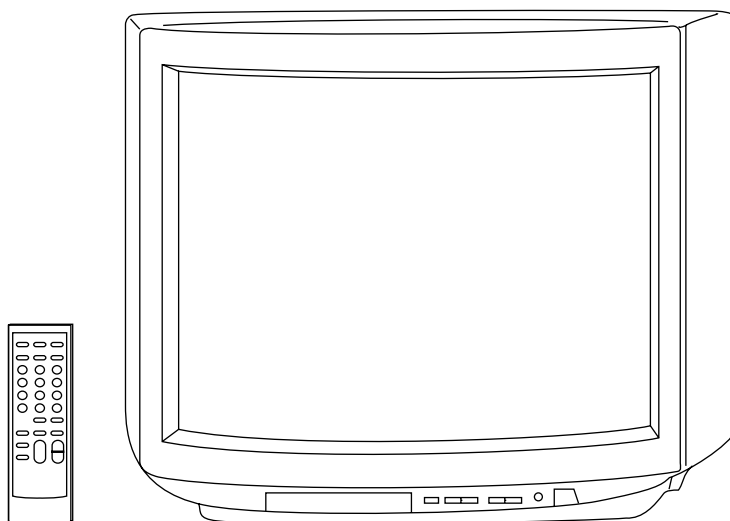


SERVICE MANUAL

BG-1L CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
KV-J25MF8J	RM-873	ME	SCC-K57P-A	KV-J29MF8J	RM-873	ME	SCC-K57N-A



TRINITRON[®] COLOR TV
SONY[®]

SPECIFICATIONS

	KV-J25MF8J	KV-J29MF8J	Note
Power requirements	110-240 V AC, 50/60 Hz		
Power consumption (W)	Indicated on the rear of the TV		
Television system	B/G, I, D/K, M		
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58		
Channel coverage			
B/G	VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41		
I	UHF: B21 to B68 / CATV: S01 to S03, S1 to S41		
D/K	VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 CATV: Z1 to Z39, S01 to S03, S1 to S41		
M	VHF: A2 to A13 / UHF: A14 to A79 / CATV: A-8 to A-2, A to W+4, W+6 to W+84		
Antenna	75-ohm external terminal		
Audio output (speaker)	6W + 6W		
Number of terminal			
Video	Input: 3 Output: 1		Phono jacks; 1 Vp-p, 75 ohms
Audio	Input: 3 Output: 1		Phono jacks; 500 mVrms
S Video	Input: 1		Y : 1 Vp-p, 75 ohms, unbalanced, sync negative C : 0.286 Vp-p, 75 ohms
Headphone	Output: 1		Minijack
Picture tube	Super Trinitron (25 in.)	Super Trinitron Plus (29 in.)	
Tube size (cm)	64	72	Measured diagonally
Screen size (cm)	60	68	Measured diagonally
Dimension (w/h/d, mm)	712 × 521 × 520	780 × 577 × 542	
Mass (kg)	33	43	
Accessory (optional)	TV stand (SU-25H)	TV stand (SU-29H)	

Design and specifications are subject to change without notice.

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.

SAFETY-RELATED COMPONENT WARNING!!

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

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SECTION 1 GENERAL

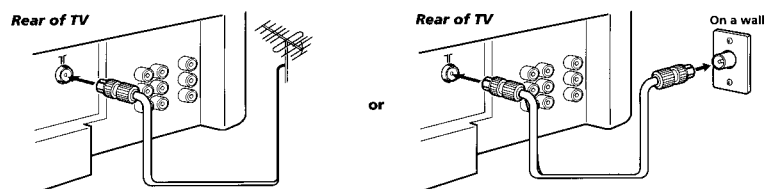
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Getting Started

Connections

Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

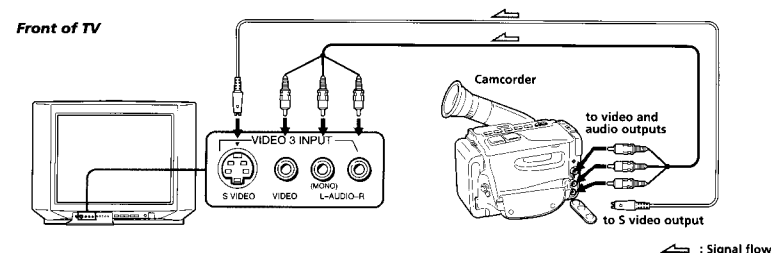
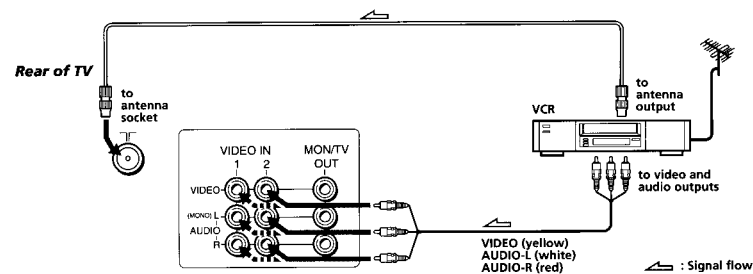
Attach an optional IEC antenna connector to the 75-ohm coaxial cable. Plug the connector into the Γ (antenna) socket at the rear of the TV.



Connecting optional equipment

You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, video game, or stereo system.

Connecting video equipment using video input jacks



When connecting a monaural VCR

Connect the yellow plug to VIDEO and the black plug to AUDIO-L (MONO).

When connecting a VCR to the Γ (antenna) terminal

Preset the signal output from the VCR to the program position 0.

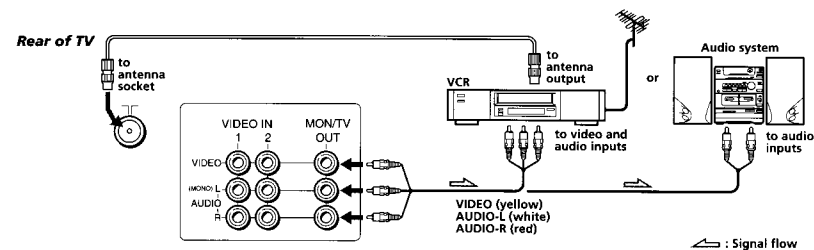
If both S Video and video signals are input simultaneously

The S Video input signal is selected. To view a video input signal, disconnect the S Video connection.

Note on the video input

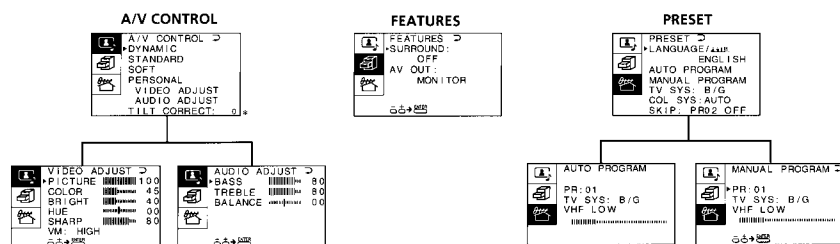
When no signal is input, the screen becomes blue.

Connecting audio/video equipment using MON/TV OUT jacks



Introducing the menus

You can preset TV channels, adjust the picture and sound qualities, and select some settings using the on-screen menus. You can use the buttons on both the remote commander and the TV to operate the menus.



(•KV-J29MF8J only)

Getting back to the previous menu (except for AUTO PROGRAM)

Press + or - to move the cursor (▶) to the first line (◀) of each menu, and press ENTER.

Cancelling the menu screen

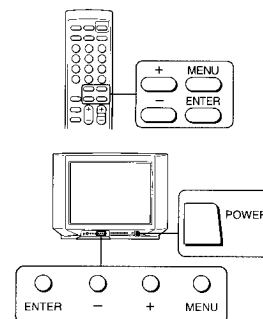
Press MENU.

Notes (except for AUTO PROGRAM)

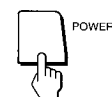
- When a menu is selected after pressing ENTER, the color of both the menu and the menu symbol change and the cursor (▶) appears beside the first item of the menu.
- When an item on the menu is selected after pressing ENTER, the color of the item changes.
- You can refer to the guide (▶) at the bottom of the menus (except for the A/V CONTROL and PRESET menus) for the basic operations of the menu.
- If more than approximately 60 seconds elapse after you press a button, the menu screen disappears automatically.

Changing the menu language

If you prefer Arabic to English, you can change the menu language. You can use buttons on the remote commander or the TV.



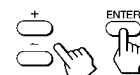
1 Press POWER to turn on the TV.



2 Press MENU.

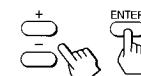


3 Press + or - to move the cursor (▶) to the PRESET menu (▶), and press ENTER.



4 Make sure the cursor (▶) appears beside LANGUAGE/ اللغة, and press ENTER.

5 Press + or - to select عربي, and press ENTER.



All of the menus change to Arabic.

6 Press MENU to return to the normal screen.

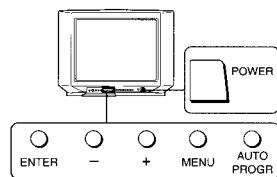


Presetting channels

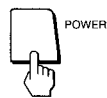
You can preset TV channels easily by storing all the receivable channels automatically. You can also preset channels manually or disable program positions (see page 11).

Presetting channels automatically

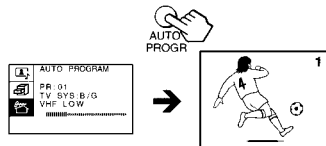
You can preset up to 100 TV channels in numerical sequence from the program position 1. You can preset channels automatically using the button on the TV or the menu.



1 Press POWER to turn on the TV.



2 Press AUTO PROGR.



The TV starts scanning and presetting channels automatically. When all of the receivable channels are stored, the first preset TV program appears on the screen.

To preset channels automatically using the menu

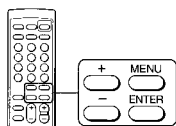
1 Press MENU.

2 Press + or - to move the cursor (►) to the PRESET menu (PRE), and press ENTER.

3 Press + or - to move the cursor (►) to AUTO PROGRAM, and press ENTER.

Presetting channels manually

To change the program position for a channel or to receive a channel with a weak signal which you cannot receive by automatic presetting, preset the channel manually.



1 Press MENU.

2 Press + or - to move the cursor (►) to the PRESET menu (PRE), and press ENTER.



3 Select your local TV system.

- (1) Press + or - to move the cursor (►) to TV SYS, and press ENTER.
- (2) Press + or - until your local TV system appears on the menu, and press ENTER.

4 Press + or - to move the cursor (►) to MANUAL PROGRAM, and press ENTER.



5 Select the program position to which you want to preset a channel.

- (1) Make sure the cursor (►) appears beside PR, and press ENTER.
- (2) Press + or - until the program position you want appears on the menu, and press ENTER.

6 Select the desired channel.

- (1) Press + or - to move the cursor (►) to VHF LOW, and press ENTER.
- (2) Press + or - until the desired channel picture appears on the TV screen, and press ENTER.

7 Press MENU to return to the normal screen.

If the TV system is not properly selected

The picture color may be poor and/or the sound may be noisy. In this case, select the appropriate TV system.

- 1 Press PROGR +/- or the number buttons to select the program position.
- 2 Display the PRESET menu.
- 3 Press + or - to move the cursor (►) to TV SYS, and press ENTER.
- 4 Press + or - until the appropriate TV system appears, and press ENTER.

Notes

- The TV system setting is memorized for each program position.
- If you do not know your local TV system, consult your nearest Sony dealer or authorized service center.

Disabling program positions

By disabling unused or unwanted program positions, you can skip those positions when you press PROGR +/-.

1 Press MENU.

2 Press + or - to move the cursor (►) to the PRESET menu (PRE), and press ENTER.

3 Press + or - to move the cursor (►) to SKIP, and press ENTER.

4 Press + or - until the unused or unwanted program position appears on the menu, and press ENTER.

5 Press + or - to select ON, and press ENTER.

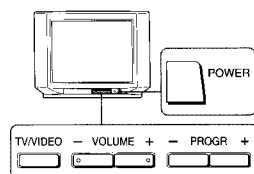
6 To disable other program positions, repeat steps 4 and 5.

7 Press MENU to return to the normal screen.

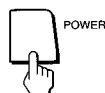
To cancel the skip setting

- 1 Display the PRESET menu.
- 2 Press + or - to move the cursor (►) to SKIP, and press ENTER.
- 3 Press + or - until the program position you want to cancel the skip setting appears, and press ENTER.
- 4 Press + or - to select OFF, and press ENTER.

Watching the TV



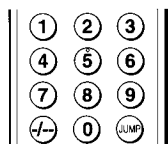
- 1 Press **POWER** to turn on the TV.



When the TV is turned on in the standby mode after pressing **POWER** on the TV, press **POWER** on the remote commander.

- 2 Select the **TV program you want to watch.**

To select a program position directly
Press the number button.

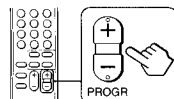


To select a two-digit program position, press “+.” before the number buttons.
For example: to select program position 25, press “+.” then “2” and “5.”

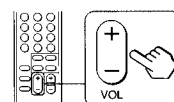


To scan through program positions

Press **PROGR +/-** on the remote commander or the TV until the program position you want appears.



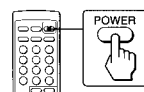
- 3 Press **VOL +/-** on the remote commander or **VOLUME +/-** on the TV to adjust the volume.



Turning off the TV

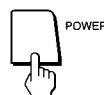
To turn off the TV temporarily

Press **POWER** on the remote commander. The standby indicator lights up.



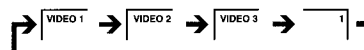
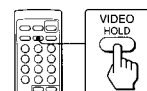
To turn off the TV completely

Press **POWER** on the TV.



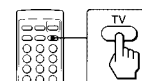
Watching the video input

Press **VIDEO/HOLD** on the remote commander or **TV/VIDEO** on the TV.



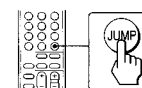
To watch TV

Press **TV** on the remote commander or **TV/VIDEO** on the TV.



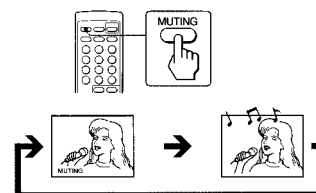
Switching back quickly to the previous channel

Press **JUMP**.



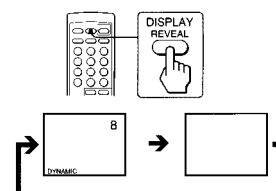
Muting the sound

Press **MUTING**.



Displaying the on-screen information

Press **DISPLAY/REVEAL**.



Note

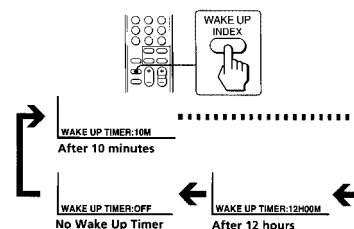
- The on-screen display shows the program position or the video mode and the picture and sound information. The on-screen display for the picture and sound information disappear after being displayed for approximately three seconds.

Setting the Wake Up Timer

You can set the TV to turn on automatically after the period of time you want.

- 1 Press **WAKE UP/INDEX** repeatedly to set the timer.

The on-screen display appears.



- 2 If you want a particular TV program or video mode to be displayed using the Wake Up Timer, select the TV program or video mode.

- 3 Press **POWER** on the remote commander or set the Sleep Timer to turn off the TV in the standby mode.

The **WAKE UP** indicator lights up in amber color.

To cancel the Wake Up Timer, press **WAKE UP/INDEX** repeatedly until “WAKE UP TIMER: OFF” appears, or turn off the main power of the TV.

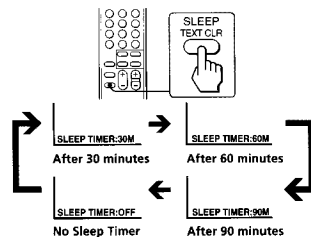
Notes

- The Wake Up Timer starts immediately after the on-screen display disappears.
- The last TV program position or video mode just before the TV turns into the standby mode will appear when the TV is turned on using the Wake Up Timer.
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up Timer, the TV automatically turns into the standby mode. If you want to continue watching the TV, press any button or control on the TV or remote commander.

Setting the Sleep Timer

You can set the TV to turn off automatically after the period of time you want.

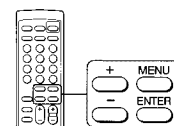
Press SLEEP.



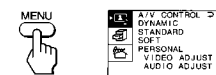
To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP TIMER: OFF" appears, or turn the TV off.

Adjusting the picture and sound

Selecting the picture and sound modes

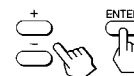


1 Press MENU.



2 Make sure the cursor (▸) appears in the A/V CONTROL menu (A), and press ENTER.

3 Press + or - to move the cursor (▸) to DYNAMIC, STANDARD, SOFT, or PERSONAL, and press ENTER.



Select	To
DYNAMIC	Receive high contrast picture with powerful sound.
STANDARD	Receive normal contrast picture with medium listening sound.
SOFT	Receive mild picture with soft sound.
PERSONAL	Receive the last picture and sound settings that are adjusted using VIDEO ADJUST and AUDIO ADJUST.

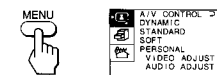
4 Press MENU to return to the normal screen.



Adjusting the picture settings (VIDEO ADJUST)

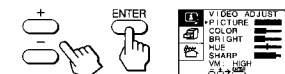
You can adjust the picture settings to suit your taste with the VIDEO ADJUST option. The adjusted settings are stored in the PERSONAL option.

1 Press MENU.



2 Make sure the cursor (▸) appears in the A/V CONTROL menu (A), and press ENTER.

3 Press + or - to move the cursor (▸) to VIDEO ADJUST, and press ENTER.



4 Press + or - to move the cursor (▸) to the item you want to adjust, and press ENTER.

5 Press + or - to adjust the selected item, and press ENTER.

For details on each item, see "Description of adjustable items" below.

6 To adjust other items, repeat steps 4 and 5.

7 Press MENU to return to the normal screen.

Description of adjustable items

Item	Press -	Press +
PICTURE	Decrease picture contrast.	Increase picture contrast.
COLOR	Decrease color intensity.	Increase color intensity.
BRIGHT	Darken the picture.	Brighten the picture.
HUE	Make picture tones become reddish.	Make picture tones become greenish.
SHARP	Soften the picture.	Sharpen the picture.
VM	Decrease emphasis on picture edges.	Increase emphasis on picture edges.

Note

- You can adjust HUE for the NTSC color system only.

If the picture is slightly snowy

You may try to improve the picture by changing the VM setting as described below:

- 1 Display the VIDEO ADJUST menu.
- 2 Press + or – to move the cursor (▶) to VM, and press ENTER.
- 3 Press + or – to select LOW, and press ENTER.

If the picture color is abnormal when receiving programs through the ㄗ (antenna) terminal

Change the color system or the TV system from the PRESET menu as described below until the color becomes normal.

- 1 Display the PRESET menu.
- 2 Press + or – to move the cursor (▶) to COL SYS or TV SYS, and press ENTER.
- 3 Press + or – to change the color system or the TV system until the color becomes normal, and press ENTER.

Note

- Normally set the color system (COL SYS) to AUTO.

Adjusting the sound settings (AUDIO ADJUST)

You can adjust the sound settings to suit your taste with the AUDIO ADJUST option. The adjusted settings are stored in the PERSONAL option.

1 Press MENU.



2 Make sure the cursor (▶) appears in the A/V CONTROL menu (⏏), and press ENTER.

3 Press + or – to move the cursor (▶) to AUDIO ADJUST, and press ENTER.



4 Press + or – to move the cursor (▶) to the item you want to adjust, and press ENTER.

5 Press + or – to adjust the selected item, and press ENTER.

For details on each item, see “Description of adjustable items” below.

6 To adjust other items, repeat steps 4 and 5.

7 Press MENU to return to the normal screen.

Description of adjustable items

Item	Press –	Press +
BASS	Decrease the bass sound.	Increase the bass sound.
TREBLE	Decrease the treble sound.	Increase the treble sound.
BALANCE	Increase the left speaker's volume	Increase the right speaker's volume.

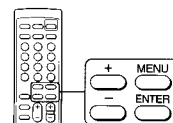
If the sound is distorted or noisy when receiving programs through the ㄗ (antenna) terminal

Change the TV system from the PRESET menu as described below until the sound becomes normal.

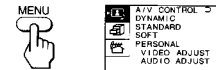
- 1 Display the PRESET menu.
- 2 Press + or – to move the cursor (▶) to TV SYS, and press ENTER.
- 3 Press + or – to change the TV system until the sound becomes normal, and press ENTER.

Listening to the surround sound (SURROUND)

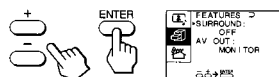
The SURROUND feature enables you to enjoy a surround sound effect that is like being in a large hall or live concert when receiving stereo signals.



1 Press MENU.

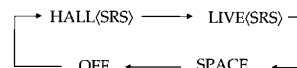


2 Press + or – to move the cursor (▶) to the FEATURES menu (⏏), and press ENTER.



3 Make sure the cursor (▶) appears beside SURROUND, and press ENTER.

4 Press + or – to select HALL(SRS), LIVE(SRS), or SPACE, and press ENTER.



For details on each item, see “Description of adjustable items” below.

5 Press MENU to return to the normal screen.

Description of adjustable items

Select	To
HALL(SRS)	Listen to a sound that spreads out over a large area.
LIVE(SRS)	Listen to the sound that gives the feeling of being at a live concert.
SPACE	Listen to a monaural sound that gives a stereo-like effect.
OFF	Turn off the surround sound.

Note

- The (SRS) (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. The word “SRS” and the SRS symbol (SRS) are registered trademarks of SRS Labs, Inc.

Customizing the TV

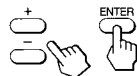
Using the AV OUT (advanced rec-out) terminal

You can select the output signal from the MON/TV OUT jacks at the rear of the TV.

1 Press MENU.



2 Press + or - to move the cursor (►) to the FEATURES menu (F), and press ENTER.



3 Press + or - to move the cursor (►) to AV OUT, and press ENTER.

4 Press + or - to select the output signal, and press ENTER.

Select	To
TV	Output the signal of the TV broadcast.
MONITOR	Output the signal of the picture you are watching as a main picture.

Note

- Do not change the channel while recording with a VCR through the MON/TV OUT jacks. If you change the channel, it also changes the channel you are recording.

Adjusting the picture tilt

■ KV-J29MF8J only

You can adjust the picture tilt if it is not aligned to the TV screen. This may happen due to the direction of the earth's magnetic fields in relation to the TV position.

1 Press MENU.



2 Make sure the cursor (►) appears in the A/V CONTROL menu (A/V), and press ENTER.

3 Press + or - to move the cursor (►) to TILT CORRECT, and press ENTER.

4 Press + or - to select the most suitable value to adjust the picture tilt, and press ENTER.

TILT CORRECT:

-5 ← -4 ← -3 ← -2 ← -1 ← 0 → +1 → +2 → +3 → +4 → +5
Press - Press +

Additional Information

Troubleshooting

If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.

If the problem persists after trying the methods below, contact your nearest Sony dealer or authorized service center.

Snowy picture Noisy sound



- Check the antenna.
- Check the antenna connection on the TV and on the wall.
- Check the TV system (TV SYS) setting.

Dotted lines or stripes



- This may be caused by local interference (e.g. cars, neon signs, hair dryers, etc.). Adjust the antenna for minimum interference.

Double images or "ghosts"



- This may be caused by reflections from nearby mountains or buildings. A highly directional antenna may improve the picture.

Good picture Noisy sound



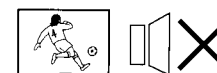
- Check the TV system (TV SYS) setting.

No picture No sound



- Press POWER.
- Press POWER to turn off the TV for about five seconds and then turn it on again.
- Check the power cord connection.
- Check the antenna connection.
- Check the VCR connections.

Good picture No sound



- Press VOL +.
- Press MUTING.

No color



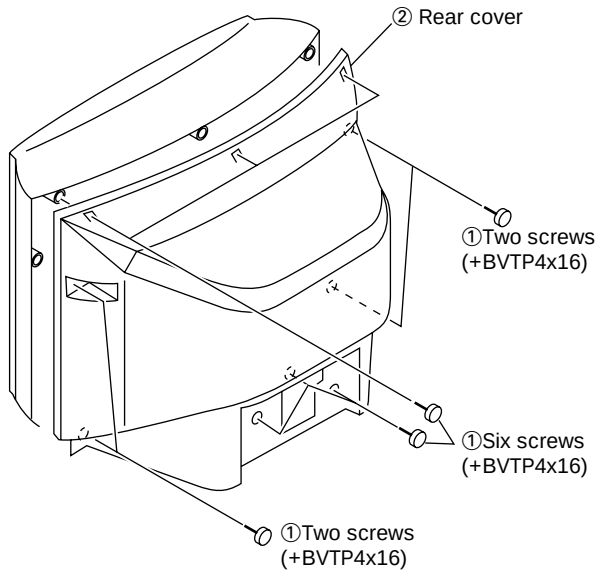
- Adjust the COLOR level in the VIDEO ADJUST menu of the PERSONAL option.
- Check the color system (COL SYS) setting.

TV cabinet creaks

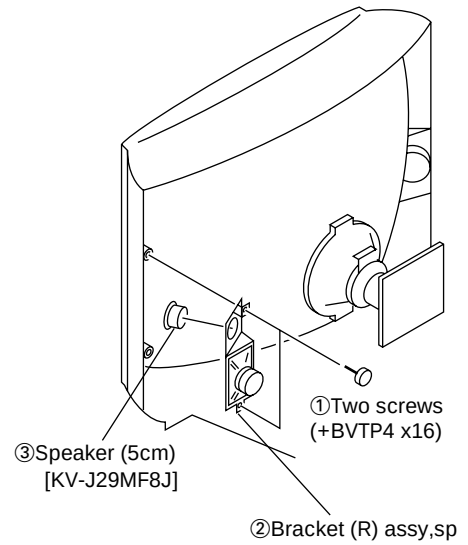
- Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

SECTION 2 DISASSEMBLY

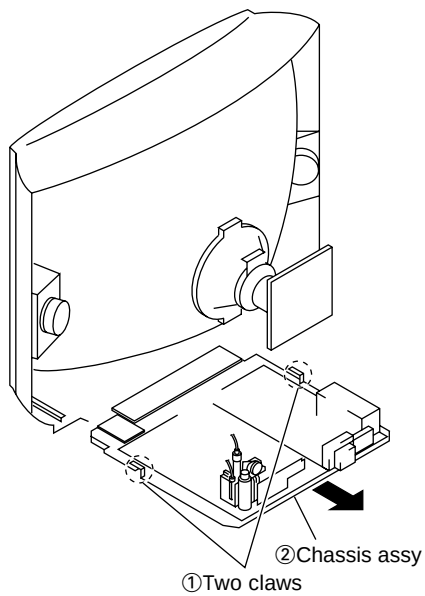
2-1. REAR COVER REMOVAL



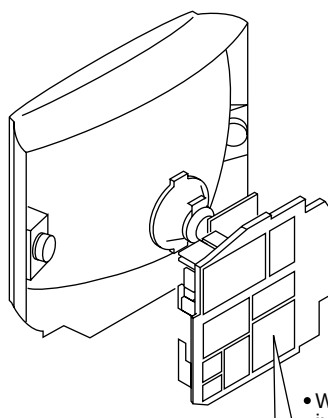
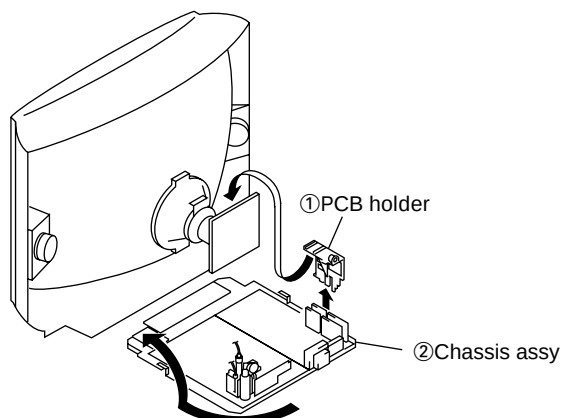
2-2. SPEAKER REMOVAL



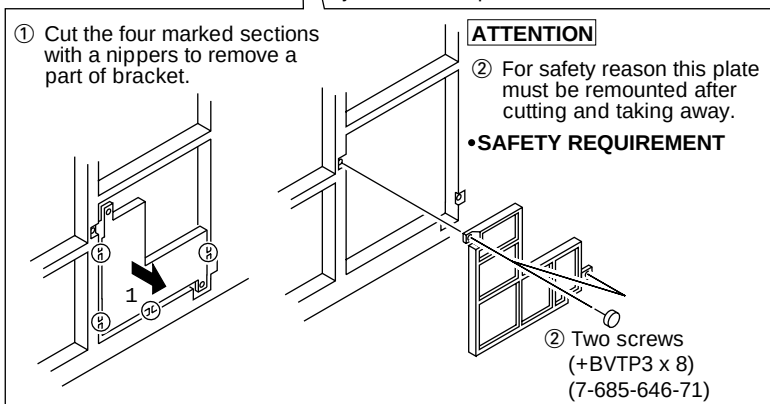
2-3. CHASSIS ASSY REMOVAL



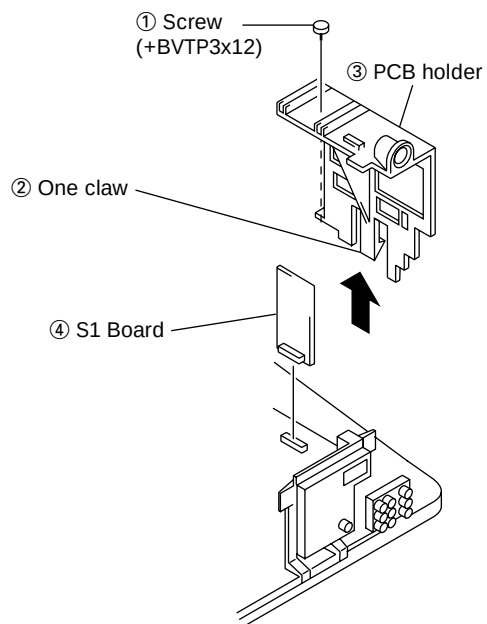
2-4. SERVICE POSITION



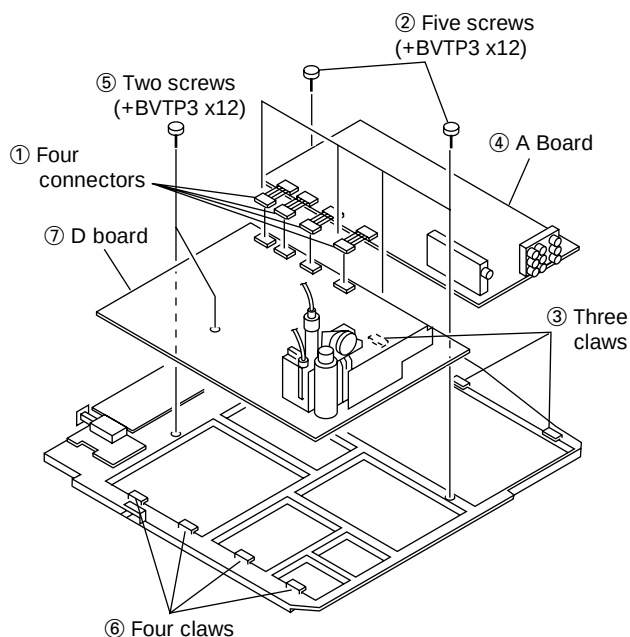
• When measuring the power supply voltage, just remove a part of bracket shown below.



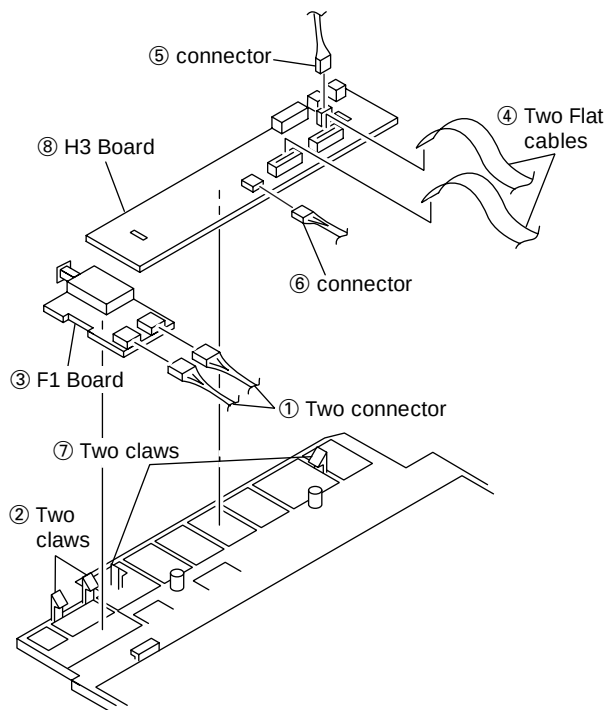
2-5. S1 BOARD REMOVAL



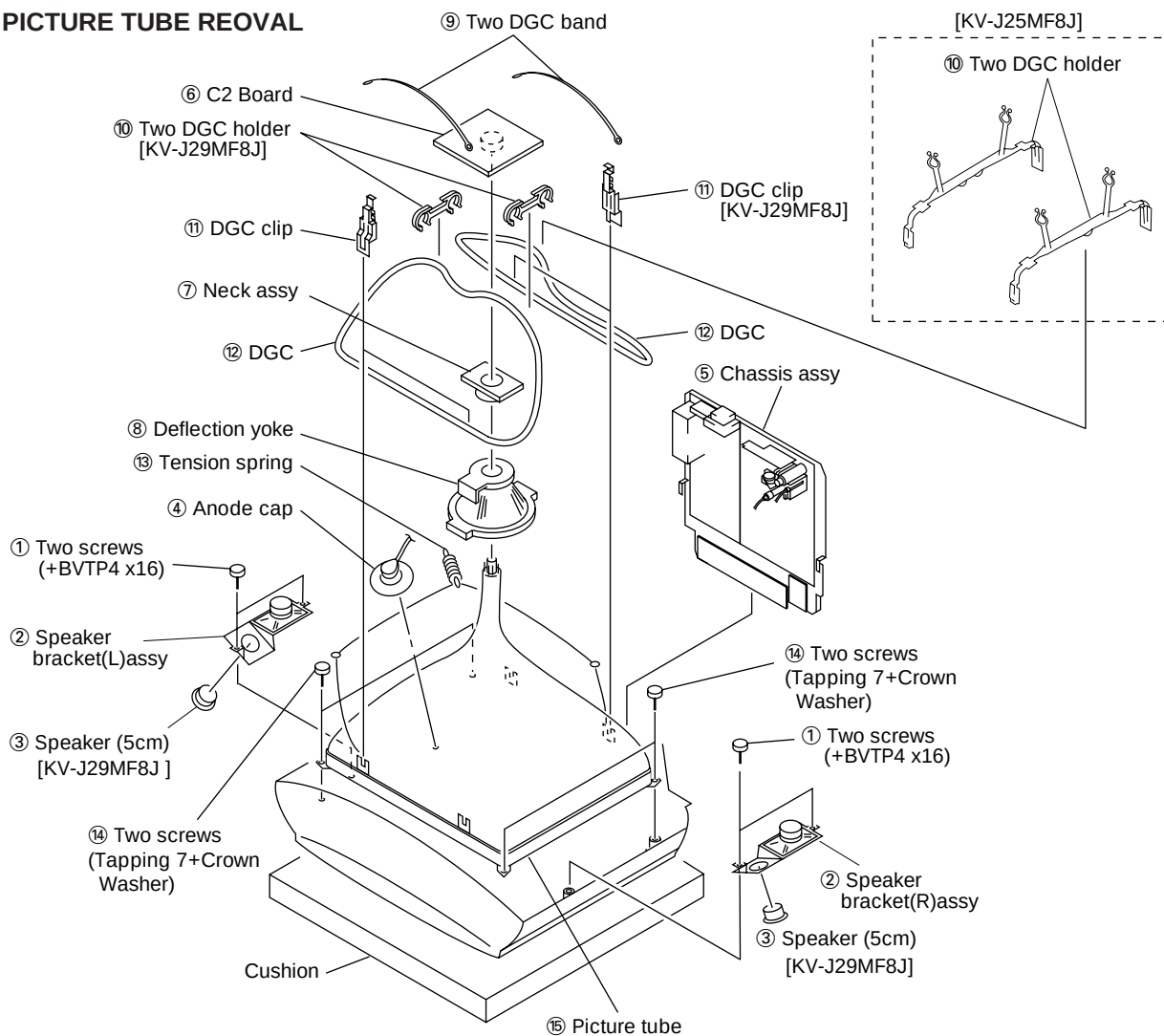
2-6. A AND D BOARDS REMOVAL



2-7. F1 AND H3 BOARDS REMOVAL



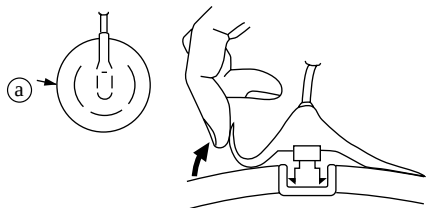
2-8. PICTURE TUBE REOVAL



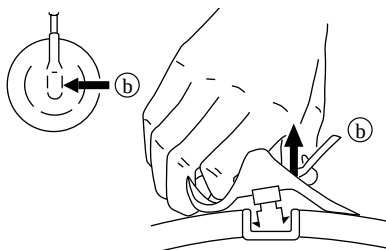
• REMOVAL OF ANODE-CAP

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

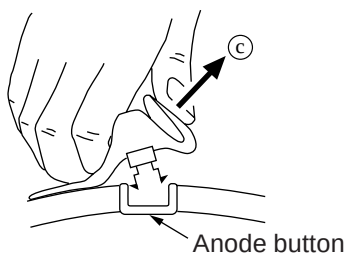
• REMOVING PROCEDURES



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



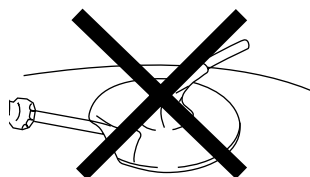
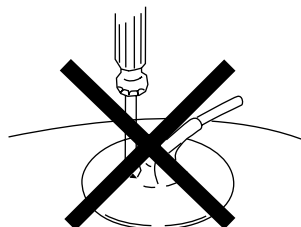
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②b.



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

• HOW TO HANDLE AN ANODE-CAP

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



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

PICTURE control RESET
BRIGHTNESS control CENTER

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.

Contrast
 Brightness

}

normal
2. Position neck ass'y as shown in Fig3-2.
3. Set the pattern generator raster signal to a red raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.
(See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that the entire screen is red. (See Figure 3-1.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
(See Figure 3-4.)

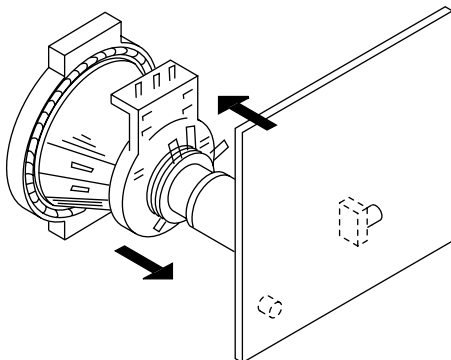


Fig. 3-1

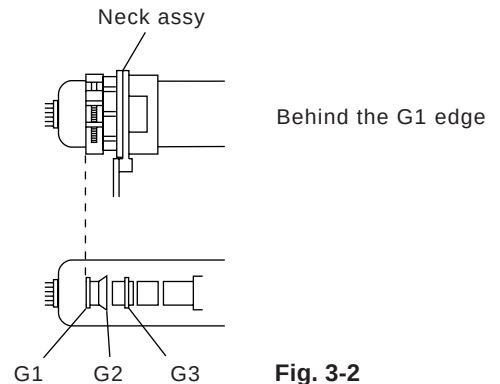


Fig. 3-2

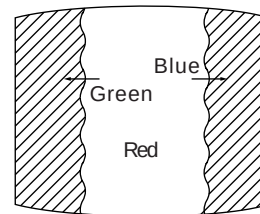


Fig. 3-3

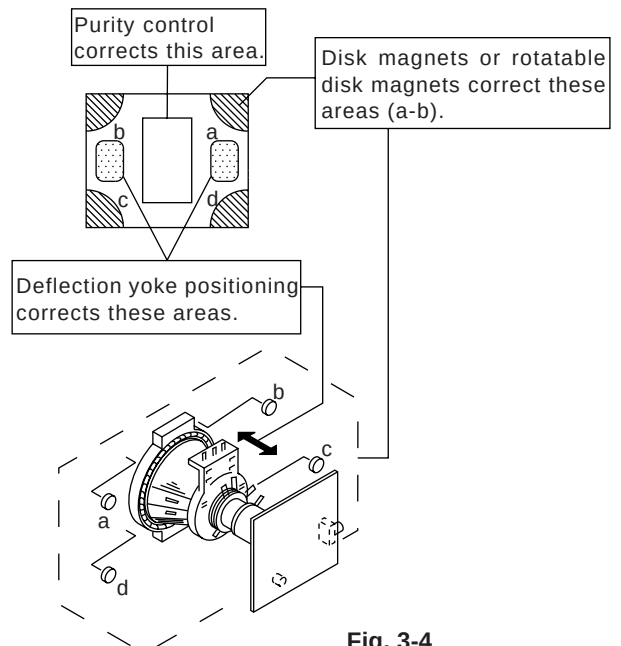


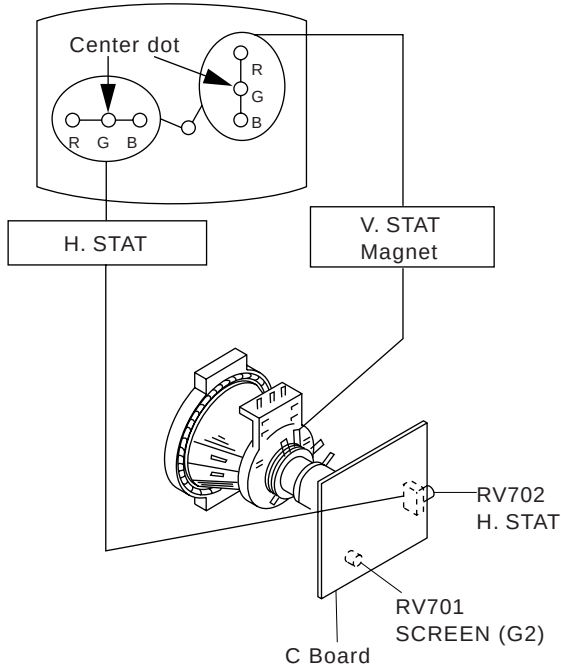
Fig. 3-4

3-2. CONVERGENCE

Preparations :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

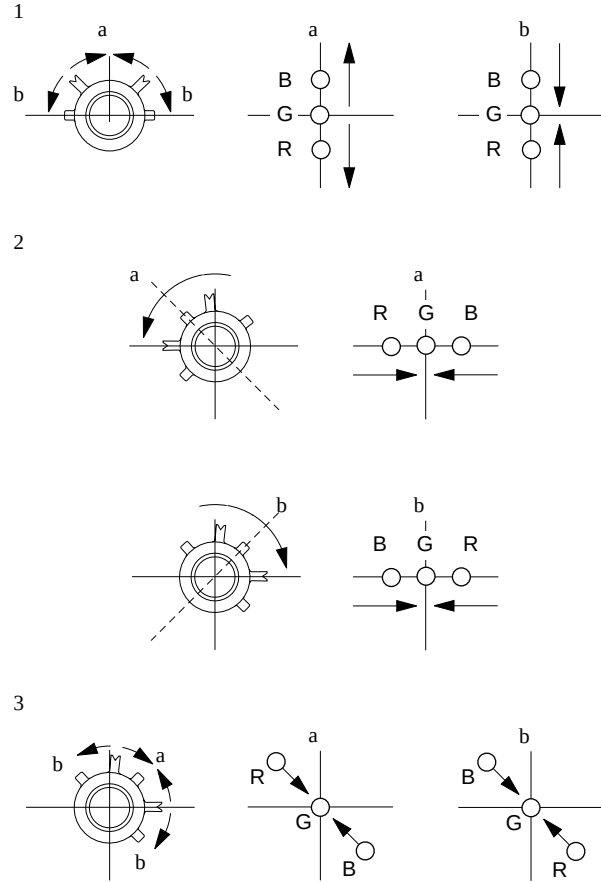
(1) Horizontal and Vertical Static Convergence



1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other.)

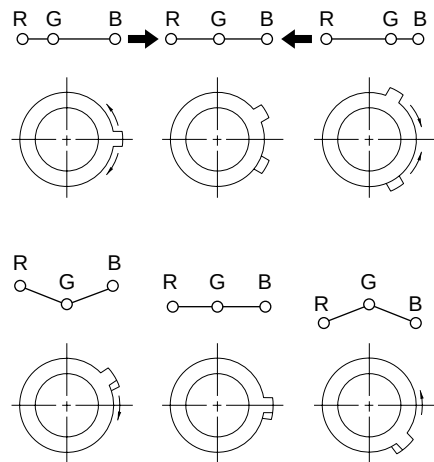
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

If the V.STAT magnet is moved in the direction of the ① and ② arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet

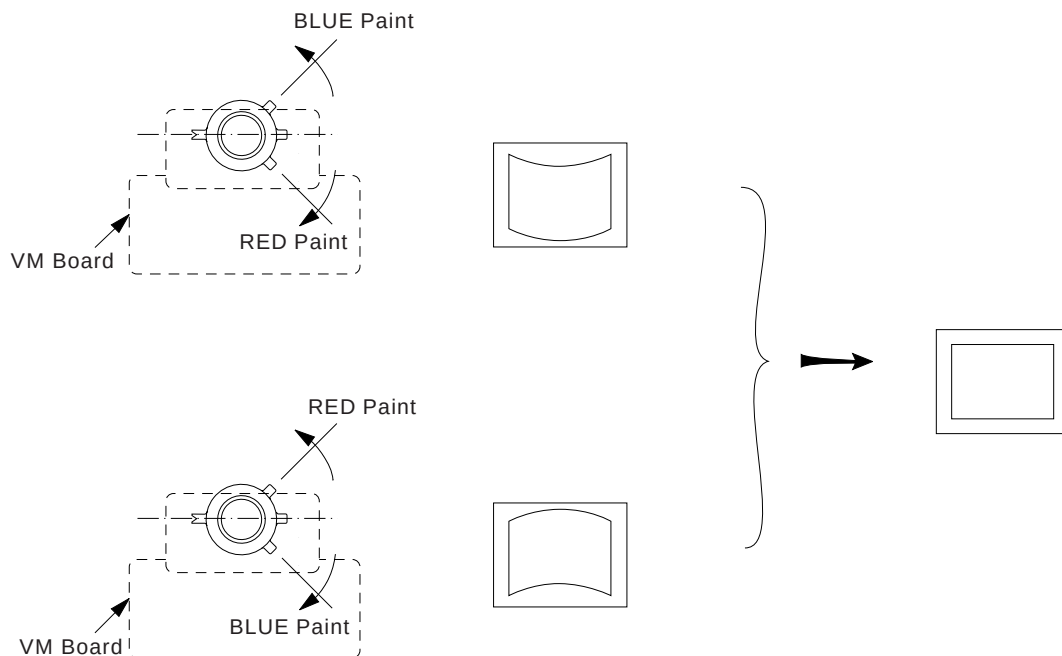
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



- Use the H.STAT VR to adjust the red, green, and blue dots so that they coincide at the center of screen.

The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.

- 1 Y separation axis correction magnet adjustment receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .
- 2 Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.

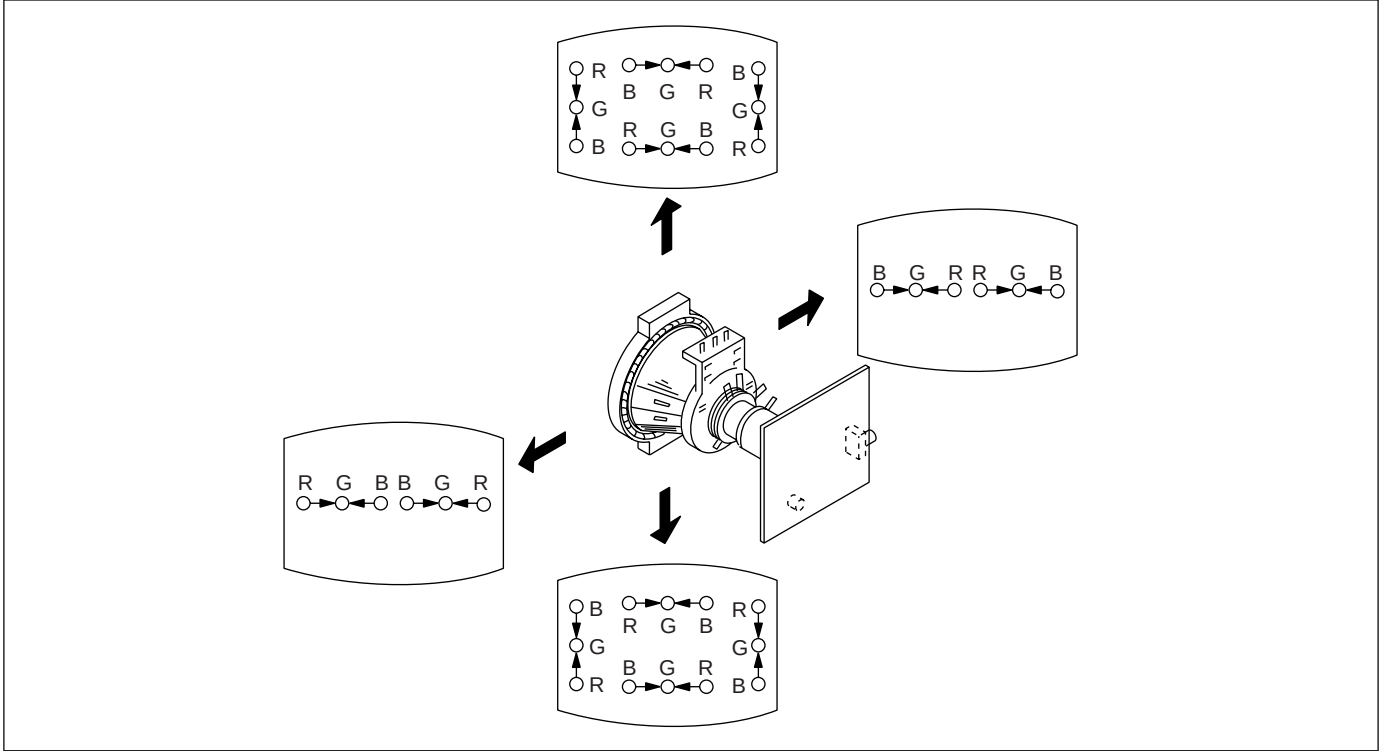


- Note**
- 1) The Red and Blue magnets should be equally far from the horizontal center line.
 - 2) Do not separate the Red and Blue magnets too far.
(Less than 8 mm)

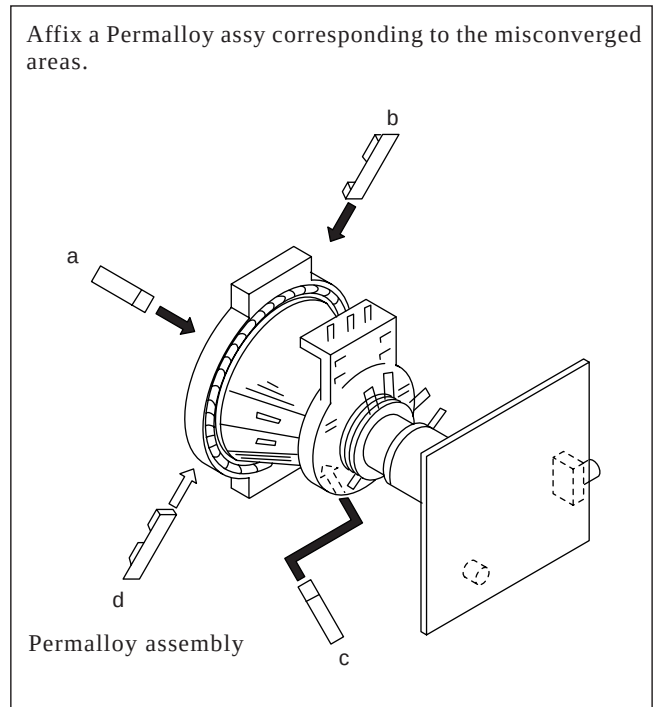
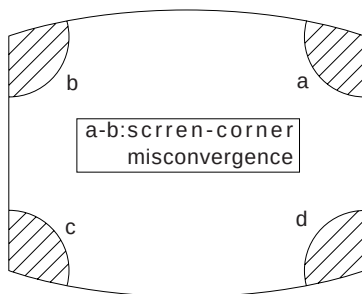
(2) Dynamic Convergence Adjustment

Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence
1. Slightly loosen the deflection yoke screws.
 2. Remove the deflection yoke spacer.
 3. Move the deflection yoke as shown in the figure below and optimize the convergence.
 4. Tighten the deflection yoke screws.
 5. Install the deflection yoke spacer.

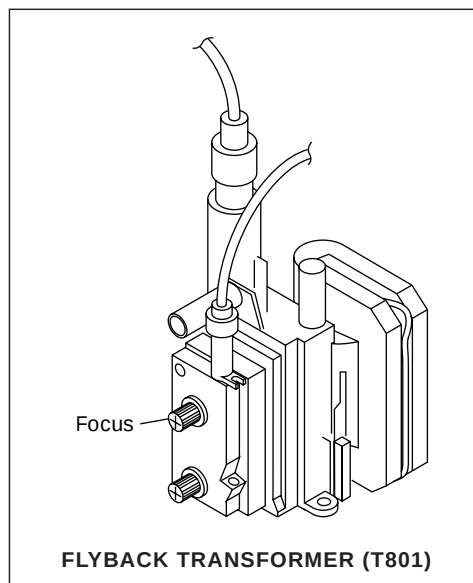


(3) Screen-corner Convergence



3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



a. AN ITEM OF ADJUSTMENT

Item number	Adjustment item	Standard DATA	Note
37	SBR	1F	SUB-BRIGHTNESS
39	GDR	2C	G. Drive
3A	BDR	2C	B. Drive
3B	GCF	07	G. CUT-OFF
3C	BCF	07	B. CUT-OFF

b. METHOD OF CANCELLATION FROM SERVICE MODE

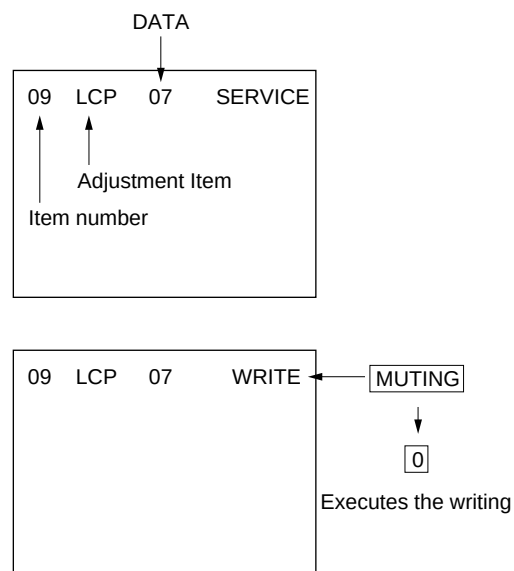
Set the standby condition (Press **POWER** button on the commander), then press **POWER** button again, hereupon it becomes TV mode.

c. METHOD OF WRITE FOR MEMORY

- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustments.
- 3) Press **MUTING** button indicate WRITE (RED) on screen.
- 4) Press **0** button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

- 1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again to confirm adjustments were made.

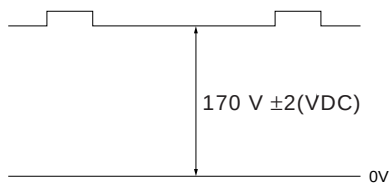


3-4. G2 (SCREEN) AND WHITE BALANCE

ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV701)

- 1) Set the PICTURE and BRIGHTNESS to normal.
- 2) Put to VIDEO input mode without signals.
- 3) Set to Service Mode.
- 4) Change BLU data of the item number **[8C]** from **[01]** to **[00]**.
(To turn off Blue Back.)
- 5) Press **[MUTING]**, and **[0]** to write the data in the memory.
- 6) Connect R, G, and B of the C board cathode to the oscilloscope.
- 7) Adjust G2 (RV701) volume to the value below.



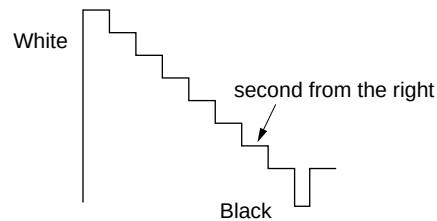
- 8) Re-set BLU data of the item number **[8C]** from **[00]** back to **[01]**.
- 9) Press **[MUTING]**, and **[0]** to write the data in the memory.

2. WHITE BALANCE ADJUSTMENTS

- 1) Set to service Mode.
- 2) Input white raster signal.
- 3) Set the PICTURE to minimum.
- 4) Select SBR(35) with **[1]** and **[4]**, and then set the level to minimum with **[3]** and **[6]**.
- 5) Select GCF(39) and BCF(3A) with **[1]** and **[4]**. And adjust the level with **[3]** and **[6]** for the best white balance.
- 6) Set the PICTURE to maximum.
- 7) Select GDR(37) and BDR (38) with **[1]** and **[4]**, and adjust the level with **[3]** and **[6]** for the best white balance.
- 8) Write into the memory by pressing **[MUTING]** then **[0]**.

3. SUB BRIGHT ADJUSTMENT

- 1) Set to service mode.
- 2) Input a staircase signal of black and white from the pattern generator.
- 3) BRIGHTNESS RESET.
PICTURE minimum
- 4) Select SBR(55) with **[1]** and **[4]**, and adjust SBR level with **[3]** and **[6]** so that the stripe second from the right is dimly lit.



SECTION 4

SELF DIAGNOSIS FUNCTION

If no acknowledgement is returned from a device which is turned "ON", the device has a problem.
In this case, one of the LED's responding to the problem device will flicker a defined number of times.

The flickering frequency responding to each failed device is shown below.

Board name	A Board	A Board	A Board	A Board
Ref. No	IC003	IC1201	IC104	IC206
Device	NONVOLA- TILE MEMORY	AV SWITCH (CXA1855S)	MAIN Y/C (CXA2050S)	AUDIO PROCESSOR (TDA8424)
Flickering Frequency	1	2	3	6

All the device are checked one after another from the left on the table.

If an error is found, the responding LED will start flickering.

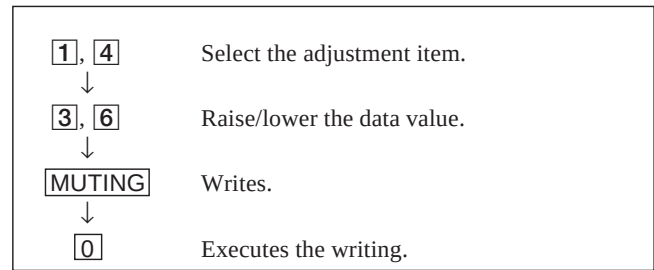
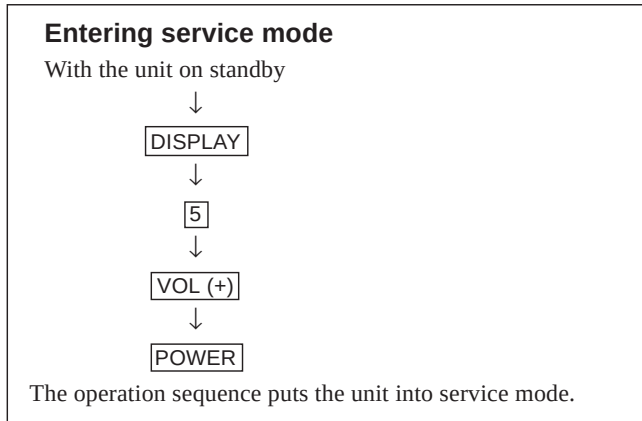
So, if more than 2 device are failed, the one on the left side will start flickering first.

SECTION 5

CIRCUIT ADJUSTMENTS

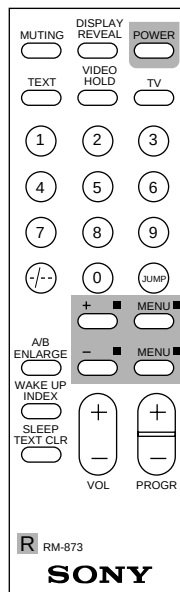
5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-871 that comes with this unit.

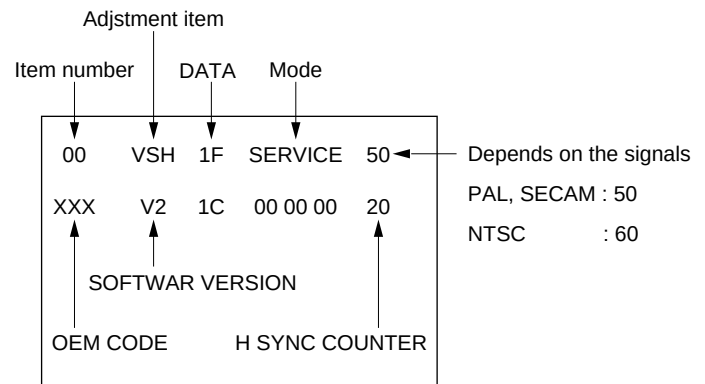


- 7, 0 All the data becomes the values in memory.
- 8, 0 All user control goes to the standard state.
- 5, 0 Service data initialization (Be sure not to use usually.)
- 2, 0 Write 50Hz adjustment data to 60Hz, or vice versa.

The screen display is :



RM-873

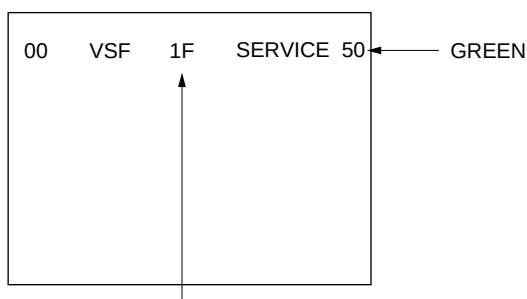


5-2. ADJUSTMENT METHOD

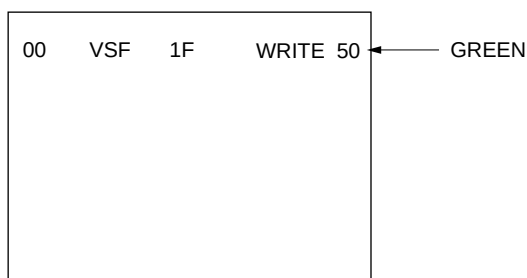
Item Number 00

This explanation uses V-Position as an example.

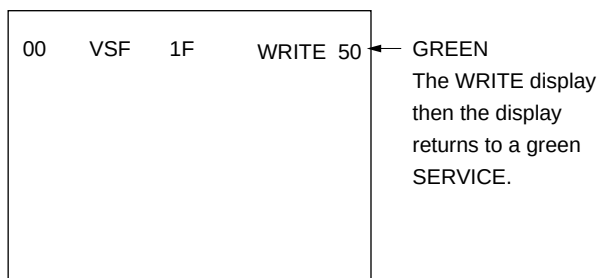
1. Select 00 VSH with the **[1]** and **[4]** buttons.
2. Raise/lower the data with the **[3]** and **[6]** buttons.
3. Select the optimum state. (The standard is IF for PAL reception.)
4. Write with the **[MUTING]** button. (The display changes to WRITE.)
5. Execute the writing with the **[0]** button. (The WRITE display will be changed back to SERVICE.)



Adjusted with **[3]** and **[6]** buttons



Written with **[MUTING]**



The WRITE display
then the display
returns to a green
SERVICE.

Write executed with **[0]**

Use the same method for Items Number 00-96. Use **[1]** and **[4]** to select the adjustment item, use **[3]** and **[6]** to adjust, write with **[MUTING]**, then execute the write with **[0]**.

Note : In **[WRITE]**, the data of all items are into memory.

- As for V-FREQ, by searching the bolded screen V range with adjusting data.

Note : For adjustment Items that have differnt standard data between 50Hz or 60Hz and novwel or wid, be sure to use the respective input signal ather adjusting.

Adjustment Item Table

Item number	Adjustment Item	Data range	Standard data		Note	Device
			J29	J25		
00	VSH	00-3F	1F		V Position	CXA2050S (Y/C/J) Slv:88H
01	VSZ	00-3F	1F		V Size	
02	HSH	00-0F	07		H Position	
03	HSZ	00-3F	1F		H Size	
04	SRC	00-0F	07		S Correction	
05	VLN	00-0F	07		V Linearity	
06	PAP	00-3F	1F		Pin Comp	
07	PPH	00-0F	07		Pin Phase	
08	UCP	00-0F	07		Up Corner Pin	
09	LCP	00-0F	07		Low Corner Pin	
0A	BOW	00-0F	07		AFC-Bow	
0B	ANG	00-0F	07		AFC-Angle	
0C	VAP	00-3F	2F		V Aspect	
0D	VSC	00-3F	1F		V Scroll	
0E	ULN	00-0F	00		UP V Linearity	
0F	LLN	00-0F	00		LOW V Linearity	
10	EHH	00-03	01	00	EHT-H	
11	EHV	00-03	01		EHT-V	
12	HBS	00-01	01		H Blk Wid. ON/OFF	
13	LBK	00-0F	0F		L Blk Width	
14	RBK	00-0F	0F		R Blk Width	
15	JSW	00-01	00		Jump ON/OFF Sw	
16	VBW	00-03	02		V Blk Wid. Con.	
17	AFC	00-03	01		AFC-Mode	
18	FHH	00-01	00		FH-HI	
19	VFQ	00-03	00		V-Freq	
1A	VOF	00-01	00		V OFF	
1B	VMD	00-01	00		CD-Mode 2	
1C	CMD	00-01	00		CD-Mode	
1D	ITL	00-03	00		Inter lace	
1E	ZSW	00-01	00		ZOOM SW	
1F	POV	00-03	03		Pre-Over	
20	CT1	00-01	01		C-Trap(NTSC)	
21	CT2	00-01	00		C-Trap(PAL)	
22	CF0	00-0F	00		C-Trap f0 Adj	
23	SF0	00-01	00	01	Sharpness f0 Adi	
24	TOT	00-01	01		TOT Filter SW	
25	CSW	00-03	00		Color SW	
26	XTL	00-03	00		Xtal	
27	CV1	00-01	01		CV/YC Select(NTSC)	
28	CV2	00-01	00		CV/YC Select(PAL)	
29	VM	00-01	01		VM ON/OFF	
2A	YVM	00-01	00		YSI/VM SW(0:YSI)	
2B	DPC	00-01	01		D-Pic ON/OFF	
2C	DCO	00-01	01		Dynamic Color	
2D	GMM	00-03	01		Gamma	
2E	DTR	00-01	01		DC-Tran	
2F	DL1	00-07	01		Delay Ctrl.(PAL)	
30	DL2	00-07	03		Delay Ctrl.(NTSC)	
31	DL3	00-07	03		Delay Ctrl.(SECAM)	
32	SCN	00-0F	09		Sub-Contrast	
33	SC1	00-0F	07		Sub-Color(PAL)	
34	SC2	00-0F	06		Sub-Color(NTSC)	
35	SH1	00-0F	07		Sub-Hue(TV)	
36	SH2	00-0F	07		Sub-Hue(VIDEO)	
37	SBR	00-3F	1F		Sub-Bright	
38	SSH	00-07	04	04	Sub-Sharpness	
39	GDR	00-3F	2C		G-Drive	

Note: Bold items are fixed data.

* : NTSC , NO MARK : PAL

Adjustment Item Table

Item number	Adjustment Item	Data range	Standard data		Note	Device
			J29	J25		
3A	BDR	00-3F	2C		B-Drive	CXA2050S (Y/C/J) Slv:88H
3B	GCF	00-0F	07		G-Cutoff	
3C	BCF	00-0F	07		B-Cutoff	
3D	RPO	00-03	01		Ref-Position	
3E	PON	00-01	01		Pic-ON	
3F	RON	00-01	01		R ON	
40	GON	00-01	01		G ON	
41	BON	00-01	01		B ON	
42	AKF	00-01	00			
43	ESY	00-01	00			
44	AGG	00-01	00			
45	ABL	00-01	00		Picture Booster	
46	LIM	00-01	00		Black Offset	
47	PB	00-01	00		Picture Booster	TDA9170 (Picture Improve) Slv:D0H
48	BOF	00-00	00		Black Offset	
49	UVG	00-3F	00		User Var Gamma	
4A	ADG	00-3F	00		Adaptive Gamma	
4B	NLA	00-3F	00		Non-linear Amp	
4C	WDS	00-02	00		Window Select	
4D	LST	00-0F	00		Window Line Start	
4E	LSP	00-0F	00		Window Line Stop	
4F	FST	00-0F	00		Window Field Start	
50	FSP	00-0F	00		Window Field Stop	
51	VA	00-01	00		V Aperture on/off	CXA1315 (V-AP) Slv:48H
52	VAW	00-03	00		V Aperture white	
53	VAB	00-03	00		V Aperture black	
54	VAC	00-0F	00		V Aperture core	
55	SHP	00-3F	00		Sharpness	CXA1315 (LTI) Slv:42H
56	VML	00-3F	00		VM mitter	
57	COR	00-3F	00		Conng	
58	DOF	00-3F	00		DSC Offset	
59	DGA	00-3F	00		DSC Gain	
5A	DLT	00-01	00		Delay Time	
5B	SDL	00-0F	00		SEL Pin Delay	SDA9189X (PinP) Slv:D6H
5C	POH	00-FF	00		H Position(MSB 8bit)	
5D	POV	00-FF	00		V Position	
5E	PMD	00-1F	00		PinP Display Mode	
5F	WRP	00-0F	00		Write Position	
60	HDL	00-1F	00		HS Delay	
61	AMS	00-01	00		Decimation Filter	
62	VDL	00-1F	00		VS Delay	
63	VSP	00-1F	00		VSP Delay	
64	CON	00-0F	00		Contrast	
65	FRY	00-0F	00		Frame Y	
66	FRV	00-0F	00		Frame V	
67	FRU	00-0F	00		Frame U	
68	INF	00-01	00		Inner Frame	
69	FWV	00-03	00		Frame Width V	
6A	FWH	00-07	00		Frame Width H	
6B	PLL	00-03	00		PLL Loop Filter	
6C	PDV	00-0F	00		Pedestal V	
6D	PDU	00-0F	00		Pedestal U	
6E	DAT	00-01	00		DAC Stream Control	
6F	DAN	00-01	00		DAC Control	

Note: Bold items are fixed data.

Adjustment Item Table

Item number	Adjustment Item	Data range	Standard data		Note	Device
			J29	J25		
70 71	WIP WSP	00-01 00-03	00 00		Wipe on/off Wipe Speed	SDA9189X (PinP) Slv:D6H
72 73 74 75 76 77 78 79 7A 7B 7C 7D 7E 7F 80 81 82 83 84	FAW CTM CTN WCD WST WTM WBT ACG CDB FGP FMP WGP NIP CRM CML ACO WAC DLY DLG	00-FF 00-FF 00-FF 00-FF 00-FF 00-FF 00-01 00-01 00-3F 00-7F 00-7F 00-7F 00-7F 00-01 00-03 00-01 00-0F 00-FF 00-FF	08 08 50 0A 15 50 EA 01 28 24 40 3C 7F 00 00 01 01 30 10		NICAM FAW Thresh NICAM Error Bit(MONO) NICAM Error Bit(NICAM) W.G.DATA CHANGE W.G.STEREO Threshold W.G.Timer W.G.bilingual Threshold AGC AUTO/CONST AGC GAIN CONST. FM(BG,I,DK)Prescale FM(M)Prescale W.G.Prescale NICAM Prescale Carrier Mute Carrier Mute Level Audio Clock Out W.G.Agreement count Stereo Search Delay W.G.Search Delay	MSP3410 (Stereo Decoder) Slv:80H
85 86	TXP MPX	00-0F 00-0F	0E 0F		Text Picture cont. Text Mix Mode Pic	SAA 5281 (Text decoder) Slv:58H
87 88 89	BB1 BB2 BB3	00-3F 00-3F 00-3F	00 1D 28		BBE control High BBE control Middle BBE control Low	CXA1315 (BBE) Slv:40H
8A	ATW	00-03	00		Auto Wide Ident speed	CXP5068 (Auto wide)
8B 8C 8D 8E 8F 90 91 92 93 94 95 96 97 98 99	BKP OSH ODL BLU ROC ROS DKS MUT DID DWZ BCS BVS WBS OPO OP1	00-FF 00-3F 00-FF 00-01 00-0F 00-07 00-01 00-01 00-01 00-01 00-01 00-01 00-03 00-FF 00-FF	00 0E 10 01 08 07 00 01 00 00 00 00 01 01 32	02	Blk off Picture OSD Position H Power On Delay Blue Back on/off N/S Center Vol. User Step D/K Stereo Serch No.Sync.Mute Disable Degauss Disable Widezoom BASS Center Shift BASS Volume Shift Woofer off Bass Shift Option 0 Option 1	CXP85340 (MICRO- CONTROLLER)

Note: Bold items are fixed data.

ITEM INFORMATION

- 50 ... 50Hz data, 60 ... 60Hz data
- Standard data listed on the Adjustment Item Table are reference values, therefore it is different for every model.

5-3. PICTURE QUALITY ADJUSTMENTS

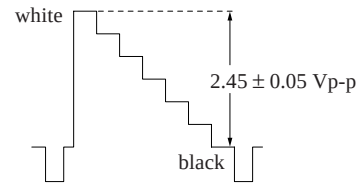
Item Number 33-36

33	SCO	Sub-Color
34	SHU	Sub-Hue
35	SBR	Sub-Bright

5-4. A BOARD ADJUSTMENT

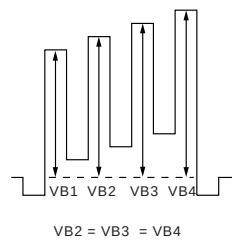
SUB CONTRAST ADJUSTMENT (SCN)

1. Receive a PAL color-bar.
2. Set service item 3E GON and 3F BON to data "00". Set the PICTURE 100%, BRIGHT 50% and COLOR MIN.
3. Connect an oscilloscope to the pin ⑥ (R OUT) of CN117, A board.
4. Set to Service Mode and select 32 (SCN) using [1] and [4] of the commander to adjust to $2.10 \pm 0.05V$.
5. Press [MUTING] → [0] of the commander to write the data.
6. Receive a NTSC color-bar and adjust 32 (SCN) as step 2~5.
7. Set service item 3E GON and 3F Bon to data "01".



SUB COLOR ADJUSTMENT (SCO)

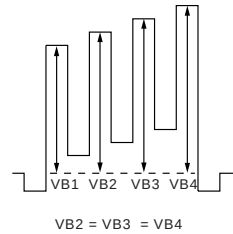
1. select Video1
2. Input a PAL color-bar, video into video1.
Set to the following condition:
PIC 100%, BRT 50%, COL 50%
3. Connect an oscilloscope to the pin ⑤ (B OUT) of CN117, A board.
4. Set to Service Mode and select 33 (SCO) with [1] and [4] of the commander to adjust to $VB2=VB3=VB4$ with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust 33 (SCO) as step 1~4.



7. [Receive] the NTSC color-bar and adjust as step 6.

SUB HUE ADJUSTMENT (SHU)

1. select Video1
2. Input a NTSC color-bar, video into video1.
3. Connect an oscilloscope to the pin ④ (B OUT) of CN117, A board.
4. Select 34 (SHU) with [1] and [4] of the commander by setting to Service Mode and adjust to $VB1=VB2=VB3=VB4$ with [3] and [6].



5. Press [MUTING] → [0] of the commander to write the data.
6. Set to WIDE Mode by [MENU] button to write the same value as in step 3.

5-5. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

When replacing IC003(MEMORY) be sure to change IC001(μ-COM) to the following new IC at the same time.

IC001 (μ-COM)

• GE, EM, E, HK model

CXP85340A-072S to CXP85340A-099S (8-752-880-11)

• ME (Arabic) model

CXP85340A-084S to CXP85340A-098S (8-752-879-23)

1. Enter to Service Mode.
2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.
3. Call each item number, and check if the respective screen shows the normal picture.
In cases where items are not well adjusted, rectify the items with fine adjustment.
Write the data per each item number ([MUTING] + [0]).
4. Select item numbers "95" (OP0) and "96" (OP1) and respectively set the bit per model with command buttons [3] and [6].
5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
(This will also cancel Service Mode.)

5-6. PICTURE DISTORTION ADJUSTMENT

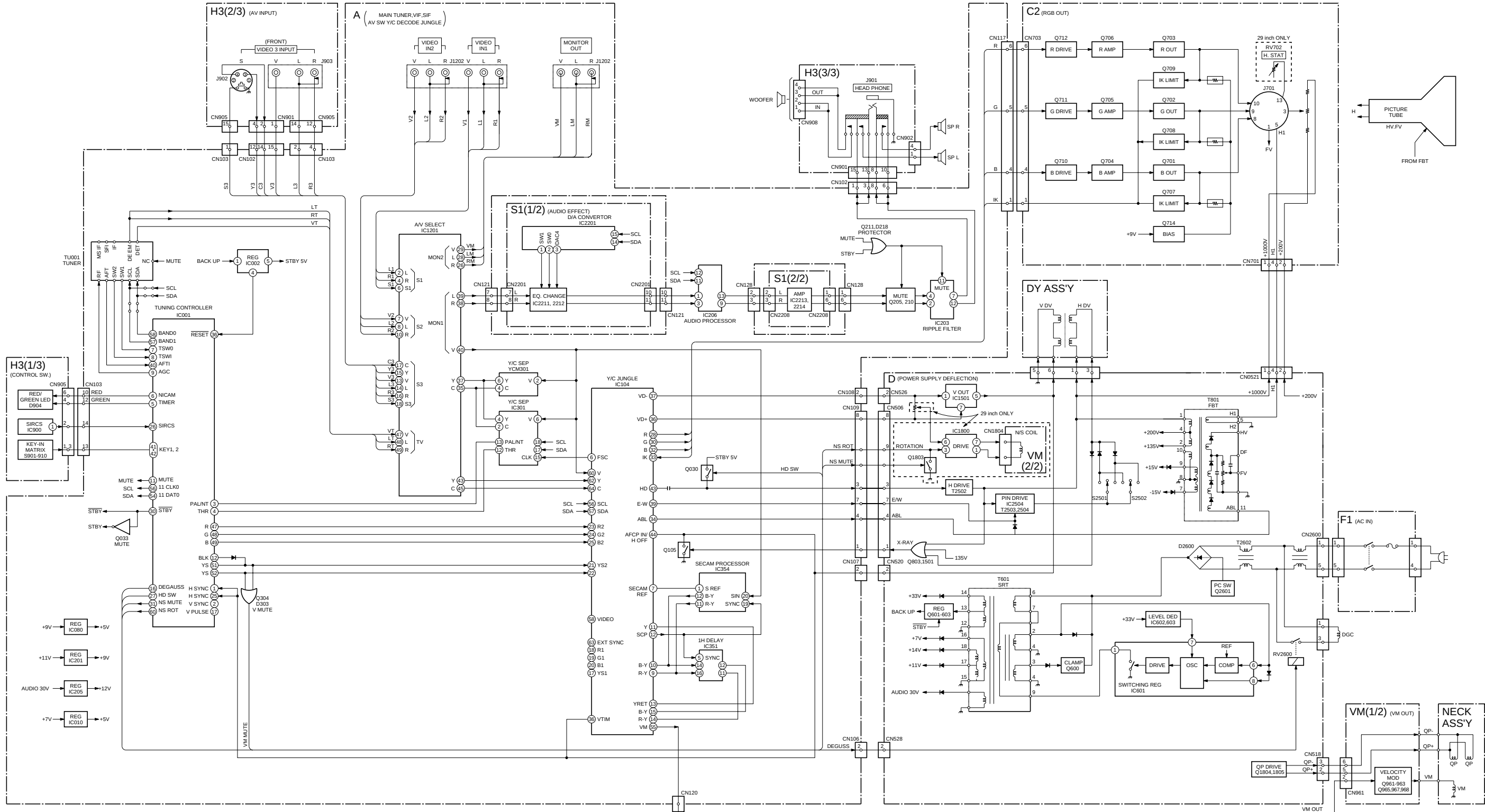
Item Number 00 – 0B

- | | | |
|----|--------------------------|--|
| 00 | VSH(V POSITION) | |
| 01 | VSZ(V SIZE) | |
| 02 | HSH(H POSITION) | |
| 03 | HSZ (H SIZE) | |
| 04 | SCR(VERTICAL Scorrction) | |
| 05 | VLN(V LINEARITY) | |
| 06 | PAP (PIN AMP) | |
| 07 | PPH(PIN PHASE) | |
| 08 | UCP(Upper Corner Pin) | |
| 09 | LCP(Lower Corner Pin) | |
| 0A | VBOW(AFC.BOW) | |
| 0B | VAG(AFC.ANGLE) | |

SECTION 6

DIAGRAMS

6-1. BLOCK DIAGRAM



The diagram illustrates the electrical connections for a television set, organized into several functional blocks:

- F1 (AC IN):** Includes terminals for AC IN (CN1690, CN1691, CN2600) and AC OUT (CN1691, CN2600).
- C2 (RGB OUT):** Includes terminals for RGB OUT (CN703, CN704, CN701, CN0521) and H1 (CN701, CN0521).
- H3 (CONTROL SW.INPUT TERMINAL):** Includes terminals for SP L, SP R, SP GND, and SP R (CN902, CN907, CN901, CN102, CN103, CN105, CN108, CN109, CN128, CN129, CN130, CN131, CN132, CN133, CN134, CN135, CN136, CN137, CN138, CN139, CN140, CN141, CN142, CN143, CN144, CN145, CN146, CN147, CN148, CN149, CN150, CN151, CN152, CN153, CN154, CN155, CN156, CN157, CN158, CN159, CN160, CN161, CN162, CN163, CN164, CN165, CN166, CN167, CN168, CN169, CN170, CN171, CN172, CN173, CN174, CN175, CN176, CN177, CN178, CN179, CN180, CN181, CN182, CN183, CN184, CN185, CN186, CN187, CN188, CN189, CN190, CN191, CN192, CN193, CN194, CN195, CN196, CN197, CN198, CN199, CN200, CN201, CN202, CN203, CN204, CN205, CN206, CN207, CN208, CN209, CN210, CN211, CN212, CN213, CN214, CN215, CN216, CN217, CN218, CN219, CN220, CN221, CN222, CN223, CN224, CN225, CN226, CN227, CN228, CN229, CN230, CN231, CN232, CN233, CN234, CN235, CN236, CN237, CN238, CN239, CN240, CN241, CN242, CN243, CN244, CN245, CN246, CN247, CN248, CN249, CN250, CN251, CN252, CN253, CN254, CN255, CN256, CN257, CN258, CN259, CN260, CN261, CN262, CN263, CN264, CN265, CN266, CN267, CN268, CN269, CN270, CN271, CN272, CN273, CN274, CN275, CN276, CN277, CN278, CN279, CN280, CN281, CN282, CN283, CN284, CN285, CN286, CN287, CN288, CN289, CN290, CN291, CN292, CN293, CN294, CN295, CN296, CN297, CN298, CN299, CN300, CN301, CN302, CN303, CN304, CN305, CN306, CN307, CN308, CN309, CN310, CN311, CN312, CN313, CN314, CN315, CN316, CN317, CN318, CN319, CN320, CN321, CN322, CN323, CN324, CN325, CN326, CN327, CN328, CN329, CN330, CN331, CN332, CN333, CN334, CN335, CN336, CN337, CN338, CN339, CN340, CN341, CN342, CN343, CN344, CN345, CN346, CN347, CN348, CN349, CN350, CN351, CN352, CN353, CN354, CN355, CN356, CN357, CN358, CN359, CN360, CN361, CN362, CN363, CN364, CN365, CN366, CN367, CN368, CN369, CN370, CN371, CN372, CN373, CN374, CN375, CN376, CN377, CN378, CN379, CN380, CN381, CN382, CN383, CN384, CN385, CN386, CN387, CN388, CN389, CN390, CN391, CN392, 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Note:	
• All capacitors are in μF unless otherwise noted.	
• All electrolytic capacitors are rated at 50V unless otherwise noted.	
• All resistors are in ohms. $k\Omega = 100\Omega$, $M\Omega = 1000k\Omega$	
• Indication of resistance, which does not have one for rating electrical power, is as follows.	
Pitch: 5 mm	
Rating electrical power 1/4W (CHIP: 1/10W)	
• : nonflammable resistor.	
• : internal component.	
• : panel designation, or adjustment for repair.	
• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.	
• Readings are taken with a color-bar signal input.	
no mark : PAL	
() : SECAM	
[] : NTSC 3.58	
« » : NTSC 4.43	
• Readings are taken with a 10 M Ω digital multimeter.	
• Voltage are dc with respect to ground unless otherwise noted.	
• Voltage variations may be noted due to normal production tolerances.	
• All voltages are in V.	
• * : Can not be measured.	
• Circled numbers are waveform reference.	
• : B + bus.	
• : B - bus.	
• : signal path.	
Reference information	
RESISTOR	: RN METAL FILM
	: RC SOLID
	: FPRD NONFRAMMABLE CARBON
	: FUSE NONFLAMMABLE FUSIBLE
	: RS NONFLAMMABLE METAL OXIDE
	: RB NONFLAMMABLE CEMENT
	: RW NONFLAMMABLE WIREWOUND
	: * ADJUSTMENT RESISTOR
COIL	: LF-8L MICRO INDUCTOR
CAPACITOR	: TA TANTALUM
	: PS STYROL
	: PP POLYPROPYLENE
	: PT MYLAR
	: MPS METALIZED POLYESTER
	: MPP METALIZED POLYPROPYLENE
	: ALB BIPOLAR
	: ALT HIGH TEMPERATURE
	: ALR HIGH RIPPLE

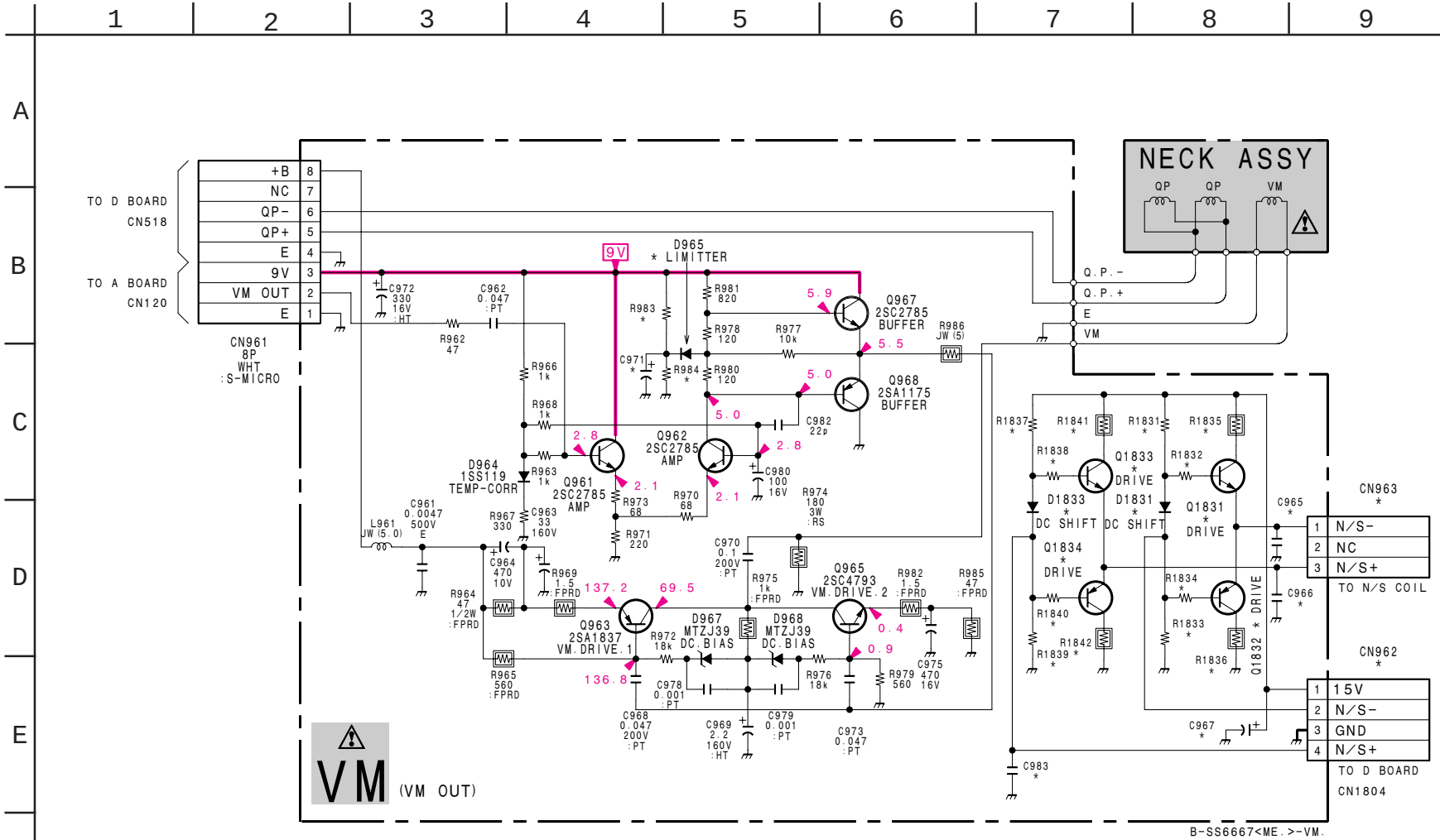
Note:The component identified by shading and mark Δ are critical for safety. Replace only with part number specified.

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Transistor (FET)		Drain Source Gate	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Source Drain Gate	
⑮	Transistor		C1 B1 E1 E2 B2 C1	
⑯	Transistor		C1 B1 E2 E1 B1 C2	
⑰	Transistor		C1 B2 E2 E1 B1 C2	
⑱	Transistor		C1 B2 E2 E1 B1 C2	
⑲	Transistor		E2 B1 E1 C2 C1 (B2)	
⑳	Transistor		B1 E1 E2 C1 C2	
㉑	Transistor		B2 E2 C2 B1 C1	

(Chip semiconductors that are not actually used are included.)

Ver.1.3

(5) Schematic Diagram of VM Board



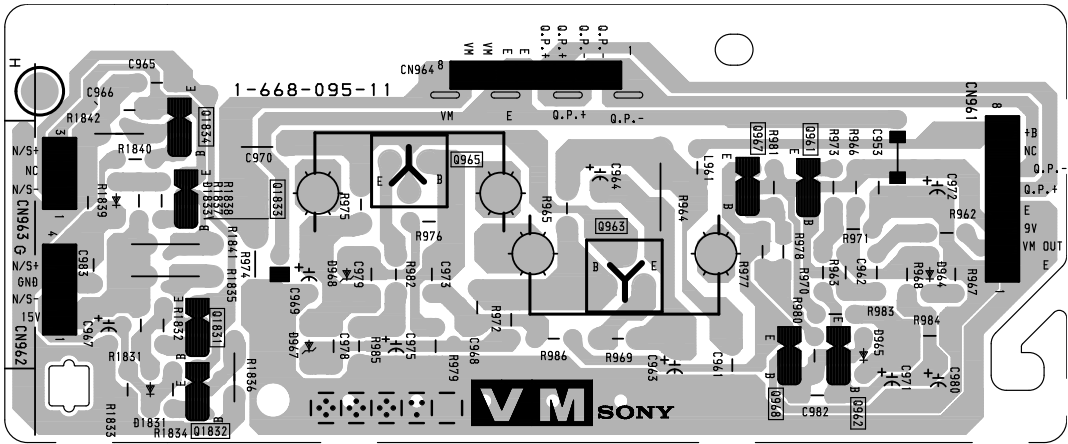
VM BOARD*MARK LIST

	KV-J25MF8J	KV-J29MF8J
C965	#	0.0022 50V
C966	#	0.0022 50V
C967	#	10 50V
C971	#	1 50V
C983	#	0.082 50V
CN962	#	4P WHT :S-MICRO
CN963	#	3P BLK :S-MICRO
D965	#	1SS119-25TD
D1831	#	1SS119-25TD
D1833	#	1SS119-25TD
Q1831	#	2SD773-T-34
Q1832	#	2SB733-T-34
Q1833	#	2SD773-T-34
Q1834	#	2SB733-T-34
R983	#	56k 1/4W
R984	#	82k 1/4W
R1831	#	1k 1/4W
R1832	#	1k 1/4W
R1833	#	1k 1/4W
R1834	#	1k 1/4W
R1835	#	15 1/2W :FPRD
R1836	#	10 1/4W :FPRD
R1837	#	1k 1/4W
R1838	#	1k 1/4W
R1839	#	1k 1/4W
R1840	#	1k 1/4W
R1841	#	15 1/2W :FPRD
R1842	#	10 1/4W :FPRD

Mark : not mounted

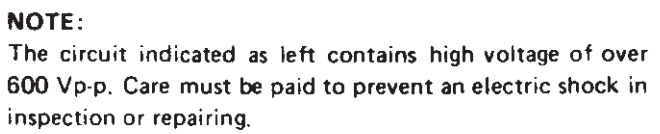
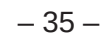
VM [VM OUT]

-VM BOARD-



Schematic diagrams

← C2 boards

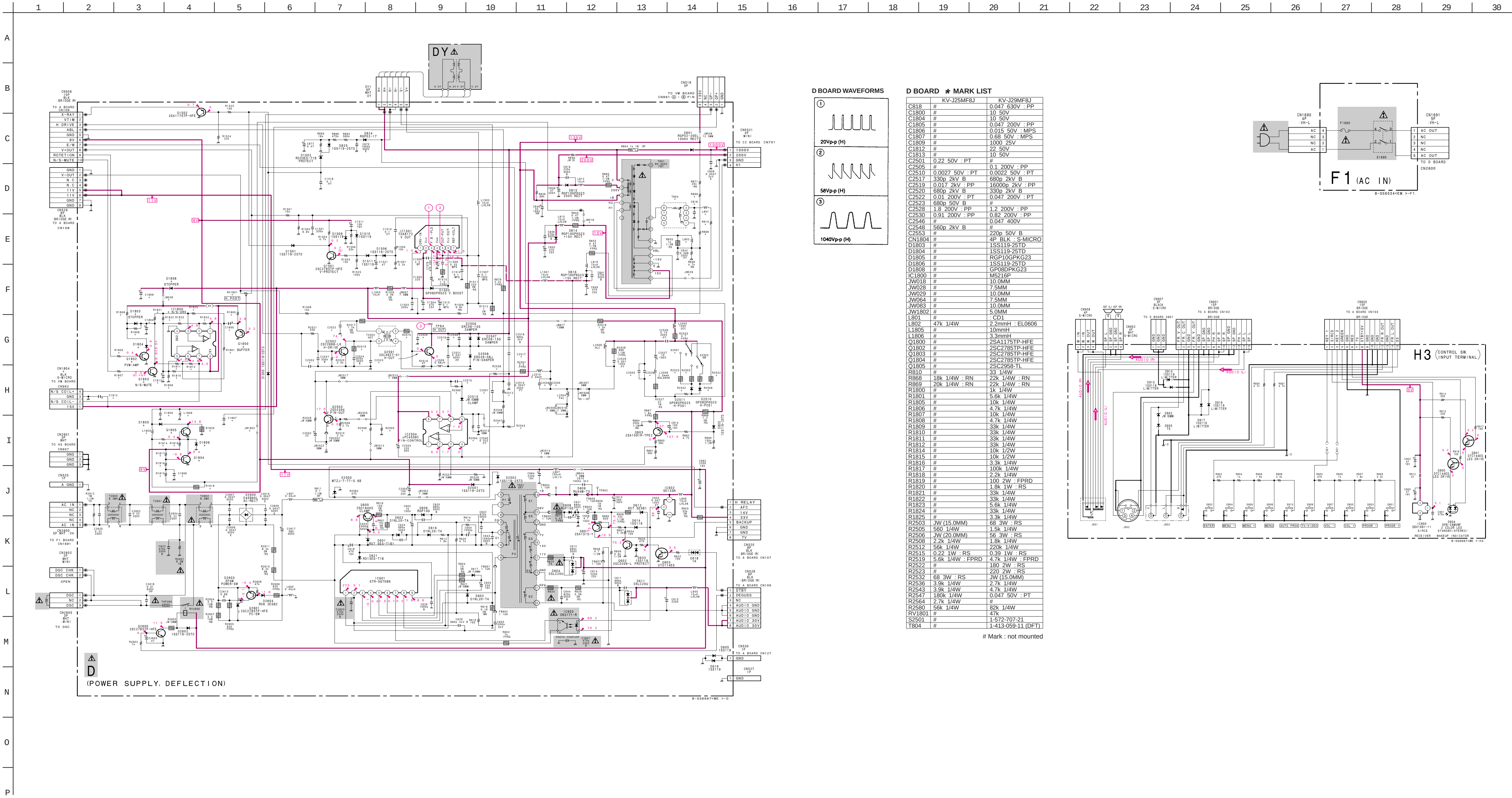


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

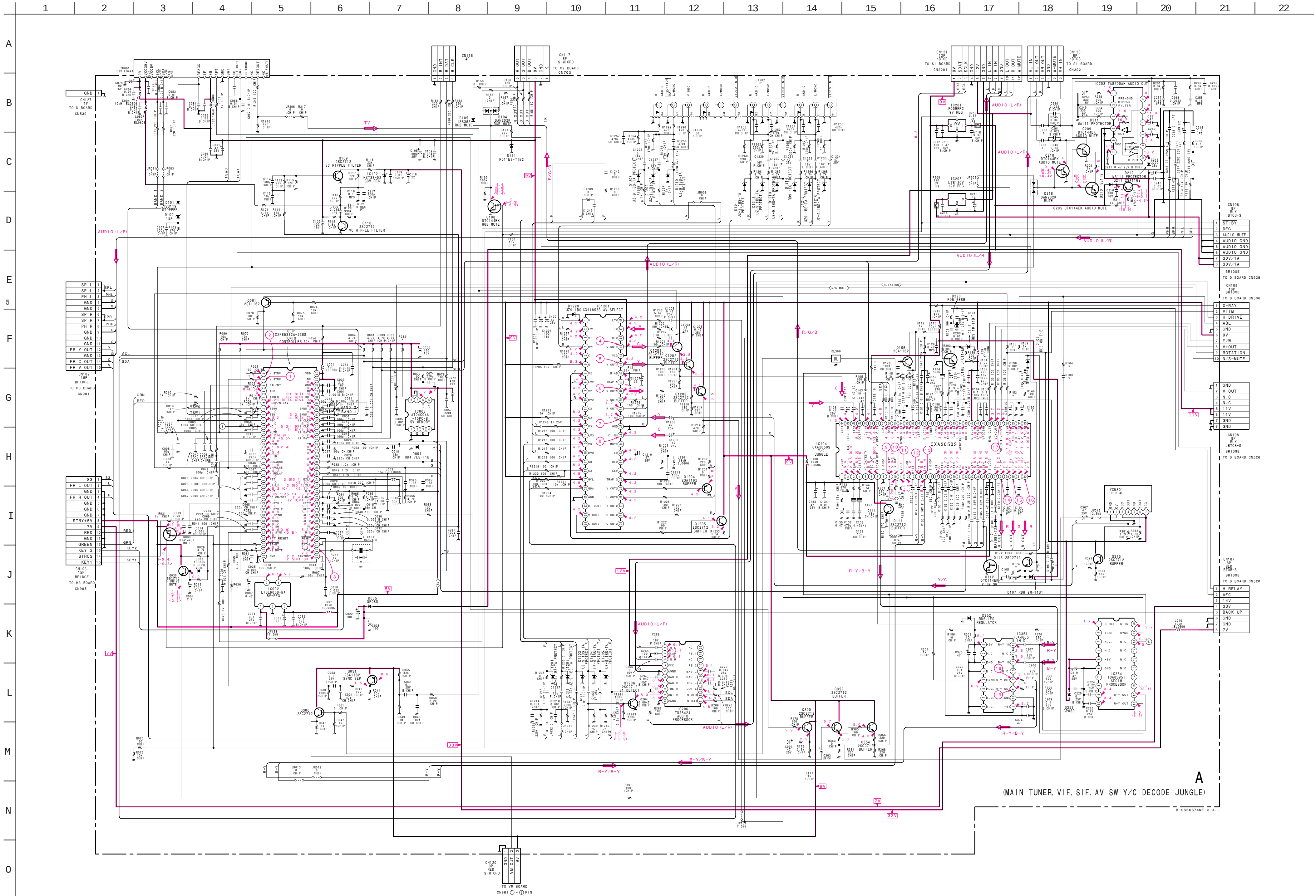
IC		D616	D-5		
		D617	C-5		
		D618	G-1		
		D619	G-10		
		D621	C-5		
		D633	E-2		
		D801	D-8		
TRANSISTOR		D803	F-4		
		D814	B-7		
		D815	C-8		
		D816	C-7		
		D824	G-8		
		D825	F-6		
		D1501	F-7		
DIODE		D1502	F-6		
		D1503	E-8		
		D1504	E-8		
		D1505	G-4		
		D1506	F-8		
		D1509	F-8		
		D1510	F-8		
		D1511	F-8		
		D1803	H-6		
		D1804	H-6		
		D1805	G-2		
		D2502	F-10		
		D2503	F-6		
		D2591	D-10		
		Q2600	B-1		
		Q2601	B-6		
		DIODE		D2504	F-4
D2506	D-9				
D2507	D-10				
D2508	E-10				
D2510	G-7				
D2511	F-8				
D2515	G-5				
D2600	A-6				
D2602	B-1				
D2603	A-6				
D2604	B-6				
VARIABLE RESISTOR					
IC		RV1801	G-5		

IC		D616	D-5		
		D617	C-5		
		D618	G-1		
		D619	G-10		
		D621	C-5		
		D633	E-2		
		D801	D-8		
TRANSISTOR		D803	F-4		
		D814	B-7		
		D815	C-8		
		D816	C-7		
		D824	G-8		
		D825	F-6		
		D1501	F-7		
DIODE		D1502	F-6		
		D1503	E-8		
		D1504	E-8		
		D1505	G-4		
		D1506	F-8		
		D1509	F-8		
		D1510	F-8		
		D1511	F-8		
		D1803	H-6		
		D1804	H-6		
		D1805	G-2		
		D2502	F-10		
		D2503	F-6		
		D2591	D-10		
		Q2600	B-1		
		Q2601	B-6		
		DIODE		D2504	F-4
D2506	D-9				
D2507	D-10				
D2508	E-10				
D2510	G-7				
D2511	F-8				
D2515	G-5				
D2600	A-6				
D2602	B-1				
D2603	A-6				
D2604	B-6				
VARIABLE RESISTOR					
IC		RV1801	G-5		

(1) Schematic Diagrams of D, F1 and H3 Boards



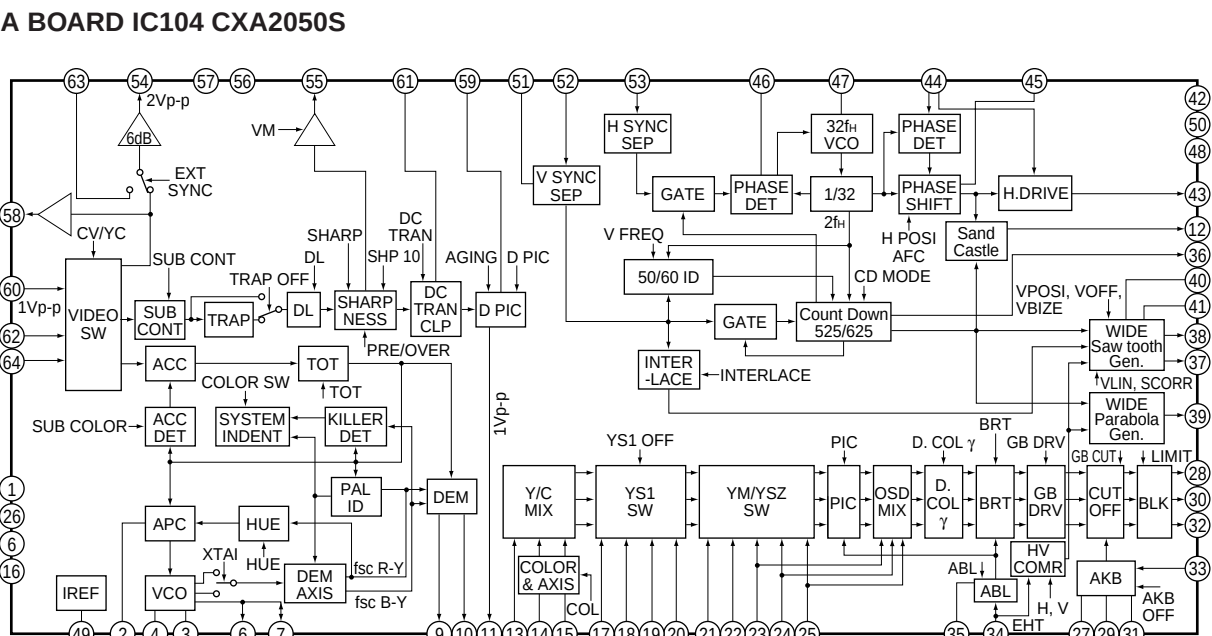
(2) Schematic Diagrams of A Board



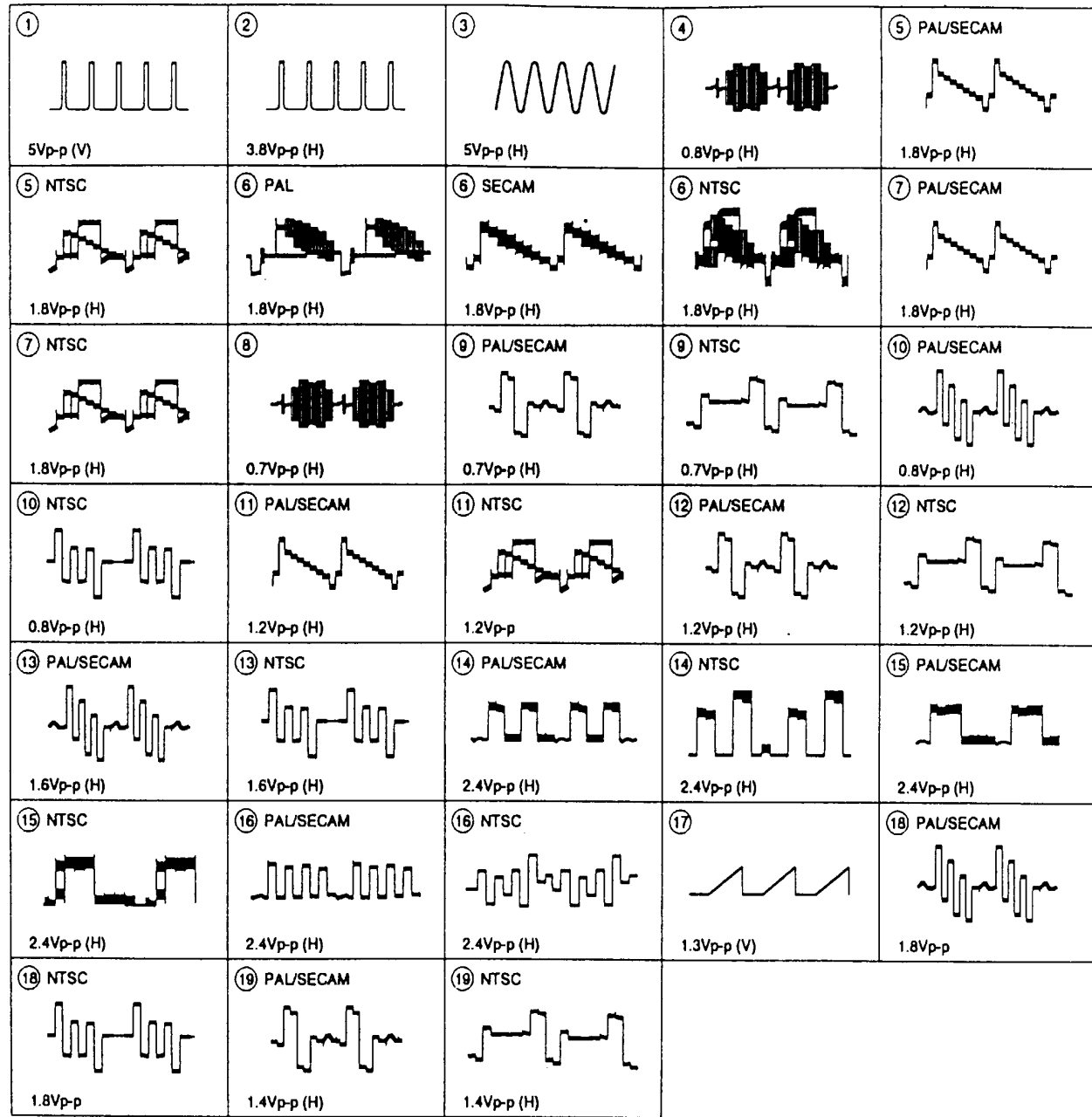
A BOARD *MARK LIST

	KV-325MF8J	KV-329MF8J
C103	0.047 50V :CHIP #	
C105	0.056 25V B :CHIP	470p 50V B :CHIP
C1259	100p 50V :CHIP #	
R032	#	4.7k :CHIP
R036	#	4.7k :CHIP
R141	330k :CHIP	#
R152	4.7k :CHIP	#
R164	120k :CHIP	#
R173	22k :CHIP	#
R174	330k :CHIP	220k :CHIP
R175	18k :CHIP	10k :CHIP
R179	820k :CHIP	4.7M :CHIP

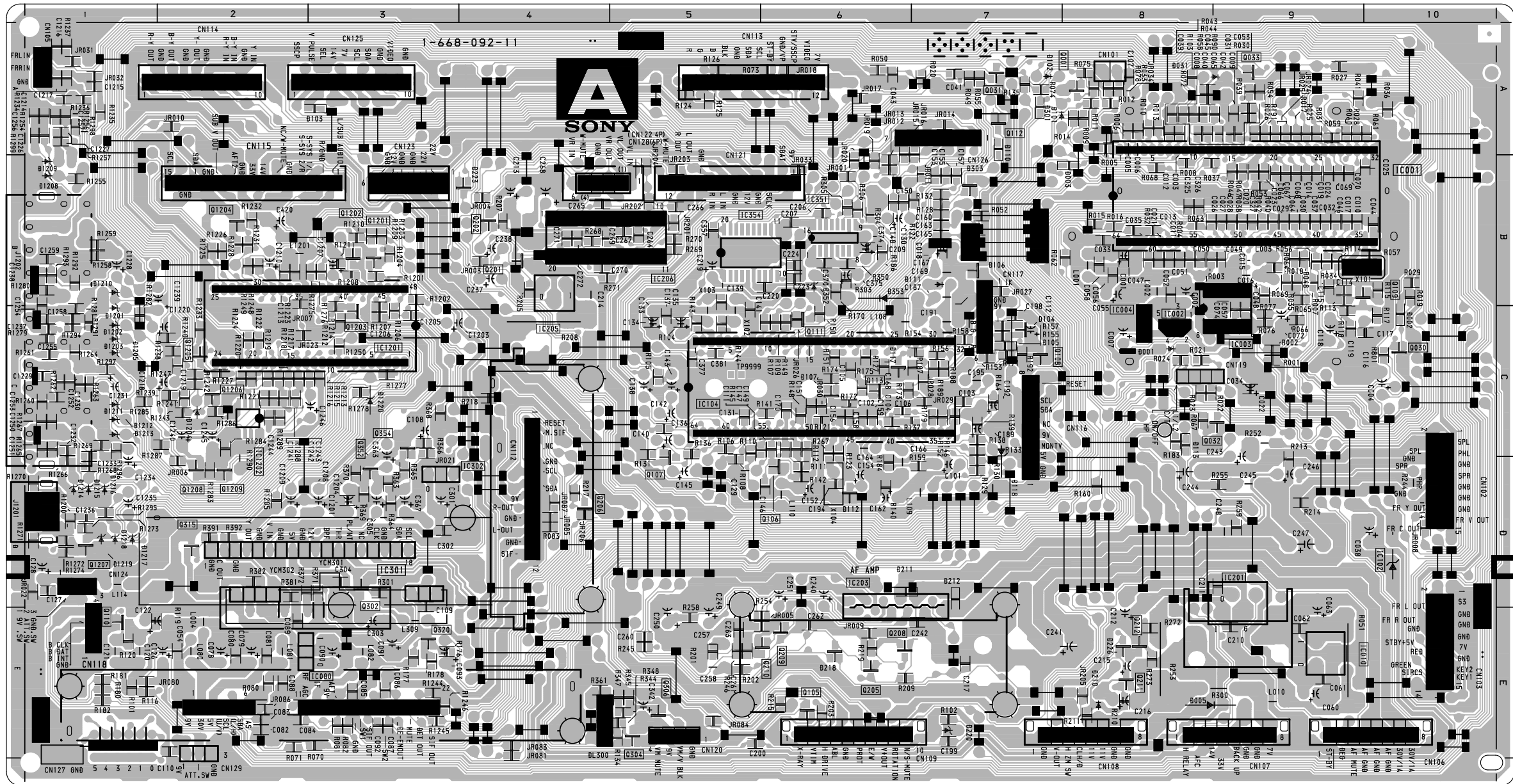
Mark : not mounted



A BOARD WAVEFORMS



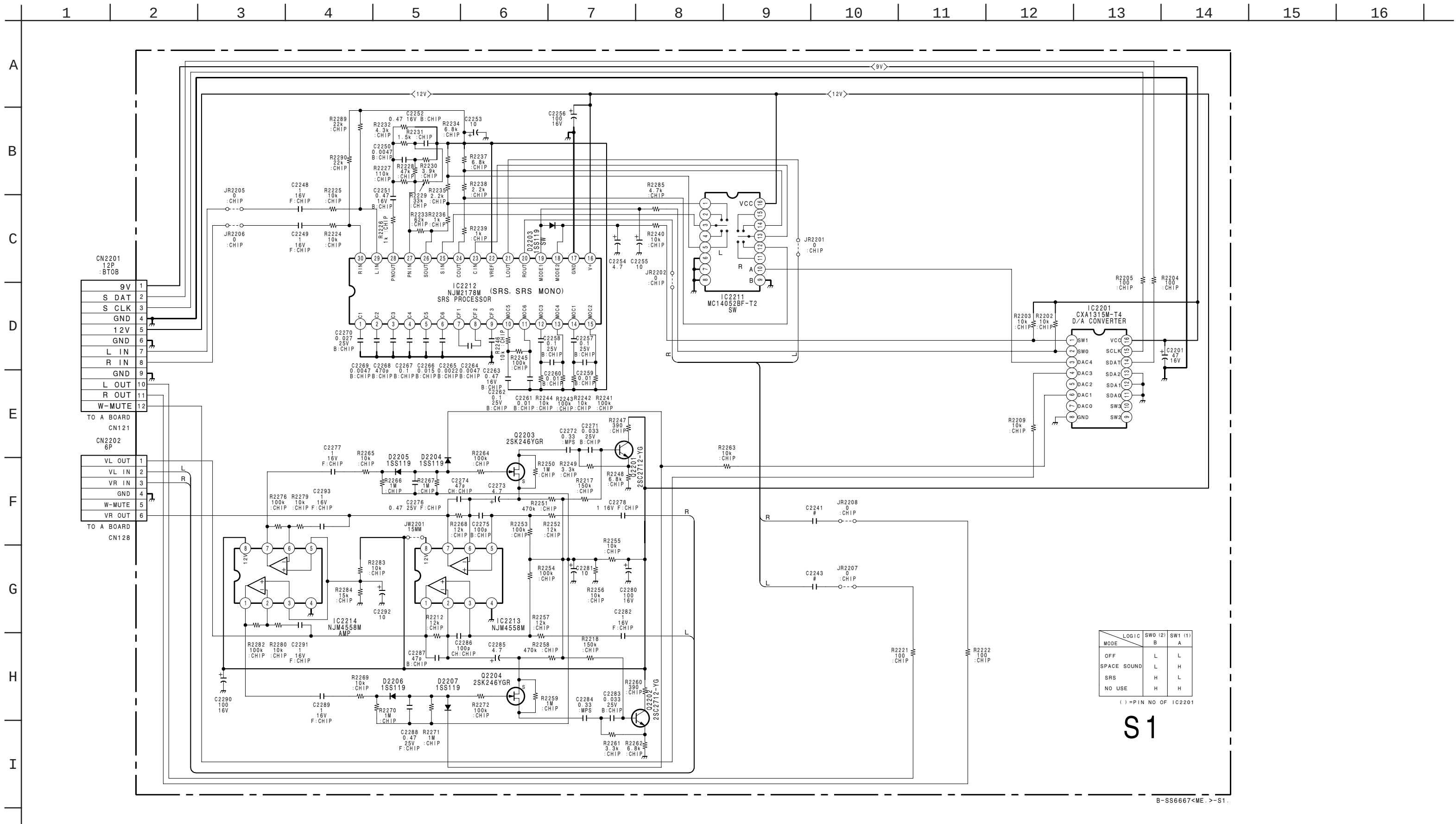
- A Board -



A BOARD

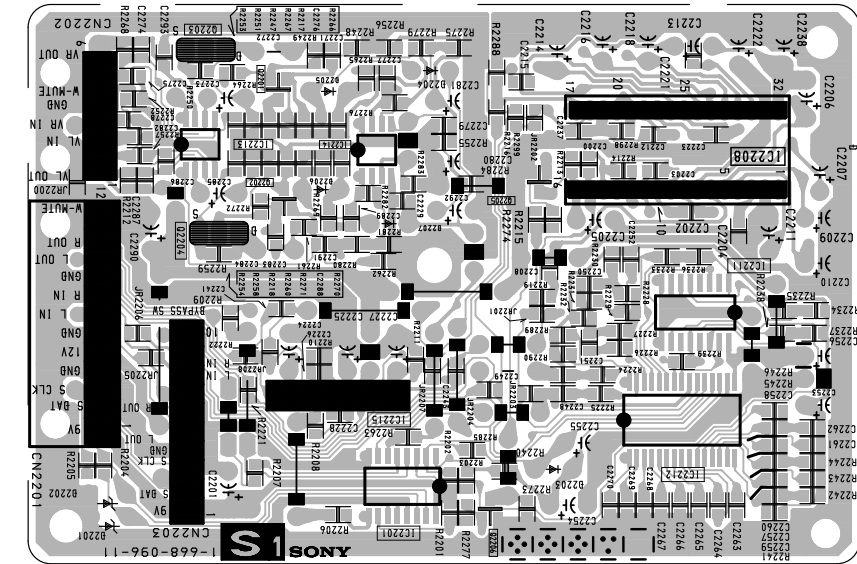
IC		DIODE	
IC001	B-9	D001	C-8 *
IC002	C-8	D002	C-10 ③
IC003	C-9	D005	E-8 -
IC102	D-10	D101	A-7 -
IC104	C-5	D102	A-7 -
IC201	D-9	D103	A-3 ③
IC203	D-6	D104	C-7 ⑧
IC205	C-4	D105	C-7 ⑧
IC206	B-5	D106	B-7 ④
IC351	B-6	D107	C-6 ④
IC354	B-5	D111	B-7 -
IC1201	C-3	D112	D-6 ④
TRANSISTOR		D117	C-6 ③
		D210	E-8 -
		D211	D-6 ③
		D212	D-7 ③
		D218	E-6 ⑧
		D220	E-7 -
		D352	B-6 -
		D353	B-6 -
		D1201	C-1 -
		D1202	C-1 -
		D1203	C-1 -
		D1204	C-2 -
		D1205	C-1 -
		D1208	B-1 -
		D1209	B-1 -
		D1210	B-1 -
		D1211	C-1 -
		D1212	C-1 -
		D1213	C-1 -
		D1214	D-1 -
		D1215	D-1 -
		D1216	D-1 -
		D1220	C-3 -
		OTHER	
		DL300	E-4
		X101	B-9
		X102	C-5
		X103	B-5
		X104	D-6

(3) Schematic Diagram of S1 Board



S1 [AUDIO EFFECT]

- S1 Board -



C2 (RGB OUT)

V901 PICTURE TUBE

V902 PICTURE TUBE

M68KZT71X (29 inch)

M60KWL70X (25 inch)

C2 BOARD * MARK LIST

	KV-J25MF8J	KV-J29MF8J
J701	1-251-239-11 SOCKET. CRT	1-526-990-22 SOCKET.
RV702	110M	#

B-SS6667<ME>->C2.

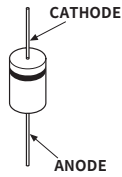


① PAL/SECAM J25MF1/J : 120Vp-p (H) J29MF1/J : 120Vp-p (H)	① NTSC J25MF1/J : 120Vp-p (H) J29MF1/J : 120Vp-p (H)
② PAL/SECAM J25MF1/J : 120Vp-p (H) J29MF1/J : 100Vp-p (H)	② NTSC J25MF1/J : 120Vp-p (H) J29MF1/J : 100Vp-p (H)
③ PAL/SECAM J25MF1/J : 120Vp-p (H) J29MF1/J : 100Vp-p (H)	③ NTSC J25MF1/J : 120Vp-p (H) J29MF1/J : 100Vp-p (H)
④ J25MF1/J : 24Vp-p (H) J29MF1/J : 22Vp-p (H)	

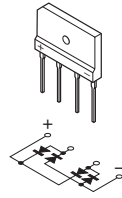
6-5. SEMICONDUCTORS

DIODE

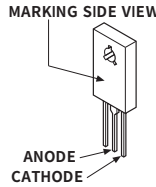
D1N120
RGP10GPKG23
EL1Z
GP08D
RD5.1ES
RGP02-17EL-6433
RGP02-20EL



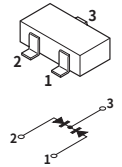
D4SB60L



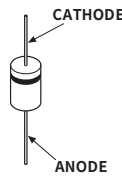
D5LC20U



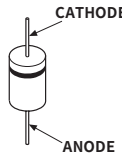
DAN202K



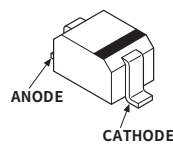
ERC06-15S
RU4AM-T3
S3L20UF4



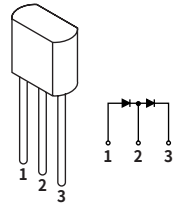
ERD29-08J



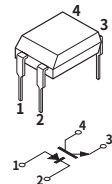
MA111
1SS355



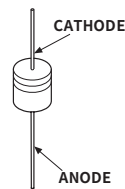
MC932



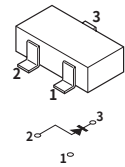
ON3171R



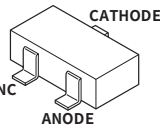
RD30ESB2
RD33ES-B2
RD4.7ESB2
RD5.1ES-B2
RD5.6ES-B1
RD7.5ES-B1
RD8.2ES-B2
RD9.1ES-L



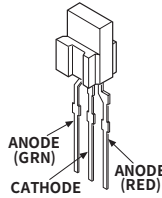
1SS119-25
RD3.6M-B1
MTZJ-T-77-5.6B
RD5.6M-B2
RD6.8M-B3



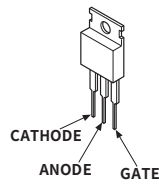
RD6.8M-B



SPB-26MVWF

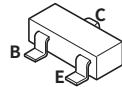


5P-6M

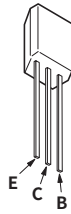


TRANSISTOR

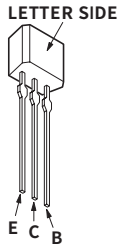
DTA114EK
DTA144EK
DTA144EKA
DTC114EK
DTC124EK
DTC144EK
2SA1162G
2SC1623-L5L6
2SC2712-YG-TE85
2SD601A-Q



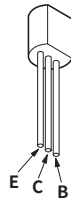
DTC114ES
DTC144ES
RN1202



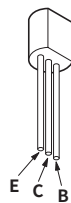
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2SA1175-HFE
2SA933AS-QRT
2SC2785-HFE



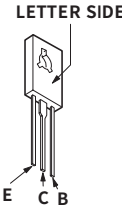
2SA1091-0
2SC2551-0



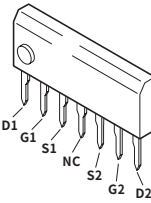
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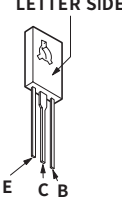
2SC2611
2SC2688-LK
2SC3601



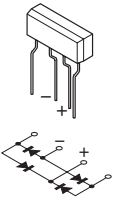
2SC4927-01



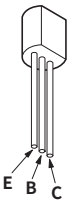
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2SD2394-F

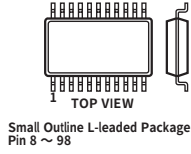


2SK246-YGR-TPE2

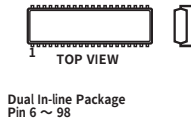


IC

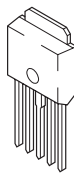
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NJM2178M-T2
NJM4558M-T2
TDA8395T



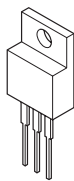
CXA1855S
CXA2050S
CXA85332A-073S
CXP85332A-206S
MC14052BF-T2
MSP3410B
P83C654
SAA5281ZP
ST24C04CB1
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TDA8424
UPC4558C
UPC574J



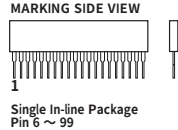
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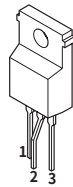
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TA7812S



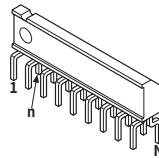
SBX1981-11



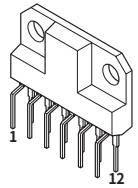
SE135N



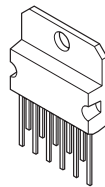
STR-S6708



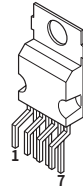
STR-S6709
TA8200AH



TDA2009A



TDA8172



SECTION 7

EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.

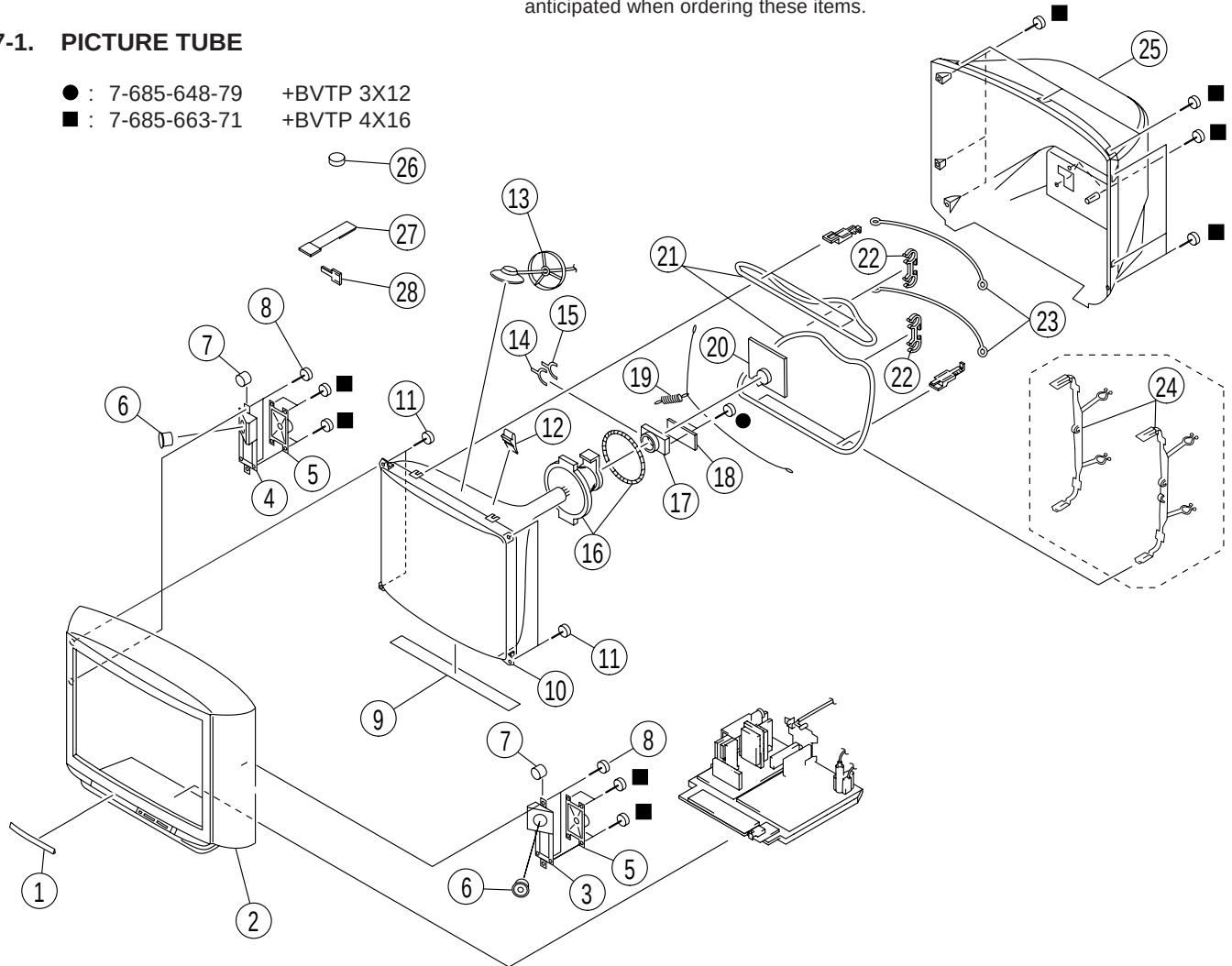
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- 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 mark Δ are critical for safety. Replace only with part number specified.

7-1. PICTURE TUBE

- : 7-685-648-79 +BVTP 3X12
 ■ : 7-685-663-71 +BVTP 4X16

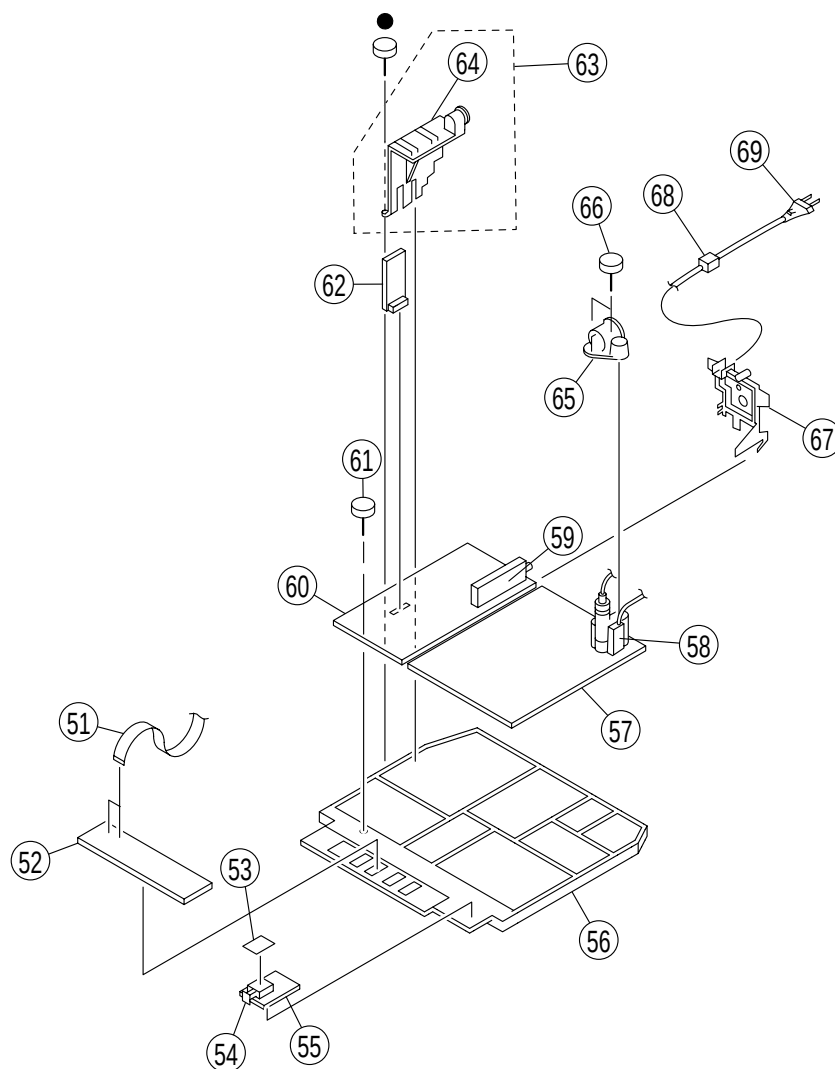


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-062-324-61	DOOR, CONTROL (J29MF8J)		16	Δ 8-451-467-21	DEFLECTION YOKE (Y29GXA2-S) (J29MF8J)	
	4-062-324-71	DOOR, CONTROL (J25MF8J)		17	Δ 1-452-762-21	NECK ASSEMBLY NA294 (J25MF8J)	
2	X-4035-158-1	BEZNET ASSY (J29MF8J)			Δ 1-452-762-31	NECK ASSEMBLY NA294 (J29MF8J)	
	X-4035-164-1	BEZNET ASSY (J25MF8J)		18	* A-1342-393-A	VM BOARD, COMPLETE (J29MF8J)	
3	* X-4033-931-2	BRACKET (R) ASSY, SP (J29MF8J)			* A-1342-394-A	VM BOARD, COMPLETE (J25MF8J)	
	* X-4034-562-1	BRACKET (R) ASSY, SP (J25MF8J)		19	4-369-318-00	SPRING, TENSION	
4	* X-4033-930-2	BRACKET (L) ASSY, SP (J29MF8J)		20	* A-1331-604-A	C2 BOARD, COMPLETE (J29MF8J)	
	* X-4034-561-1	BRACKET (L) ASSY, SP (J25MF8J)			* A-1331-625-A	C2 BOARD, COMPLETE (J25MF8J)	
5	1-505-503-11	SPEAKER (15X6.5CM)		21	Δ 1-403-619-51	COIL, DEMAGNETIZATION (J25MF8J)	
6	1-505-489-11	SPEAKER (5CM) (J29MF8J)			Δ 1-403-672-12	COIL, DEMAGNETIZATION (J29MF8J)	
7	4-374-745-21	CUSHION (A)		22	* 4-054-297-02	HOLDER, DGC (J29MF8J)	
8	4-384-096-01	SCREW, TAPPING (4X16)+W		23	4-043-827-02	BAND, DEGAUSSING COIL	
9	4-385-725-01	SHEET, BLOTING		24	* 4-042-988-02	HOLDER, DGC (J25MF8J)	
10	Δ 8-733-244-05	PICTURE TUBE (M60KWL70X) (J25MF8J)		25	4-054-484-03	COVER, REAR (J29MF8J)	
	Δ 8-733-868-05	PICTURE TUBE (M68KZT71X) (J29MF8J)			4-054-493-02	COVER, REAR (J25MF8J)	
11	4-046-765-01	SCREW, TAPPING 7+CROWN WASHER			1-452-032-00	MAGNET, DISK ; 10mm ϕ	
12	4-046-600-01	SPACER, DY		26	4-051-737-21	PIECE A(100), CONV. CORRECT	
13	3-704-372-01	HOLDER, HV CABLE		27	4-034-272-01	PLATE, CORRECTION, TLV	
14	1-452-278-22	MAGNET, PURITY (J29MF8J)		28	4-034-272-11	PLATE, CORRECTION, TLV	
15	1-452-278-32	MAGNET, PURITY (J29MF8J)			4-034-272-41	PLATE, CORRECTION, TLV	
16	Δ 8-451-404-41	DEFLECTION YOKE (Y25GXAS) (J25MF8J)					

7-2. CHASSIS

● : 7-685-648-79 +BVTP 3X12

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



REF. NO.	PART NO.	DESCRIPTION	REMARK
51	1-777-353-11	CABLE, FLAT	
52	* A-1372-257-A	H3 BOARD, COMPLETE	
53	* 4-055-447-21	SHEET, INSULATING	
54	△ 1-571-433-21	SWITCH, PUSH (AC POWER)	
55	* A-1241-319-A	F1 BOARD, COMPLETE	
56	* X-4034-588-4	BRACKET ASSY, MAIN	
57	* A-1346-699-A	D BOARD, COMPLETE (J29MF8J)	
	* A-1346-700-A	D BOARD, COMPLETE (J25MF8J)	
58	△ 1-453-227-11	TRANSFORMER ASSY, FLYBACK (NX-4002/M3I4) (J25MF8J)	
	△ 1-453-227-21	TRANSFORMER ASSY, FLYBACK (NX-4002/M3I4) (J29MF8J)	
59	△ 8-598-375-01	TUNER VSS BTV-FG411	

REF. NO.	PART NO.	DESCRIPTION	REMARK
60	* A-1298-389-A	A BOARD, COMPLETE (J29MF8J)	
	* A-1298-390-A	A BOARD, COMPLETE (J25MF8J)	
61	4-046-797-01	SCREW (3X12), (+)BVTAP	
62	* A-1390-802-A	S1 BOARD, COMPLETE	
63	X-4034-323-1	HOLDER ASSY, PWB (J29MF8J)	64
64	* 4-055-142-02	HOLDER, PC BOARD	
65	* 4-055-139-01	HOLDER, FBT	
66	4-302-428-03	SCREW (WASHER HEAD) (+P 3X12)	
67	4-055-143-11	BRACKET, TERMINAL	
68	4-022-115-00	HOLDER, AC CORD	
69	△ 1-574-062-12	CORD, POWER (WITH CONNECTOR)	2.5A/250V

SECTION 8

ELECTRICAL PARTS LIST

F1 **A**

NOTE:

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

- The components identified by $\blacktriangle$ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

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

- CAPACITORS
PF : $\mu\mu$ F

- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	* A-1241-319-A	F1 BOARD, COMPLETE *****		C025	1-163-275-11	CERAMIC CHIP 0.001MF 5%	50V
		<CONNECTOR>		C026	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
CN1690	* 1-580-844-11	PIN, CONNECTOR (POWER)		C027	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
CN1691	* 1-695-292-11	PIN, CONNECTOR (POWER)		C028	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
		<FUSE>		C029	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
F1690	Δ 1-532-350-11	FUSE, TIME-LAG 4A/250V		C030	1-163-037-11	CERAMIC CHIP 0.022MF 10%	50V
	1-533-223-11	HOLDER, FUSE ; F1690		C031	1-163-243-11	CERAMIC CHIP 47PF 5%	50V
		<SWITCH>		C032	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
S1690	Δ 1-571-433-21	SWITCH, PUSH (AC POWER)		C033	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
		*****		C034	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
				C035	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
				C037	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
				C038	1-124-122-11	ELECT 100MF 20%	50V
				C039	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C040	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C041	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
				C042	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C043	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C044	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C045	1-216-295-91	SHORT 0	
				C046	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C048	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C049	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C050	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C051	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
				C052	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
				C053	1-164-004-11	CERAMIC CHIP 0.1MF 10%	25V
				C054	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C055	1-126-941-11	ELECT 470MF 20%	16V
				C056	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V
				C057	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
				C064	1-163-037-11	CERAMIC CHIP 0.022MF 10%	50V
				C065	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
				C066	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
				C067	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
				C068	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
				C069	1-163-259-91	CERAMIC CHIP 220PF 5%	50V
				C072	1-126-941-11	ELECT 470MF 20%	16V
				C074	1-163-001-11	CERAMIC CHIP 220PF 10%	50V
				C078	1-104-665-11	ELECT 100MF 20%	16V
				C079	1-136-165-00	FILM 0.1MF 5%	50V
				C080	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C082	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C083	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C084	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C085	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C086	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C087	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C088	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C089	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
				C091	1-104-664-11	ELECT 47MF 20%	25V
				C093	1-104-664-11	ELECT 47MF 20%	25V
				C101	1-124-903-11	ELECT 1MF 20%	50V
C001	1-163-011-11	CERAMIC CHIP 0.0015MF 10%	50V				
C002	1-126-965-11	ELECT 22MF 20%	50V				
C003	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C004	1-126-961-11	ELECT 2.2MF 20%	50V				
C005	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C006	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C007	1-124-902-00	ELECT 0.47MF 20%	50V				
C008	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C009	1-163-275-11	CERAMIC CHIP 0.001MF 5%	50V				
C010	1-163-037-11	CERAMIC CHIP 0.022MF 10%	50V				
C011	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C012	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C013	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C014	1-163-275-11	CERAMIC CHIP 0.001MF 5%	50V				
C015	1-101-884-00	CERAMIC 56PF 5%	50V				
C016	1-101-884-00	CERAMIC 56PF 5%	50V				
C017	1-163-251-11	CERAMIC CHIP 100PF 5%	50V				
C018	1-163-099-00	CERAMIC CHIP 18PF 5%	50V				
C019	1-163-275-11	CERAMIC CHIP 0.001MF 5%	50V				
C020	1-163-259-91	CERAMIC CHIP 220PF 5%	50V				
C021	1-163-275-11	CERAMIC CHIP 0.001MF 5%	50V				
C022	1-124-122-11	ELECT 100MF 20%	50V				
C023	1-163-275-11	CERAMIC CHIP 0.001MF 5%	50V				
C024	1-163-259-91	CERAMIC CHIP 220PF 5%	50V				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C102	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	C210	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C103	1-104-760-11	CERAMIC CHIP 0.047MF	10% 50V	C211	1-107-823-11	CERAMIC CHIP 0.47MF	10% 16V
C105	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C212	1-104-665-11	ELECT 100MF	20% 16V
			(J25MF8J)	C213	1-124-907-11	ELECT 10MF	20% 50V
			(J29MF8J)	C214	1-130-495-00	MYLAR 0.1MF	5% 50V
C105	1-164-343-11	CERAMIC CHIP 0.056MF	10% 25V	C216	1-104-661-91	ELECT 330MF	20% 16V
			(J25MF8J)	C217	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C106	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C219	1-104-664-11	ELECT 47MF	20% 25V
C107	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C220	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C108	1-124-557-11	ELECT 1000MF	20% 25V	C223	1-164-161-11	CERAMIC CHIP 0.22MF	10% 25V
C109	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C224	1-164-161-11	CERAMIC CHIP 0.22MF	10% 25V
C114	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C237	1-124-903-11	ELECT 1MF	20% 50V
C115	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V	C238	1-124-903-11	ELECT 1MF	20% 50V
C116	1-136-165-00	FILM 0.1MF	5% 50V	C240	1-124-903-11	ELECT 1MF	20% 50V
C117	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C241	1-128-550-11	ELECT 2200MF	20% 35V
C118	1-126-965-11	ELECT 22MF	20% 50V	C242	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C119	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C243	1-126-965-11	ELECT 22MF	20% 50V
C120	1-130-493-00	MYLAR 0.068MF	5% 50V	C244	1-128-550-11	ELECT 2200MF	20% 35V
C121	1-130-493-00	MYLAR 0.068MF	5% 50V	C245	1-130-495-00	MYLAR 0.1MF	5% 50V
C122	1-104-665-11	ELECT 100MF	20% 16V	C246	1-126-965-11	ELECT 22MF	20% 50V
C129	1-136-173-00	FILM 0.47MF	5% 50V	C247	1-128-550-11	ELECT 2200MF	20% 35V
C130	1-124-903-11	ELECT 1MF	20% 50V	C248	1-130-495-00	MYLAR 0.1MF	5% 50V
C133	1-104-664-11	ELECT 47MF	20% 25V	C249	1-104-661-91	ELECT 330MF	20% 16V
C134	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C250	1-104-661-91	ELECT 330MF	20% 16V
C135	1-124-902-00	ELECT 0.47MF	20% 50V	C251	1-124-910-11	ELECT 47MF	20% 50V
C136	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C257	1-247-843-11	CARBON 3.3K	5% 1/4W
C137	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C258	1-247-843-11	CARBON 3.3K	5% 1/4W
C138	1-124-907-11	ELECT 10MF	20% 50V	C260	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C139	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	C261	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C140	1-124-907-11	ELECT 10MF	20% 50V	C264	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C141	1-163-099-00	CERAMIC CHIP 18PF	5% 50V	C265	1-164-346-11	CERAMIC CHIP 1MF	16V
C142	1-124-902-00	ELECT 0.47MF	20% 50V	C266	1-164-346-11	CERAMIC CHIP 1MF	16V
C143	1-124-907-11	ELECT 10MF	20% 50V	C267	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C145	1-124-907-11	ELECT 10MF	20% 50V	C268	1-104-665-11	ELECT 100MF	20% 16V
C146	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C269	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C147	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C270	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
C148	1-164-346-11	CERAMIC CHIP 1MF	16V	C325	1-216-055-00	RES, CHIP 1.8K	
C149	1-164-346-11	CERAMIC CHIP 1MF	16V	C326	1-216-055-00	RES, CHIP 1.8K	
C150	1-164-346-11	CERAMIC CHIP 1MF	16V	C327	1-216-055-00	RES, CHIP 1.8K	
C151	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C367	1-104-664-11	ELECT 47MF	20% 25V
C152	1-104-664-11	ELECT 47MF	20% 25V	C370	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C153	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C374	1-124-910-11	ELECT 47MF	20% 50V
C154	1-126-961-11	ELECT 2.2MF	20% 50V	C375	1-124-910-11	ELECT 47MF	20% 50V
C155	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C420	1-104-664-11	ELECT 47MF	20% 25V
C156	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C1201	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C157	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1203	1-104-664-11	ELECT 47MF	20% 25V
C158	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C1204	1-104-665-11	ELECT 100MF	20% 16V
C159	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1205	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C160	1-164-346-11	CERAMIC CHIP 1MF	16V	C1206	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C162	1-104-666-11	ELECT 220MF	20% 16V	C1207	1-126-966-11	ELECT 33MF	20% 50V
C163	1-164-346-11	CERAMIC CHIP 1MF	16V	C1208	1-104-664-11	ELECT 47MF	20% 25V
C164	1-137-581-11	FILM 0.1MF	5% 100V	C1209	1-104-664-11	ELECT 47MF	20% 25V
C165	1-164-346-11	CERAMIC CHIP 1MF	16V	C1210	1-104-664-11	ELECT 47MF	20% 25V
C166	1-137-581-11	FILM 0.1MF	5% 100V	C1213	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C167	1-104-664-11	ELECT 47MF	20% 25V	C1214	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C168	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1215	1-164-346-11	CERAMIC CHIP 1MF	16V
C169	1-137-372-11	FILM 0.022MF	5% 50V	C1216	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C170	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C1217	1-164-346-11	CERAMIC CHIP 1MF	16V
C187	1-137-372-11	FILM 0.022MF	5% 50V	C1218	1-104-664-11	ELECT 47MF	20% 25V
C189	1-126-965-11	ELECT 22MF	20% 50V	C1219	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C191	1-137-372-11	FILM 0.022MF	5% 50V	C1220	1-104-664-11	ELECT 47MF	20% 25V
C192	1-126-961-11	ELECT 2.2MF	20% 50V	C1226	1-164-346-11	CERAMIC CHIP 1MF	16V
C195	1-136-173-00	FILM 0.47MF	5% 50V	C1227	1-164-346-11	CERAMIC CHIP 1MF	16V
C198	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C1228	1-126-941-11	ELECT 470MF	20% 16V
C199	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1229	1-164-346-11	CERAMIC CHIP 1MF	16V
C200	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1230	1-164-346-11	CERAMIC CHIP 1MF	16V
C206	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1231	1-104-664-11	ELECT 47MF	20% 25V
C207	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1232	1-164-346-11	CERAMIC CHIP 1MF	16V
C209	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1233	1-164-346-11	CERAMIC CHIP 1MF	16V			<DELAY LINE>	
C1234	1-104-664-11	ELECT 47MF	20% 25V				
C1242	1-216-295-91	SHORT 0		DL300	1-409-547-11	DELAY LINE	
C1243	1-216-295-91	SHORT 0				<IC>	
C1246	1-104-664-11	ELECT 47MF	20% 25V				
C1250	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC001	8-752-890-83	IC CXP85332A-238S	
C1251	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC002	8-759-805-37	IC L78LR05D-MA	
C1252	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC003	8-759-370-33	IC ST24C04FB6	
C1253	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC102	8-759-157-40	IC uPC574J	
C1254	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC104	8-752-076-87	IC CXA2050S	
C1255	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC201	8-759-095-63	IC PQ09RF2	
C1256	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC203	8-759-168-24	IC TA8200AH	
C1257	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	IC205	8-759-231-58	IC TA7812S	
C1258	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	IC206	8-759-090-21	IC TDA8424	
C1259	1-163-251-11	CERAMIC CHIP 100PF	5% 50V (J25MF8J)	IC351	8-759-288-85	IC TDA4665T-T	
		<CONNECTOR>		IC354	8-759-251-56	IC TDA8395T	
				IC1201	8-752-068-46	IC CXA1855S	
CN102	1-569-321-11	SOCKET, CONNECTOR 15P				<JACK>	
CN103	1-569-321-11	SOCKET, CONNECTOR 15P					
CN106	* 1-779-891-11	CONNECTOR, BOARD TO BOARD 8P		J1202	1-778-388-11	JACK BLOCK, PIN 9P	
CN107	* 1-779-891-11	CONNECTOR, BOARD TO BOARD 8P				<CHIP CONDUCTOR>	
CN108	* 1-779-891-11	CONNECTOR, BOARD TO BOARD 8P					
CN109	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P		JR001	1-216-295-91	SHORT 0	
CN117	* 1-564-509-11	PLUG, CONNECTOR 6P		JR005	1-216-295-91	SHORT 0	
CN118	* 1-560-278-21	PLUG, CONNECTOR 4P		JR006	1-216-295-91	SHORT 0	
CN120	* 1-564-506-11	PLUG, CONNECTOR 3P		JR007	1-216-295-91	SHORT 0	
CN121	* 1-770-747-11	CONNECTOR, BOARD TO BOARD 12P		JR008	1-216-295-91	SHORT 0	
CN127	1-695-915-11	TAB (CONTACT)		JR009	1-216-295-91	SHORT 0	
CN128	1-770-722-11	CONNECTOR, BOARD TO BOARD 6P		JR010	1-216-295-91	SHORT 0	
		<DIODE>		JR011	1-216-295-91	SHORT 0	
D001	8-719-109-81	DIODE RD4.7ESB2		JR012	1-216-295-91	SHORT 0	
D002	8-719-988-62	DIODE 1SS355		JR013	1-216-295-91	SHORT 0	
D005	8-719-908-03	DIODE GP08D		JR023	1-216-295-91	SHORT 0	
D101	8-719-911-19	DIODE 1SS119-25		JR024	1-216-295-91	SHORT 0	
D102	1-249-431-11	CARBON 15K	5% 1/4W	JR025	1-216-295-91	SHORT 0	
D103	8-719-988-62	DIODE 1SS355		JR027	1-216-295-91	SHORT 0	
D104	8-719-914-43	DIODE DAN202K		JR028	1-216-295-91	SHORT 0	
D105	8-719-988-62	DIODE 1SS355		JR029	1-216-295-91	SHORT 0	
D106	8-719-157-36	DIODE RD6.8M-B		JR030	1-216-295-91	SHORT 0	
D107	8-719-106-31	DIODE RD8.2M-T1B1		JR031	1-216-295-91	SHORT 0	
D111	8-719-110-22	DIODE RD11ESB2		JR032	1-216-295-91	SHORT 0	
D112	8-719-106-43	DIODE RD9.1M-B1		JR081	1-216-295-91	SHORT 0	
D117	8-719-400-75	DIODE MA3091		JR083	1-216-295-91	SHORT 0	
D210	8-719-911-19	DIODE 1SS119-25		JR087	1-216-295-91	SHORT 0	
D211	8-719-404-49	DIODE MA111		JR205	1-216-295-91	SHORT 0	
D212	8-719-404-49	DIODE MA111		JR206	1-216-295-91	SHORT 0	
D218	8-719-914-43	DIODE DAN202K				<COIL>	
D220	8-719-109-88	DIODE RD5.6ESB1		L001	1-408-397-00	INDUCTOR 1UH	
D352	8-719-109-84	DIODE RD5.1ESB1		L002	1-408-409-00	INDUCTOR 10UH	
D353	8-719-908-03	DIODE GP08D		L003	1-408-605-31	INDUCTOR 15UH	
D1201	8-719-121-24	DIODE RD9.1ESL		L004	1-408-409-00	INDUCTOR 10UH	
D1202	8-719-121-24	DIODE RD9.1ESL		L010	1-410-663-31	INDUCTOR 10UH	
D1203	8-719-121-24	DIODE RD9.1ESL		L080	1-408-409-00	INDUCTOR 10UH	
D1204	8-719-121-24	DIODE RD9.1ESL		L082	1-408-409-00	INDUCTOR 10UH	
D1205	8-719-121-24	DIODE RD9.1ESL		L108	1-408-409-00	INDUCTOR 10UH	
D1208	8-719-121-24	DIODE RD9.1ESL		L109	1-408-421-00	INDUCTOR 100UH	
D1209	8-719-121-24	DIODE RD9.1ESL		L110	1-408-409-00	INDUCTOR 10UH	
D1210	8-719-121-24	DIODE RD9.1ESL		L1201	1-408-412-00	INDUCTOR 18UH	
D1211	8-719-121-24	DIODE RD9.1ESL				<TRANSISTOR>	
D1212	8-719-121-24	DIODE RD9.1ESL					
D1213	8-719-121-24	DIODE RD9.1ESL		Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
D1214	8-719-121-24	DIODE RD9.1ESL		Q030	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
D1215	8-719-121-24	DIODE RD9.1ESL		Q031	8-729-216-22	TRANSISTOR 2SA1162-G	
D1216	8-719-121-24	DIODE RD9.1ESL		Q033	8-729-901-06	TRANSISTOR DTA144EK	
D1220	8-719-121-24	DIODE RD9.1ESL					



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q105	8-729-027-43	TRANSISTOR DTC114EKA-T146		R057	1-216-049-91	RES, CHIP 1.0K	
Q106	8-729-216-22	TRANSISTOR 2SA1162-G		R058	1-216-049-91	RES, CHIP 1.0K	
Q108	8-729-027-43	TRANSISTOR DTC114EKA-T146		R059	1-216-065-00	RES, CHIP 4.7K	
Q109	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R061	1-216-025-91	RES, CHIP 100	
Q110	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R062	1-216-025-91	RES, CHIP 100	
Q111	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R063	1-216-025-91	RES, CHIP 100	
				R064	1-216-025-91	RES, CHIP 100	
Q112	8-729-027-43	TRANSISTOR DTC114EKA-T146		R065	1-216-065-00	RES, CHIP 4.7K	
Q113	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R066	1-216-065-00	RES, CHIP 4.7K	
Q205	1-801-806-11	TRANSISTOR DTC144EK-T146		R069	1-216-049-91	RES, CHIP 1.0K	
Q209	1-801-806-11	TRANSISTOR DTC144EK-T146		R070	1-216-033-00	RES, CHIP 220	
Q210	1-801-806-11	TRANSISTOR DTC144EK-T146		R071	1-216-033-00	RES, CHIP 220	
Q211	8-729-216-22	TRANSISTOR 2SA1162-G		R072	1-216-073-00	RES, CHIP 10K	
Q306	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R073	1-216-073-00	RES, CHIP 10K	
Q315	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R074	1-216-079-00	RES, CHIP 18K	
Q320	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R075	1-216-073-00	RES, CHIP 10K	
Q352	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R076	1-216-025-91	RES, CHIP 100	
Q354	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R077	1-216-025-91	RES, CHIP 100	
Q1201	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R078	1-216-073-00	RES, CHIP 10K	
Q1202	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R081	1-216-049-91	RES, CHIP 1.0K	
Q1203	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R090	1-216-073-00	RES, CHIP 10K	
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G		R101	1-216-065-00	RES, CHIP 4.7K	
Q1205	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R102	1-216-025-91	RES, CHIP 100	
Q1206	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R103	1-216-041-00	RES, CHIP 470	
		<RESISTOR>		R104	1-216-077-00	RES, CHIP 15K	
				R105	1-216-025-91	RES, CHIP 100	
				R106	1-216-049-91	RES, CHIP 1.0K	
R001	1-216-065-00	RES, CHIP 4.7K		R107	1-216-033-00	RES, CHIP 220	
R002	1-216-065-00	RES, CHIP 4.7K		R108	1-216-049-91	RES, CHIP 1.0K	
R003	1-216-065-00	RES, CHIP 4.7K		R109	1-216-033-00	RES, CHIP 220	
R004	1-216-065-00	RES, CHIP 4.7K		R110	1-216-049-91	RES, CHIP 1.0K	
R005	1-216-025-91	RES, CHIP 100		R111	1-216-033-00	RES, CHIP 220	
R006	1-216-025-91	RES, CHIP 100		R112	1-216-025-91	RES, CHIP 100	
R007	1-216-073-00	RES, CHIP 10K		R113	1-216-081-00	RES, CHIP 22K	
R008	1-216-049-91	RES, CHIP 1.0K		R114	1-216-041-00	RES, CHIP 470	
R009	1-216-049-91	RES, CHIP 1.0K		R115	1-216-081-00	RES, CHIP 22K	
R010	1-216-049-91	RES, CHIP 1.0K		R116	1-216-081-00	RES, CHIP 22K	
R011	1-216-049-91	RES, CHIP 1.0K		R117	1-216-081-00	RES, CHIP 22K	
R013	1-216-049-91	RES, CHIP 1.0K		R118	1-216-081-00	RES, CHIP 22K	
R014	1-216-049-91	RES, CHIP 1.0K		R119	1-216-055-00	RES, CHIP 1.8K	
R015	1-216-049-91	RES, CHIP 1.0K		R120	1-216-109-00	RES, CHIP 330K	
R016	1-216-049-91	RES, CHIP 1.0K		R121	1-208-806-11	RES, CHIP 10K	
R018	1-216-033-00	RES, CHIP 220		R122	1-216-033-00	RES, CHIP 220	
R019	1-216-101-00	RES, CHIP 150K		R123	1-216-065-00	RES, CHIP 4.7K	
R020	1-216-025-91	RES, CHIP 100		R124	1-216-025-91	RES, CHIP 100	
R026	1-216-049-91	RES, CHIP 1.0K		R125	1-216-025-91	RES, CHIP 100	
R028	1-216-025-91	RES, CHIP 100		R126	1-216-025-91	RES, CHIP 100	
R029	1-216-065-00	RES, CHIP 4.7K		R128	1-216-033-00	RES, CHIP 220	
R030	1-216-097-91	RES, CHIP 100K		R129	1-216-041-00	RES, CHIP 470	
R031	1-216-049-91	RES, CHIP 1.0K		R130	1-216-025-91	RES, CHIP 100	
R032	1-216-065-00	RES, CHIP 4.7K (J29MF8J)		R132	1-216-033-00	RES, CHIP 220	
R033	1-216-049-91	RES, CHIP 1.0K		R133	1-216-025-91	RES, CHIP 100	
R035	1-216-065-00	RES, CHIP 4.7K		R135	1-216-295-91	SHORT 0	
R036	1-216-065-00	RES, CHIP 4.7K (J29MF8J)		R138	1-216-025-91	RES, CHIP 100	
R038	1-216-051-00	RES, CHIP 1.2K		R139	1-216-049-91	RES, CHIP 1.0K	
R039	1-216-025-91	RES, CHIP 100		R141	1-216-109-00	RES, CHIP 330K (J25MF8J)	
R040	1-216-051-00	RES, CHIP 1.2K		R142	1-216-049-91	RES, CHIP 1.0K	
R041	1-216-025-91	RES, CHIP 100		R143	1-216-041-00	RES, CHIP 470	
R042	1-216-051-00	RES, CHIP 1.2K		R144	1-216-053-00	RES, CHIP 1.5K	
R043	1-216-081-00	RES, CHIP 22K		R145	1-216-061-00	RES, CHIP 3.3K	
R044	1-216-073-00	RES, CHIP 10K		R146	1-216-025-91	RES, CHIP 100	
R046	1-216-025-91	RES, CHIP 100		R148	1-216-105-91	RES, CHIP 220K	
R047	1-216-025-91	RES, CHIP 100		R149	1-216-041-00	RES, CHIP 470	
R048	1-216-025-91	RES, CHIP 100		R150	1-216-041-00	RES, CHIP 470	
R049	1-216-121-91	RES, CHIP 1.0M		R151	1-216-043-91	RES, CHIP 560	
R050	1-216-057-00	RES, CHIP 2.2K		R152	1-216-065-00	RES, CHIP 4.7K (J25MF8J)	
R053	1-216-025-91	RES, CHIP 100		R153	1-216-295-91	SHORT 0	
R054	1-216-073-00	RES, CHIP 10K		R154	1-216-031-00	RES, CHIP 180	
R055	1-216-095-00	RES, CHIP 82K		R155	1-216-295-91	SHORT 0	
R056	1-216-025-91	RES, CHIP 100					



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R156	1-216-031-00	RES, CHIP 180		R1201	1-216-025-91	RES, CHIP 100	
R157	1-216-295-91	SHORT	0	R1202	1-216-025-91	RES, CHIP 100	
R158	1-216-031-00	RES, CHIP 180		R1203	1-216-033-00	RES, CHIP 220	
				R1204	1-216-031-00	RES, CHIP 180	
R159	1-216-033-00	RES, CHIP 220		R1205	1-216-073-00	RES, CHIP 10K	
R160	1-216-073-00	RES, CHIP 10K		R1206	1-216-067-00	RES, CHIP 5.6K	
R164	1-216-099-00	RES, CHIP 120K (J25MF8J)		R1207	1-216-067-00	RES, CHIP 5.6K	
R170	1-216-037-00	RES, CHIP 330		R1208	1-216-025-91	RES, CHIP 100	
R171	1-216-081-00	RES, CHIP 22K		R1209	1-216-033-00	RES, CHIP 220	
R172	1-216-097-91	RES, CHIP 100K		R1210	1-216-031-00	RES, CHIP 180	
R173	1-216-081-00	RES, CHIP 22K (J25MF8J)		R1211	1-216-093-00	RES, CHIP 68K	
R174	1-216-105-91	RES, CHIP 220K (J29MF8J)		R1212	1-216-025-91	RES, CHIP 100	
R174	1-216-109-00	RES, CHIP 330K (J25MF8J)		R1213	1-216-073-00	RES, CHIP 10K	
R175	1-216-073-00	RES, CHIP 10K (J29MF8J)		R1214	1-216-041-00	RES, CHIP 470	
R175	1-216-079-00	RES, CHIP 18K (J25MF8J)		R1215	1-216-025-91	RES, CHIP 100	
R176	1-216-061-00	RES, CHIP 3.3K		R1216	1-216-025-91	RES, CHIP 100	
R177	1-216-049-91	RES, CHIP 1.0K		R1217	1-216-025-91	RES, CHIP 100	
R178	1-216-025-91	RES, CHIP 100		R1218	1-216-025-91	RES, CHIP 100	
R179	1-208-291-11	RES, CHIP 4.7M (J29MF8J)		R1219	1-216-025-91	RES, CHIP 100	
R179	1-216-119-00	RES, CHIP 820K (J25MF8J)		R1220	1-216-025-91	RES, CHIP 100	
R180	1-216-033-00	RES, CHIP 220		R1221	1-216-073-00	RES, CHIP 10K	
R181	1-216-033-00	RES, CHIP 220		R1222	1-216-025-91	RES, CHIP 100	
R182	1-216-033-00	RES, CHIP 220		R1223	1-216-041-00	RES, CHIP 470	
R184	1-216-059-00	RES, CHIP 2.7K		R1224	1-216-025-91	RES, CHIP 100	
R186	1-216-001-00	RES, CHIP 10		R1225	1-216-025-91	RES, CHIP 100	
R191	1-216-025-91	RES, CHIP 100		R1226	1-216-025-91	RES, CHIP 100	
R192	1-216-097-91	RES, CHIP 100K		R1227	1-216-025-91	RES, CHIP 100	
R201	1-164-346-11	CERAMIC CHIP 1MF	16V	R1228	1-216-025-91	RES, CHIP 100	
R202	1-164-346-11	CERAMIC CHIP 1MF	16V	R1231	1-216-295-91	SHORT	0
R203	1-216-073-00	RES, CHIP 10K		R1232	1-216-033-00	RES, CHIP 220	
R208	1-216-475-11	METAL OXIDE 120	5% 3W F	R1233	1-216-053-00	RES, CHIP 1.5K	
R209	1-216-049-91	RES, CHIP 1.0K		R1234	1-216-105-91	RES, CHIP 220K	
R210	1-216-089-91	RES, CHIP 47K		R1235	1-216-295-91	SHORT	0
R211	1-216-049-91	RES, CHIP 1.0K		R1236	1-216-295-91	SHORT	0
R213	1-216-073-00	RES, CHIP 10K		R1237	1-216-105-91	RES, CHIP 220K	
R214	1-216-073-00	RES, CHIP 10K		R1239	1-216-022-00	RES, CHIP 75	
R215	1-216-089-91	RES, CHIP 47K		R1240	1-216-022-00	RES, CHIP 75	
R217	1-216-295-91	SHORT	0	R1241	1-216-097-91	RES, CHIP 100K	
R244	1-249-413-11	CARBON 470	5% 1/4W	R1242	1-216-057-00	RES, CHIP 2.2K	
R245	1-216-061-00	RES, CHIP 3.3K		R1243	1-216-097-91	RES, CHIP 100K	
R246	1-216-061-00	RES, CHIP 3.3K		R1245	1-216-027-00	RES, CHIP 120	
R252	1-249-413-11	CARBON 470	5% 1/4W	R1246	1-216-033-00	RES, CHIP 220	
R253	1-216-386-11	METAL OXIDE 0.56	5% 3W F	R1247	1-216-295-91	SHORT	0
R254	1-216-025-91	RES, CHIP 100		R1254	1-216-113-00	RES, CHIP 470K	
R255	1-216-308-00	RES, CHIP 4.7		R1255	1-216-049-91	RES, CHIP 1.0K	
R258	1-216-025-91	RES, CHIP 100		R1256	1-216-113-00	RES, CHIP 470K	
R259	1-216-308-00	RES, CHIP 4.7		R1257	1-216-049-91	RES, CHIP 1.0K	
R267	1-216-041-00	RES, CHIP 470		R1258	1-216-113-00	RES, CHIP 470K	
R268	1-216-025-91	RES, CHIP 100		R1259	1-216-021-00	RES, CHIP 68	
R269	1-216-025-91	RES, CHIP 100		R1260	1-216-105-91	RES, CHIP 220K	
R270	1-216-025-91	RES, CHIP 100		R1261	1-216-065-00	RES, CHIP 4.7K	
R271	1-216-025-91	RES, CHIP 100		R1262	1-216-105-91	RES, CHIP 220K	
R303	1-216-001-00	RES, CHIP 10		R1263	1-216-065-00	RES, CHIP 4.7K	
R304	1-216-049-91	RES, CHIP 1.0K		R1264	1-216-022-00	RES, CHIP 75	
R305	1-216-025-91	RES, CHIP 100		R1265	1-216-105-91	RES, CHIP 220K	
R306	1-216-025-91	RES, CHIP 100		R1266	1-216-065-00	RES, CHIP 4.7K	
R345	1-216-049-91	RES, CHIP 1.0K		R1267	1-216-105-91	RES, CHIP 220K	
R347	1-216-049-91	RES, CHIP 1.0K		R1268	1-216-065-00	RES, CHIP 4.7K	
R361	1-216-295-91	SHORT	0	R1269	1-216-022-00	RES, CHIP 75	
R363	1-216-295-91	SHORT	0	R1275	1-216-025-91	RES, CHIP 100	
R364	1-216-033-00	RES, CHIP 220		R1276	1-216-025-91	RES, CHIP 100	
R365	1-216-025-91	RES, CHIP 100		R1277	1-216-025-91	RES, CHIP 100	
R366	1-216-033-00	RES, CHIP 220		R1278	1-216-025-91	RES, CHIP 100	
R368	1-216-033-00	RES, CHIP 220		R1288	1-216-295-91	SHORT	0
R381	1-216-051-00	RES, CHIP 1.2K		R1289	1-216-295-91	SHORT	0
R382	1-216-051-00	RES, CHIP 1.2K		R1295	1-216-033-00	RES, CHIP 220	
R391	1-216-043-91	RES, CHIP 560		R1296	1-216-033-00	RES, CHIP 220	
R392	1-216-295-91	SHORT	0	R1297	1-216-033-00	RES, CHIP 220	
R801	1-216-025-91	RES, CHIP 100		R1298	1-216-041-00	RES, CHIP 470	
R1200	1-216-033-00	RES, CHIP 220					



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

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1299	1-216-041-00	RES, CHIP 470	
<TUNER>			
TU001	Δ 8-598-375-01	TUNER, VSS BTV-FG441	
<CRYSTAL>			
X101	1-577-358-21	VIBRATOR, CERAMIC	
X102	1-567-505-11	OSCILLATOR, CRYSTAL	
X103	1-567-504-11	OSCILLATOR, CRYSTAL	
X104	1-577-611-11	OSCILLATOR, CERAMIC	
<MODULE>			
YCM301	1-466-162-61	FILTER BLOCK, COM (CFB-4)	

* A-1331-604-A	C2 BOARD, COMPLETE (KV-J29MF8J)	*****	
* A-1331-625-A	C2 BOARD, COMPLETE (KV-J25MF8J)	*****	
7-682-948-01	SCREW +PSW 3X8		
<CAPACITOR>			
C701	1-137-490-11	FILM 0.01MF 10% 1KV	
C702	1-102-074-00	CERAMIC 0.001MF 10% 50V	
C708	1-102-114-00	CERAMIC 470PF 10% 50V	
C709	1-102-114-00	CERAMIC 470PF 10% 50V	
C710	1-102-114-00	CERAMIC 470PF 10% 50V	
C711	1-101-880-00	CERAMIC 47PF 5% 50V	
C712	1-102-114-00	CERAMIC 470PF 10% 50V	
C713	1-102-112-00	CERAMIC 330PF 10% 50V	
C714	1-102-112-00	CERAMIC 330PF 10% 50V	
C716	1-124-122-11	ELECT 100MF 20% 50V	
C717	1-107-651-11	ELECT 4.7MF 20% 250V	
C726	1-104-664-11	ELECT 47MF 20% 25V	
<CONNECTOR>			
CN701	* 1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
CN703	* 1-564-509-11	PLUG, CONNECTOR 6P	
CN704	1-695-915-11	TAB (CONTACT)	
<DIODE>			
D701	8-719-911-19	DIODE 1SS119-25	
D702	8-719-911-19	DIODE 1SS119-25	
D703	8-719-911-19	DIODE 1SS119-25	
D704	8-719-911-19	DIODE 1SS119-25	
D705	8-719-911-19	DIODE 1SS119-25	
D706	8-719-911-19	DIODE 1SS119-25	
D707	8-719-911-19	DIODE 1SS119-25	
D708	8-719-911-19	DIODE 1SS119-25	
D709	8-719-911-19	DIODE 1SS119-25	
D710	8-719-991-33	DIODE 1SS133T-77	
D711	8-719-991-33	DIODE 1SS133T-77	
D712	8-719-991-33	DIODE 1SS133T-77	
D713	8-719-908-03	DIODE GP08D	
D720	8-719-911-19	DIODE 1SS119-25	
D721	8-719-911-19	DIODE 1SS119-25	
<JACK>			
J701	Δ 1-251-239-11	SOCKET, PICTURE TUBE (J25MF8J)	
J701	Δ 1-526-990-21	SOCKET, PICTURE TUBE (J29MF8J)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
<COIL>			
L701	1-410-667-31	INDUCTOR 22UH	
L703	1-408-609-41	INDUCTOR 33UH	
L705	1-408-609-41	INDUCTOR 33UH	
L707	1-408-609-41	INDUCTOR 33UH	
<TRANSISTOR>			
Q701	8-729-326-11	TRANSISTOR 2SC2611	
Q702	8-729-326-11	TRANSISTOR 2SC2611	
Q703	8-729-326-11	TRANSISTOR 2SC2611	
Q704	8-729-326-11	TRANSISTOR 2SC2611	
Q705	8-729-326-11	TRANSISTOR 2SC2611	
Q706	8-729-326-11	TRANSISTOR 2SC2611	
Q707	8-729-200-17	TRANSISTOR 2SA1091-O	
Q708	8-729-200-17	TRANSISTOR 2SA1091-O	
Q709	8-729-200-17	TRANSISTOR 2SA1091-O	
Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q712	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q713	8-729-200-17	TRANSISTOR 2SA1091-O	
Q714	8-729-255-12	TRANSISTOR 2SC2551-O	
<RESISTOR>			
R701	1-244-941-00	CARBON 680K 5% 1/2W	
R702	1-249-496-11	CARBON 100K 5% 1/2W	
R703	1-249-489-11	CARBON 22K 5% 1/2W	
R705	1-216-389-11	METAL OXIDE 1 5% 3W F	
R710	1-215-923-00	METAL OXIDE 10K 5% 3W F	
R711	1-260-101-11	CARBON 1.5K 5% 1/2W	
R712	1-215-923-00	METAL OXIDE 10K 5% 3W F	
R713	1-260-101-11	CARBON 1.5K 5% 1/2W	
R714	1-215-923-00	METAL OXIDE 10K 5% 3W F	
R715	1-260-101-11	CARBON 1.5K 5% 1/2W	
R716	1-249-899-11	CARBON 100 5% 1/4W F	
R717	1-249-899-11	CARBON 100 5% 1/4W F	
R718	1-249-899-11	CARBON 100 5% 1/4W F	
R720	1-249-923-11	CARBON 1K 5% 1/4W F	
R722	1-249-923-11	CARBON 1K 5% 1/4W F	
R724	1-249-923-11	CARBON 1K 5% 1/4W F	
R725	1-249-426-11	CARBON 5.6K 5% 1/4W	
R726	1-249-426-11	CARBON 5.6K 5% 1/4W	
R727	1-249-426-11	CARBON 5.6K 5% 1/4W	
R728	1-249-408-11	CARBON 180 5% 1/4W	
R729	1-249-408-11	CARBON 180 5% 1/4W	
R730	1-247-815-91	CARBON 220 5% 1/4W	
R731	1-249-401-11	CARBON 47 5% 1/4W	
R732	1-249-401-11	CARBON 47 5% 1/4W	
R733	1-249-401-11	CARBON 47 5% 1/4W	
R734	1-260-087-11	CARBON 100 5% 1/2W	
R735	1-249-417-11	CARBON 1K 5% 1/4W	
R738	1-247-807-31	CARBON 100 5% 1/4W	
R739	1-247-807-31	CARBON 100 5% 1/4W	
R740	1-247-807-31	CARBON 100 5% 1/4W	
R741	1-249-437-11	CARBON 47K 5% 1/4W	
R743	1-249-435-11	CARBON 33K 5% 1/4W	
R744	1-215-413-00	METAL 470 1% 1/4W	
R745	1-215-413-00	METAL 470 1% 1/4W	
R747	1-216-489-11	METAL OXIDE 27K 5% 3W F	
R748	1-249-441-11	CARBON 100K 5% 1/4W	
R749	1-216-490-11	METAL OXIDE 39K 5% 3W F	
R751	1-215-926-00	METAL OXIDE 33K 5% 3W F	
R753	1-249-429-11	CARBON 10K 5% 1/4W	
R755	1-249-427-11	CARBON 6.8K 5% 1/4W	
R756	1-249-427-11	CARBON 6.8K 5% 1/4W	
R757	1-249-427-11	CARBON 6.8K 5% 1/4W	
R758	1-249-419-11	CARBON 1.5K 5% 1/4W	
R759	1-249-419-11	CARBON 1.5K 5% 1/4W	
R760	1-249-419-11	CARBON 1.5K 5% 1/4W F	

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<VARIABLE RESISTOR>				<RESISTOR>			
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M		R962	1-249-401-11	CARBON 47 5%	1/4W
RV702	1-241-656-21	RES, ADJ, METAL FILM 110M (J29MF8J)		R963	1-249-417-11	CARBON 1K 5%	1/4W
RV704	1-247-895-91	CARBON 470K 5%	1/4W	R964	1-247-735-11	CARBON 47 5%	1/2W F
RV705	1-247-901-11	CARBON 820K 5%	1/4W	R965	1-249-414-11	CARBON 560 5%	1/4W F
				R966	1-249-417-11	CARBON 1K 5%	1/4W
*****				R967	1-249-411-11	CARBON 330 5%	1/4W
* A-1342-393-A VM BOARD, COMPLETE (KV-J29MF8J)				R968	1-249-417-11	CARBON 1K 5%	1/4W
*****				R969	1-249-383-11	CARBON 1.5 5%	1/4W F
* A-1342-394-A VM BOARD, COMPLETE (KV-J25MF8J)				R970	1-249-403-11	CARBON 68 5%	1/4W
*****				R971	1-247-815-91	CARBON 220 5%	1/4W
4-382-854-11 SCREW (M3X10), P, SW (+)				R972	1-249-432-11	CARBON 18K 5%	1/4W
<CAPACITOR>				R973	1-249-403-11	CARBON 68 5%	1/4W
C961	1-161-830-00	CERAMIC 0.0047MF	500V	R974	1-216-476-11	METAL OXIDE 180 5%	3W F
C962	1-130-491-00	MYLAR 0.047MF 5%	50V	R975	1-249-417-11	CARBON 1K 5%	1/4W F
C963	1-107-638-11	ELECT 33MF 20%	160V	R976	1-249-432-11	CARBON 18K 5%	1/4W
C964	1-126-941-11	ELECT 470MF 20%	16V	R977	1-249-429-11	CARBON 10K 5%	1/4W
C965	1-102-121-00	CERAMIC 0.0022MF 10%	50V (J29MF8J)	R978	1-249-406-11	CARBON 120 5%	1/4W
C966	1-102-121-00	CERAMIC 0.0022MF 10%	50V (J29MF8J)	R979	1-249-414-11	CARBON 560 5%	1/4W
C967	1-124-907-11	ELECT 10MF 20%	50V (J29MF8J)	R980	1-249-406-11	CARBON 120 5%	1/4W
C968	1-106-383-00	MYLAR 0.047MF 10%	200V	R981	1-249-416-11	CARBON 820 5%	1/4W
C969	1-107-949-11	ELECT 2.2MF 20%	160V	R982	1-249-383-11	CARBON 1.5 5%	1/4W F
C970	1-104-999-11	MYLAR 0.1MF 10%	200V	R983	1-249-438-11	CARBON 56K 5%	1/4W (J29MF8J)
C971	1-126-960-11	ELECT 1MF 20%	50V (J29MF8J)	R984	1-249-440-11	CARBON 82K 5%	1/4W (J29MF8J)
C972	1-107-883-11	ELECT 330MF 20%	16V	R985	1-249-401-11	CARBON 47 5%	1/4W F
C973	1-130-491-00	MYLAR 0.047MF 5%	50V	R1831	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
C975	1-126-941-11	ELECT 470MF 20%	16V	R1832	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
C978	1-130-471-00	MYLAR 0.001MF 5%	50V	R1833	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
C979	1-130-471-00	MYLAR 0.001MF 5%	50V	R1834	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
C980	1-104-665-11	ELECT 100MF 20%	16V	R1835	1-247-729-11	CARBON 15 5%	1/2W F
C982	1-102-959-00	CERAMIC 22PF 5%	50V	R1836	1-247-688-11	CARBON 10 5%	1/4W F
C983	1-136-164-00	FILM 0.082MF 5%	50V (J29MF8J)	R1837	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
<CONNECTOR>				R1838	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
CN961	* 1-564-511-11	PLUG, CONNECTOR 8P		R1839	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
CN962	* 1-564-507-11	PLUG, CONNECTOR 4P (J29MF8J)		R1840	1-249-417-11	CARBON 1K 5%	1/4W (J29MF8J)
CN963	* 1-564-506-11	PLUG, CONNECTOR 3P (J29MF8J)		R1841	1-247-729-11	CARBON 15 5%	1/2W F
<DIODE>				R1842	1-247-688-11	CARBON 10 5%	1/4W F
D964	8-719-911-19	DIODE 1SS119-25		*****			
D965	8-719-911-19	DIODE 1SS119-25 (J29MF8J)		* A-1346-699-A D BOARD, COMPLETE (KV-J29MF8J)			
D967	8-719-110-88	DIODE RD39ESB2		*****			
D968	8-719-110-88	DIODE RD39ESB2		* A-1346-700-A D BOARD, COMPLETE (KV-J25MF8J)			
D1831	8-719-911-19	DIODE 1SS119-25 (J29MF8J)		*****			
D1833	8-719-911-19	DIODE 1SS119-25 (J29MF8J)		4-057-539-21 SHEET, INSULATING			
<TRANSISTOR>				4-382-854-11 SCREW (M3X10), P, SW (+)			
Q961	8-729-119-78	TRANSISTOR 2SC2785-HFE		<CAPACITOR>			
Q962	8-729-119-78	TRANSISTOR 2SC2785-HFE		C602	1-107-929-11	ELECT 10MF 20%	100V
Q963	8-729-017-05	TRANSISTOR 2SA1837		C603	1-107-883-11	ELECT 330MF 20%	16V
Q965	8-729-017-06	TRANSISTOR 2SC4793		C604	1-102-074-00	CERAMIC 0.001MF 10%	50V
Q967	8-729-119-78	TRANSISTOR 2SC2785-HFE		C605	1-161-754-00	CERAMIC 0.001MF 10%	3KV
Q968	8-729-119-76	TRANSISTOR 2SA1175-HFE		C609	1-107-928-11	ELECT 4.7MF 20%	100V
Q1831	8-729-140-98	TRANSISTOR 2SD773-34 (J29MF8J)		C610	1-161-754-00	CERAMIC 0.001MF 10%	3KV
Q1832	8-729-140-93	TRANSISTOR 2SB733-34 (J29MF8J)					
Q1833	8-729-140-98	TRANSISTOR 2SD773-34 (J29MF8J)					
Q1834	8-729-140-93	TRANSISTOR 2SB733-34 (J29MF8J)					



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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C611	1-102-002-00	CERAMIC	680PF 10% 500V	C2510	1-130-476-00	MYLAR	0.0027MF 5% 50V (J25MF8J)
C612	1-102-002-00	CERAMIC	680PF 10% 500V	C2515	1-137-417-11	MYLAR	0.0047MF 10% 200V
C613	1-125-494-11	ELECT(BLOCK)	560MF 20% 160V	C2517	1-162-115-00	CERAMIC	330PF 10% 2KV (J25MF8J)
C614	1-107-890-11	ELECT	2200MF 20% 25V	C2517	1-162-116-00	CERAMIC	680PF 10% 2KV (J29MF8J)
C615	1-124-607-11	ELECT	2200MF 20% 50V	C2518	1-162-116-00	CERAMIC	680PF 10% 2KV
C618	1-128-528-11	ELECT	470MF 20% 16V	C2519	1-113-582-11	FILM	0.017MF 3% 2KV (J25MF8J)
C620	1-164-625-11	CERAMIC	680PF 10% 500V	C2519	1-117-200-11	FILM	16000PF 3% 2KV (J29MF8J)
C621	1-102-002-00	CERAMIC	680PF 10% 500V	C2520	1-162-115-00	CERAMIC	330PF 10% 2KV (J29MF8J)
C622	1-113-900-11	CERAMIC	470PF 10% 250V	C2520	1-162-116-00	CERAMIC	680PF 10% 2KV (J25MF8J)
C624	1-102-002-00	CERAMIC	680PF 10% 500V	C2521	1-130-959-00	FILM	0.047MF 5% 400V
C626	1-102-074-00	CERAMIC	0.001MF 10% 50V	C2522	1-106-383-00	MYLAR	0.047MF 10% 200V (J29MF8J)
C629	1-162-116-00	CERAMIC	680PF 10% 2KV	C2522	1-107-364-11	MYLAR	0.01MF 10% 200V (J25MF8J)
C632	1-137-353-11	MYLAR	0.047MF 10% 100V	C2523	1-102-002-00	CERAMIC	680PF 10% 500V (J25MF8J)
C633	1-162-318-11	CERAMIC	0.001MF 10% 500V	C2524	1-102-212-00	CERAMIC	820PF 10% 500V
C642	1-102-212-00	CERAMIC	820PF 10% 500V	C2526	1-106-395-00	MYLAR	0.15MF 10% 200V
C643	1-164-645-11	CERAMIC	1000PF 10% 500V	C2527	1-107-636-11	ELECT	10MF 20% 160V
C644	1-102-212-00	CERAMIC	820PF 10% 500V	C2528	1-115-356-11	FILM	1.2MF 5% 200V (J29MF8J)
C683	1-126-768-11	ELECT	2200MF 20% 16V	C2528	1-117-674-11	FILM	1.8MF 5% 200V (J25MF8J)
C684	1-126-768-11	ELECT	2200MF 20% 16V	C2529	1-106-343-00	MYLAR	0.001MF 10% 100V
C808	1-162-114-00	CERAMIC	0.0047MF 2KV	C2530	1-115-521-11	FILM	0.82MF 5% 200V (J29MF8J)
C814	1-104-665-11	ELECT	100MF 20% 16V	C2530	1-136-110-00	FILM	0.91MF 5% 200V (J25MF8J)
C816	1-102-244-00	CERAMIC	220PF 10% 500V	C2540	1-130-487-00	MYLAR	0.022MF 5% 50V
C818	1-129-722-00	FILM	0.047MF 5% 630V (J29MF8J)	C2543	1-124-484-11	ELECT	220MF 20% 35V
C835	1-126-941-11	ELECT	470MF 20% 25V	C2546	1-136-060-00	FILM	0.047MF 5% 400V (J29MF8J)
C836	1-102-228-00	CERAMIC	470PF 10% 500V	C2547	1-102-112-00	CERAMIC	330PF 10% 50V
C839	1-107-655-11	ELECT	47MF 20% 250V	C2548	1-162-135-11	CERAMIC	560PF 10% 2KV (J25MF8J)
C840	1-126-941-11	ELECT	470MF 20% 25V	C2552	1-126-965-11	ELECT	22MF 20% 50V
C841	1-102-228-00	CERAMIC	470PF 10% 500V	C2553	1-102-110-00	CERAMIC	220PF 10% 50V (J29MF8J)
C842	1-106-387-00	MYLAR	0.068MF 10% 200V	C2601	Δ 1-113-900-51	CERAMIC	470PF 10% 250V
C846	1-123-024-21	ELECT	33MF 160V	C2602	1-130-711-00	FILM	0.22MF 20% 250V
C875	1-102-038-00	CERAMIC	0.001MF 500V	C2603	Δ 1-113-900-51	CERAMIC	470PF 10% 250V
C877	1-124-902-00	ELECT	0.47MF 20% 50V	C2604	1-130-711-00	FILM	0.22MF 20% 250V
C1501	1-102-820-00	CERAMIC	330PF 5% 50V	C2605	1-107-909-11	ELECT	47MF 20% 50V
C1503	1-102-820-00	CERAMIC	330PF 5% 50V	C2606	1-161-830-00	CERAMIC	0.0047MF 500V
C1504	1-126-941-11	ELECT	470MF 20% 25V	C2607	1-161-830-00	CERAMIC	0.0047MF 500V
C1505	1-126-969-11	ELECT	220MF 20% 50V	C2609	1-161-830-00	CERAMIC	0.0047MF 500V
C1506	1-136-171-00	FILM	0.33MF 5% 50V	C2610	1-161-830-00	CERAMIC	0.0047MF 500V
C1507	1-106-220-00	MYLAR	0.1MF 10% 100V	C2613	1-136-175-00	FILM	0.68MF 5% 50V
C1509	1-109-953-11	CAPACITOR	2.2MF 20% 50V	C2617	1-109-841-11	ELECT(BLOCK)	560MF 20% 400V
C1511	1-104-665-11	ELECT	100MF 20% 16V	C2618	1-136-601-11	FILM	0.01MF 10% 630V
C1514	1-136-165-00	FILM	0.1MF 5% 50V	C2620	1-130-711-00	FILM	0.22MF 20% 250V
C1515	1-136-165-00	FILM	0.1MF 5% 50V	<CONNECTOR>			
C1518	1-130-495-00	MYLAR	0.1MF 5% 50V	CN506	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1519	1-130-495-00	MYLAR	0.1MF 5% 50V	CN518	* 1-564-508-11	PLUG, CONNECTOR 5P	
C1520	1-104-665-11	ELECT	100MF 20% 16V	CN520	* 1-779-889-11	CONNECTOR, BOARD TO BOARD 8P	
C1521	1-126-967-11	ELECT	47MF 20% 50V	CN526	* 1-779-889-11	CONNECTOR, BOARD TO BOARD 8P	
C1579	1-126-941-11	ELECT	470MF 20% 25V	CN527	1-695-915-11	TAB (CONTACT)	
C1800	1-124-907-11	ELECT	10MF 20% 50V (J29MF8J)	CN528	* 1-779-889-11	CONNECTOR, BOARD TO BOARD 8P	
C1804	1-124-907-11	ELECT	10MF 20% 50V (J29MF8J)	CN530	* 1-695-915-11	TAB (CONTACT)	
C1805	1-129-765-00	FILM	0.047MF 5% 200V (J29MF8J)	CN0521	* 1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
C1806	1-136-155-00	FILM	0.015MF 5% 50V (J29MF8J)	CN1804	* 1-564-507-11	PLUG, CONNECTOR 4P (J29MF8J)	
C1807	1-136-175-00	FILM	0.68MF 5% 50V (J29MF8J)	CN2600	* 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
C1809	1-126-942-61	ELECT	1000MF 20% 25V (J29MF8J)				
C1812	1-126-965-11	ELECT	22MF 20% 50V (J29MF8J)				
C1813	1-124-907-11	ELECT	10MF 20% 50V (J29MF8J)				
C2501	1-130-499-00	MYLAR	0.22MF 5% 50V (J25MF8J)				
C2504	1-104-665-11	ELECT	100MF 20% 25V				
C2505	1-107-846-11	FILM	0.1MF 5% 200V (J29MF8J)				
C2510	1-130-475-00	MYLAR	0.0022MF 5% 50V (J29MF8J)				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
CN2601	* 1-564-518-11	PLUG, CONNECTOR 3P		FB607	1-410-397-21	INDUCTOR 1.1UH	
CN2602	1-508-786-00	PIN, CONNECTOR (5mm PITCH) 2P				<IC>	
CN2605	* 1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P		IC601	8-749-014-01	IC STR-S6708N	
		<DIODE>		IC602	8-749-920-61	IC SE-135N	
D601	8-719-110-02	DIODE RD7.5ESB1		IC603	Δ 8-749-924-35	PHOTO COUPLER ON3171-R	
D602	8-719-510-26	DIODE D1NL20-TA2		IC1501	8-759-980-58	IC TDA8172	
D603	8-719-510-26	DIODE D1NL20-TA2		IC1800	8-759-603-37	IC M5216P (J29MF8J)	
D604	8-719-510-37	DIODE D5LC20U		IC2504	8-759-145-58	IC uPC4558C	
D605	8-719-911-19	DIODE 1SS119-25				<COIL>	
D606	8-719-302-43	DIODE EL1Z		L600	1-410-396-41	INDUCTOR 0.45UH	
D608	8-719-979-85	DIODE EGP20G		L601	1-410-396-41	INDUCTOR 0.45UH	
D609	8-719-312-10	DIODE RU4AM-T3		L605	1-412-527-11	INDUCTOR 15UH	
D611	8-719-510-37	DIODE D5LC20U		L606	1-412-527-11	INDUCTOR 15UH	
D612	8-719-110-02	DIODE RD7.5ESB1		L607	1-406-978-11	COIL, CHOKE 150UH	
D614	8-719-911-19	DIODE 1SS119-25		L801	1-459-104-00	COIL, WITH CORE (J29MF8J)	
D616	8-719-510-26	DIODE D1NL20-TA2		L802	1-249-437-11	CARBON 47K 5%	1/4W (J25MF8J)
D618	1-249-417-11	CARBON 1K	5%	L802	1-408-947-00	INDUCTOR 2.2mH (J29MF8J)	
D619	8-719-911-19	DIODE 1SS119-25		L812	1-412-525-31	INDUCTOR 10UH	
D621	8-719-110-36	DIODE RD13ESB2		L815	1-412-525-31	INDUCTOR 10UH	
D633	8-719-911-19	DIODE 1SS119-25		L816	1-412-525-31	INDUCTOR 10UH	
D801	8-719-018-82	DIODE RGP02-20EL-6394		L1501	1-412-525-31	INDUCTOR 10UH	
D803	8-719-911-19	DIODE 1SS119-25		L1502	1-412-525-31	INDUCTOR 10UH	
D814	8-719-302-43	DIODE EL1Z		L1503	1-412-525-31	INDUCTOR 10UH	
D815	8-719-302-43	DIODE EL1Z		L1805	1-459-104-00	COIL, WITH CORE (J29MF8J)	
D816	8-719-302-43	DIODE EL1Z		L1806	1-459-075-11	COIL,DYNAMIC CONVERSION CHOKE (J29MF8J)	
D824	8-719-028-72	DIODE RGP02-17EL-6433		L2504	1-459-390-00	COIL (WITH CORE)	
D825	8-719-911-19	DIODE 1SS119-25		L2505	1-459-104-00	COIL, WITH CORE	
D1501	8-719-911-19	DIODE 1SS119-25		L2506	1-422-613-11	COIL, AIR CORE	
D1502	8-719-150-92	DIODE RD33EB3T		L2508	Δ 1-412-551-21	INDUCTOR 1.5mH	
D1503	8-719-908-03	DIODE GP08D		L2509	1-411-955-12	COIL, HORIZONTAL LINEARITY	
D1505	8-719-911-19	DIODE 1SS119-25		L2510	1-459-075-11	COIL,DYNAMIC CONVERSION CHOKE	
D1506	8-719-911-19	DIODE 1SS119-25				<TRANSISTOR>	
D1507	8-719-911-19	DIODE 1SS119-25		Q600	8-729-028-34	TRANSISTOR 2SD1640Q,R	
D1508	8-719-911-19	DIODE 1SS119-25		Q601	8-729-203-79	TRANSISTOR 2SA1315-Y	
D1509	8-719-911-19	DIODE 1SS119-25		Q602	8-729-140-96	TRANSISTOR 2SD774-34	
D1510	8-719-911-19	DIODE 1SS119-25		Q603	8-729-920-24	TRANSISTOR DTD114ES	
D1511	8-719-911-19	DIODE 1SS119-25		Q803	8-729-200-17	TRANSISTOR 2SA1091-O	
D1803	8-719-911-19	DIODE 1SS119-25 (J29MF8J)		Q1501	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D1804	8-719-911-19	DIODE 1SS119-25 (J29MF8J)		Q1502	8-729-119-78	TRANSISTOR 2SA1175-HFE	
D1805	8-719-302-43	DIODE EL1Z (J29MF8J)		Q1503	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D1806	8-719-911-19	DIODE 1SS119-25 (J29MF8J)		Q1800	8-729-119-76	TRANSISTOR 2SA1175-HFE (J29MF8J)	
D1808	8-719-908-03	DIODE GP08D (J29MF8J)		Q1802	8-729-119-78	TRANSISTOR 2SC2785-HFE (J29MF8J)	
D2500	8-719-923-38	DIODE MTZJ-T-77-5.6B		Q1803	8-729-119-78	TRANSISTOR 2SC2785-HFE (J29MF8J)	
D2501	8-719-911-19	DIODE 1SS119-25		Q1804	8-729-119-78	TRANSISTOR 2SC2785-HFE (J29MF8J)	
D2502	8-719-911-19	DIODE 1SS119-25		Q1805	8-729-195-82	TRANSISTOR 2SC2958-L (J29MF8J)	
D2506	8-719-945-80	DIODE ERC06-15S		Q2502	8-729-119-80	TRANSISTOR 2SC2688-LK	
D2507	8-719-945-80	DIODE ERC06-15S		Q2503	8-729-018-99	TRANSISTOR 2SD2394-F	
D2508	8-719-900-26	DIODE ERD29-08J		Q2591	8-729-016-32	TRANSISTOR 2SC4927-01	
D2510	8-719-908-03	DIODE GP08D		Q2600	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D2511	8-719-908-03	DIODE GP08D		Q2601	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D2600	8-719-510-53	DIODE D4SB60L				<RESISTOR>	
D2602	8-719-911-19	DIODE 1SS119-25		R601	1-215-923-00	METAL OXIDE 10K 5%	3W F
D2603	8-719-108-18	THYRISTOR 5P6M		R602	1-249-417-11	CARBON 1K 5%	1/4W F
D2604	8-719-110-08	DIODE RD8.2ESB2		R603	1-215-901-00	METAL OXIDE 33K 5%	2W F
		<CONNECTOR>		R604	1-215-905-11	METAL OXIDE 10 5%	3W F
DY1	* 1-580-798-11	CONNECTOR PIN (DY) 6P		R606	1-216-422-11	METAL OXIDE 18 5%	1W F
		<FERRITE BEAD>		R607	1-247-843-11	CARBON 3.3K 5%	1/4W
FB600	1-410-397-21	INDUCTOR 1.1UH		R608	1-260-115-11	CARBON 22K 5%	1/2W
FB601	1-410-397-21	INDUCTOR 1.1UH		R609	1-260-108-11	CARBON 5.6K 5%	1/2W
FB602	1-410-397-21	INDUCTOR 1.1UH					
FB603	1-410-397-21	INDUCTOR 1.1UH					
FB604	1-410-397-21	INDUCTOR 1.1UH					
FB605	1-410-397-21	INDUCTOR 1.1UH					



The components identified by shading and mark Δ are critical for safety.
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REF. NO.	PART NO.	DESCRIPTION			REMARK		REF. NO.	PART NO.	DESCRIPTION			REMARK
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F	R1801	1-249-426-11	CARBON	5.6K	5%	1/4W
R612	1-249-420-11	CARBON	1.8K	5%	1/4W							(J29MF8J)
R614	1-249-418-11	CARBON	1.2K	5%	1/4W		R1805	1-249-429-11	CARBON	10K	5%	1/4W
R615	Δ 1-249-377-91	CARBON	0.47	5%	1/4W	F						(J29MF8J)
R616	1-215-886-11	METAL OXIDE	100	5%	2W	F	R1806	1-249-425-11	CARBON	4.7K	5%	1/4W
R618	1-217-191-21	WIREWOUND	0.18	10%	2W	F						(J29MF8J)
R619	1-247-807-31	CARBON	100	5%	1/4W		R1807	1-249-429-11	CARBON	10K	5%	1/4W
												(J29MF8J)
R620	1-249-425-11	CARBON	4.7K	5%	1/4W		R1808	1-249-425-11	CARBON	4.7K	5%	1/4W
R622	1-247-807-31	CARBON	100	5%	1/4W							(J29MF8J)
R624	Δ 1-533-790-21	LINK, IC					R1809	1-249-435-11	CARBON	33K	5%	1/4W
R625	Δ 1-533-790-21	LINK, IC										(J29MF8J)
R628	1-260-072-11	CARBON	4.7	5%	1/2W		R1810	1-249-435-11	CARBON	33K	5%	1/4W
												(J29MF8J)
R629	1-216-406-11	METAL OXIDE	0.56	5%	5W	F	R1811	1-249-435-11	CARBON	33K	5%	1/4W
R634	1-247-807-31	CARBON	100	5%	1/4W							(J29MF8J)
R635	1-249-413-11	CARBON	470	5%	1/4W		R1812	1-249-435-11	CARBON	33K	5%	1/4W
R690	1-249-416-11	CARBON	820	5%	1/4W							(J29MF8J)
R804	1-217-778-11	FUSIBLE	1K	5%	1W	F						
R810	1-249-399-11	CARBON	33	5%	1/4W		R1814	1-260-111-11	CARBON	10K	5%	1/2W
												(J29MF8J)
R836	1-215-465-00	METAL	68K	1%	1/4W		R1815	1-260-111-11	CARBON	10K	5%	1/2W
R853	1-249-470-11	CARBON	0.47	5%	1/2W	F						(J29MF8J)
R854	1-249-470-11	CARBON	0.47	5%	1/2W	F	R1816	1-247-843-11	CARBON	3.3K	5%	1/4W
R855	1-202-818-00	SOLID	1K	20%	1/2W							(J29MF8J)
							R1817	1-249-441-11	CARBON	100K	5%	1/4W
R858	1-215-437-00	METAL	4.7K	1%	1/4W							(J29MF8J)
R860	1-249-438-11	CARBON	56K	5%	1/4W		R1818	1-249-421-11	CARBON	2.2K	5%	1/4W
R861	1-249-438-11	CARBON	56K	5%	1/4W							(J29MF8J)
R868	1-215-451-00	METAL	18K	1%	1/4W		R1819	1-215-886-11	METAL OXIDE	100	5%	2W F
												(J29MF8J)
R868	1-215-453-00	METAL	22K	1%	1/4W		R1820	1-216-434-11	METAL OXIDE	1.8K	5%	1W F
												(J29MF8J)
R869	1-215-452-00	METAL	20K	1%	1/4W		R1821	1-249-435-11	CARBON	33K	5%	1/4W
												(J29MF8J)
R869	1-215-453-00	METAL	22K	1%	1/4W		R1822	1-249-435-11	CARBON	33K	5%	1/4W
												(J29MF8J)
R871	1-215-452-00	METAL	20K	1%	1/4W		R1823	1-249-426-11	CARBON	5.6K	5%	1/4W
R876	1-249-421-11	CARBON	2.2K	5%	1/4W	F						(J29MF8J)
R884	1-260-199-11	CARBON	200K	5%	1/2W		R1824	1-249-435-11	CARBON	33K	5%	1/4W
												(J29MF8J)
R885	1-249-470-11	CARBON	0.47	5%	1/2W	F	R1825	1-247-843-11	CARBON	3.3K	5%	1/4W
R886	1-216-370-11	METAL OXIDE	1.2	5%	2W	F						(J29MF8J)
R887	1-249-420-11	CARBON	1.8K	5%	1/4W	F	R2501	1-249-385-11	CARBON	2.2	5%	1/4W F
R890	1-260-125-11	CARBON	150K	5%	1/2W		R2503	1-215-910-00	METAL OXIDE	68	5%	3W F
R892	1-249-425-11	CARBON	4.7K	5%	1/4W							(J29MF8J)
							R2505	1-249-414-11	CARBON	560	5%	1/4W
												(J25MF8J)
R894	1-215-487-00	METAL	560K	1%	1/4W							
R895	1-249-432-11	CARBON	18K	5%	1/4W		R2505	1-249-419-11	CARBON	1.5K	5%	1/4W
R898	1-215-485-00	METAL	470K	1%	1/4W							(J29MF8J)
R1501	1-249-429-11	CARBON	10K	5%	1/4W		R2506	1-216-473-11	METAL OXIDE	56	5%	3W F
R1502	1-249-427-11	CARBON	6.8K	5%	1/4W							(J29MF8J)
							R2508	1-249-420-11	CARBON	1.8K	5%	1/4W
R1503	1-249-431-11	CARBON	15K	5%	1/4W							(J29MF8J)
R1504	1-249-425-11	CARBON	4.7K	5%	1/4W		R2508	1-249-421-11	CARBON	2.2K	5%	1/4W
R1506	1-249-435-11	CARBON	33K	5%	1/4W							(J25MF8J)
R1508	1-249-429-11	CARBON	10K	5%	1/4W		R2510	1-249-421-11	CARBON	2.2K	5%	1/4W
R1509	1-215-441-00	METAL	6.8K	1%	1/4W							
R1511	1-215-913-11	METAL OXIDE	220	5%	3W	F	R2512	1-247-887-00	CARBON	220K	5%	1/4W
R1512	1-216-369-00	METAL OXIDE	1	5%	2W	F						(J29MF8J)
R1513	1-215-405-00	METAL	220	1%	1/4W		R2512	1-249-438-11	CARBON	56K	5%	1/4W
R1514	1-215-453-00	METAL	22K	1%	1/4W							(J25MF8J)
R1515	1-249-383-11	CARBON	1.5	5%	1/4W	F	R2515	1-216-341-11	METAL OXIDE	0.22	5%	1W F
												(J25MF8J)
R1516	1-249-426-11	CARBON	5.6K	5%	1/4W		R2515	1-216-344-00	METAL OXIDE	0.39	5%	1W F
R1517	1-249-426-11	CARBON	5.6K	5%	1/4W							(J29MF8J)
R1518	1-249-425-11	CARBON	4.7K	5%	1/4W		R2516	1-249-401-11	CARBON	47	5%	1/4W
R1519	1-249-431-11	CARBON	15K	5%	1/4W							
R1520	1-216-361-00	METAL OXIDE	0.22	5%	2W	F	R2517	1-216-481-11	METAL OXIDE	1.2K	5%	3W F
							R2518	1-215-918-00	METAL OXIDE	1.5K	5%	3W F
R1523	1-247-807-31	CARBON	100	5%	1/4W		R2519	1-247-722-11	CARBON	5.6K	5%	1/4W F
R1524	1-247-863-91	CARBON	22K	5%	1/4W							(J25MF8J)
R1525	1-249-441-11	CARBON	100K	5%	1/4W		R2519	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1550	1-249-429-11	CARBON	10K	5%	1/4W							(J29MF8J)
R1551	1-247-843-11	CARBON	3.3K	5%	1/4W		R2520	1-247-843-11	CARBON	3.3K	5%	1/4W
R1800	1-249-417-11	CARBON	1K	5%	1/4W		R2521	1-249-411-11	CARBON	330	5%	1/4W
												(J29MF8J)
							R2522	1-216-452-11	METAL OXIDE	180	5%	2W F
												(J29MF8J)

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R2523	1-215-888-00	METAL OXIDE 220	5% 2W F (J29MF8J)	* A-1372-257-A	H3 BOARD, COMPLETE	*****	
R2527	1-215-861-00	METAL OXIDE 47	5% 1W F	* 4-055-304-01	HOLDER, LED		
R2528	1-247-750-11	CARBON 680	5% 1/2W F				
R2532	1-215-910-00	METAL OXIDE 68	5% 3W F (J25MF8J)		<CAPACITOR>		
R2533	1-249-389-11	CARBON 4.7	5% 1/4W F	C900	1-126-967-11	ELECT 47MF	20% 16V
R2536	1-249-422-11	CARBON 2.7K	5% 1/4W (J29MF8J)	C901	1-102-824-00	CERAMIC 470PF	5% 50V
R2536	1-249-424-11	CARBON 3.9K	5% 1/4W (J25MF8J)	C902	1-126-967-11	ELECT 47MF	20% 16V
R2543	1-249-424-11	CARBON 3.9K	5% 1/4W (J25MF8J)		<CONNECTOR>		
R2543	1-249-425-11	CARBON 4.7K	5% 1/4W (J29MF8J)	CN901	1-569-321-11	SOCKET, CONNECTOR 15P	
R2547	1-130-491-00	MYLAR 0.047MF	5% 50V (J29MF8J)	CN902	* 1-564-507-11	PLUG, CONNECTOR 4P	
R2547	1-247-885-00	CARBON 180K	5% 1/4W (J25MF8J)	CN905	1-569-321-11	SOCKET, CONNECTOR 15P	
R2556	1-249-422-11	CARBON 2.7K	5% 1/4W	CN907	* 1-564-518-11	PLUG, CONNECTOR 3P	
R2564	1-249-422-11	CARBON 2.7K	5% 1/4W (J25MF8J)	CN908	* 1-564-507-11	PLUG, CONNECTOR 4P	
					<DIODE>		
R2580	1-249-438-11	CARBON 56K	5% 1/4W (J25MF8J)	D904	8-719-045-19	DIODE SPB-26MVWF	
R2580	1-249-440-11	CARBON 82K	5% 1/4W (J29MF8J)	D905	1-247-804-11	CARBON 75	5% 1/4W
R2582	1-249-413-11	CARBON 470	5% 1/4W	D914	8-719-911-19	DIODE 1SS119-25	
R2601	Δ 1-218-265-91	METAL 8.2M	5% 1W	D915	8-719-911-19	DIODE 1SS119-25	
R2602	1-249-417-11	CARBON 1K	5% 1/4W	D916	8-719-911-19	DIODE 1SS119-25	
R2604	1-202-962-11	CEMENTED 3.3	5% 10W				
R2605	1-249-416-11	CARBON 820	5% 1/4W F		<IC>		
R2606	1-249-416-11	CARBON 820	5% 1/4W F	IC900	8-742-041-11	HYB IC SBX1981-11	
R2607	1-202-962-11	CEMENTED 3.3	5% 10W		<JACK>		
R2608	1-249-437-11	CARBON 47K	5% 1/4W	J901	1-750-264-11	JACK	
R2610	1-216-486-00	METAL OXIDE 8.2K	5% 3W F	J902	1-778-045-11	TERMINAL, S	
R2611	1-216-486-00	METAL OXIDE 8.2K	5% 3W F	J903	1-695-585-11	JACK BLOCK, PIN (L TYPE) 3P	
R2612	1-202-719-00	SOLID 1M	10% 1/2W		<TRANSISTOR>		
	<VARIABLE RESISTOR>						
RV1801	1-223-241-11	RES, ADJ, CARBON 47K (J29MF8J)		Q900	8-729-030-02	TRANSISTOR DTC144ESA	
	<RELAY>			Q901	8-729-030-02	TRANSISTOR DTC144ESA	
RY2600	Δ 1-515-684-31	RELAY			<RESISTOR>		
	<SWITCH>			R900	1-249-425-11	CARBON 4.7K	5% 1/4W
S2501	1-572-707-11	SWITCH, LEVER (J29MF8J)		R901	1-249-425-11	CARBON 4.7K	5% 1/4W
S2502	1-572-707-11	SWITCH, LEVER		R902	1-249-413-11	CARBON 470	5% 1/4W
	<TRANSFORMER>			R903	1-249-413-11	CARBON 470	5% 1/4W
T601	Δ 1-429-818-11	TRANSFORMER, CONVERTER		R904	1-249-417-11	CARBON 1K	5% 1/4W
T801	Δ 1-453-227-11	TRANSFORMER ASSY, FLYBACK (NX-4002/M3I4) (J25MF8J)		R905	1-249-417-11	CARBON 1K	5% 1/4W
T801	Δ 1-453-227-21	TRANSFORMER ASSY, FLYBACK (NX-4002/M3I4) (J29MF8J)		R906	1-249-420-11	CARBON 1.8K	5% 1/4W
T804	1-413-059-00	TRANSFORMER, FERRITE (DFT) (J29MF8J)		R907	1-249-420-11	CARBON 1.8K	5% 1/4W
T2502	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE		R908	1-247-843-11	CARBON 3.3K	5% 1/4W
T2601	1-431-182-11	TRANSFORMER, LINE FILTER		R909	1-247-843-11	CARBON 3.3K	5% 1/4W
T2602	Δ 1-424-505-11	TRANSFORMER, LINE FILTER		R912	1-249-401-11	CARBON 47	5% 1/4W
T2603	Δ 1-424-505-11	TRANSFORMER, LINE FILTER		R914	1-249-411-11	CARBON 330	5% 1/4W
	<THERMISTOR>			R915	1-249-411-11	CARBON 330	5% 1/4W
THP260	Δ 1-809-827-11	THERMISTOR, POSITIVE		R917	1-247-807-31	CARBON 100	5% 1/4W
				R918	1-247-807-31	CARBON 100	5% 1/4W
					<SWITCH>		
				S901	1-571-532-21	SWITCH, TACTIL	
				S902	1-571-532-21	SWITCH, TACTIL	
				S903	1-571-532-21	SWITCH, TACTIL	
				S904	1-571-532-21	SWITCH, TACTIL	
				S905	1-571-532-21	SWITCH, TACTIL	
				S906	1-571-532-21	SWITCH, TACTIL	
				S907	1-571-532-21	SWITCH, TACTIL	



REF. NO.	PART NO.	DESCRIPTION	REMARK
S908	1-571-532-21	SWITCH, TACTIL	
S909	1-571-532-21	SWITCH, TACTIL	
S910	1-571-532-21	SWITCH, TACTIL	

* A-1390-802-A S1 BOARD, COMPLETE

<CAPACITOR>

C2201	1-126-967-11	ELECT	47MF	20%	16V
C2248	1-164-346-11	CERAMIC CHIP	1MF		16V
C2249	1-164-346-11	CERAMIC CHIP	1MF		16V
C2250	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2251	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C2252	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C2253	1-126-964-11	ELECT	10MF	20%	50V
C2254	1-126-963-11	ELECT	4.7MF	20%	50V
C2255	1-126-964-11	ELECT	10MF	20%	50V
C2256	1-126-933-11	ELECT	100MF	20%	16V
C2257	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2258	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2259	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2260	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2261	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C2262	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2263	1-107-823-11	CERAMIC CHIP	0.47MF	10%	16V
C2264	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2265	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C2266	1-163-023-00	CERAMIC CHIP	0.015MF	10%	50V
C2267	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C2268	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C2269	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C2270	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C2271	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C2272	1-136-171-00	FILM	0.33MF	5%	50V
C2273	1-126-963-11	ELECT	4.7MF	20%	50V
C2274	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C2275	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2276	1-164-346-11	CERAMIC CHIP	1MF		16V
C2277	1-164-346-11	CERAMIC CHIP	1MF		16V
C2278	1-164-346-11	CERAMIC CHIP	1MF		16V
C2280	1-126-933-11	ELECT	100MF	20%	16V
C2281	1-126-964-11	ELECT	10MF	20%	50V
C2282	1-164-346-11	CERAMIC CHIP	1MF		16V
C2283	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C2284	1-136-171-00	FILM	0.33MF	5%	50V
C2285	1-126-963-11	ELECT	4.7MF	20%	50V
C2286	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C2287	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C2288	1-164-346-11	CERAMIC CHIP	1MF		16V
C2289	1-164-346-11	CERAMIC CHIP	1MF		16V
C2290	1-126-933-11	ELECT	100MF	20%	16V
C2291	1-164-346-11	CERAMIC CHIP	1MF		16V
C2292	1-126-964-11	ELECT	10MF	20%	50V
C2293	1-164-346-11	CERAMIC CHIP	1MF		16V

<CONNECTOR>

CN2201	* 1-770-748-11	CONNECTOR, BOARD TO BOARD 12P
CN2202	* 1-778-959-11	CONNECTOR, BOARD TO BOARD 6P

<DIODE>

D2203	8-719-911-19	DIODE 1SS119-25
D2204	8-719-911-19	DIODE 1SS119-25
D2205	8-719-911-19	DIODE 1SS119-25

REF. NO.	PART NO.	DESCRIPTION	REMARK
D2206	8-719-911-19	DIODE 1SS119-25	
D2207	8-719-911-19	DIODE 1SS119-25	

<IC>

IC2201	8-752-058-68	IC CXA1315M
IC2211	8-759-009-06	IC MC14052BF
IC2212	8-759-493-92	IC NJM2178M-T2
IC2213	8-759-100-96	IC uPC4558G2
IC2214	8-759-100-96	IC uPC4558G2

<CHIP CONDUCTOR>

JR2201	1-216-295-91	SHORT	0
JR2202	1-216-295-91	SHORT	0
JR2205	1-216-295-91	SHORT	0
JR2206	1-216-295-91	SHORT	0
JR2207	1-216-295-91	SHORT	0
JR2208	1-216-295-91	SHORT	0

<TRANSISTOR>

Q2201	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L
Q2202	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L
Q2203	8-729-224-61	TRANSISTOR 2SK246-Y
Q2204	8-729-224-61	TRANSISTOR 2SK246-Y

<RESISTOR>

R2202	1-216-073-00	RES, CHIP 10K
R2203	1-216-073-00	RES, CHIP 10K
R2204	1-216-025-91	RES, CHIP 100
R2205	1-216-025-91	RES, CHIP 100
R2209	1-216-073-00	RES, CHIP 10K
R2212	1-216-075-00	RES, CHIP 12K
R2217	1-216-101-00	RES, CHIP 150K
R2218	1-216-101-00	RES, CHIP 150K
R2221	1-216-025-91	RES, CHIP 100
R2222	1-216-025-91	RES, CHIP 100
R2224	1-216-073-00	RES, CHIP 10K
R2225	1-216-073-00	RES, CHIP 10K
R2226	1-216-049-91	RES, CHIP 1.0K
R2227	1-216-098-00	RES, CHIP 110K
R2228	1-216-089-91	RES, CHIP 47K
R2229	1-216-085-00	RES, CHIP 33K
R2230	1-216-063-91	RES, CHIP 3.9K
R2231	1-216-053-00	RES, CHIP 1.5K
R2232	1-216-064-00	RES, CHIP 4.3K
R2233	1-216-092-00	RES, CHIP 62K
R2234	1-216-069-00	RES, CHIP 6.8K
R2235	1-216-057-00	RES, CHIP 2.2K
R2236	1-216-049-91	RES, CHIP 1.0K
R2237	1-216-069-00	RES, CHIP 6.8K
R2238	1-216-057-00	RES, CHIP 2.2K
R2239	1-216-049-91	RES, CHIP 1.0K
R2240	1-216-073-00	RES, CHIP 10K
R2241	1-216-097-91	RES, CHIP 100K
R2242	1-216-073-00	RES, CHIP 10K
R2243	1-216-097-91	RES, CHIP 100K

R2244	1-216-073-00	RES, CHIP 10K
R2245	1-216-097-91	RES, CHIP 100K
R2246	1-216-073-00	RES, CHIP 10K
R2247	1-216-039-00	RES, CHIP 390
R2248	1-216-069-00	RES, CHIP 6.8K

R2249	1-216-061-00	RES, CHIP 3.3K
R2250	1-216-097-91	RES, CHIP 100K
R2251	1-216-113-00	RES, CHIP 470K
R2252	1-216-075-00	RES, CHIP 12K
R2253	1-216-097-91	RES, CHIP 100K

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