL GLAZE	0 5% 1/10W	R456	1-216-097-91	METAL GLAZE	100K 5% 1/10W
JR1831	1-216-295-91	METAL GLAZE	0 5% 1/10W	R457	1-216-099-00	METAL GLAZE	120K 5% 1/10W
JR1832	1-216-295-91	METAL GLAZE	0 5% 1/10W	R458	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1833	1-216-295-91	METAL GLAZE	0 5% 1/10W	R459	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1834	1-216-295-91	METAL GLAZE	0 5% 1/10W	R463	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1835	1-216-295-91	METAL GLAZE	0 5% 1/10W	R465	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1836	1-216-295-91	METAL GLAZE	0 5% 1/10W	R466	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1837	1-216-295-91	METAL GLAZE	0 5% 1/10W	R467	1-216-041-00	METAL GLAZE	470 5% 1/10W
JR1838	1-216-295-91	METAL GLAZE	0 5% 1/10W	R468	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1839	1-216-295-91	METAL GLAZE	0 5% 1/10W	R469	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1840	1-216-295-91	METAL GLAZE	0 5% 1/10W	R470	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
JR1843	1-216-295-91	METAL GLAZE	0 5% 1/10W	R483	1-216-063-91	METAL GLAZE	3.9K 5% 1/10W
JR1845	1-216-295-91	METAL GLAZE	0 5% 1/10W	R484	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1846	1-216-295-91	METAL GLAZE	0 5% 1/10W	R490	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1865	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1801	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1866	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1802	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1868	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1803	1-216-296-91	METAL GLAZE	0 5% 1/8W
JR1869	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1804	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
JR1870	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1805	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1871	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1806	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
JR1872	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1807	1-216-049-91	METAL GLAZE	1K 5% 1/10W
JR1873	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1808	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1874	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1810	1-216-076-00	METAL GLAZE	13K 5% 1/10W
JR1875	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1811	1-216-025-91	METAL GLAZE	100 5% 1/10W
JR1876	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1812	1-216-033-00	METAL GLAZE	220 5% 1/10W
JR1877	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1813	1-216-045-00	METAL GLAZE	680 5% 1/10W
JR1885	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1814	1-216-031-00	METAL GLAZE	180 5% 1/10W
JR1886	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1815	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1887	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1816	1-216-295-91	METAL GLAZE	0 5% 1/10W
JR1888	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1817	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1890	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1818	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR1891	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1819	1-216-073-00	METAL GLAZE	10K 5% 1/10W
JR1892	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1820	1-216-029-00	METAL GLAZE	150 5% 1/10W
JR1893	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1821	1-216-023-00	METAL GLAZE	82 5% 1/10W
JR1894	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1822	1-216-296-91	METAL GLAZE	0 5% 1/8W
JR1896	1-216-295-91	METAL GLAZE	0 5% 1/10W	R1831	1-216-081-00	METAL GLAZE	22K 5% 1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1832	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W			
R1833	1-216-041-00	METAL GLAZE	470 5%	1/10W			
R1834	1-216-115-00	METAL GLAZE	560K 5%	1/10W			
R1835	1-216-037-00	METAL GLAZE	330 5%	1/10W			
R1844	1-216-081-00	METAL GLAZE	22K 5%	1/10W			
R1845	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W			
R1846	1-216-056-00	METAL GLAZE	2K 5%	1/10W			
R1847	1-216-115-00	METAL GLAZE	560K 5%	1/10W			
R1848	1-216-025-91	METAL GLAZE	100 5%	1/10W			
R1849	1-216-001-00	METAL GLAZE	10 5%	1/10W			
R1850	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1851	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1852	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1853	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1854	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1855	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1856	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1857	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1858	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W			
R1859	1-216-017-91	METAL GLAZE	47 5%	1/10W			
R1861	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1864	1-216-071-00	METAL GLAZE	8.2K 5%	1/10W			
R1865	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1866	1-216-089-91	METAL GLAZE	47K 5%	1/10W			
R1867	1-216-075-00	METAL GLAZE	12K 5%	1/10W			
R1868	1-216-089-91	METAL GLAZE	47K 5%	1/10W			
R1869	1-216-049-91	METAL GLAZE	1K 5%	1/10W			
R1871	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W			
R1879	1-216-049-91	METAL GLAZE	1K 5%	1/10W			
R1880	1-216-085-00	METAL GLAZE	33K 5%	1/10W			
R1881	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W			
R1882	1-216-085-00	METAL GLAZE	33K 5%	1/10W			
R1885	1-216-049-91	METAL GLAZE	1K 5%	1/10W			
R1886	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1888	1-216-021-00	METAL GLAZE	68 5%	1/10W			
R1890	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1891	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1894	1-216-047-91	METAL GLAZE	820 5%	1/10W			
R1895	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W			
R1896	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1897	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W			
R1901	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1902	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1903	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1904	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1905	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1906	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1907	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1908	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1909	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1910	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1911	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1912	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W			
R1920	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1921	1-216-295-91	METAL GLAZE	0 5%	1/10W			
R1922	1-216-025-91	METAL GLAZE	100 5%	1/10W			
R1923	1-216-083-00	METAL GLAZE	27K 5%	1/10W			
R1924	1-216-083-00	METAL GLAZE	27K 5%	1/10W			
						< CRYSTAL >	
X401	1-767-343-21	VIBRATOR, CRYSTAL	(24.576MHz)				
X1801	1-579-175-11	VIBRATOR, CERAMIC	(10MHz)				

	*A-1632-572-A	A BOARD, COMPLETE	(KV-29C3A)			*****	
	*A-1632-570-A	A BOARD, COMPLETE	(KV-29C3B)			*****	
	*A-1632-498-A	A BOARD, COMPLETE	(KV-29C3D)			*****	
	*A-1632-571-A	A BOARD, COMPLETE	(KV-29C3E)			*****	
	*A-1632-574-A	A BOARD, COMPLETE	(KV-29C3K)			*****	
	*A-1632-573-A	A BOARD, COMPLETE	(KV-29C3R)			*****	
						< CAPACITOR >	
C101	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V		
C102	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V		
C103	1-163-251-11	CERAMIC CHIP	100PF	5%	50V		
						(KV-29C3B)	
C105	1-126-965-11	ELECT	22MF	20%	50V		
C111	1-124-907-11	ELECT	10MF	20%	50V		
C112	1-164-346-11	CERAMIC CHIP	1MF		16V		
C114	1-164-346-11	CERAMIC CHIP	1MF		16V		
C116	1-104-664-11	ELECT	47MF	20%	16V		
C117	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V		
C118	1-104-664-11	ELECT	47MF	20%	16V		
C119	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V		
C120	1-124-907-11	ELECT	10MF	20%	50V		
C121	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V		
C122	1-164-346-11	CERAMIC CHIP	1MF		16V		
C126	1-104-664-11	ELECT	47MF	20%	16V		
C127	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V		
C128	1-104-664-11	ELECT	47MF	20%	16V		
C129	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V		
C130	1-163-133-00	CERAMIC CHIP	470PF	5%	50V		
C131	1-164-346-11	CERAMIC CHIP	1MF		16V		
C132	1-163-133-00	CERAMIC CHIP	470PF	5%	50V		
C133	1-164-346-11	CERAMIC CHIP	1MF		16V		
C134	1-124-907-11	ELECT	10MF	20%	50V		
C135	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V		
C136	1-124-907-11	ELECT	10MF	20%	50V		
C137	1-164-506-11	CERAMIC CHIP	4.7MF		16V		
C138	1-126-964-11	ELECT	10MF	20%	50V		
C139	1-164-346-11	CERAMIC CHIP	1MF		16V		
C140	1-164-506-11	CERAMIC CHIP	4.7MF		16V		
C141	1-164-506-11	CERAMIC CHIP	4.7MF		16V		
C143	1-163-113-00	CERAMIC CHIP	68PF	5%	50V		
C144	1-163-237-11	CERAMIC CHIP	27PF	5%	50V		
C145	1-163-113-00	CERAMIC CHIP	68PF	5%	50V		
						(KV-29C3B)	
C146	1-164-346-11	CERAMIC CHIP	1MF		16V		
C150	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V		
C151	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V		
C152	1-124-907-11	ELECT	10MF	20%	50V		
C153	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V		
C154	1-110-501-11	CERAMIC CHIP	0.33MF	10%	16V		
C155	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V		

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C156	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C320	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V
C157	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C321	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C159	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C322	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C160	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C323	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C162	1-164-346-11	CERAMIC CHIP 1MF	16V	C324	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C163	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C325	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C164	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C350	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C165	1-164-346-11	CERAMIC CHIP 1MF	16V	C351	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C166	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C355	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C167	1-164-222-11	CERAMIC CHIP 0.22MF	25V	C356	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C200	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C357	1-163-241-11	CERAMIC CHIP 39PF	5% 50V
C201	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1001	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C202	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1002	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C203	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1003	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C204	1-162-568-11	CERAMIC CHIP 0.33MF	10% 16V	C1004	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C205	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1005	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C206	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1006	1-165-321-11	CERAMIC CHIP 0.68MF	10% 16V
C207	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1007	1-164-344-11	CERAMIC CHIP 0.068MF	10% 25V
C208	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1020	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C209	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1021	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C210	1-110-501-11	CERAMIC CHIP 0.33MF	10% 16V	C1022	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C211	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C1035	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C212	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C1036	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C213	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1039	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C214	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1040	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C215	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1041	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C216	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1042	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C217	1-124-907-11	ELECT 10MF	20% 50V	C1043	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C218	1-124-907-11	ELECT 10MF	20% 50V	C1060	1-163-001-11	CERAMIC CHIP 220PF	10% 50V
C219	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C1301	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C220	1-163-131-00	CERAMIC CHIP 390PF	5% 50V	C1401	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C221	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1402	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C222	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1403	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C223	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1404	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C224	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C1405	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C227	1-164-337-11	CERAMIC CHIP 2.2MF	16V	C1406	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C228	1-164-337-11	CERAMIC CHIP 2.2MF	16V	C1407	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C229	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1408	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C230	1-164-506-11	CERAMIC CHIP 4.7MF	16V	C1409	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V
C231	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V	C1413	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C232	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V	C1414	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C233	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1417	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C234	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1418	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C303	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1420	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C304	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1421	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C305	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1430	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C306	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1431	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C307	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1432	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1433	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C309	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1434	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C310	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1435	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C311	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1437	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1438	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C313	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1439	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C314	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1441	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C315	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1442	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C316	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1443	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C317	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1444	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C318	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	C1445	1-164-506-11	CERAMIC CHIP 4.7MF	16V
C319	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	C1446	1-164-506-11	CERAMIC CHIP 4.7MF	16V



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1447	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V	D217	8-719-158-49	DIODE RD12SB2	
C1448	1-165-320-11	CERAMIC CHIP 0.47MF	10% 16V	D218	8-719-158-49	DIODE RD12SB2	
C1450	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	D219	8-719-158-49	DIODE RD12SB2	
C1451	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	D220	8-719-158-49	DIODE RD12SB2	
C1452	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D221	8-719-158-49	DIODE RD12SB2	
C1460	1-163-263-11	CERAMIC CHIP 330PF	5% 50V	D223	8-719-158-49	DIODE RD12SB2	
C1461	1-163-263-11	CERAMIC CHIP 330PF	5% 50V	D301	8-719-401-41	DIODE MA3051L-TX	
C1462	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	D1007	8-719-914-44	DIODE DAP202K	
C2001	1-164-506-11	CERAMIC CHIP 4.7MF	16V	D1008	8-719-914-43	DIODE DAN202K	
C2002	1-164-506-11	CERAMIC CHIP 4.7MF	16V	D1009	8-719-105-91	DIODE RD5.6M-B2	
C2004	1-164-506-11	CERAMIC CHIP 4.7MF	16V	D1010	8-719-105-91	DIODE RD5.6M-B2	
C2005	1-164-506-11	CERAMIC CHIP 4.7MF	16V	D1405	8-719-914-42	DIODE DA204K	
C2007	1-163-038-91	CERAMIC CHIP 0.1MF	25V	D2001	8-719-036-58	DIODE MA3030-H(TX)	
C2020	1-164-222-11	CERAMIC CHIP 0.22MF	25V			< FERRITE BEAD >	
C2021	1-164-222-11	CERAMIC CHIP 0.22MF	25V	FB101	1-414-235-11	INDUCTOR, FERRITE BEAD	
C2023	1-163-038-91	CERAMIC CHIP 0.1MF	25V	FB102	1-414-235-11	INDUCTOR, FERRITE BEAD	
C2024	1-163-251-11	CERAMIC CHIP 100PF	5% 50V			< ENCAPSULATED FILTER >	
C2025	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	FL102	1-236-071-11	ENCAPSULATED COMPONENT	
C2026	1-163-235-11	CERAMIC CHIP 22PF	5% 50V	FL103	1-236-071-11	ENCAPSULATED COMPONENT	
C2028	1-163-031-11	CERAMIC CHIP 0.01MF	50V	FL200	1-236-071-11	ENCAPSULATED COMPONENT	
C2029	1-164-222-11	CERAMIC CHIP 0.22MF	25V	FL201	1-233-764-21	FILTER	
C2030	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	FL202	1-236-071-11	ENCAPSULATED COMPONENT	
C2031	1-164-222-11	CERAMIC CHIP 0.22MF	25V	FL203	1-236-071-11	ENCAPSULATED COMPONENT	
C2033	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	FL302	1-236-071-11	ENCAPSULATED COMPONENT	
		< FILTER >		FL1001	1-236-071-11	ENCAPSULATED COMPONENT	
CD1001	1-527-992-31	OSCILLATOR, CERAMIC		FL1002	1-236-071-11	ENCAPSULATED COMPONENT	
CF200	1-409-327-00	TRAP, CERAMIC (6.5MHZ)		FL1402	1-236-071-11	ENCAPSULATED COMPONENT	
		< CONNECTOR >		FL1403	1-236-071-11	ENCAPSULATED COMPONENT	
CN101	1-695-301-11	CONNECTOR, BOARD TO BOARD 40P		FL1404	1-236-071-11	ENCAPSULATED COMPONENT	
CN115	*1-564-524-11	PLUG, CONNECTOR 9P		FL1405	1-236-071-11	ENCAPSULATED COMPONENT	
CN117	*1-564-520-11	PLUG, CONNECTOR 5P		FL2001	1-236-071-11	ENCAPSULATED COMPONENT	
CN201	1-766-296-11	CONNECTOR, DUAL SCART		FL2003	1-236-071-11	ENCAPSULATED COMPONENT	
CN1413	1-564-523-11	PLUG, CONNECTOR 8P				< IC >	
CN2012	*1-564-525-11	PLUG, CONNECTOR 10P		IC101	8-752-068-45	IC CXA1855Q-T6	
		< DIODE >		IC102	8-759-267-25	IC LM2940CT-9.0	
D102	8-719-158-49	DIODE RD12SB2		IC104	8-759-514-57	IC BA7046F	
D103	8-719-158-49	DIODE RD12SB2		IC201	8-759-376-56	IC MSP3400C-PS-C6-T-ND	
D104	8-719-158-49	DIODE RD12SB2				(KV-29C3A/29C3D/29C3K/29C3R)	
D105	8-719-158-49	DIODE RD12SB2				8-759-437-33	IC MSP3410B-PS-F7-T-ND (KV-29C3B/29C3E)
D199	8-719-914-43	DIODE DAN202K		IC302	8-759-439-58	IC TDA9143/N2	
D200	8-719-158-49	DIODE RD12SB2		IC303	8-759-288-85	IC TDA4665T-T	
D201	8-719-158-49	DIODE RD12SB2		IC1001	8-759-351-92	IC SDA30C164-GEG	
D202	8-719-158-49	DIODE RD12SB2		IC1002	8-759-439-66	IC M27C4001-15C1	
D203	8-719-158-49	DIODE RD12SB2				1-750-797-11	SOCKET, PLCC ; IC1002
D204	8-719-158-49	DIODE RD12SB2		IC1003	8-759-378-21	IC ST24C16FB6	
D205	8-719-158-49	DIODE RD12SB2		IC1004	8-759-259-18	IC MB3793-42PNF	
D206	8-719-158-49	DIODE RD12SB2		IC1401	8-759-439-58	IC TDA9143/N2	
D207	8-719-158-49	DIODE RD12SB2		IC1403	8-759-438-61	IC SDA9288X-A141	
D208	8-719-158-49	DIODE RD12SB2		IC2001	8-759-438-65	IC SDA5273-C126-GEG	
D209	8-719-158-49	DIODE RD12SB2				< COIL >	
D210	8-719-158-49	DIODE RD12SB2		L101	1-412-751-11	INDUCTOR 18UH (KV-29C3B)	
D211	8-719-158-49	DIODE RD12SB2		L321	1-412-006-31	INDUCTOR CHIP 10UH	
D212	8-719-158-49	DIODE RD12SB2		L1401	1-410-428-11	INDUCTOR 56UH	
D213	8-719-158-49	DIODE RD12SB2				< TRANSISTOR >	
D214	8-719-158-49	DIODE RD12SB2		Q102	8-729-920-74	TRANSISTOR 2SC2412K-QR	
D215	8-719-158-49	DIODE RD12SB2		Q103	8-729-039-67	TRANSISTOR BSS83 (KV-29C3B)	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R184	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1038	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R185	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1039	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R186	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	R1040	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R187	1-216-107-00	METAL GLAZE 270K	5% 1/10W	R1041	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R188	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R1042	1-216-025-91	METAL GLAZE 100	5% 1/10W
R189	1-218-755-11	METAL CHIP 130K	0.50% 1/10W	R1044	1-216-025-91	METAL GLAZE 100	5% 1/10W
R190	1-216-075-00	METAL GLAZE 12K	5% 1/10W	R1045	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R191	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W	R1046	1-216-025-91	METAL GLAZE 100	5% 1/10W
R192	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1047	1-216-009-00	METAL GLAZE 22	5% 1/10W
R193	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1048	1-216-083-00	METAL GLAZE 27K	5% 1/10W
R194	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1050	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R195	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1051	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R196	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R1052	1-216-037-00	METAL GLAZE 330	5% 1/10W
R197	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1053	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R198	1-216-113-00	METAL GLAZE 470K	5% 1/10W	R1056	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R199	1-216-081-00	METAL GLAZE 22K	5% 1/10W	R1059	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R200	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1060	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R201	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1061	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R202	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W	R1062	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R203	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W	R1063	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R204	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1070	1-216-025-91	METAL GLAZE 100	5% 1/10W
R205	1-216-037-00	METAL GLAZE 330	5% 1/10W	R1071	1-216-025-91	METAL GLAZE 100	5% 1/10W
R207	1-216-039-00	METAL GLAZE 390	5% 1/10W	R1075	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R208	1-216-039-00	METAL GLAZE 390	5% 1/10W	R1301	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R213	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1302	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R214	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1303	1-216-037-00	METAL GLAZE 330	5% 1/10W
R215	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1304	1-216-037-00	METAL GLAZE 330	5% 1/10W
R272	1-216-295-91	METAL GLAZE 0	5% 1/10W	R1325	1-216-009-00	METAL GLAZE 22	5% 1/10W
R311	1-216-095-00	METAL GLAZE 82K	5% 1/10W	R1340	1-216-037-00	METAL GLAZE 330	5% 1/10W
R312	1-216-077-00	METAL GLAZE 15K	5% 1/10W	R1341	1-216-017-91	METAL GLAZE 47	5% 1/10W
R313	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1342	1-216-017-91	METAL GLAZE 47	5% 1/10W
R314	1-216-033-00	METAL GLAZE 220	5% 1/10W	R1344	1-216-037-00	METAL GLAZE 330	5% 1/10W
R315	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1401	1-216-095-00	METAL GLAZE 82K	5% 1/10W
R317	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	R1402	1-216-077-00	METAL GLAZE 15K	5% 1/10W
R330	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1403	1-216-025-91	METAL GLAZE 100	5% 1/10W
R331	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1404	1-216-025-91	METAL GLAZE 100	5% 1/10W
R332	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1406	1-216-037-00	METAL GLAZE 330	5% 1/10W
R333	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1407	1-216-037-00	METAL GLAZE 330	5% 1/10W
R334	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1410	1-216-041-00	METAL GLAZE 470	5% 1/10W
R335	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1411	1-216-041-00	METAL GLAZE 470	5% 1/10W
R336	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1412	1-216-041-00	METAL GLAZE 470	5% 1/10W
R337	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1413	1-216-041-00	METAL GLAZE 470	5% 1/10W
R338	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1414	1-216-041-00	METAL GLAZE 470	5% 1/10W
R340	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1415	1-216-041-00	METAL GLAZE 470	5% 1/10W
R341	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1416	1-216-041-00	METAL GLAZE 470	5% 1/10W
R342	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1417	1-216-041-00	METAL GLAZE 470	5% 1/10W
R343	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1418	1-216-041-00	METAL GLAZE 470	5% 1/10W
R345	1-216-025-91	METAL GLAZE 100	5% 1/10W	R1420	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R351	1-216-037-00	METAL GLAZE 330	5% 1/10W	R1421	1-216-047-91	METAL GLAZE 820	5% 1/10W
R352	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1422	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W
R353	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1423	1-216-045-00	METAL GLAZE 680	5% 1/10W
R374	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1424	1-216-049-91	METAL GLAZE 1K	5% 1/10W
R1001	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1425	1-216-047-91	METAL GLAZE 820	5% 1/10W
R1011	1-216-295-91	METAL GLAZE 0	5% 1/10W	R1426	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1012	1-216-041-00	METAL GLAZE 470	5% 1/10W	R1427	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1030	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1428	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1033	1-216-295-91	METAL GLAZE 0	5% 1/10W	R1430	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1034	1-216-073-00	METAL GLAZE 10K	5% 1/10W	R1431	1-216-025-91	METAL GLAZE 100	5% 1/10W
R1036	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1433	1-216-043-91	METAL GLAZE 560	5% 1/10W
R1037	1-216-049-91	METAL GLAZE 1K	5% 1/10W	R1434	1-216-043-91	METAL GLAZE 560	5% 1/10W

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Replace only with the part number specified.

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Ne les remplacer que par une pièce portant le numéro spécifié.

A **G**

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1435	1-216-043-91	METAL GLAZE 560 5%	1/10W
R1436	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R1440	1-216-037-00	METAL GLAZE 330 5%	1/10W
R1441	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R1442	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R1450	1-216-029-00	METAL GLAZE 150 5%	1/10W
R1451	1-216-029-00	METAL GLAZE 150 5%	1/10W
R1452	1-216-029-00	METAL GLAZE 150 5%	1/10W
R1461	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R1462	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R1463	1-216-041-00	METAL GLAZE 470 5%	1/10W
R2001	1-216-025-91	METAL GLAZE 100 5%	1/10W
R2002	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R2020	1-216-041-00	METAL GLAZE 470 5%	1/10W
R2021	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2022	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2023	1-216-063-91	METAL GLAZE 3.9K 5%	1/10W
R2024	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R2025	1-216-025-91	METAL GLAZE 100 5%	1/10W
R2026	1-216-025-91	METAL GLAZE 100 5%	1/10W
R2027	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2028	1-216-009-00	METAL GLAZE 22 5%	1/10W
R2031	1-216-017-91	METAL GLAZE 47 5%	1/10W
R2032	1-216-017-91	METAL GLAZE 47 5%	1/10W
R2033	1-216-017-91	METAL GLAZE 47 5%	1/10W
R2034	1-216-295-91	METAL GLAZE 0 5%	1/10W
R2035	1-216-017-91	METAL GLAZE 47 5%	1/10W
R2037	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R2040	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R2041	1-216-025-91	METAL GLAZE 100 5%	1/10W
< TUNER >			
TU101	1-693-338-11	TUNER (TUVIF) (AEP) (KV-29C3A/29C3D/29C3E/29C3K/29C3R)	
	1-693-340-11	TUNER (TUVIF) (FR) (KV-29C3B)	
	1-473-953-11	ADAPTOR, IEC ; TU101	
< CRYSTAL >			
X200	1-760-628-11	VIBRATOR, CRYSTAL (18.432MHz)	
X301	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)	
X302	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)	
X1001	1-760-551-21	VIBRATOR, CERAMIC (20.48MHz)	
X1401	1-567-505-11	OSCILLATOR, CRYSTAL (3.58MHz)	
X1402	1-567-504-11	OSCILLATOR, CRYSTAL (4.43MHz)	
X1403	1-760-551-21	VIBRATOR, CERAMIC (20.48MHz)	

*A-1636-021-A	G BOARD, COMPLETE	*****	
*4-203-609-01	HOLDER, G		
< CAPACITOR >			
C602	1-165-127-11	CERAMIC 470PF 10%	500V
C603	1-165-127-11	CERAMIC 470PF 10%	500V
C604	1-136-171-00	FILM 0.33MF 5%	50V
C605	1-137-399-11	FILM 0.1MF 5%	50V
C606	1-136-171-00	FILM 0.33MF 5%	50V
C607	1-137-399-11	FILM 0.1MF 5%	50V
C608	1-164-625-11	CERAMIC 680PF 10%	500V

REF.NO.	PART NO.	DESCRIPTION	REMARK
C609	1-129-718-00	FILM 0.022MF 5%	630V
C610	1-126-953-11	ELECT 2200MF 20%	35V
C611	1-126-953-11	ELECT 2200MF 20%	35V
C612	1-124-903-11	ELECT 1MF 20%	50V
C613	1-128-548-11	ELECT 4700MF 20%	25V
C614	1-128-548-11	ELECT 4700MF 20%	25V
C615	1-110-626-11	ELECT 330MF 20%	160V
C616	1-164-625-11	CERAMIC 680PF 10%	500V
C617	1-136-559-11	MYLAR 0.0047MF 10%	400V
C618	1-104-989-91	FILM 0.0022MF 5%	200V
C621	Δ 1-136-519-12	FILM 0.47MF 20%	300V
C622	Δ 1-136-518-12	FILM 0.33MF 20%	300V
C624	Δ 1-113-890-61	CERAMIC 0.0022MF 20%	250V
C626	Δ 1-164-503-61	CERAMIC 0.0022MF 20%	400V
C627	1-126-940-11	ELECT 330MF 20%	25V
C628	1-126-965-11	ELECT 22MF 20%	50V
C629	1-162-599-12	CERAMIC 0.0047MF 250V	
C630	1-162-599-12	CERAMIC 0.0047MF 250V	
C631	Δ 1-161-964-91	CERAMIC 0.0047MF 250V	
C633	1-125-555-11	ELECT 330MF 20%	400V
C635	1-136-165-00	FILM 0.1MF 5%	50V
C636	1-136-165-00	FILM 0.1MF 5%	50V
C637	1-126-964-11	ELECT 10MF 20%	50V
C648	1-101-001-00	CERAMIC 0.001MF 50V	
C650	1-126-964-11	ELECT 10MF 20%	50V
C651	1-136-171-00	FILM 0.33MF 5%	50V
C662	1-124-563-11	ELECT 2200MF 20%	25V
C663	1-126-964-11	ELECT 10MF 20%	50V
C664	1-102-129-00	CERAMIC 0.01MF 10%	50V
C665	1-126-940-11	ELECT 330MF 20%	25V
< CONNECTOR >			
CN0008	Δ 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN0009	Δ 1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN0701	1-573-299-21	CONNECTOR, BOARD TO BOARD 10P	
CN0702	1-695-300-11	CONNECTOR, BOARD TO BOARD 20P	
CN0703	Δ *1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
< DIODE >			
D601	8-719-510-53	DIODE D4SB60L	
D602	8-719-991-33	DIODE 1SS133T-77	
D603	8-719-109-89	DIODE RD5.6ESE2	
D605	8-719-047-31	DIODE RBA-402L	
D607	8-719-510-12	DIODE D10SC4M	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D607	
D608	8-719-510-12	DIODE D10SC4M	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D608	
D609	8-719-047-31	DIODE RBA-402L	
D610	8-719-312-39	DIODE R2K-V1	
D611	8-719-510-64	DIODE S2LA20F	
D614	8-719-911-19	DIODE 1SS119-25	
D615	8-719-911-19	DIODE 1SS119-25	
D616	8-719-911-19	DIODE 1SS119-25	
D617	8-719-911-19	DIODE 1SS119-25	
D618	8-719-911-19	DIODE 1SS119-25	
D619	8-719-911-19	DIODE 1SS119-25	
D620	8-719-911-19	DIODE 1SS119-25	
D621	8-719-911-19	DIODE 1SS119-25	
D622	8-719-510-64	DIODE S2LA20F	
D623	8-719-510-64	DIODE S2LA20F	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D625	8-719-911-19	DIODE 1SS119-25		R616	Δ 1-205-949-11	WIREWOUND 1.8 5% 10W	
D626	8-719-911-19	DIODE 1SS119-25		R617	Δ 1-205-949-11	WIREWOUND 1.8 5% 10W	
D627	8-719-911-19	DIODE 1SS119-25		R619	Δ 1-244-995-00	CARBON 1M 5% 1/2W	
D628	8-719-911-19	DIODE 1SS119-25		R620	Δ 1-218-265-11	METAL 8.2M 5% 1W	
D630	8-719-991-33	DIODE 1SS133T-77		R621	1-249-417-11	CARBON 1K 5% 1/4W	F
D633	8-719-991-33	DIODE 1SS133T-77		R622	1-249-430-11	CARBON 12K 5% 1/4W	
D634	8-719-991-33	DIODE 1SS133T-77		R623	1-249-436-11	CARBON 39K 5% 1/4W	
D636	8-719-511-40	DIODE S1VB40		R624	1-249-425-11	CARBON 4.7K 5% 1/4W	
< FERRITE BEAD >				R625	1-247-815-91	CARBON 220 5% 1/4W	
FB601	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R626	1-247-863-91	CARBON 22K 5% 1/4W	
FB602	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R627	1-247-815-91	CARBON 220 5% 1/4W	
FB603	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R628	1-247-807-31	CARBON 100 5% 1/4W	
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH		R629	1-249-428-11	CARBON 8.2K 5% 1/4W	
< IC >				R636	1-207-905-00	WIREWOUND 0.27 10% 2W	F
IC601	1-810-051-11	POWER MODULE DM-48		R637	1-249-389-11	CARBON 4.7 5% 1/4W	F
IC602	Δ 8-749-010-64	PHOTO COUPLER PC123FY2		R639	1-247-791-91	CARBON 22 5% 1/4W	
IC603	8-759-510-52	IC TEA7605		R640	1-247-791-91	CARBON 22 5% 1/4W	
< COIL >				R641	1-247-791-91	CARBON 22 5% 1/4W	
L605	1-412-523-21	INDUCTOR 6.8UH		R642	1-247-791-91	CARBON 22 5% 1/4W	
L606	1-412-523-21	INDUCTOR 6.8UH		R651	1-215-880-00	METAL OXIDE 10 5% 2W	F
< TRANSFORMER >				R652	1-247-891-00	CARBON 330K 5% 1/4W	
LF602	Δ 1-429-860-11	TRANSFORMER, LINE FILTER		R653	1-247-891-00	CARBON 330K 5% 1/4W	
< IC LINK >				R654	1-247-891-00	CARBON 330K 5% 1/4W	
PS601	Δ 1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R655	1-247-891-00	CARBON 330K 5% 1/4W	
PS602	Δ 1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R656	1-249-439-11	CARBON 68K 5% 1/4W	
PS604	Δ 1-801-550-21	PROTECTOR MODULE 2.5A/MP250		R657	1-249-429-11	CARBON 10K 5% 1/4W	
PS605	Δ 1-801-549-21	PROTECTOR MODULE 2.5A/MP400		R658	1-249-421-11	CARBON 2.2K 5% 1/4W	
< TRANSISTOR >				R659	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q601	8-729-032-87	TRANSISTOR 2SC4834NP-F09		R660	1-249-429-11	CARBON 10K 5% 1/4W	
Q602	8-729-032-87	TRANSISTOR 2SC4834NP-F09		R661	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE		R662	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q604	8-729-200-21	TRANSISTOR 2SC2500-B		R663	1-249-429-11	CARBON 10K 5% 1/4W	
Q605	8-729-119-76	TRANSISTOR 2SC1175-HFE		R664	1-249-429-11	CARBON 10K 5% 1/4W	
Q608	8-729-200-21	TRANSISTOR 2SC2500-B		R667	1-249-377-11	CARBON 0.47 5% 1/4W	F
Q610	8-729-119-76	TRANSISTOR 2SA933S-RT		R670	1-249-417-11	CARBON 1K 5% 1/4W	
Q611	8-729-119-78	TRANSISTOR 2SC1740S-RT		< RELAY >			
Q612	8-729-119-76	TRANSISTOR 2SA933S-RT		RY601	Δ 1-755-167-11	RELAY, AC POWER	
Q615	8-729-200-21	TRANSISTOR 2SC2500-B		RY602	Δ 1-755-167-11	RELAY, AC POWER	
Q621	8-729-200-21	TRANSISTOR 2SC2500-B		< TRANSFORMER >			
< RESISTOR >				T601	Δ 1-429-844-11	TRANSFORMER, CONVERTER (PIT)	
R601	1-202-933-61	FUSIBLE 0.1 10% 1/2W	F	T602	Δ 1-429-254-11	TRANSFORMER, CONVERTER (PRT)	
R602	1-247-891-00	CARBON 330K 5% 1/4W		T603	Δ 1-429-952-11	TRANSFORMER	
R603	1-247-891-00	CARBON 330K 5% 1/4W		< THERMISTOR >			
R604	1-216-369-00	METAL OXIDE 1 5% 2W	F	THP601	Δ 1-809-827-11	THERMISTOR, POSITIVE	
R605	1-247-891-00	CARBON 330K 5% 1/4W		< VARISTOR >			
R606	1-247-891-00	CARBON 330K 5% 1/4W		VDR601	1-810-977-21	VARISTOR ERZV10D621	
R607	1-216-369-00	METAL OXIDE 1 5% 2W	F	*****			
R608	1-247-887-00	CARBON 220K 5% 1/4W		*A-1638-097-A	C BOARD, COMPLETE		
R609	1-249-429-11	CARBON 10K 5% 1/4W	F		*****		
R610	1-249-419-11	CARBON 1.5K 5% 1/4W	F		4-382-854-11	SCREW (M3X10), P, SW (+)	
R611	1-249-377-11	CARBON 0.47 5% 1/4W	F	< CAPACITOR >			
				C3701	1-162-114-00	CERAMIC 0.0047MF	2KV

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Ne les remplacer que par une pièce portant le numéro spécifié.

C

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C3703	1-107-662-11	ELECT 22MF	20% 250V	Q3717	8-729-906-70	TRANSISTOR BF871-127	
C3712	1-102-978-00	CERAMIC 220PF	5% 50V	Q3718	8-729-906-70	TRANSISTOR BF871-127	
C3713	1-102-978-00	CERAMIC 220PF	5% 50V				
C3714	1-102-978-00	CERAMIC 220PF	5% 50V			< RESISTOR >	
C3716	1-128-528-11	ELECT 470MF	20% 16V	R3701	1-202-884-11	SOLID 820K	20% 1/2W
C3720	1-162-116-00	CERAMIC 680PF	10% 2KV	R3702	1-202-884-11	SOLID 820K	20% 1/2W
		< CONNECTOR >		R3703	1-202-549-00	SOLID 100	20% 1/2W
CN3701	1-695-915-11	TAB (CONTACT)		R3705	1-216-377-00	METAL OXIDE 1	5% 1W F
CN3703	*1-564-512-11	PLUG, CONNECTOR 9P		R3706	1-216-377-00	METAL OXIDE 1	5% 1W F
CN3704	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P		R3707	1-249-416-11	CARBON 820	5% 1/4W
		< DIODE >		R3708	1-249-416-11	CARBON 820	5% 1/4W
D3701	8-719-991-33	DIODE 1SS133T-77		R3709	1-249-416-11	CARBON 820	5% 1/4W
D3702	8-719-991-33	DIODE 1SS133T-77		R3710	1-215-922-11	METAL OXIDE 6.8K	5% 3W F
D3703	8-719-991-33	DIODE 1SS133T-77		R3711	1-202-549-00	SOLID 100	20% 1/2W
D3704	8-719-991-33	DIODE 1SS133T-77		R3712	1-215-922-11	METAL OXIDE 6.8K	5% 3W F
D3705	8-719-991-33	DIODE 1SS133T-77		R3713	1-202-549-00	SOLID 100	20% 1/2W
D3706	8-719-991-33	DIODE 1SS133T-77		R3714	1-215-922-11	METAL OXIDE 6.8K	5% 3W F
D3707	8-719-991-33	DIODE 1SS133T-77		R3715	1-202-549-00	SOLID 100	20% 1/2W
D3708	8-719-991-33	DIODE 1SS133T-77		R3716	1-249-405-11	CARBON 100	5% 1/4W F
D3709	8-719-991-33	DIODE 1SS133T-77		R3717	1-249-405-11	CARBON 100	5% 1/4W F
D3710	8-719-908-03	DIODE GP08D		R3718	1-249-405-11	CARBON 100	5% 1/4W F
D3711	8-719-901-83	DIODE 1SS83		R3721	1-247-885-00	CARBON 180K	5% 1/4W
D3712	8-719-901-83	DIODE 1SS83		R3723	1-247-885-00	CARBON 180K	5% 1/4W
D3713	8-719-901-83	DIODE 1SS83		R3725	1-249-419-11	CARBON 1.5K	5% 1/4W
D3714	8-719-991-33	DIODE 1SS133T-77		R3726	1-249-419-11	CARBON 1.5K	5% 1/4W
D3715	8-719-018-82	DIODE RGP02-20EL-6394		R3727	1-249-419-11	CARBON 1.5K	5% 1/4W
D3716	8-719-991-33	DIODE 1SS133T-77		R3728	1-247-815-91	CARBON 220	5% 1/4W
D3717	8-719-991-33	DIODE 1SS133T-77		R3729	1-247-815-91	CARBON 220	5% 1/4W
D3718	8-719-991-33	DIODE 1SS133T-77		R3730	1-247-815-91	CARBON 220	5% 1/4W
D3719	8-719-991-33	DIODE 1SS133T-77		R3731	1-249-403-11	CARBON 68	5% 1/4W
		< SOCKET >		R3732	1-249-403-11	CARBON 68	5% 1/4W
J3701 Δ	1-526-990-21	SOCKET, CRT		R3733	1-249-403-11	CARBON 68	5% 1/4W
		< COIL >		R3734	1-202-549-00	SOLID 100	20% 1/2W
L3701	1-408-607-31	INDUCTOR 22UH		R3735	1-247-885-00	CARBON 180K	5% 1/4W
L3702	1-408-607-31	INDUCTOR 22UH		R3738	1-249-401-11	CARBON 47	5% 1/4W
L3703	1-408-409-00	INDUCTOR 10UH		R3739	1-249-401-11	CARBON 47	5% 1/4W
L3704	1-408-607-31	INDUCTOR 22UH		R3740	1-249-401-11	CARBON 47	5% 1/4W
L3705	1-408-409-00	INDUCTOR 10UH		R3741	1-249-435-11	CARBON 33K	5% 1/4W
L3706	1-408-607-31	INDUCTOR 22UH		R3742	1-249-429-11	CARBON 10K	5% 1/4W
L3707	1-408-409-00	INDUCTOR 10UH		R3743	1-249-430-11	CARBON 12K	5% 1/4W
L3709	1-408-409-00	INDUCTOR 10UH		R3747	1-216-437-00	METAL OXIDE 5.6K	5% 1W F
		< TRANSISTOR >		R3748	1-247-885-00	CARBON 180K	5% 1/4W
Q3701	8-729-906-70	TRANSISTOR BF871-127		R3749	1-216-437-00	METAL OXIDE 5.6K	5% 1W F
Q3702	8-729-906-70	TRANSISTOR BF871-127		R3750	1-249-432-11	CARBON 18K	5% 1/4W
Q3703	8-729-906-70	TRANSISTOR BF871-127		R3751	1-216-437-00	METAL OXIDE 5.6K	5% 1W F
Q3704	8-729-326-11	TRANSISTOR 2SC2611		R3752	1-249-431-11	CARBON 15K	5% 1/4W
Q3705	8-729-326-11	TRANSISTOR 2SC2611		R3758	1-247-807-31	CARBON 100	5% 1/4W
Q3706	8-729-326-11	TRANSISTOR 2SC2611		R3759	1-247-807-31	CARBON 100	5% 1/4W
Q3707	8-729-200-17	TRANSISTOR 2SA1091-O		R3760	1-247-807-31	CARBON 100	5% 1/4W
Q3708	8-729-200-17	TRANSISTOR 2SA1091-O		R3761	1-249-418-11	CARBON 1.2K	5% 1/4W
Q3709	8-729-200-17	TRANSISTOR 2SA1091-O		R3762	1-249-418-11	CARBON 1.2K	5% 1/4W
Q3710	8-729-119-78	TRANSISTOR 2SC2785-HFE		R3763	1-249-418-11	CARBON 1.2K	5% 1/4W
Q3711	8-729-119-78	TRANSISTOR 2SC2785-HFE				< VARIABLE RESISTOR >	
Q3712	8-729-119-78	TRANSISTOR 2SC2785-HFE		RV3701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
Q3716	8-729-906-70	TRANSISTOR BF871-127		RV3702	1-241-714-11	RES, ADJ, METAL FILM 110M	

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D

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
< DIODE >				IC603	8-759-095-34	IC LM2940T-8.0	
D101	8-719-982-27	DIODE MTZJ-33C			4-382-854-11	SCREW (M3X10), P, SW (+) ; IC603	
D236	8-719-911-19	DIODE 1SS119-25		IC604	8-759-513-71	IC PQ05RF21	
D237	8-719-911-19	DIODE 1SS119-25			4-202-373-01	SPRING, IC ; IC604	
D238	8-719-911-19	DIODE 1SS119-25		IC606	8-759-991-43	IC LM78L12ACZ	
D239	8-719-911-19	DIODE 1SS119-25		IC607	8-759-513-71	IC PQ05RF21	
D262	8-719-911-19	DIODE 1SS119-25			4-202-373-01	SPRING, IC ; IC607	
D264	8-719-911-19	DIODE 1SS119-25		IC801	8-759-103-93	IC UPC393C	
D276	8-719-911-19	DIODE 1SS119-25		IC802	8-759-192-71	IC STV9379	
D278	8-719-911-19	DIODE 1SS119-25			4-202-373-01	SPRING, IC ; IC802	
D279	8-719-911-19	DIODE 1SS119-25		IC900	8-742-014-00	RECEIVER HIC SBX1981-51	
D280	8-719-911-19	DIODE 1SS119-25		IC901	8-749-012-12	IC IS474	
D281	8-719-911-19	DIODE 1SS119-25		IC2701	8-759-603-37	IC M5216P	
D282	8-719-911-19	DIODE 1SS119-25		< JACK >			
D612	8-719-911-19	DIODE 1SS119-25		J900	1-764-606-11	JACK	
D613	8-719-911-19	DIODE 1SS119-25		J901	1-568-678-11	TERMINAL BLOCK, S 3P	
D631	8-719-911-19	DIODE 1SS119-25		< COIL >			
D632	8-719-911-19	DIODE 1SS119-25		L602	1-412-525-31	INDUCTOR 10UH	
D633	8-719-911-19	DIODE 1SS119-25		L603	1-412-525-31	INDUCTOR 10UH	
D802	8-719-979-99	DIODE ERD08M-15		L801	1-459-123-00	COIL,DUST CORE(PAC)	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D802		L802	1-459-123-00	COIL,DUST CORE(PAC)	
D803	8-719-043-14	DIODE ESAD39M-06C		L803	1-459-123-00	COIL,DUST CORE(PAC)	
	4-382-854-11	SCREW (M3X10), P, SW (+) ; D803		L806	1-459-592-11	COIL (WITH CORE) (PMC)	
D804	8-719-971-20	DIODE ERC38-06		L807	1-412-524-11	INDUCTOR 8.2UH	
D805	8-719-908-03	DIODE GP08D		L811	1-459-104-00	COIL, WITH CORE 10MH	
D806	8-719-908-03	DIODE GP08D		L813	1-459-104-00	COIL, WITH CORE 10MH	
D810	8-719-979-85	DIODE EGP20G		L814	1-422-613-11	COIL, AIR CORE	
D811	8-719-302-43	DIODE EL1Z		L815	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
D812	8-719-510-26	DIODE D1NL20		L816	1-408-947-00	INDUCTOR 2.2MMH	
D813	8-719-510-26	DIODE D1NL20		L820	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
D814	8-719-908-03	DIODE GP08D		L900	1-408-409-00	INDUCTOR 10UH	
D815	8-719-110-13	DIODE RD9.1ESB2		L901	1-408-409-00	INDUCTOR 10UH	
D816	8-719-110-41	DIODE RD15ES-B2		L902	1-249-417-11	CARBON 1K 5% 1/4W	
D817	8-719-911-19	DIODE 1SS119-25		L903	1-249-417-11	CARBON 1K 5% 1/4W	
D818	8-719-911-19	DIODE 1SS119-25		L1604	1-459-104-00	COIL, WITH CORE	
D819	8-719-911-19	DIODE 1SS119-25		L1605	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE	
D871	8-719-911-19	DIODE 1SS119-25		L1622	1-406-674-11	COIL, CHOKE 3.3MMH	
D873	8-719-911-19	DIODE 1SS119-25		< TRANSISTOR >			
D874	8-719-911-19	DIODE 1SS119-25		Q276	8-729-030-03	TRANSISTOR DTC144ESA-TP	
D901	8-719-030-11	DIODE SLA-570KT3F		Q277	8-729-119-76	TRANSISTOR 2SA1175-HFE	
	*4-203-258-01	HOLDER, LED ; D901		Q278	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D1609	8-719-979-85	DIODE EGP20G		Q279	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D1611	8-719-911-19	DIODE 1SS119-25		Q280	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D2701	8-719-911-19	DIODE 1SS119-25		Q281	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D2702	8-719-911-19	DIODE 1SS119-25		Q282	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< CONNECTOR >				Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
DY1	*1-580-798-11	CONNECTOR PIN (DY) 6P		Q607	8-729-029-56	TRANSISTOR DTA144ESA	
< FUSE >				Q613	8-729-030-03	TRANSISTOR DTC144ESA-TP	
F601	Δ 1-532-299-00	FUSE		Q614	8-729-029-56	TRANSISTOR DTA144ESA	
	Δ *1-533-725-11	HOLDER, FUSE ; F601		Q616	8-729-030-03	TRANSISTOR DTC144ESA-TP	
< IC >				Q617	8-729-029-67	TRANSISTOR DTC144ESA-TP	
IC236	8-759-190-89	IC TDA7265		Q618	8-729-029-56	TRANSISTOR 2SA933S	
	4-202-373-01	SPRING, IC ; IC236		Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	4-202-710-01	SPACER, INSULATING ; IC236		Q624	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC260	8-759-330-93	IC TDA7309		Q801	8-729-119-80	TRANSISTOR 2SC2688-LK	
IC261	8-759-502-21	IC TDA2822M		Q802	8-729-821-07	TRANSISTOR 2SC3997CA	
					4-200-399-01	SPACER, IC ; Q802	
					4-382-854-11	SCREW (M3X10), P, SW (+) ; Q802	

D

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q803	8-729-039-68	TRANSISTOR IRF620		R635	1-215-926-00	METAL OXIDE 33K 5%	3W F
	4-202-373-01	SPRING, IC ; Q803		R638	1-249-425-11	CARBON 4.7K 5%	1/4W
Q804	8-729-039-68	TRANSISTOR IRF620		R644	1-249-425-11	CARBON 4.7K 5%	1/4W
Q1610	8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q1611	8-729-017-06	TRANSISTOR 2SC4793		R645	1-249-410-11	CARBON 270 5%	1/4W
Q2701	8-729-119-78	TRANSISTOR 2SC2785-HFE		R646	1-249-403-11	CARBON 68 5%	1/4W
	< RESISTOR >			R647	1-249-420-11	CARBON 1.8K 5%	1/4W
				R665	1-249-425-11	CARBON 4.7K 5%	1/4W
				R666	1-249-413-11	CARBON 470 5%	1/4W
R236	1-249-424-11	CARBON 3.9K 5%	1/4W	R676	1-249-437-11	CARBON 47K 5%	1/4W
R237	1-249-417-11	CARBON 1K 5%	1/4W	R677	1-249-437-11	CARBON 47K 5%	1/4W
R239	1-249-424-11	CARBON 3.9K 5%	1/4W	R678	1-249-421-11	CARBON 2.2K 5%	1/4W
R240	1-249-417-11	CARBON 1K 5%	1/4W	R679	1-247-815-91	CARBON 220 5%	1/4W
R244	1-249-413-11	CARBON 470 5%	1/4W	R802	1-215-916-00	METAL OXIDE 680 5%	3W F
R245	1-249-430-11	CARBON 12K 5%	1/4W	R803	1-215-916-00	METAL OXIDE 680 5%	3W F
R246	1-249-430-11	CARBON 12K 5%	1/4W	R804	1-215-916-00	METAL OXIDE 680 5%	3W F
R247	1-249-413-11	CARBON 470 5%	1/4W	R805	1-215-923-00	METAL OXIDE 10K 5%	3W F
R248	1-249-425-11	CARBON 4.7K 5%	1/4W	R806	1-249-411-11	CARBON 330 5%	1/4W
R249	1-216-357-00	METAL OXIDE 4.7 5%	1W F	R807	1-247-843-11	CARBON 3.3K 5%	1/4W
R250	1-216-357-00	METAL OXIDE 4.7 5%	1W F	R808	1-216-385-11	METAL OXIDE 0.47 5%	3W F
R251	1-249-429-11	CARBON 10K 5%	1/4W	R809	1-215-880-00	METAL OXIDE 10 5%	2W F
R252	1-249-429-11	CARBON 10K 5%	1/4W	R810	1-215-914-11	METAL OXIDE 330 5%	3W F
R260	1-247-863-91	CARBON 22K 5%	1/4W	R811	1-216-434-11	METAL OXIDE 1.8K 5%	1W F
R261	1-247-863-91	CARBON 22K 5%	1/4W	R817	1-202-972-61	FUSIBLE 1 5%	1/4W F
R262	1-249-421-11	CARBON 2.2K 5%	1/4W	R818	1-249-377-11	CARBON 0.47 5%	1/4W F
R263	1-249-421-11	CARBON 2.2K 5%	1/4W	R819	1-249-377-11	CARBON 0.47 5%	1/4W F
R264	1-212-857-00	FUSIBLE 10 5%	1/4W F	R820	1-214-907-00	METAL 56K 1%	1/2W
R265	1-249-389-11	CARBON 4.7 5%	1/4W F	R821	1-249-428-11	CARBON 8.2K 5%	1/4W
R266	1-249-389-11	CARBON 4.7 5%	1/4W F	R823	1-249-420-11	CARBON 1.8K 5%	1/4W
R267	1-247-815-91	CARBON 220 5%	1/4W	R834	1-247-887-00	CARBON 220K 5%	1/4W
R268	1-247-815-91	CARBON 220 5%	1/4W	R835	1-249-434-11	CARBON 27K 5%	1/4W
R269	1-249-415-11	CARBON 680 5%	1/4W	R837	1-249-422-11	CARBON 2.7K 5%	1/4W
R270	1-249-415-11	CARBON 680 5%	1/4W	R842	1-249-399-11	CARBON 33 5%	1/4W F
R271	1-247-742-11	CARBON 180 5%	1/2W F	R843	1-202-822-00	SOLID 2.2K 20%	1/2W
R277	1-249-419-11	CARBON 1.5K 5%	1/4W	R844	1-249-424-11	CARBON 3.9K 5%	1/4W
R278	1-249-441-11	CARBON 100K 5%	1/4W	R845	1-247-881-00	CARBON 120K 5%	1/4W
R279	1-249-429-11	CARBON 10K 5%	1/4W	R846	1-249-422-11	CARBON 2.7K 5%	1/4W
R280	1-249-425-11	CARBON 4.7K 5%	1/4W	R847	1-249-437-11	CARBON 47K 5%	1/4W
R281	1-249-437-11	CARBON 47K 5%	1/4W	R848	1-249-425-11	CARBON 4.7K 5%	1/4W
R282	1-249-430-11	CARBON 12K 5%	1/4W	R849	1-249-429-11	CARBON 10K 5%	1/4W
R283	1-249-429-11	CARBON 10K 5%	1/4W	R850	1-249-389-11	CARBON 4.7 5%	1/4W F
R284	1-249-432-11	CARBON 18K 5%	1/4W	R851	1-216-394-00	METAL OXIDE 2.7 5%	3W F
R285	1-249-425-11	CARBON 4.7K 5%	1/4W	R854	1-249-436-11	CARBON 39K 5%	1/4W
R286	1-249-421-11	CARBON 2.2K 5%	1/4W	R855	1-249-417-11	CARBON 1K 5%	1/4W
R287	1-249-412-11	CARBON 390 5%	1/4W	R857	1-202-822-00	SOLID 2.2K 20%	1/2W
R288	1-249-421-11	CARBON 2.2K 5%	1/4W	R859	1-249-432-11	CARBON 18K 5%	1/4W
R289	1-249-421-11	CARBON 2.2K 5%	1/4W	R860	1-247-843-11	CARBON 3.3K 5%	1/4W
R290	1-247-807-31	CARBON 100 5%	1/4W	R861	1-249-417-11	CARBON 1K 5%	1/4W
R291	1-249-421-11	CARBON 2.2K 5%	1/4W	R862	1-249-383-11	CARBON 1.5 5%	1/4W F
R292	1-249-429-11	CARBON 10K 5%	1/4W	R863	1-216-475-11	METAL OXIDE 120 5%	3W F
R293	1-249-429-11	CARBON 10K 5%	1/4W	R865	1-249-436-11	CARBON 39K 5%	1/4W
R294	1-249-429-11	CARBON 10K 5%	1/4W	R866	1-249-432-11	CARBON 18K 5%	1/4W
R295	1-247-885-00	CARBON 180K 5%	1/4W	R867	1-216-389-11	METAL OXIDE 1 5%	3W F
R296	1-247-885-00	CARBON 180K 5%	1/4W	R868	1-249-418-11	CARBON 1.2K 5%	1/4W
R297	1-247-807-31	CARBON 100 5%	1/4W	R871	1-249-441-11	CARBON 100K 5%	1/4W
R298	1-247-807-31	CARBON 100 5%	1/4W	R872	1-247-895-91	CARBON 470K 5%	1/4W
R630	1-249-429-11	CARBON 10K 5%	1/4W	R873	1-247-887-00	CARBON 220K 5%	1/4W
R631	1-215-477-00	METAL 220K 1%	1/4W	R875	1-247-843-11	CARBON 3.3K 5%	1/4W
R632	1-249-417-11	CARBON 1K 5%	1/4W	R895	1-215-866-11	METAL OXIDE 330 5%	1W F
R633	1-249-429-11	CARBON 10K 5%	1/4W	R900	1-247-815-91	CARBON 220 5%	1/4W
R634	1-247-895-91	CARBON 470K 5%	1/4W	R901	1-249-417-11	CARBON 1K 5%	1/4W

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

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

D **VM**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R902	1-249-417-11	CARBON 1K 5%	1/4W	C1714	1-136-203-11	FILM 0.01MF	10% 250V
R908	1-249-401-11	CARBON 47 5%	1/4W	C1715	1-163-001-11	CERAMIC CHIP 220PF	10% 50V
R909	1-249-437-11	CARBON 47K 5%	1/4W	C1716	1-124-907-11	ELECT 10MF	20% 50V
R910	1-249-437-11	CARBON 47K 5%	1/4W	C1718	1-124-120-11	ELECT 220MF	20% 16V
R911	1-249-425-11	CARBON 4.7K 5%	1/4W	C1719	1-124-907-11	ELECT 10MF	20% 50V
R912	1-249-421-11	CARBON 2.2K 5%	1/4W	C1722	1-101-810-00	CERAMIC 100PF	5% 500V
R913	1-249-425-11	CARBON 4.7K 5%	1/4W	C1723	1-104-396-11	ELECT 10MF	20% 16V
R914	1-249-421-11	CARBON 2.2K 5%	1/4W	C1724	1-101-810-00	CERAMIC 100PF	5% 500V
R916	1-247-807-31	CARBON 100 5%	1/4W	< CONNECTOR >			
R917	1-259-880-11	CARBON 2.2M 5%	1/4W	CN1701	1-774-418-11	CONNECTOR, BOARD TO BOARD 8P	
R922	1-249-406-11	CARBON 120 5%	1/4W	CN1830	*1-564-510-11	PLUG, CONNECTOR 7P	
R923	1-249-406-11	CARBON 120 5%	1/4W	< DIODE >			
R925	1-249-429-11	CARBON 10K 5%	1/4W	D1701	8-719-914-43	DIODE DAN202K	
R926	1-249-429-11	CARBON 10K 5%	1/4W	D1702	8-719-914-42	DIODE DA204K	
R1641	1-247-863-91	CARBON 22K 5%	1/4W	D1704	8-719-982-37	DIODE MTZJ-39C	
R1645	1-249-439-11	CARBON 68K 5%	1/4W	D1705	8-719-982-37	DIODE MTZJ-39C	
R1646	1-249-421-11	CARBON 2.2K 5%	1/4W	D1706	8-719-914-42	DIODE DA204K	
R1648	1-215-875-11	METAL OXIDE 10K 5%	1W F	D1708	8-719-914-42	DIODE DA204K	
R1649	1-249-429-11	CARBON 10K 5%	1/4W	D1709	8-719-914-42	DIODE DA204K	
R1650	1-249-429-11	CARBON 10K 5%	1/4W	< COIL >			
R1651	1-249-399-11	CARBON 33 5%	1/4W F	L1702	1-408-410-00	INDUCTOR 12UH	
R1652	1-249-421-11	CARBON 2.2K 5%	1/4W	< TRANSISTOR >			
R2701	1-247-863-91	CARBON 22K 5%	1/4W	Q1701	8-729-901-59	TRANSISTOR BF199	
R2702	1-247-863-91	CARBON 22K 5%	1/4W	Q1702	8-729-216-22	TRANSISTOR 2SA1162-G	
R2703	1-247-863-91	CARBON 22K 5%	1/4W	Q1703	8-729-017-05	TRANSISTOR 2SA1837	
R2704	1-247-863-91	CARBON 22K 5%	1/4W	Q1704	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q1703	
R2705	1-249-429-11	CARBON 10K 5%	1/4W	Q1704	8-729-920-74	TRANSISTOR 2SC2412K-QR	
R2706	1-249-429-11	CARBON 10K 5%	1/4W	Q1705	8-729-017-06	TRANSISTOR 2SC4793	
R2708	1-249-429-11	CARBON 10K 5%	1/4W	Q1705	4-382-854-11	SCREW (M3X10), P, SW (+) ; Q1705	
R2719	1-212-857-00	FUSIBLE 10 5%	1/4W F	Q1706	8-729-920-74	TRANSISTOR 2SC2412K-QR	
< SWITCH >				Q1707	8-729-920-74	TRANSISTOR 2SC2412K-QR	
S601	Δ 1-571-433-21	SWITCH, PUSH (AC POWER)		Q1708	8-729-901-59	TRANSISTOR BF199	
S900	1-692-979-11	SWITCH, TACTILE		Q1710	8-729-216-22	TRANSISTOR 2SA1162-G	
S901	1-692-979-11	SWITCH, TACTILE		Q1711	8-729-039-27	TRANSISTOR BC546B	
S902	1-692-979-11	SWITCH, TACTILE		Q1712	8-729-039-25	TRANSISTOR BC556B	
< TRANSFORMER >				< RESISTOR >			
T801	1-427-762-11	TRANSFORMER, FERRITE (HDT)		JR1701	1-216-296-91	METAL GLAZE 0 5%	1/8W
T803	1-427-776-11	TRANSFORMER, FERRITE (PMT)		JR1702	1-216-296-91	METAL GLAZE 0 5%	1/8W
T804	1-426-940-11	HLT		R1701	1-216-025-91	METAL GLAZE 100 5%	1/10W
T805	Δ 1-453-222-11	TRANSFORMER ASSY, FLYBACK (NX-4003/U2B4)		R1702	1-249-413-11	CARBON 470 5%	1/4W
T806	1-413-059-00	TRANSFORMER, FERRITE (DFT)		R1703	1-216-174-00	METAL GLAZE 100 5%	1/8W
*****				R1704	1-249-418-11	CARBON 1.2K 5%	1/4W
*A-1644-077-A VM BOARD, COMPLETE *****				R1705	1-247-736-11	CARBON 56 5%	1/2W F
< CAPACITOR >				R1706	1-249-414-11	CARBON 560 5%	1/4W F
C1701	1-104-119-00	ELECT 330MF	20% 16V	R1707	1-249-411-11	CARBON 330 5%	1/4W
C1704	1-161-830-00	CERAMIC 0.0047MF	500V	R1709	1-249-412-11	CARBON 390 5%	1/4W
C1706	1-107-638-11	ELECT 33MF	20% 160V	R1711	1-249-432-11	CARBON 18K 5%	1/4W
C1707	1-126-907-11	ELECT 10MF	20% 50V	R1712	1-216-085-00	METAL GLAZE 33K 5%	1/10W
C1708	1-163-075-00	CERAMIC CHIP 0.047MF	50V	R1713	1-216-083-00	METAL GLAZE 27K 5%	1/10W
C1709	1-129-702-00	FILM 0.001MF	10% 630V	R1714	1-216-073-00	METAL GLAZE 10K 5%	1/10W
C1710	1-136-203-11	FILM 0.01MF	10% 250V	R1715	1-215-866-11	METAL OXIDE 330 5%	1W F
C1711	1-162-318-11	CERAMIC 0.001MF	10% 500V	R1716	1-249-417-11	CARBON 1K 5%	1/4W F
C1712	1-107-667-11	ELECT 2.2MF	20% 160V	R1717	1-249-432-11	CARBON 18K 5%	1/4W
C1713	1-162-318-11	CERAMIC 0.001MF	10% 500V	R1718	1-249-412-11	CARBON 390 5%	1/4W

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REF.NO.	PART NO.	DESCRIPTION	REMARK
R1719	1-249-416-11	CARBON	820 5% 1/4W
R1720	1-216-089-91	METAL GLAZE	47K 5% 1/10W
R1721	1-249-414-11	CARBON	560 5% 1/4W
R1723	1-249-429-11	CARBON	10K 5% 1/4W
R1724	1-216-689-11	METAL GLAZE	39K 5% 1/10W
R1725	1-249-413-11	CARBON	470 5% 1/4W
R1726	1-216-035-00	METAL GLAZE	270 5% 1/10W
R1727	1-249-402-11	CARBON	56 5% 1/4W F
R1730	1-216-121-91	METAL GLAZE	1M 5% 1/10W
R1731	1-216-049-91	METAL GLAZE	1K 5% 1/10W
R1736	1-247-807-31	CARBON	100 5% 1/4W
R1737	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R1738	1-216-174-00	METAL GLAZE	100 5% 1/8W
R1739	1-216-222-00	METAL GLAZE	10K 5% 1/8W
R1740	1-216-174-00	METAL GLAZE	100 5% 1/8W
R1741	1-216-166-00	METAL GLAZE	47 5% 1/8W
R1743	1-216-021-00	METAL GLAZE	68 5% 1/10W
R1744	1-216-150-91	METAL GLAZE	10 5% 1/8W
R1745	1-216-150-91	METAL GLAZE	10 5% 1/8W

REF.NO.	PART NO.	DESCRIPTION	REMARK
MISCELLANEOUS *****			
Δ	1-406-807-11	COIL, DEGAUSSING	
	1-452-032-00	MAGNET, DISK; 10MM \emptyset	
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM \emptyset	
Δ	1-453-222-11	TRANSFORMER ASSY, FLYBACK	(NX-4003/U2B4)
	1-504-146-11	SPEAKER (5X11CM)	
Δ	1-251-317-31	CAP ASSY, HIGH-VOLTAGE	
Δ	1-571-433-21	SWITCH, PUSH (AC POWER)	
	1-693-338-11	TUNER (TUVIF) (AEP)	(KV-29C3A/29C3D/29C3E/29C3K/29C3R)
	1-693-340-11	TUNER (TUVIF) (FR)	(KV-29C3B)
Δ	1-751-680-11	CORD, POWER (WITH NOISE FILTER)	2.5A/250V
Δ	8-451-466-11	DEFLECTION YOKE (Y29GXC2B)	
Δ	8-453-005-21	NECK ASSY, (NA297-M2)	
V901 Δ	8-733-856-05	PICTURE TUBE (SD-269)(M68LCT60X)	

ACCESSORIES AND PACKING MATERIALS

- *4-203-485-11 CUSHION (LOWER) (ASSY)
- *4-203-486-01 CUSHION (UPPER) (ASSY)
- *4-203-487-01 INDIVIDUAL CARTON

- 4-203-639-41 MANUAL, INSTRUCTION (KV-29C3A) (ITALIAN)
- 4-203-639-51 MANUAL, INSTRUCTION (KV-29C3B) (XXXXX)
- 4-203-639-11 MANUAL, INSTRUCTION (KV-29C3D) (XXXXX/XXXXX/XXXXX/XXXX/XXXXX)

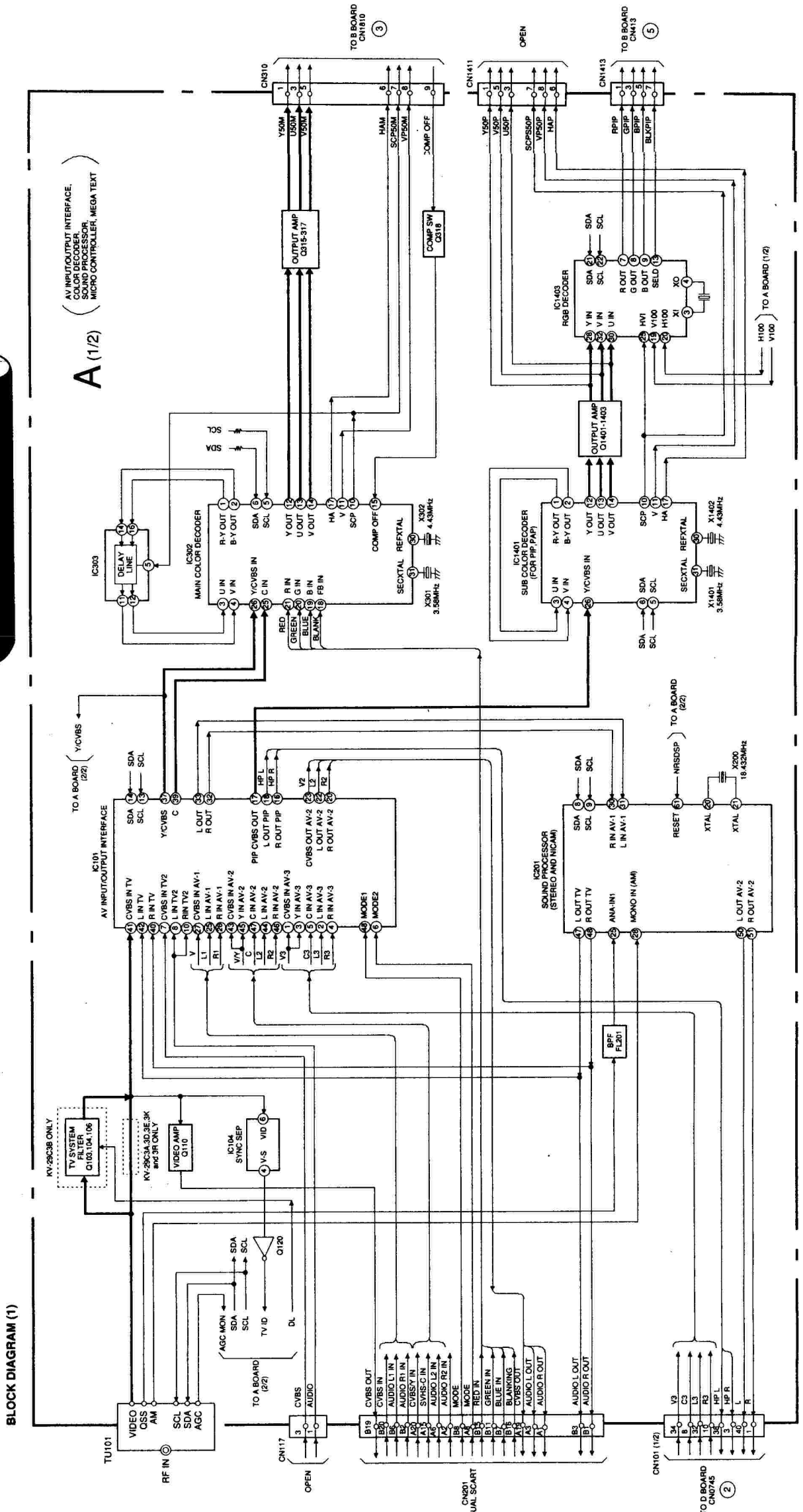
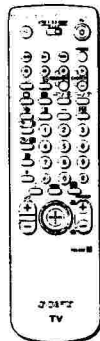
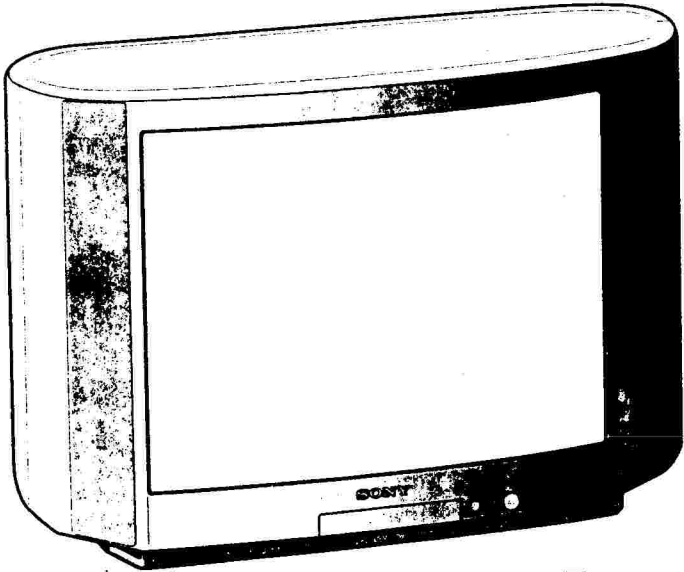
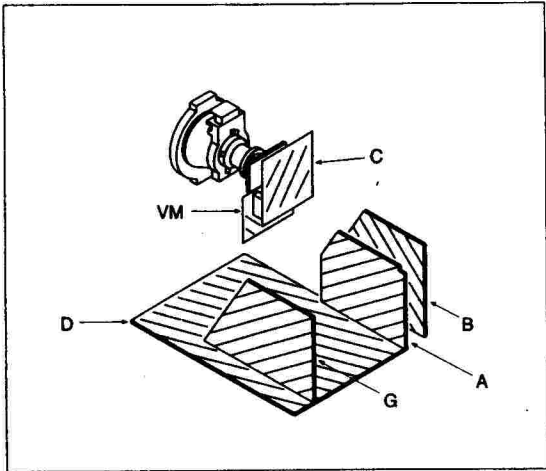
- 4-203-639-71 MANUAL, INSTRUCTION (KV-29C3E) (XXXXX)
- 4-203-639-81 MANUAL, INSTRUCTION (KV-29C3E) (XXXXX)
- 4-203-639-91 MANUAL, INSTRUCTION (KV-29C3K/29C3R) (XXXXX)

*4-395-957-01 BAG, PROTECTION

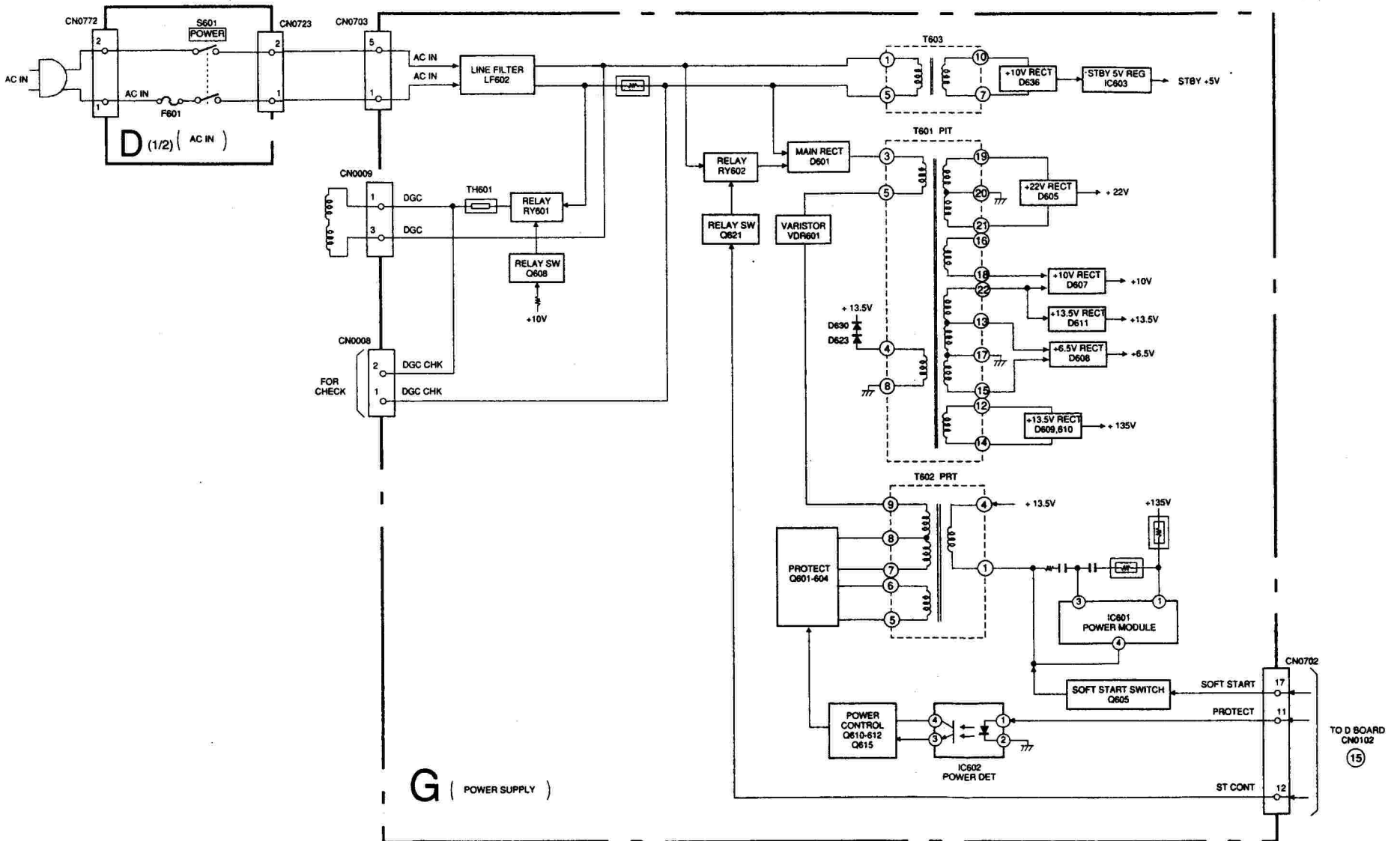
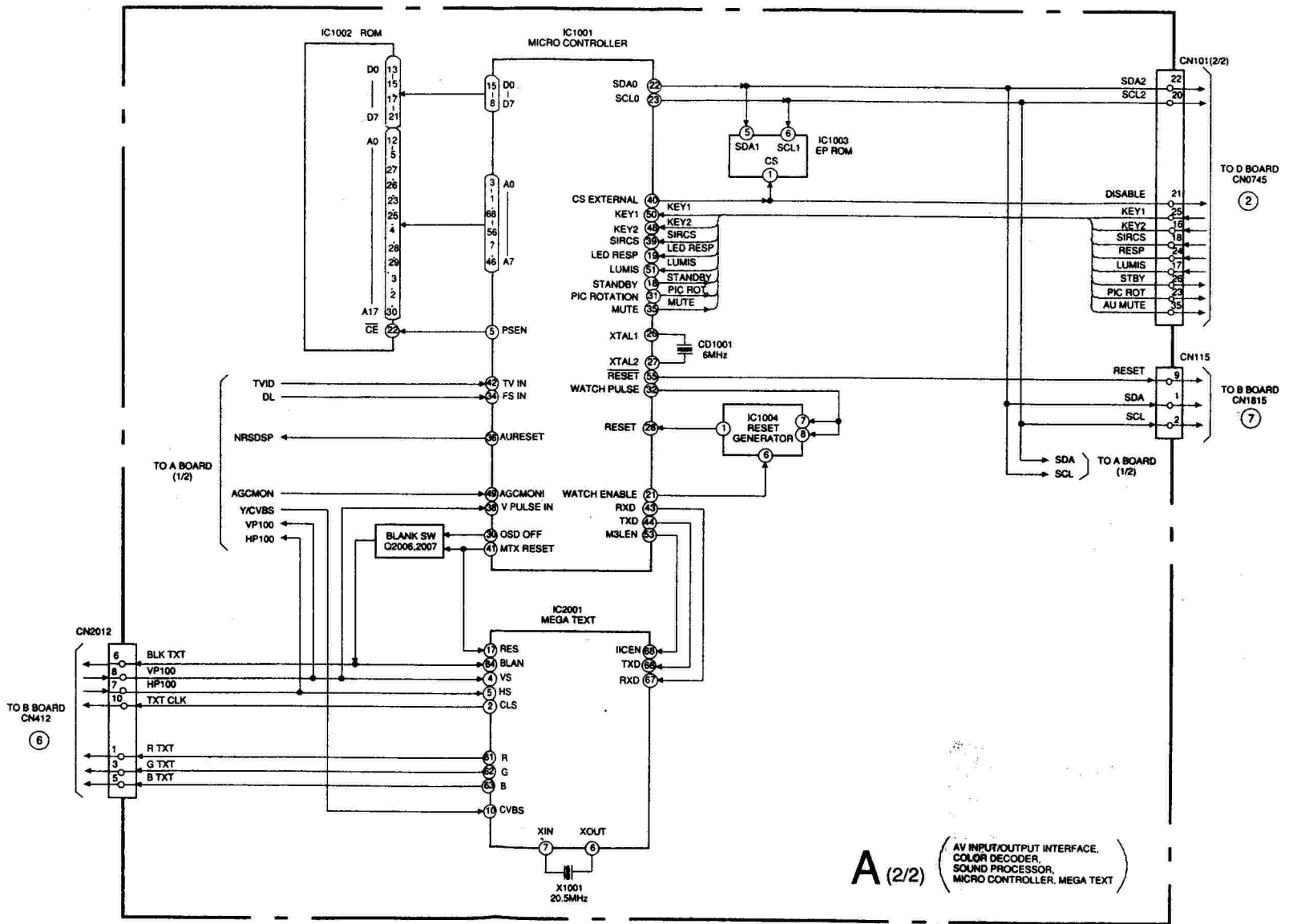
REMOTE COMMANDER

1-473-692-11 COMMANDER, STANDARD TYPE (RM-862)

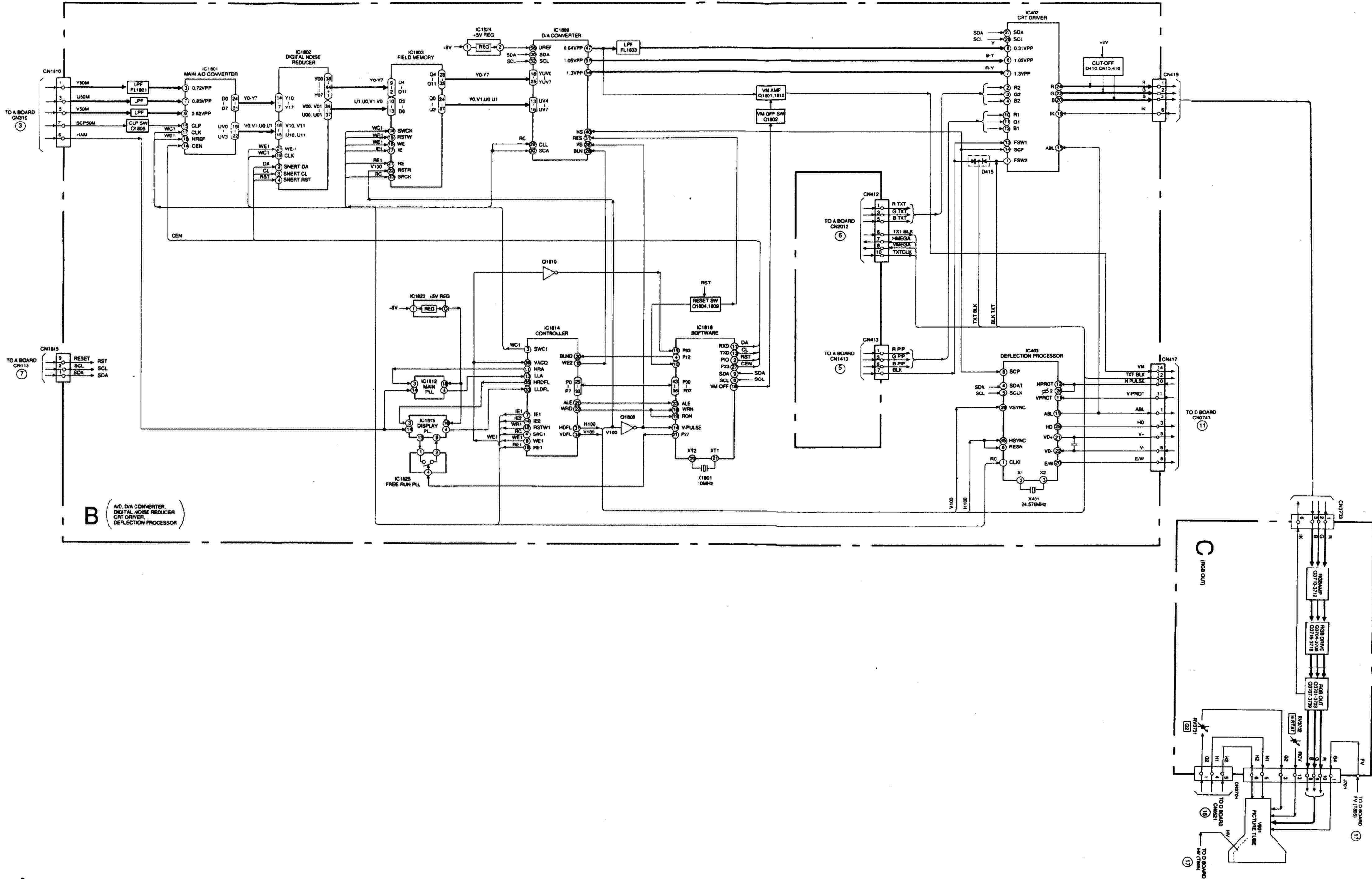
MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-29C3A	RM-862	Italian	SCC-K43A-A	KV-29C3E	RM-862	Spanish	SCC-K42A-A
KV-29C3B	RM-862	French	SCC-K45A-A	KV-29C3K	RM-862	OIRT	SCC-K44A-A
KV-29C3D	RM-862	AEP	SCC-K41A-A	KV-29C3R	RM-862	OIRT	SCC-K44B-A

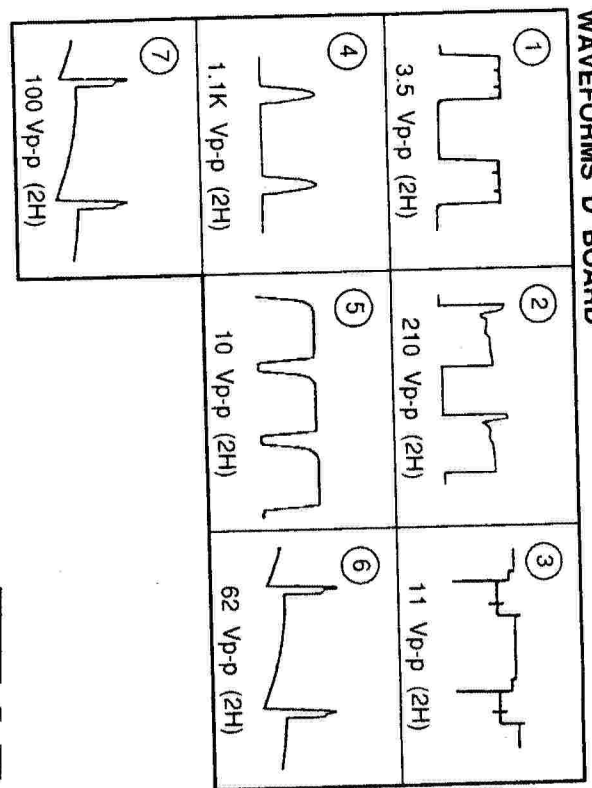


BLOCK DIAGRAM (2)

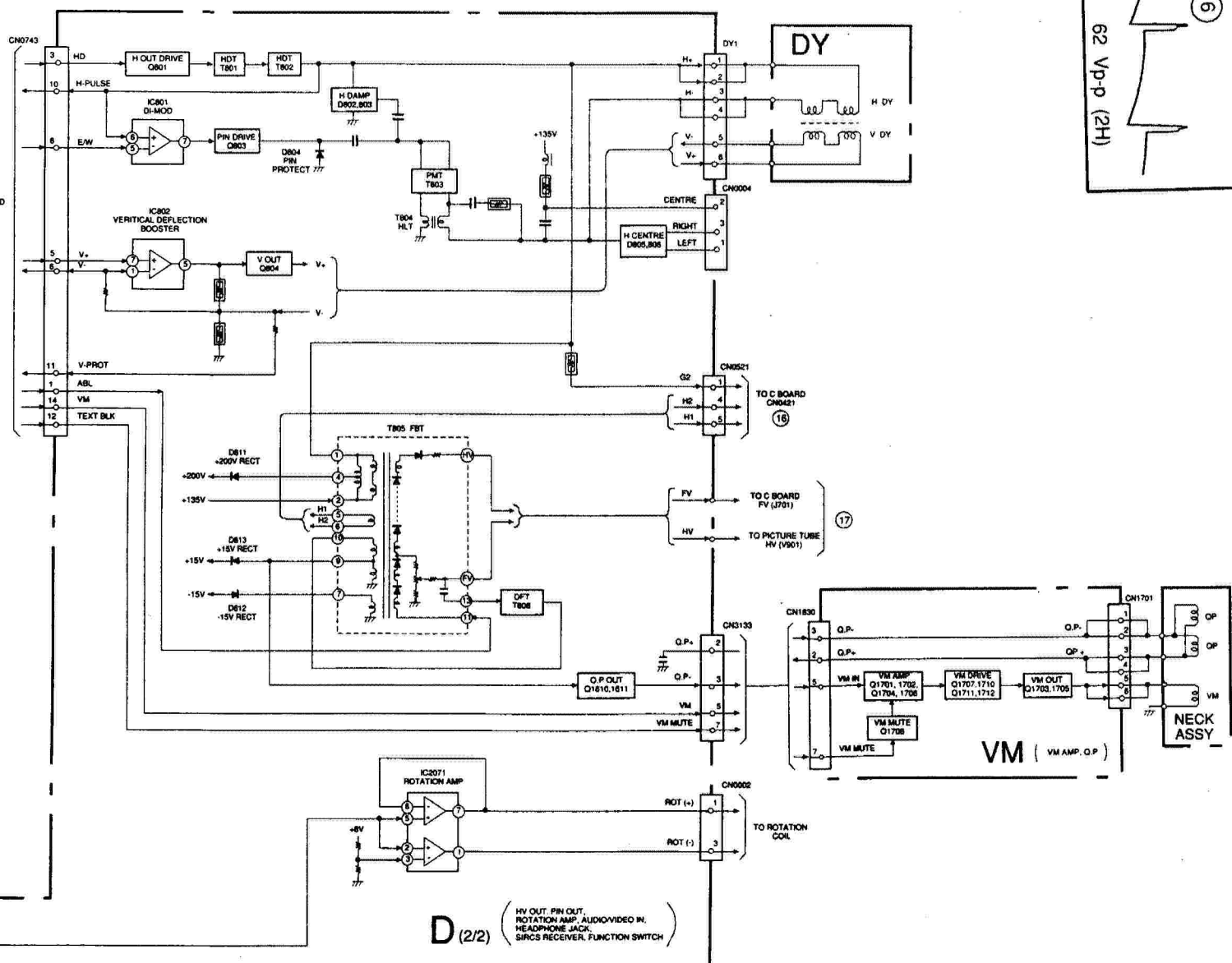
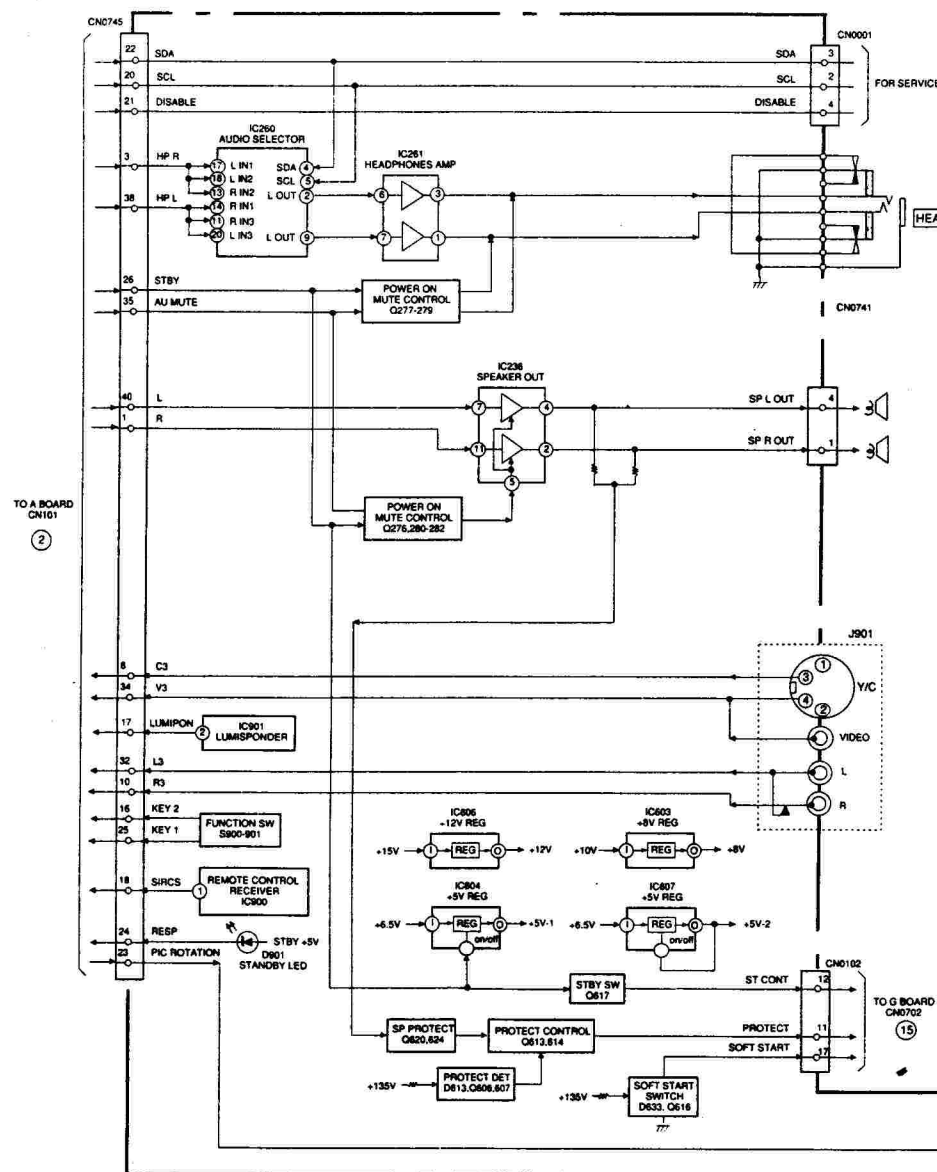


BLOCK DIAGRAM (3)



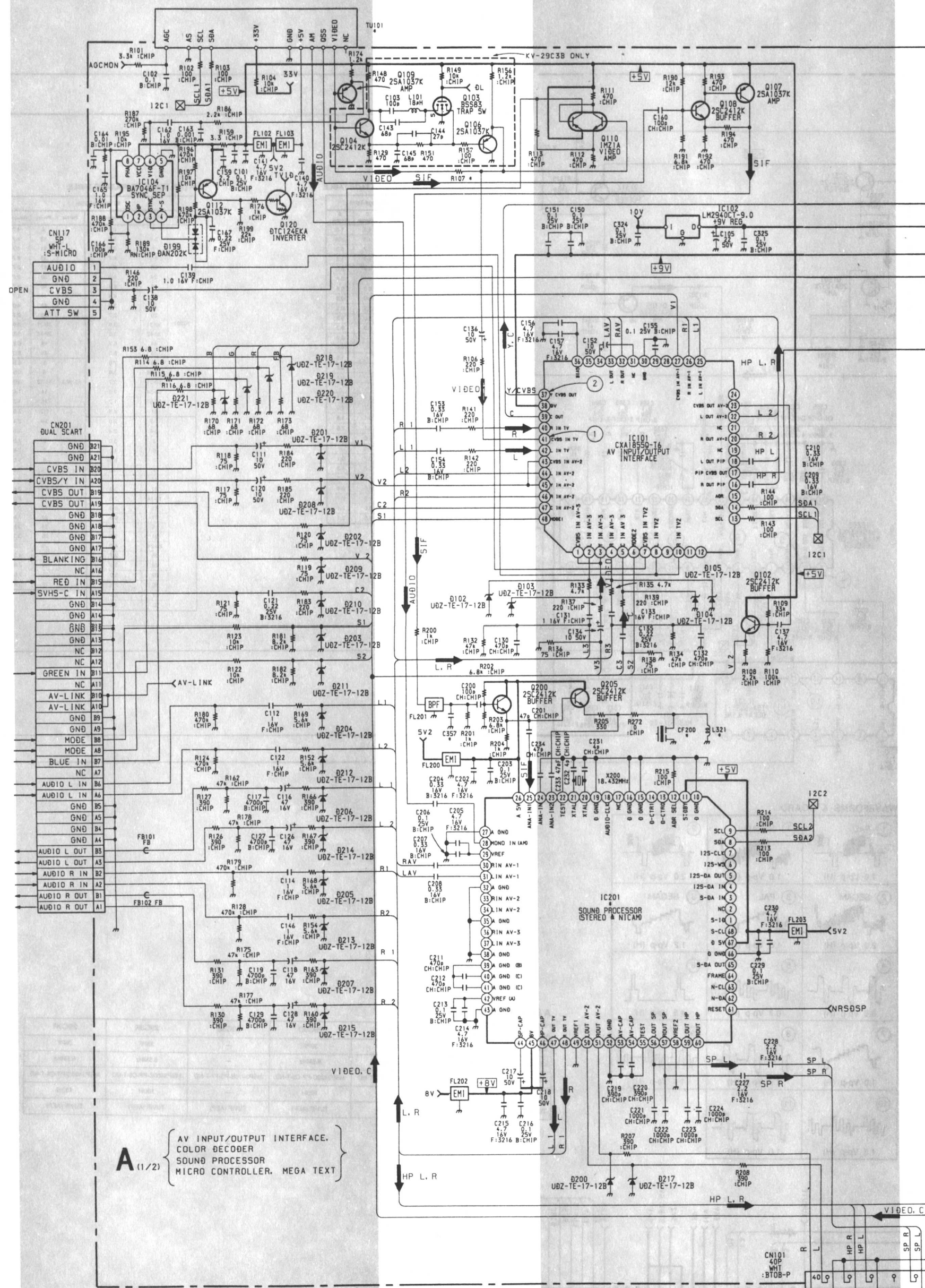


BLOCK DIAGRAM (4)

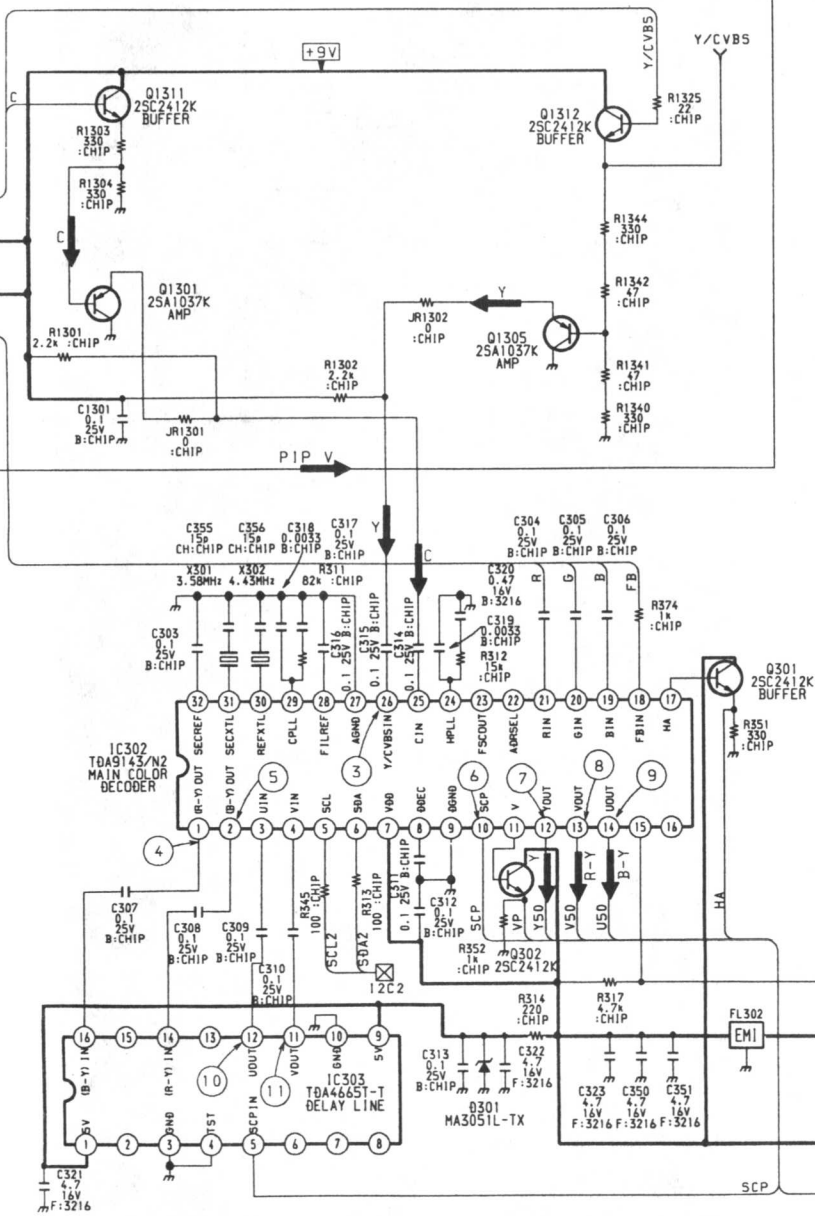


D (2/2) (HV OUT, PIN OUT, ROTATION AMP, AUDIO/VIDEO IN, HEADPHONE JACK, SIRCS RECEIVER, FUNCTION SWITCH)

A
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A (1/2) { AV INPUT/OUTPUT INTERFACE.
COLOR DECODER
SOUND PROCESSOR
MICRO CONTROLLER, MEGA TEXT }



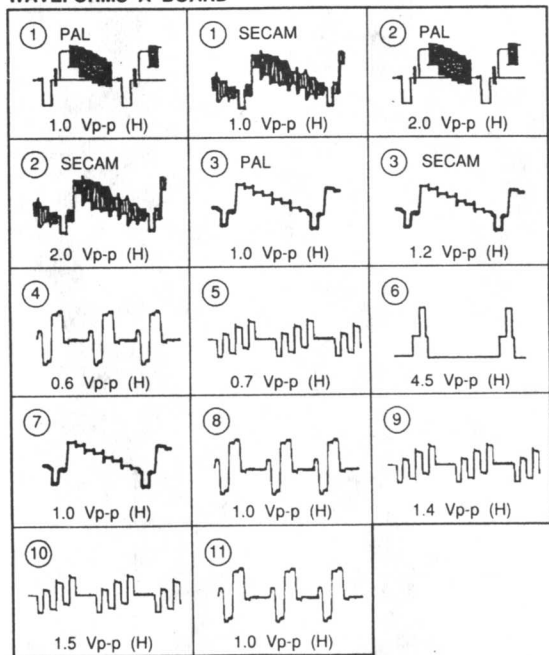
A (1/2) BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q102	1.9	4.7	1.3
Q105	0.08	4.5	0.08
Q107	4.4	1.7	5.0
Q108	1.8	4.4	1.2
Q112	4.3	4.9	5.0
Q120	4.6	0.1	0.1
Q301	0.5	8.0	0.4
Q302	-	8.0	0.3
Q318	0.1	5.2	0.1
Q1201	8.6	5.0	9.2
Q1202	0.7	5.0	9.2
Q1301	1.9	-	0.2
Q1302	-	-	0.6
Q1303	0.8	-	1.5
Q1304	2.2	-	0.1
Q1305	2.0	-	0.1
Q1306	1.7	-	-
Q1307	-	3.4	0.1
Q1308	3.5	4.7	2.9
Q1309	0.9	0.1	1.6
Q1310	1.0	0.1	1.6
Q1311	4.5	9.0	3.9
Q1312	4.5	9.0	-
Q1313	4.6	0.7	0.1
Q1314	4.8	4.7	4.3
Q1404	4.5	7.8	3.8
Q1411	0.5	8.0	0.6
Q1412	0.1	8.0	0.1
Q1201	2.6	8.6	2.1
Q1202	2.6	8.6	2.1

A (1/2) BOARD IC VOLTAGE TABLE

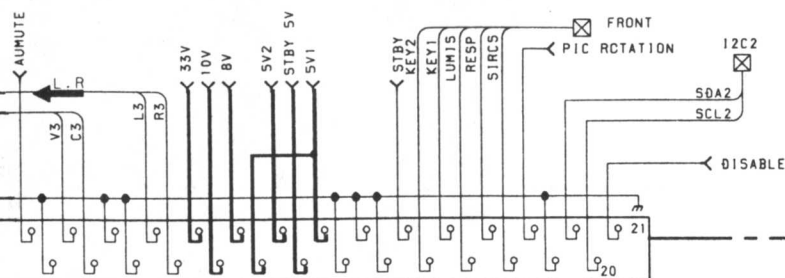
IC Voltage Table						
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)	
IC201	4	0.5	IC201	4	4.7	
	5-6	4.7		13	4.7	
	7	2.4		31	4.7	
	8-9	4.7		35	4.7	
	20	2.4		37	2.7	
	24	4.4		39	2.2	
	25	8.8		40	2.7	
	26	4.4		41	4.7	
	28	3.8		45	4.8	
	29	2.7		29	2.7	
	30-31	3.8		30-31	3.8	
	39-42	3.8		39-42	3.8	
	44	6.2		44	6.2	
	45	8.0		45	8.0	
	46	7.0		1	5.0	
	47-48	3.8		5	0.6	
	50-51	3.7		IC 303	11-12	3.0
	53-54	3.8		14	1.4	
	56-57	1.2		16	1.2	
	61	4.8		1-2	2.0	
IC302	1-2	2.0	IC302	3-4	2.4	
	3-4	2.4		5	3.5	
	5	3.0		6	4.0	
	6	4.0		7	7.8	
	7	8.0		8	5.0	
	8	5.0		10	0.8	
	10	0.5		12	2.4	
	12	3.2		13-14	2.6	
	13-14	2.6		15	8.0	
	15	8.0		17	0.3	
	17	0.3		22	7.8	
	19	1.6		24	3.6	
	21	1.0		26	3.3	
	23-24	4.0		28	3.5	
	26	3.7		29	4.3	
	28	3.5		30	2.6	
	29	5.0		31	-2.6	
	30	2.5		32	3.8	
31	2.5					
32	2.0					

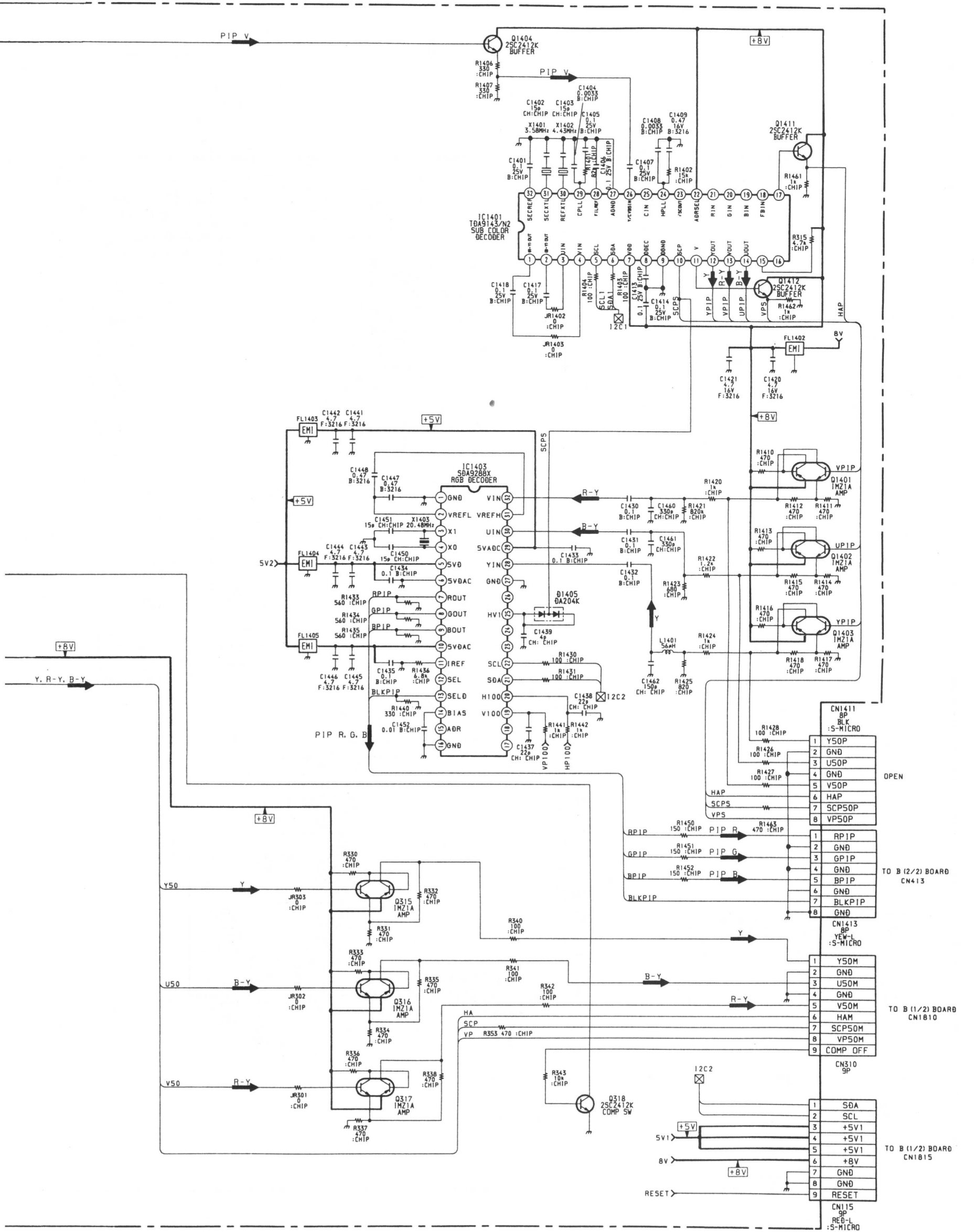
WAVEFORMS A BOARD



A BOARD * MARK

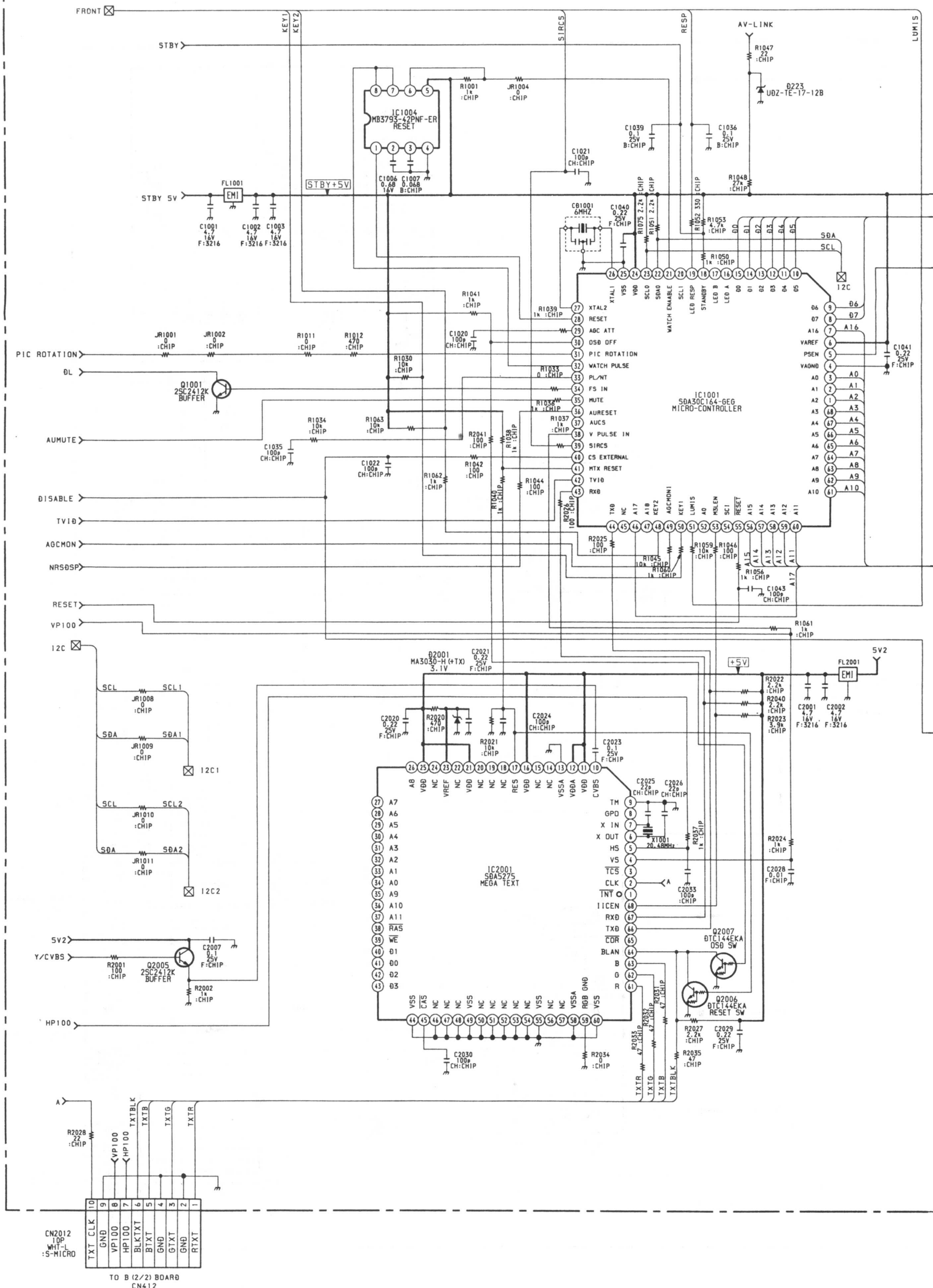
Model	29C3A	29C3B	29C3D	29C3E	29C3K	29C3R
Ref No	29C3A	29C3B	29C3D	29C3E	29C3K	29C3R
C357	39PF	39PF	39PF	-	39PF	39PF
CF200	6.5MHz	6.5MHz	6.5MHz	-	6.5MHz	6.5MHz
IC201	MSP3400C-PP-C6-T-ND	MSP3410B-PS-F7-T-ND	MSP3400C-PP-C6-T-ND	MSP3410B-PS-F7-T-ND	MSP3400C-PP-C6-T-ND	MSP3400C-PP-C6-T-ND
L321	10UH	10UH	10UH	-	10UH	10UH
TU101	TUVIF (AEP)	TUVIF (FR)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)	TUVIF (AEP)





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B-#SSAE4.<...>-A...-29C3

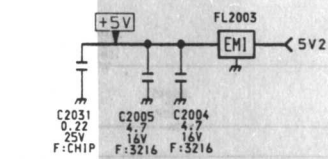
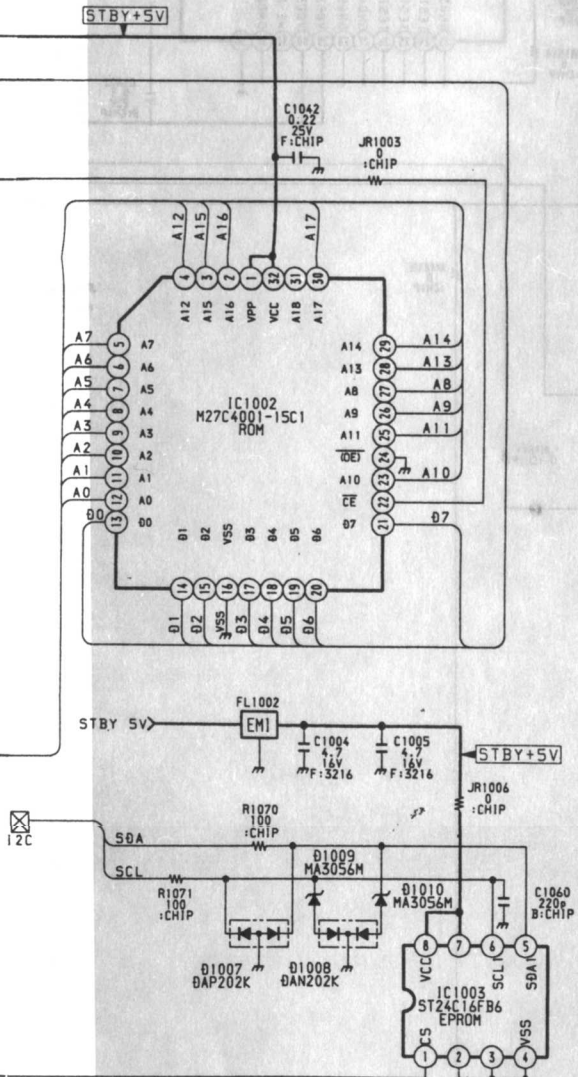


TO B (2/2) BOARD
CN412

10	TXTR
9	TXTLBK
8	TXTB
7	TXTG
6	TXTLBK
5	TXTB
4	TXTG
3	TXTLBK
2	TXTB
1	TXTG

CN2012
 10P
 WHI-L
 S-MICRO

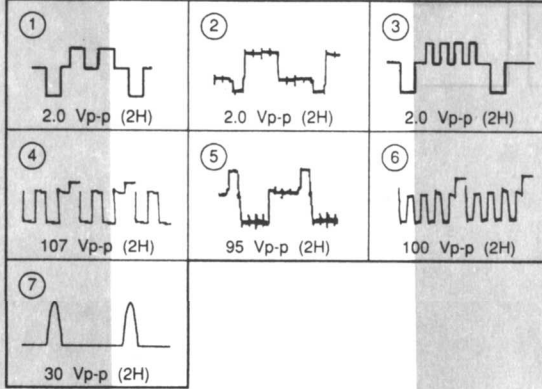
A (2/2)



A (2/2) BOARD IC VOLTAGE TABLE

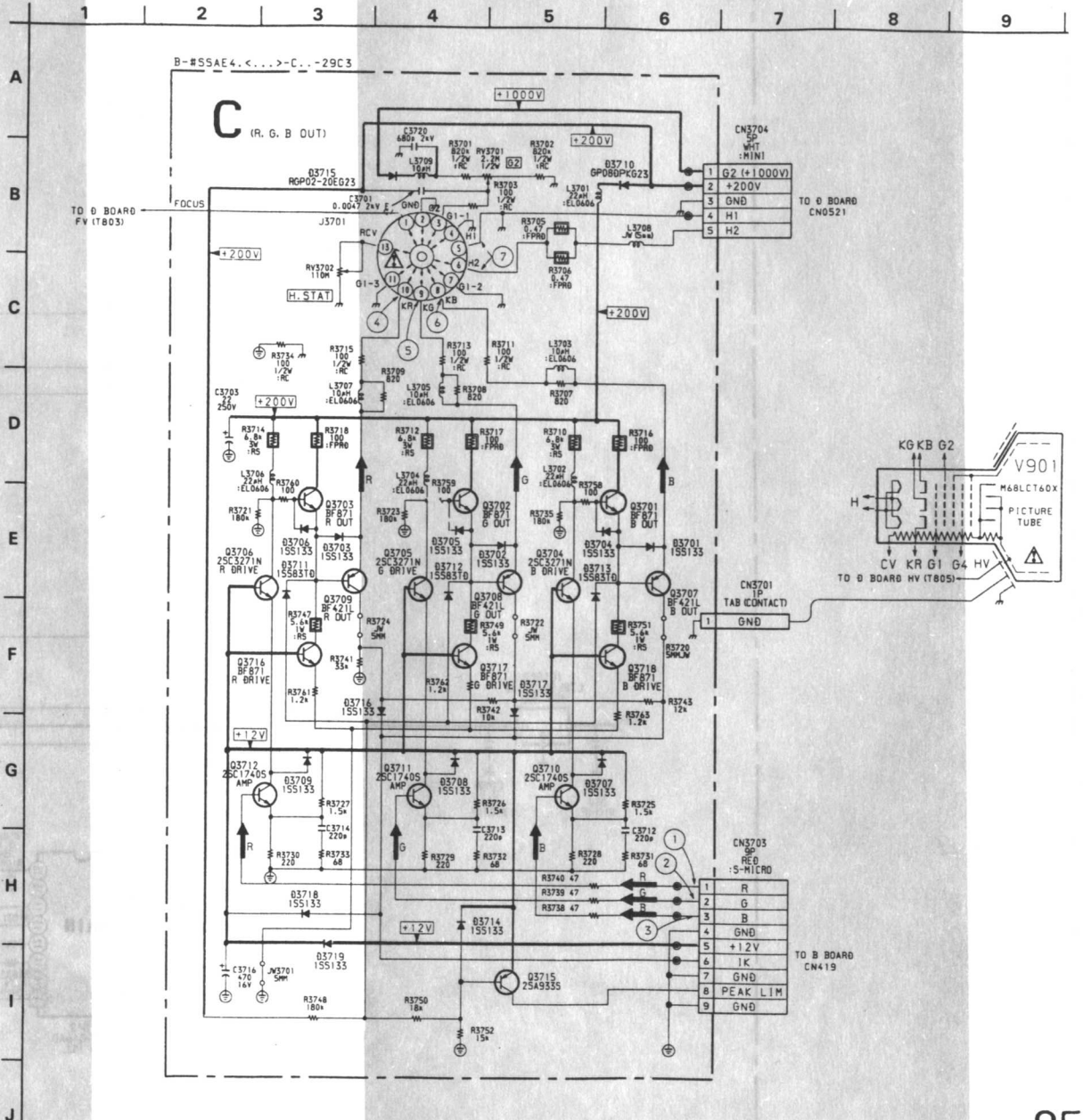
IC Voltage Table					
Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC101	1-5	4.6	IC1101	1	4.8
	7-8	4.6		2	1.1
	10	4.6		4	0.9
	17	4.6		5	0.3
	23	4.6		6-7	2.4
	29	4.6		8	1.4
	31	4.6		9	4.7
	34	4.6		10	1.7
	36	4.6		11	1.5
	38	9.0		16	4.0
	40-47	4.6		18-20	4.7
IC1001	5	2.4	IC2001	21	2.5
	6	4.8		22	2.3
	19	3.6		22	2.3
	20	0.1		2	0.4
	24	4.8		5	0.3
	26	2.1		6-7	1.6
	27	2.3		8	4.0
	28	4.6		10	1.0
	30	0.1		11-12	4.7
	31-32	2.4		16	4.7
	33	4.8		21	4.7
	36	4.1		23	2.9
	38	0.1		25	4.7
	39	0.6		66	4.7
40	4.8	68	4.7		
41	0.1				
42	4.8				
43	4.4				
44	4.1				
48	4.8				
49	2.2				
50	4.8				
52	4.8				
54	4.8				

WAVEFORMS C BOARD

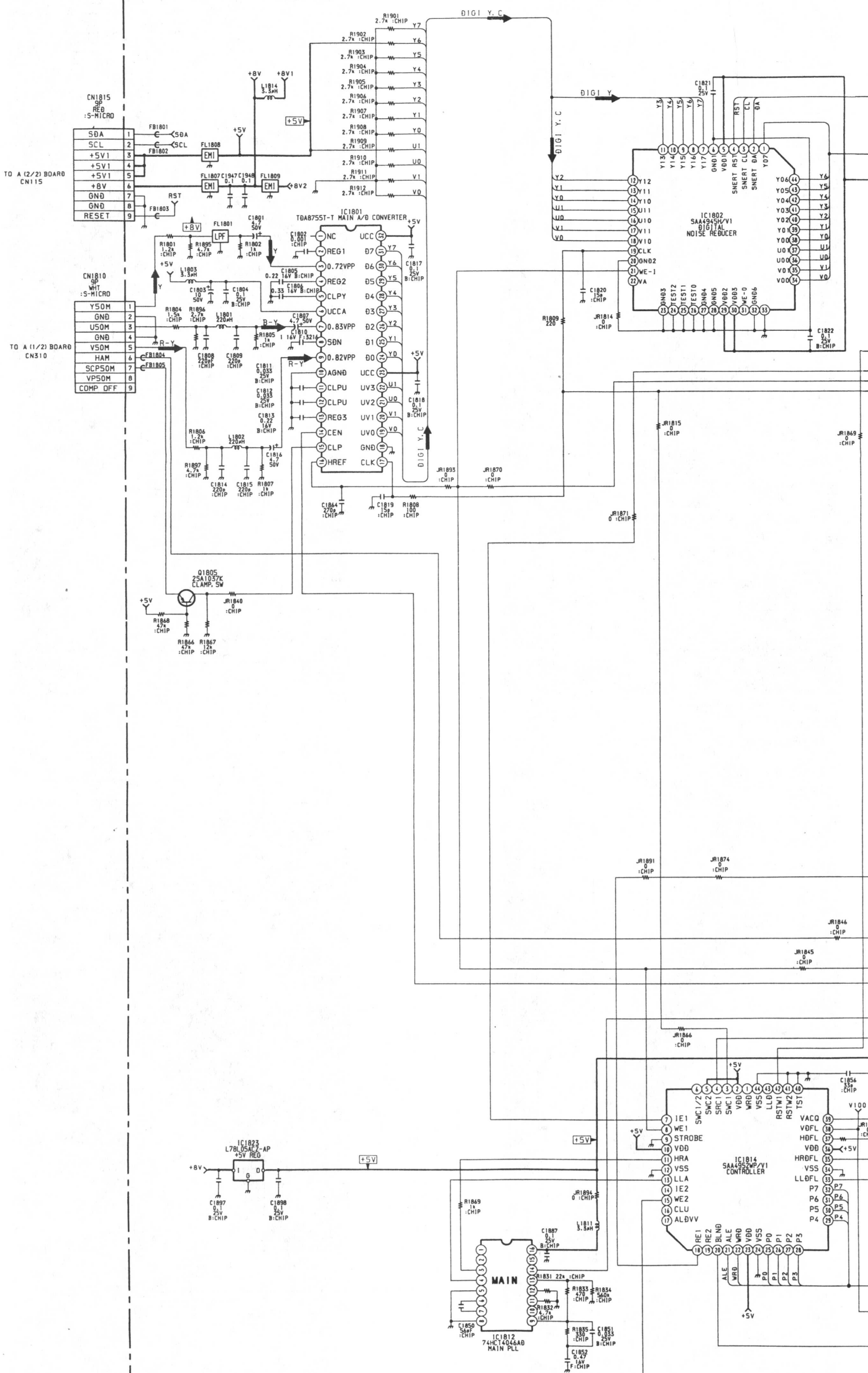


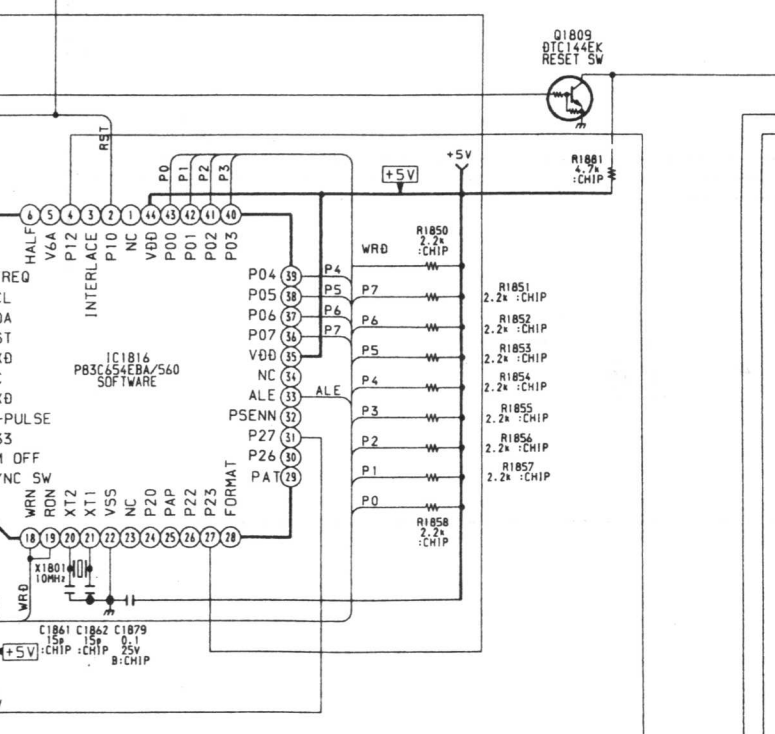
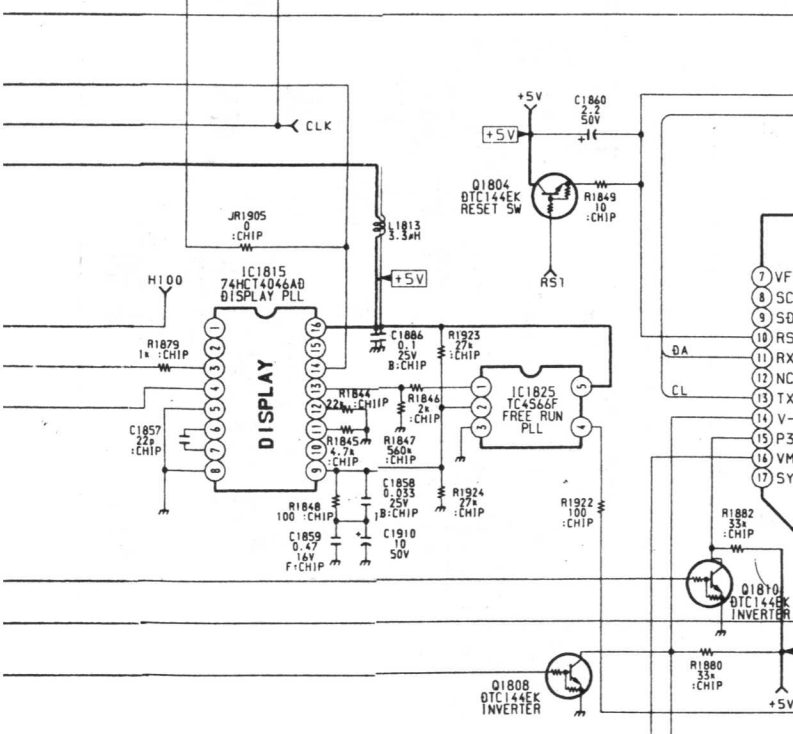
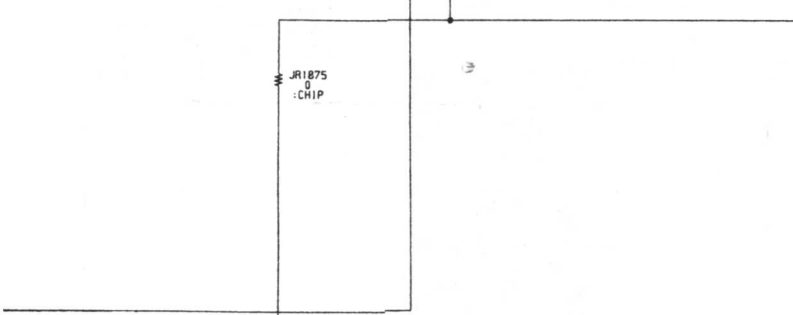
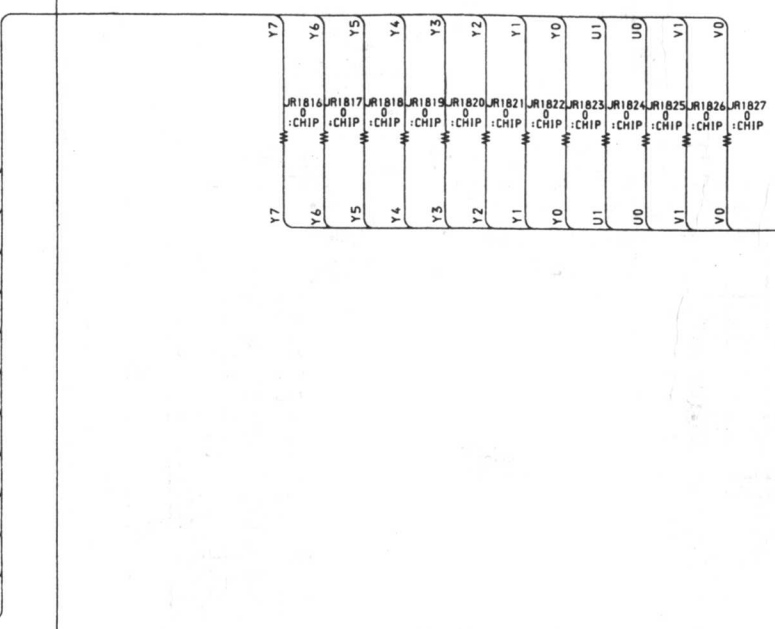
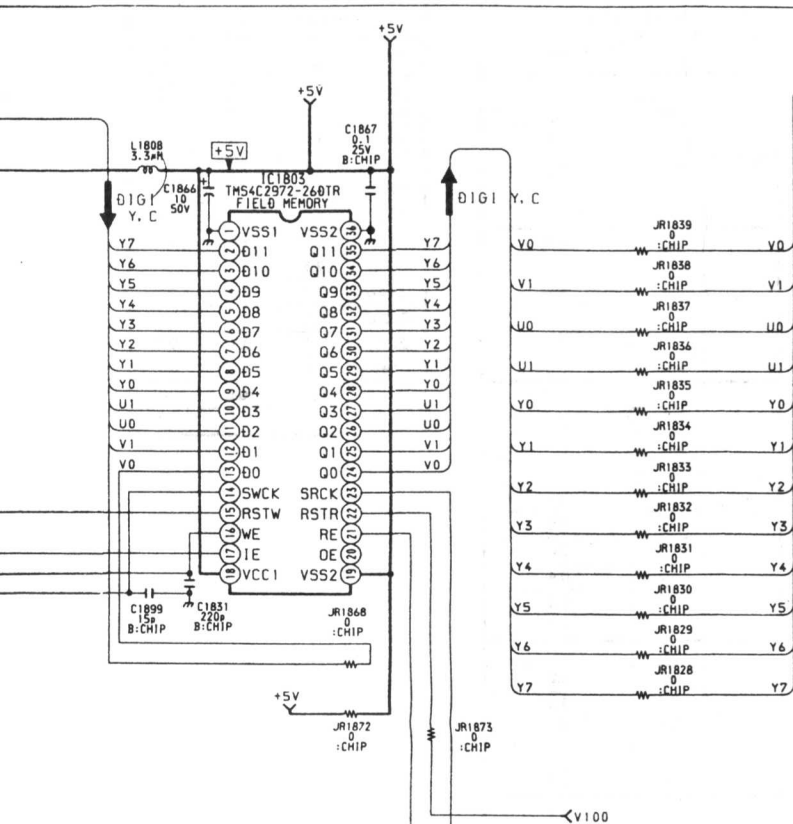
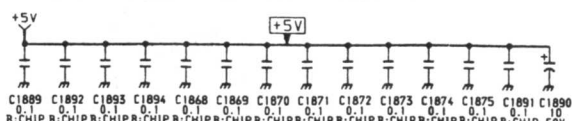
A (2/2) BOARD TRANSISTOR VOLTAGE TABLE

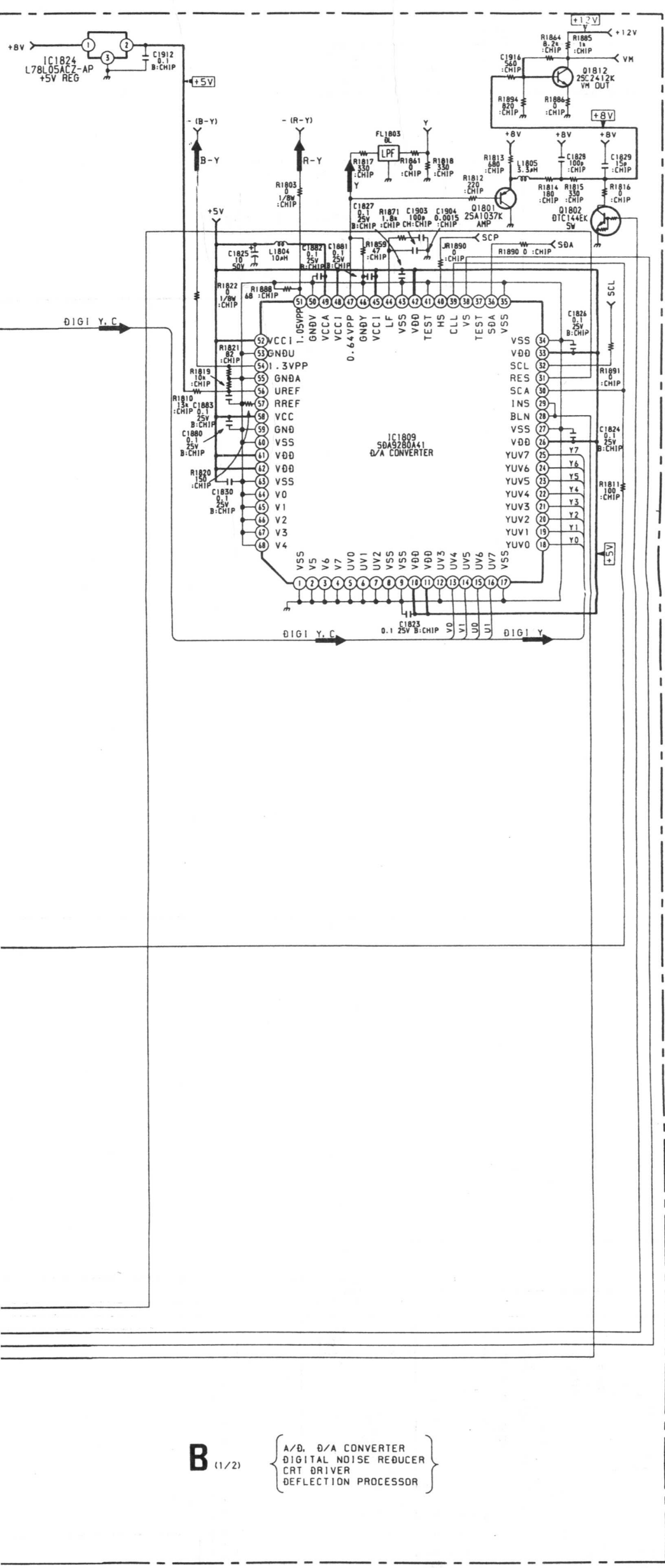
Transistor Voltage Table			
Ref No	B Base	C Collector	E Emitter
Q1001	0.1	0.7	0.1
Q1004	0.1	0.7	-
Q1101	3.3	5.0	2.6



B-#55AE4.<...>-B.-29C3







B (1/2) { A/D, D/A CONVERTER
DIGITAL NOISE REDUCER
CRT DRIVER
DEFLECTION PROCESSOR }

**B (1/2) BOARD
IC VOLTAGE TABLE**

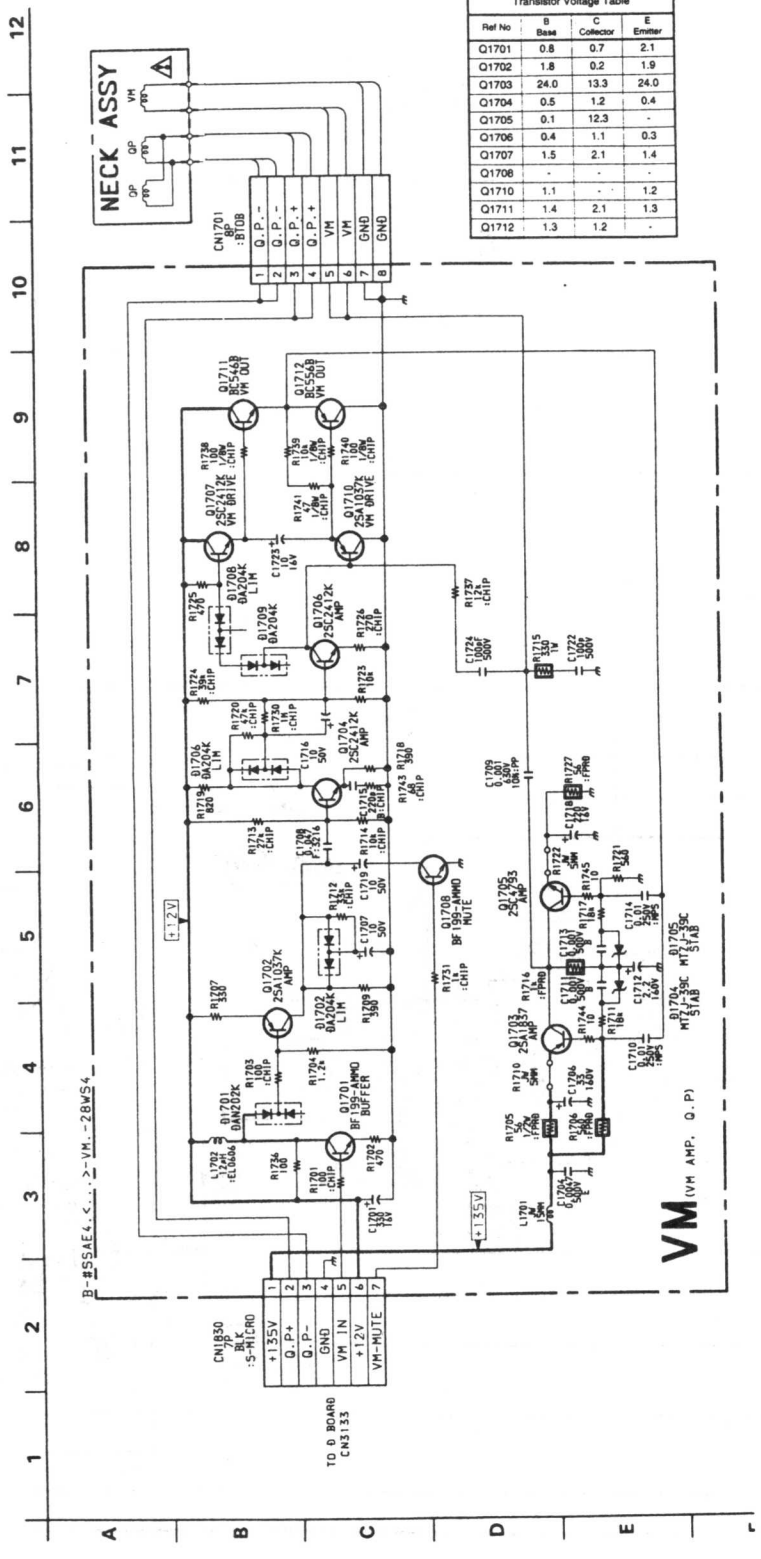
IC	Pin No	Voltage (V)
IC1812	3-4	2.4
	6-7	0.7
	9	4.6
	11-13	4.7
	14	0.3
	16	5.0
IC1813	3-4	2.4
	6-7	0.7
	9	4.6
	11-13	4.7
	14	0.3
	16	5.0
IC1815	1	5.0
	2	2.3
	3-4	2.5
	6-7	0.8
	9-11	3.0
	12	4.5
	13	3.0
	14	0.4
IC1821	2	2.5
	4-5	2.3
	12	2.0
	14	2.0
	16	8.0
IC1822	2	2.9
	4-5	2.6
	12	2.3
	14	2.1
	16	8.0

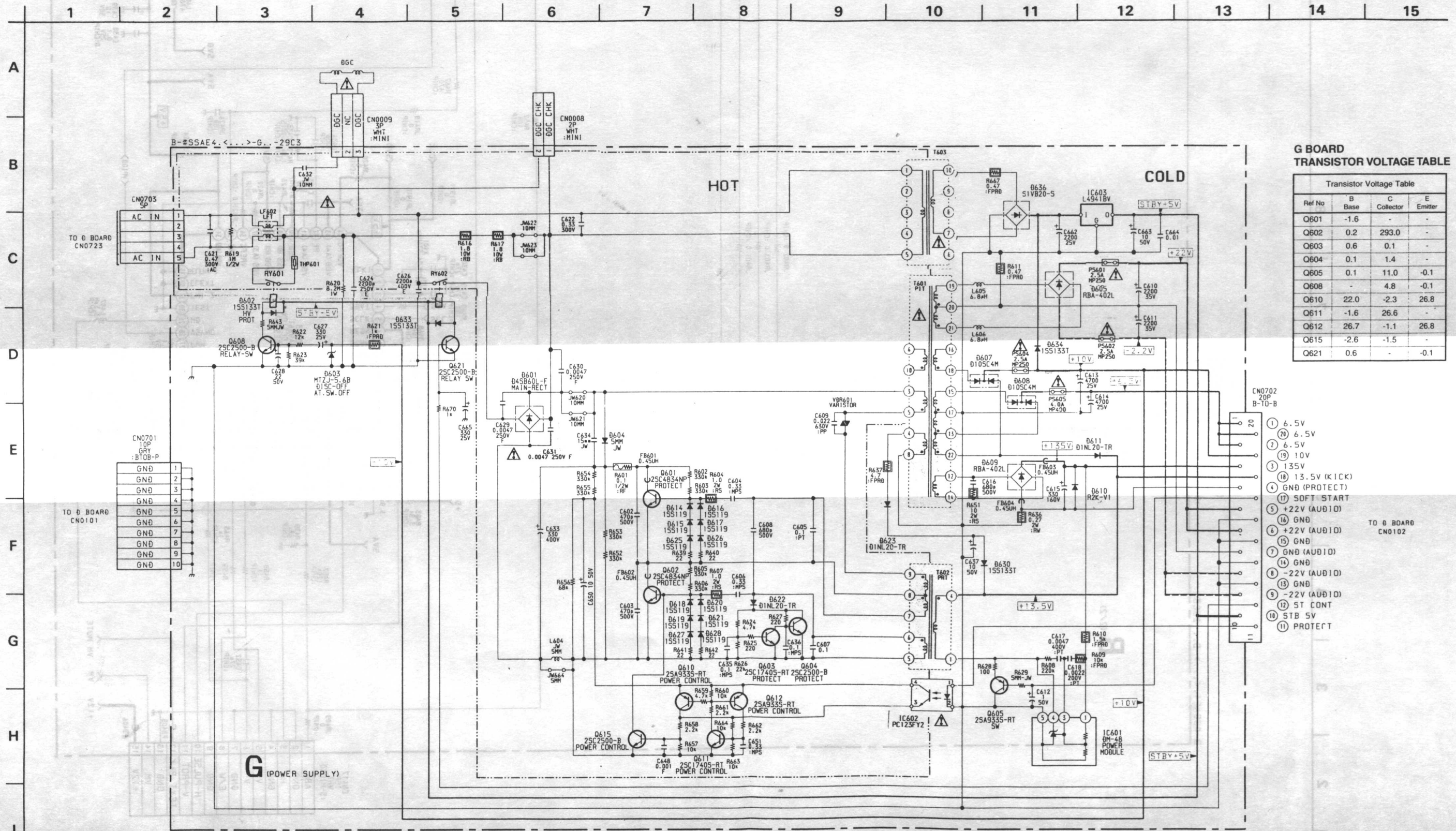
**B BOARD
TRANSISTOR VOLTAGE TABLE**

Ref No	B Base	C Collector	E Emitter
Q411	0.1	4.8	4.8
Q412	0.1	4.8	4.8
Q415	1.8	0.1	-
Q416	0.1	5.6	-
Q1801	0.1	-	0.9
Q1802	4.0	0.1	0.1
Q1804	0.3	4.8	0.1
Q1805	2.5	1.3	0.7
Q1807	2.5	1.3	0.7
Q1808	0.1	4.7	0.1
Q1809	0.1	0.1	0.1
Q1810	0.1	4.8	-
Q1812	0.5	10.5	-
Q1813	0.1	3.7	0.1

**VM BOARD
TRANSISTOR VOLTAGE TABLE**

Ref No	B Base	C Collector	E Emitter
Q1701	0.8	0.7	2.1
Q1702	1.8	0.2	1.9
Q1703	24.0	13.3	24.0
Q1704	0.5	1.2	0.4
Q1705	0.1	12.3	-
Q1706	0.4	1.1	0.3
Q1707	1.5	2.1	1.4
Q1708	-	-	-
Q1710	1.1	-	1.2
Q1711	1.4	2.1	1.3
Q1712	1.3	1.2	-





G BOARD TRANSISTOR VOLTAGE TABLE

Transistor Voltage Table				
Ref No	B Base	C Collector	E Emitter	
Q601	-1.6	-	-	
Q602	0.2	293.0	-	
Q603	0.6	0.1	-	
Q604	0.1	1.4	-	
Q605	0.1	11.0	-0.1	
Q608	-	4.8	-0.1	
Q610	22.0	-2.3	26.8	
Q611	-1.6	26.6	-	
Q612	26.7	-1.1	26.8	
Q615	-2.6	-1.5	-	
Q621	0.6	-	-0.1	

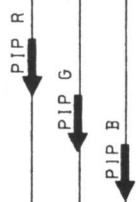
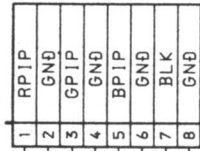
- Legend for output terminals (CN0702 B-TU-B):
- ① 6.5V
 - ② 6.5V
 - ③ 6.5V
 - ④ 10V
 - ⑤ 135V
 - ⑥ 13.5V (KICK)
 - ⑦ GND (PROTECT)
 - ⑧ SOFT START
 - ⑨ +22V (AUB10)
 - ⑩ +22V (AUB10)
 - ⑪ GND
 - ⑫ GND (AUB10)
 - ⑬ GND
 - ⑭ -22V (AUB10)
 - ⑮ GND
 - ⑯ -22V (AUB10)
 - ⑰ ST CONT
 - ⑱ STB 5V
 - ⑲ PROTECT

TO A (1/2) BOARD
CN1413

CN413
8P
YEL
:S-MICRO

B-#SSAE4.<...>-B...-29C3

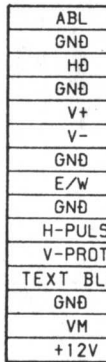
B (2/2)



JR402 0 :CHIP
JR403 0 :CHIP
JR401 0 :CHIP

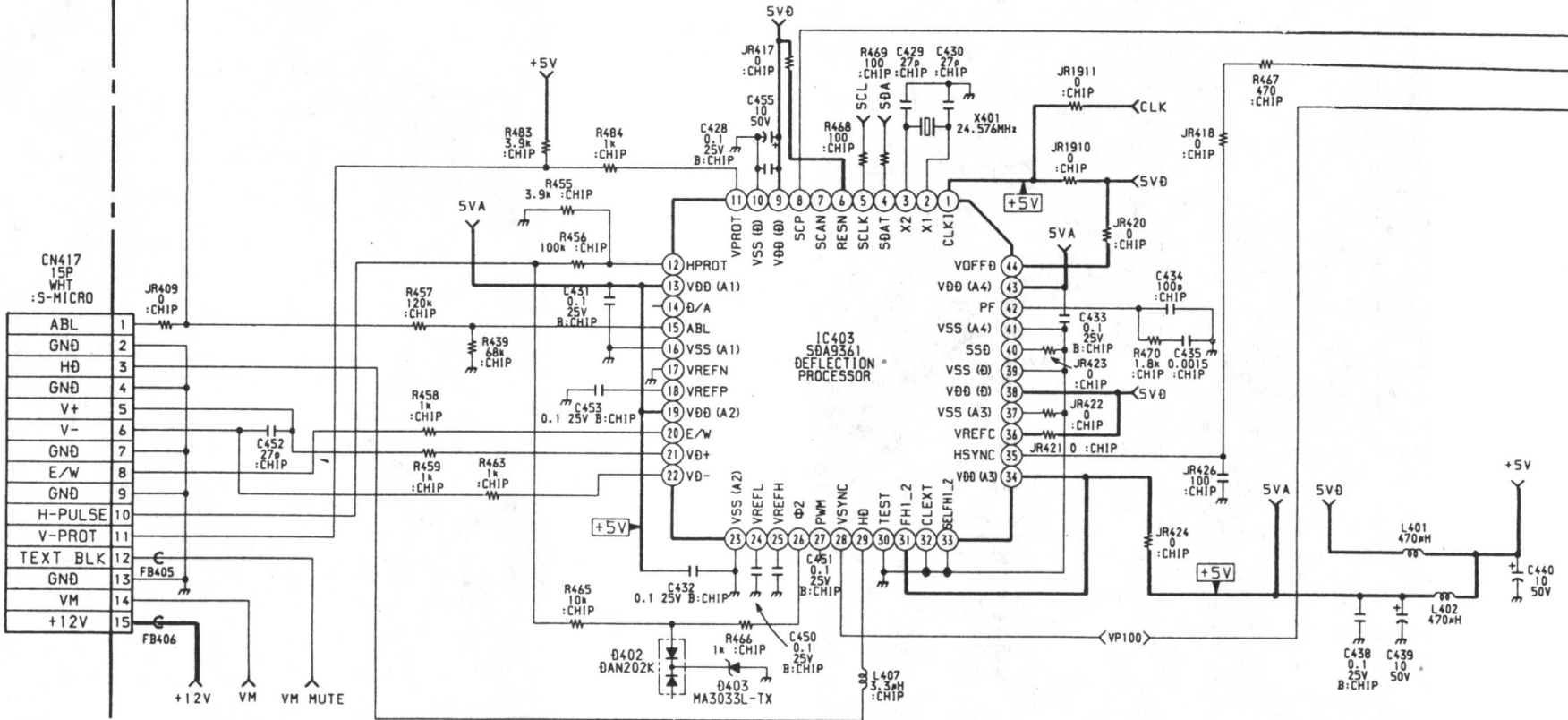
TO D BOARD
CN0743

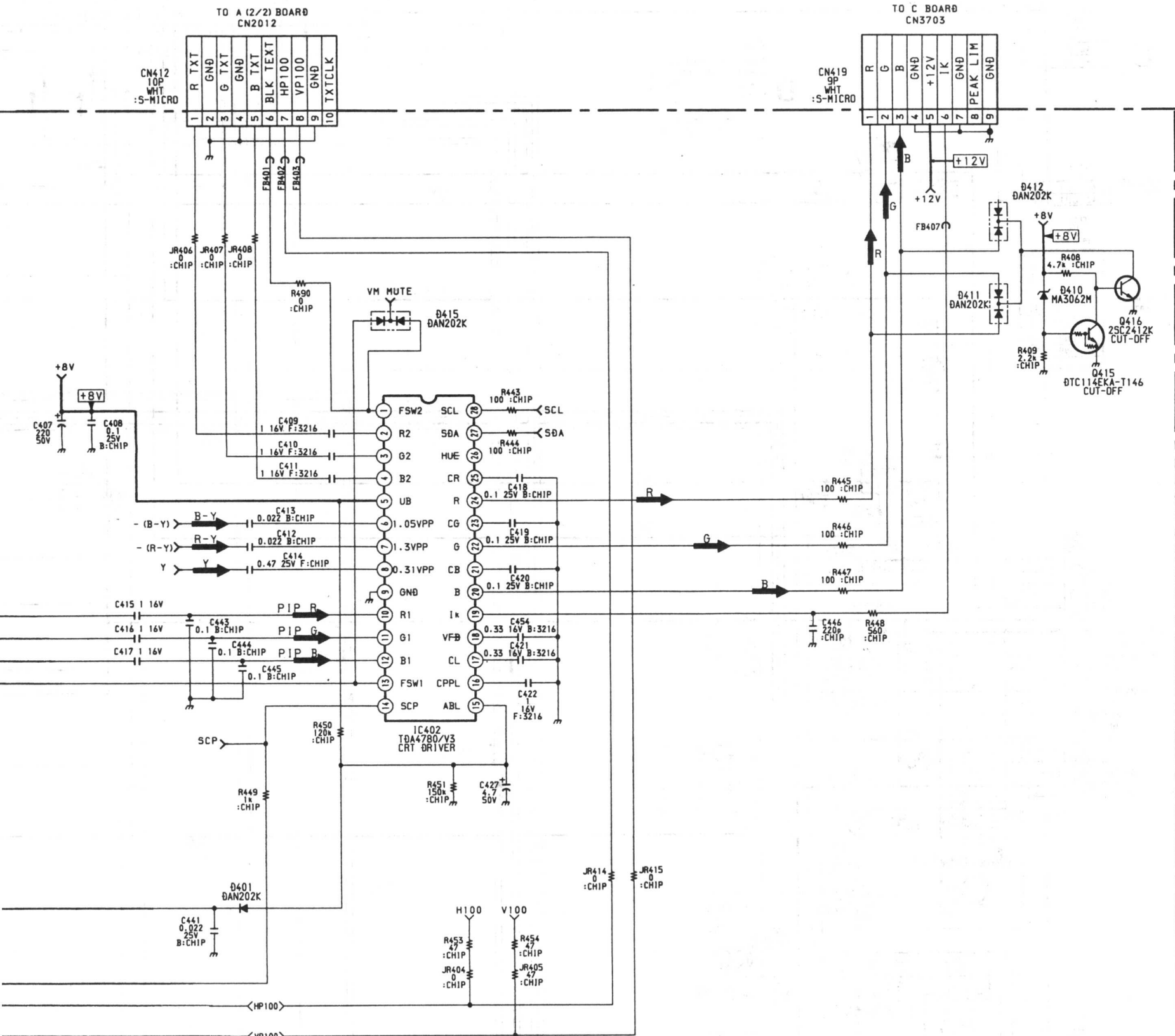
CN417
15P
WHT
:S-MICRO



+12V VM VM MUTE

IC403
SDA9361
DEFLECTION
PROCESSOR





**B (2/2) BOARD
IC VOLTAGE TABLE**

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC402	2-4	5.0
	5	7.8
	6-7	4.0
	8	3.7
	10-12	5.0
	14	0.7
	16	4.7
	17	5.1
	18	1.8
	19	7.5
	20	2.5
	21	3.3
	22	2.8
	23	3.3
	24	2.9
	25	3.3
27	4.0	
28	3.8	
IC405	5	3.2
	9	3.2
	13-14	3.2
IC406	16	4.8

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

TO A (1/2) BOARD
CN101

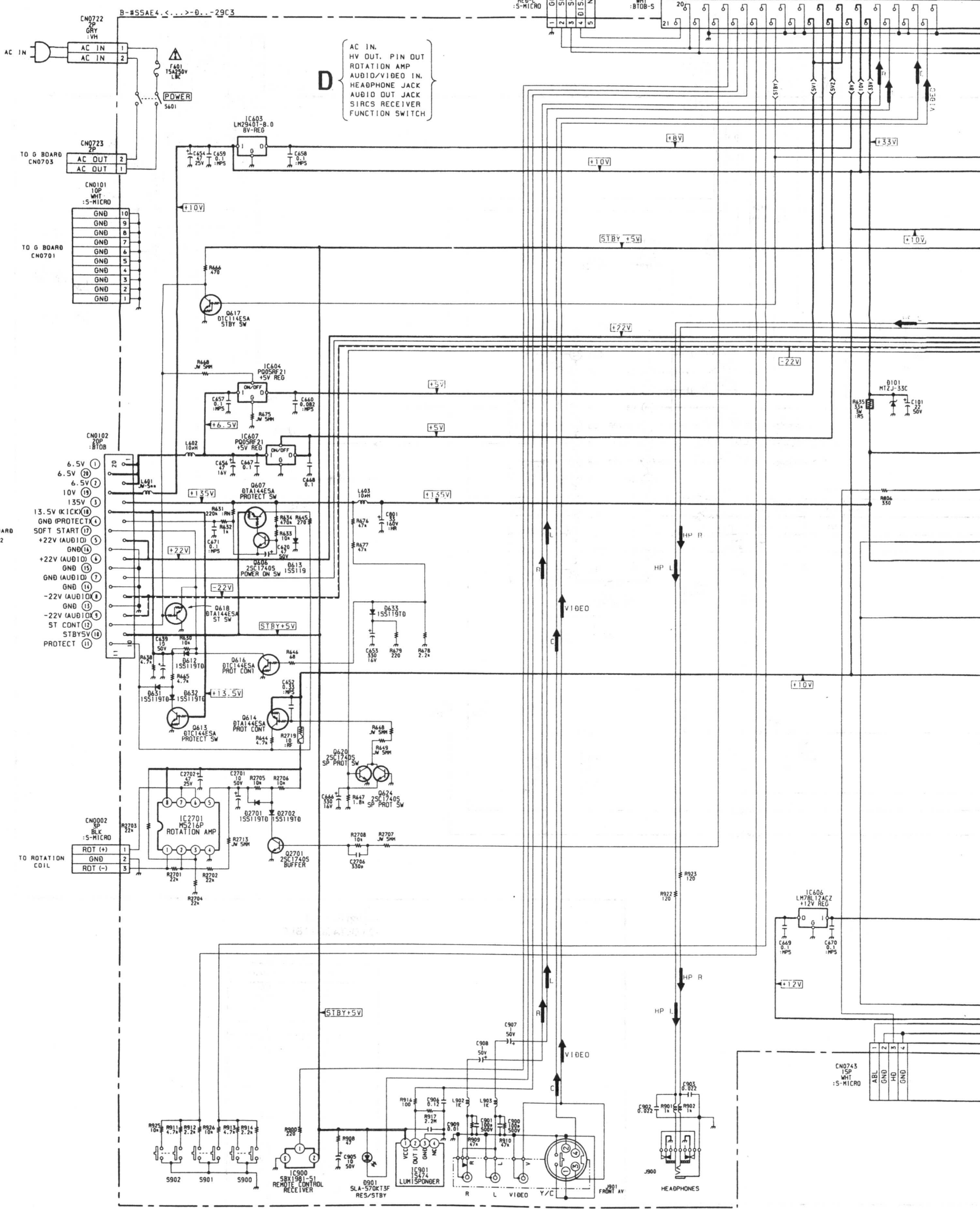
FOR SERVICE
CN0001
SP
RED-L
:S-MICRO

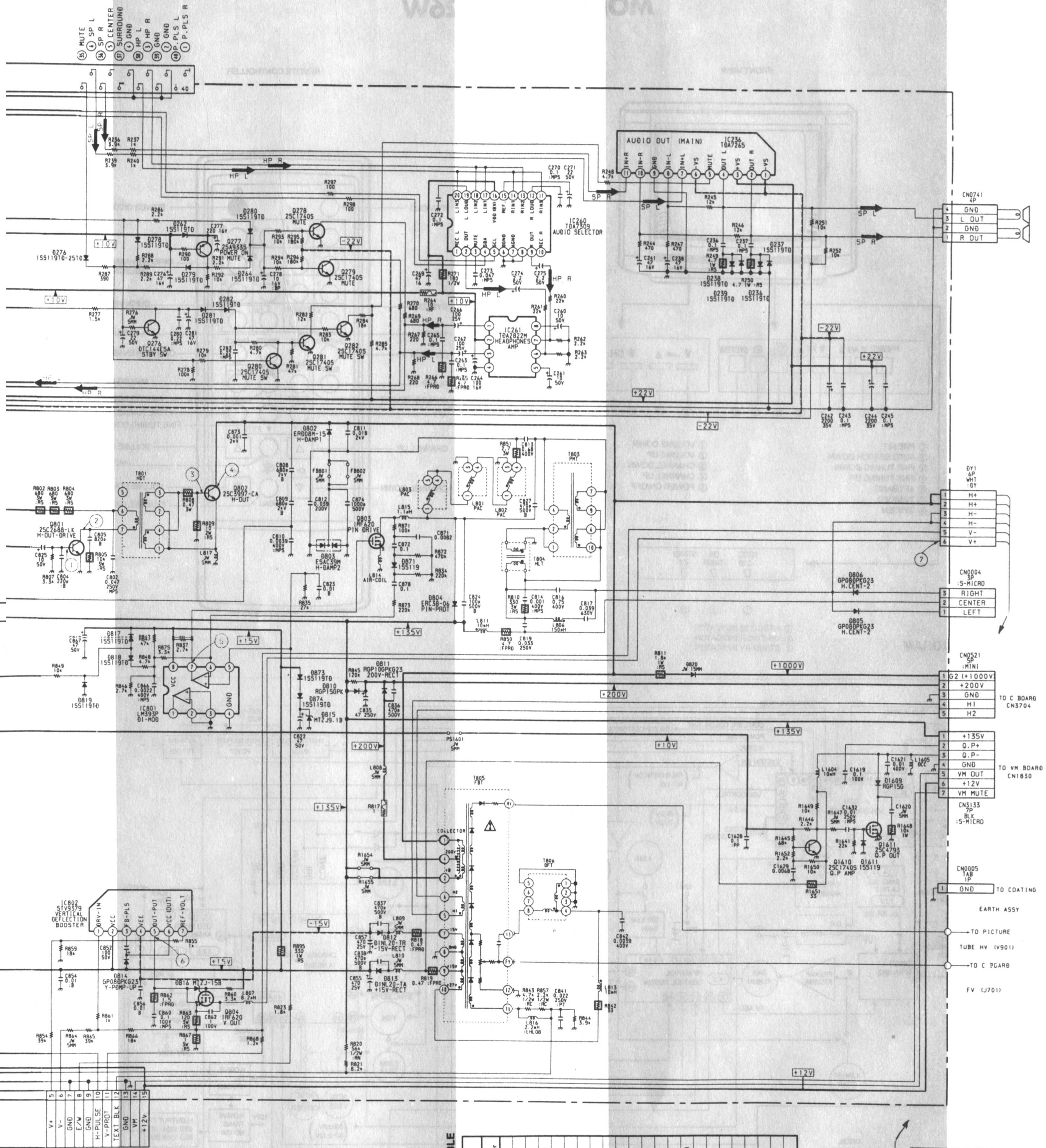
CN0745
40P
WHT
:BT0B-S

- (1) DISABLE
- (2) SCL
- (3) SDA
- (4) DISABLE
- (5) NC
- (6) GND
- (7) STIRCS
- (8) RESP LED
- (9) LUMIPDN
- (10) KEY1
- (11) KEY2
- (12) STBY
- (13) GND
- (14) GND
- (15) GND
- (16) STBY5V
- (17) 5V1
- (18) 5V2
- (19) 10V
- (20) 10V
- (21) FR R IN
- (22) FR L IN
- (23) GND
- (24) FR V IN
- (25) GND
- (26) FR V IN
- (27) GND

D

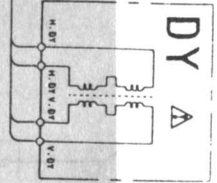
AC IN.
HV OUT. PIN OUT
ROTATION AMP
AUDIO/VIDEO IN.
HEADPHONE JACK
AUDIO OUT JACK
SIRCS RECEIVER
FUNCTION SWITCH





D BOARD TRANSISTOR VOLTAGE TABLE

Ref No	B Base	C Collector	E Emitter
Q276	0.7	4.0	-
Q277	10.0	-	9.7
Q278	-1.3	-	-
Q280	0.4	0.7	-1.3
Q281	0.7	-	-
Q282	0.7	-	-
Q801	-1.0	101.0	-
Q802	-	136.0	-
Q803	9.0	15.0	-
Q804	11.3	0.1	-1.3
Q806	0.5	4.8	0.3
Q807	4.8	1.6	4.8
Q613	13.5	-	-
Q614	10.0	9.0	10.0
Q616	0.7	-	-
Q617	0.7	3.5	-
Q618	3.5	-	-
Q624	-	10.0	-
Q2701	-	10.0	-
Q1610	-0.5	2.2	-
Q1611	0.2	43.4	-



TO B (2/2) BOARD CN417

TO C BOARD CN3704

TO VM BOARD CN1850

TO COATING

EARTH ASSY

TO PICTURE TUBE HV (V901)

TO C R GARD FV (J701)