AV-32WH3EP
AV-28WH3EP

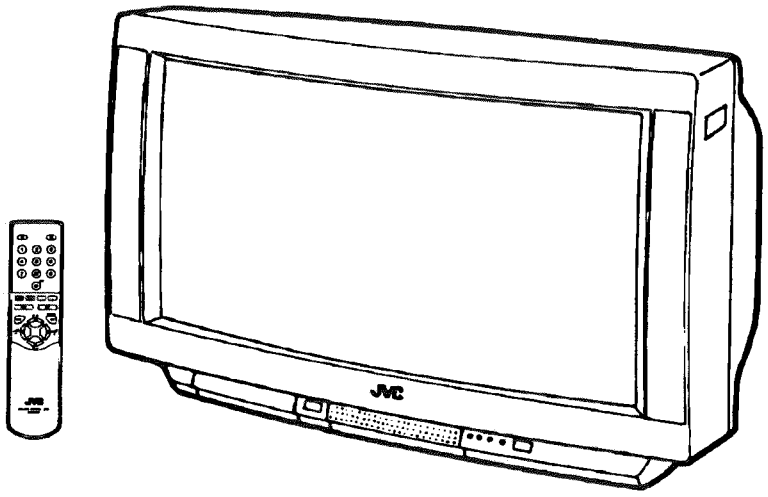
JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
MC

AV-32WH3EP
AV-28WH3EP



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No.51379
May. 1998

SPECIFICATIONS

Item	Content	
	AV-32WH3EP	AV-28WH3EP
Dimensions (W × H × D) Mass	80.5mm × 55.0mm × 55.0mm 48.2kg	71.6mm × 48.9mm × 49.6mm 34.7kg
TV RF System Colour System Stereo System Teletext System	CCIR (L, B/G, I) PAL / SECAM / NTSC (Only EXT mode) A2/NICAM (B/G, L) Fastext(United Kingdom system) / TOP (German system) / WST(Standard system)	
Receiving Frequency VHF UHF CATV(M) CATV(S) CATV(H)	 47MHz~ 470MHz 470MHz~862MHz 68MHz~175MHz 230MHz~301MHz 302MHz~470MHz	
Intermediate Frequency VIF Carrier SIF Carrier	 38.9MHz(L, B/G, I) / 34.25MHz(L') 33.4MHz(5.5MHz : B/G) / 32.9MHz(6.0MHz : I) / 32.4MHz(6.5MHz : L) / 40.75MHz(6.5MHz : L')	
Colour Sub Carrier Freq. PAL SECAM NTSC	 4.43MHz 4.0625MHz / 4.25MHz 3.58MHz / 4.43MHz	
Power Input	AC 220V~240V , 50Hz	
Power Consumption	200W(Max), 139W(Avg) / 139W/h (ITALY)	194W(Max), 136W(Avg) / 136W/h (ITALY)
Picture Tube	Visible size : 76cm, Measured diagonally	Visible size : 66cm, Measured diagonally
High Voltage	31.0Kv $^{+1kV}_{-1.5kV}$ (at zero beam current)	
Speaker Audio Output	10 cm round × 2 10W + 10W	
EXT-1/EXT-2 (Input/Output) EXT3(Input) Video Audio(L/R) S-VIDEO	21-pin Euro connector (SCART socket) 1Vp-p 75Ω (RCA pin jack) 500mVrms(-4dBs), High Impedance(RCA pin jack) Y : 1Vp-p Positive (negative sync provided, when terminated with 75Ω) C : 0.286Vp-p (burst signal, when terminated with 75Ω)	
Aerial Input Termind Headphone jack	75Ω unbalanced, Coaxial Stereo mini jack (φ 3.5mm)	
Remote Control Unit	RM-C795 AAA(R03) dry battery × 2	

Design & specification are subject to change without notice.

OPERATING INSTRUCTIONS

JVC

COLOUR TELEVISION

AV-32WH3EP
AV-28WH3EP

CONTENTS

INSTRUCTIONS

Thank you for buying this JVC colour television.
To make sure you understand how to use your new TV, please read this manual thoroughly before you begin.

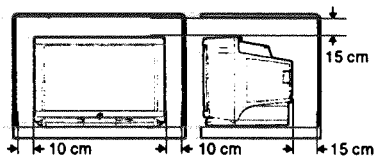
WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified (AC 220 – 240 V, 50 Hz) on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid improper installation and never position the unit where good ventilation is unattainable.
   When installing this television, distance recommendations must be maintained between the floor and wall, as well as instalment in a tightly enclosed area or piece of furniture. Adhere to the minimum distance guidelines shown for safe operation.

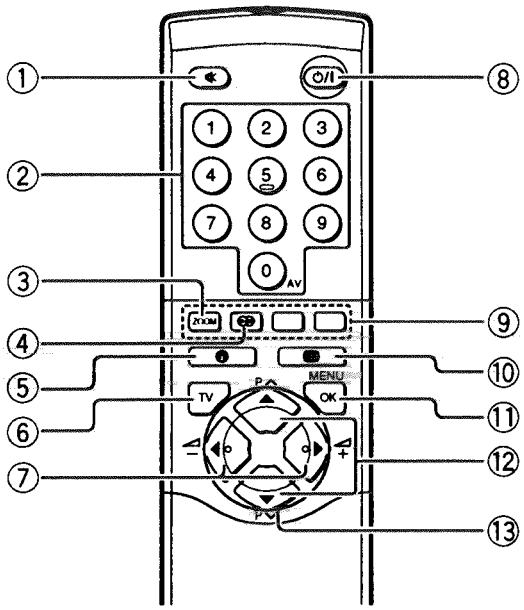


4. Do not allow objects or liquid into the cabinet openings.
5. In the event of a fault, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

When you don't use this TV set for a long period of time, be sure to disconnect the power plug from the AC socket.

Locations of remote control buttons

OUTSIDE BUTTONS



①	Muting button	p.11
②	Number buttons	p.8
③	ZOOM button	p.13
④	Hyper Sound button	p.11
⑤	Information button	p.15
⑥	TV button	
⑦	Volume –/+ buttons	p.8
⑧	Standby button	p.6, 9
⑨	Colour buttons	
⑩	TV/text button	p.17
⑪	OK button	
⑫	PR channel ∨/∧ buttons	p.8
⑬	◀/▶ / ▼/▲ buttons	
⑭	Teletext/VCR control buttons	p.17

⑮ VCR/TEXT selector switch

- When switched to the VCR side, the ⑭ buttons function as the JVC VCR control buttons.

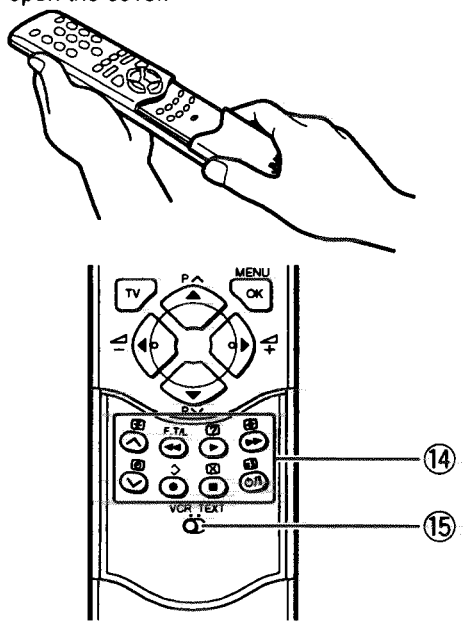
Notes:

- For details on button functions, see the JVC VCR manual.
- Depending on your VCR, the remote control may not operate perfectly, and may not even control the VCR at all.

- When switched to the TEXT side, the ⑭ buttons function as teletext control buttons.

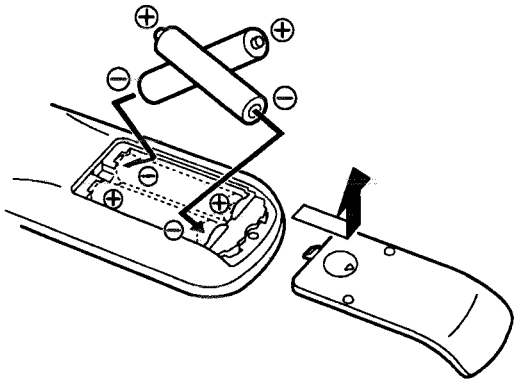
INSIDE BUTTONS

How to open the cover.



Inserting batteries into your remote control

Use two AAA/R03 dry cell batteries. Insert the batteries from the ⊖ end, making sure the ⊕ and ⊖ polarities are correct.



CAUTION:

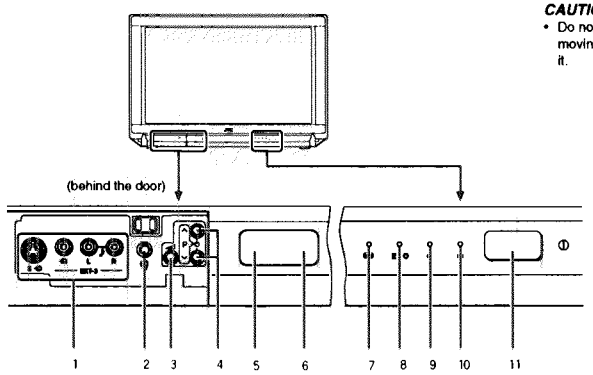
- Follow the warnings printed on the batteries.

Notes:

- Battery life is approx. six months to one year, depending on frequency of use.
- If the remote control doesn't work properly, replace the batteries.
- The batteries we supply are only for setting up and testing your TV, please replace them as necessary.

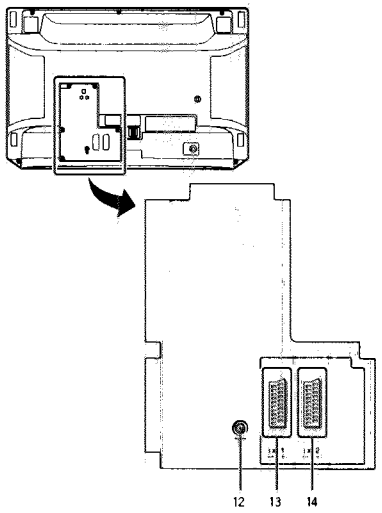
Locations of TV buttons and parts

FRONT PANEL



CAUTION:
- Do not hold the front panel door when moving the TV set, if you do, you may break it.

REAR PANEL

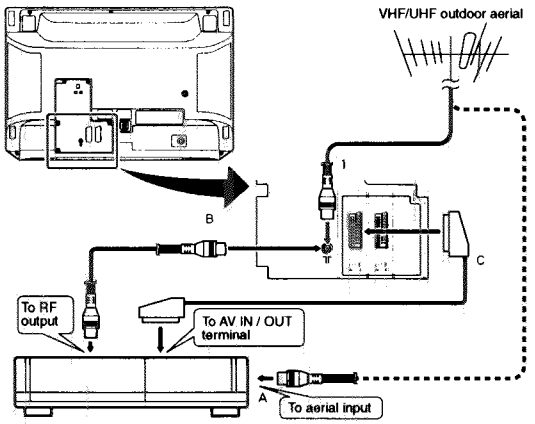


①	EXT-3 terminals	p.4, 19
②	Headphone jack (mini jack)	p.5
③	Volume button (Press this button to display the volume level indicator. Press the 4 Up/down buttons to change volume while the volume level indicator is displayed.)	p.9
④	Up/down buttons (You can use this button as the V/Λ buttons of the PR channel. Pressing the 3 Volume button makes this button function as the Volume –/+ buttons.)	p.9
⑤	Remote control sensor	
⑥	ECO sensor	
⑦	Hyper sound lamp	p.11
⑧	ECO lamp	p.12
⑨	Sleep timer lamp	p.15
⑩	Power lamp	p.6, 9
⑪	Main power button	p.6, 9
⑫	Aerial socket	p.4
⑬	EXT-1 terminal	p.4, 19
⑭	EXT-2 terminal	p.4, 19

PREPARATION AND BASIC OPERATION

1. Connecting the aerial and VCR

If not connecting a VCR, do 1 only.
If connecting a VCR, proceed A → B → C.



VCR/S-VHS VCR

Notes:
- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.
- You can view video from a VCR without doing C. For details, refer to the manual provided with your VCR.

2. Connecting other external devices

Conditions:
- This TV set has external device connectors, EXT-1 to EXT-3 to which you can connect a VCR. However, there are some differences in functions among them. Consult the following table before making connections.

	EXT-1	EXT-2	EXT-3 (front)
VIDEO IN	√ *1	√ *1	√ *1
VIDEO OUT	√ *2	√ *3	–
S-VIDEO IN	√ *1	√ *1	√ *1
S-VIDEO OUT	–	–	–
RGB IN	√	–	–
AUDIO-L IN	√	√	√
AUDIO-R IN	√	√	√
AUDIO-L OUT	√ *2	√ *3	–
AUDIO-R OUT	√ *2	√ *3	–
Others	• Automatic detection and switching of input mode. • Automatic detection and switching of ZOOM mode.		

*1 Select VIDEO or S-VIDEO mode from the EXT SETTING menu. For details, see page 19 "EXT SETTING".
*2 Only the TV broadcast is output.
*3 TV broadcasts or inputs from EXT-1 or 3 can be output. For details, see page 19 "DUBBING".

- Use headphones with a stereo mini jack (dia. 3.5 mm).
  When using headphones, the speakers will not output sound.
- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.

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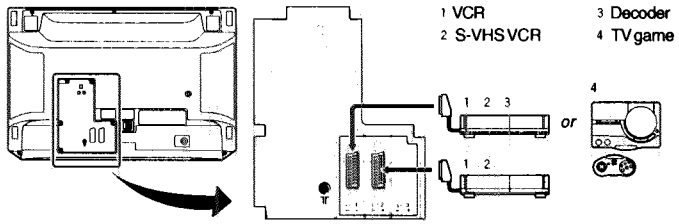
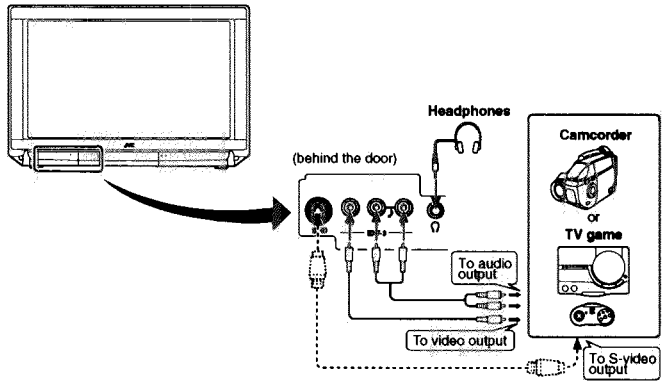
Devices which can be connected to the terminals on the rear panel

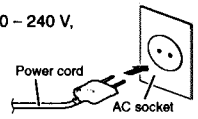


Devices which can be connected to the terminals on the front panel



3. Connecting the power cord

Insert the power plug into an AC socket (AC 220 – 240 V, 50 Hz).



4. Turning the power and TV on

1. Press the Main power button on the TV to turn the power on.

⏻ ① *The Power lamp lights red (power on), then green (TV on).*

If the power lamp stays red and does not change to green:
Your TV is in the standby mode. Press the Standby button on the remote control to turn your TV on.

Note:
- You can also press the PR channel ∨/∧ button, a number button or the up/down button on the front panel to turn the TV on.

5. Initial Settings

- When the TV is first turned ON, it enters into the initial setting mode, and the JVC logo is displayed.

Note:
- The TV enters into the initial setting mode only once when the TV is first turned ON. If you turn the TV off or exit from the setting menu while performing the initial settings by mistake, you must redo the initial settings, "LANGUAGE" and "AUTO PROGRAM", following the procedures described in page 22 and 23.

1. Press any button on the remote control.

Language menu appears.

Selecting the on-screen language

You can select your language from ten languages listed on the LANGUAGE menu. The displayed menus on the screen are described in the selected language.

2. Press ▼/▲ button to select ENGLISH.

Note:
- In this manual, operation procedures are explained in English as the on-screen language is set to ENGLISH. If you select "FRANÇAIS" from the LANGUAGE selection menu, menus are all described in French of course.

3. Press OK button.

English is set for the on-screen display description, and the COUNTRY menu appears.

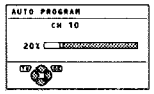
Automatically allocating stations to PR channels (AUTO PROGRAM)

To view a TV programme, you must first allocate the broadcast stations to the PR channels. You can automatically allocate up to 99 stations to the PR channels (PR 1 to PR 99) on this TV.

- If this TV identifies a broadcast station name, that station ID is also automatically registered in a PR channel.
- If the cable TV stations support ACI (Automatic Channel Installation), the ACI function will operate in the place of the normal AUTO PROGRAM function and all of the broadcast will be quickly registered in the PR channels in accordance with the instructions for the cable TV station.

4. Press the ▼/▲ and ◀/▶ buttons to select your country and then press the blue button.

The AUTO PROGRAM menu is displayed and the broadcast stations received by the TV are automatically registered in the PR channels one after another.

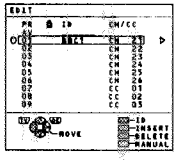


If the ACI menu is displayed:
Press the ▼/▲ button to select the area in which you live and then press the OK button.

If "ACI ERROR" is displayed in the AUTO PROGRAM menu:
Press the OK button again to start the ACI function. If the "ACI ERROR" is displayed again, press the ▶ button to change to the AUTO PROGRAM function and register the stations in the PR channels.

The EDIT menu is displayed after the allocation is completed.

- If you want to edit the PR channels or allocate a station to PR 0 channel, see page 20 "EDIT/MANUAL" for a description of the procedure.



● The procedure is complete.
Press the TV button to exit the menu.

Notes:

- If you want to quit the automatic allocation, press the TV button.
- "ACI" is displayed in the AUTO PROGRAM menu while the ACI function is operating.
- The ACI function may not operate correctly if you don't have good reception.

Notes:

- If a station you want to view is not allocated to a PR channel, manually allocate it. (See page 22.)
- The EDIT menu can be used to edit the PR channels in the following ways.
  - Delete an unnecessary station
  - Change a PR channel number
  - Register a station ID
  - Add a station
  - Manually allocate a station

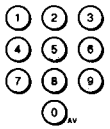
6. Viewing a television programme

1. Select a PR channel.

Selection

- Press the PR channel V/Λ button.

Direct channel selection

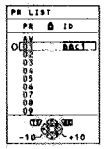


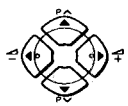
- Press the corresponding number buttons.

Example: To select channel 6, press "6".
To select channel 12, press "1" and "2".

To use the PR LIST to select a PR channel

1. Press the Information button repeatedly to select the PR LIST.
The PR LIST appears.
   - To exit the PR LIST, press the TV button.

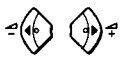




2. Press ▼/▲ buttons to select a PR channel.
   - Press ▶ button to view the next page of the PR LIST.
   - Press ◀ button to view the previous page of the PR LIST.

3. Press OK button.

2. Press the Volume –/+ buttons.



The Volume level indicator appears and the volume changes as you press the Volume –/+ buttons.

Notes:

- If you don't have a clear picture or no colour appears, change the colour system manually (see page 12 for details).
- Enter "0" when selecting an AV channel (PR 0 channel).

Note:

- The 🔒 mark will appear on the PR channel when the CHILD LOCK setting is on (see page 16).

Turning the TV and power off

1. Press the Standby button to turn the TV off.

⏻/I *The Power lamp changes from green to red.*
The TV enters standby mode.

2. Press the Main power button on the TV to turn the main power off.

⏻ *The Power lamp goes off.*

Note:
- To save energy, we recommend that you turn the main power off when you are not using the TV.

To select a channel without using the remote control

You can also use the buttons on the front panel of the TV.

1. Press the Up/down button to turn your TV on.

The Power lamp changes from red to green.

Note:
- If your TV does not turn on, press the Main power button, and then press the Up/down button again.

2. Press the Up/down button to select the PR channel.

Note:
- You can't change PR channels when the volume level indicator is displayed.

3. Adjust the volume.

1. Press the Volume button.
   The volume level indicator appears.
2. Press the Up/down button while the volume level indicator is displayed.

● To turn off your TV, press the Main power button.

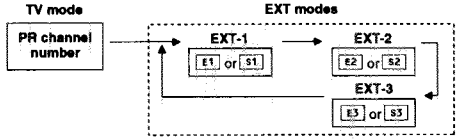
⏻ *The Power lamp goes off.*

Viewing images from external devices

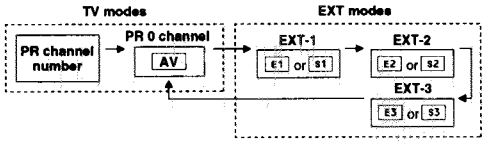
1. Repeatedly press the 0 button to select the EXT terminal.

0 AV *The current selection appears, and disappears after several seconds.*

When a station is not registered to the PR 0 (AV) channel, pressing the 0 button changes the selection as follows:



When a station is registered to the PR 0 (AV) channel, pressing the 0 button changes the selection as follows:



TV mode:
Shows images input from an external device (such as a VCR) or TV aerial connected to the aerial socket of your TV.

EXT modes:
Shows images input from an external device (such as a VCR) connected to the selected EXT terminal.

The EXT terminal can be selected with the following method.
- Repeatedly press the PR channel ∨/∧ button.
- Repeatedly press the up/down button inside the TV front panel door.
- Use the PR LIST.
  1. Repeatedly press the information button to display the PR LIST.
  2. Press the ▼/▲ / ◀/▶ buttons to select the EXT terminal.
  3. Press the OK button.

Notes:
- To use S-Video mode to view input from an S-VHS VCR, see "To select S-VIDEO input for a terminal" on page 19. When selecting EXT-1, EXT-2 or EXT-3 input terminals as S-VIDEO input, E1, E2 or E3 changes to S1, S2 or S3 in the display.
- If you don't have a clear picture or no colour appears, change the colour system manually (see page 12).
- When selecting an EXT terminal with no input signal, the EXT number and ID become fixed on screen.

Note:
- Each EXT terminal is registered after the PR 99 channel.

SOUND AND PICTURE

MUTING

You can render the volume to 0 instantly. This is convenient when answering the phone or when receiving visitors.

1. Press (Muting).

The sound is rendered inaudible.

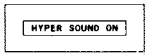
To restore the sound:
Press the Muting button again.

HYPER SOUND

You can enjoy sounds with a wider atmosphere by using Hyper sound.

1. Press (Hyper Sound).

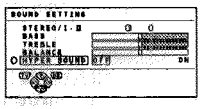
The HYPER SOUND ON appears.



To return to normal sound:
Press the Hyper Sound button again.

- If you turned on HYPER SOUND, the Hyper sound lamp lights.
- HYPER SOUND can be also set to ON by operating MENU.

1. Press the OK button.
   The MENU appears.
2. Press the ▼/▲ button to select SOUND SETTING, and press the OK button.
   The SOUND SETTING menu appears.
3. Press the ▼/▲ button to select HYPER SOUND.



4. Press the ◀/▶ button to select ON, OFF.
5. Press the OK button.
   This completes the setting.

MULTI SOUND

You can select the multi sound mode for stereo broadcast programmes and bilingual programmes.

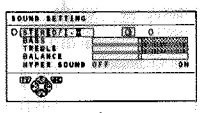
Note:
- The MULTI SOUND function has no effect on programmes other than A2 or NICAM broadcast programmes.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select SOUND SETTING, then press OK.

The SOUND SETTING menu appears.



3. Press ▼/▲ to select STEREO / I • II.

Notes:
- The multi sound mode display is different from the broadcast programme.
- The multi sound function does not work in EXT modes. The STEREO / I•II does not appear in SOUND SETTING menu.

4. Press ◀/▶ to select a multi sound mode.

Ⓓ : Stereo sound
Ⅰ : Bilingual I (Sub I)
Ⅱ : Bilingual II (Sub II)
0 : Normal sound

5. Press OK.

This completes the setting.

Note:
- When you display the current PR channel number, the current multi sound mode appears for approximately 3 seconds.

TINT

You can choose from among three TINT modes.

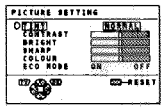
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE SETTING, then press OK.

The PICTURE SETTING menu appears.

3. Press ▼/▲ to select TINT.



4. Press ◀/▶ to select a tint mode.

COOL:
A cool white colour base with a boost in the colour and contrast levels. Creating a more vivid picture.

WARM:
Use this mode when viewing film programmes.

NORMAL:
A normal white colour base with no boost in the colour or contrast levels.

5. Press OK.

This completes the setting.

COLOUR SYSTEM

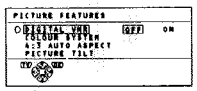
The colour system is automatically selected, but if the picture is not clear or no colour appears, select the colour system manually.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE FEATURES, then press OK.

The PICTURE FEATURES menu appears.



3. Press ▼/▲ button to select COLOUR SYSTEM, then press OK.

The COLOUR SYSTEM menu appears.

4. Press ◀/▶ to select the appropriate colour system.

PAL:
PAL system.

SECAM:
SECAM system.

NTSC3.58:
NTSC 3.58 MHz system.

NTSC4.43:
NTSC 4.43 MHz system.

AUTO:
Automatic colour system selection.

Notes:
- Auto may not function properly depending on signal quality. If the picture is abnormal in AUTO mode, select another colour system manually.
- When in TV mode (PR 1 to PR 99), you cannot select AUTO, NTSC 3.58 or NTSC 4.43.
- When in TV mode (PR 0), you cannot select NTSC 3.58 or NTSC 4.43.

5. Press OK.

This completes the setting.

PICTURE/SOUND ADJUSTMENT

You can adjust the picture and sound as you like.

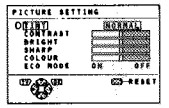
To adjust the picture

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE SETTING, then press OK.

The PICTURE SETTING menu appears.



3. Press ▼/▲ to select an item, and press ◀/▶ to adjust it.

- To return to the default settings, press blue button.

◀	Item	▶
Lower	CONTRAST (picture contrast)	Higher
Darker	BRIGHT (picture brightness)	Brighter
Softer	SHARP (picture sharpness)	Sharper
Lighter	COLOUR (picture colour)	Deeper
Reddish	HUE (picture hue)	Greenish

Note:
- You can adjust the HUE (picture hue) only when the colour system is NTSC 3.58 or NTSC 4.43.

4. Press OK.

This completes the setting.

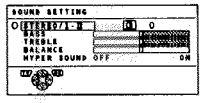
To adjust the sound

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select SOUND SETTING, then press OK.

The SOUND SETTING menu appears.



3. Press ▼/▲ to select an item, and press ◀/▶ to adjust it.

◀	Item	▶
Weaker	BASS (low frequency sound)	Stronger
Weaker	TREBLE (high frequency sound)	Stronger
Left	BALANCE (audio balance)	Right

4. Press OK.

This completes the setting.

ECO MODE

When you set ECO mode to ON, the screen contrast is automatically adjusted to a setting suitable for the brightness of your room.
This reduces eye strain and the power consumption of the TV.

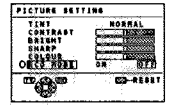
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select PICTURE SETTING, then press OK.

The PICTURE SETTING menu appears.

3. Press ▼/▲ to select ECO MODE.



4. Press ◀/▶ to select ON, OFF.

5. Press OK.

This completes the setting.
- If you turned on ECO mode, the ECO lamp lights.

DIGITAL VNR

When you set DIGITAL VNR to ON, you can reduce the noise on the screen so improving picture quality further.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**
   The PICTURE FEATURES menu appears.
3. **Press ▼/▲ to select DIGITAL VNR.**

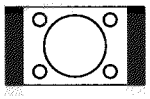
4. **Press ◀/▶ to select ON, OFF.**
5. **Press OK.**
   This completes the setting.

ZOOM

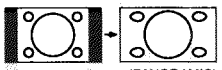
Select a ZOOM mode to change the picture format. You can enlarge the picture to fill the wide TV screen (16:9 aspect ratio). In addition, you can stretch a normal picture (4:3 aspect ratio) to fill the wide TV screen.

Notes:
- The picture format information of the present broadcasting programme may be received as WSS (Wide Screen Signalling). When AUTO mode is selected for ZOOM mode and the WSS signal is received, this TV automatically selects the optimum ZOOM mode corresponding to the WSS signal. However, in the case of weak WSS signal reception, this function may not work correctly. In this case, select an optimum ZOOM mode manually.
- If the EXT-1 or EXT-2 terminal's input is from a picture signal with a 16:9 aspect ratio picture format, the ZOOM mode may automatically changes to FULL mode. This is because the TV detects an identification signal which is not an WSS signal.

REGULAR mode:
Use to view a normal picture (4:3 aspect ratio) unchanged.

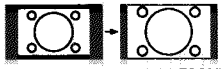


PANORAMIC mode:
Stretches the left and right sides of a normal picture to fill the screen, in a way that does not appear unnatural.

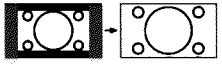

(PANORAMIC)

Note:
- In PANORAMIC mode, the top and bottom of the picture are slightly cut off.

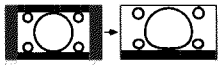
14:9 ZOOM mode:
Use to expand a picture with a 14:9 aspect ratio.


(14:9 ZOOM)

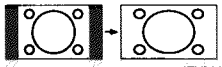
16:9 ZOOM mode:
Use to expand a wide picture (16:9 aspect ratio).


(16:9 ZOOM)

16:9 ZOOM SUBTITLE mode:
Use to expand a picture with a 16:9 aspect ratio having subtitles at the bottom of the screen.


(16:9 ZOOM SUBTITLE)

FULL mode:
Uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.


(FULL)

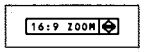
Note:
- For pictures with a 16:9 aspect ratio that have been squeezed into a normal picture (4:3 aspect ratio), select FULL mode to restore their original dimensions.

Manual ZOOM selection

you can select a disired ZOOM mode manually.

1. **Press ZOOM.**
   The ZOOM menu appears.

2. **Press ▼/▲ to select a ZOOM mode.**
3. **Press OK.**
   The picture expands and the selected ZOOM mode is displayed in about 5 seconds.



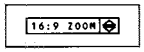
(Continued to the next page)

To move the picture vertically:

If you cannot see subtitles at the bottom of the screen, or if the top or bottom is cut off, move the picture vertically.

Notes:
- You cannot move the picture vertically in AUTO, REGULAR and FULL mode.

1. **Press ZOOM.**
   The ZOOM menu appears.
2. **Press OK.**
   The ZOOM mode is displayed in about 5 seconds.



3. **Before the display disappears, press ▼/▲ to move the picture up or down.**

Note:
- To return the picture to its default position, press the ZOOM button to display the ZOOM menu and press the OK button.

Automatic ZOOM selection (AUTO mode)

You can set your TV to automatically select the optimum ZOOM mode to suit the picture format.

1. **Press ZOOM.**
   The ZOOM menu appears.

2. **Press ▼/▲ to select AUTO.**
3. **Press OK.**
   Your TV automatically selects the optimum ZOOM mode to suit the current programme's picture format.

Note:
- This function may not work correctly depending on the programme. In this case, select the optimum ZOOM mode manually.

To preset a ZOOM mode for the normal picture:

You can preset one of three ZOOM modes, REGULAR, PANORAMIC or 14:9 ZOOM, as the ZOOM mode for the normal picture (4:3 aspect ratio).

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**
   The PICTURE FEATURES menu appears.
3. **Press ▼/▲ to select 4:3 AUTO ASPECT, then press OK.**
   The 4:3 AUTO ASPECT menu appears.

4. **Press ▼/▲ to select a ZOOM mode.**
5. **Press OK.**
   This completes the setting.

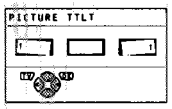
PICTURE TILT

(except AV-28WH3EP)

The AV-32WH3EP has a large picture tube in which a picture could be tilted to the left or right because of magnetic pull from the earth. Use the procedure described below to adjust the picture.

Note:
- The AV-28WH3EP does not have the tilted image correction function.

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select PICTURE FEATURES, then press OK.**
   The PICTURE FEATURES menu appears.
3. **Press ▼/▲ to select PICTURE TILT, then press OK.**
   The PICTURE TILT menu appears.



4. **Press ◀/▶ to select the direction to which you want to correct the tilted image on your screen.**
   - : *If it is inclined to the left, select this symbol to correct it.*
   - : *If it is inclined to the right, select this symbol to correct it.*
   - : *If it is not inclined to either the left or right, select this symbol to set it as it is.*
5. **Press OK.**
   The correction is complete.

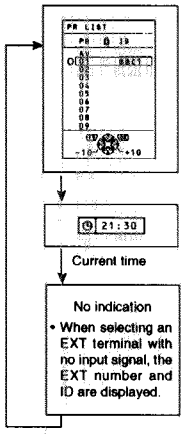
OTHER FEATURES

INFORMATION

You can display the PR LIST or the current time.

1. Press [i] (Information) repeatedly.

The display changes cyclically in the following order.



About PR LIST:

- Ten positions including the currently selected PR channel will be displayed as a list.
  Press ▼/▲ / ◀/▶ to select the desired PR channel. For details see page 8.

About the current time display:

This TV uses teletext data to determine the current time.

- If the TV has not received a station that has teletext data since it was turned on, the time display is blank. To view the current time, select a station that is broadcasting teletext data. As long as you do not turn off the TV, then even if you select other stations, the time will still be displayed.
- When watching videos, the wrong current time is sometimes displayed.

SLEEP TIMER

You can set the TV to automatically turn off after a specified period of time.

Note:

- The SLEEP TIMER does not turn off the Main power.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select FEATURES, then press OK.

The FEATURES menu appears.

3. Press ▼/▲ to select SLEEP TIMER, then press OK.

The SLEEP TIMER menu appears.

4. Press ◀/▶ to select a period of time.

You can set the period of time a maximum of 120 minutes in 10 minute increments.

OFF:

Turns off the SLEEP TIMER.

5. Press OK.

- The Sleep timer lamp lights if you set the SLEEP TIMER.

To display the remaining Sleep timer time:

Perform steps 1 to 3 to display the SLEEP TIMER menu, and press OK button when you finish checking the time.

To turn off the Sleep timer:

Perform steps 1 to 3 to display the SLEEP TIMER menu, press ◀ button to select "OFF", and then press OK button.

- The Sleep timer lamp goes out.

Note:

- One minute before the SLEEP TIMER turns off the TV, "GOOD NIGHT!" appears.

BLUE BACK

When viewing a PR channel with no or poor reception, or if there is no input from an external device, you can mute the sound and change the picture into a blue picture.

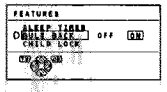
1. Press OK.

The MENU appears.

2. Press ▼/▲ to select FEATURES, then press OK.

The FEATURES menu appears.

3. Press ▼/▲ to select BLUE BACK.



4. Press ◀/▶ to select ON or OFF.

5. Press OK.

This completes the setting.

CHILD LOCK

You can lock some PR channels to prevent your children from watching them.

To set the CHILD LOCK

1. Press OK.

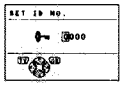
The MENU appears.

2. Press ▼/▲ to select FEATURES, then press OK.

The FEATURES menu appears.

3. Press ▼/▲ to select CHILD LOCK, then press 0 button.

The SET ID NO menu appears.

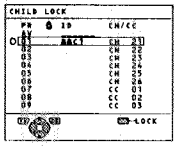


4. Enter the ID number.

1. Press ▼/▲ to select a number.
2. Press ◀/▶ to move the cursor.

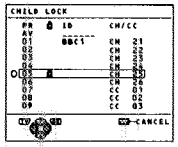
5. Press OK.

The CHILD LOCK menu appears.



6. Press ▼/▲ to select a PR channel, then press the blue button.

The selected PR channel is locked.



- To cancel the CHILD LOCK: Press the blue button again.
- Repeat step 6 to lock all PR channels which you want to lock.

7. Press OK.

This completes the setting.

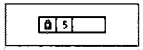
Notes:

- You cannot select a locked PR channel using the PR channel V/Λ buttons.
- Even if you can select a locked channel and display it, you can not view the programme of the locked channel.

To view a locked PR channel

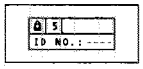
1. Select a locked PR channel.

- Use the number buttons to select the PR channel.
  The locked channel is displayed.



2. Press [i] (Information).

The ID NO. input menu appears.



3. Press the number buttons to enter the ID number.

You are now viewing the locked PR channel.

If you forget the ID number:

Perform steps 1 to 3 of "To set the CHILD LOCK". After you confirm the ID number, press the TV button to exit the menu.

DEMONSTRATION

The demonstration runs automatically and introduces the menus of this TV's main features.

1. Press OK.

The MENU appears.

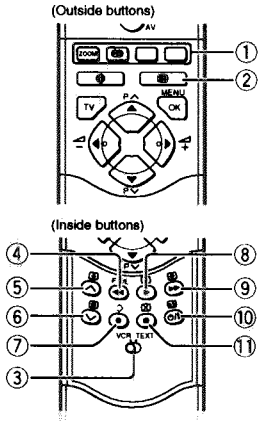
2. Press ▼/▲ to select DEMO, then press OK.

The demonstration begins.

- To stop the demonstration, press any button on the remote control.

TELETEXT

Note:
- If you have trouble receiving teletext broadcasts, consult your local dealer or the teletext station.



1 Colour buttons
2 TV/text button
3 VCR/TEXT selector switch
- When this switch is set to the TEXT side, the following buttons function as the teletext control button.

4 MODE button
5 HOLD button
6 SUB PAGE button
7 STORE button
8 REVEAL button
9 SIZE button
10 INDEX button
11 DISPLAY CANCEL button

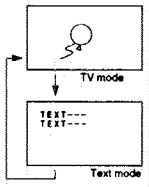
BASIC TELETEXT OPERATION

You can view three types of teletext broadcasts on the TV: Fastext, TOP and WST. The TV automatically recognizes the type of teletext broadcast.

Condition:
- The VCR/TEXT selector switch must already be set to the TEXT side.

1. Select a channel with a teletext broadcast.

2. Press ▭ (TV/text).



3. Select a page number.

Browse:
Press the PR channel V/Λ button on the remote control.

Direct selection:
Press the number buttons to enter a three-digit page number.

Colour button selection:
Press a colour button to select the corresponding page number on the bottom line of the screen.

Notes:
- Category names of teletext pages may appear instead of page numbers.
- In principle, ZOOM mode is fixed to FULL mode when you view Teletext programmes.
- Some Teletext programmes display a mixture of regular TV programmes and Teletext information. When viewing these programmes, ZOOM mode returns to the mode you selected before you started viewing Teletext programmes. With the ZOOM mode, the Teletext information may not be displayed in the correct position. If this happens, press the TV/Text button to cancel the Text mode, then change the ZOOM mode to the PANORAMIC mode or FULL mode.

● To return to TV mode, press the TV/text button.

Notes:
- You can also return to TV mode by pressing the TV button.
- None of the MENU operations are possible in the Text mode. Perform the MENU operation after pressing the TV/Text button to cancel the Text mode.

DISPLAY CANCEL

You can search for a teletext page while watching TV.

1. Select a teletext page.
The TV searches for a teletext page.

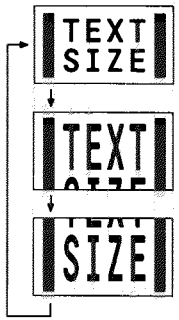
2. Press DISPLAY CANCEL.
The TV programme appears.
When the TV finds the teletext page, its page number appears in the upper left of the screen.

3. Press ▭ (TV/text) when the page number is on the screen.

SIZE

You can double the height of the teletext display.

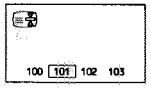
1. Press SIZE repeatedly.



HOLD

You can hold a teletext page on the screen for as long as you want, even while several other teletext pages are being received.

1. Press HOLD.
▭ is displayed in the upper left of the screen, and the teletext page is held on the screen.



To release hold mode:
Press HOLD button again.

INDEX

Just press INDEX button to return to the index page.

1. Press INDEX.

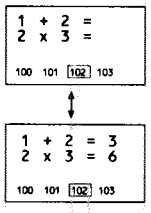
Fastext/TOP/WST:
Returns to page 100 or a previously specified page.

LIST mode:
Returns to the page number displayed in the lower left area of the screen.

REVEAL

Some teletext pages include hidden text (such as answers to a quiz).

1. Press REVEAL.
Each time you press REVEAL button, text is hidden or revealed.



LIST MODE

You can store the numbers of your favourite teletext pages and call them up quickly using the colour buttons.

Note:
- You can store up to 64 pages in memory. You can store four pages in each channel from 1 to 15 (60 pages), and four pages that are the same for all channels above channel 15 (4 pages).

To store the page numbers

1. Press MODE to engage LIST mode.
Stored page numbers are displayed at the bottom of the screen.

2. Press a colour button, then enter the number of the teletext page.
To assign other pages to remaining colour buttons, repeat this operation.

3. Press and hold STORE.
The four page numbers blink white to indicate that they are stored in memory.

To call up a stored page

1. Press MODE to engage LIST mode.
Stored page numbers are displayed at the bottom of the screen.

To release LIST mode:
Press MODE button again.

2. Press a colour button to which a page has been assigned.

SUB PAGE

Some teletext pages include sub-pages that are automatically displayed. You can hold any sub-page, or view it at any time.

1. Call up a teletext page with sub-pages.

2. Press SUB PAGE.
Sub-page numbers are displayed at the left of the screen.

Background colour of the sub-page number is yellow:
This is the number of the sub-page which is currently being displayed.

Background colour of the sub-page number is white:
These are the numbers of the sub-pages which can be displayed.

Background colour of the sub-page number is blue or red:
These are the numbers of sub-pages which have not been sent and can therefore not be displayed.

3. Press ▼/▲ button to select a sub-page number.

OTHER PREPARATION

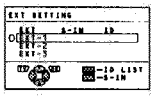
EXT SETTING

You can select S-VIDEO or normal input for the EXT-1, EXT-2 and EXT-3 terminals, and you can give an EXT ID to each EXT input terminal.

To select S-VIDEO input for a terminal

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**
   The EXT SOURCE menu appears.

3. **Press ▼/▲ to select EXT SETTING, then press OK.**
   The EXT SETTING menu appears.

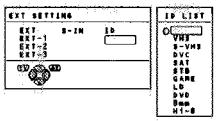


4. **Press ▼/▲ to select an EXT input terminal.**
5. **Press the yellow button.**
   The S-VIDEO input indication appears.
   - To select normal input, press the yellow button again.

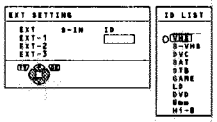
   - If you want to set an EXT ID here, perform the operation procedures from the step 4 of the section "To give an EXT ID to an EXT input terminal" in the next column.
6. **Press OK.**
   The menu disappears.

To give an EXT ID to an EXT input terminal

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**
   The EXT SOURCE menu appears.
3. **Press ▼/▲ to select EXT SETTING, then press OK.**
   The EXT SETTING menu appears.
4. **Press ▼/▲ to select an EXT input terminal.**
5. **Press the blue button.**
   The ID LIST appears.



6. **Press ▼/▲ to select a EXT ID.**



Note:
- To erase the EXT ID, select a blank space.

7. **Press OK.**

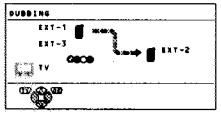
● This completes the procedure. Press the TV button to exit the menu.

DUBBING

Select output to a VCR or other device connected to the EXT-2 terminal. Note that you cannot output from the EXT-2 terminal when the TV is turned off.

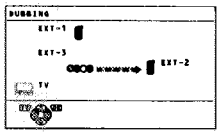
Note:
- RGB signals from TV games and TELETEXT screens cannot be output from EXT-2 terminal.

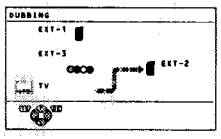
1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select EXT SOURCE, then press OK.**
   The EXT SOURCE menu appears.
3. **Press ▼/▲ to select DUBBING, then press OK.**
   The DUBBING menu appears.



4. **Press ▼/▲ to select the input which you want to output from EXT-2.**

   TV:
   The sound and picture of the currently selected PR channel is output from EXT-2, so you can record the output on a VCR connected to the EXT-2 terminal while watching a video input from the EXT-1 or EXT-3 terminal.





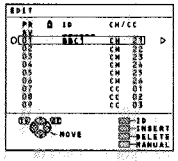
5. **Press OK.**
   The menu disappears.

EDIT/MANUAL

You can change PR channel settings by doing any of the following:
- You can delete an unwanted station from a PR channel,
- You can change the PR channel number of a station,
- You can add station IDs to PR channels,
- You can add a new station to a PR channel, or
- You can manually allocate the desired station to a PR channel.

To edit PR channels

1. **Press OK.**
   The MENU appears.
2. **Press ▼/▲ to select INSTALL, then press OK.**
   The INSTALL menu appears.
3. **Press ▼/▲ to select EDIT/ MANUAL, then press OK.**
   The EDIT menu appears.

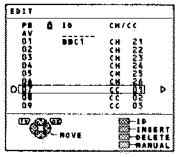


4. **Use any of the procedures described in the following pages to change the PR channel settings.**

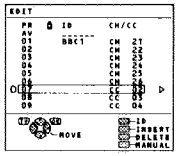
● This completes the procedure. Press the TV button to exit the menu.

To delete a station from a PR channel

1. **Press ▼/▲ to select the station you want to delete.**



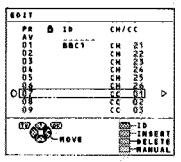
2. **Press the yellow button.**



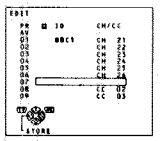
Note:
- Stations allocated to PR channels following the deleted PR channel number are shifted back by one to the preceding PR channel number.

To change the PR channel number of a station

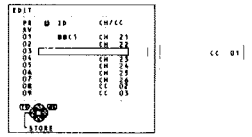
1. **Press ▼/▲ to select the station.**



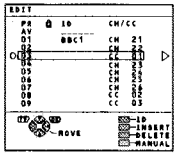
2. **Press ▶.**



3. **Press ▼/▲ to move the selected station to the desired PR channel number.**
   - To cancel the operation, press the [i] (Information) button.

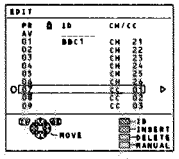


4. **Press ◀.**

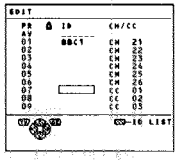


To add a station ID to a station

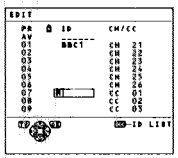
1. Press ▼/▲ to select the station.



2. Press the red button.

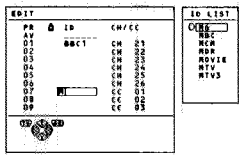


3. Press ▼/▲ to select the first letter of the desired station's ID.



4. Press the blue button.

The ID LIST menu appears.

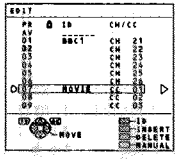


5. Press ▼/▲ to select the station ID.

- To cancel the operation, press the (Information) button.

6. Press OK.

Returns to the EDIT menu.



Programming a station's ID manually:

Follow the operations below in place of steps 3 thru 5.

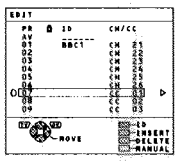
(1) Press the ▼/▲ button repeatedly to select a character.

(2) Press the ▶ button to move cursor to input position.
- Pressing the ◀ button moves the cursor backward.

(3) To complete station ID, follow steps (1) and (2) repeatedly.
- A station ID can have up to 6 characters.

To add a new station to a PR channel

1. Press ▼/▲ to select the row containing the PR channel number to which you want to add a station.

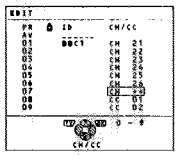


2. Press the green button.

3. Press ▼/▲ to display the enter number indicator.

CH: to add terrestrial broadcast stations
CC: to add cable TV stations

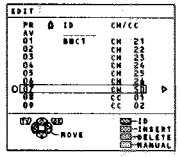
- To cancel the operation, press the (Information) button.



Note:
- For details on the relationship between the displayed CH/CC number and the actual channel number, see the Channel table on page 25.

4. Press the number buttons to enter the channel number.

- To enter a one-digit channel number, enter the corresponding number and press OK button.



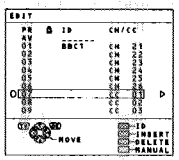
Note:
- When you add a station, the station preset to PR99 is deleted.

To manually allocate a station to PR channel (Manual allocation)

Condition:
- To manually allocate French stations to PR channels, you must set COUNTRY to FRANCE. If COUNTRY is set to any other country than FRANCE, perform "AUTO PROGRAM" steps 1 thru 4 on page 23 to set COUNTRY to FRANCE. Then press the (Information) button to return to the INSTALL menu. Finally press the ▼/▲ button to select EDIT/MANUAL, and press the OK button to return to the EDIT menu.

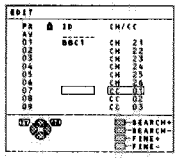
1. Press ▼/▲ to select a PR channel number.

Note:
- PR channel number "AV" appears on the screen as PR 0 channel. We recommend that you allocate this PR channel to a VCR connected to the aerial socket.



2. Press the blue button.

Your TV enters the Manual allocation mode.



3. Press the green or red button to search for a station.

Scanning stops when the TV receives a broadcast.
Press the green or red button to search for another station, and keep searching until you see the station you want.

CH: Terrestrial broadcast stations
CC: Cable TV stations

When COUNTRY is set to FRANCE, the broadcast system is displayed as "(B/G)", "(I)" or "(L)" to the right of the PR channel number. If the signal of a station is incorrectly received, press the ▶ button to change the broadcast system and then repeat step 3.

If reception is poor:
Press the blue or yellow button to fine-tune the station.

Note:
- For details on the relationship between the displayed CH/CC number and the actual channel number, see the Channel table on page 25.

4. Press OK.

The station is allocated to a PR channel.

LANGUAGE

You can select one of ten languages for the on-screen display.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select INSTALL, then press OK.

The INSTALL menu appears.

3. Press ▼/▲ to select LANGUAGE, then press OK.

The LANGUAGE menu appears.

4. Press ▼/▲ to select a language.

5. Press OK.

This completes the setting.

AUTO PROGRAM

If the "Initial Settings" on page 6 are stopped midway or if you want to perform the PR channel automatic allocation again, perform the operation in accordance with this explanation of the AUTO PROGRAM.

You can automatically allocate up to 99 stations to the PR channels (PR 1 to PR 99) on this TV.

- If this TV identifies a broadcast station name, that station ID is also automatically registered in a PR channel.
- If the cable TV stations support ACI (Automatic Channel Installation), the ACI function will operate in the place of the normal AUTO PROGRAM function and all of the broadcast will be quickly registered in the PR channels in accordance with the instructions for the cable TV station.

1. Press OK.

The MENU appears.

2. Press ▼/▲ to select INSTALL, then press OK.

The INSTALL menu appears.

3. Press ▼/▲ to select AUTO PROGRAM, then press OK.

The COUNTRY menu appears.

4. Press ▼/▲ / ◀/▶ to select your country.

5. Press the blue button.

The AUTO PROGRAM menu is displayed and the broadcast stations received by the TV are automatically registered in the PR channels one after another.

If the ACI menu is displayed:

Press the ▼/▲ button to select the area in which you live and then press the OK button.

If "ACI ERROR" is displayed in the AUTO PROGRAM menu:

Press the OK button again to start the ACI function. If the "ACI ERROR" is displayed again, press the ▶ button to change to the AUTO PROGRAM function and register the stations in the PR channels.

Notes:

- If you want to quit the automatic allocation, press the TV button.
- "ACI" is displayed in the AUTO PROGRAM menu while the ACI function is operating.
- The ACI function may not operate correctly if you don't have good reception.

The EDIT menu is displayed after the allocation is completed.

- If you want to edit the PR channels or allocate a station to PR 0 channel, see page 20 "EDIT/MANUAL" for a description of the procedure.

Notes:

- If a station you want to view is not allocated to a PR channel, manually allocate it. (See page 22.)
- The EDIT menu can be used to edit the PR channels in the following ways.
  - Delete an unnecessary station
  - Change a PR channel number
  - Register a station ID
  - Add a station
  - Manually allocate a station

● The procedure is complete. Press the TV button to exit the menu.

TROUBLESHOOTING

- If the plug is disconnected from the AC socket, or the TV aerial has problems, you may think there is a problem with the TV itself. Be sure to check the following before calling for service.

IMPORTANT

- Review all instructions in this manual.

	Problem	Action
■ GENERAL	No power supply.	Insert the plug in an AC socket. Press the Main power button (see page 6).
	No picture or sound.	Check aerial connections (see page 4). Press the number 0 button to select the correct mode (see page 10). Select the correct colour system manually (see page 12).
	The power shuts off automatically.	Press the Standby button to turn the power on again (see page 6)
	Inoperable remote control.	Replace the batteries (see page 2). Insert the batteries correctly (see page 2). Use the remote control within about 7 metres of the TV.
	MENU can not be displayed.	Are you watching the Teletext screen? None of the MENU operations are possible in the Text mode. Perform the MENU operation after pressing the TV/Text button to cancel the Text mode.
■ PICTURE	Poor colour.	Adjust COLOUR and BRIGHT (see page 12). Select the correct colour system manually (see page 12).
	The screen mode suddenly changed.	The ZOOM mode's automatic selective function is working (see page 13).
	The picture is tilted. (AV-32WH3EP only)	Use the PICTURE TILT to correct the tilt (see page 14).
	Lines or streaks in picture (interference).	Move the components apart until the interference is eliminated. Reposition the aerial.
	Spots (crosstalk).	Reposition the aerial. Replace with an aerial with better directionality.
	Double pictures (ghosts).	Reposition the aerial. Replace with an aerial with better directionality.
	Snowy pictures (noise).	Check aerial connections. Redirect the aerial. Replace or repair the aerial.
	The screen turns blue.	The BLUE BACK function is on (see page 15).
■ SOUND	No sound from the TV's speakers.	Disconnect the headphones.
	No stereo sound.	Change STEREO/I•II to ⓞ mode (see page 11).
	No "SUB-I" or "SUB-II" sound in a multisound broadcast.	Change STEREO/I•II to the correct mode (see page 11).
■ TELETEXT	No teletext reception.	Tune to a teletext broadcast channel (see page 17). We recommend that you can not view videotape teletext, as it may not be recorded correctly.
	The current time is not displayed.	Tune to a teletext broadcast channel (see page 15).

The following are normal and are NOT malfunctions:

- When you touch the CRT surface, you might feel a slight charge of static electricity. This is because the CRT contains static electricity; it does not affect the human body.
- The TV may emit a crackling sound due to a sudden change in temperature. There is no problem unless the picture or sound is abnormal.
- When a still, bright image (of a white dress, for example) appears on the screen, the image may be coloured. This problem occurs in all CRTs, and as the bright image disappears, such colouration also disappears.
- This TV is equipped with a microcomputer that may operate abnormally due to interference from external components. If this happens, turn off the main power and disconnect the power cord from the AC socket. Then reconnect the power cord to AC socket and turn on the main power again.

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AV-32WH3EP
AV-28WH3EP

CHANNEL TABLE

- The following table shows the relationship between the displayed CH/CC channel number and the actual channel number.
- The actual channel numbers for the "CC" channel numbers from CC110 to CC161 differ depending on the cable TV station. Check which actual channel numbers correspond to which "CC" channels while referring to the broadcast frequencies which are indicated in the channel tables of each cable TV station. If you can not find the broadcast frequency for a channel, contact the cable TV station.

CH	Channel
CH 02 / CH 202	E2
CH 03 / CH 203	E3, ITALY A
CH 04 / CH 204	E4, ITALY B
CH 05 / CH 205	E5, ITALY D
CH 06 / CH 206	E6, ITALY E
CH 07 / CH 207	E7, ITALY F
CH 08 / CH 208	E8
CH 09 / CH 209	E9, ITALY G
CH 10 / CH 210	E10, ITALY H
CH 11 / CH 211	E11, ITALY H+1
CH 12 / CH 212	E12, ITALY H+2
CH 21 / CH 221	E21
CH 22 / CH 222	E22
CH 23 / CH 223	E23
CH 24 / CH 224	E24
CH 25 / CH 225	E25
CH 26 / CH 226	E26
CH 27 / CH 227	E27
CH 28 / CH 228	E28
CH 29 / CH 229	E29
CH 30 / CH 230	E30
CH 31 / CH 231	E31
CH 32 / CH 232	E32
CH 33 / CH 233	E33
CH 34 / CH 234	E34
CH 35 / CH 235	E35
CH 36 / CH 236	E36
CH 37 / CH 237	E37
CH 38 / CH 238	E38
CH 39 / CH 239	E39

CH	Channel
CH 40 / CH 240	E40
CH 41 / CH 241	E41
CH 42 / CH 242	E42
CH 43 / CH 243	E43
CH 44 / CH 244	E44
CH 45 / CH 245	E45
CH 46 / CH 246	E46
CH 47 / CH 247	E47
CH 48 / CH 248	E48
CH 49 / CH 249	E49
CH 50 / CH 250	E50
CH 51 / CH 251	E51
CH 52 / CH 252	E52
CH 53 / CH 253	E53
CH 54 / CH 254	E54
CH 55 / CH 255	E55
CH 56 / CH 256	E56
CH 57 / CH 257	E57
CH 58 / CH 258	E58
CH 59 / CH 259	E59
CH 60 / CH 260	E60
CH 61 / CH 261	E61
CH 62 / CH 262	E62
CH 63 / CH 263	E63
CH 64 / CH 264	E64
CH 65 / CH 265	E65
CH 66 / CH 266	E66
CH 67 / CH 267	E67
CH 68 / CH 268	E68
CH 69 / CH 269	E69

CC	Channel
CC 01 / CC 201	S1
CC 02 / CC 202	S2
CC 03 / CC 203	S3
CC 04 / CC 204	S4
CC 05 / CC 205	S5
CC 06 / CC 206	S6
CC 07 / CC 207	S7
CC 08 / CC 208	S8
CC 09 / CC 209	S9
CC 10 / CC 210	S10
CC 11 / CC 211	S11
CC 12 / CC 212	S12
CC 13 / CC 213	S13
CC 14 / CC 214	S14
CC 15 / CC 215	S15
CC 16 / CC 216	S16
CC 17 / CC 217	S17
CC 18 / CC 218	S18
CC 19 / CC 219	S19
CC 20 / CC 220	S20
CC 21 / CC 221	S21
CC 22 / CC 222	S22
CC 23 / CC 223	S23
CC 24 / CC 224	S24
CC 25 / CC 225	S25
CC 26 / CC 226	S26
CC 27 / CC 227	S27
CC 28 / CC 228	S28
CC 29 / CC 229	S29
CC 30 / CC 230	S30

CC	Channel
CC 31 / CC 231	S31
CC 32 / CC 232	S32
CC 33 / CC 233	S33
CC 34 / CC 234	S34
CC 35 / CC 235	S35
CC 36 / CC 236	S36
CC 37 / CC 237	S37
CC 38 / CC 238	S38
CC 39 / CC 239	S39
CC 40 / CC 240	S40
CC 41 / CC 241	S41
CC 75 / CC 275	X
CC 76 / CC 276	Y
CC 77 / CC 277	Z, ITALY C
CC 78 / CC 278	Z+1
CC 79 / CC 279	Z+2

(Continued to the next page)

CHANNEL TABLE

CH	Channel
CH 102	F2
CH 103	F3
CH 104	F4
CH 105	F5
CH 106	F6
CH 107	F7
CH 108	F8
CH 109	F9
CH 110	F10
CH 121	F21
CH 122	F22
CH 123	F23
CH 124	F24
CH 125	F25
CH 126	F26
CH 127	F27
CH 128	F28
CH 129	F29
CH 130	F30
CH 131	F31
CH 132	F32
CH 133	F33
CH 134	F34
CH 135	F35
CH 136	F36
CH 137	F37
CH 138	F38
CH 139	F39
CH 140	F40

CH	Channel
CH 141	F41
CH 142	F42
CH 143	F43
CH 144	F44
CH 145	F45
CH 146	F46
CH 147	F47
CH 148	F48
CH 149	F49
CH 150	F50
CH 151	F51
CH 152	F52
CH 153	F53
CH 154	F54
CH 155	F55
CH 156	F56
CH 157	F57
CH 158	F58
CH 159	F59
CH 160	F60
CH 161	F61
CH 162	F62
CH 163	F63
CH 164	F64
CH 165	F65
CH 166	F66
CH 167	F67
CH 168	F68
CH 169	F69

CC	Frequency (MHz)
CC 110	116 - 124
CC 111	124 - 132
CC 112	132 - 140
CC 113	140 - 148
CC 114	148 - 156
CC 115	156 - 164
CC 116	164 - 172
CC 123	220 - 228
CC 124	228 - 236
CC 125	236 - 244
CC 126	244 - 252
CC 127	252 - 260
CC 128	260 - 268
CC 129	268 - 276
CC 130	276 - 284
CC 131	284 - 292
CC 132	292 - 300
CC 133	300 - 306
CC 141	306 - 311
CC 142	311 - 319
CC 143	319 - 327
CC 144	327 - 335
CC 145	335 - 343
CC 146	343 - 351
CC 147	351 - 359
CC 148	359 - 367
CC 149	367 - 375
CC 150	375 - 383

CC	Frequency (MHz)
CC 151	383 - 391
CC 152	391 - 399
CC 153	399 - 407
CC 154	407 - 415
CC 155	415 - 423
CC 156	423 - 431
CC 157	431 - 439
CC 158	439 - 447
CC 159	447 - 455
CC 160	455 - 463
CC 161	463 - 469

SPECIFICATIONS

Item \ Model	AV-32WH3EP	AV-28WH3EP
TV RF systems	CCIR L, B/G, I	
Colour systems	PAL, SECAM (NTSC 3.58 / 4.43 MHz only in EXT modes)	
Channels and frequencies	E2-E12, E21-E69, F2-F10, F21-F69, S1-S41, X, Y, Z, Z+1, Z+2, A-H, H+1, H+2 • French cable TV channels of broadcast frequencies 116–172 MHz or 220–469 MHz.	
Sound-multiplex systems	A2/NICAM (B/G, L) system	
Teletext systems	Fastext (United Kingdom system) / TOP (German system) / WST (standard system)	
Power requirements	AC 220 – 240 V, 50 Hz	
Power consumption	Maximum 200 W, Average 139 W, Standby 0.9 W	Maximum 194 W, Average 136 W, Standby 0.9 W
Picture tube size	Visible area 76 cm (measured diagonally)	Visible area 66 cm (measured diagonally)
Audio output	Rated Power output 10 W + 10 W	
Speakers	10 cm round x 2	
External input / output	EXT-1, EXT-2: 21-pin Euroconnector (SCART)	
	EXT-3: VIDEO IN (RCA) AUDIO L / R IN (RCA) S-VIDEO IN (Mini Din 4-pin)	
	Headphone jack (stereo mini jack, dia. 3.5 mm)	
Dimensions (W x H x D)	805 mm x 550 mm x 550 mm	716 mm x 489 mm x 496 mm
Weight	48.2 kg	34.7 kg
Accessories	Remote control unit RM-C795 x 1 AAA (R03) dry cell battery x 2	

Design and specifications subject to change without notice.

Pictures displayed on the screen using this TV's image-processing functions should not be shown for any commercial or demonstration purpose in public places (tearooms and halls in hotels, etc.) without the consent of the owners of copyright of the original picture sources, as this constitutes an infringement of copyright.


JVC
VICTOR COMPANY OF JAPAN, LIMITED

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

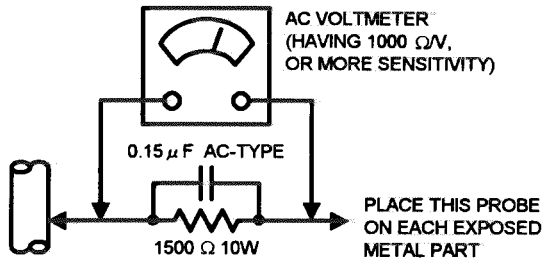
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

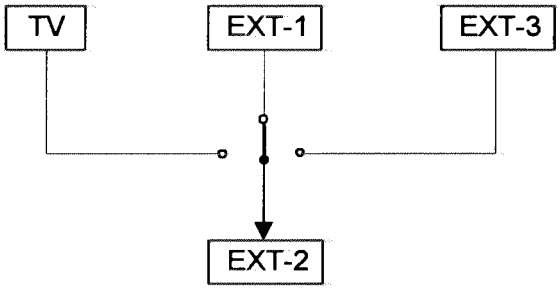
(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



FEATURES

- By preference, users can select the picture size from REGULAR, PANORAMIC, 14:9 ZOOM, 16:9 ZOOM, 16:9 ZOOM SUBTITLE, FULL modes. When the TV unit received WSS picture signal, the picture can be changed to 16:9 mode automatically.
- The TELETEXT SYSTEM has a built-in Fastext, TOP and WST system.
- Because this TV unit corresponds to multiplex broadcast, users can enjoy music programs and sporting events with live realism. In addition, BILINGUAL programs can be heard in their original language.
- In accordance with the brightness in a room, the brightness and/or contrast of the picture can be adjusted automatically to make the optimum picture which is easy on the eye.
- Users can make VTR dubbing of picture and sound by controlling the AV selector to select an optional source at the EXT-2 output shown in figure.



MAIN DIFFERENCE PARTS LIST

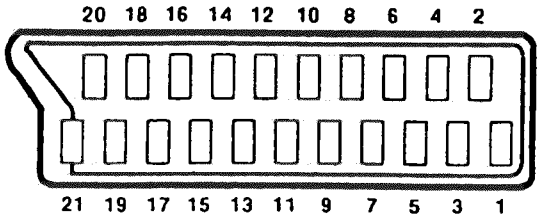
⚠	Model Name / Parts Name	AV-32WH3EP	AV-28WH3EP
	MAIN PWB ASS'Y	SMC-1003A-U2	SMC-1004A-U2
	POWER DEF ASS'Y	SMC-2002A-U2	SMC-2003A-U2
	CRT SOCKET PWB ASS'Y	SMC-3002A-U2	SMC-3003A-U2
	CONTROL BASE	CM12925-B01-E	CM12925-B03-E
	CONTROL BASE	CM12925-A02-E	CM12925-A04-E
	CONNECTOR ASS'Y	CHGA04-5400-G	WJJ0010-002A
	FFC WIRE	CHGB119-10BD	CHFB119-06BD
⚠	CRT	W76ESF031X44	W66ESF002X44
⚠	DEG COIL	CELD062-001J2	CELD061-001J2
	ROTATION COIL	CELD904-001	×
	BRAIDED ASS'Y	CHGB0029-0C	CHGB0029-0B
	FRONT CABNET	CM12587-A0R-E	CM12833-A0F-E
⚠	HVT (SERVICE)	CETH021-00AJ1	CETH020-00AJ1
⚠	REAR COVER	CM12737-003-E	CM12582-A04-E
⚠	RATING LABEL	LC20092-004A-U LC20093-004A-U	LC20092-005A-U LC20093-005A-U
	EURO LABEL	AEM1038-089-E	AEM1038-090-E
	X-RAY CARD	LC10102-003A-U	LC10102-004A-U

■21-pin Euro connector (SCART socket) : EXT-1 / EXT-2

(P-P= Peak to Peak, S-W= Sync tip to white peak, B-W= Blanking to white peak)

Pin No.	Signal Designation	Matching Value	EXT-1	EXT-2
1	AUDIO R output	500mVrms(Nominal), Low impedance	O (TV OUT)	O (LINE OUT)
2	AUDIO R input	500mVrms(Nominal), High impedance	O	O
3	AUDIO L output	500mVrms(Nominal), Low impedance	O (TV OUT)	O (LINE OUT)
4	AUDIO GND		O	O
5	GND (B)		O	O
6	AUDIO L input	500mVrms(Nominal), High impedance	O	O
7	B input	700mV_{B-W}, 75Ω	O	NC
8	FUNCTON SW (SLOW SW)	Low : 0-3V, High : 8-12V, High impedance	O	O
9	GND (G)		O	O
10	--		NC	--
10	SCL3		--	O
11	G input	700mV_{B-W}, 75Ω	O	NC
12	--		NC	--
12	SDA3		--	O
13	GND (R)		O	O
14	GND (Y_S)		O	NC
15	R / C input	R : 700mV_{B-W}, 75Ω C : 300mV_{P-P}, 75Ω	O	O (only C)
16	Ys input	Low : 0 - 0.4, High : 1 - 3V, 75Ω	O	NC
17	GND(VIDEO output)		O	O
18	GND(VIDEO input)		O	O
19	VIDEO output	1V_{S-W}(Negative going sync), 75Ω	O (TV)	O (LINE OUT)
20	VIDEO / Y input	1V_{S-W}(Negative going sync), 75Ω	O	O
21	COMMON GND		O	O

[Pin assignment]



SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power cord.
2. Remove the 13 screws marked Ⓐ as shown in Fig. 1.
3. Withdraw the rear cover toward you.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the two claws under the both sides of the chassis from the front cabinet.
2. Withdraw the chassis backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE AV TERMINAL PWB & THE AV TERMINAL BASE

- After removing the rear cover.

1. Remove the 3 screws marked Ⓑ as shown in Fig. 1.
2. While raising the claw marked Ⓒ , remove the top of the AV TERMINAL BASE slightly in the direction of arrow Ⓓ as shown in Fig. 2.

REMOVING THE SPEAKER

- After removing the rear cover.

1. Remove the 4 screws marked Ⓔ as shown in Fig. 1.
2. Follow the same steps when removing the other hand speaker.

REMOVING THE DOME SPEAKER BOX

- After removing the rear cover.

1. Remove the 2 screws marked Ⓕ as shown in Fig. 1.
2. Follow the same steps when removing the other hand DOME SPEAKER BOX.

NOTE : When removing the screws marked Ⓕ of the DOME SPEAKER BOX, remove the upper screw.

REMOVING THE CONTROL BASE

- After removing the CHASSIS.

1. While pushing down the claws marked Ⓖ , remove the CONTROL BASE in the arrow direction Ⓗ as shown in Fig. 3.

REMOVING THE TRANSF. HOLDER .

- After removing the CHASSIS.

1. Remove the 3 screws marked Ⓘ as shown in Fig. 1.

CHECKING THE PW BOARD

To check the back side of the PW Board.

1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
2) Erect the chassis vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.

Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

This exploded view describes about AV-32WH3EP.
Although AV-28WH3EP is slightly different from this figure, you can use the exploded view for disassembling the AV-28WH3EP in the same step as for the AV-32WH3EP.

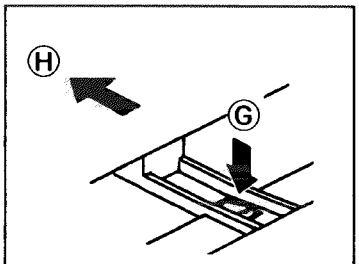
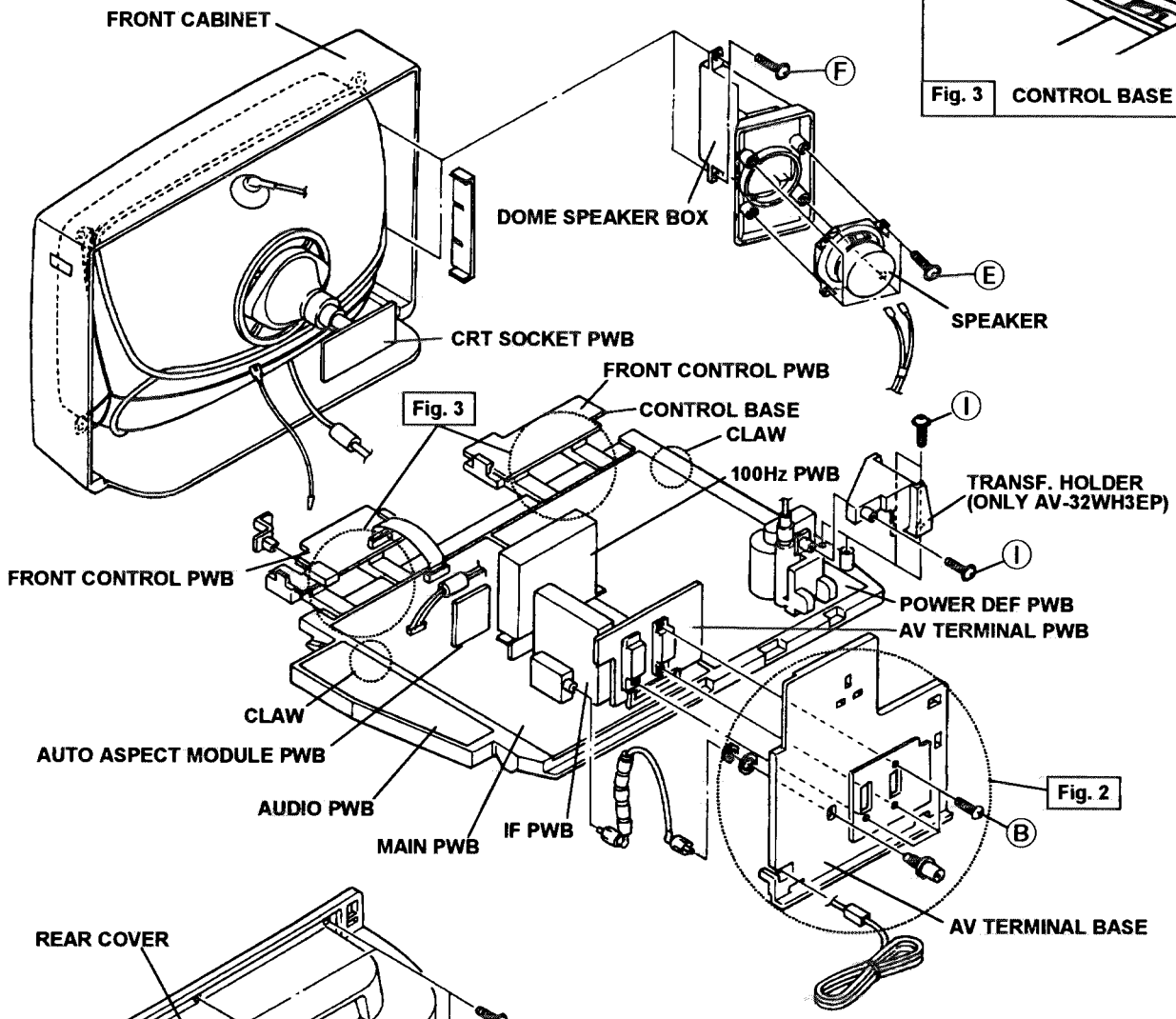


Fig. 3 CONTROL BASE



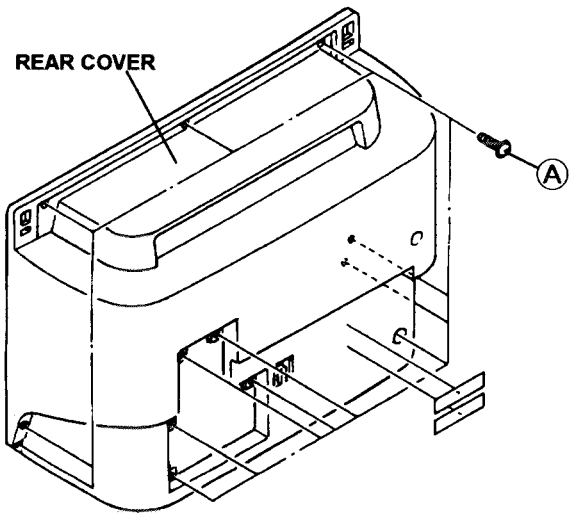


Fig. 1

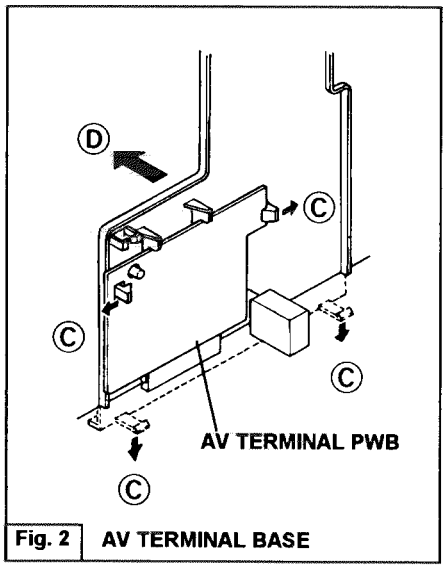


Fig. 2 AV TERMINAL BASE

REMOVING THE CRT

* Replacement of the CRT should be performed by 2 or more persons.
- After removing the cover, chassis etc..,

1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.4).
2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.5.
3. Remove 4 screws marked by arrows with a box type screw driver as shown in Fig.5.

- Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.6.

- The CRT should be assembled according to the opposite sequence of its dismounting steps.

* The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

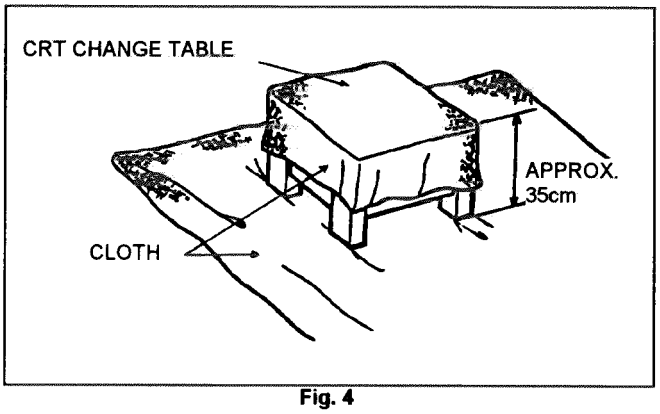


Fig. 4

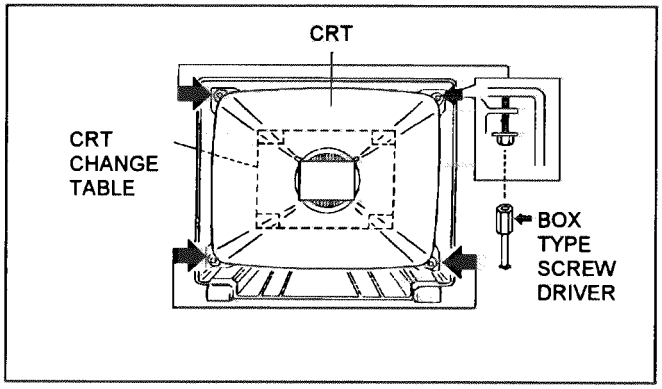


Fig. 5

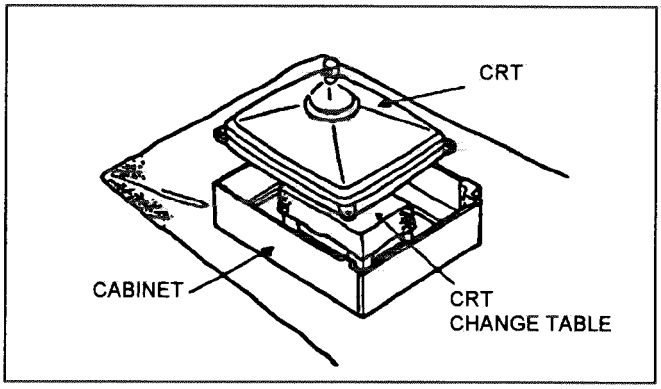


Fig. 6

COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

- Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismounting them, be sure to coat silicon grease for electrical insulation as shown in Fig.7.
  Wipe around the anode button with clean and dry cloth. (Fig.7)
  Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not stick to the anode button. (Fig.8)

★ **Silicon grease product No. KS - 650N**

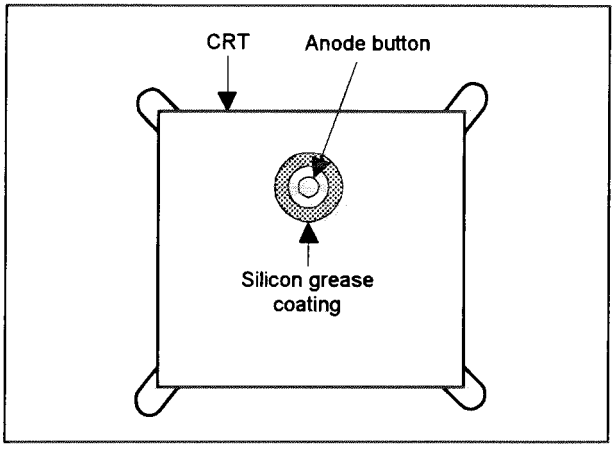


Fig. 7

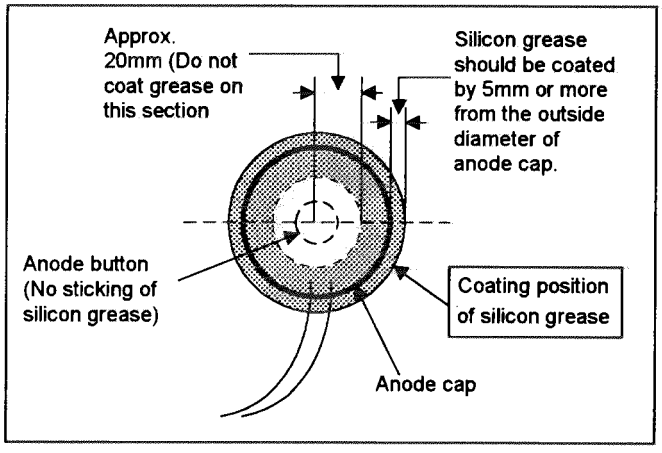


Fig. 8

REPLACEMENT OF MEMORY ICs

1. Memory ICs

This TV use memory ICs. In the memory ICs, there are memorized data for correctly operating the video and deflection circuits. When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. Procedure for replacing memory ICs

PROCEDURE
(1) **Power off** Switch the power off and unplug the power code from the outlet.
(2) **Replace ICs.** Be sure to use memory ICs written with the initial data values.
(3) **Power on** Plug the power code into the outlet and switch the power on.
(4) **Check and set SYSTEM CONSTANT SET:** 1) Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously. 2) The SERVICE MENU screen of Fig. 1 will be displayed. 3) While the SERVICE MENU is displayed, press the INFORMATION key and MUTING key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed. 4) Check the setting values of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the FUNCTION UP/DOWN key, and set the correct value with the FUNCTION -/+ key. 5) Press the MENU key to memorize the setting value. 6) Press the INFORMATION key twice, and return to the normal screen.
(5) **Setting of receive channels** Set the receive channel. For setting, refer to the OPERATING INSTRUCTIONS.
(6) **User settings** Check the user setting values of Table 2, and if setting value is different, set the correct value. For setting, refer to the OPERATING INSTRUCTIONS.
(7) **Setting of SERVICE MENU** Verify the setting items of the **SERVICE MENU** of Table 3, and reset where necessary. For setting, refer to the SERVICE ADJUSTMENTS.

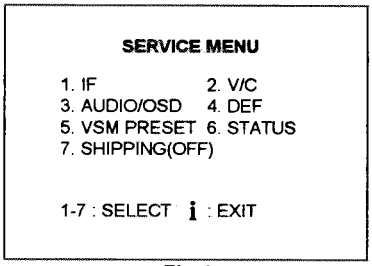


Fig.1

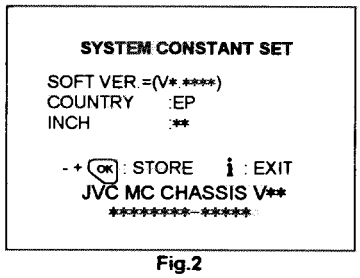


Fig.2

NAME OF REMOTE CONTROL KEY

Names of key	key
INFORMATION	
MUTING	
MENU	
FUNCTION UP/DOWN	
FUNCTION -/+	

SETTING VALUES OF SYSTEM CONSTANT SET (TABLE 1)

Setting item	Setting content	Setting value	
		AV-32WH3EP	AV-28WH3EP
1. COUNTRY	EN → EP → ER → EK	EP	←
2. INCH	29 → 28 → 32	32	28

USER SETTING VALUES (TABLE 2)

Setting item		Setting value	Setting item		Setting value
SUB POWER		ON	INSTALL	LANGUAGE	ENGLISH
CHANNEL		1 POSITION	EXT SOURCE	EXT SETTING	ID:NO INPUT S-IN:NO INPUT
CHANNEL PRESET		See;OPERATING INSTRUCTUONS.		DUBBING	EXT-1→EXT-2
VOLUME		Appropriate sound volume	FEATURES	SLEEP TIMER	OFF
DISPLAY		CHANNEL NUMBER DISPLAY		BLUE BACK	ON
ZOOM MODE		REGULAR		CHILD LOCK	ID NO.0000 all channel off
PICTURE FEATURE	COLOR SYSTEM	TV:depend on PR EXT:AUTO	PICTURE SETTING	TINT	COOL
	DIGITAL VNR	ON		CONTRAST	RESET
4:3 AUTO ASPECT		PANORAMIC		BRIBHT	RESET
PICTURE TILT [AV-32WH3EP]		CENTRE		SHARP	RESET
SOUND SETTING	BASS	CENTRE		COLOUR	RESET
	TREBLE	CENTRE		ECO	OFF
	BALANCE	CENTRE			
	HYPER SOUND	OFF			

SERVICE MENU SETTING ITEMS (TABLE 3)

Setting item	Setting value	Setting item	Setting value
1. IF	1. VCO 2. DELAY POINT 3. L.V.LEVEL	4. DEF.	1. V-SHIFT 2. V-SLOPE 3. V-SIZE 4. H-CENT 5. H-SIZE 6. EW-PIN 7. EW-COR 8. TRAPEZ 9. V-S.CR 10. EHT-COMP
2. V / C	1. RGB BLK 2. R DRIVE 3. G DRIVE 4. B DRIVE 5. R LEVEL 6. G LEVEL 7. B LEVEL 8. BRIGHT 9. CONT. 10. COLOUR(PAL/SECAM/NTSC) 11. HUE 12. PEAK DRIVE 13. GAMMA 14. CONT LIMIT	5. VSM PRESET [COOL NORMAL [WARM	1. BRIGHT 2. CONT. 3. COLOUR 4. SHARP 5. HUE 6. R DRIVE 7. G DRIVE 8. B DRIVE 9. BASS 10. TREBLE
3. AUDIO / OSD ***(Do not adjust)***	1. CONC LIMIT 2. A2 ID THR 3. TEXT MONO H	6. VPS ***(Do not adjust)***	VPS
		7. SHIPPING ***(Do not adjust)***	ON / OFF

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 ways of adjusting this TV: One is with the REMOTE CONTROL UNIT and the other is the conventional method using adjustment parts and components.**
2. **The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.**
3. Turn on the power of the TV and measuring instrument for warming up for at least 30 minutes before starting adjustment.
4. Make sure that connection is correctly made to AC power source.
5. If the receive or input signal is not specified, use the most appropriate signal for adjustment.
6. Never touch parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.
7. Preparation for adjustment (presetting):
   Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT:

PICTURE MODE (VSM)	COOL
SLEEP TIMER	OFF
HYPER SOUND	OFF
BALANCE	CENTER
ECO	OFF
ZOOM	FULL

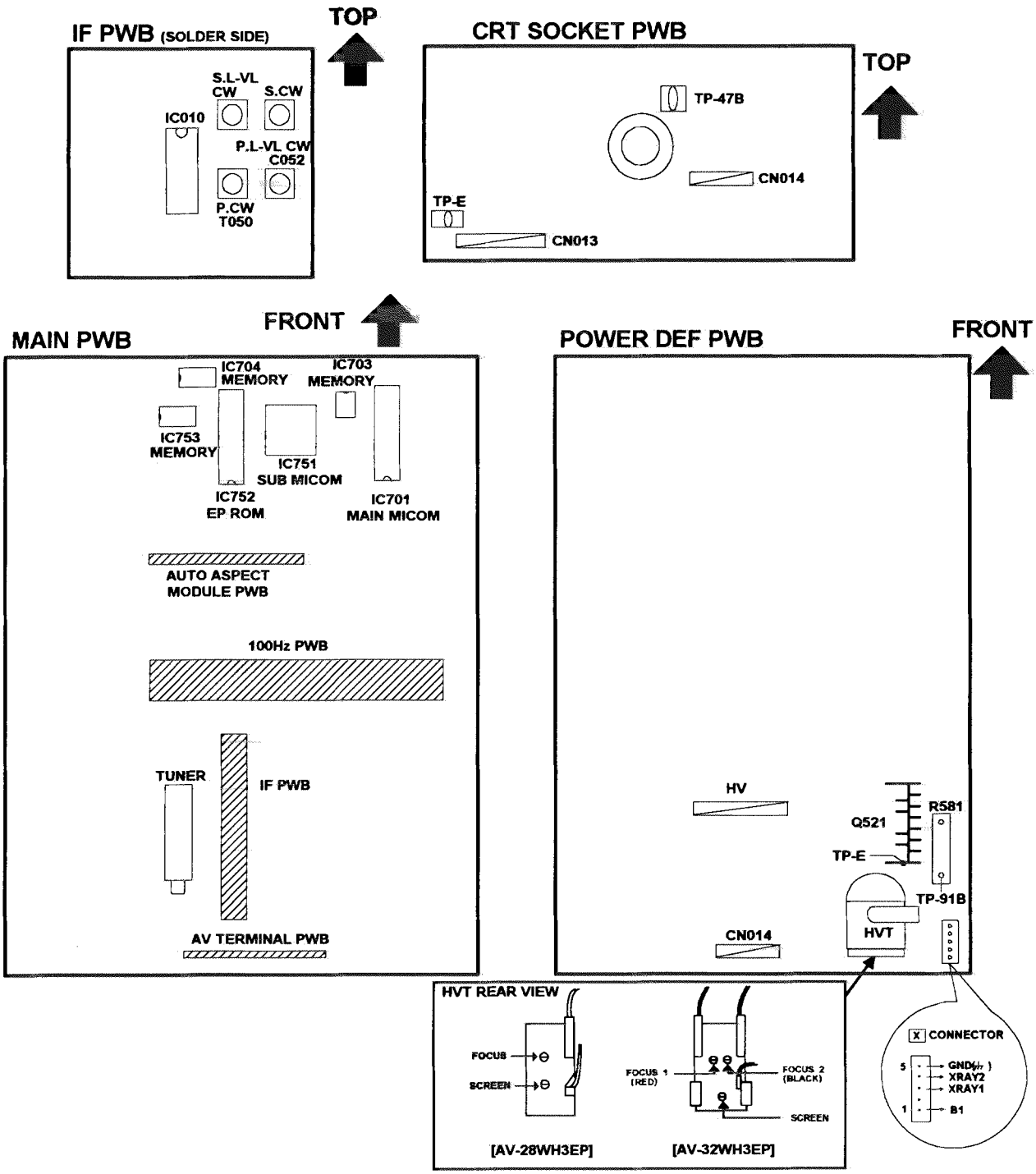
MEASUREING INSTRUMENT AND FIXTURES

1. DC voltmeter (or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [PAL/SECAM/NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

- Check of B1 Power supply.
- Adjustment of FOCUS.
- IF circuit adjustment.
- VSM preset adjust setting.
- VIDEO / CHROMA circuit adjustment.
- DEFLECTION circuit adjustment.
- AUDIO circuit adjustment. (Do not adjust)
- OSD horizontal position.

ADJUSTMENT LOCATION



BASIC OPERATION OF SERVICE MENU

1. TOOL OF SERVICE MENU OPERATION

Operate the SERVICE MENU with the REMOTE CONTROL UNIT.

2. SERVICE MENU ITEMS

With the SERVICE MENU, various settings (adjustments) can be made, and they are broadly classified in the following items of settings (adjustments):

(1) **1. IF** ····· This mode adjusts the setting values of the IF circuit.
(2) **2.V/C** ····· This mode adjusts the setting values of the VIDEO / CHROMA circuit.
(3) **3.AUDIO/OSD** ····· This mode adjusts the setting values of the multiplicity SOUND circuit.
(4) **4.DEF** ····· This mode adjusts the setting values of the DEFLECTION circuit for each aspect mode given below.
- FULL (100/120Hz)
- PANORAMIC (100/120Hz)
- 16:9 ZOOM SUBTITLE (100/120Hz)

(5) **5.VSM PRSET** ····· This mode adjusts the initial setting values of COOL,NORMAL and WARM.
(VSM : Video Status Memory)
(6) **6.STATUS** ····· This mode shows the monitor of the VPS and PDC.***(Do not adjust)***.
(VPS : Video Program System, PDC : Program Delivery Code)
(7) **7.SHIPPING** ····· This mode sets the INITIAL SETTING VALUE. ***(Do not adjust)***

3. BASIC OPERATION OF SERVICE MENU

(1) **How to enter SERVICE MENU**

Press the INFORMATION key and the MUTING key of the REMOTE CONTROL UNIT simultaneously, and the SERVICE MENU screen of Fig. 1 will be displayed.

SERVICE MENU

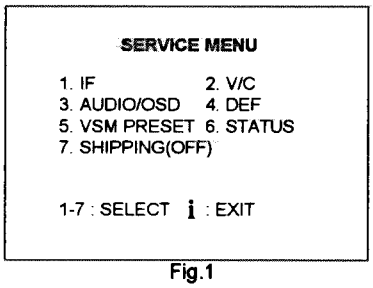


Fig.1

(2) **Selection of SUB MENU SCREEN**

Press one of keys 1~7 of the REMOTE CONTROL UNIT and select the SUB MENU SCREEN (See Fig. 3), form the SERVICE MENU.

SERVICE MENU → SUB MENU

1. IF
2. V / C
3. AUDIO/OSD
4. DEF.
5. VSM PRESET
6. STATUS
7. SHIPPING

NEME OF REMOTE CONTOROL KEY

Names of key	key
INFORMATION	
MUTEING	
MENU	
FUNCTION UP/DOWN	
FUNCTION -/+	

Fig.2

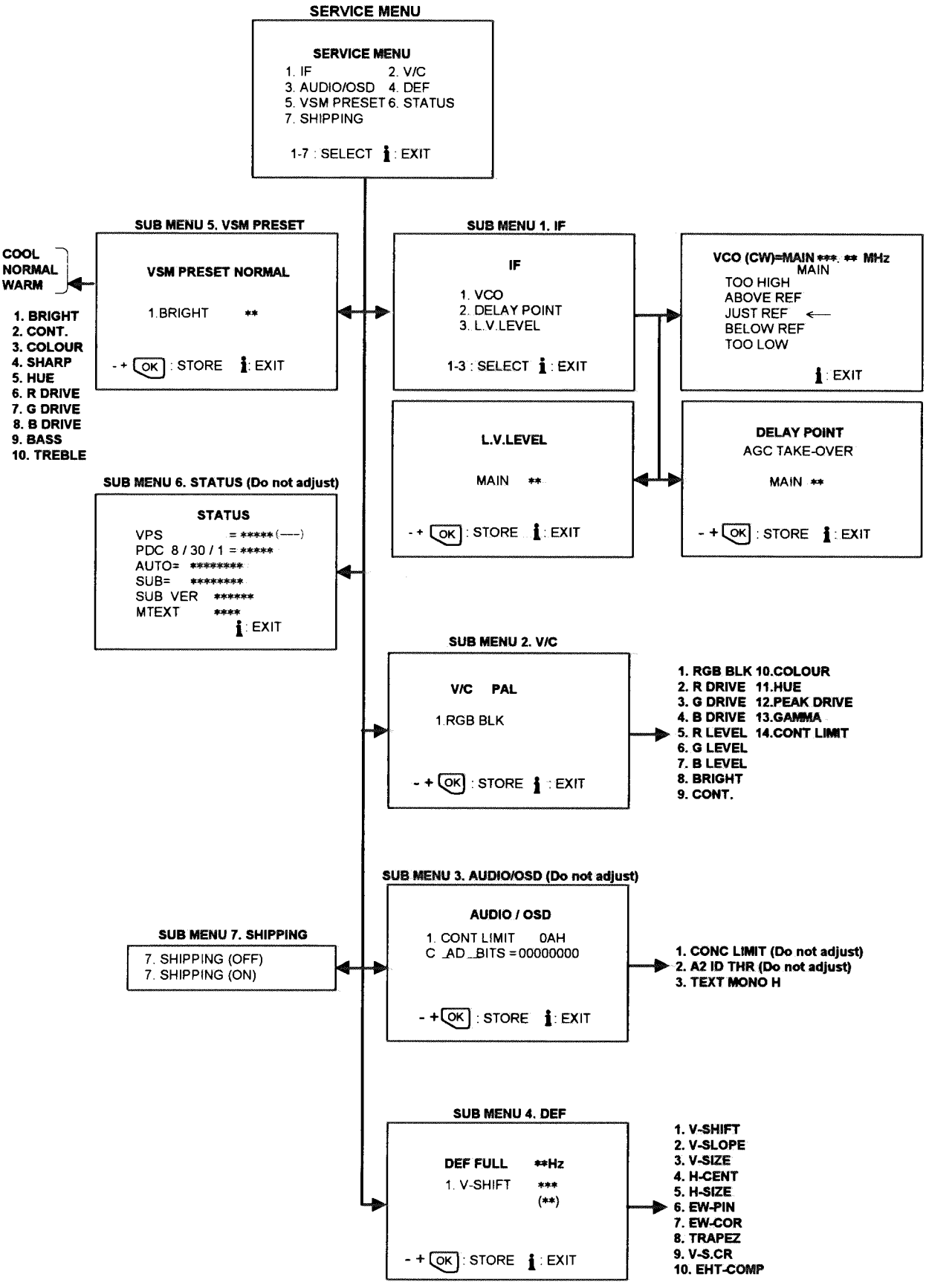


Fig. 3 SUB MENU SCREEN

(3) **Method of Setting**

1) Method of Setting **1.IF**

[1. VCO]

① 1 Key ····· Select **1.IF**.

② 1 Key ····· Select **1.VCO**

③ The VCO (CW) screen will be displayed in yellow and a allow mark when the AFC voltage is at a certain level.

④ INFORMATION Key ····· As you press this twice, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

① 1 Key ····· Select **1.IF**.

② 2 Key ····· Select **2.DELAY POINT**.

③ FUNCTION -/+ ····· Set (adjust) the setting values of the setting items.

④ MENU Key ····· Memorize the set value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)

⑤ INFORMATION Key ····· When this is pressed twice, you will return to the SERVICE MENU.

[3. L.V.LEVEL]

① 1 Key ····· Select **1.IF**.

② 3 Key ····· Select **3.L.V.LEVEL**.

③ FUNCTION -/+ Key ····· Set (adjust) the setting values of the setting items.

④ MENU Key ····· Memorize the set value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF keys - if you do, the values will not be stored in memory.)

⑤ INFORMATION Key ····· When this is pressed twice, you will return to the SERVICE MENU.

2) Method of setting **2.V/C, 3.AUDIO, 4.DEF,** and **5.VSM PRESET.**

① 2~5 Key ····· Select one from **2. V/C, 3. AUDIO, 4. DEF,** and **5. VSM PRESET**.

② FUNCTION UP/DOUN Key ····· Select setting items.

③ FUNCTION -/+ ····· Set (adjust) the setting values of the setting items.
(When 1.RGB BLK of 2.V/C is selected, press the FUNCTION-/+ key, and the whole will change to a black picture. Press the FUNCTION-/+ or 2 key, and the screen will return to the original screen.)

④ MENU Key ····· Memorize the setting value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF key - if you do, the values will not be stored in memory.)

⑤ INFOMATION Key ····· Return to the **SERVICE MENU** screen.

3) Method of setting **6.STATUS** and **7.SHIPPING**.

6.STATUS **(Do not adjust)** ····· This mode displayed monitor of VPS, PDC systems.

7.SHIPPING **(Do not adjust)** ····· This mode is set the initial setting value at the time of shipment, you need not to use it for service.

(4) **Release of SERVICE MENU**

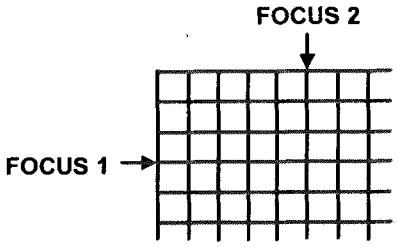
1) After completing the setting, return to the SERVICE MENU, then again press the INFORMATION key.

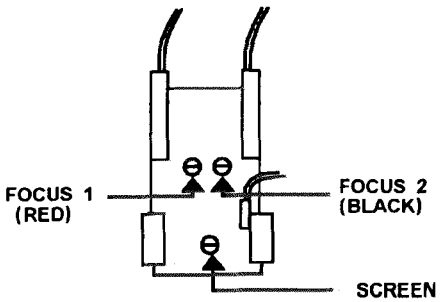
B1 POWER SUPPLY CHECK

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 Power supply	Signal generator DC voltmeter	TP-91(B1) TP-E(GND ⏚) [X connector on POWER DEF PWB]		1. Receive a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E(GND ⏚). 3. Make sure that the voltage is DC141.4±2.0V.

FOCUS ADJUSTMENT

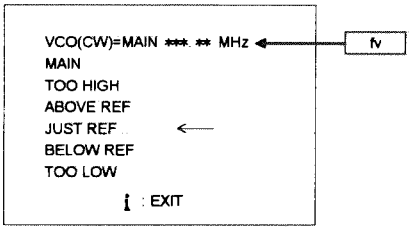
Item	Measuring instrument	Test point	Adjustment part	Description
[AV-28WH3EP] Adjustment of FOCUS	Signal generator		FOCUS VR [In HVT]	1. Receive a cross-hatch signal. Select FULL mode. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.
[AV-32WH3EP] Adjustment of FOCUS	Signal generator		FOCUS 1 (Red) FOCUS 2 (Black) [In HVT]	1. Receive a cross-hatch signal. Select FULL mode. 2. By turning the black VR FOCUS 2, adjust the picture so that the 5th vertical line from the left side of the cross-hatch picture becomes thinnest. 3. By turning the red VR FOCUS 1, adjust the picture so that the 3rd horizontal line from the upper side of the cross-hatch picture becomes uniform at the line center and its periphery. 4. Carry out adjustment by repeating the steps 2 and 3 above. 5. Make sure that when the screen is darkened, the lines remain in good focus.





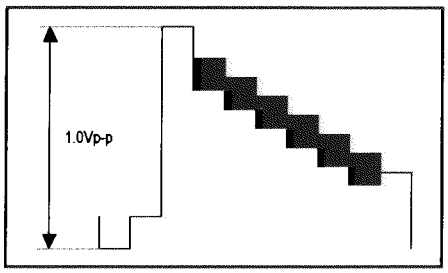
IF CIRCUIT ADJUSTMENT

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Adjustment of VCO</td><td>Remote control unit</td><td></td><td>P. CW TRANSF. (T050)
P.L-VL CW TRIM. C [On IF PWB]</td><td>● Do not make any adjustment unless the adjustment is out of way and you cannot get correct PICTURE.
1. Select 1.IF from the SERVICE MENU.
2. Press 1 key and select 1.VCO.
3. Select a SECAM L or PAL broadcast channel with the CHANNEL key.
4. Turn the core of P. CW TRANSF. until the arrow mark (←) on the screen points TOO HIGH (Step 1).
5. Turn the core of P. CW TRANSF. until the arrow mark (←) on the screen points TOO LOW (Step 2).
6. Then slowly turn back the core of P. CW TRANSF. until the arrow mark (←) on the screen points JUST REF (Step 3).
7. In the district where SECAM L's broadcast, can be received, select a SECAM L's broadcast channel with the CHANNEL key and adjust the P.L-VL CW TRIM.C in the same manner as for above steps. And readjust P.CW TRANSF., if necessary.
8. Press the INFORMATION key three times to return to normal screen.
9. Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.</td></tr>
<tr><td>Adjustment of DELAY POINT</td><td>Remote control unit</td><td></td><td>DELAY POINT (AGC TAKE-OVER)</td><td>1. Receive a black and white signal (colour off).
2. Select 1.IF from the SERVICE MENU.
3. Select 2.DELAY POINT by pressing the 2 key on the remote control.
4. Adjust the FUNCTION - or + key until video noise disappears.
5. Press the MENU key and memorize the set value.
6. Turn to other channels and make sure that there are no irregularities.</td></tr>
<tr><td>Adjustment of L-DET. LEVEL</td><td>Signel generator
Oscilloscope [H-rate]
Remote control unit</td><td>EXT-1 ⑲pin (TV OUT)</td><td></td><td>1. Receive a SECAM-L full field colour bar signal (100% white).
2. Connect an oscilloscope terminated 75Ω to EXT-1 terminal of ⑲pin (TV out).
3. Select 1. IF from the SERVICE MENU.
4. Press 3 key and select 3.LV LEVEL.
5. Adjust the LV LEVEL by FUNCTION -/+ key and make the wave detector output 1.0Vp-p.
6. Press the MENU key and memorize the set value.</td></tr>
</table>



Screen display	Step 1	Step 2	Step 3
TOO HIGH	←		
ABOVE REFERENCE			
JUST REFERENCE			←
BELOW REFERENCE			
TOO LOW		←	

Setting item (Adjustment item)	Variable range	Initial setting value
DELAY POINT (AGC TAKE-OVER)	0~63	35



VSM PRESET SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET ADJUST	**Remote control unit**		**1. BRIGHT** **2. CONT.** **3. COLOUR** **4. SHARP** **5. HUE** **6. R DRIVE** **7. G DRIVE** **8. B DRIVE** **9. BASS** **10. TREBLE**	1. Select COOL with the MENU key of the remote control unit. 2. Select 5.VSM PRESET from the SERVICE MENU. 3. Adjust the FUNCTION UP/DOWN and -/+ key to bring the set values of 1.BRIGHT ~ 10.TREBLE to the values shown in the table. 4. Press the MENU key and memorize the set value. 5. Respectively select the VSM PRESET mode for NORMAL and WARM, and make similar adjustment as in 3 above. 6. Press the MENU key and memorize the set value. * Refer to OPERATING INSTRUCTIONS for the PICTURE MODE.

VSM preset mode / Setting item	COOL	NORMAL	WARM
1. BRIGHT SETTING VALUE	+0	+0	+0
2. CONT. SETTING VALUE	+13	+7	+2
3. COLOUR SETTING VALUE	+2	+0	-2
4. SHARP SETTING VALUE	+0	+0	-2
5. HUE SETTING VALUE	+0	+0	+0
6. R DRIVE SETTING VALUE	-8	+0	+14
7. G DRIVE SETTING VALUE	-6	+0	+5
8. B DRIVE SETTING VALUE	+2	+0	-6
9. BASS SETTING VALUE	+0	+0	+0
10.TREBLE SETTING VALUE	+0 (Fixed)	+0 (Fixed)	+0 (Fixed)

SETTING VALUES OF VSM PRESET

VIDEO/CHROMA CIRCUIT ADJUSTMENT

The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

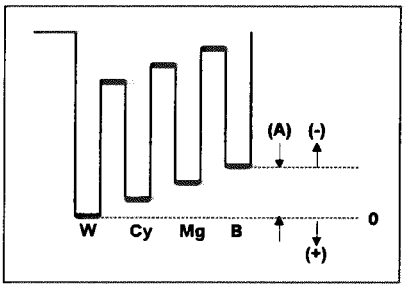
Setting Item (Adjustment Item)	Initial setting value	
	PAL / SECAM	NTSC 3.58 NTSC 4.43
1.RGB BLK	———	———
2.R.DRIVE	+12	———
3.G.DRIVE	+2	———
4.B.DRIVE (Do not ajust)	+0	———
5.R.LEVEL	+0	———
6.G.LEVEL	+0	———
7.B.LEVEL	+0	———
8.BRIGHT	-10	———
9.CONT	-5	———

Colour system / Setting item	Initial setting value	
	PAL / SECAM	NTSC 3.58 NTSC 4.43
10.COLOUR	+3	+12
11.HUE	———	-2
12.PEAK DRIVE (Do not ajust)	+5	———
13.GAMMA (Do not ajust)	-21	———
14.CONT. LIMIT (Do not ajust)	NO	NO

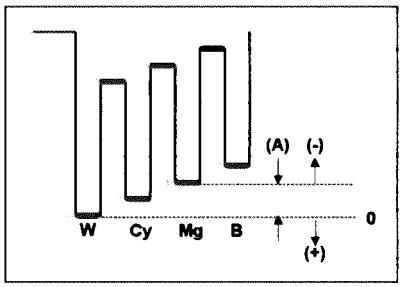
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of WHITE BALANCE	Signal generator Remote control unit		2.R DRIVE 3.G DRIVE 5.R LEVEL 6.G LEVEL 7.B LEVEL	● Set the PICTURE MODE to COOL. 1. Receive a black and white signal(colour off). 2. Select 2. V/C from the SERVICE MENU. 3. Modify 2. R DRIVE and 3.G DRIVE data to adjust the white balance (high light) 4. Modify 5. R LEVEL, 6. G LEVEL and 7. B LEVEL data to adjust the white balance of low light. Components. 5. Press the MENU key and memorize the set value.
Adjustment of SUB BRIGHT	Remote control unit		8.BRIGHT	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 8.BRIGHT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION -/+ key. 5. If the brightness is not the best with the initial setting value, make fine adjustment until you get the best brightness. 6. Press the MENU key and memorize the set value.
Adjustment of SUB CONT.	Remote control unit		9.CONT.	1. Receive any broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 9.CONT with the FUNCTION UP/DOWN key. 4. Set the initial setting value with the FUNCTION - or + key. 5. If the contrast is not the best with the initial setting value, make fine adjustment until you get the best contrast. 6. Press the MENU key and memorize the set value.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR I	**Remote control unit**		**10.COLOUR (PAL~NTSC)**	**[Method of adjustment without measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive PAL broadcast. 2. Select 2.V/C from the SERVICE MENU. 3. Select 10.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value for PAL COLOUR with the FUNCTION - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. 6. Press the MENU key and memorize the set value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM broadcast. Make fine adjustment of SECAM COLOUR in the same manner as for above.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal from the EXT terminal. 2. Make similar fine adjustment of NTSC 3.58 COLOUR in the same manner as for above.
				(NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB COLOUR II	**Signal generator** **Oscilloscope** **Remote control unit**	**TP-47B** **TP-E(⊥)** **[CRT SOCKET PWB]**	**10.COLOUR (PAL~NTSC)**	**[Method of adjustment using measuring instrument]**
			PAL COLOUR	(PAL COLOUR) 1. Receive a PAL full field colour bar signal(75% white). 2. Select 2.V/C from the SERVICE MENU. 3. Select 10.COLOUR with the FUNCTION UP/DOWN key. 4. Set the initial setting value of PAL COLOUR with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E 6. Adjust PAL COLOUR and bring the value of (A) in the illustration to -8V (voltage difference between white (w) and blue (B)). 7. Press the MENU key and memorize the setting value.
			SECAM COLOUR	(SECAM COLOUR) 1. Receive a SECAM full field colour bar signal(75% white). 2. Set the initial setting value of SECAM COLOUR with the FUNCTION -/+ key. 3. Adjust SECAM COLOUR and bring the value of (A) of the illustration to -6V(W~B). 4. Press the MENU key and memorize the setting value.
			NTSC COLOUR	(NTSC 3.58 COLOUR) 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Set the initial setting value of NTSC 3.58 COLOUR with the FUNCTION -/+ key. 3. Adjust NTSC 3.58 COLOUR and bring the value of (A) of the illustration to -2V(W~B). 4. Press the MENU key and memorize the setting value.
				(NTSC 4.43 COLOUR) 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB HUE I	**Remote control unit**		**11.HUE**	**[Method of adjustment without measuring instrument]**
			NTSC 3.58 HUE	[NTSC 3.58 HUE] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 11.HUE with the FUNCTION UP/DOWN key. 4. Set the initial setting value of NTSC 3.58 HUE with the FUNCTION -/+ key. 5. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint. 6. Press the MENU key and memorize the set value.
			NTSC 4.43 HUE	[NTSC 4.43 HUE] 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.
Adjustment of SUB HUE II	**Signal generator** **Oscilloscope** **Remote control unit**	**TP-47B TP-E(⊥) [CRT SOCKET PWB]**	**11.HUE**	**[Method of adjustment using measuring instrument]**
			NTSC 3.58 HUE	[NTSC 3.58 HUE] 1. Input a NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. 2. Select 2.V/C from the SERVICE MENU. 3. Select 11.HUE with the FUNCTION UP/DOWN key. 4. Set the initial setting value of NTSC 3.58 HUE with the FUNCTION - or + key. 5. Connect the oscilloscope between TP-47B and TP-E 6. Adjust NTSC 3.58 HUE to bring the value of (A) in the illustration to 0V (voltage difference between white (W) and magenta(Mg)). 7. Press the MENU key and memorize the setting value
			NTSC 4.43 HUE	[NTSC 4.43 HUE] 1. When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.



DEFLECTION CIRCUIT ADJUSTMENT

There are 2 modes of the adjustment (1) 100Hz mode (①FULL ②PANORAMIC, ③16:9 ZOOM SUBTITLE), (2) 120Hz mode (each aspect mode) ····· depending upon the kind of signals (vertical frequency 100Hz / 120Hz).

- **When the 100Hz FULL mode has been established, the setting of other modes will be done automatically. However, if the picture quality has not been optimized, adjust each mode again, respectively.**
- **The adjustment using the remote control unit is made on the basis of the initial setting values.**
- **The setting values which adjust the screen to the optimum condition can be different from the initial setting values. Regular and Zoom switching is conducted not by the Deflection circuit, but by the 100 Hz PWB. Therefore, the deflection system cannot be adjusted in these modes.**

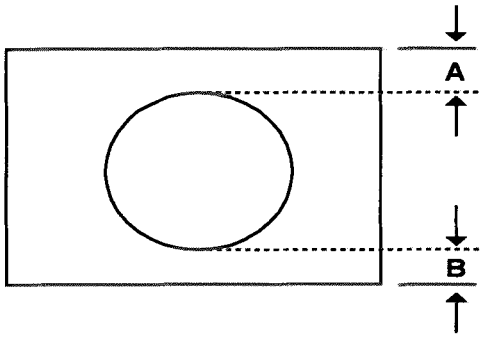
[AV-32WH3EP]

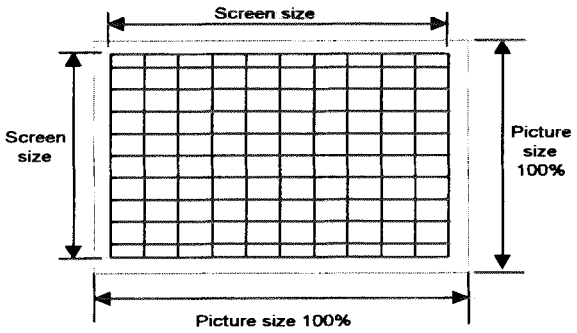
Setting item	Adjustment name	Initial setting value					
		FULL		PANORAMIC		16 : 9 ZOOM SUBTITLE	
		100Hz	120Hz	100Hz	120Hz	100Hz	120Hz
1.V- SHIFT	Vertical center	3	+1	0	0	0	0
2.V- SLOPE	Vertical def. Start position	14 (Fixed)	0 (Fixed)	-4 (Fixed)	+2 (Fixed)	+1 (Fixed)	+3 (Fixed)
3.V-SIZE	Vertical height	22	-2	+11	-3	+12	-5
4.H-CENT	Horizontal center	26	-3	0	-1	0	-2
5.H-SIZE	Horizontal width	16	-1	+9	-1	0	0
6.EW-PIN	Side pin correction	38	0	+9	0	+6	-1
7.EW-COR	Side pin four corner correction	19	0	+12	+5	+6	0
8.TRAPEZ	Trapezoidal distortion correction	4 (Fixed)	0 (Fixed)	+1 (Fixed)	-1 (Fixed)	-1 (Fixed)	+1 (Fixed)
9.V-S.CR	Vertical height correction	8 (Fixed)	0 (Fixed)	+19 (Fixed)	0 (Fixed)	+5 (Fixed)	0 (Fixed)
10.EHT-COMP	Size Regulation	30 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)

[AV-28WH3EP]

Setting item	Adjustment name	Initial setting value					
		FULL		PANORAMIC		16 : 9 ZOOM SUBTITLE	
		100Hz	120Hz	100Hz	120Hz	100Hz	120Hz
1.V- SHIFT	Vertical center	3	+1	0	0	0	0
2.V- SLOPE	Vertical def. Start position	14 (Fixed)	+1 (Fixed)	-3 (Fixed)	+3 (Fixed)	+2 (Fixed)	+4 (Fixed)
3.V-SIZE	Vertical height	24	-4	+9	-4	+12	-6
4.H-CENT	Horizontal center	25	-3	0	-3	0	-3
5.H-SIZE	Horizontal width	29	-1	+7	-1	0	-1
6.EW-PIN	Side pin correction	28	-1	+8	+1	+4	+1
7.EW-COR	Side pin four corner correction	10	-3	+19	+6	+10	+3
8.TRAPEZ	Trapezoidal distortion correction	3	0	0	0	-1	0
9.V-S.CR	Vertical height correction	10 (Fixed)	0 (Fixed)	+19 (Fixed)	0 (Fixed)	+5 (Fixed)	0 (Fixed)
10.EHT-COMP	Size Regulation	25 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)	0 (Fixed)

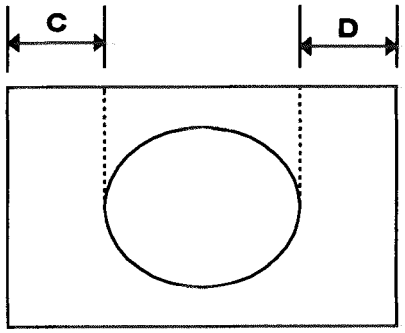
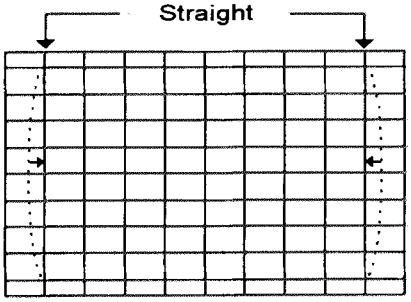
Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V-SHIFT and V-SLOPE	**Signal generator** **Remote control unit**		**1.V- SHIFT** **2.V- SLOPE**	[FULL mode] 1. Receive a circle pattern signal of vertical frequency 50Hz. 2. Select 4.DEF from the SERVICE MENU. 3. Select 1.V-SHIFT with the FUNCTION UP/DOWN key. 4. Adjust V-SHIFT to make **A = B**. 5. IF it is not enough to adjust the "V=SHIFT", choose "2.V=SLOPE" and adjust to make **A = B**. 6. Press the MENU key and memorize the set value.
Adjustment of V-SIZE			**3.V-SIZE**	7. Receive a cross-hatch signal. 8. Select 3.V-SIZE and set the initial setting value. 9. Adjust V-SIZE and make sure that the vertical screen size of the picture size is in the bellow table. 10. Press the MENU key and memorize the set value. 11. Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the vertical screen size is in the table below. 12. Press the MENU key and memorize the set value.



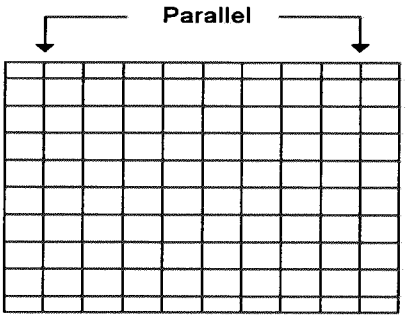


MODE	FULL	PANORAMIC	16:9 ZOOM SUB TITLE
SCREEN TOP	92%	87%	70%
SCREEN BOTTOM	92%	87%	83%

[SCREEN SIZE]

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Adjustment of H.CENTER
 
</td><td></td><td></td><td>4.H-CENT.</td><td>13. Receive a circle pattern signal.
14. Select 4.H-CENT and set the initial setting value.
15. Adjust H-CENT to make C=D.
16. Press the MENU key and memorize the set value.</td></tr>
<tr><td>Adjustment of H.SIZE
<table><tr><th>ASPECT MODE</th><th>PANORAMIC</th><th>16:9 ZOOM SUBTITLE</th><th>FULL</th></tr><tr><td>H SIZE</td><td>95%</td><td>92%</td><td>92%</td></tr></table>[SCREEN SIZE]</td><td></td><td></td><td>5.H-SIZE</td><td>17. Receive a cross-hatch signal.
18. Select 5.H-SIZE and set the initial setting value.
19. Adjust H-SIZE and make sure that the horizontal screen size of the picture size is in the bellow table.
20. Press the MENU key and memorize the set value.
21. Input a NTSC VIDEO signal (60Hz) from the EXT terminal, and make sure that the horizontal screen size is in the table below.
22. Press the MENU key and memorize the set value.</td></tr>
<tr><td>Adjustment of EW-PIN
 
</td><td></td><td></td><td>6.EW-PIN</td><td>23. Select 6.EW-PIN and set the initial setting value
24. Adjust EW-PIN and make the 2nd.vertical lines at the left and right edges of the screen straight. Also make sure that the 3rd vertical lines are straight.
25. Press the MENU key and memorize the set value.</td></tr>
</table>

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of EW-COR			**7.EW-COR**	★ No alignment, but adjust this mode if result of no alignment is too bad. 26. Select 7.EW-COR and set the initial setting value. 27. Adjust EW-COR and make the vertical lines at the four corners of the screen straight. 28. Press the MENU key and memorize the set value.
Adjustment of TRAPEZ			**8.TRAPEZ**	29. Receive a cross-hatch signal of vertical frequency 50Hz. 30. Select 4.DEF from the SERVICE MENU. 31. Select 8.TRAPEZ with the FUNCTION UP/DOWN key. 32. Set the initial setting value of TRAPEZ with the FUNCTION - or + key. 33. Adjust TRAPEZ and bring the VERTICAL lines at the right and left edges of the screen parallel . 34. Press the MENU key and memorize the set value.
Adjustment of V-S.CR			**9.V-S.CR**	★ No alignment, but adjust this mode if result of no alignment is too bad. 35. Select 9.V-S.CR and set the initial setting value. 36. Adjust each item to get exact square of cross-hatch pattern. 37. Press the MENU key and memorize the set value. NOTE : Do not adjust PANORAMIC & 16:9 ZOOM SUBTITLE mode.
				At first the adjustment in 100Hz-FULL mode should be done, then the data for the other aspect mode is corrected in the respective value at the same time. And confirm the deflection adjustment initial setting value in 120Hz(NTSC EXT mode) FULL mode. If the adjustment in 100Hz each aspect mode has been done and stored, the data for the same aspect modes in 120Hz is corrected in the respective value. Only the data for the other aspect mode in 120Hz is corrected for itself.



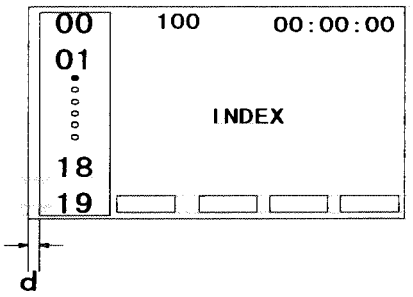
AUDIO CIRCUIT ADJUSTMENT

3. AUDIO / OSD

Setting item	Variable range	fixed value
1. CONC LIMIT***(Do not adjust)***	00H~FFH	0AH
2. A2 ID THR***(Do not adjust)***	00H~FFH	19H
3. TEXT MONO H	00H~FFH	1EH

OSD horizontal position

Item	Measuring instrument	Test point	Adjustment part	Description
TEXT MONO H			3.TEXT MONO H	★ No alignment, but adjust this mode if result of no alignment is too bad. 1. Select 3.AUDIO / OSD from SERVICE MENU. 2. Select 3.TEXT MONO H with the FUNCTION UP/DOWN key. 3. Push text key to get a picture of "TEXT-MONO H". 4. Push "SUBPAGE" key. It gets a picture as shown left. 5. Adjust the value of the distance "d" as shown left with the FUNCTION -/+ key. Push "SUBPAGE" key to check adjustment every adjust. 6. Press the MENU Key, and memorize the set values.



MODEL	d
ALL MODELS	5~20mm

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

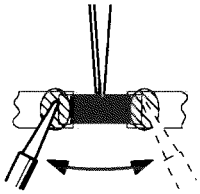
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

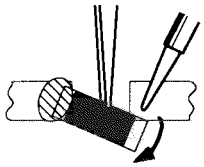
1. How to remove Chip parts

◆ **Resistors, capacitors, etc**

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

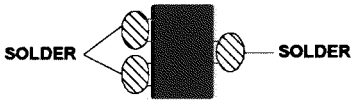


(2) Shift with tweezers and remove the chip part.

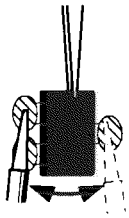


◆ **Transistors, diodes, variable resistors, etc**

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

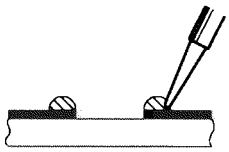


Note : After removing the part, remove remaining solder from the pattern.

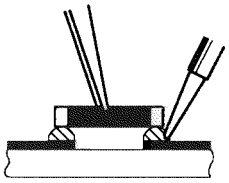
2. How to install Chip parts

◆ **Resistors, capacitors, etc**

(1) Apply solder to the pattern as indicated in the figure.



(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

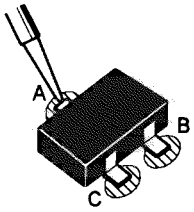


◆ **Transistors, diodes, variable resistors, etc**

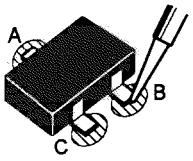
(1) Apply solder to the pattern as indicated in the figure.

(2) Grasp the chip part with tweezers and place it on the solder.

(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



AV-32WH3EP/AV-28WH3EP STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	:PAL Colour bar signal
(2)Setting positions of each knob/button and variable resistor	:Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ/V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div :V ⇒ 5mS/div :Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value

No unit	:[Ω]
K	:[KΩ]
M	:[MΩ]

●Rated allowable power

No indication	:1/4[W]
Others	:As specified

●Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammble resistor
FR	:Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

●Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]

*Electrolytic Capacitors

47/50[Example]:Capacitance value [μF]/withstand voltage[V]

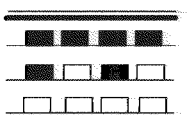
●Type

No indication	:Ceramic capacitor
MY	:Mylar capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

(4)Power Supply



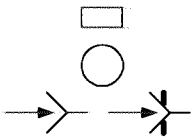
:B1
:B2(12V)
:9V
:5V

*Respective voltage values are indicated

(5)Test point

:Test point
:Only test point display

(6)Connecting method



:Connector
:Wrapping or soldering
:Receptacle

(7)Ground symbol

⊥ :LIVE side ground
⊥ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
▽ :DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

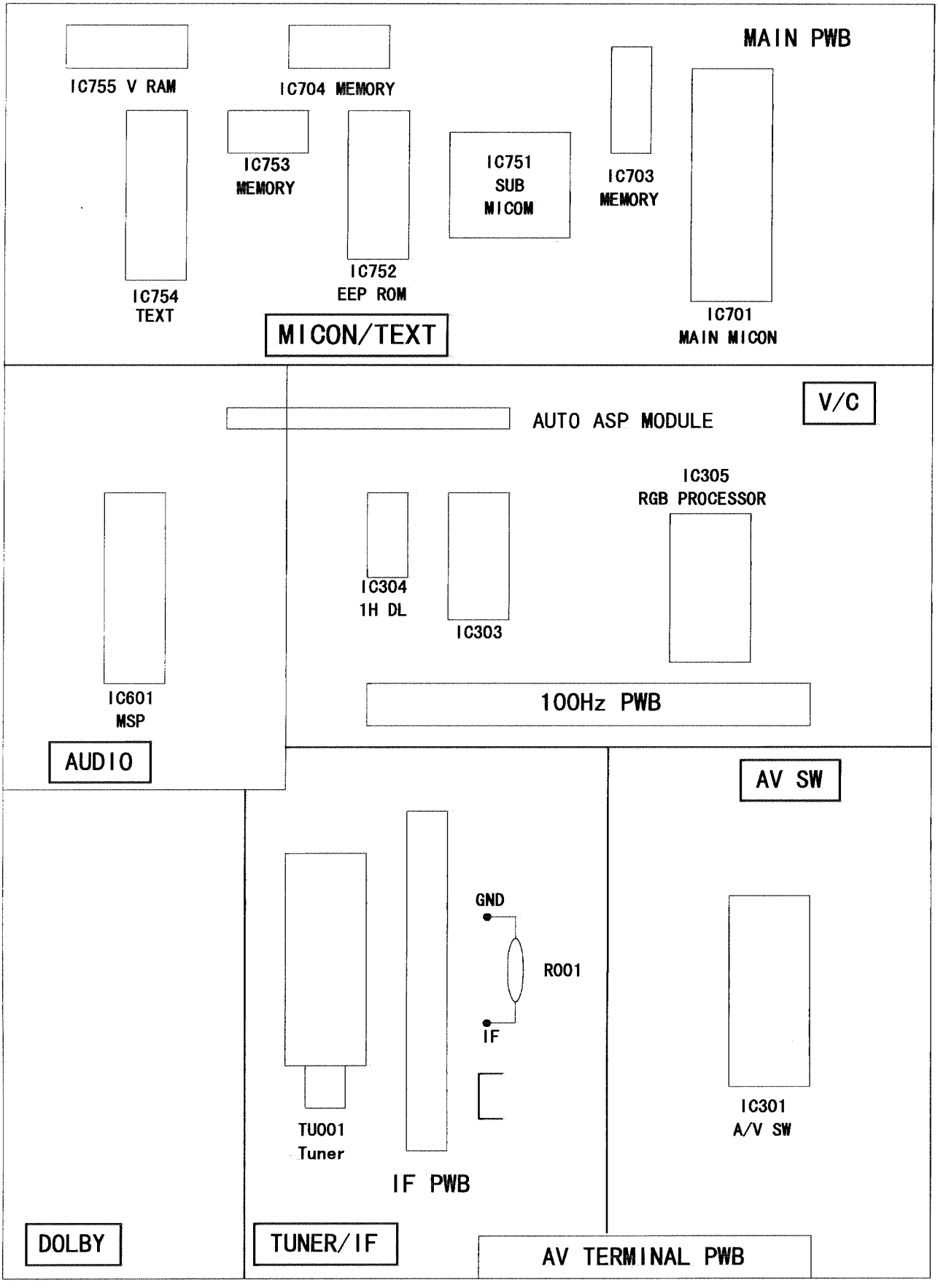
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⊥) side GND. Therefore, care must be taken for the following points.

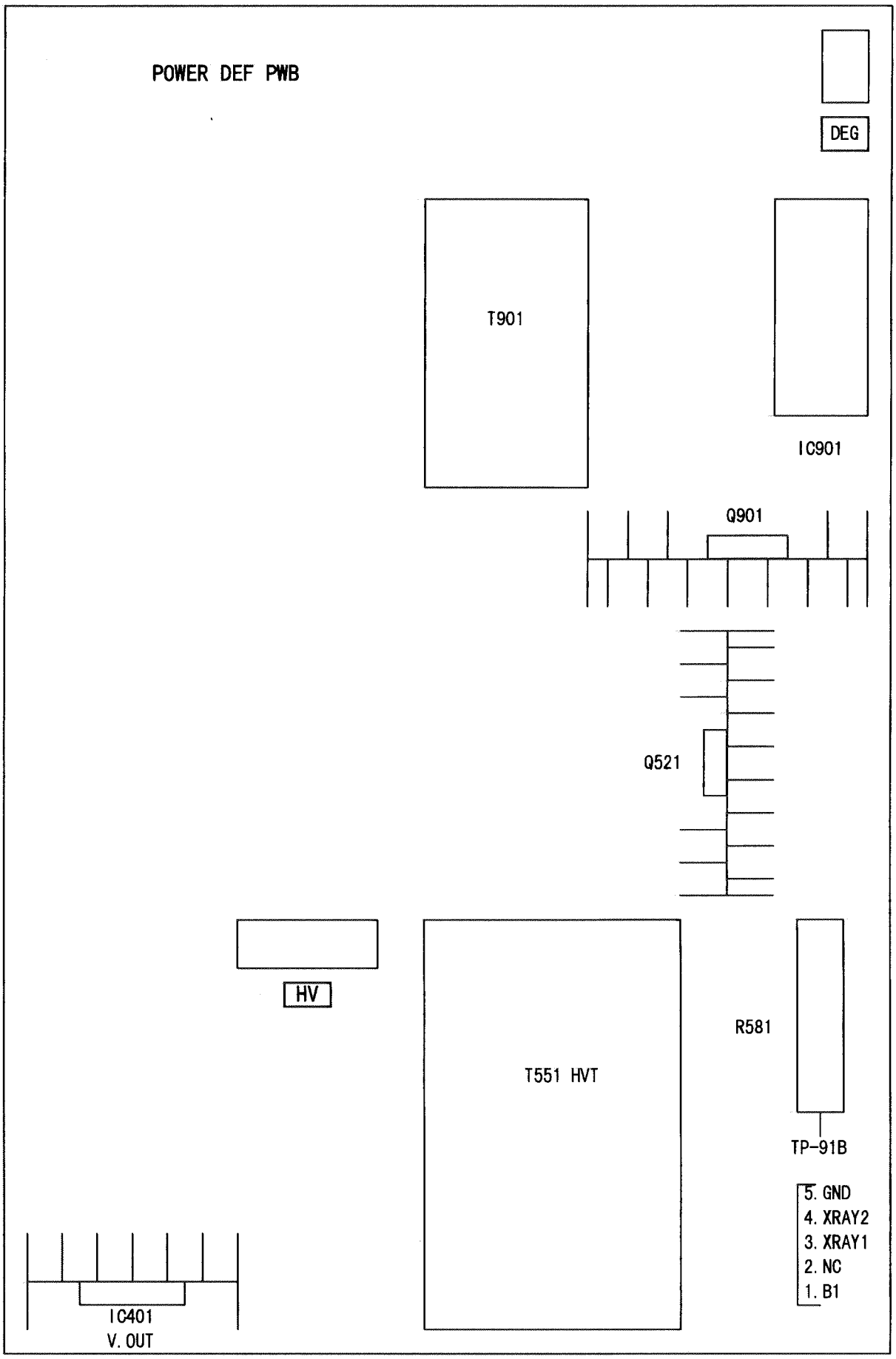
(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

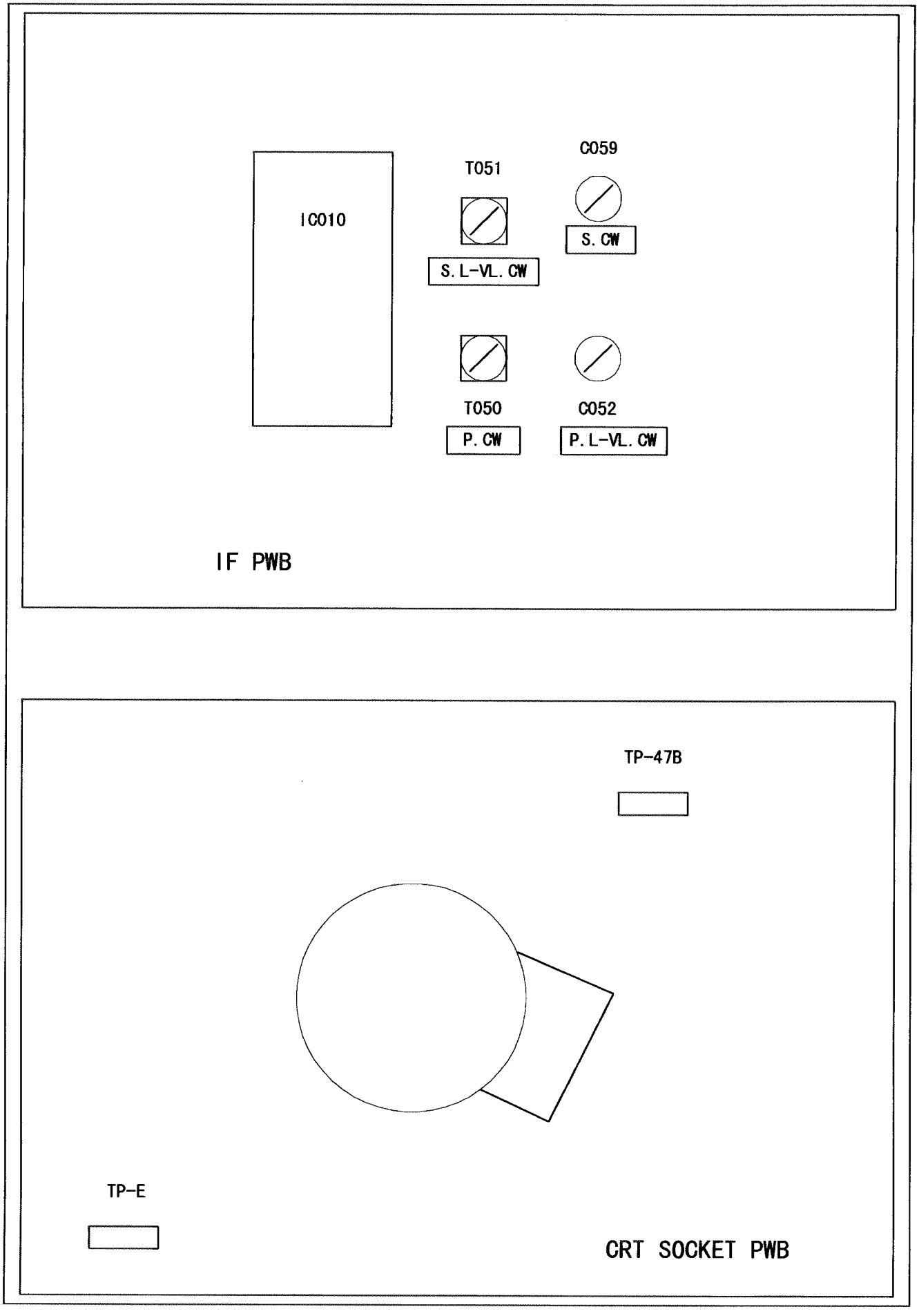
(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇**Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

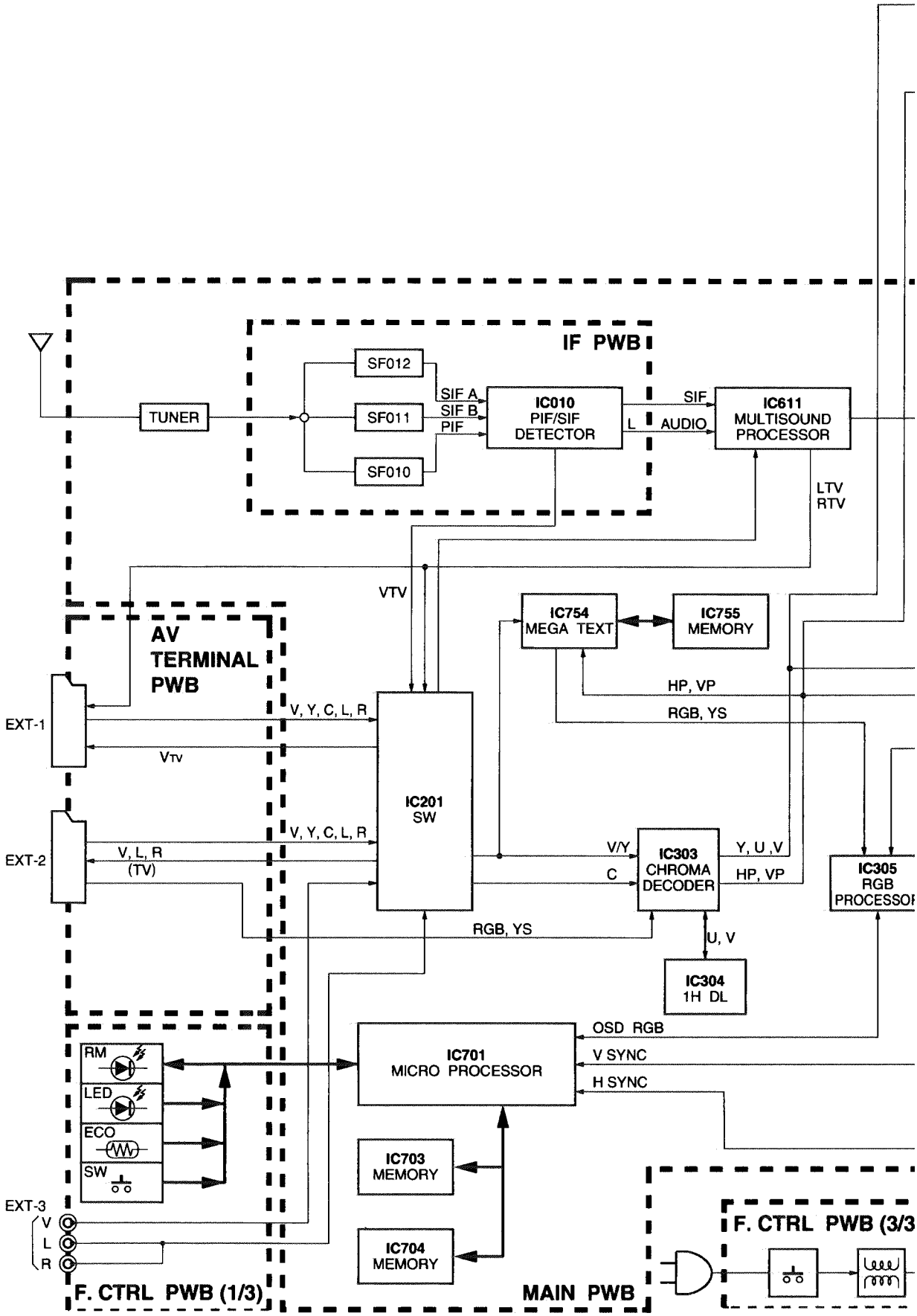
【 MAIN PARTS LOCATION AND ALIGNMENTS LOCATION 】

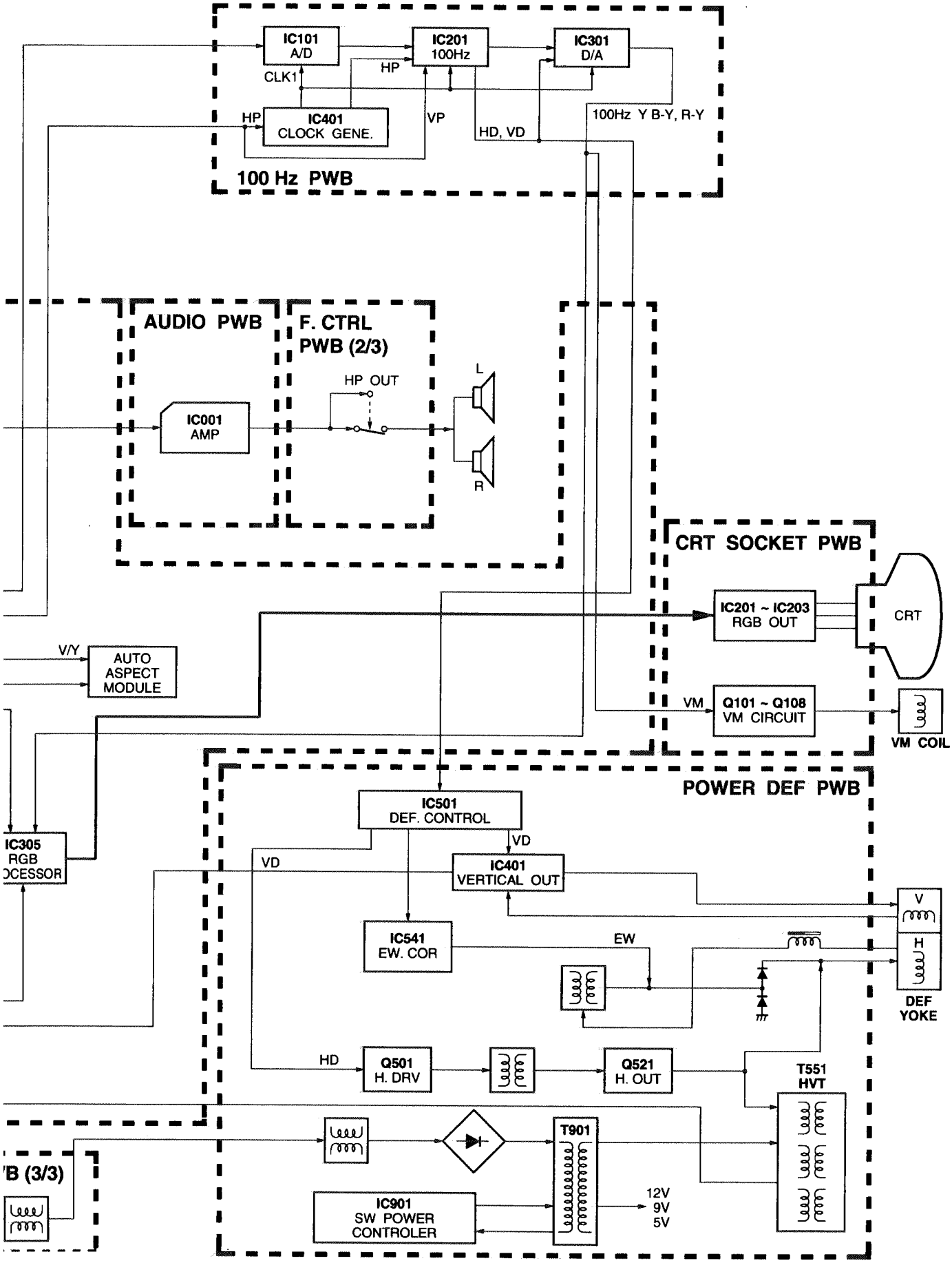



POWER DEF PWB
DEG
T901
IC901
Q901
Q521
HV
T551 HVT
R581
TP-91B
5. GND
4. XRAY2
3. XRAY1
2. NC
1. B1
IC401
V. OUT

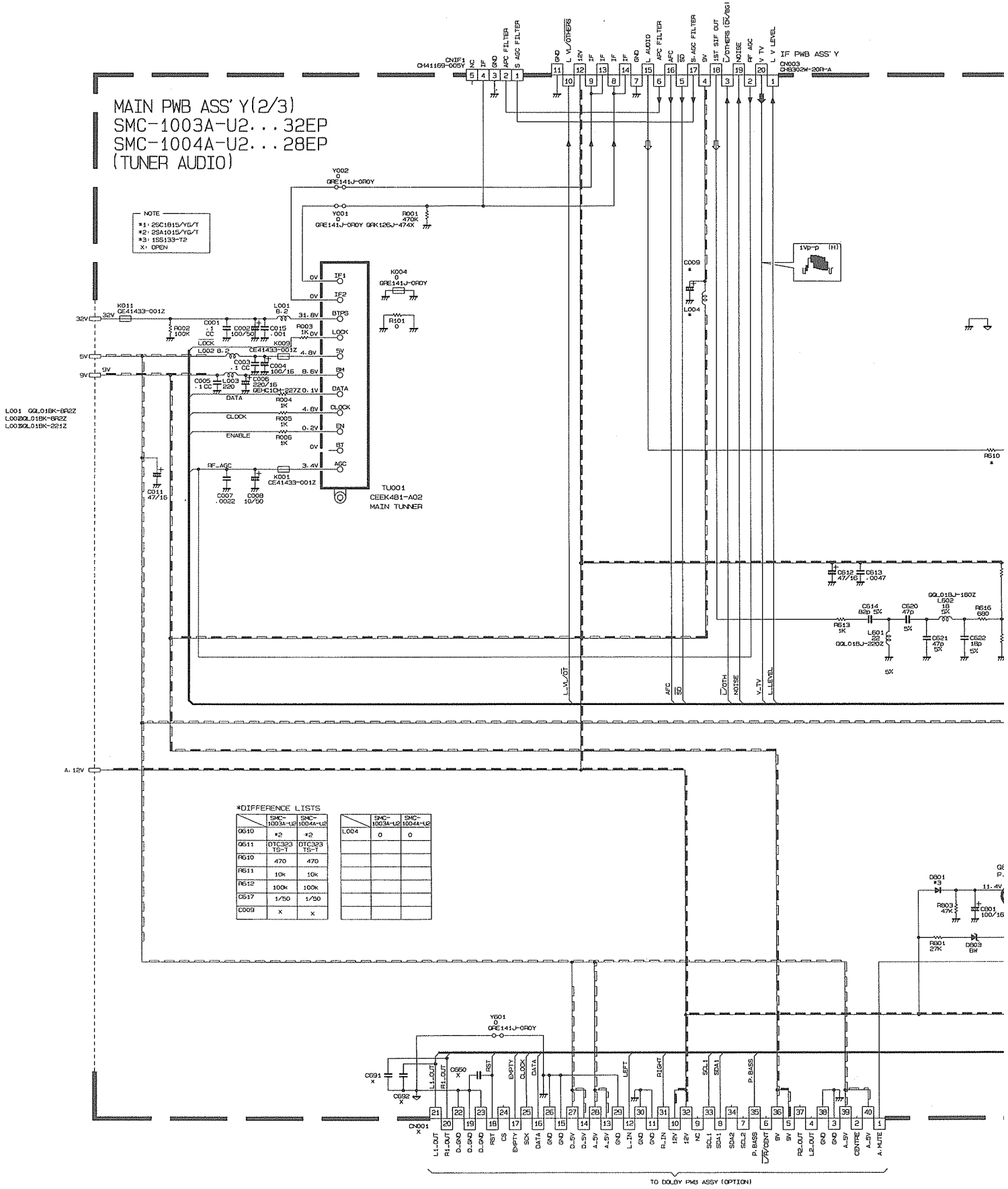

IC010
T051
S. L-VL. CW
C059
S. CW
T050
P. CW
C052
P. L-VL. CW
IF PWB
TP-47B
TP-E
CRT SOCKET PWB

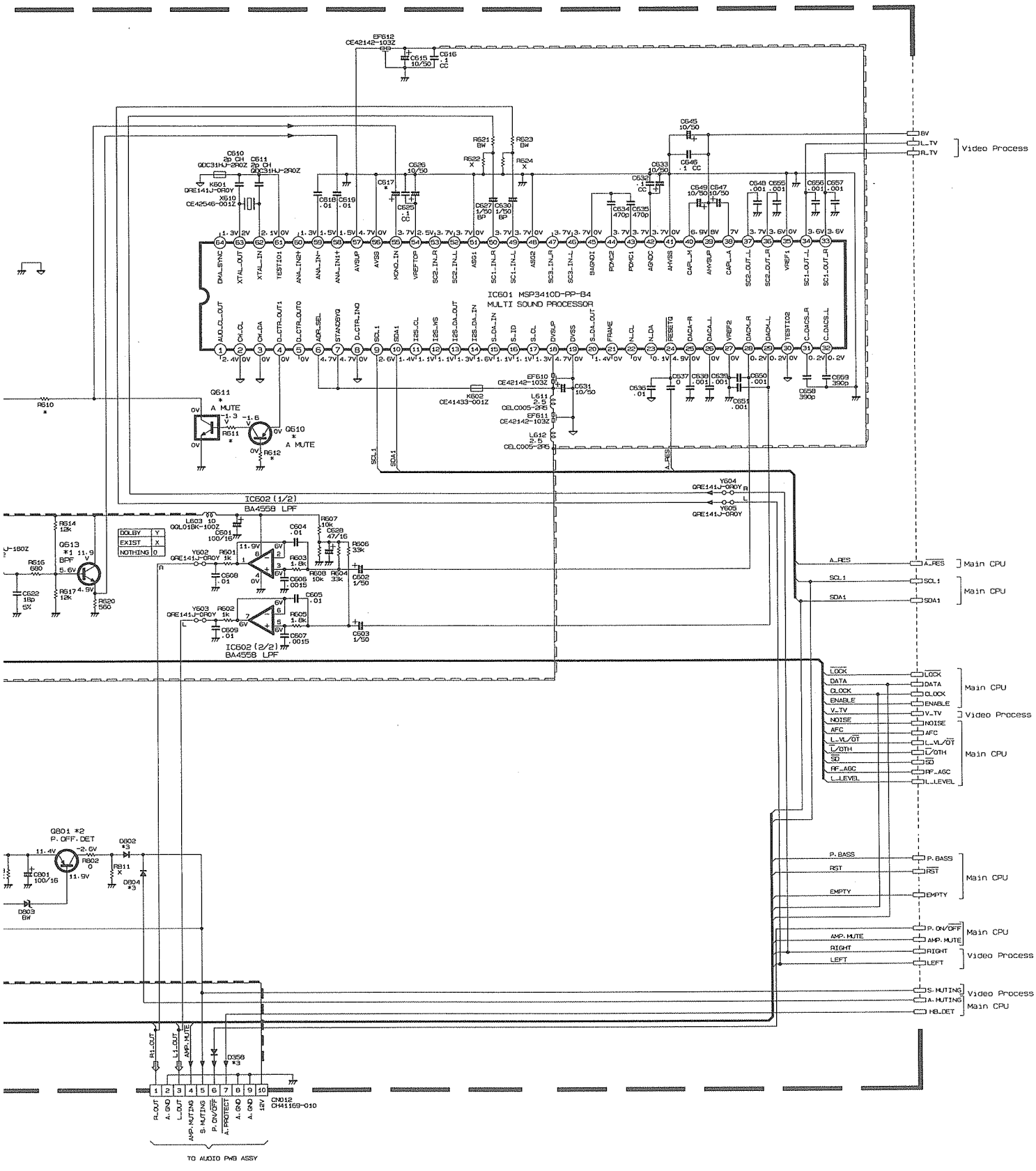
【 BLOCK DIAGRAM 】



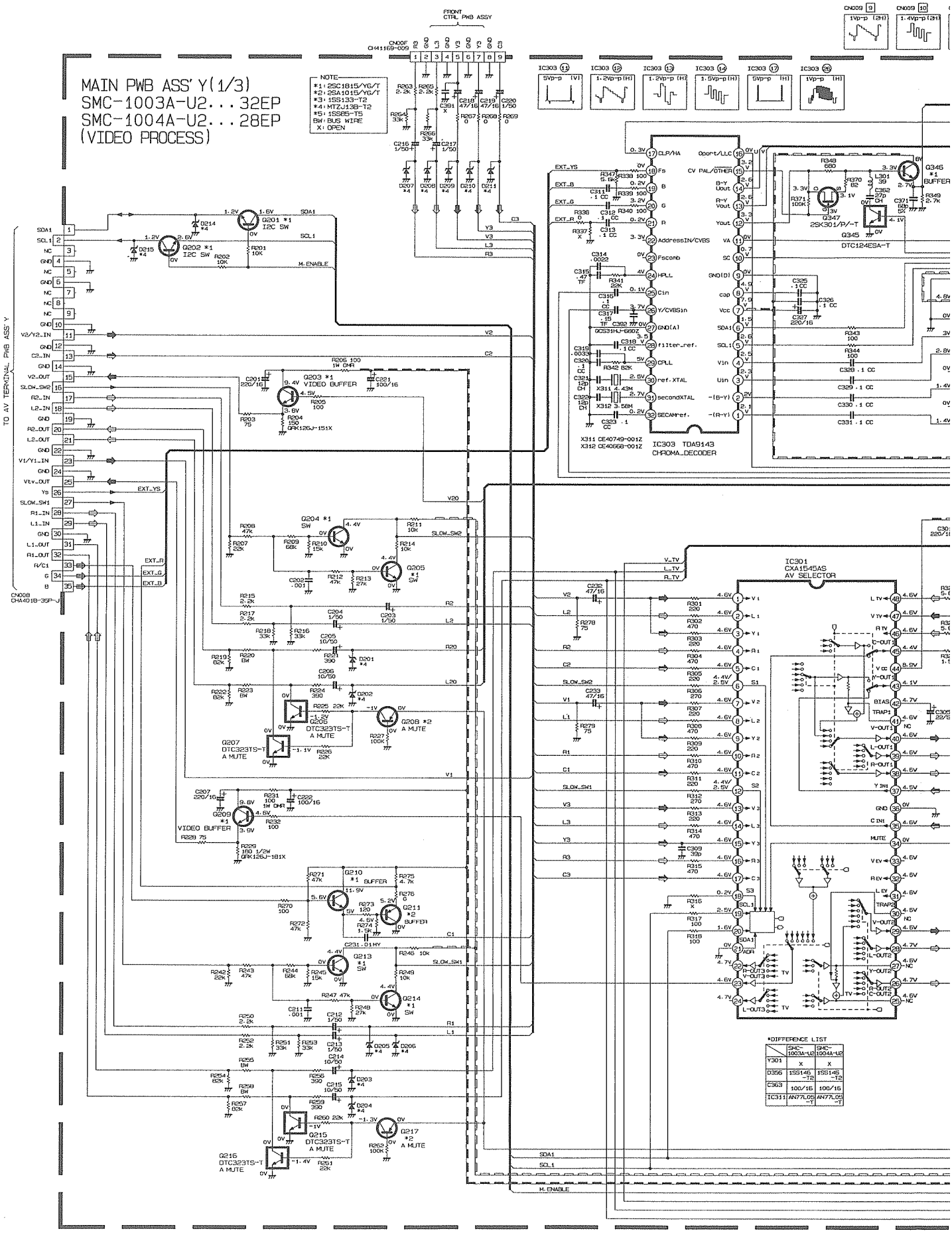

IC101
A/D
IC201
100Hz
IC301
D/A
CLK1
HP
HP
IC401
CLOCK GENE.
VP
HD, VD
100Hz Y B-Y, R-Y
100 Hz PWB
AUDIO PWB
F. CTRL
PWB (2/3)
HP OUT
IC001
AMP
L
R
CRT SOCKET PWB
IC201 ~ IC203
RGB OUT
CRT
V/Y
AUTO
ASPECT
MODULE
VM
Q101 ~ Q108
VM CIRCUIT
VM COIL
POWER DEF PWB
IC501
DEF. CONTROL
VD
VD
IC401
VERTICAL OUT
IC305
RGB
OCESSOR
V
H
IC541
EW. COR
EW
DEF
YOKE
HD
Q501
H. DRV
Q521
H. OUT
T551
HVT
T901
B (3/3)
IC901
SW POWER
CONTROLER
12V
9V
5V

〖 MAIN PWB CIRCUIT DIAGRAM(TUNER , AUDIO) 〗

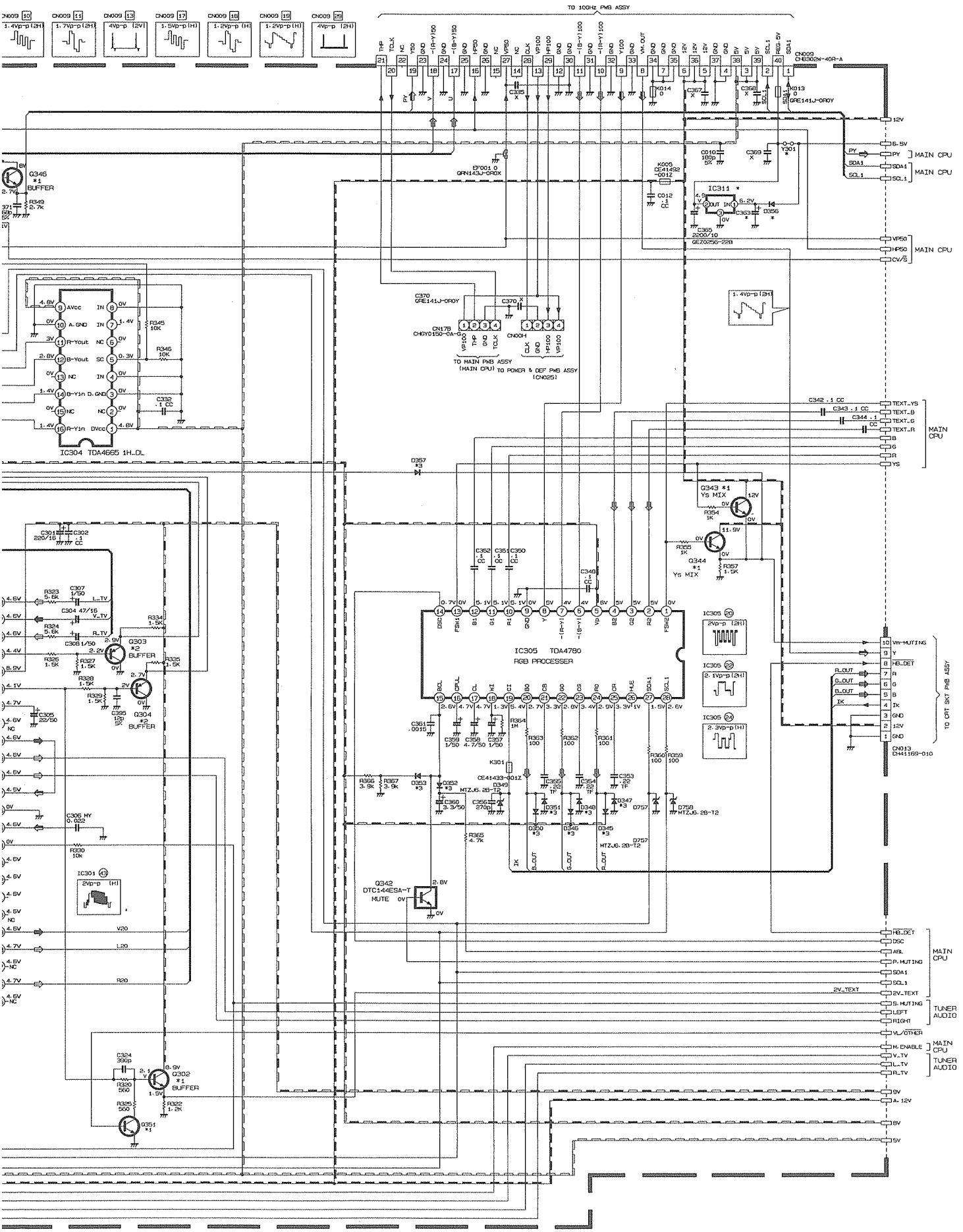



IC601 MSP3410D-PP-B4
MULTI SOUND PROCESSOR
IC602 (1/2)
BA4558 LPF
IC602 (2/2)
BA4558 LPF
Video Process
Main CPU
TO AUDIO PWB ASSY
CN012
CH41169-010

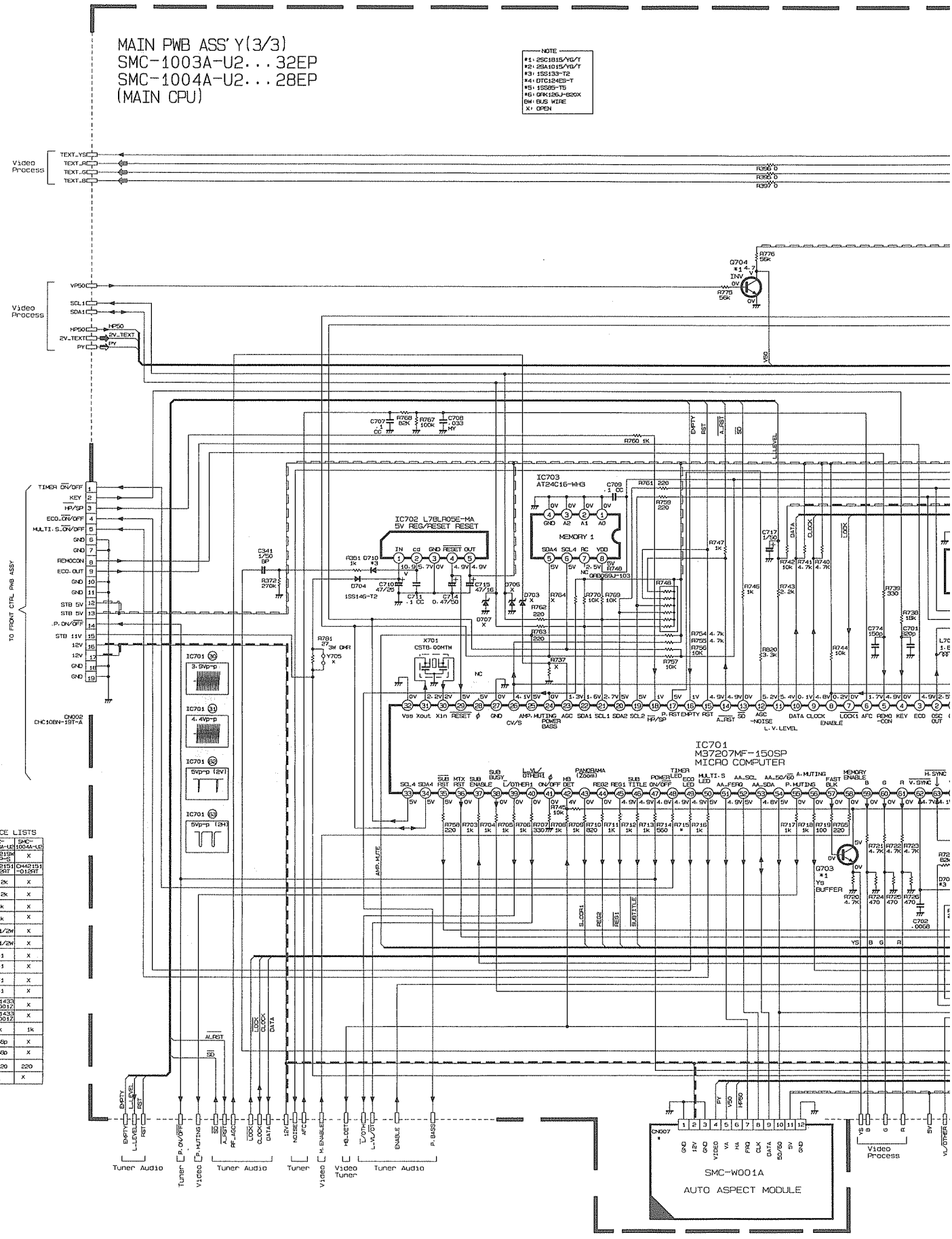
【 MAIN PWB CIRCUIT DIAGRAM(Video Process) 】



AV-32WH3EP
AV-28WH3EP

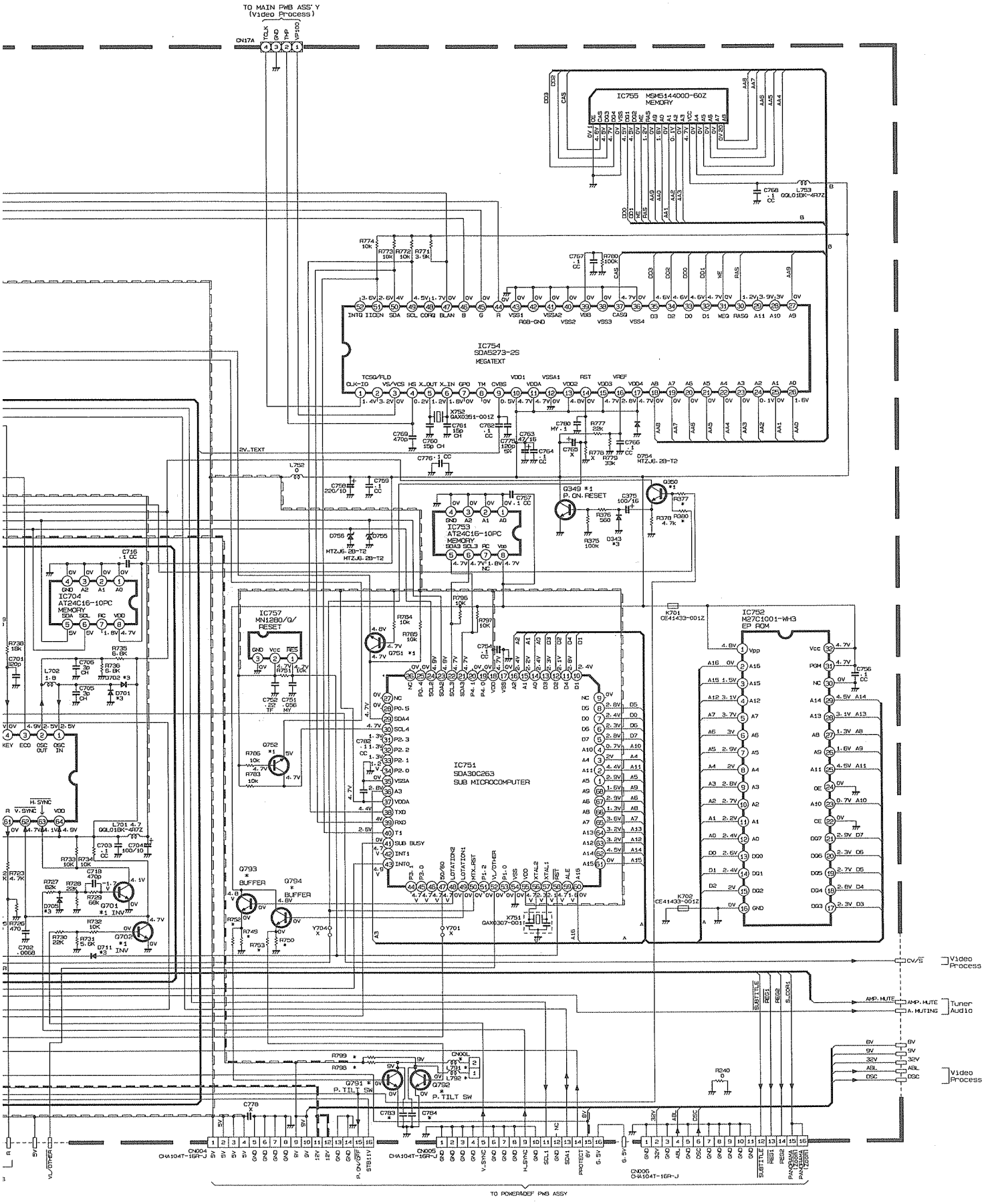


【 MAIN PWB CIRCUIT DIAGRAM(MAIN CPU) 】

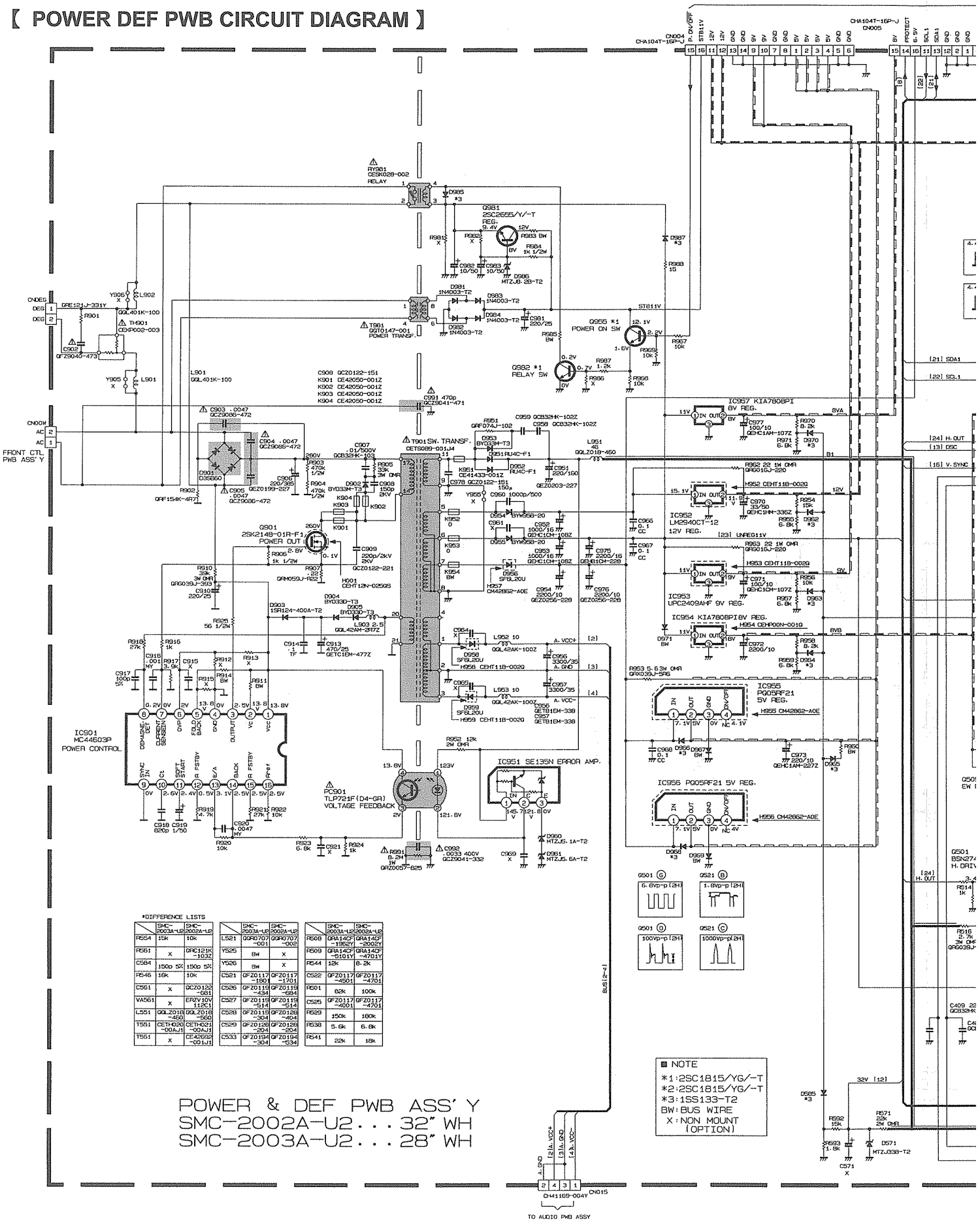


*DIFFERENCE LISTS

	SMC-1003A-U2	SMC-1004A-U2
CN00L	CHB215M-02P-S	X
CN007	CH42151-012RT	CH42151-012RT
R749	8.2k	X
R750	8.2k	X
R752	1k	X
R753	1k	X
R798	*6 1/2W	X
R799	*6 1/2W	X
Q791	*1	X
Q792	*1	X
Q793	*1	X
Q794	*1	X
L791	CE41433-0012	X
L792	CE41433-0012	X
R715	1k	1k
C783	68p	X
C784	68p	X
R377	220	220
R380	X	X


TO MAIN PWB ASS'Y
(Video Process)
CN17A
IC755 MSM5144000-60Z
MEMORY
IC754
SDA5273-2S
MEGATEXT
IC751
SDA30C263
SUB MICROCOMPUTER
IC752
M27C1001-WH3
EP ROM
IC753
AT24C16-10PC
MEMORY
IC704
AT24C16-10PC
MEMORY
IC757
MN1280/Q/
RESET
Q349 *1
P. ON. RESET
Q793
BUFFER
Q794
BUFFER
Q701
Q702
Q752
Q792
P. TILT SW
X751
GAX0307-001
X752
GAX0351-001Z
Y701
Y704
K701
CE41433-001Z
K702
CE41433-001Z
CN004
CHA104T-16R-J
CN005
CHA104T-16R-J
CN006
CHA104T-16R-J
CN00L
CHA104T-16R-J
TO POWER&DEF PWB ASSY
Video Process
Tuner Audio
Video Process

【 POWER DEF PWB CIRCUIT DIAGRAM 】



*DIFFERENCE LISTS

	SMC-2003A-U2	SMC-2002A-U2
R554	15k	10k
R561	X	QRC121K-1032
C584	150p 5%	150p 5%
R546	16k	10k
C561	X	QCZ0122-681
VA561	X	ERZV10V112C1
L551	QQLZ018-460	QQLZ018-560
T551	CETH020-00AJ1	CETH021-00AJ1
T561	X	CEA2693-001J1

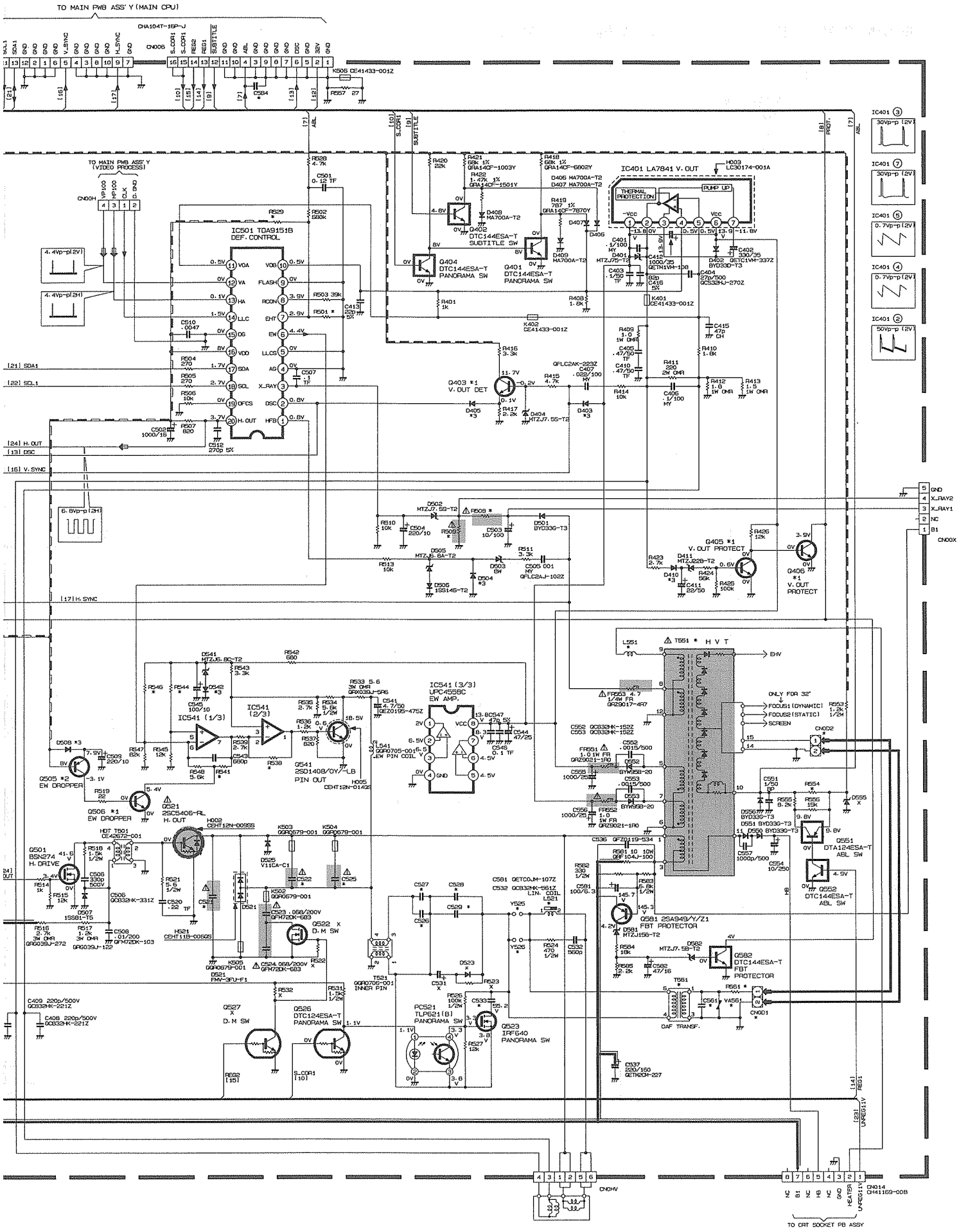
	SMC-2003A-U2	SMC-2002A-U2
L521	QQR0707-001	QQR0707-002
Y525	BW	X
Y526	BW	X
C521	QFZ0117-1801	QFZ0117-1701
C526	QFZ0119-434	QFZ0119-684
C527	QFZ0119-514	QFZ0119-514
C528	QFZ0119-304	QFZ0128-404
C529	QFZ0128-204	QFZ0128-204
C533	QFZ0119-304	QFZ0119-334

	SMC-2003A-U2	SMC-2002A-U2
R508	QRA14CF-1862Y	QRA14CF-2002Y
R509	QRA14CF-5101Y	QRA14CF-4701Y
R544	12k	8.2k
C522	QFZ0117-4501	QFZ0117-4701
R501	82k	100k
C525	QFZ0117-4001	QFZ0117-4701
R529	150k	160k
R538	5.6k	6.8k
R541	22k	18k

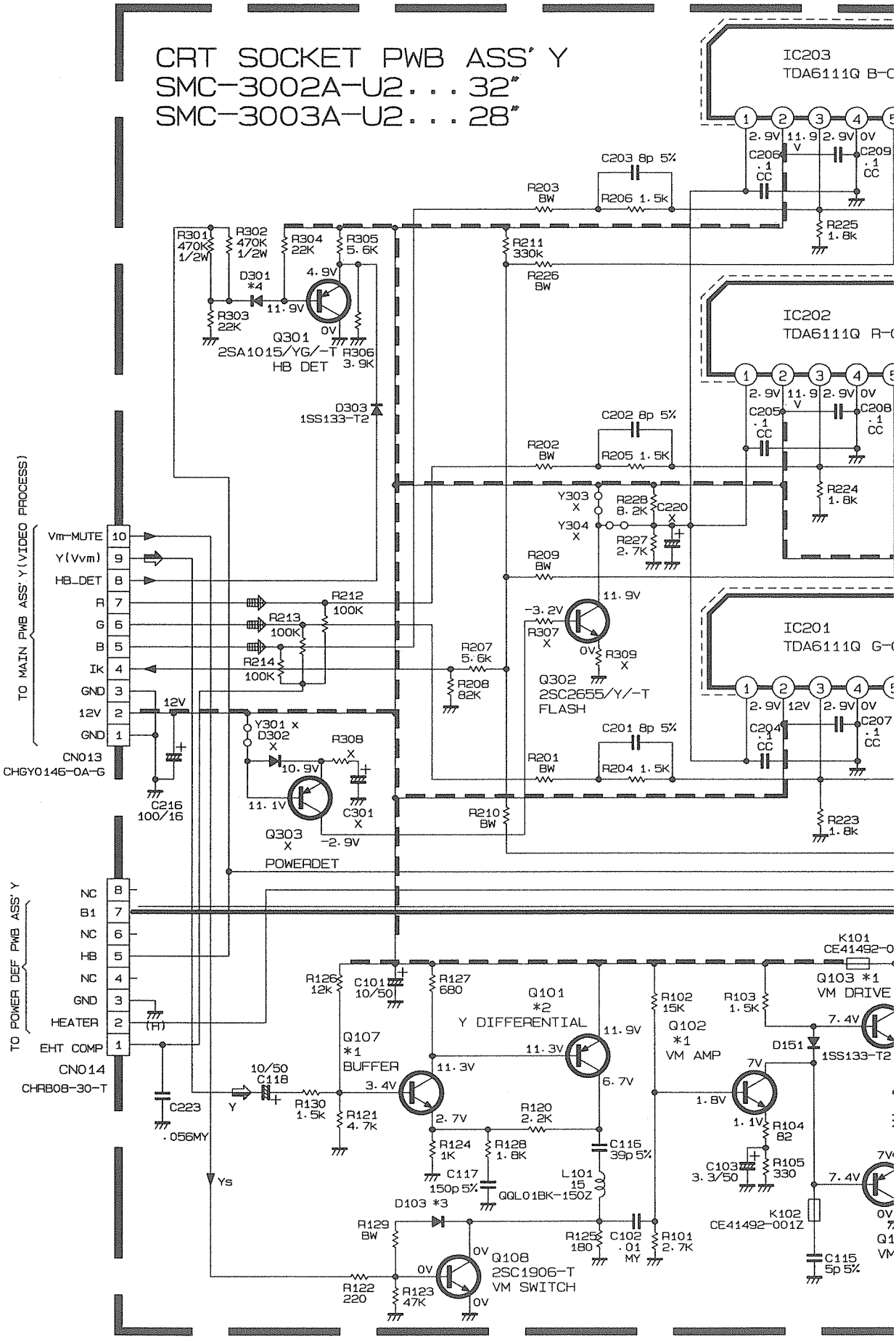
■ NOTE
*1:2SC1815/YG/-T
*2:2SC1815/YG/-T
*3:1SS133-T2
BW:BUS WIRE
X:NON MOUNT (OPTION)

POWER & DEF PWB ASS'Y
SMC-2002A-U2 . . . 32" WH
SMC-2003A-U2 . . . 28" WH

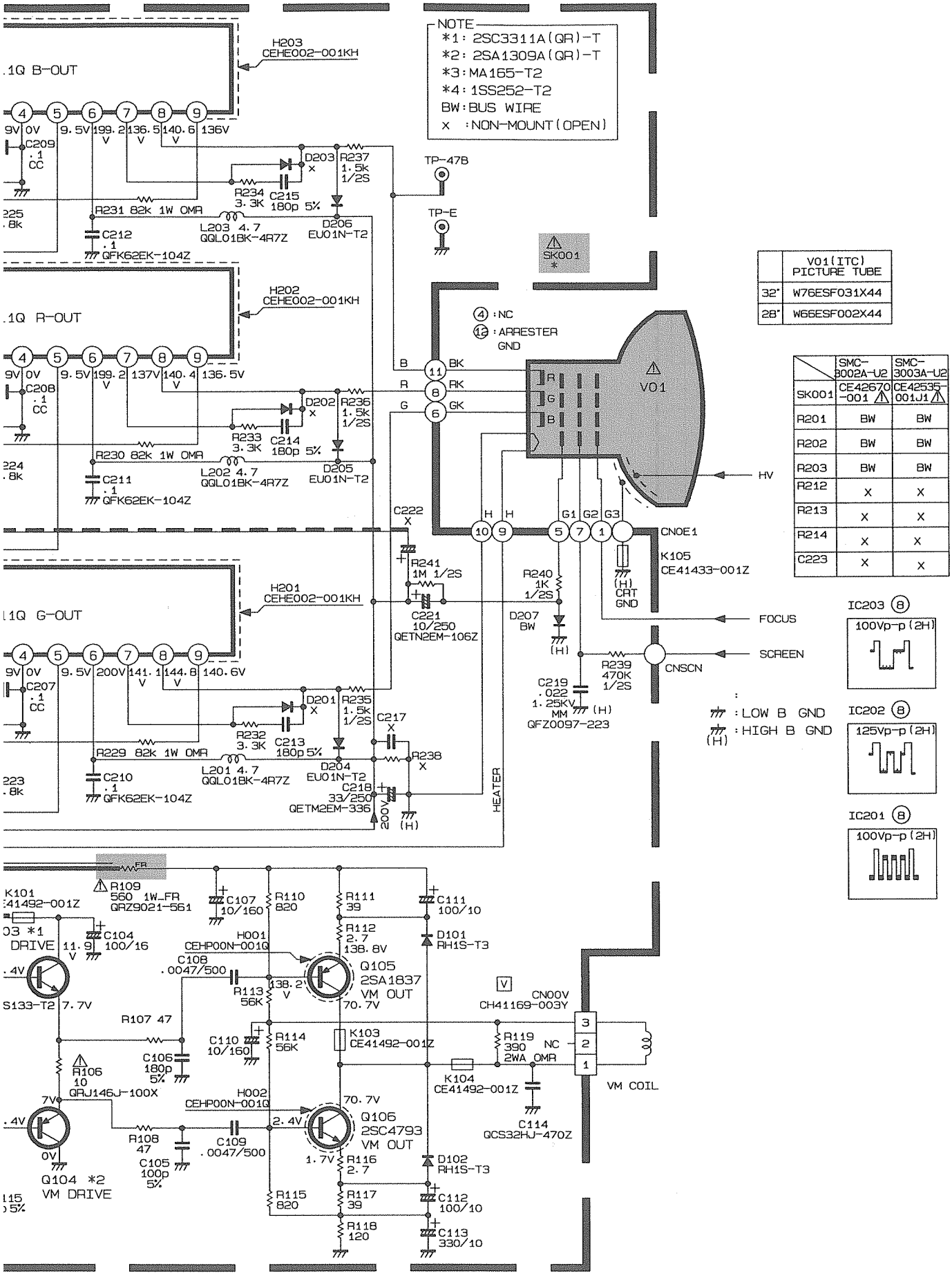
AV-32WH3EP
AV-28WH3EP



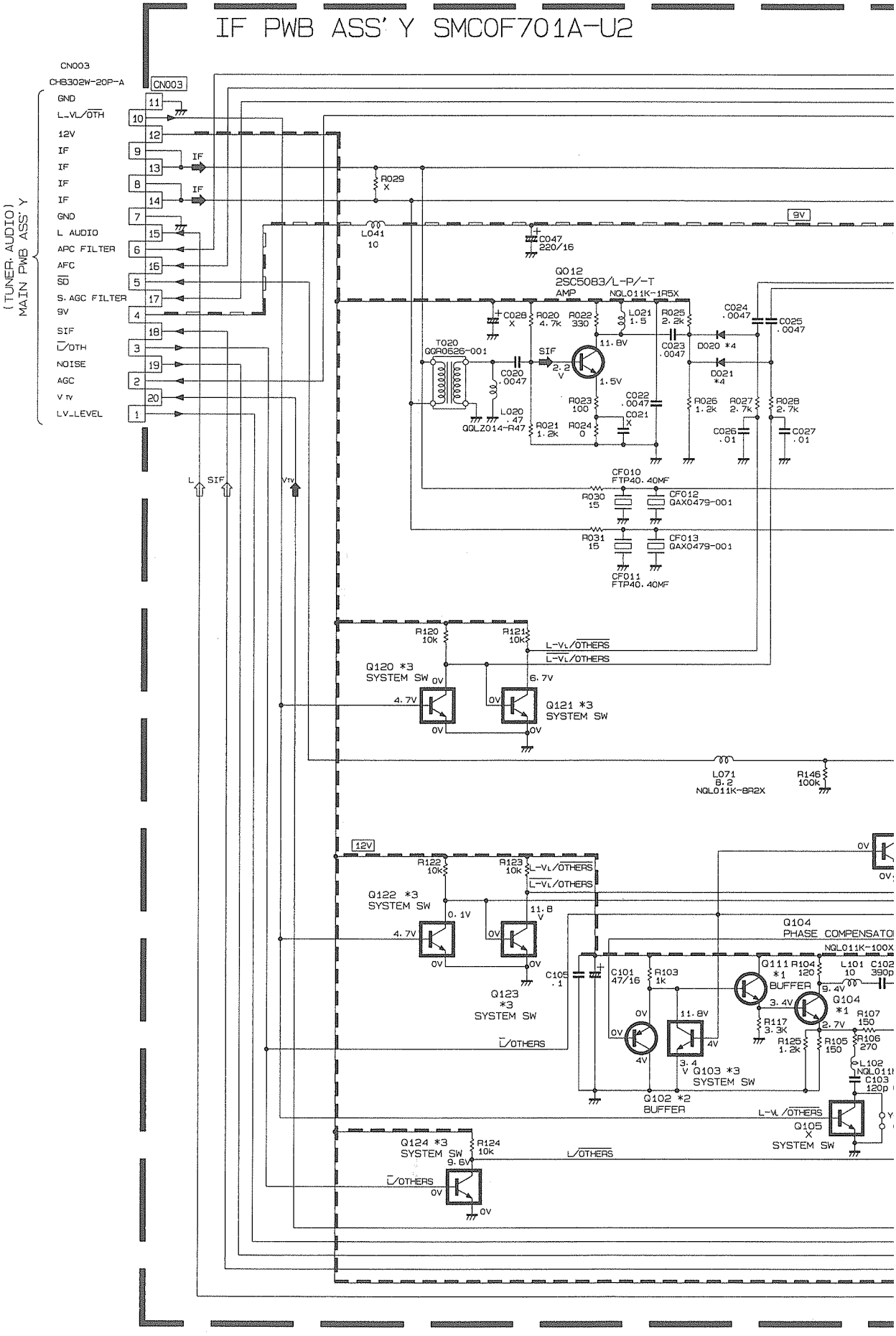
【 CRT SKT PWB CIRCUIT DIAGRAM 】

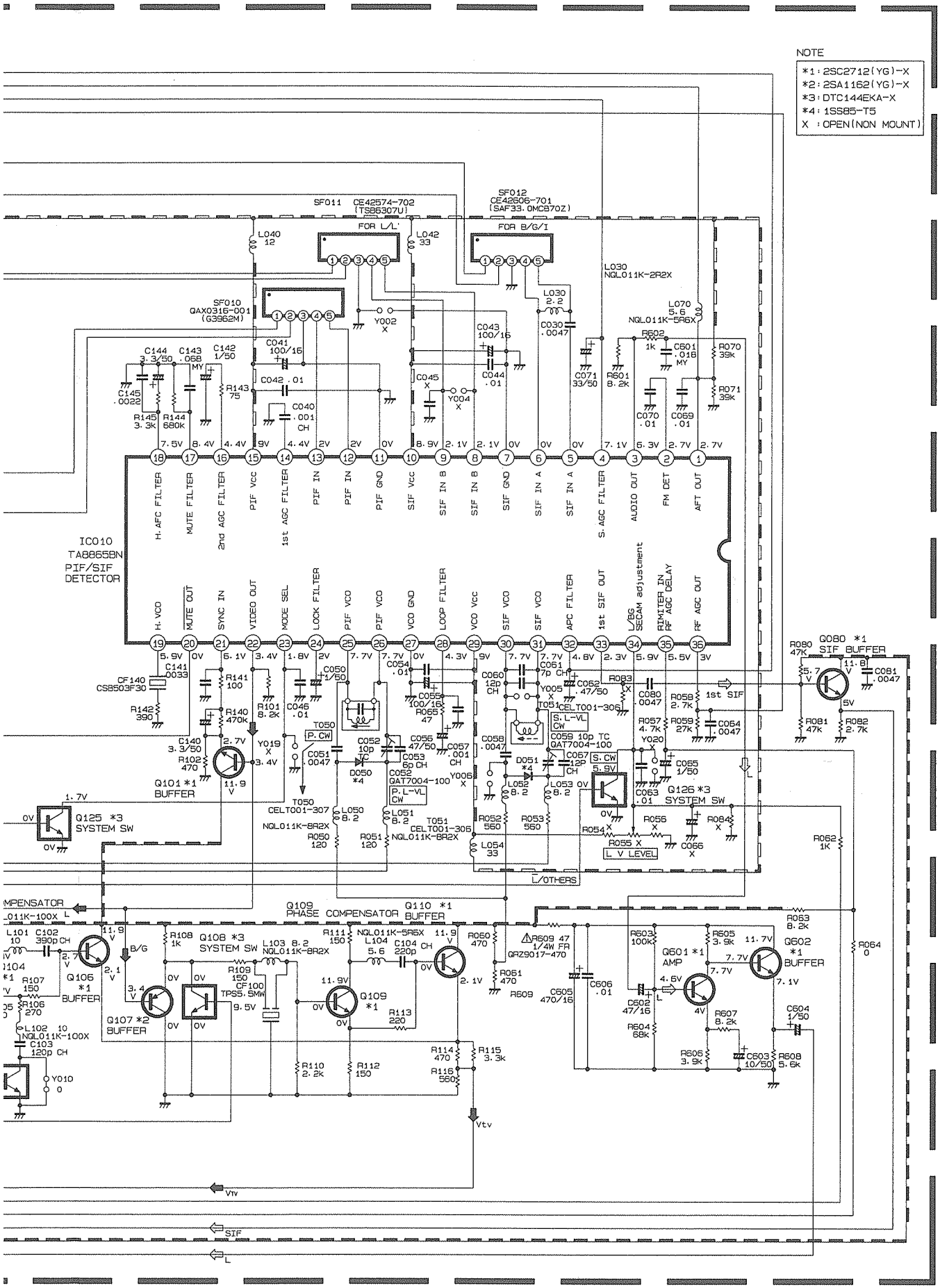


/H3EP AV-32WH3EP
/H3EP AV-28WH3EP

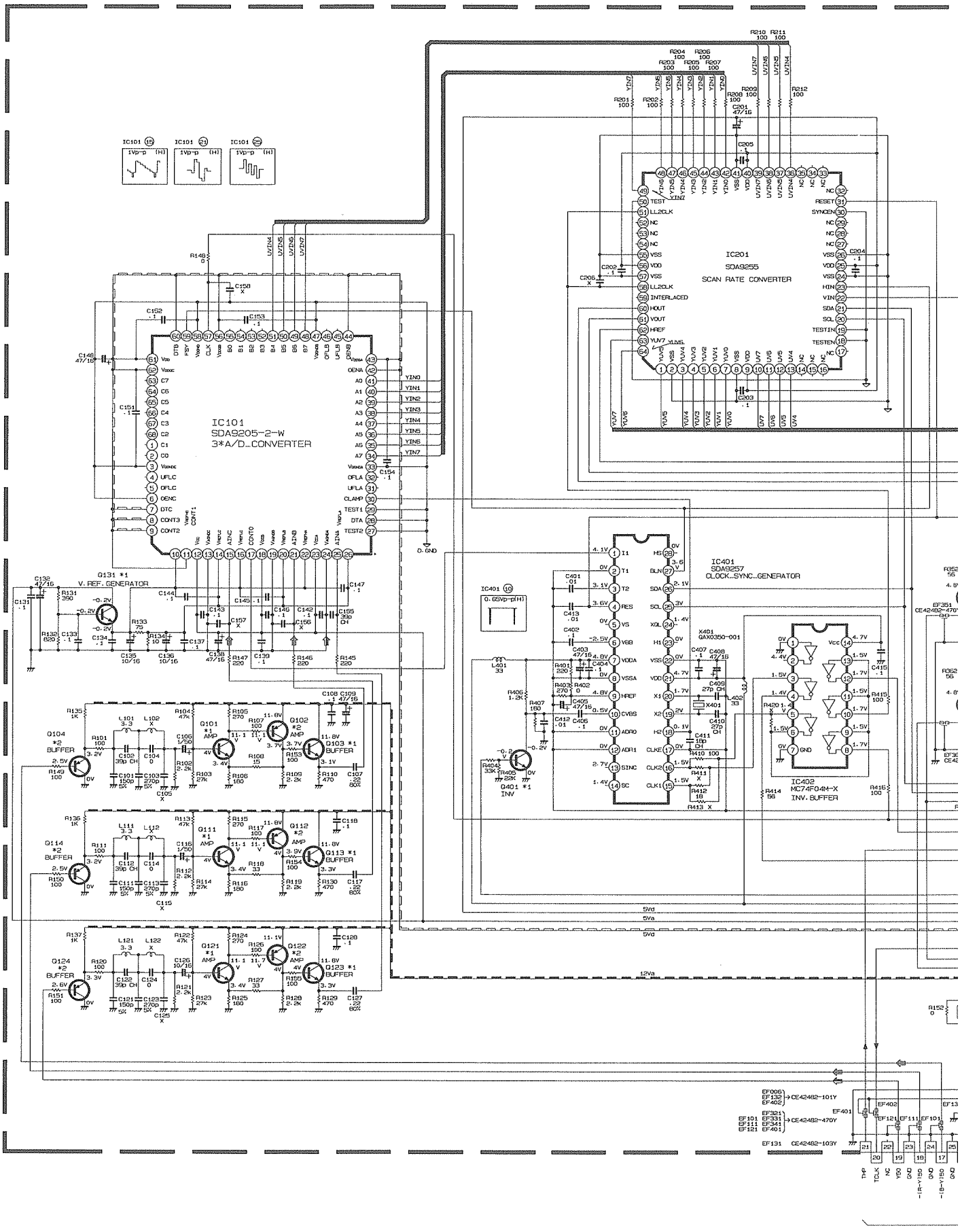


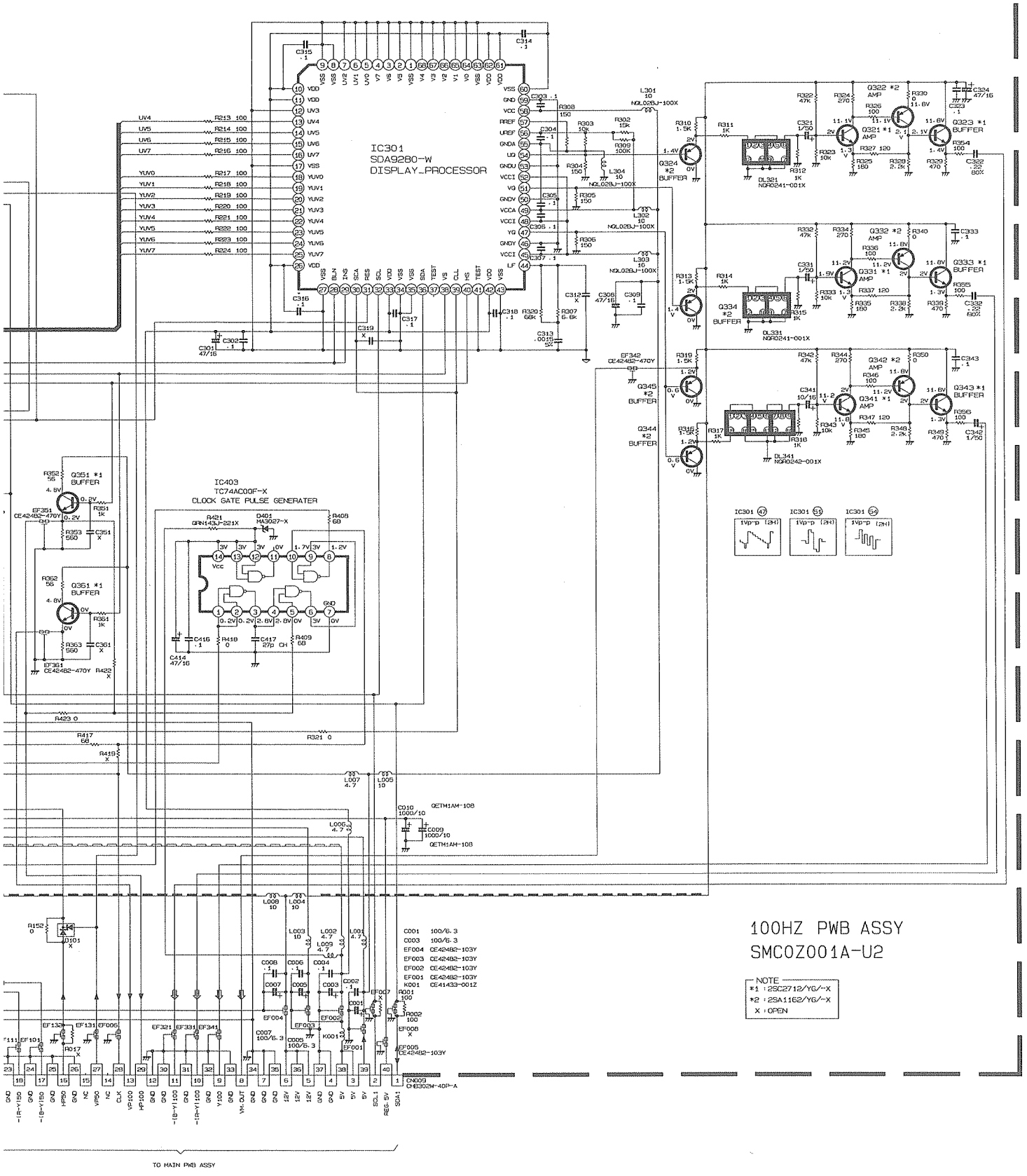
【 IF PWB CIRCUIT DIAGRAM 】



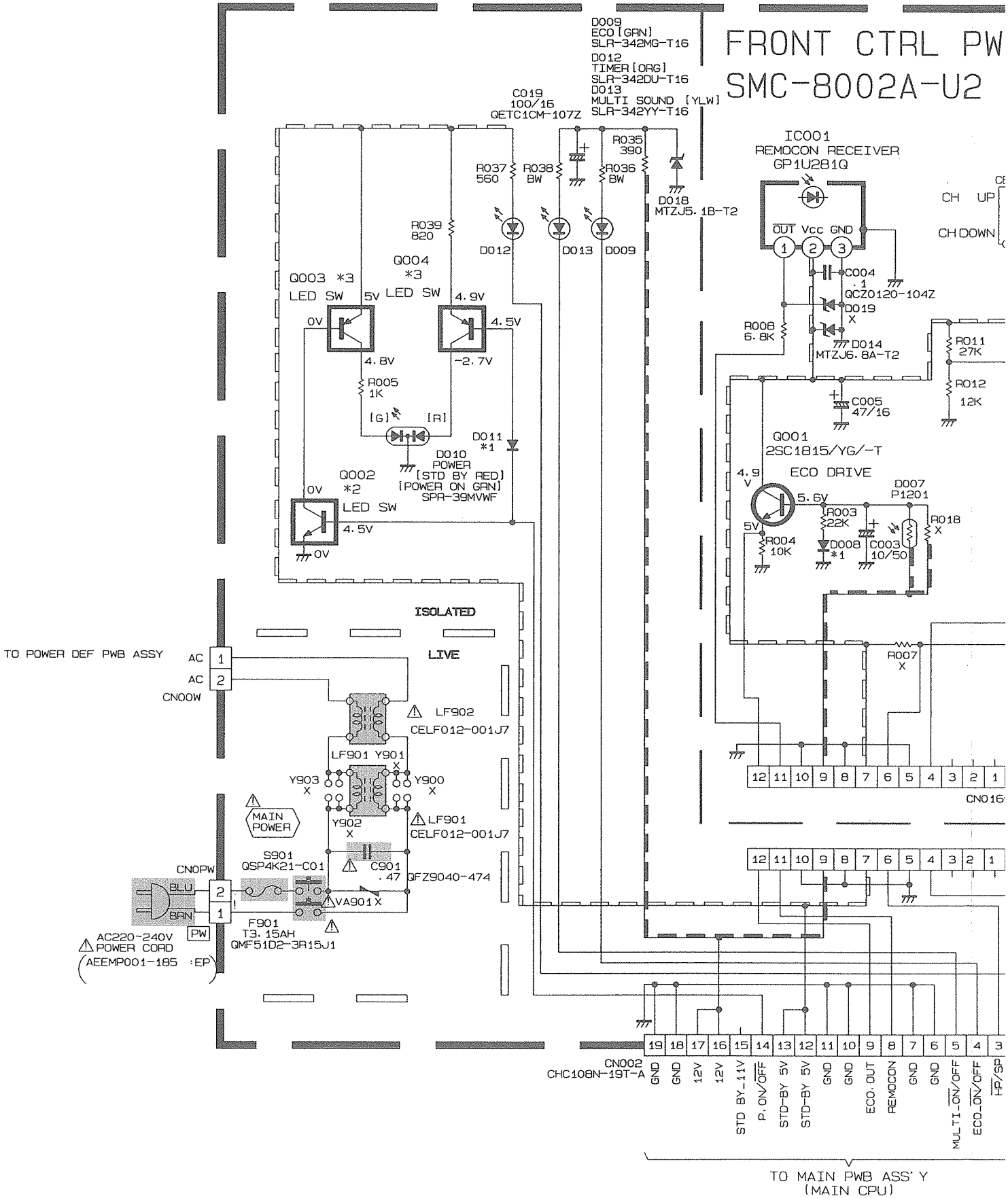

NOTE
*1 : 2SC2712(YG)-X
*2 : 2SA1162(YG)-X
*3 : DTC144EKA-X
*4 : 1SS85-T5
X : OPEN(NON MOUNT)
SF011 CE42574-702 (TS6307U)
FOR L/L'
SF012 CE42606-701 (SAF33.0MC870Z)
FOR B/G/I
SF010 QAX0316-001 (G3962M)
L030 NQL011K-2R2X
L070 5.6 NQL011K-5R6X
IC010 TA8865BN PIF/SIF DETECTOR
H. AFC FILTER
MUTE FILTER
2nd AGC FILTER
PIF VCC
1st AGC FILTER
PIF IN
PIF IN
PIF GND
SIF Vcc
SIF IN B
SIF IN B
SIF GND
SIF IN A
SIF IN A
S. AGC FILTER
AUDIO OUT
FM DET
AFT OUT
H. VCO
MUTE OUT
SYNC IN
VIDEO OUT
MODE SEL
LOCK FILTER
PIF VCO
PIF VCO
VCO GND
LOOP FILTER
VCO Vcc
SIF VCO
SIF VCO
APC FILTER
1st SIF OUT
L/BG SECAM adjustment
RIMITER IN RF AGC DELAY
RF AGC OUT
Q080 *1 SIF BUFFER
Q101 *1 BUFFER
Q125 *3 SYSTEM SW
Q126 *3 SYSTEM SW
Q106 *1 BUFFER
Q107 *2 BUFFER
Q108 *3 SYSTEM SW
Q109 *1
Q110 *1 BUFFER
Q601 *1 AMP
Q602 *1 BUFFER
1st SIF
L/OTHERS
Vtv
SIF
L

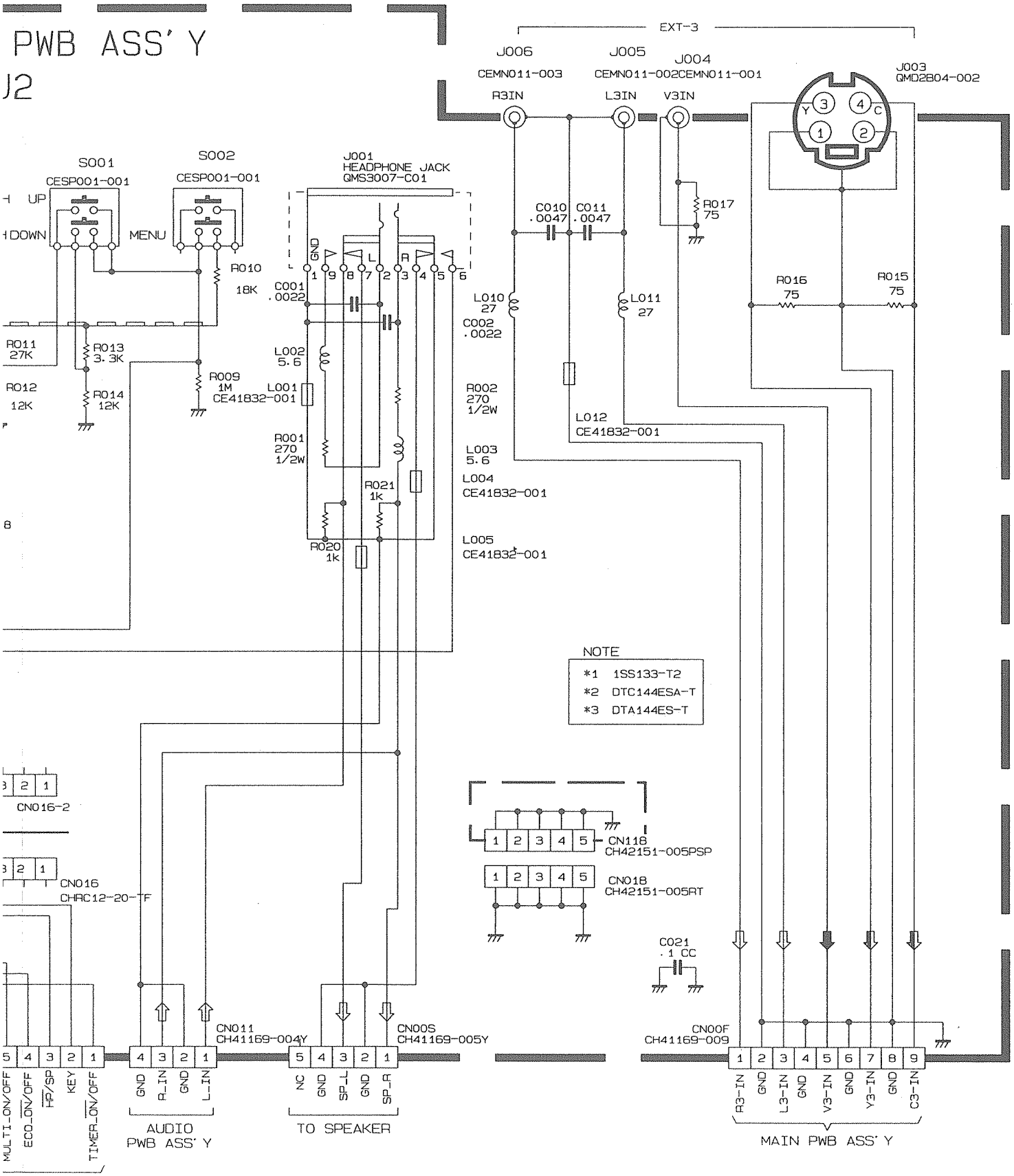
【 100Hz PWB CIRCUIT DIAGRAM 】



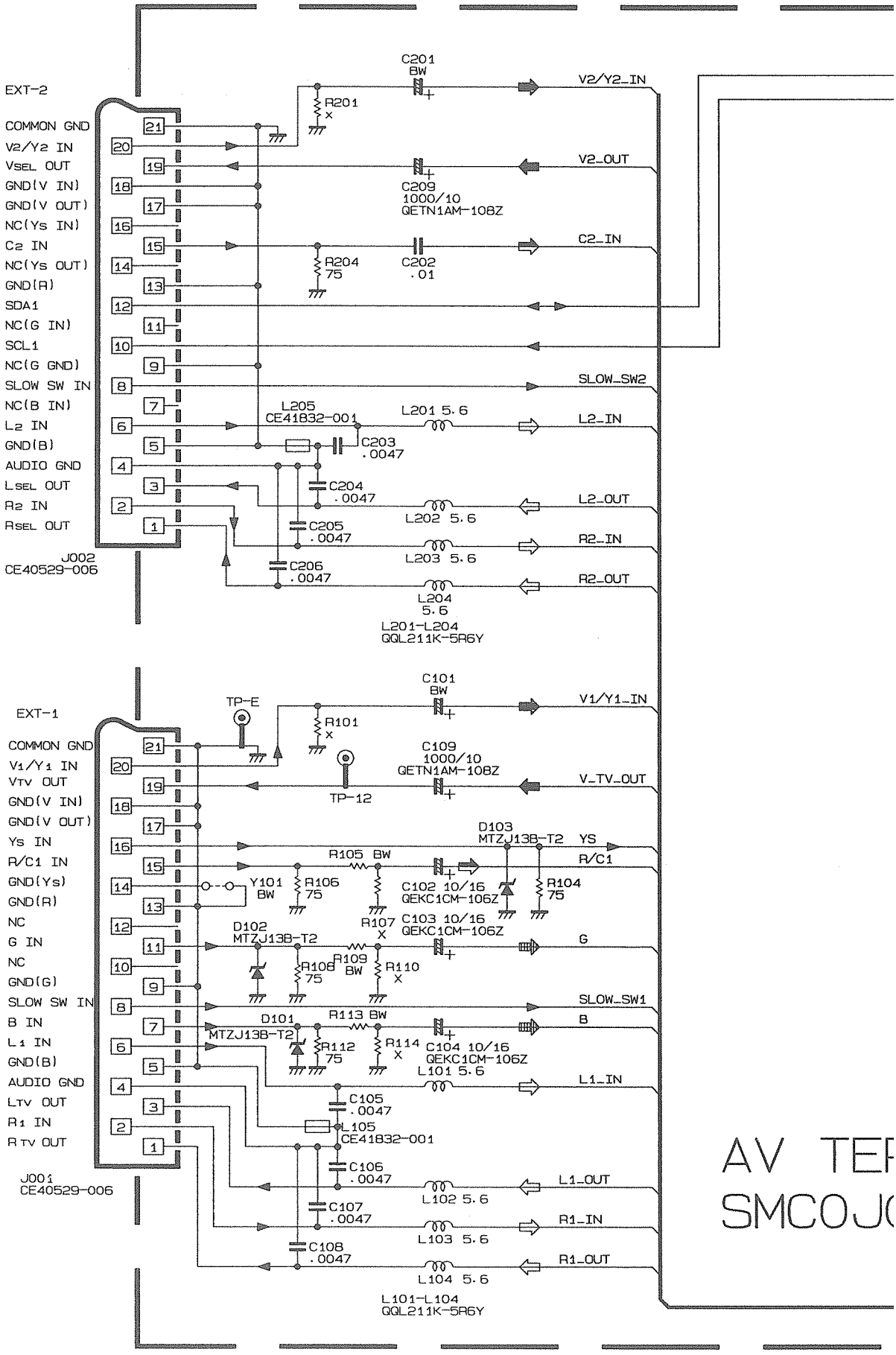

IC301
SDA9280-W
DISPLAY_PROCESSOR
IC403
TC74AC00F-X
CLOCK GATE PULSE GENERATOR
100HZ PWB ASSY
SMC0Z001A-U2
NOTE
*1 : 2SC2712/YG/-X
*2 : 2SA1162/YG/-X
X : OPEN
TO MAIN PWB ASSY

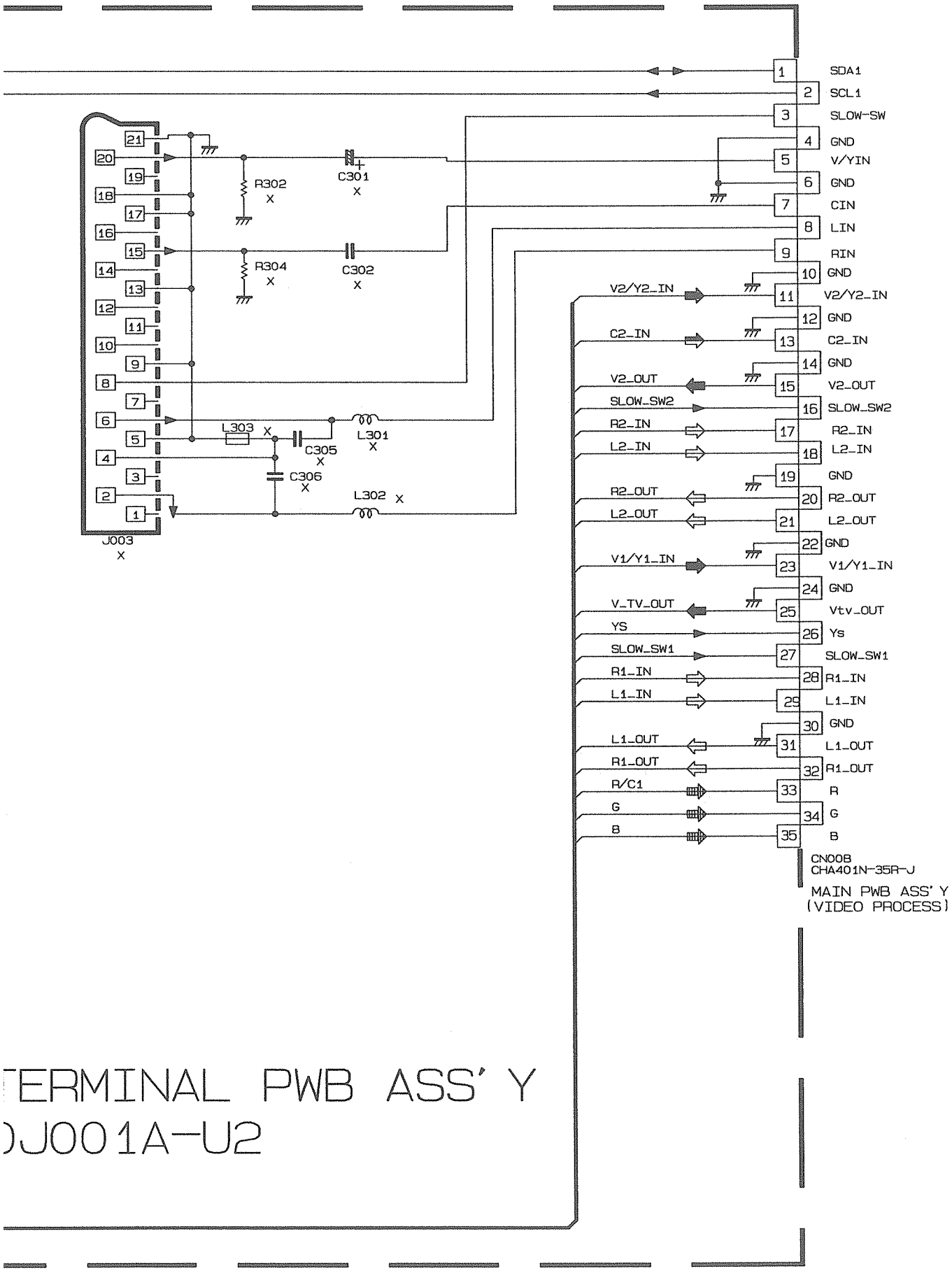
【 FRONT CONTROL PWB CIRCUIT DIAGRAM 】




PWB ASS' Y
J2
EXT-3
J006
CEMN011-003
R3IN
J005
CEMN011-002
L3IN
J004
CEMN011-001
V3IN
J003
QMD2B04-002
S001
CESP001-001
S002
CESP001-001
UP
DOWN
MENU
J001
HEADPHONE JACK
QMS3007-C01
R010
18K
C001
.0022
C010
.0047
C011
.0047
R017
75
R016
75
R015
75
L010
27
L011
27
C002
.0022
R011
27K
R013
3.3K
R012
12K
R014
12K
R009
1M
L001
CE41832-001
L002
5.6
R002
270
1/2W
L012
CE41832-001
L003
5.6
L004
CE41832-001
R001
270
1/2W
R021
1k
R020
1k
L005
CE41832-001
NOTE
*1 1SS133-T2
*2 DTC144ESA-T
*3 DTA144ES-T
CN016-2
CN016
CHRC12-20-TF
CN118
CH42151-005PSP
CN01B
CH42151-005RT
C021
.1 CC
CN011
CH41169-004Y
CN00S
CH41169-005Y
CN00F
CH41169-009
MULTI_ON/OFF
ECO_ON/OFF
HP/SP
KEY
TIMER_ON/OFF
GND
R_IN
GND
L_IN
AUDIO
PWB ASS' Y
NC
GND
SP_L
GND
SP_R
TO SPEAKER
R3-IN
GND
L3-IN
GND
V3-IN
GND
Y3-IN
GND
C3-IN
MAIN PWB ASS' Y

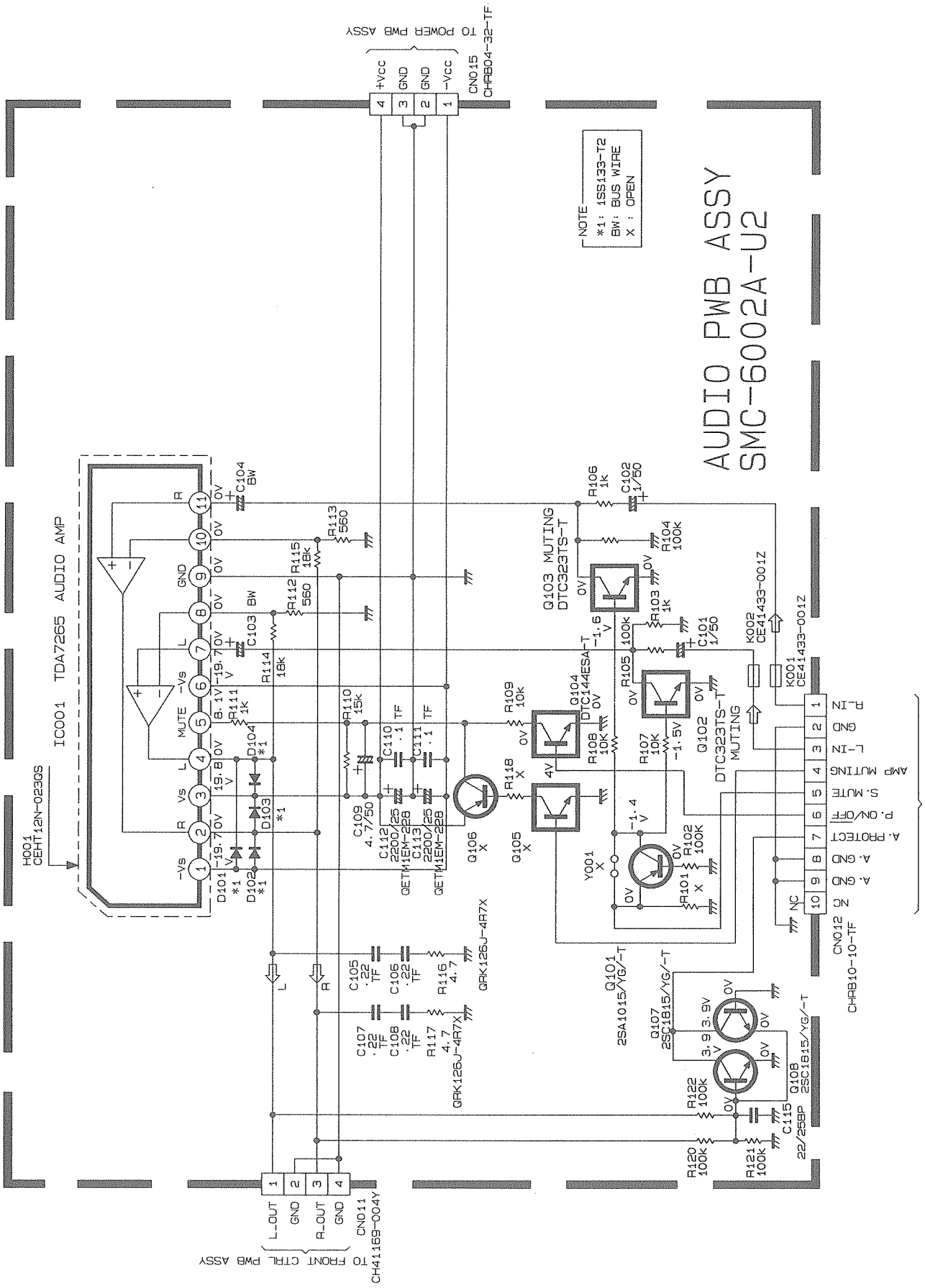
【 AV TERMINAL PWB CIRCUIT DIAGRAM 】



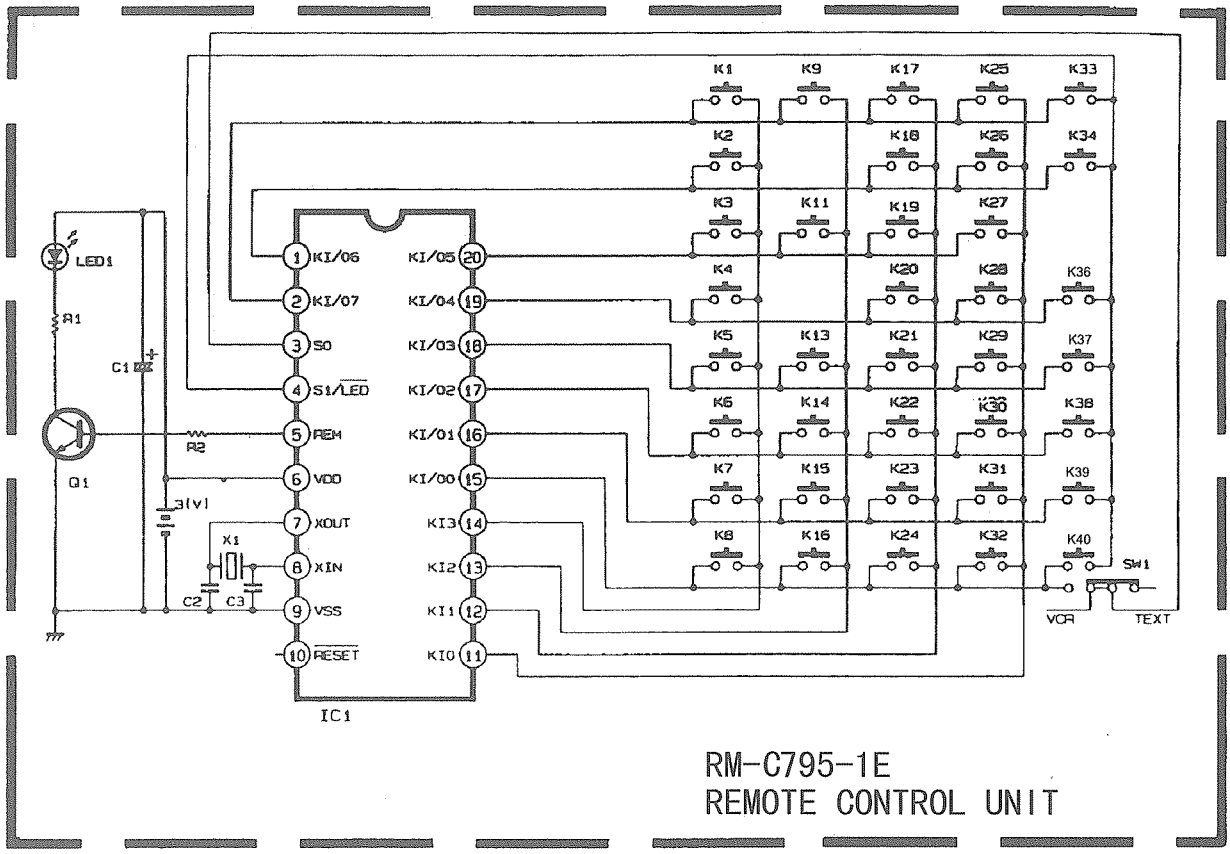


TERMINAL PWB ASS' Y
)J001A-U2

〖 AUDIO PWB CIRCUIT DIAGRAM 〗



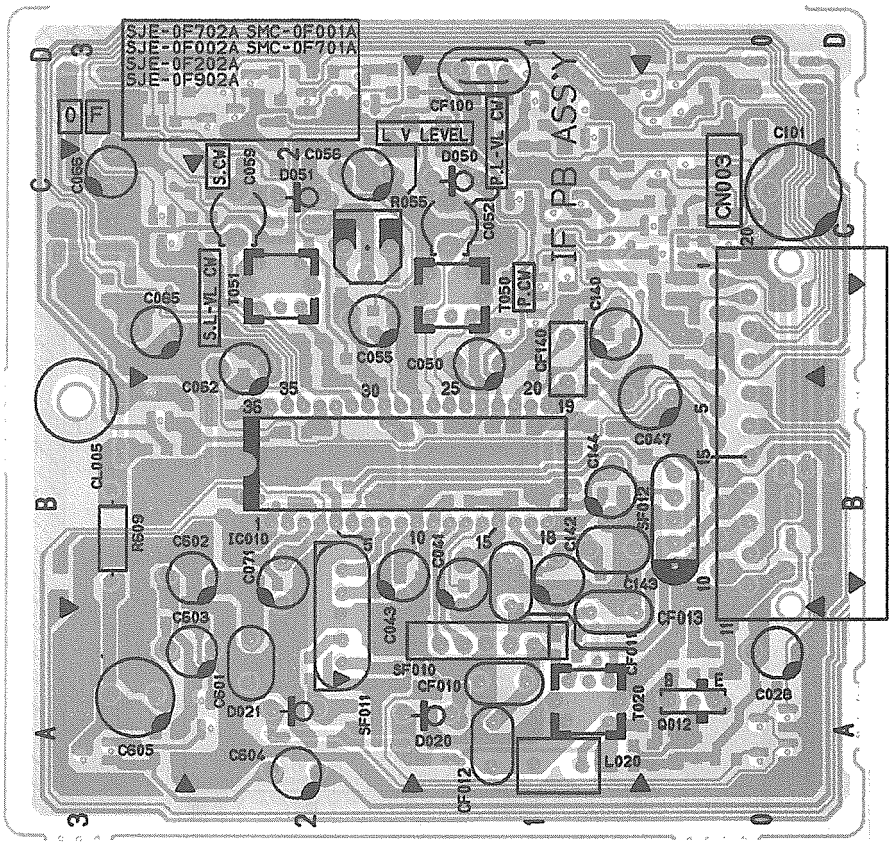
【 REMOTE CONTROL UNIT CIRCUIT DIAGRAM 】



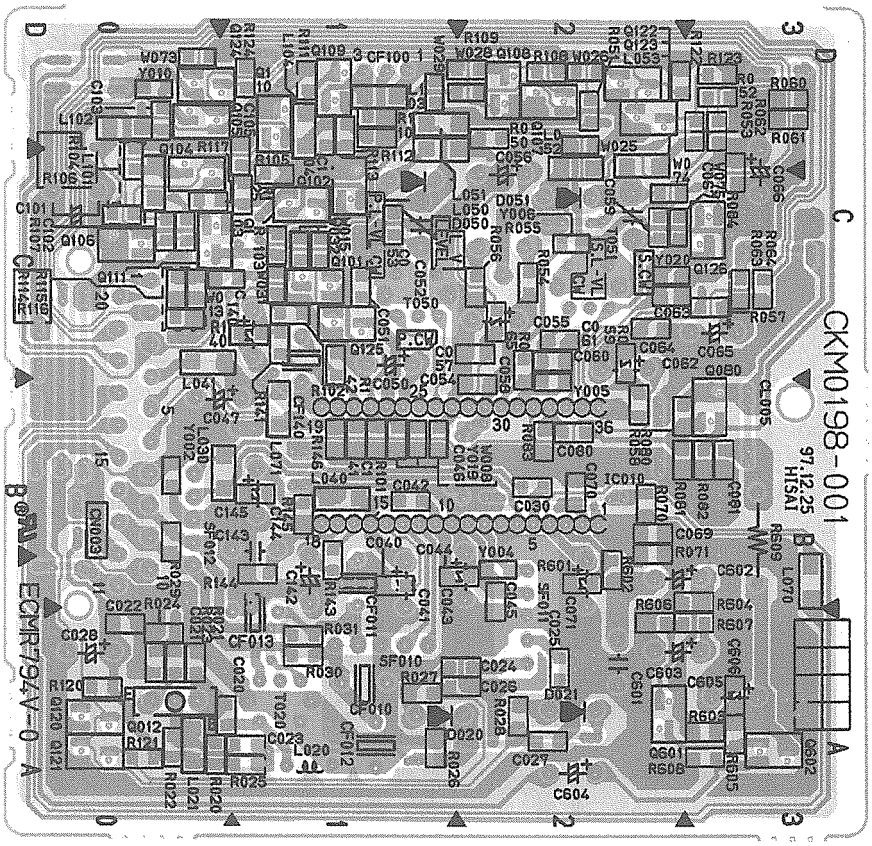
■ KEY FUNCTION

No.	Key Name	No.	Key Name	No.	Key Name	No.	Key Name
1	1	14	3D (GREEN)	22	MODE (TEXT)	29	CANCEL (TEXT)
2	2	15	P.BASS (YELLOW)		REW ◀◀ (VCR)		STOP ■ (VCR)
3	3	16	PIP (BLUE)	23	SIZE (TEXT)	30	INDEX (TEXT)
4	4	17			FF ▶▶ (VCR)		(')/| (VCR)
5	5	18	REVEAL (TEXT)	24	SUB PAGE(TEXT)	31	▲
6	6		PLAY ▶ (VCR)		P V (VCR)	32	◀
7	7	19	TV	25		33	▼
8	8	20	MENU/OK	26	STORE (TEXT)	34	▶
9	9	21	HOLD (TEXT)		(VCR)	36	FREEZE
11	0		P ∧ (VCR)	27	(')/|		
13	ZOOM (RED)			28			

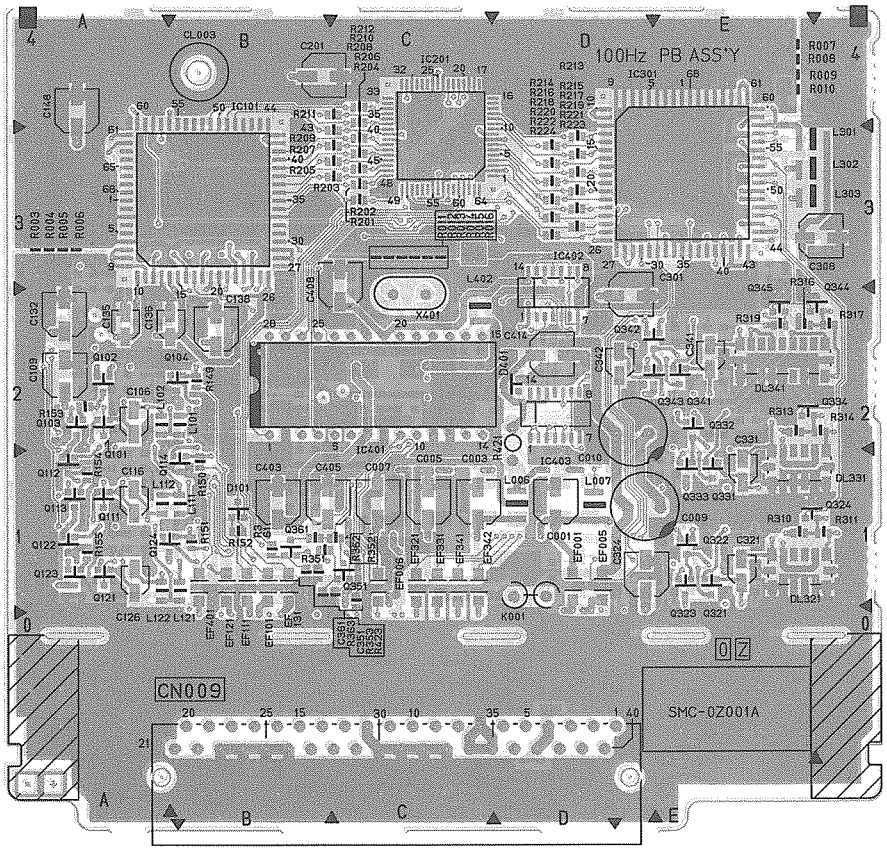
【 IF PWB PATTERN(TOP) 】



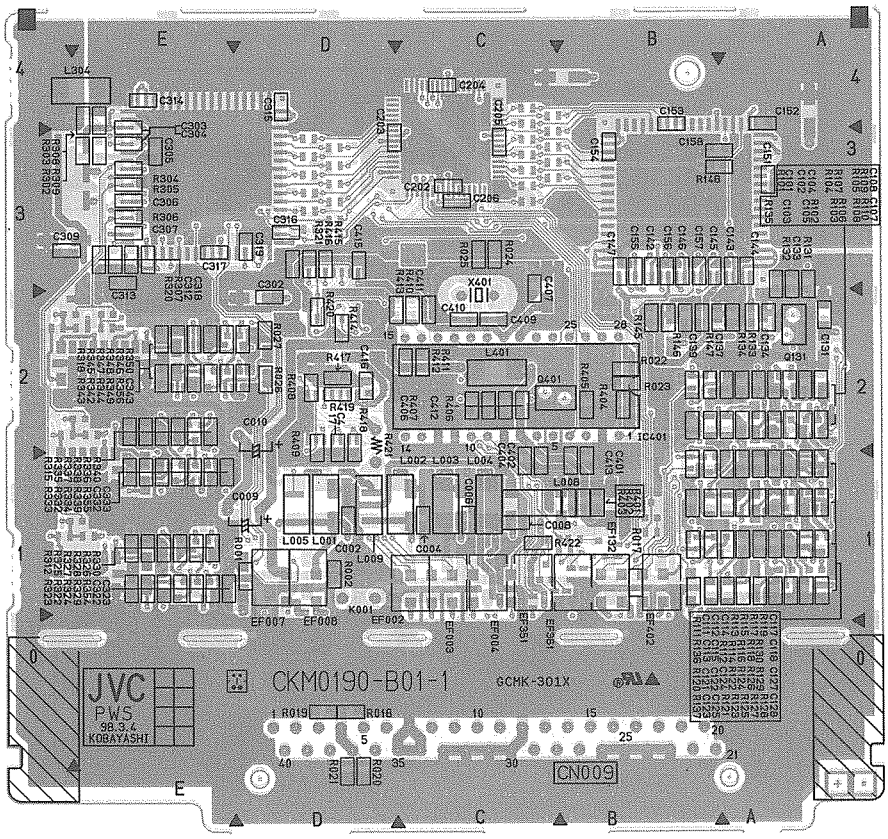
【 IF PWB PATTERN(BOTTOM) 】



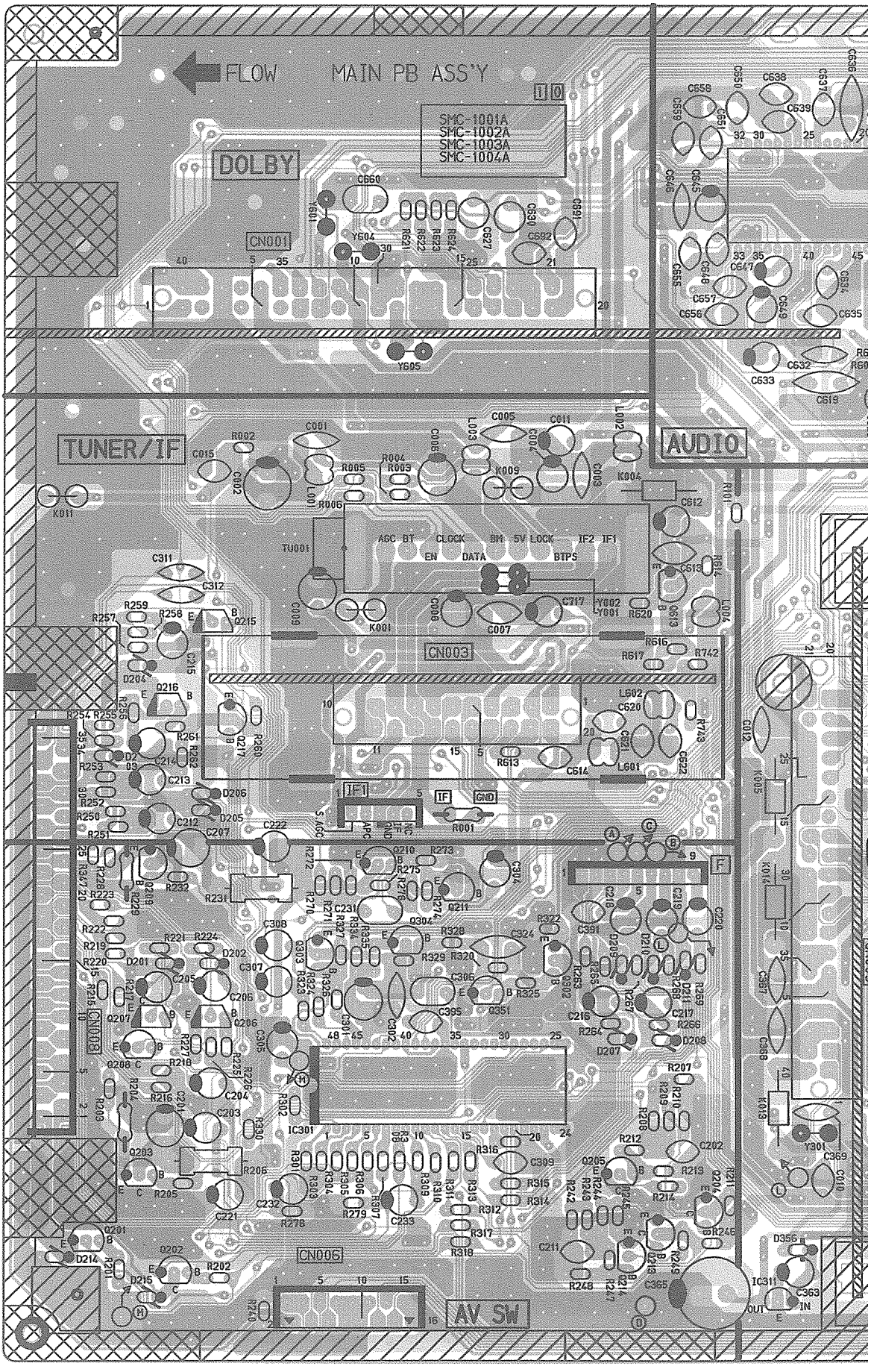
〖100Hz PWB PATTERN(TOP)〗



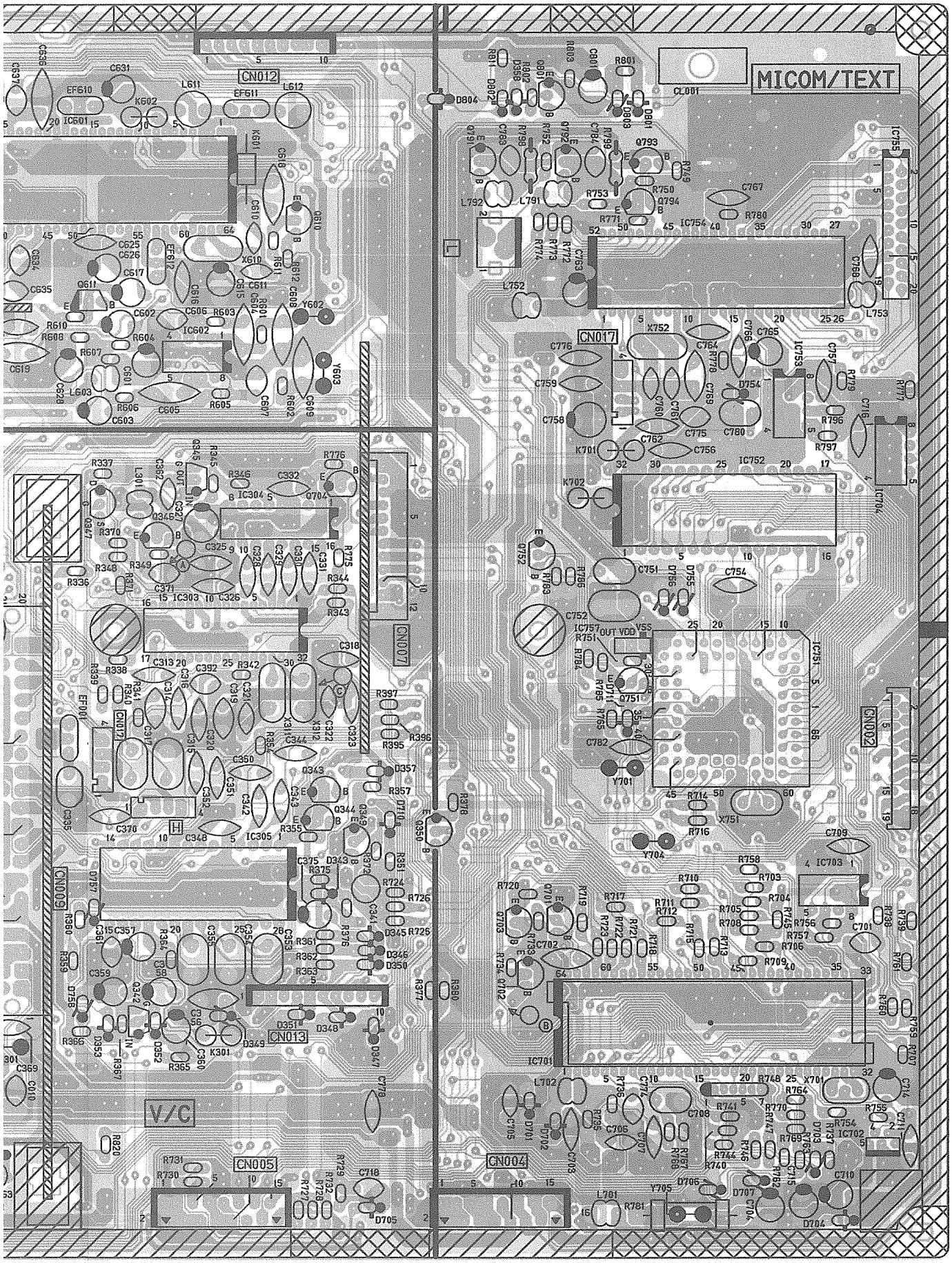
〖100Hz PWB PATTERN(BOTTOM)〗



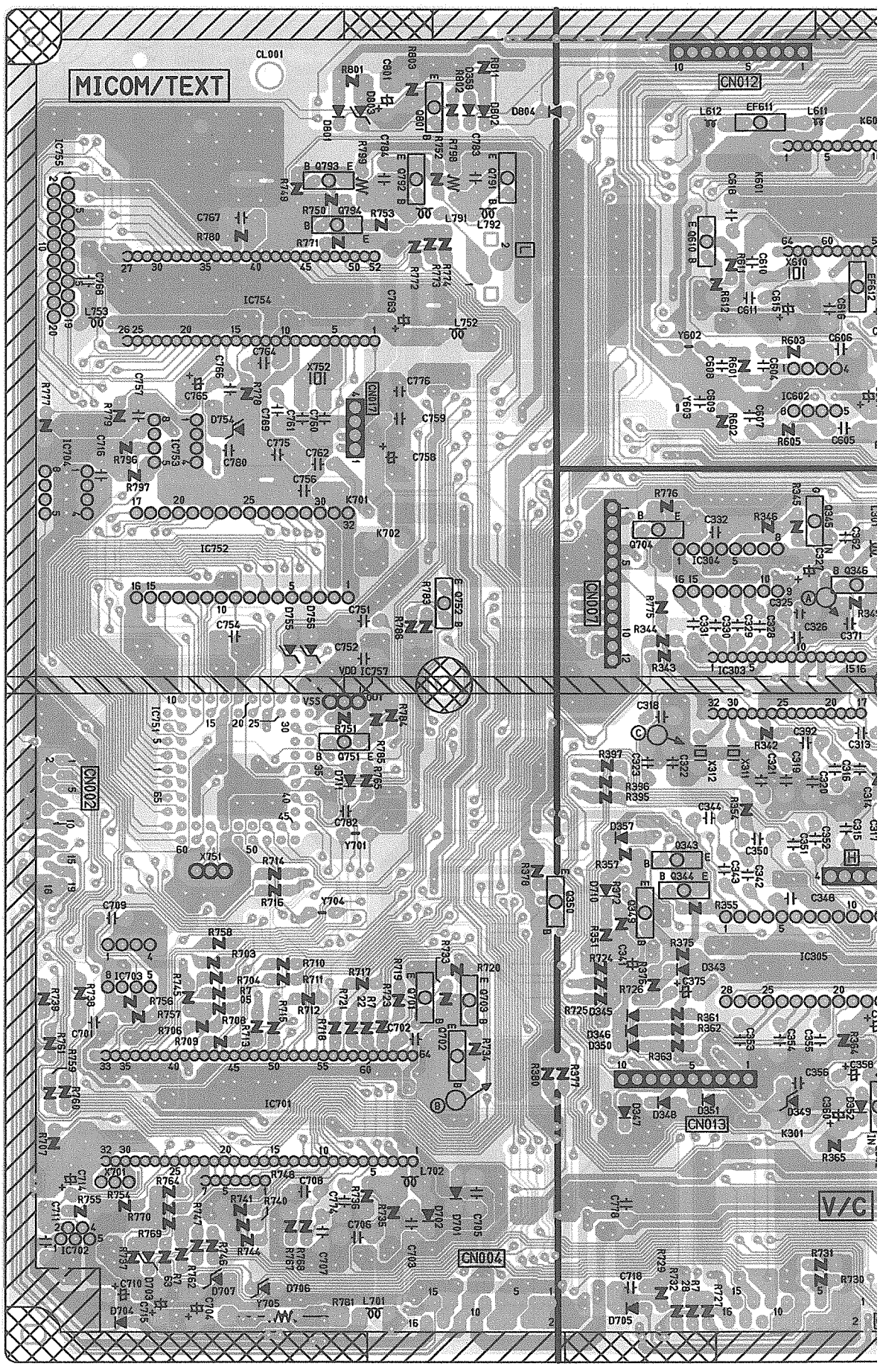
【 MAIN PWB PATTERN(PARTS SIDE) 】



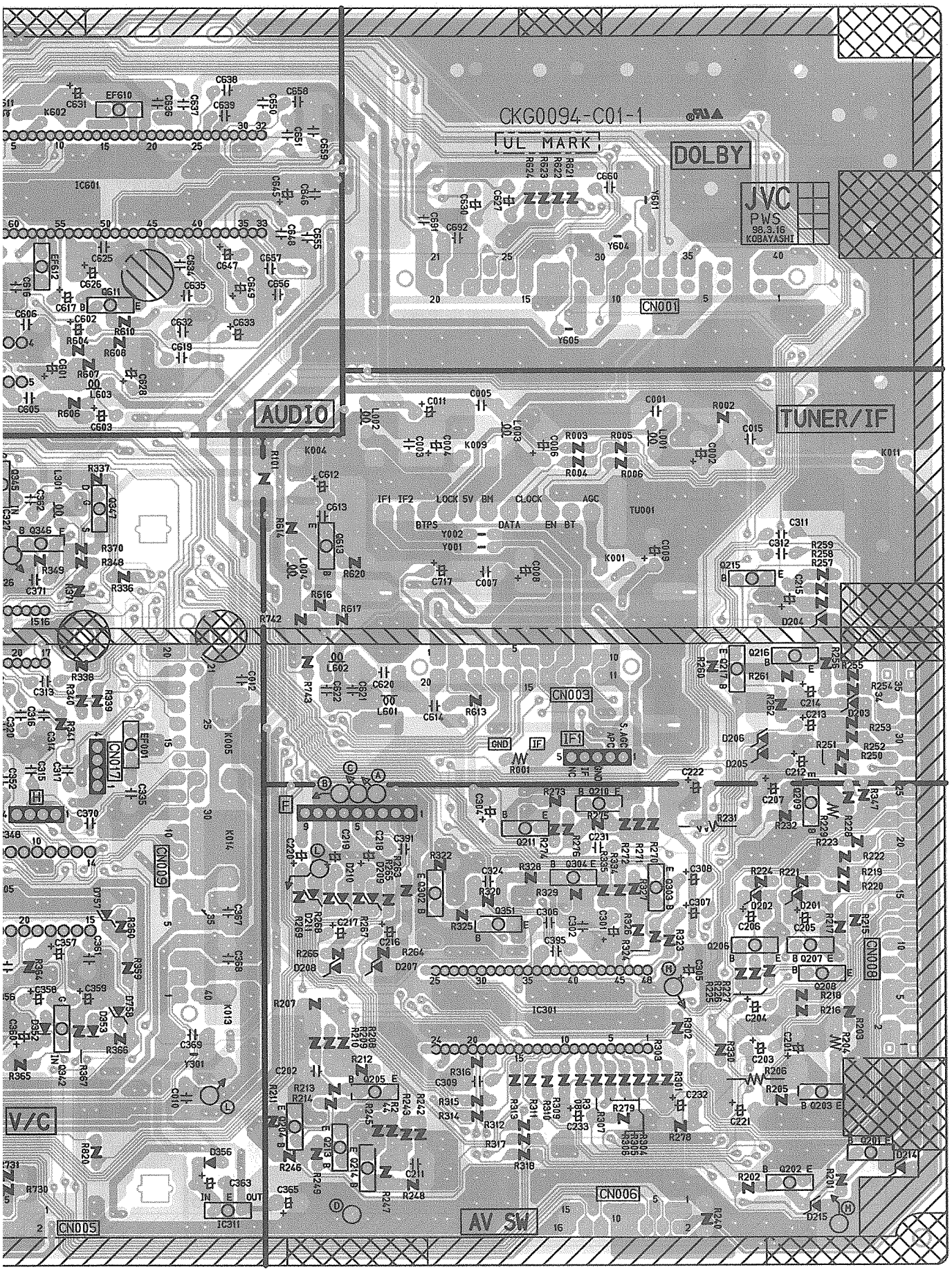
H3EP AV-32WH3EP
H3EP AV-28WH3EP



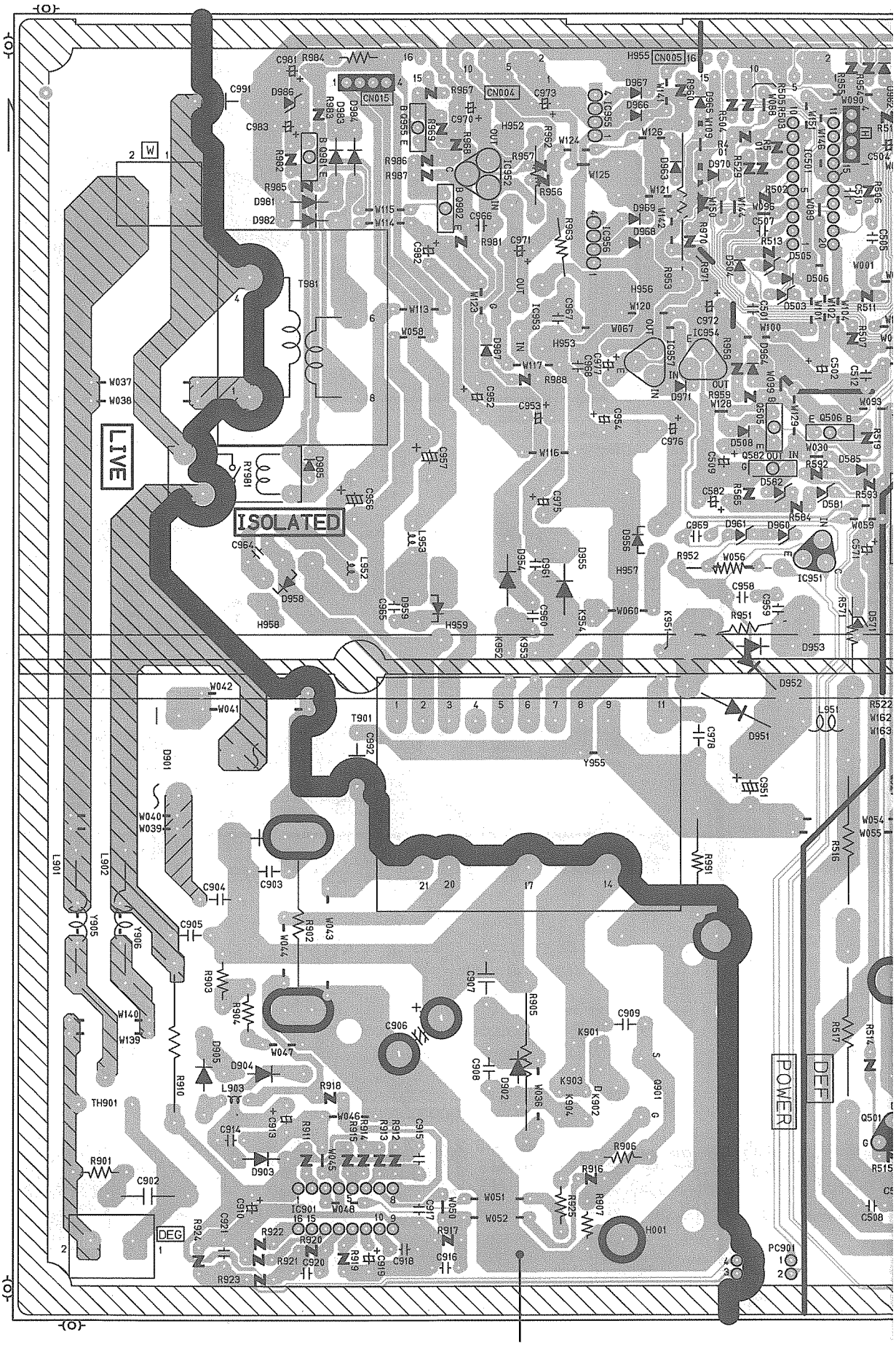
【 MAIN PWB PATTERN(SOLDER SIDE) 】



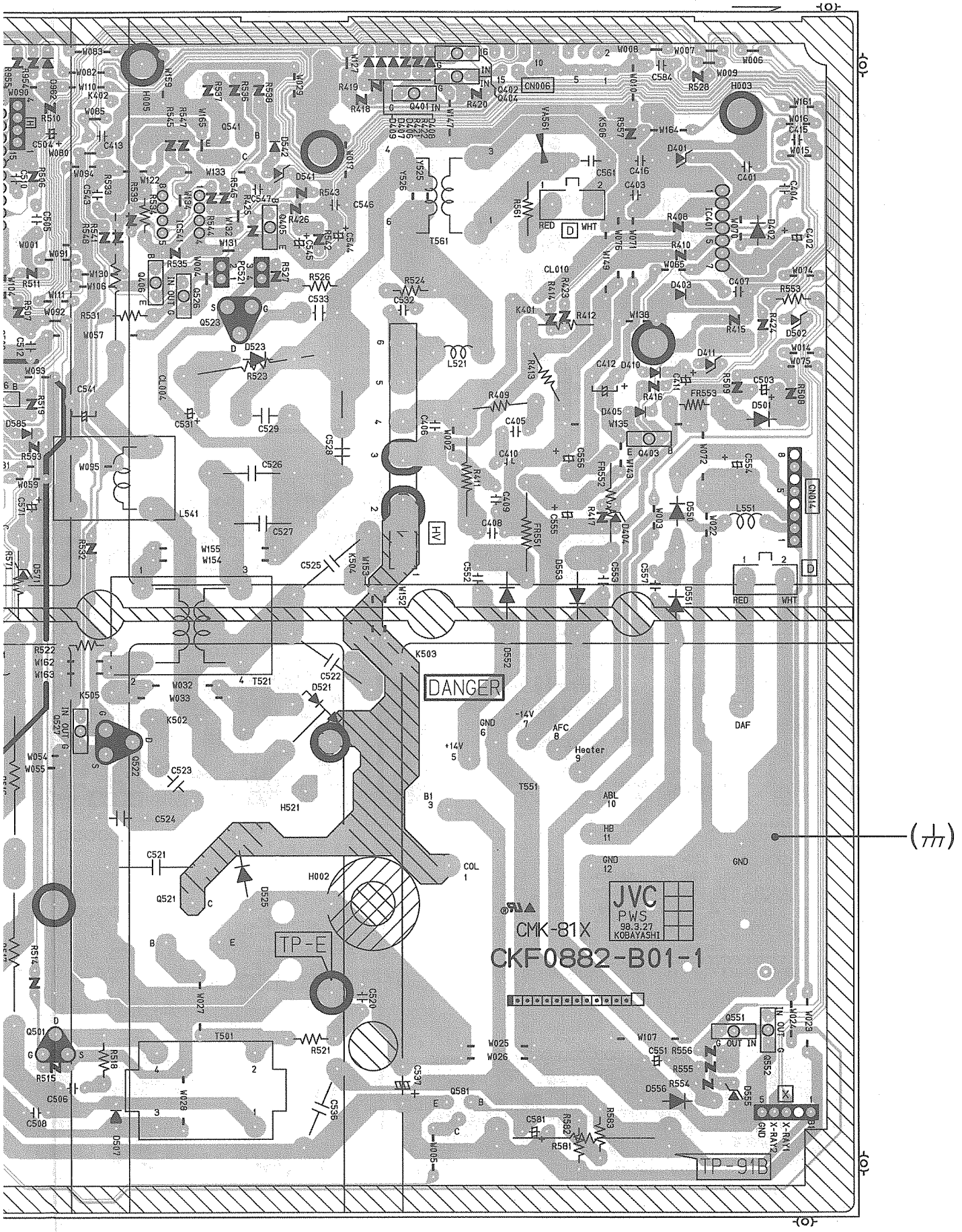
/H3EP AV-32WH3EP
/H3EP AV-28WH3EP



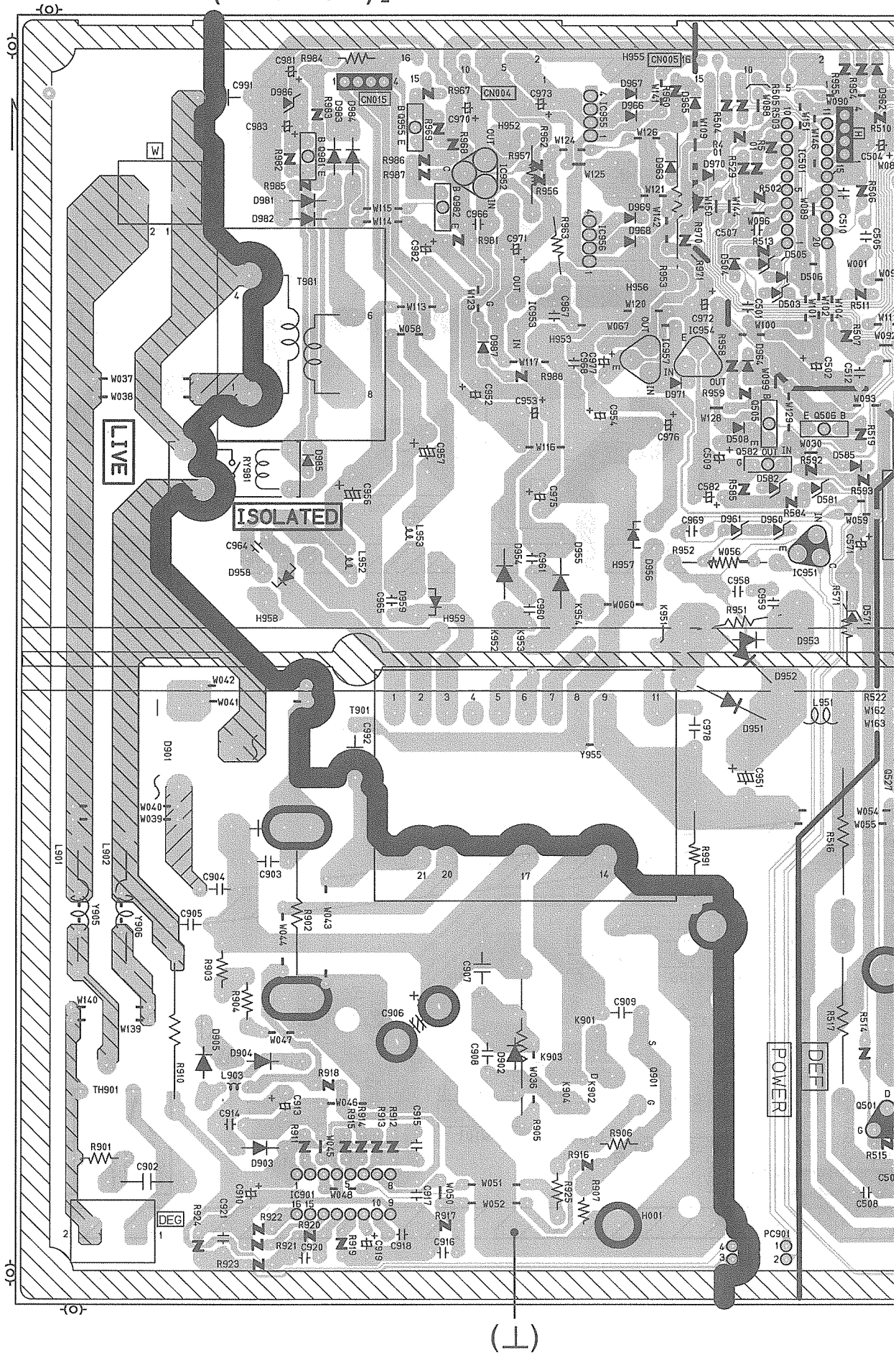
【 POWER DEF PWB PATTERN(AV-32WH3EP) 】

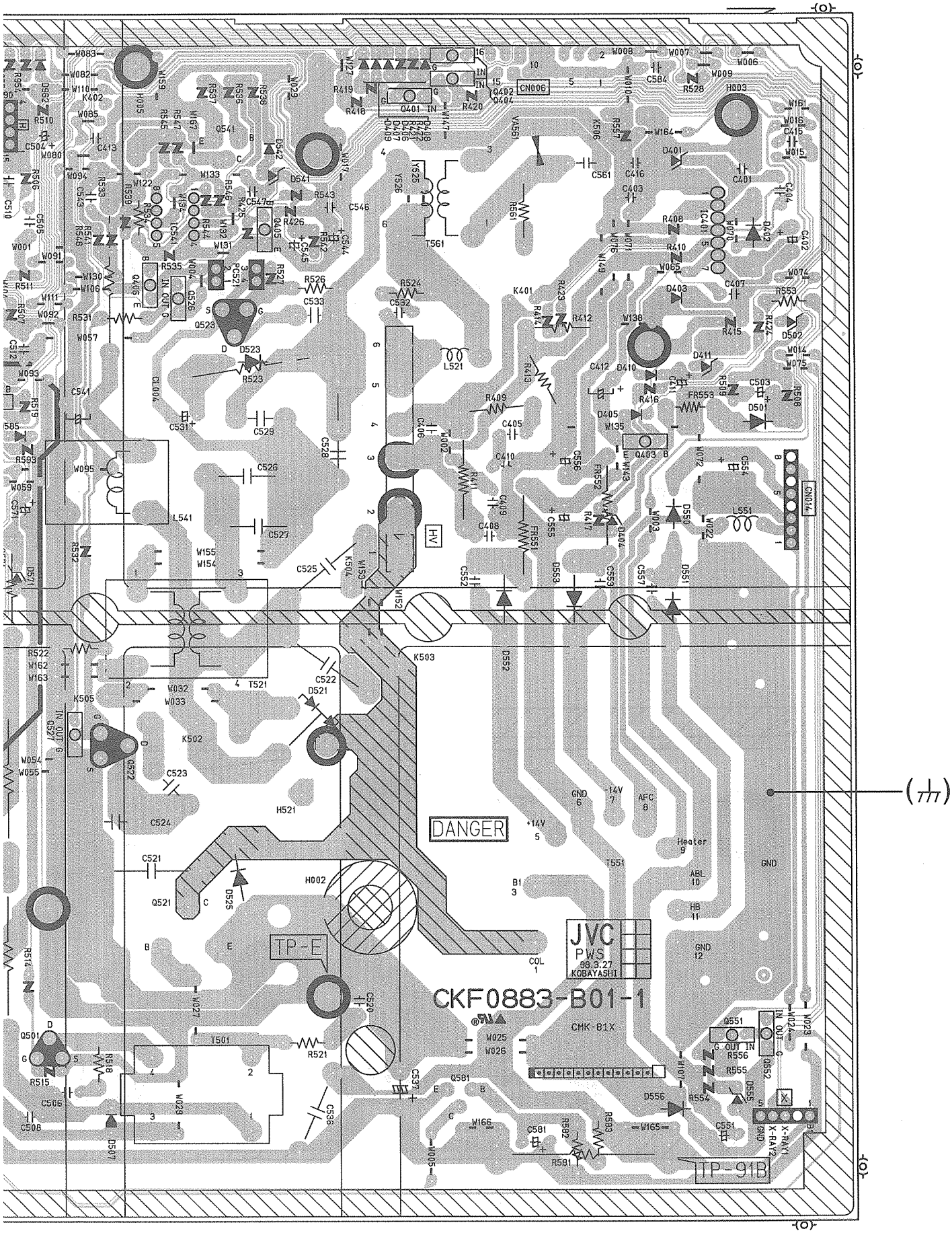


P AV-32WH3EP
P AV-28WH3EP



【 POWER DEF PWB PATTERN(AV-28WH3EP) 】




DANGER
TP-E
TP-91B
JVC
PWS
98.3.27
KOBAYASHI
CKF0883-B01-1
CMK-81X
+14V
GND
-14V
AFC
Heater
ABL
HB
COL
X-RAY1
X-RAY2
CN006
CN014
H521
H002
H003
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T561
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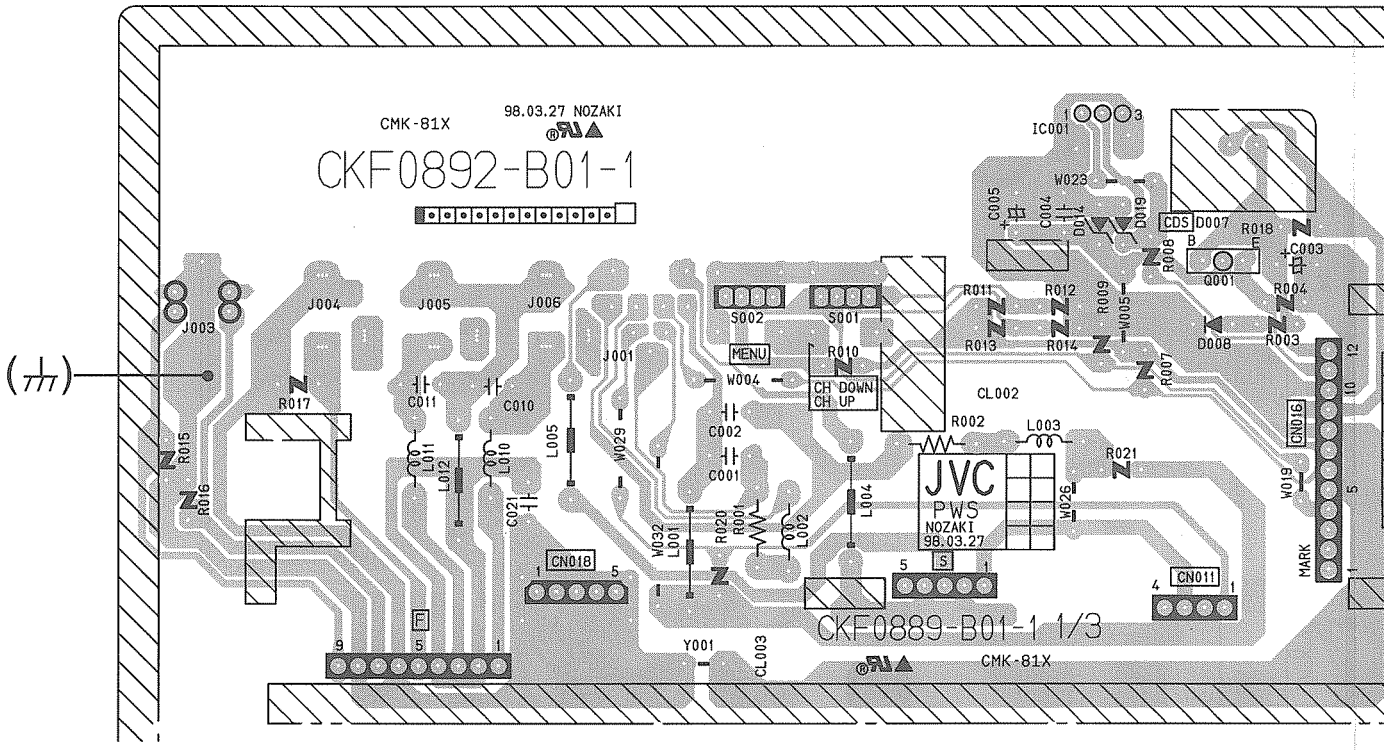
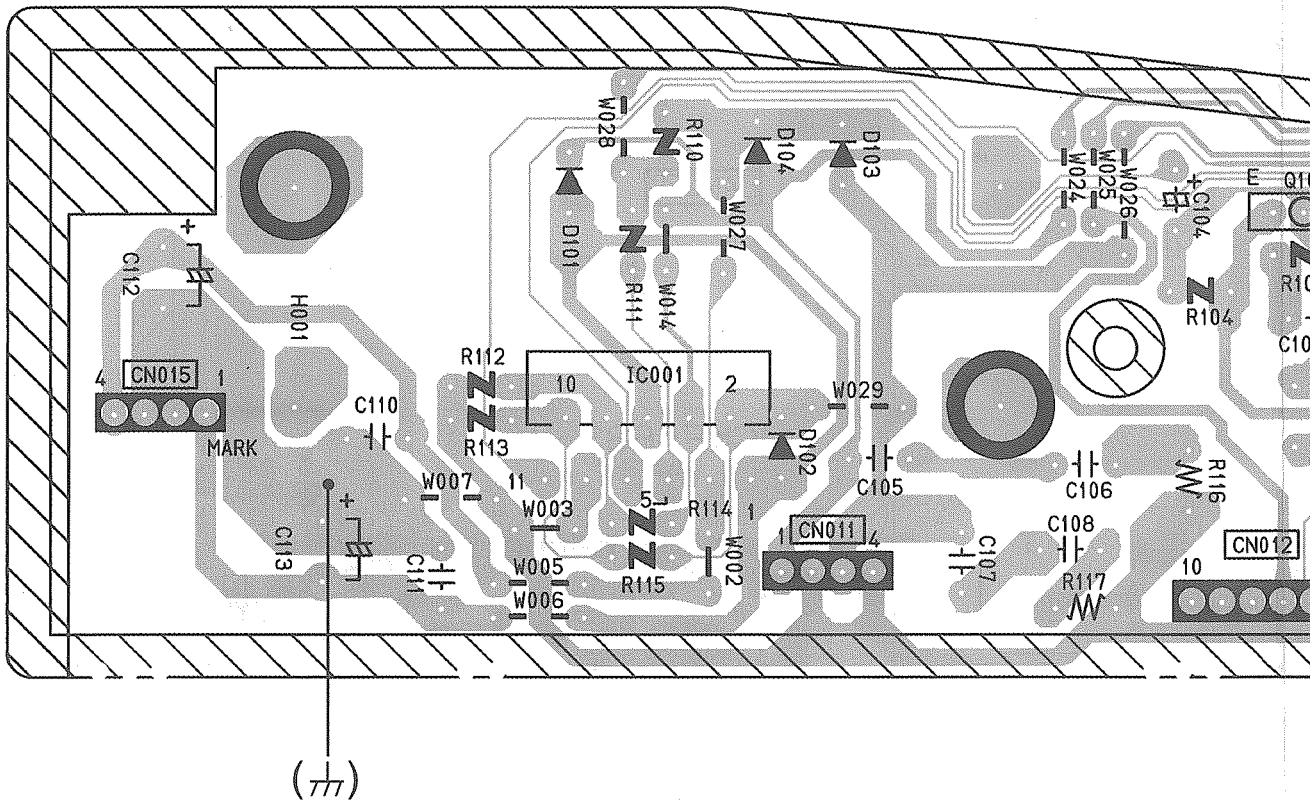
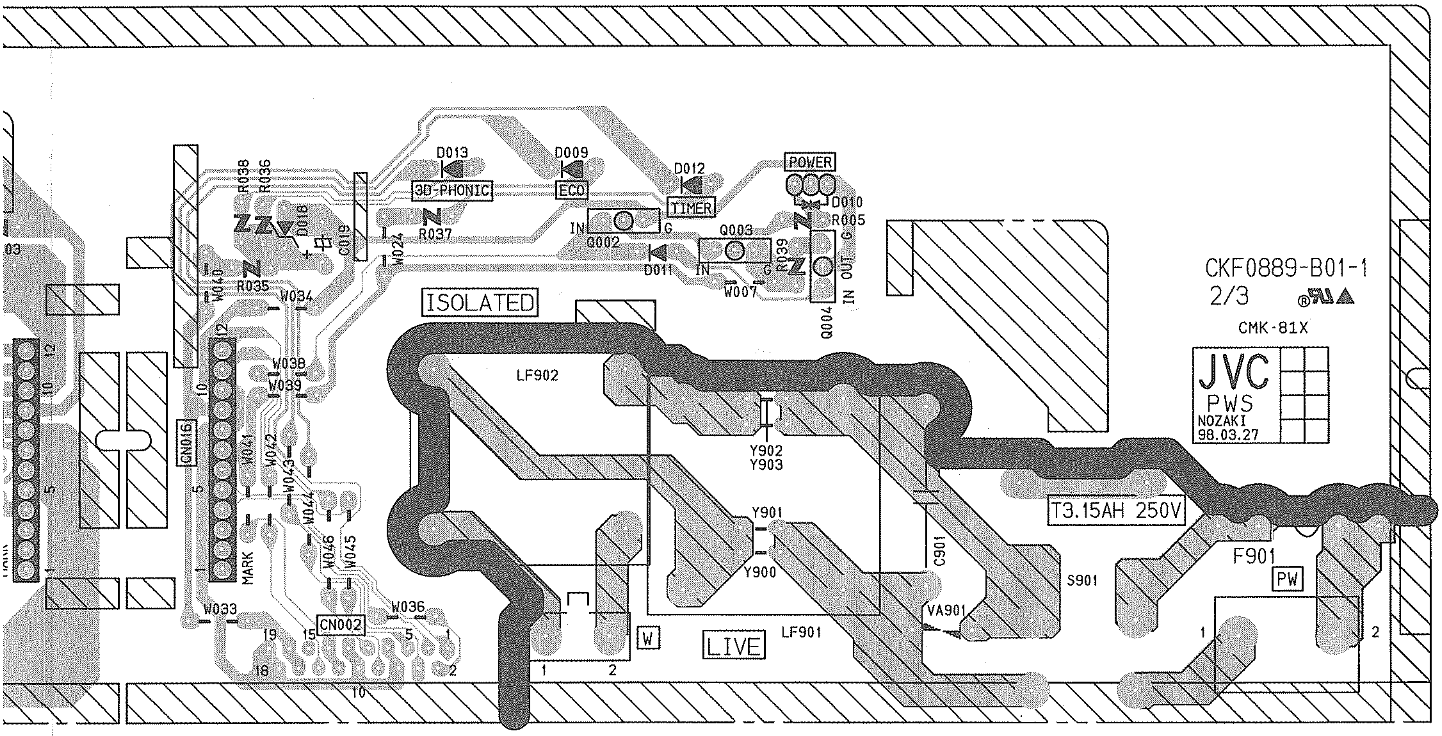
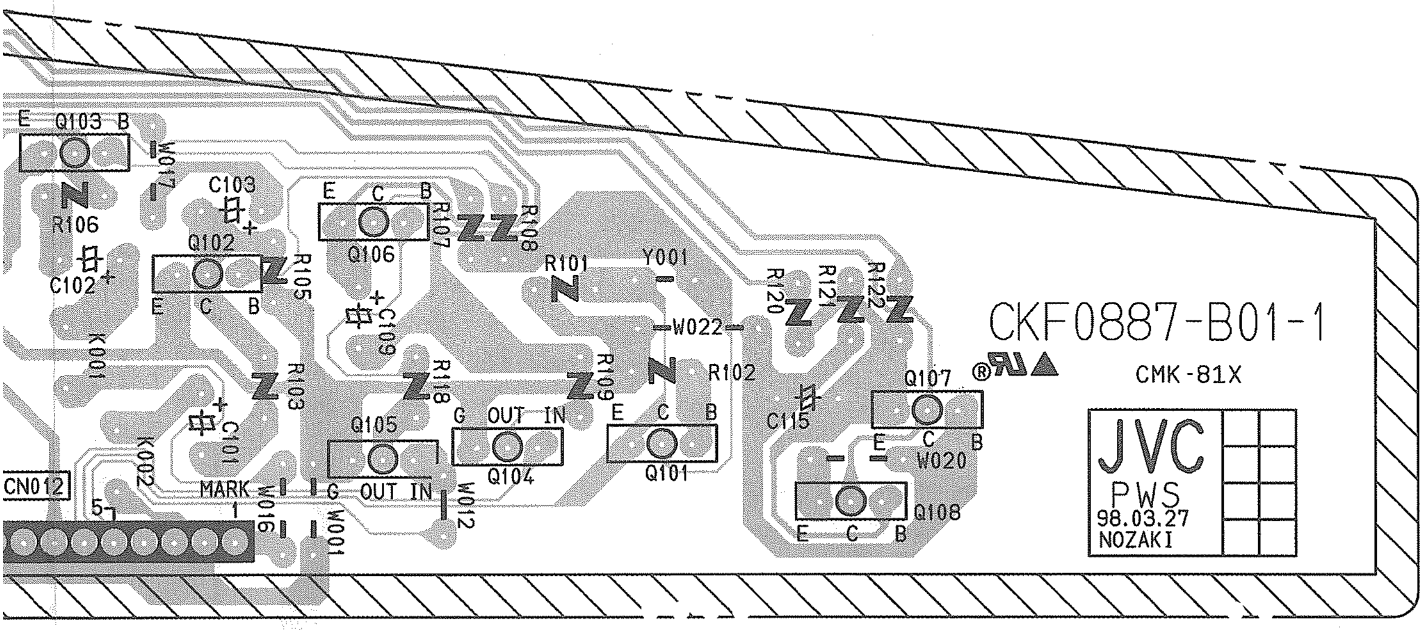
〖 FRONT CTL PWB PATTERN 〗



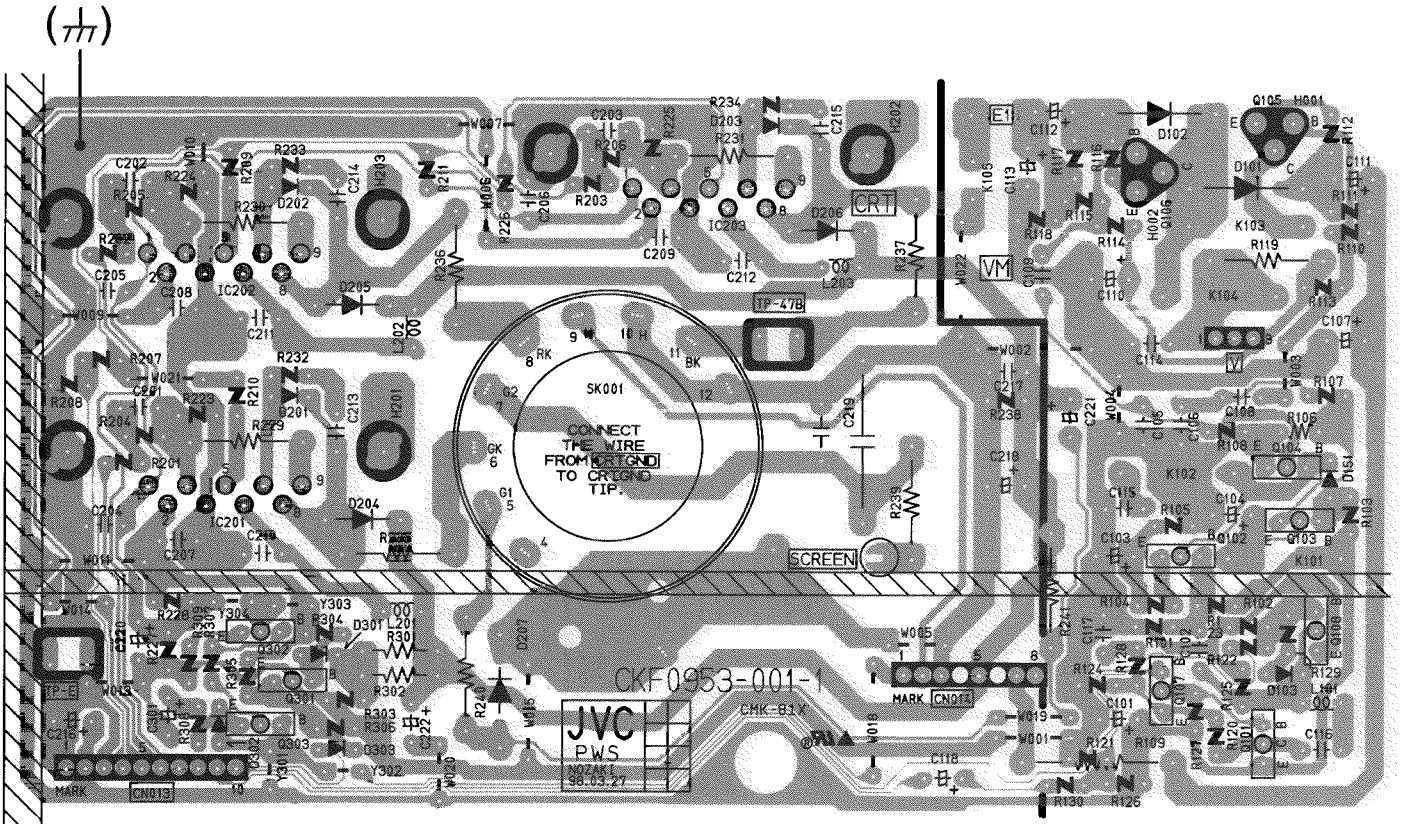
〖 AUDIO PWB PATTERN 〗



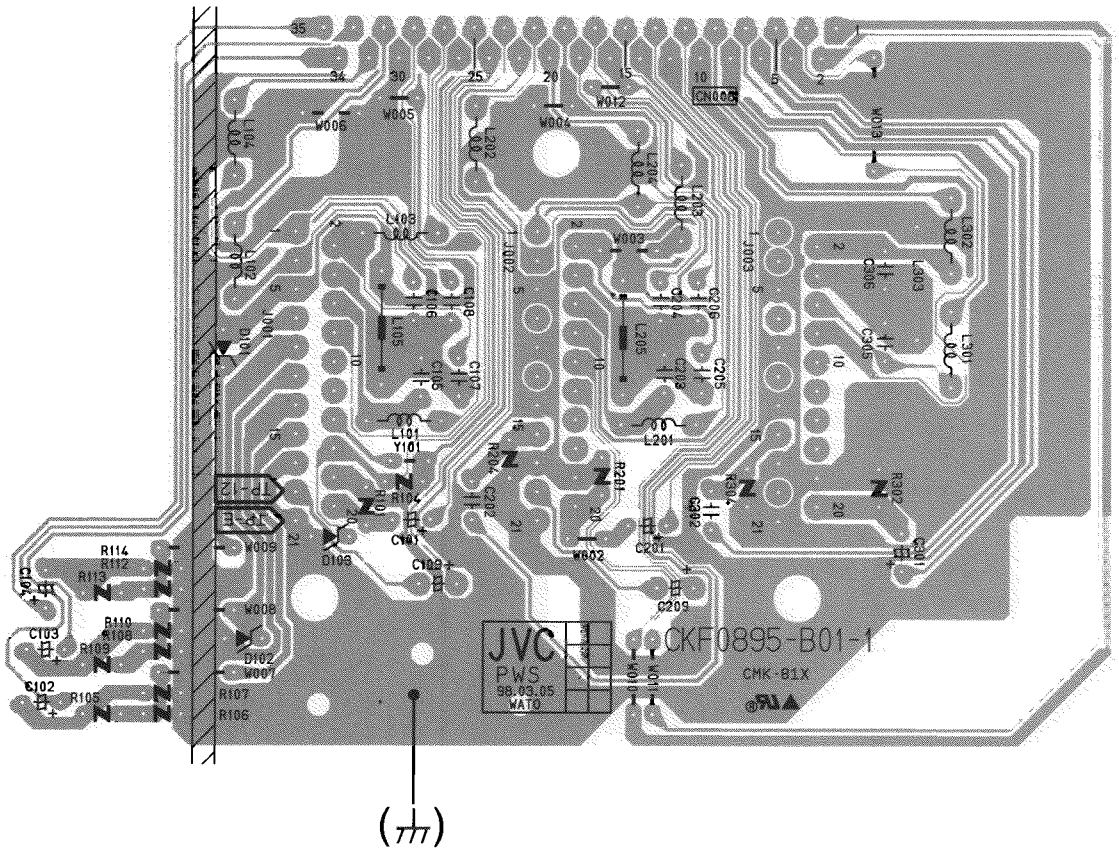

ISOLATED
LIVE
LF902
LF901
T3.15AH 250V
CKF0889-B01-1
2/3
CMK-81X
JVC
PWS
NOZAKI
98.03.27
POWER
3D-PHONIC
ECO
TIMER
S901
F901
PW
C901
VA901
Y900
Y901
Y902
Y903
CN016
CN002


CKF0887-B01-1
CMK-81X
JVC
PWS
98.03.27
NOZAKI
CN012
MARK

【 CRT SOCKET PWB PATTERN 】



【 AV TER. PWB PATTERN 】



PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

AV-32WH3EP
AV-28WH3EP

CONTENTS

USING P.W. BOARD & REMOTE CONTROL UNIT

Model / P.W.B ASS'Y	AV-32WH3EP	AV-28WH3EP
MAIN P.W.B	SMC-1003A-U2	SMC-1004A-U2
POWER DEF PWB	SMC-2002A-U2	SMC-2003A-U2
CRT SOCKET P.W.B	SMC-3002A-U2	SMC-3003A-U2
AUDIO P.W.B	SMC-6002A-U2	←
FRONT CONTROL P.W.B	SMC-8002A-U2	←
AV TERMINAL P.W.B	SMC0J001A-U2	←
100Hz P.W.B	SMC0Z001A-U2	←
IF P.W.B	SMC0F701A-U2	←
AUTO ASPECT MODULE	SMC-W001A(U)	←
REMOTE CONTROL UNIT	RM-C795-1E	←

DIFFERENCE OF PARTS LIST

EXPLODED VIEW PARTS LIST

⚠	Ref. No	Part Name	Part No		Description
			AV-32WH3EP	AV-28WH3EP	
⚠	L01	DEGAUSSING COIL	CELD062-001J2	CELD061-001J2	
⚠	V01	ITC TUBE(C)	W76ESF031X44	W66ESF002X44	
⚠	T2551	H.V.TRANSF.	CETH021-00AJ1	CETH020-00AJ1	SERVICE
	L03	ROTATION COIL	CELD904-001	----------	(32"ONLY)
⚠	1	REAR COVER	CM12737-003-E	CM12582-A04-E	
	6	FFC WIRE	CHFB119-10BD	CHFB119-06BD	
	8	BRAIDED ASSY	CHGB0029-0C	CHGB0029-0B	
⚠	12	RATING LABEL	LC20092-004A-U	LC20092-005A-U	
⚠	13	RATING LABEL	LC20093-004A-U	LC20093-005A-U	
	14	CONTROL BASE	CM12925-B01-E	CM12925-B03-E	
	17	DOME SPACER	CM22951-001	----------	X2 (32"ONLY)
	19	TRANSF.HOLDER	CM23076-B01-E	----------	(32"ONLY)
	21	RECEP WIRE ASSY	CHGT0055-0E	QUB190-34ASFX	
	23	TAPPING SCREW	GBSA4016N	----------	X3 (32"ONLY)
	26	CONTER PANEL	CM12925-A02-E	CM12925-A04-E	
	100	FRONT CABINET ASSY	CM12587-A0R-E	CM12833-A0F-E	Include No.101~113
	105	DOOR	CM23131-004-E	CM23132-004-E	SERVICE
	106	SPEAKER NET	CM36172-00A-S	CM36171-00A-H	X2

PACKING PARTS LIST

⚠	Ref. No	Part Name	Part No		Description
			AV-32WH3EP	AV-28WH3EP	
	1	PACKING CASE	AEM1002-A43-E	AEM1002-A44-E	
	2	CUSHION ASSY	CP11549-B0B-E	CP11547-A0B-E	
	3	SET COVER	AEM1004-A07-E	AEM1004-A06-E	
	4	CUSHION SHEET	AEM3022-003-E	CP40193-009-E	
	12	X-RAY CARD	LC10102-003A-U	LC10102-004A-U	
	15	EURO LABEL	AEM1038-089-E	AEM1038-090-E	

EXPLODED VIEW PARTS LIST

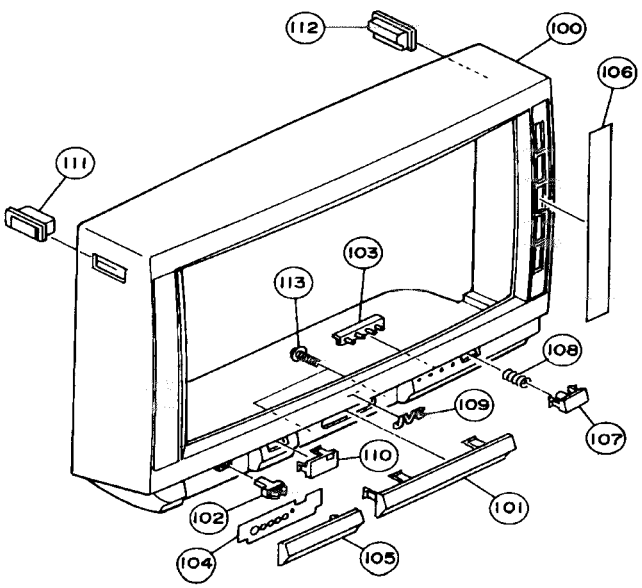
AV-32WH3EP

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	L01	CELD062-001J2	DEGAUSSING COIL		*
⚠	V01	W76ESF031X44	ITC TUBE(C)		*
⚠	T2551	CETH021-00AJ1	H.V.TRANSF	(SERVICE)	*
	L03	CELD904-001	ROTATION COIL	(32" ONLY)	*
⚠	1	CM12737-003-E	REAR COVER		*
	2	GBSA4016N	TAPPING SCREW	x13	*
	3	CM12923-A01-E	CHASSIS BASE		*
	4	CM12924-005-E	AV TERMINAL BASE		*
	5	SBSB3012M	TAPPING SCREW	x3	*
	6	CHFB119-10BD	FFC WIRE		*
	7	CEBSF10P-03KJ6	SPEAKER	x2 (SP01/SP02)	*
	8	CHGB0029-0C	BRAIDED ASSY		*
	9	CHGB0017-0B	BRAIDED SUB ASSY	x2	*
⚠	10	AEEMP001-185	POWER CORD		*
⚠	11	CM46618-A01-E	POWER CORD CLAMP		*
⚠	12	LC20092-004A-U	RATING LABEL		*
⚠	13	LC20093-004A-U	RATING LABEL		*
	14	CM12925-B01-E	CONTROL BASE		*
	15	GBSA4016N	TAPPING SCREW	x12	*
	16	WJM0014-001A	S.P WIRE ASS'Y	x2	*
	17	CM22951-001	DOME SPACER	x2(32" ONLY)	
	18	2528MXSP-2SE	DOME SPK BOX	x2	*
	19	CM23076-B01-E	TRANSF.HOLDER	(32" ONLY)	*
	20	CHGY0017-0A-YS	ANTENNA CABLE		*
	21	CHGT0055-0E	RECEP WIRE ASSY		*
	22	QQR0491-001	FILTER	x2	
	23	GBSA4016N	TAPPING SCREW	x3(32" ONLY)	*
	24	CE42112-002	PALJ CONNECTOR		
	25	CM36311-001	KNOB CAP		
	26	CM12925-A02-E	CONTROL BASE		*
	100	CM12587-A0R-E	FRONT CABINET AS	Include NO.101~113	*
	101	CM12966-A01-E	CENTER PANEL		*
	102	CM48229-00A	DOOR LATCH		
	103	CM36223-001	L.E.D.LENS		*
	104	CM36587-003-E	OPERATION SHEET		
	105	CM23131-004-E	DOOR	(SERVICE)	*
	106	CM36172-00A-S	SPEAKER NET	x2	*
	107	CM36225-010-E	POWER KNOB	(SERVICE)	*
	108	CM35235-003-H	SPRING		*
	109	CM48125-001	JVC MARK		
	110	CM48076-A01	CDS WINDOW		*
	111	CM35865-00U	INSULATER ASSY	(SERVICE)	*
	112	CM35865-00V	INSULATOR ASSY	(SERVICE)	*
	113	GBSB4012Z	TAPPING SCREW	x2	*

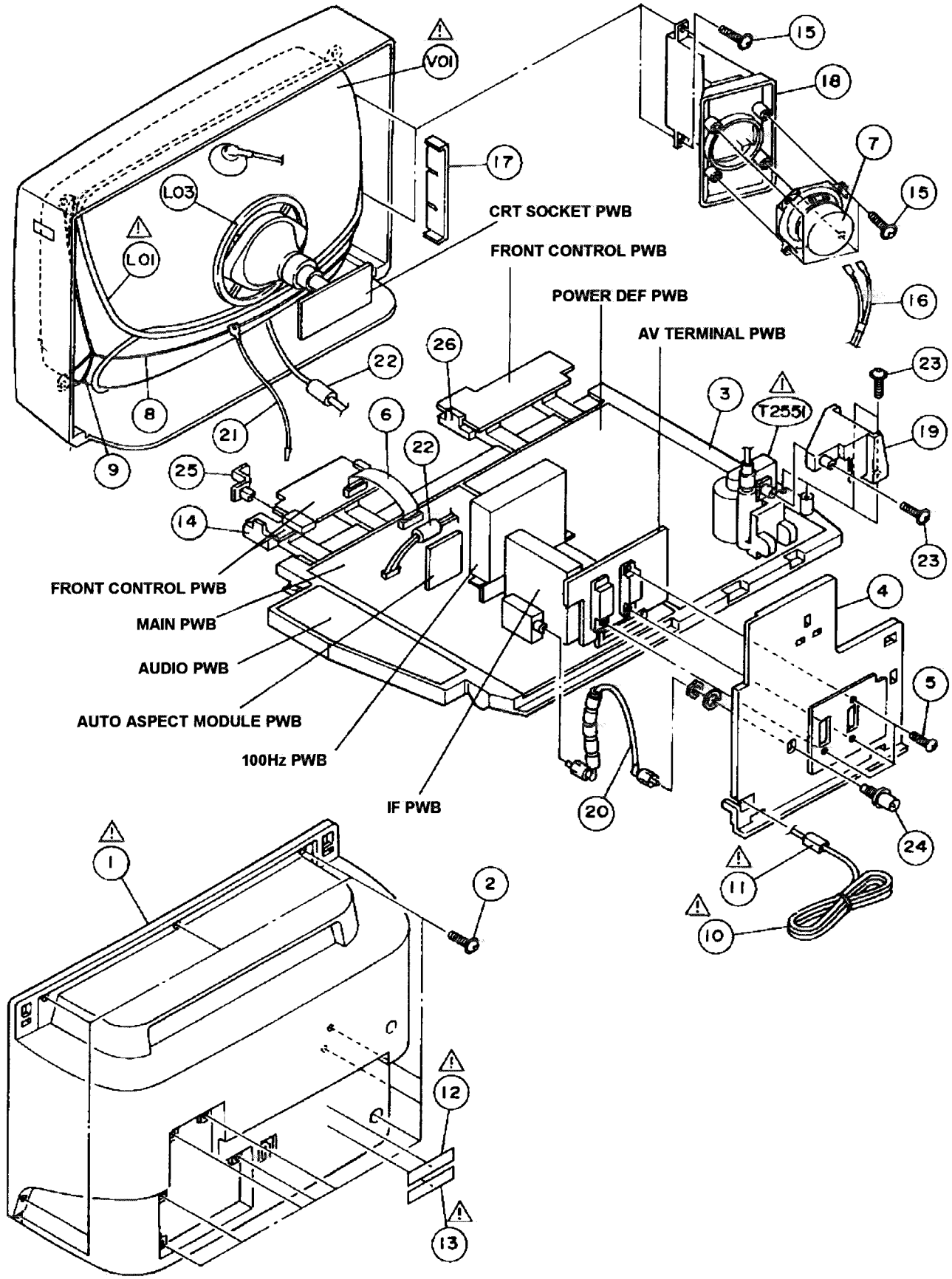
AV-28WH3EP

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	L01	CELD061-001J2	DEGAUSSING COIL		*
⚠	V01	W66ESF002X44	ITC TUBE(C)		*
⚠	T2551	CETH020-00AJ1	HVT(SERVICE)		*
⚠	1	CM12582-A04-E	REAR COVER		*
	2	GBSA4016N	TAPPING SCREW	x13	*
	3	CM12923-A01-E	CHASSIS BASE		*
	4	CM12924-005-E	AV TERMINAL BASE		*
	5	SBSB3012M	TAPPING SCREW	x3	*
	6	CHFB119-06BD	FFC WIRE		*
	7	CEBSF10P-03KJ6	SPEAKER	x2 (SP01/SP02)	*
	8	CHGB0029-0B	BRAIDED ASSY		*
	9	CHGB0017-0B	BRAIDED SUB ASSY	x2	*
⚠	10	AEEMP001-185	POWER CORD		*
⚠	11	CM46618-A01-E	POWER CORD CLAMP		*
⚠	12	LC20092-005A-U	RATING LABEL		*
⚠	13	LC20093-005A-U	RATING LABEL		*
	14	CM12925-B03-E	CONTROL BASE		*
	15	GBSA4016N	TAPPING SCREW	x12	*
	16	WJM0014-001A	S.P WIRE ASS'Y	x2	*
	18	2528MXSP-2SE	DOME SPK BOX	x2	*
	20	CHGY0017-0A-YS	ANTENNA CABLE		*
	21	QUB190-34ASFX	RECEP WIRE ASSY		*
	22	QQR0491-001	FILTER	x2	
	24	CE42112-002	PALJ CONNECTOR		
	25	CM36311-001	KNOB CAP		
	26	CM12925-A04-E	CONTROL BASE		*
	100	CM12833-A0F-E	F.CABINET ASSY	Include NO.101~113	*
	101	CM12966-A01-E	CENTER PANEL		*
	102	CM48229-00A	DOOR LATCH		
	103	CM36223-001	L.E.D.LENS		*
	104	CM36587-003-E	OPERATION SHEET		
	105	CM23132-004-E	DOOR	(SERVICE)	*
	106	CM36171-00A-H	SPEAKER NET	x2	*
	107	CM36225-010-E	POWER KNOB	(SERVICE)	*
	108	CM35235-003-H	SPRING		*
	109	CM48125-001	JVC MARK		
	110	CM48076-A01	CDS WINDOW		*
	111	CM35865-00U	INSULATER ASSY	(SERVICE)	*
	112	CM35865-00V	INSULATOR ASSY	(SERVICE)	*
	113	GBSB4012Z	TAPPING SCREW	x2	

EXPLODED VIEW



EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SMC-1003A-U2)

AV-32WH3EP

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001	QRK126J-474X	C R	470kΩ 1/2W J	*
R1002	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1003-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1201-02	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1203	QRE141J-750Y	C R	75Ω 1/4W J	*
R1204	QRK126J-151X	C R	150Ω 1/2W J	
R1205	QRE141J-101Y	C R	100Ω 1/4W J	*
R1206	QRG01GJ-101	OM R	100Ω 1W J	*
R1207	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1208	QRE141J-473Y	C R	47kΩ 1/4W J	*
R1209	QRE141J-683Y	C R	68kΩ 1/4W J	*
R1210	QRE141J-153Y	C R	15kΩ 1/4W J	*
R1211	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1212	QRE141J-473Y	C R	47kΩ 1/4W J	*
R1213	QRE141J-273Y	C R	27kΩ 1/4W J	*
R1214	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1215	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
R1216	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1217	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
R1218	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1219	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1221	QRE141J-391Y	C R	390Ω 1/4W J	*
R1222	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1224	QRE141J-391Y	C R	390Ω 1/4W J	*
R1225-26	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1227	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1228	QRE141J-750Y	C R	75Ω 1/4W J	*
R1229	QRK126J-181X	C R	180Ω 1/2W J	*
R1231	QRG01GJ-101	OM R	100Ω 1W J	*
R1232	QRE141J-101Y	C R	100Ω 1/4W J	*
R1240	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
R1242	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1243	QRE141J-473Y	C R	47kΩ 1/4W J	*
R1244	QRE141J-683Y	C R	68kΩ 1/4W J	*
R1245	QRE141J-153Y	C R	15kΩ 1/4W J	*
R1246	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1247	QRE141J-473Y	C R	47kΩ 1/4W J	*
R1248	QRE141J-273Y	C R	27kΩ 1/4W J	*
R1249	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1250	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
R1251	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1252	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
R1253	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1254	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1256	QRE141J-391Y	C R	390Ω 1/4W J	*
R1257	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1259	QRE141J-391Y	C R	390Ω 1/4W J	*
R1260-61	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1262	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1263	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
R1264	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1265	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
R1266	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1267-69	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
R1270	QRE141J-101Y	C R	100Ω 1/4W J	*
R1271-72	QRE141J-473Y	C R	47kΩ 1/4W J	*
R1273	QRE141J-121Y	C R	120Ω 1/4W J	*
R1274	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
R1275	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
R1278-79	QRE141J-750Y	C R	75Ω 1/4W J	*
R1301	QRE141J-221Y	C R	220Ω 1/4W J	*
R1302	QRE141J-471Y	C R	470Ω 1/4W J	*
R1303	QRE141J-221Y	C R	220Ω 1/4W J	*
R1304	QRE141J-471Y	C R	470Ω 1/4W J	*
R1305	QRE141J-221Y	C R	220Ω 1/4W J	*
R1306	QRE141J-271Y	C R	270Ω 1/4W J	*
R1307	QRE141J-221Y	C R	220Ω 1/4W J	*
R1308	QRE141J-471Y	C R	470Ω 1/4W J	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1309	QRE141J-221Y	C R	220Ω 1/4W J	*
R1310	QRE141J-471Y	C R	470Ω 1/4W J	*
R1311	QRE141J-221Y	C R	220Ω 1/4W J	*
R1312	QRE141J-271Y	C R	270Ω 1/4W J	*
R1313	QRE141J-221Y	C R	220Ω 1/4W J	*
R1314-15	QRE141J-471Y	C R	470Ω 1/4W J	*
R1317-18	QRE141J-101Y	C R	100Ω 1/4W J	*
R1320	QRE141J-561Y	C R	560Ω 1/4W J	*
R1322	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
R1323-24	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
R1325	QRE141J-561Y	C R	560Ω 1/4W J	*
R1326-29	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
R1330	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1334-35	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
R1338-40	QRE141J-101Y	C R	100Ω 1/4W J	*
R1341	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1342	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1343-44	QRE141J-101Y	C R	100Ω 1/4W J	*
R1345-46	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1347	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
R1348	QRE141J-681Y	C R	680Ω 1/4W J	*
R1349	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
R1351	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
R1354-55	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1359-63	QRE141J-101Y	C R	100Ω 1/4W J	*
R1364	QRE141J-105Y	C R	1MΩ 1/4W J	*
R1365	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
R1366-67	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
R1370	QRE141J-820Y	C R	82Ω 1/4W J	*
R1371	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1372	QRE141J-274Y	C R	270kΩ 1/4W J	*
R1375	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1376	QRE141J-561Y	C R	560Ω 1/4W J	*
R1377	QRE141J-221Y	C R	220Ω 1/4W J	*
R1378	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
R1601-02	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1603	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
R1604	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1605	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
R1606	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1607-08	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1610	QRE141J-471Y	C R	470Ω 1/4W J	*
R1611	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1612	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1613	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1614	QRE141J-123Y	C R	12kΩ 1/4W J	*
R1616	QRE141J-681Y	C R	680Ω 1/4W J	*
R1617	QRE141J-123Y	C R	12kΩ 1/4W J	*
R1620	QRE141J-561Y	C R	560Ω 1/4W J	*
R1703-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1707	QRE141J-331Y	C R	330Ω 1/4W J	*
R1708-09	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1710	QRE141J-821Y	C R	820Ω 1/4W J	*
R1711-13	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1714	QRE141J-561Y	C R	560Ω 1/4W J	*
R1715-18	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1719	QRE141J-101Y	C R	100Ω 1/4W J	*
R1720-23	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
R1724-26	QRE141J-471Y	C R	470Ω 1/4W J	*
R1727	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1728	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1729	QRE141J-683Y	C R	68kΩ 1/4W J	*
R1730	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1731	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
R1732-34	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1735-36	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
R1738	QRE141J-183Y	C R	18kΩ 1/4W J	*
R1739	QRE141J-331Y	C R	330Ω 1/4W J	*

⚠	Symbol No.	Part No.	Part Name	Description			Local
	RESISTOR						
	R1740-41	QRE141J-472Y	C R	4.7kΩ	1/4W	J	*
	R1742	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1743	QRE141J-222Y	C R	2.2kΩ	1/4W	J	*
	R1744-45	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1746-47	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R1748	QRB069J-103	NETW.R				*
	R1749-50	QRE141J-822Y	C R	8.2kΩ	1/4W	J	*
	R1751	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1752-53	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R1754-55	QRE141J-472Y	C R	4.7kΩ	1/4W	J	*
	R1756-57	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1758-59	QRE141J-221Y	C R	220Ω	1/4W	J	*
	R1760	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R1761-63	QRE141J-221Y	C R	220Ω	1/4W	J	*
	R1765	QRE141J-221Y	C R	220Ω	1/4W	J	*
	R1767	QRE141J-104Y	C R	100kΩ	1/4W	J	*
	R1768	QRE141J-823Y	C R	82kΩ	1/4W	J	*
	R1769-70	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1771	QRE141J-392Y	C R	3.9kΩ	1/4W	J	*
	R1772-74	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1775-76	QRE141J-563Y	C R	56kΩ	1/4W	J	*
	R1777	QRE141J-223Y	C R	22kΩ	1/4W	J	*
	R1779	QRE141J-333Y	C R	33kΩ	1/4W	J	*
	R1780	QRE141J-104Y	C R	100kΩ	1/4W	J	*
	R1781	QRL039J-270	OM R	27Ω	3W	J	*
	R1783-86	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1796-97	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R1798-99	QRK126J-820X	C R	82Ω	1/2W	J	
	R1801	QRE141J-273Y	C R	27kΩ	1/4W	J	*
	R1803	QRE141J-473Y	C R	47kΩ	1/4W	J	*
	R1820	QRE141J-332Y	C R	3.3kΩ	1/4W	J	*
	CAPACITOR						
	C1001	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1002	QETC1HM-107Z	E CAP.	100μF	50V	M	*
	C1003	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1004	QETN1CM-107Z	E CAP.	100μF	16V	M	*
	C1005	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1006	QETN1CM-227Z	E CAP.	220μF	16V	M	*
	C1007	QCB31HK-222Z	C CAP.	2200pF	50V	K	*
	C1008	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1009	QEHC1CM-227Z	E CAP.	220μF	16V	M	*
	C1010	QCS31HJ-181Z	C CAP.	180pF	50V	J	*
	C1011	QETN1CM-476Z	E CAP.	47μF	16V	M	*
	C1012	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1015	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1201	QETN1CM-227Z	E CAP.	220μF	16V	M	*
	C1202	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1203-04	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1205-06	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1207	QETN1CM-227Z	E CAP.	220μF	16V	M	*
	C1211	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1212-13	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1214-15	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1216-17	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1218-19	QETN1CM-476Z	E CAP.	47μF	16V	M	*
	C1220	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1221-22	QETN1CM-107Z	E CAP.	100μF	16V	M	*
	C1231	QFLC1HJ-103Z	M CAP.	0.01μF	50V	J	*
	C1232-33	QETN1CM-476Z	E CAP.	47μF	16V	M	*
	C1301	QETN1CM-227Z	E CAP.	220μF	16V	M	*
	C1302	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1304	QETN1CM-476Z	E CAP.	47μF	16V	M	*
	C1305	QETN1HM-226Z	E CAP.	22μF	50V	M	*
	C1306	QFLC1HJ-223Z	M CAP.	0.022μF	50V	J	*
	C1307-08	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1309	QCS31HJ-390Z	C CAP.	39pF	50V	J	*
	C1311-13	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1314	QCB31HK-222Z	C CAP.	2200pF	50V	K	*
	C1315	QFV71HJ-474Z	MF CAP.	0.47μF	50V	J	*
	C1316	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1317	QFV71HJ-154Z	MF CAP.	0.15μF	50V	J	*
	C1318	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*

⚠	Symbol No.	Part No.	Part Name	Description			Local
	CAPACITOR						
	C1319	QCB31HK-332Z	C CAP.	3300pF	50V	K	*
	C1320	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1321	QDC31HJ-120Z	C CAP.	12pF	50V	J	*
	C1322	QDC31HJ-120Z	C CAP.	12pF	50V	J	*
	C1323	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1324	QCS31HJ-391Z	C CAP.	390pF	50V	J	*
	C1325-26	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1327	QETN1CM-227Z	E CAP.	220μF	16V	M	*
	C1328-32	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1341	QEM61HM-105Z	BP E CAP.	1μF	50V	M	*
	C1342-44	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1348	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1350-52	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1353-55	QFV71HJ-224Z	MF CAP.	0.22μF	50V	J	*
	C1356	QCS31HJ-271Z	C CAP.	270pF	50V	J	*
	C1357	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1358	QETN1HM-475Z	E CAP.	4.7μF	50V	M	*
	C1359	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1360	QETN1HM-335Z	E CAP.	3.3μF	50V	M	*
	C1361	QCB31HK-152Z	C CAP.	1500pF	50V	K	*
	C1362	QDC31HJ-270Z	C CAP.	27pF	50V	J	*
	C1363	QETN1CM-107Z	E CAP.	100μF	16V	M	*
	C1365	QEZ0256-228	E CAP.				
	C1371	QCS31HJ-680Z	C CAP.	68pF	50V	J	*
	C1375	QETN1CM-107Z	E CAP.	100μF	16V	M	*
	C1392	QCS31HJ-680Z	C CAP.	68pF	50V	J	*
	C1395	QCS31HJ-120Z	C CAP.	12pF	50V	J	*
	C1601	QETN1CM-107Z	E CAP.	100μF	16V	M	*
	C1602-03	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1604-05	QCB31HK-103Z	C CAP.	0.01μF	50V	K	*
	C1606-07	QCB31HK-152Z	C CAP.	1500pF	50V	K	*
	C1608-09	QCB31HK-103Z	C CAP.	0.01μF	50V	K	*
	C1610-11	QDC31HJ-2R0Z	C CAP.	2.0pF	50V	J	*
	C1612	QETN1CM-476Z	E CAP.	47μF	16V	M	*
	C1613	QCB31HK-472Z	C CAP.	4700pF	50V	K	*
	C1614	QCS31HJ-820Z	C CAP.	82pF	50V	J	*
	C1615	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1616	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1617	QETN1HM-105Z	E CAP.	1μF	50V	M	*
	C1618-19	QCB31HK-103Z	C CAP.	0.01μF	50V	K	*
	C1620-21	QCS31HJ-470Z	C CAP.	47pF	50V	J	*
	C1622	QCS31HJ-180Z	C CAP.	18pF	50V	J	*
	C1625	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1626	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1627	QENC1HM-105Z	BP E CAP.	1μF	50V	M	*
	C1628	QETN1CM-476Z	E CAP.	47μF	16V	M	*
	C1630	QENC1HM-105Z	BP E CAP.	1μF	50V	M	*
	C1631	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1632	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1633	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1634-35	QCB31HK-471Z	C CAP.	470pF	50V	K	*
	C1636	QCB31HK-103Z	C CAP.	0.01μF	50V	K	*
	C1637	QRE141J-0R0Y	C R	0.0Ω	1/4W	J	*
	C1638-39	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1645	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1646	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1647	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1648	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1649	QETN1HM-106Z	E CAP.	10μF	50V	M	*
	C1650-51	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1655-57	QCB31HK-102Z	C CAP.	1000pF	50V	K	*
	C1658	QCB31HK-391Z	C CAP.	390pF	50V	K	*
	C1659	QCB31HK-391Z	C CAP.	390pF	50V	K	*
	C1701	QCB31HK-821Z	C CAP.	820pF	50V	K	*
	C1702	QCB31HK-682Z	C CAP.	6800pF	50V	K	*
	C1703	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1704	QETN1AM-107Z	E CAP.	100μF	10V	M	*
	C1705-06	QDC31HJ-3R0Z	C CAP.	3.0pF	50V	J	*
	C1707	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1708	QFLC1HJ-333Z	M CAP.	0.033μF	50V	J	*
	C1709	QCZ0120-104Z	C CAP.	0.1μF	25V	Z	*
	C1710	QETN1EM-476Z	E CAP.	47μF	25V	M	*

⚠ Symbol No.	Part No	Part Name	Description	Local
CAPACITOR				
C1711	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1714	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1715	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1716	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1717	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1718	QCB31HK-471Z	C CAP.	470pF 50V K	*
C1751	QFLC1HJ-563Z	M CAP.	0.056μF 50V J	*
C1752	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
C1754	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1756-57	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1758	QETN1AM-227Z	E CAP.	220μF 10V M	*
C1759	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1760-61	QDC31HJ-150Z	C CAP.	15pF 50V J	*
C1762	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1763	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1764	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1766-68	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1769	QCS31HJ-471Z	C CAP.	470pF 50V J	*
C1774	QCB31HK-151Z	C CAP.	150pF 50V K	*
C1775	QCS31HJ-121Z	C CAP.	120pF 50V J	*
C1776	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1780	QFLC1HJ-104Z	M CAP.	0.1μF 50V J	*
C1782	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1783-84	QCS31HJ-680Z	C CAP.	68pF 50V J	*
C1801	QETN1CM-107Z	E CAP.	100μF 16V M	*
COIL				
L1001-02	QQL01BK-8R2Z	COIL	8.2μH K	*
L1003	QQL01BK-221Z	COIL	220μH K	*
L1004	QQL01BK-101Z	COIL	100μH K	*
L1301	QQL01BK-390Z	COIL	39μH K	*
L1601	QQL01BJ-220Z	COIL	22μH J	*
L1602	QQL01BJ-180Z	COIL	18μH J	*
L1603	QQL01BK-100Z	COIL	10μH K	*
L1611-12	CELC005-2R5J7	CHOKE COIL	2.5μH	*
L1701	QQL01BK-4R7Z	COIL	4.7μH K	*
L1702	QQL01BK-8R2Z	COIL	8.2μH K	*
L1752	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
L1753	QQL01BK-4R7Z	COIL	4.7μH K	*
L1791-92	CE41433-001Z	BEADS CORE		*
DIODE				
D1201-11	MTZJ13B-T2	ZENER DIODE		*
D1214-15	MTZJ13B-T2	ZENER DIODE		*
D1343	1SS133-T2	SI.DIODE		*
D1345-48	1SS133-T2	SI.DIODE		*
D1349	MTZJ6.2B-T2	ZENER DIODE		*
D1350-53	1SS133-T2	SI.DIODE		*
D1356	1SS146-T2	SI.DIODE		*
D1357-58	1SS133-T2	SI.DIODE		*
D1701-02	1SS133-T2	SI.DIODE		*
D1704	1SS146-T2	SI.DIODE		*
D1705	1SS133-T2	SI.DIODE		*
D1710-11	1SS133-T2	SI.DIODE		*
D1754-58	MTZJ6.2B-T2	ZENER DIODE		*
D1801-02	1SS133-T2	SI.DIODE		*
D1804	1SS133-T2	SI.DIODE		*
TRANSISTOR				
Q1201-05	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1206-07	DTC323TS-T	DIGI.TRANSISTOR		*
Q1208	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1209-10	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1211	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1213-14	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1215-16	DTC323TS-T	DIGI.TRANSISTOR		*
Q1217	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1302	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1303-04	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1342	DTC144ESA-T	DIGI.TRANSISTOR		*
Q1343-44	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1345	DTC124ESA-T	DIGI.TRANSISTOR		*
Q1346	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1347	2SK301/P/-T	F.E.T.		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR				
Q1349-51	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1610	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1611	DTC323TS-T	DIGI.TRANSISTOR		*
Q1613	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1701-04	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1751-52	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1791-94	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1801	2PA1015/YG/-T	SI.TRANSISTOR		*
IC				
IC1301	CXA1545AS	I.C.(MONO-ANA)		*
IC1303	TDA9143/N2/S1	I C		
IC1304	TDA4665	I.C.(MONO-ANA)		*
IC1305	TDA4780	I.C.(MONO-ANA)		*
IC1311	AN77L05-T	I.C.(MONO-ANA)		*
IC1601	MSP3410D-PP-B4	I C		*
IC1602	BA4558	I.C.(MONO-ANA)		*
IC1701	M37207MF-150SP	I C		
IC1702	L78LR05E-MA	I.C.(MONO-ANA)		*
IC1703	AT24C16-WH3	I.C(EP-ROM)		*
IC1704	AT24C16-10PC	I.C.(EP-ROM)		*
IC1751	SDA30C263	MICRO COMPUTER		
IC1752	M27C1001-WH3	I.C(EP-ROM)		*
IC1753	AT24C16-10PC	I.C.(EP-ROM)		*
IC1754	SDA5273-2S	MEGA TEXT		
IC1755	MSM514400D-60Z	D RAM		
IC1757	MN1280/Q/	I.C.(DIGI-MOS)		*
OTHERS				
	QQR0490-001	NOISE FILTER		
	CEMS009-064	I.C.SOCKET		
	CEMS006-068	IC SOCKET		
	CEMS007-032	IC SOCKET		
EF1001	QRN143J-0R0X	C R	0.0Ω 1/4W J	*
EF1610-12	CE42142-103Z	EMI FILTER		*
K1001	CE41433-001Z	BEADS CORE		*
K1004	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1005	CE41492-001Z	CHOKE COIL		*
K1009	CE41433-001Z	BEADS CORE		*
K1011	CE41433-001Z	BEADS CORE		*
K1013-14	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1301	CE41433-001Z	BEADS CORE		*
K1601	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1602	CE41433-001Z	BEADS CORE		*
K1701-02	CE41433-001Z	BEADS CORE		*
MD03	----------	IF PWB ASSY	SMC0F701A-U2	
MD07	----------	AUTO ASPECT MODU	SMC-W001A(U)	
TU1001	CEEK481-A02	TUNER		
X1311	CE40749-001Z	CRYSTAL		*
X1312	CE40668-001Z	CRYSTAL		*
X1610	CE42546-001Z	CRYSTAL		*
X1701	CST8.00MTW	CER.RESONATOR		*
X1751	QAX0307-001	CER.RESONATOR		
X1752	QAX0351-001Z	X TAL		*

MAIN P.W. BOARD ASS'Y (SMC-1004A-U2)

AV-28WH3EP

Δ	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1001	QRK126J-474X	C R	470kΩ 1/2W J	*
	R1002	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1003-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1201-02	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1203	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1204	QRK126J-151X	C R	150Ω 1/2W J	
	R1205	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1206	QRG01GJ-101	OM R	100Ω 1W J	*
	R1207	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1208	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1209	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1210	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R1211	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1212	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1213	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1214	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1215	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1216	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1217	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1218	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1219	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1221	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1222	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1224	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1225-26	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1227	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1228	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1229	QRK126J-181X	C R	180Ω 1/2W J	*
	R1231	QRG01GJ-101	OM R	100Ω 1W J	*
	R1232	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1240	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1242	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1243	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1244	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1245	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R1246	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1247	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1248	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R1249	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1250	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1251	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1252	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1253	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1254	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1256	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1257	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1259	QRE141J-391Y	C R	390Ω 1/4W J	*
	R1260-61	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1262	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1263	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1264	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1265	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1266	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1267-69	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1270	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1271-72	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R1273	QRE141J-121Y	C R	120Ω 1/4W J	*
	R1274	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1275	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1278-79	QRE141J-750Y	C R	75Ω 1/4W J	*
	R1301	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1302	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1303	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1304	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1305	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1306	QRE141J-271Y	C R	270Ω 1/4W J	*
	R1307	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1308	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1309	QRE141J-221Y	C R	220Ω 1/4W J	*

Δ	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1310	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1311	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1312	QRE141J-271Y	C R	270Ω 1/4W J	*
	R1313	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1314-15	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1317-18	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1320	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1322	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R1323-24	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1325	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1326-29	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1330	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1334-35	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R1338-40	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1341	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1342	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1343-44	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1345-46	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1347	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1348	QRE141J-681Y	C R	680Ω 1/4W J	*
	R1349	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R1351	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
	R1354-55	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1359-63	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1364	QRE141J-105Y	C R	1MΩ 1/4W J	*
	R1365	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1366-67	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R1370	QRE141J-820Y	C R	82Ω 1/4W J	*
	R1371	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1372	QRE141J-274Y	C R	270kΩ 1/4W J	*
	R1375	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1376	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1377	QRE141J-221Y	C R	220Ω 1/4W J	*
	R1378	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1601-02	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1603	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R1604	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1605	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R1606	QRE141J-333Y	C R	33kΩ 1/4W J	*
	R1607-08	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1610	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1611	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1612	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R1613	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1614	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R1616	QRE141J-681Y	C R	680Ω 1/4W J	*
	R1617	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R1620	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1703-06	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1707	QRE141J-331Y	C R	330Ω 1/4W J	*
	R1708-09	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1710	QRE141J-821Y	C R	820Ω 1/4W J	*
	R1711-13	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1714	QRE141J-561Y	C R	560Ω 1/4W J	*
	R1715-18	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R1719	QRE141J-101Y	C R	100Ω 1/4W J	*
	R1720-23	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1724-26	QRE141J-471Y	C R	470Ω 1/4W J	*
	R1727	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R1728	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1729	QRE141J-683Y	C R	68kΩ 1/4W J	*
	R1730	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R1731	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R1732-34	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1735-36	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R1738	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R1739	QRE141J-331Y	C R	330Ω 1/4W J	*
	R1740-41	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R1742	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R1743	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R1744-45	QRE141J-103Y	C R	10kΩ 1/4W J	*

RESISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1746-47	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1748	QRB069J-103	NETW.R.		*
R1751	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1754-55	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
R1756-57	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1758-59	QRE141J-221Y	C R	220Ω 1/4W J	*
R1760	QRE141J-102Y	C R	1kΩ 1/4W J	*
R1761-63	QRE141J-221Y	C R	220Ω 1/4W J	*
R1765	QRE141J-221Y	C R	220Ω 1/4W J	*
R1767	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1768	QRE141J-823Y	C R	82kΩ 1/4W J	*
R1769-70	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1771	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
R1772-74	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1775-76	QRE141J-563Y	C R	56kΩ 1/4W J	*
R1777	QRE141J-223Y	C R	22kΩ 1/4W J	*
R1779	QRE141J-333Y	C R	33kΩ 1/4W J	*
R1780	QRE141J-104Y	C R	100kΩ 1/4W J	*
R1781	QRL039J-270	OM R	27Ω 3W J	*
R1783-86	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1796-97	QRE141J-103Y	C R	10kΩ 1/4W J	*
R1801	QRE141J-273Y	C R	27kΩ 1/4W J	*
R1803	QRE141J-473Y	C R	47kΩ 1/4W J	*
R1820	QRE141J-332Y	C R	3.3kΩ 1/4W J	*

CAPACITOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
C1001	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1002	QETC1HM-107Z	E CAP.	100μF 50V M	*
C1003	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1004	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1005	QCZ0120-104Z	C CAP	0.1μF 25V Z	*
C1006	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1007	QCB31HK-222Z	C CAP	2200pF 50V K	*
C1008	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1009	QEHC1CM-227Z	E CAP.	220μF 16V M	*
C1010	QCS31HJ-181Z	C CAP.	180pF 50V J	*
C1011	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1012	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1015	QCB31HK-102Z	C CAP.	1000pF 50V K	*
C1201	QETN1CM-227Z	E CAP	220μF 16V M	*
C1202	QCB31HK-102Z	C CAP	1000pF 50V K	*
C1203-04	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1205-06	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1207	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1211	QCB31HK-102Z	C CAP.	1000pF 50V K	*
C1212-13	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1214-15	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1216-17	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1218-19	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1220	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1221-22	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1231	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
C1232-33	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1301	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1302	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1304	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1305	QETN1HM-226Z	E CAP.	22μF 50V M	*
C1306	QFLC1HJ-223Z	M CAP.	0.022μF 50V J	*
C1307-08	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1309	QCS31HJ-390Z	C CAP.	39pF 50V J	*
C1311-13	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1314	QCB31HK-222Z	C CAP.	2200pF 50V K	*
C1315	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	*
C1316	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1317	QFV71HJ-154Z	MF CAP.	0.15μF 50V J	*
C1318	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1319	QCB31HK-332Z	C CAP.	3300pF 50V K	*
C1320	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1321	QDC31HJ-120Z	C CAP.	12pF 50V J	*
C1322	QDC31HJ-120Z	C CAP.	12pF 50V J	*
C1323	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1324	QCS31HJ-391Z	C CAP.	390pF 50V J	*
C1325-26	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1327	QETN1CM-227Z	E CAP.	220μF 16V M	*
C1328-32	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1341	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
C1342-44	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1348	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1350-52	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1353-55	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
C1356	QCS31HJ-271Z	C CAP.	270pF 50V J	*
C1357	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1358	QETN1HM-475Z	E CAP.	4.7μF 50V M	*
C1359	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1360	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
C1361	QCB31HK-152Z	C CAP.	1500pF 50V K	*
C1362	QDC31HJ-270Z	C CAP.	27pF 50V J	*
C1363	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1365	QEZ0256-228	E CAP.		
C1371	QCS31HJ-680Z	C CAP.	68pF 50V J	*
C1375	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1392	QCS31HJ-680Z	C CAP.	68pF 50V J	*
C1395	QCS31HJ-120Z	C CAP.	12pF 50V J	*
C1601	QETN1CM-107Z	E CAP.	100μF 16V M	*
C1602-03	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1604-05	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
C1606-07	QCB31HK-152Z	C CAP.	1500pF 50V K	*
C1608-09	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
C1610-11	QDC31HJ-2R0Z	C CAP.	2.0pF 50V J	*
C1612	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1613	QCB31HK-472Z	C CAP.	4700pF 50V K	*
C1614	QCS31HJ-820Z	C CAP.	82pF 50V J	*
C1615	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1616	QCZ0120-104Z	C CAP	0.1μF 25V Z	*
C1617	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1618-19	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
C1620-21	QCS31HJ-470Z	C CAP.	47pF 50V J	*
C1622	QCS31HJ-180Z	C CAP.	18pF 50V J	*
C1625	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1626	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1627	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C1628	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1630	QENC1HM-105Z	BP E CAP.	1μF 50V M	*
C1631	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1632	QCZ0120-104Z	C CAP	0.1μF 25V Z	*
C1633	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1634-35	QCB31HK-471Z	C CAP.	470pF 50V K	*
C1636	QCB31HK-103Z	C CAP.	0.01μF 50V K	*
C1637	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
C1638-39	QCB31HK-102Z	C CAP.	1000pF 50V K	*
C1645	QETN1HM-106Z	E CAP	10μF 50V M	*
C1646	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1647	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1648	QCB31HK-102Z	C CAP.	1000pF 50V K	*
C1649	QETN1HM-106Z	E CAP.	10μF 50V M	*
C1650-51	QCB31HK-102Z	C CAP.	1000pF 50V K	*
C1655-57	QCB31HK-102Z	C CAP.	1000pF 50V K	*
C1658	QCB31HK-391Z	C CAP.	390pF 50V K	*
C1659	QCB31HK-391Z	C CAP.	390pF 50V K	*
C1701	QCB31HK-821Z	C CAP.	820pF 50V K	*
C1702	QCB31HK-682Z	C CAP.	6800pF 50V K	*
C1703	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1704	QETN1AM-107Z	E CAP.	100μF 10V M	*
C1705-06	QDC31HJ-3R0Z	C CAP.	3.0pF 50V J	*
C1707	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1708	QFLC1HJ-333Z	M CAP.	0.033μF 50V J	*
C1709	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1710	QETN1EM-476Z	E CAP.	47μF 25V M	*
C1711	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1714	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
C1715	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1716	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1717	QETN1HM-105Z	E CAP.	1μF 50V M	*
C1718	QCB31HK-471Z	C CAP.	470pF 50V K	*
C1751	QFLC1HJ-563Z	M CAP.	0.056μF 50V J	*
C1752	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
C1754	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1756-57	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C1758	QETN1AM-227Z	E CAP.	220μF 10V M	*
C1759	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1760-61	QDC31HJ-150Z	C CAP.	15pF 50V J	*
C1762	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1763	QETN1CM-476Z	E CAP.	47μF 16V M	*
C1764	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1766-68	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1769	QCS31HJ-471Z	C CAP.	470pF 50V J	*
C1774	QCB31HK-151Z	C CAP.	150pF 50V K	*
C1775	QCS31HJ-121Z	C CAP.	120pF 50V J	*
C1776	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1780	QFLC1HJ-104Z	M CAP.	0.1μF 50V J	*
C1782	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
C1801	QETN1CM-107Z	E CAP.	100μF 16V M	*
COIL				
L1001-02	QQL01BK-8R2Z	COIL	8.2μH K	*
L1003	QQL01BK-221Z	COIL	220μH K	*
L1301	QQL01BK-390Z	COIL	39μH K	*
L1601	QQL01BJ-220Z	COIL	22μH J	*
L1602	QQL01BJ-180Z	COIL	18μH J	*
L1603	QQL01BK-100Z	COIL	10μH K	*
L1611-12	CELC005-2R5J7	CHOKE COIL	2.5μH	*
L1701	QQL01BK-4R7Z	COIL	4.7μH K	*
L1702	QQL01BK-8R2Z	COIL	8.2μH K	*
L1752	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
L1753	QQL01BK-4R7Z	COIL	4.7μH K	*
DIODE				
D1201-11	MTZJ13B-T2	ZENER DIODE		*
D1214-15	MTZJ13B-T2	ZENER DIODE		*
D1343	1SS133-T2	SI.DIODE		*
D1345-48	1SS133-T2	SI.DIODE		*
D1349	MTZJ6.2B-T2	ZENER DIODE		*
D1350-53	1SS133-T2	SI.DIODE		*
D1356	1SS146-T2	SI.DIODE		
D1357-58	1SS133-T2	SI.DIODE		*
D1701-02	1SS133-T2	SI.DIODE		*
D1704	1SS146-T2	SI.DIODE		*
D1705	1SS133-T2	SI.DIODE		*
D1710-11	1SS133-T2	SI.DIODE		*
D1754-58	MTZJ6.2B-T2	ZENER DIODE		*
D1801-02	1SS133-T2	SI.DIODE		*
D1804	1SS133-T2	SI.DIODE		*
TRANSISTOR				
Q1201-05	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1206-07	DTC323TS-T	DIGI.TRANSISTOR		*
Q1208	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1209-10	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1211	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1213-14	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1215-16	DTC323TS-T	DIGI.TRANSISTOR		*
Q1217	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1302	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1303-04	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1342	DTC144ESA-T	DIGI.TRANSISTOR		*
Q1343-44	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1345	DTC124ESA-T	DIGI.TRANSISTOR		*
Q1346	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1347	2SK301/P/-T	F.E.T.		*
Q1349-51	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1610	2PA1015/YG/-T	SI.TRANSISTOR		*
Q1611	DTC323TS-T	DIGI.TRANSISTOR		*
Q1613	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1701-04	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1751-52	2PC1815/YG/-T	SI.TRANSISTOR		*
Q1801	2PA1015/YG/-T	SI.TRANSISTOR		*
IC				
IC1301	CXA1545AS	I.C.(MONO-ANA)		*
IC1303	TDA9143/N2/S1	I C		
IC1304	TDA4665	I.C.(MONO-ANA)		*
IC1305	TDA4780	I.C.(MONO-ANA)		*

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC				
IC1311	AN77L05-T	I.C.(MONO-ANA)		*
IC1601	M5P3410D-PP-B4	I C		*
IC1602	BA4558	I.C.(MONO-ANA)		*
IC1701	M37207MF-150SP	I C		
IC1702	L78LR05E-MA	I.C.(MONO-ANA)		*
IC1703	AT24C16-WH3	I.C(EP-ROM)		*
IC1704	AT24C16-10PC	I.C.(EP-ROM)		*
IC1751	SDA30C263	MICRO COMPUTER		
IC1752	M27C1001-WH3	I.C(EP-ROM)		*
IC1753	AT24C16-10PC	I.C.(EP-ROM)		*
IC1754	SDA5273-25	MEGA TEXT		
IC1755	MSM514400D-60Z	D RAM		
IC1757	MN1280/Q/	I.C.(DIGI-MOS)		*
OTHERS				
	QQR0490-001	NOISE FILTER		
	CEMS009-064	I.C.SOCKET		
	CEMS006-068	IC SOCKET		
	CEMS007-032	IC SOCKET		
EF1001	QRN143J-0R0X	C R	0.0Ω 1/4W J	*
EF1610-12	CE42142-103Z	EMI FILTER		*
K1001	CE41433-001Z	BEADS CORE		*
K1004	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1005	CE41492-001Z	CHOKE COIL		*
K1009	CE41433-001Z	BEADS CORE		*
K1011	CE41433-001Z	BEADS CORE		*
K1013-14	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1301	CE41433-001Z	BEADS CORE		*
K1601	QRE141J-0R0Y	C R	0.0Ω 1/4W J	*
K1602	CE41433-001Z	BEADS CORE		*
K1701-02	CE41433-001Z	BEADS CORE		*
MD03	----------	IF PWB ASSY	SMC0F701A-U2	
MD07	----------	AUTO ASPECT MODU	SMC-W001A(U)	
TU1001	CEEK481-A02	TUNER		
X1311	CE40749-001Z	CRYSTAL		*
X1312	CE40668-001Z	CRYSTAL		*
X1610	CE42546-001Z	CRYSTAL		*
X1701	CST8.00MTW	CER.RESONATOR		*
X1751	QAX0307-001	CER.RESONATOR		
X1752	QAX0351-001Z	X'TAL		*

IF P.W.BOARD ASS'Y (SMC0F701A-U2)

This PW Board Ass'y is included in the above MAIN PW Board Ass'y

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0020	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R0021	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
R0022	NRSA02J-331X	MG R	330Ω 1/10W J	*
R0023	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0024	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0025	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0026	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
R0027-28	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R0030-31	NRSA02J-150X	MG R	15Ω 1/10W J	*
R0050-51	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0052-53	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0057	NRSA02J-472X	MG R	4.7kΩ 1/10W J	*
R0058	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R0059	NRSA02J-273X	MG R	27kΩ 1/10W J	*
R0060-61	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0062	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R0063	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R0064	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0065	NRSA02J-470X	MG R	47Ω 1/10W J	*
R0070-71	NRSA02J-393X	MG R	39kΩ 1/10W J	*
R0080-81	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R0082	NRSA02J-272X	MG R	2.7kΩ 1/10W J	*
R0101	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
R0102	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0103	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R0104	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0105	NRSA02J-151X	MG R	150Ω 1/10W J	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
RESISTOR					
	R0106	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0107	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0108	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0109	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0110	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0111-12	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0113	NRSA02J-221X	MG R	220Ω 1/10W J	*
	R0114	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0115	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
	R0116	NRSA02J-561X	MG R	560Ω 1/10W J	*
	R0117	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
	R0120-24	NRSA02J-103X	MG R	10kΩ 1/10W J	*
	R0125	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
	R0140	NRSA02J-474X	MG R	470kΩ 1/10W J	*
	R0141	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0142	NRSA02J-391X	MG R	390Ω 1/10W J	*
	R0143	NRSA02J-750X	MG R	75Ω 1/10W J	*
	R0144	NRSA02J-684X	MG R	680kΩ 1/10W J	*
	R0145	NRSA02J-332X	MG R	3.3kΩ 1/10W J	*
	R0146	NRSA02J-104X	MG R	100kΩ 1/10W J	*
	R0601	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
	R0602	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0603	NRSA02J-104X	MG R	100kΩ 1/10W J	*
	R0604	NRSA02J-683X	MG R	68kΩ 1/10W J	*
	R0605-06	NRSA02J-392X	MG R	3.9kΩ 1/10W J	*
	R0607	NRSA02J-822X	MG R	8.2kΩ 1/10W J	*
	R0608	NRSA02J-562X	MG R	5.6kΩ 1/10W J	*
CAPACITOR					
	C0020	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0022-25	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0026-27	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C0030	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0040	NDC21HJ-102X	C CAP.	1000pF 50V J	*
	C0041	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C0042	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C0043	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C0044	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C0046	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C0047	QETN1CM-227Z	E CAP.	220μF 16V M	*
	C0050	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C0051	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0052	QAT7004-100		10pF	
	C0053	NDC21HJ-6R0X	C CAP.	6.0pF 50V J	*
	C0054	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C0055	QETN1CM-107Z	E CAP	100μF 16V M	*
	C0056	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
	C0057	NDC21HJ-102X	C CAP	1000pF 50V J	*
	C0058	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0059	QAT7004-100		10pF	
	C0060	NDC21HJ-120X	C CAP.	12pF 50V J	*
	C0061	NDC21HJ-7R0X	C CAP.	7.0pF 50V J	*
	C0062	QETN1HM-474Z	E CAP.	0.47μF 50V M	*
	C0063	NCB21HK-103X	C CAP.	0.01μF 50V K	*
	C0064	NCB21HK-472X	C CAP	4700pF 50V K	*
	C0065	QETN1HM-105Z	E CAP	1μF 50V M	*
	C0067	NDC21HJ-120X	C CAP	12pF 50V J	*
	C0069-70	NCB21HK-103X	C CAP	0.01μF 50V K	*
	C0071	QETN1HM-336Z	E CAP	33μF 50V M	*
	C0080-81	NCB21HK-472X	C CAP.	4700pF 50V K	*
	C0101	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C0102	NDC21HJ-391X	C CAP.	390pF 50V J	*
	C0103	NDC21HJ-121X	C CAP.	120pF 50V J	*
	C0104	NDC21HJ-221X	C CAP.	220pF 50V J	*
	C0105	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
	C0140	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C0141	NCB21HK-332X	C CAP.	3300pF 50V K	*
	C0142	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C0143	QFLC1HJ-683Z	M CAP.	0.068μF 50V J	*
	C0144	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C0145	NCB21HK-222X	C CAP.	2200pF 50V K	*
	C0601	QFLC1HJ-183Z	M CAP.	0.018μF 50V J	*
	C0602	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C0603	QETN1HM-106Z	E CAP.	10μF 50V M	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR					
	C0604	QETN1HM-105Z	E CAP.	1μF 50V M	*
	C0605	QETN1CM-477Z	E CAP.	470μF 16V M	*
	C0606	NCB21HK-103X	C CAP.	0.01μF 50V K	*
TRANSFORMER					
	T0020	QQR0626-001	I.F.TRANSF.		*
	T0050	CELT001-307	C.WAVE TRANSF.		*
	T0051	CELT001-306	C.WAVE TRANSF.		*
COIL					
	L0020	QQLZ014-R47	PEAKING COIL	0.47μH	*
	L0021	NQL011K-1R5X	COIL	1.5μH	*
	L0030	NQL011K-2R2X	COIL	2.2μH	*
	L0040	NQL011K-120X	COIL	12μH	*
	L0041	NQL011K-100X	COIL	10μH	*
	L0042	NQL011K-330X	COIL	33μH	*
	L0050-53	NQL011K-8R2X	COIL	8.2μH	*
	L0054	NQL011K-330X	COIL	33μH	*
	L0070	NQL011K-5R6X	COIL	5.6μH	*
	L0071	NQL011K-8R2X	COIL	8.2μH	*
	L0101	NQL011K-6R8X	COIL	6.8μH	*
	L0102	NQL011K-100X	COIL	10μH	*
	L0103	NQL011K-8R2X	COIL	8.2μH	*
	L0104	NQL011K-5R6X	COIL	5.6μH	*
DIODE					
	D0020-21	1SS85-T5	SI.DIODE		
	D0050-51	1SS85-T5	SI.DIODE		
TRANSISTOR					
	Q0012	2SC5083/L-P/-T	SI.TRANSISTOR		*
	Q0080	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0101	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0102	2SA1162/YG/-X	SI.TRANSISTOR		*
	Q0103	DTC144EKA-X	DIGI.TRANSISTOR		*
	Q0104	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0106	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0107	2SA1162/YG/-X	SI.TRANSISTOR		*
	Q0108	DTC144EKA-X	DIGI.TRANSISTOR		*
	Q0109-11	2SC2712/YG/-X	SI.TRANSISTOR		*
	Q0120-26	DTC144EKA-X	DIGI.TRANSISTOR		*
	Q0601-02	2SC2712/YG/-X	SI.TRANSISTOR		*
IC					
	IC0010	TA8865BN	I.C.(MONO-ANA)		*
OTHERS					
	CF0010-11	FTP40.40MF	CERAMIC FILTER		*
	CF0012-13	QAX0479-001	SAW FILTER		
	CF0100	TPS5.5MW	CERAMIC FILTER		*
	CF0140	CSB503F30-T2	CER.RESONATOR		*
⚠	R0609	QRZ9017-470	FUSI.RESISTOR	47 Ω 1/4W J	*
	SF0010	QAX0316-001	SAW FILTER		*
	SF0011	CE42574-702	SAW FILTER		
	SF0012	CE42606-701	SAW FILTER		
	W0008	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0013	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0015	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0025-26	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0028-29	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0031-32	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	W0073-75	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	Y0010	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*

AUTO ASPECT MODULE (SMC-W001A(U))

This PW Board Ass'y is included in the above MAIN PW Board Ass'y

Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
		SMC-W001A(U)	AUTO ASPECT MODULE	

POWER DEF P.W.BOARD ASS'Y(SMC-2002A-U2) AV-32WH3EP

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R2401	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2408	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2409	QRX01GJ-1R0	MF R	1.0Ω 1W J	*
	R2410	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2411	QRG029J-221	OM R	220 Ω 2W J	
	R2412	QRX01GJ-1R8	MF R	1.8Ω 1W J	*
	R2413	QRX01GJ-1R5	MF R	1.5Ω 1W J	*
	R2414	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2415	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2416	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2417	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R2418	QRA14CF-6802Y	MF R	68kΩ 1/4W F	
	R2419	QRA14CF-7870Y	MF R	787Ω 1/4W F	
	R2420	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R2421	QRA14CF-1003Y	MF R	100kΩ 1/4W F	
	R2422	QRA14CF-1501Y	MF R	1.5kΩ 1/4W F	
	R2423	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2424	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R2425	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R2426	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2501	QRE141J-104Y	C R	100kΩ 1/4W J	*
	R2502	QRE141J-684Y	C R	680kΩ 1/4W J	*
	R2503	QRE141J-393Y	C R	39kΩ 1/4W J	*
	R2504-05	QRE141J-271Y	C R	270Ω 1/4W J	*
	R2506	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2507	QRE141J-821Y	C R	820Ω 1/4W J	*
	R2508	QRA14CF-2002Y	MF R	20kΩ 1/4W F	
	R2509	QRA14CF-4701Y	MF R	4.7kΩ 1/4W F	
	R2510	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2511	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2513	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2514	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2515	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2516	QRG039J-272	OM R	2.7kΩ 3W J	
	R2517	QRG039J-122	OM R	1.2kΩ 3W J	
	R2518	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
	R2519	QRE141J-220Y	C R	22Ω 1/4W J	*
	R2521	QRE121J-5R6Y	C R	5.6Ω 1/2W J	*
	R2524	QRE121J-471Y	C R	470Ω 1/2W J	*
	R2526	QRE121J-104Y	C R	100kΩ 1/2W J	*
	R2527	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2528	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2529	QRE141J-184Y	C R	180kΩ 1/4W J	*
	R2531	QRE121J-152Y	C R	1.5kΩ 1/2W J	*
	R2533	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2534	QRE121J-562Y	C R	5.6kΩ 1/2W J	*
	R2535	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2536	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R2537	QRE141J-821Y	C R	820Ω 1/4W J	*
	R2538	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2539	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R2541	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R2542	QRE141J-681Y	C R	680Ω 1/4W J	*
	R2543	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R2544	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2545	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R2546	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2547	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R2548	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R2553	QRE121J-122Y	C R	1.2kΩ 1/2W J	*
	R2554	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2555	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2556	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2557	QRE141J-270Y	C R	27Ω 1/4W J	*
	R2561	QRC121K-103Z	COMP R	10kΩ 1/2W K	*
	R2571	QRG029J-223	OM R	22kΩ 2W J	*
	R2581	QRF104J-100	UNF R	10 Ω 10W J	*
	R2582	QRE121J-331Y	C R	330Ω 1/2W J	*
	R2583	QRE121J-682Y	C R	6.8kΩ 1/2W J	*
	R2584	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R2585	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R2592	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2593	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R2901	QRE121J-331Y	C R	330Ω 1/2W J	*
	R2902	QRF154K-4R7	UNF R		*
	R2903-04	QRE121J-474Y	C R	470kΩ 1/2W J	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R2905	QRG039J-333	OM R	33kΩ 3W J	*
	R2906	QRE121J-102Y	C R	1kΩ 1/2W J	*
	R2907	QRM059J-R22	MP R	0.22 Ω 5W J	*
	R2910	QRG039J-393	OM R	39kΩ 3W J	
	R2916	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2917	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R2918	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R2919	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R2920	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2921	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R2922	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2923	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2924	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R2925	QRE121J-560Y	C R	56Ω 1/2W J	*
	R2951	QRF074J-102	UNF R	1kΩ 7W J	*
	R2952	QRG029J-123	OM R	12kΩ 2W J	*
	R2953	QRX039J-5R6	MF R	5.6 Ω 3W J	
	R2954	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R2955	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2956	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2957	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2958	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2959	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2962-63	QRG01GJ-220	OM R	22Ω 1W J	*
	R2967-69	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R2970	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R2971	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R2984	QRE121J-102Y	C R	1kΩ 1/2W J	*
	R2987	QRE141J-122Y	C R	1.2kΩ 1/4W J	*
	R2988	QRE141J-150Y	C R	15Ω 1/4W J	*
⚠	R2991	QRZ0057-825	C R	8.2MΩ 1W J	*
	CAPACITOR				
	C2401	QFLC2AJ-104Z	M CAP.	0.1μF 100V J	*
	C2402	QETC1VM-337Z	E CAP.	330μF 35V M	*
	C2403	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
	C2404	QCS32HJ-270Z	C CAP.	27pF 500V J	*
	C2405	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	*
	C2406	QFLC2AJ-104Z	M CAP.	0.1μF 100V J	*
	C2407	QFLC2AK-223Z	M CAP.	0.022μF 100V K	*
	C2408-09	QCB32HK-221Z	C CAP.	220pF 500V K	*
	C2410	QFV71HJ-474Z	MF CAP.	0.47μF 50V J	*
	C2411	QETN1HM-226Z	E CAP.	22μF 50V M	*
	C2412	QETM1VM-108	E CAP.	1000μF 35V M	*
	C2413	QCS31HJ-220Z	C CAP.	22pF 50V J	*
	C2415	QDC31HJ-470Z	C CAP.	47pF 50V J	*
	C2416	QCS31HJ-820Z	C CAP.	82pF 50V J	*
	C2501	QFV71HJ-124Z	MF CAP.	0.12μF 50V J	*
	C2502	QETN1CM-106Z	E CAP.	1000μF 16V M	*
	C2503	QETN2AM-106Z	E CAP.	10μF 100V M	*
	C2504	QETN1AM-227Z	E CAP.	220μF 10V M	*
	C2505	QFLC2AJ-102Z	M CAP.	1000pF 100V J	*
	C2506	QCB32HK-331Z	C CAP.	330pF 500V K	*
	C2507	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
	C2508	QFM72DK-103	M CAP.	0.01μF 200V K	*
	C2509	QETN1AM-227Z	E CAP.	220μF 10V M	*
	C2510	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C2512	QCS31HJ-271Z	C CAP.	270pF 50V J	*
	C2520	QFV71HJ-224Z	MF CAP.	0.22μF 50V J	*
	C2521	QFZ0117-1701	M.PP CAP.		*
	C2522	QFZ0117-4701	M.PP CAP.		*
	C2523-24	QFM72DK-683	M CAP.	0.068μF 200V K	*
	C2525	QFZ0117-4701	M.PP CAP.	4700pF	*
	C2526	QFZ0119-684	M.PP CAP.	0.68μF	*
	C2527	QFZ0119-514	M.PP CAP.	0.51μF	*
	C2528	QFZ0128-404	M.PP CAP.	0.4μF	*
	C2529	QFZ0128-204	M.PP CAP.	0.2μF	
	C2532	QCB32HK-561Z	C CAP.	560pF 500V K	*
	C2533	QFZ0194-534	MPP CAP.	0.53μF	
	C2536	QFZ0119-534	M.PP CAP.		*
	C2537	QETM2CM-227	E CAP.	220μF 160V M	*
	C2541	QEZ0195-475Z	E CAP.	4.7μF	*
	C2543	QCB31HK-681Z	C CAP.	680pF 50V K	*
	C2544	QETN1EM-476Z	E CAP.	47μF 25V M	*
	C2545	QETN1AM-107Z	E CAP.	100μF 10V M	*
	C2546	QFV71HJ-104Z	MF CAP.	0.1μF 50V J	
	C2547	QCS31HJ-470Z	C CAP.	47pF 50V J	*
	C2551	QEN61HM-105Z	BP E CAP.	1μF 50V M	*
	C2552-53	QCB32HK-152Z	C CAP.	1500pF 500V K	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C2554	QETN2EM-106Z	E CAP.	10µF 250V M	*
	C2555-56	QETN1EM-108Z	E CAP.	1000µF 25V M	*
	C2557	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2561	QCZ0122-681	C CAP.	680pF	
	C2581	QETC0JM-107Z	E CAP.	100µF 6.3V M	*
	C2582	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C2584	QCS31HJ-151Z	C CAP.	150pF 50V J	*
⚠	C2902	QFZ9040-473	M.M.CAP.		*
	C2903-05	QCZ9086-472	C CAP.		*
	C2906	QEZ0199-227	E CAP.		
	C2907	QCB32HK-103	C CAP.	0.01µF 500V K	*
	C2908	QCZ0122-151	C CAP.		*
	C2909	QCZ0122-221	C CAP.		*
	C2910	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2913	QETC1EM-477Z	E CAP.	470µF 25V M	*
	C2914	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2916	QFLC1HJ-102Z	M CAP.	1000pF 50V J	*
	C2917	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C2918	QCB31HK-821Z	C CAP.	820pF 50V K	*
	C2919	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C2920	QFLC1HJ-472Z	M CAP.	4700pF 50V J	*
	C2951	QEZ0203-227	E CAP.	220µF 160V M	
	C2952-53	QEHC1CM-108Z	E CAP.	1000µF 16V M	*
	C2954	QEZ0256-228	E CAP.	2200µF	
	C2956-57	QETB1EM-338	E CAP.	3300µF 25V M	*
	C2958-60	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2966-68	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C2970	QEHC1HM-336Z	E CAP.	33µF 50V M	*
	C2971	QEHC1CM-107Z	E CAP.	100µF 16V M	*
	C2972	QETN1AM-228Z	E CAP.	2200µF 10V M	*
	C2973	QEHC1AM-227Z	E CAP.	220µF 10V M	*
	C2975	QEHB1CM-228	E CAP.	2200µF 16V M	*
	C2976	QEZ0256-228	E CAP.		
	C2977	QEHC1AM-107Z	E CAP.	100µF 10V M	*
	C2978	QCZ0122-151	C CAP.		*
	C2981	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2982-83	QETN1HM-106Z	E CAP.	10µF 50V M	*
⚠	C2991	QCZ9041-471	C CAP.		*
⚠	C2992	QCZ9041-332	C CAP.		*
	TRANSFORMER				
	T2501	CE42672-001	DRIVE TRANSF.		*
	T2521	QQR0706-001	PINC.TRANSF.		*
⚠	T2551	CETH021-00AJ1	FBT		*
	T2561	CE42692-001J1	DAF TRANSF.		*
⚠	T2901	CETS089-001J4	SWITCH.TRANSF.		*
	T2981	QQT0147-001	POWER TRANSF.		*
	COIL				
	L2521	QQR0707-002	LINEARITY COIL		*
	L2541	QQR0705-001	CHOKE COIL		*
	L2551	QQLZ018-560	HEATER CHOKE		*
	L2901-02	QQL401K-100	COIL	10µH K	*
	L2903	QQL42AM-2R7Z	COIL	2.7µH M	*
	L2951	QQLZ018-460	HEATER CHOKE		*
	L2952-53	QQL42AK-100Z	CHOKE COIL	10µH	
	DIODE				
	D2401	MTZJ7S-T2	ZENER DIODE		*
	D2402	BYD33D-T3	SI.DIODE		*
	D2403	1SS133-T2	SI.DIODE		*
	D2404	MTZJ7.5S-T2	ZENER DIODE		*
	D2405	1SS133-T2	SI.DIODE		*
	D2406-09	MA700A-T2	SI.DIODE		*
	D2410	1SS133-T2	SI.DIODE		*
	D2411	MTZJ22B-T2	ZENER DIODE		*
	D2501	BYD33G-T3	SI.DIODE		*
	D2502	MTZJ7.5S-T2	ZENER DIODE		*
	D2504	1SS133-T2	SI.DIODE		*
	D2505	MTZJ6.8A-T2	ZENER DIODE		*
	D2506	1SS146-T2	SI.DIODE		*
	D2507	1SS81-T5	SI.DIODE		*
	D2508	1SS133-T2	SI.DIODE		*
	D2521	FMV-3FU-F1	SI.DIODE		
	D2525	V11CA-C1	SI.DIODE		
	D2541	MTZJ6.8C-T2	ZENER DIODE		*
	D2542	1SS133-T2	SI.DIODE		*
	D2550-51	BYD33G-T3	SI.DIODE		*
	D2552-53	BYW95B-20	SI.DIODE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D2556	BYD33G-T3	SI.DIODE		*
	D2571	MTZJ33B-T2	ZENER DIODE		*
	D2581	MTZJ15B-T2	ZENER DIODE		*
	D2582	MTZJ7.5B-T2	ZENER DIODE		*
	D2585	1SS133-T2	SI.DIODE		*
	D2901	D3SB60	BRIDGE DIODE		
	D2902	BYD33M-T3	SI.DIODE		*
	D2903	1SR124-400A-T2	SI.DIODE		*
	D2904-05	BYD33D-T3	SI.DIODE		*
	D2951-52	RU4C-F1	SI.DIODE		
	D2953	BYD33M-T3	SI.DIODE		*
	D2954-55	BYW95B-20	SI.DIODE		*
	D2956	SF6L20U	SI.DIODE		
	D2958-59	SF6L20U	SI.DIODE		
	D2960	MTZJ5.1A-T2	ZENER DIODE		
	D2961	MTZJ5.6A-T2	ZENER DIODE		*
	D2962-63	1SS133-T2	SI.DIODE		*
	D2964	1SS133-T2	SI.DIODE		
	D2965-66	1SS133-T2	SI.DIODE		*
	D2968	1SS133-T2	SI.DIODE		*
	D2970	1SS133-T2	SI.DIODE		*
	D2981-84	1N4003-T2	SI.DIODE		*
	D2985	1SS133-T2	SI.DIODE		*
	D2986	MTZJ8.2B-T2	ZENER DIODE		*
	D2987	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q2401-02	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2403	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2404	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2405-06	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2501	BSN274	F.E.T.		*
	Q2505	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q2506	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2521	2SC5406-RL	SI.TRANSISTOR		*
	Q2523	IRF640	F.E.T.		
	Q2526	DTC124ESA-T	DIGI.TRANSISTOR		*
	Q2541	2SD1408/OY/-LB	SI.TRANSISTOR		*
	Q2551	DTA124ESA-T	DIGI.TRANSISTOR		*
	Q2552	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2581	2SA949/Y/Z1	SI.TRANSISTOR		*
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2901	2SK2148-01R-F1	F.E.T.		
	Q2955	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2981	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q2982	2PC1815/YG/-T	SI.TRANSISTOR		*
	IC				
	IC2401	LA7841	I.C.(MONO-ANA)		
	IC2501	TDA9151B	I.C.(DEF-PRO)		*
	IC2541	UPC4558C	I.C.(MONO-ANA)		
	IC2901	MC44603P	I.C.(MONO-ANA)		*
	IC2951	SE135N	I.C.(HYBRID)		*
	IC2952	LM2940CT-12	I.C.(MONO-ANA)		
	IC2953	UPC2409AHF	I.C.(MONO-ANA)		
	IC2954	KIA7808PI	I.C.(MONO-ANA)		*
	IC2955-56	PQ05RF21	I.C.(MONO-ANA)		
	IC2957	KIA7808PI	I.C.(MONO-ANA)		*
	OTHERS				
⚠	FR2551	QRZ9021-1R0	FUSI.RESISTOR	1.0 Ω	*
⚠	FR2552	QRZ9021-1R0	FUSI.RESISTOR	1.0 Ω	*
⚠	FR2553	QRZ9017-4R7	FUSI.RESISTOR	4.7 Ω	*
	K2401-02	CE41433-001Z	BEADS CORE		*
	K2502-05	QQR0679-001	FERRITE BEADS		
	K2506	CE41433-001Z	BEADS CORE		*
	K2901-04	CE42050-001Z	CORE		*
	K2951	CE41433-001Z	BEADS CORE		*
	K2952-53	QRN143J-0ROX	C R	0.0Ω 1/4W J	*
	PC2521	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC2901	TLP721F(D4-GR)	I.C.(PH.COUPLER)		*
	RY2981	CESK028-002	RELAY		*
	TH2901	CEKP002-003	M.P.THERMISTOR		*
	VA2561	ERZV10V112C1	VARISTOR		*

POWER DEF P.W.BOARD ASS'Y(SMC-2003A-U2)

AV-28WH3EP

⚠	Symbol No.	Part No.	Part Name	Description			Local
	RESISTOR						
	R2401	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R2408	QRE141J-182Y	C R	1.8kΩ	1/4W	J	*
	R2409	QRX01GJ-1R0	MF R	1.0Ω	1W	J	*
	R2410	QRE141J-182Y	C R	1.8kΩ	1/4W	J	*
	R2411	QRG029J-221	OM R	220 Ω	2W	J	
	R2412	QRX01GJ-1R8	MF R	1.8Ω	1W	J	*
	R2413	QRX01GJ-1R5	MF R	1.5Ω	1W	J	*
	R2414	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2415	QRE141J-472Y	C R	4.7kΩ	1/4W	J	*
	R2416	QRE141J-332Y	C R	3.3kΩ	1/4W	J	*
	R2417	QRE141J-222Y	C R	2.2kΩ	1/4W	J	*
	R2418	QRA14CF-6802Y	MF R	68kΩ	1/4W	F	
	R2419	QRA14CF-7870Y	MF R	787Ω	1/4W	F	
	R2420	QRE141J-223Y	C R	22kΩ	1/4W	J	*
	R2421	QRA14CF-1003Y	MF R	100kΩ	1/4W	F	
	R2422	QRA14CF-1501Y	MF R	1.5kΩ	1/4W	F	
	R2423	QRE141J-272Y	C R	2.7kΩ	1/4W	J	*
	R2424	QRE141J-563Y	C R	56kΩ	1/4W	J	*
	R2425	QRE141J-104Y	C R	100kΩ	1/4W	J	*
	R2426	QRE141J-123Y	C R	12kΩ	1/4W	J	*
	R2501	QRE141J-823Y	C R	82kΩ	1/4W	J	*
	R2502	QRE141J-684Y	C R	680kΩ	1/4W	J	*
	R2503	QRE141J-393Y	C R	39kΩ	1/4W	J	*
	R2504-05	QRE141J-271Y	C R	270Ω	1/4W	J	*
	R2506	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2507	QRE141J-821Y	C R	820Ω	1/4W	J	*
	R2508	QRA14CF-1962Y	MF R	19.6kΩ	1/4W	F	
	R2509	QRA14CF-5101Y	MF R	5.1kΩ	1/4W	F	
	R2510	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2511	QRE141J-332Y	C R	3.3kΩ	1/4W	J	*
	R2513	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2514	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R2515	QRE141J-123Y	C R	12kΩ	1/4W	J	*
	R2516	QRG039J-272	OM R	2.7kΩ	3W	J	
	R2517	QRG039J-122	OM R	1.2kΩ	3W	J	
	R2518	QRE121J-152Y	C R	1.5kΩ	1/2W	J	*
	R2519	QRE141J-220Y	C R	22Ω	1/4W	J	*
	R2521	QRE121J-5R6Y	C R	5.6Ω	1/2W	J	*
	R2524	QRE121J-471Y	C R	470Ω	1/2W	J	*
	R2526	QRE121J-104Y	C R	100kΩ	1/2W	J	*
	R2527	QRE141J-123Y	C R	12kΩ	1/4W	J	*
	R2528	QRE141J-472Y	C R	4.7kΩ	1/4W	J	*
	R2529	QRE141J-154Y	C R	150kΩ	1/4W	J	*
	R2531	QRE121J-152Y	C R	1.5kΩ	1/2W	J	*
	R2533	QRX039J-5R6	MF R	5.6 Ω	3W	J	
	R2534	QRE121J-562Y	C R	5.6kΩ	1/2W	J	*
	R2535	QRE141J-272Y	C R	2.7kΩ	1/4W	J	*
	R2536	QRE141J-122Y	C R	1.2kΩ	1/4W	J	*
	R2537	QRE141J-821Y	C R	820Ω	1/4W	J	*
	R2538	QRE141J-562Y	C R	5.6kΩ	1/4W	J	*
	R2539	QRE141J-272Y	C R	2.7kΩ	1/4W	J	*
	R2541	QRE141J-223Y	C R	22kΩ	1/4W	J	*
	R2542	QRE141J-681Y	C R	680Ω	1/4W	J	*
	R2543	QRE141J-332Y	C R	3.3kΩ	1/4W	J	*
	R2544-45	QRE141J-123Y	C R	12kΩ	1/4W	J	*
	R2546	QRE141J-183Y	C R	18kΩ	1/4W	J	*
	R2547	QRE141J-823Y	C R	82kΩ	1/4W	J	*
	R2548	QRE141J-562Y	C R	5.6kΩ	1/4W	J	*
	R2553	QRE121J-122Y	C R	1.2kΩ	1/2W	J	*
	R2554	QRE141J-153Y	C R	15kΩ	1/4W	J	*
	R2555	QRE141J-822Y	C R	8.2kΩ	1/4W	J	*
	R2556	QRE141J-153Y	C R	15kΩ	1/4W	J	*
	R2557	QRE141J-270Y	C R	27Ω	1/4W	J	*
	R2571	QRG029J-223	OM R	22kΩ	2W	J	*
	R2581	QRF104J-100	UNF R	10 Ω	10W	J	*
	R2582	QRE121J-331Y	C R	330Ω	1/2W	J	*
	R2583	QRE121J-682Y	C R	6.8kΩ	1/2W	J	*
	R2584	QRE141J-183Y	C R	18kΩ	1/4W	J	*
	R2585	QRE141J-222Y	C R	2.2kΩ	1/4W	J	*
	R2592	QRE141J-153Y	C R	15kΩ	1/4W	J	*
	R2593	QRE141J-182Y	C R	1.8kΩ	1/4W	J	*
	R2901	QRE121J-331Y	C R	330Ω	1/2W	J	*

⚠	Symbol No.	Part No.	Part Name	Description			Local
	RESISTOR						
	R2902	QRF154K-4R7	UNF R				*
	R2903-04	QRE121J-474Y	C R	470kΩ	1/2W	J	*
	R2905	QRG039J-333	OM R	33kΩ	3W	J	*
	R2906	QRE121J-102Y	C R	1kΩ	1/2W	J	*
	R2907	QRM059J-R22	MP R	0.22 Ω	5W	J	*
	R2910	QRG039J-393	OM R	39kΩ	3W	J	
	R2916	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R2917	QRE141J-392Y	C R	3.9kΩ	1/4W	J	*
	R2918	QRE141J-273Y	C R	27kΩ	1/4W	J	*
	R2919	QRE141J-472Y	C R	4.7kΩ	1/4W	J	*
	R2920	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2921	QRE141J-273Y	C R	27kΩ	1/4W	J	*
	R2922	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2923	QRE141J-682Y	C R	6.8kΩ	1/4W	J	*
	R2924	QRE141J-102Y	C R	1kΩ	1/4W	J	*
	R2925	QRE121J-560Y	C R	56Ω	1/2W	J	*
	R2951	QRF074J-102	UNF R	1kΩ	7W	J	*
	R2952	QRG029J-123	OM R	12kΩ	2W	J	*
	R2953	QRX039J-5R6	MF R	5.6 Ω	3W	J	
	R2954	QRE141J-153Y	C R	15kΩ	1/4W	J	*
	R2955	QRE141J-682Y	C R	6.8kΩ	1/4W	J	*
	R2956	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2957	QRE141J-682Y	C R	6.8kΩ	1/4W	J	*
	R2958	QRE141J-822Y	C R	8.2kΩ	1/4W	J	*
	R2959	QRE141J-682Y	C R	6.8kΩ	1/4W	J	*
	R2962-63	QRG01GJ-220	OM R	22Ω	1W	J	*
	R2967-69	QRE141J-103Y	C R	10kΩ	1/4W	J	*
	R2970	QRE141J-822Y	C R	8.2kΩ	1/4W	J	*
	R2971	QRE141J-682Y	C R	6.8kΩ	1/4W	J	*
	R2984	QRE121J-102Y	C R	1kΩ	1/2W	J	*
	R2987	QRE141J-122Y	C R	1.2kΩ	1/4W	J	*
	R2988	QRE141J-150Y	C R	15Ω	1/4W	J	*
⚠	R2991	QRZ0057-825	C R	8.2MΩ	1W	J	*
	CAPACITOR						
	C2401	QFLC2AJ-104Z	M CAP.	0.1μF	100V	J	*
	C2402	QETC1VM-337Z	E CAP.	330μF	35V	M	*
	C2403	QFV71HJ-104Z	MF CAP.	0.1μF	50V	J	
	C2404	QCS32HJ-270Z	C CAP.	27pF	500V	J	*
	C2405	QFV71HJ-474Z	MF CAP.	0.47μF	50V	J	*
	C2406	QFLC2AJ-104Z	M CAP.	0.1μF	100V	J	*
	C2407	QFLC2AK-223Z	M CAP.	0.022μF	100V	K	*
	C2408-09	QCB32HK-221Z	C CAP.	220pF	500V	K	*
	C2410	QFV71HJ-474Z	MF CAP.	0.47μF	50V	J	*
	C2411	QETN1HM-226Z	E CAP.	22μF	50V	M	*
	C2412	QETM1VM-108	E CAP.	1000μF	35V	M	*
	C2413	QCS31HJ-220Z	C CAP.	22pF	50V	J	*
	C2415	QDC31HJ-470Z	C CAP.	47pF	50V	J	*
	C2416	QCS31HJ-820Z	C CAP.	82pF	50V	J	*
	C2501	QFV71HJ-124Z	MF CAP.	0.12μF	50V	J	*
	C2502	QETN1CM-108Z	E CAP.	1000μF	16V	M	*
	C2503	QETN2AM-106Z	E CAP.	10μF	100V	M	*
	C2504	QETN1AM-227Z	E CAP.	220μF	10V	M	*
	C2505	QFLC2AJ-102Z	M CAP.	1000pF	100V	J	*
	C2506	QCB32HK-331Z	C CAP.	330pF	500V	K	*
	C2507	QFV71HJ-104Z	MF CAP.	0.1μF	50V	J	
	C2508	QFM72DK-103	M CAP.	0.01μF	200V	K	*
	C2509	QETN1AM-227Z	E CAP.	220μF	10V	M	*
	C2510	QCB31HK-472Z	C CAP.	4700pF	50V	K	*
	C2512	QCS31HJ-271Z	C CAP.	270pF	50V	J	*
	C2520	QFV71HJ-224Z	MF CAP.	0.22μF	50V	J	*
	C2521	QFZ0117-1801	M.PP CAP.				*
	C2522	QFZ0117-4501	M.PP CAP.				*
	C2523-24	QFM72DK-683	M CAP.	0.068μF	200V	K	*
	C2525	QFZ0117-4001	M.PP CAP.	4000pF	2000V	±2.5%	
	C2526	QFZ0119-434	M.PP CAP.	0.43μF	200V	±3%	*
	C2527	QFZ0119-514	M.PP CAP.	0.51μF	200V	±3%	*
	C2528	QFZ0119-304	M.PP CAP.	0.3μF	200V	±3%	*
	C2529	QFZ0128-204	M.PP CAP.	0.2μF	400V	±3%	
	C2532	QCB32HK-561Z	C CAP.	560pF	500V	K	*
	C2533	QFZ0194-304	M.PP CAP.	0.3μF	200V	±3%	*
	C2536	QFZ0119-534	M.PP CAP.	0.53μF	200V	±3%	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR					
	C2537	QETM2CM-227	E CAP.	220µF 160V M	*
	C2541	QEZ0195-475Z	E CAP.	4.7µF	*
	C2543	QCB31HK-681Z	C CAP.	680pF 50V K	*
	C2544	QETN1EM-476Z	E CAP.	47µF 25V M	*
	C2545	QETN1AM-107Z	E CAP.	100µF 10V M	*
	C2546	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2547	QCS31HJ-470Z	C CAP.	47pF 50V J	*
	C2551	QEN61HM-105Z	BP E CAP.	1µF 50V M	*
	C2552-53	QCB32HK-152Z	C CAP.	1500pF 500V K	*
	C2554	QETN2EM-106Z	E CAP.	10µF 250V M	*
	C2555-56	QETN1EM-108Z	E CAP.	1000µF 25V M	*
	C2557	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2581	QETC0JM-107Z	E CAP.	100µF 6.3V M	*
	C2582	QETN1CM-476Z	E CAP.	47µF 16V M	*
	C2584	QCS31HJ-151Z	C CAP.	150pF 50V J	*
⚠	C2902	QFZ9040-473	M.M.CAP.	0.047µF	*
	C2903-05	QCZ9086-472	C CAP.	4700pF	*
	C2906	QEZ0199-227	E CAP.	220µF	
	C2907	QCB32HK-103	C CAP.	0.01µF 500V K	*
	C2908	QCZ0122-151	C CAP.	150pF 200V K	*
	C2909	QCZ0122-221	C CAP.	220pF 2000V K	*
	C2910	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2913	QETC1EM-477Z	E CAP.	470µF 25V M	*
	C2914	QFV71HJ-104Z	MF CAP.	0.1µF 50V J	
	C2916	QFLC1HJ-102Z	M CAP.	1000pF 50V J	*
	C2917	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C2918	QCB31HK-821Z	C CAP.	820pF 50V K	*
	C2919	QETN1HM-105Z	E CAP.	1µF 50V M	*
	C2920	QFLC1HJ-472Z	M CAP.	4700pF 50V J	*
	C2951	QEZ0203-227	E CAP.	220µF 160V M	
	C2952-53	QEHC1CM-108Z	E CAP	1000µF 16V M	*
	C2954	QEZ0256-228	E CAP.		
	C2956-57	QETB1EM-338	E CAP.	3300µF 25V M	*
	C2958-60	QCB32HK-102Z	C CAP.	1000pF 500V K	*
	C2966-68	QCZ0120-104Z	C CAP.	0.1µF 25V Z	*
	C2970	QEHC1HM-336Z	E CAP.	33µF 50V M	*
	C2971	QEHC1CM-107Z	E CAP.	100µF 16V M	*
	C2972	QETN1AM-228Z	E CAP.	2200µF 10V M	*
	C2973	QEHC1AM-227Z	E CAP.	220µF 10V M	*
	C2975	QEHB1CM-228	E CAP.	2200µF 16V M	*
	C2976	QEZ0256-228	E CAP.	2200µF	
	C2977	QEHC1AM-107Z	E CAP.	100µF 10V M	*
	C2978	QCZ0122-151	C CAP.	150pF 200V K	*
	C2981	QETN1EM-227Z	E CAP.	220µF 25V M	*
	C2982-83	QETN1HM-106Z	E CAP.	10µF 50V M	*
⚠	C2991	QCZ9041-471	C CAP.		*
⚠	C2992	QCZ9041-332	C CAP.		*
TRANSFORMER					
	T2501	CE42672-001	DRIVE TRANSF		*
	T2521	QQR0706-001	PINC.TRANSF		*
⚠	T2551	CETH020-00AJ1	H.V.TRANSF.		*
⚠	T2901	CETS089-001J4	SWITCH.TRANSF.		*
	T2981	QQT0147-001	POWER TRANSF.		*
COIL					
	L2521	QQR0707-001	LINEARITY COIL		*
	L2541	QQR0705-001	CHOKE COIL		*
	L2551	QQLZ018-460	HEATER CHOKE		*
	L2901-02	QQL401K-100	COIL	10µH K	*
	L2903	QQL42AM-2R7Z	COIL	2.7µH M	*
	L2951	QQLZ018-460	HEATER CHOKE		*
	L2952-53	QQL42AK-100Z	CHOKE COIL	10µH	
DIODE					
	D2401	MTZJ75-T2	ZENER DIODE		*
	D2402	BYD33D-T3	SI.DIODE		*
	D2403	1SS133-T2	SI.DIODE		*
	D2404	MTZJ7.5S-T2	ZENER DIODE		*
	D2405	1SS133-T2	SI.DIODE		*
	D2406-09	MA700A-T2	SI.DIODE		*
	D2410	1SS133-T2	SI.DIODE		*
	D2411	MTZJ22B-T2	ZENER DIODE		*
	D2501	BYD33G-T3	SI.DIODE		*
	D2502	MTZJ7.5S-T2	ZENER DIODE		*
	D2504	1SS133-T2	SI.DIODE		*
	D2505	MTZJ6.8A-T2	ZENER DIODE		*
	D2506	1SS146-T2	SI.DIODE		*
	D2507	1SS81-T5	SI.DIODE		*
	D2508	1SS133-T2	SI.DIODE		*

⚠	Symbol No.	Part No.	Part Name	Description	Local
DIODE					
	D2521	FMV-3FU-F1	SI.DIODE		
	D2525	V11CA-C1	SI.DIODE		
	D2541	MTZJ6.8C-T2	ZENER DIODE		*
	D2542	1SS133-T2	SI.DIODE		*
	D2550-51	BYD33G-T3	SI.DIODE		*
	D2552-53	BYW95B-20	SI.DIODE		*
	D2556	BYD33G-T3	SI.DIODE		*
	D2571	MTZJ33B-T2	ZENER DIODE		*
	D2581	MTZJ15B-T2	ZENER DIODE		*
	D2582	MTZJ7.5B-T2	ZENER DIODE		*
	D2585	1SS133-T2	SI.DIODE		*
	D2901	D3SB60	BRIDGE DIODE		
	D2902	BYD33M-T3	SI.DIODE		*
	D2903	1SR124-400A-T2	SI.DIODE		*
	D2904-05	BYD33D-T3	SI.DIODE		*
	D2951-52	RU4C-F1	SI.DIODE		
	D2953	BYD33M-T3	SI.DIODE		*
	D2954-55	BYW95B-20	SI.DIODE		*
	D2956	SF6L20U	SI.DIODE		
	D2958-59	SF6L20U	SI.DIODE		
	D2960	MTZJ5.1A-T2	ZENER DIODE		*
	D2961	MTZJ5.6A-T2	ZENER DIODE		*
	D2962-66	1SS133-T2	SI.DIODE		*
	D2968	1SS133-T2	SI.DIODE		*
	D2970	1SS133-T2	SI.DIODE		*
	D2981-84	1N4003-T2	SI.DIODE		*
	D2985	1SS133-T2	SI.DIODE		*
	D2986	MTZJ8.2B-T2	ZENER DIODE		*
	D2987	1SS133-T2	SI.DIODE		*
TRANSISTOR					
	Q2401-02	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2403	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2404	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2405-06	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2501	BSN274	F.E.T.		*
⚠	Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR					
	Q2505	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q2506	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2521	2SC5406-RL	SI.TRANSISTOR		*
	Q2523	IRF640	F.E.T.		
	Q2526	DTC124ESA-T	DIGI.TRANSISTOR		*
	Q2541	2SD1408/OY/-LB	SI.TRANSISTOR		*
	Q2551	DTA124ESA-T	DIGI.TRANSISTOR		*
	Q2552	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2581	2SA949/Y/Z1	SI.TRANSISTOR		*
	Q2582	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q2901	2SK2148-01R-F1	F.E.T.		
	Q2955	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q2981	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q2982	2PC1815/YG/-T	SI.TRANSISTOR		*
IC					
	IC2401	LA7841	I.C.(MONO-ANA)		
	IC2501	TDA9151B	I.C.(DEF-PRO)		*
	IC2541	UPC4558C	I.C.(MONO-ANA)		
	IC2901	MC44603P	I.C.(MONO-ANA)		*
	IC2951	SE135N	I.C.(HYBRID)		*
	IC2952	LM2940CT-12	I.C.(MONO-ANA)		
	IC2953	UPC2409AHF	I.C.(MONO-ANA)		
	IC2954	K1A7808PI	I.C.(MONO-ANA)		*
	IC2955-56	PQ05RF21	I.C.(MONO-ANA)		
	IC2957	K1A7808PI	I.C.(MONO-ANA)		*
OTHERS					
⚠	FR2551	QRZ9021-1R0	FUSI.RESISTOR		*
⚠	FR2552	QRZ9021-1R0	FUSI.RESISTOR		*
⚠	FR2553	QRZ9017-4R7	FUSI.RESISTOR		*
	K2401-02	CE41433-001Z	BEADS CORE		*
	K2502-05	QQR0679-001	FERRITE BEADS		
	K2506	CE41433-001Z	BEADS CORE		*
	K2901-04	CE42050-001Z	CORE		*
	K2951	CE41433-001Z	BEADS CORE		*
	K2952-53	QRN143J-0ROX	C R	0.0Ω 1/4W J	*
	PC2521	TLP621(B)	I.C.(PH.COUPLER)		*
⚠	PC2901	TLP721F(D4-GR)	I.C.(PH.COUPLER)		*
	RY2981	CE5K028-002	RELAY		*
	TH2901	CEKP002-003	W.P.THERMISTOR		*

CRT SOCKET PW BOARD ASS'Y (SMC-3002A-U2)

AV-32WH3EP

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3101	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3102	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R3103	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3104	QRE141J-820Y	C R	82Ω 1/4W J	*
	R3105	QRE141J-331Y	C R	330Ω 1/4W J	*
	R3106	QRJ146J-100X	C R	10Ω 1/4W J	*
	R3107-08	QRE141J-470Y	C R	47Ω 1/4W J	*
⚠	R3109	QRZ9021-561	FUSI.R		*
	R3110	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3111	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3112	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3113-14	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R3115	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3116	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3117	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3118	QRE141J-121Y	C R	120Ω 1/4W J	*
	R3119	QRL029J-391	OM R	390Ω 2W J	*
	R3120	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R3121	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R3122	QRE141J-221Y	C R	220Ω 1/4W J	*
	R3123	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R3124	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R3125	QRE141J-181Y	C R	180Ω 1/4W J	*
	R3126	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R3127	QRE141J-681Y	C R	680Ω 1/4W J	*
	R3128	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3130	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3204-06	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3207	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3208	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R3211	QRE141J-334Y	C R	330kΩ 1/4W J	*
	R3223-25	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3227	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3228	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R3229-31	QRG016J-823	OM R	82kΩ 1W J	*
	R3232-34	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R3235-37	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K	*
	R3239	QRC121K-474Z	COMP.R	470kΩ 1/2W K	*
	R3240	QRC121K-102Z	COMP.R	1kΩ 1/2W K	*
	R3241	QRC121K-105Z	COMP.R	1MΩ 1/2W K	*
	R3301-02	QRE121J-474Y	C R	470kΩ 1/2W J	*
	R3303-04	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R3305	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3306	QRE141J-392Y	C R	3.9kΩ 1/4W J	*
	R3307	QRE141J-101Y	C R	100Ω 1/4W J	*
	R3308	QRE141J-471Y	C R	470Ω 1/4W J	*
	R3309	QRE141J-390Y	C R	39Ω 1/4W J	*
	CAPACITOR				
	C3101	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3102	QFLC1HJ-103Z	M CAP.	0.01μF 50V J	*
	C3103	QETN1HM-335Z	E CAP.	3.3μF 50V M	*
	C3104	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C3105	QCS31HJ-101Z	C CAP.	100pF 50V J	*
	C3106	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C3107	QETN2CM-106Z	E CAP.	10μF 160V M	*
	C3108-09	QCB32HK-472Z	C CAP.	4700pF 500V K	*
	C3110	QETN2CM-106Z	E CAP.	10μF 160V M	*
	C3111-12	QETN1AM-107Z	E CAP.	100μF 10V M	*
	C3113	QETN1AM-337Z	E CAP.	330μF 10V M	*
	C3114	QCS32HJ-470Z	C CAP.	47pF 500V J	*
	C3115	QCS31HJ-5R0Z	C CAP.	5.0pF 50V J	*
	C3116	QCS31HJ-390Z	C CAP.	39pF 50V J	*
	C3117	QCS31HJ-151Z	C CAP.	150pF 50V J	*
	C3118	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C3201-03	QCS31HJ-8R0Z	C CAP.	8.0pF 50V J	*
	C3204-09	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
	C3210-12	QFK62EK-104Z	MM CAP.	0.1μF 250V K	*
	C3213-15	QCS31HJ-181Z	C CAP.	180pF 50V J	*
	C3216	QETN1CM-107Z	E CAP.	100μF 16V M	*
	C3218	QETM2EM-336	E CAP.	33μF 250V M	*
	C3219	QFZ0097-223	M M CAP.	0.022μF 1250V K	*
	C3221	QETN2EM-106Z	E CAP.	10μF 250V M	*
	C3301	QETN1CM-107Z	E CAP.	100μF 16V M	*

⚠	Symbol No.	Part No.	Part Name	Description	Local
	COIL				
	L3101	QQL01BK-150Z	COIL	15μH K	*
	L3201-03	QQL01BK-4R7Z	COIL	4.7μH K	*
	DIODE				
	D3101-02	RH1S-T3	SI.DIODE		*
	D3103	MA165-T2	SI.DIODE		*
	D3151	1SS133-T2	SI.DIODE		*
	D3204-06	EU01N-T2	SI.DIODE		
	D3301	1SS252-T2	SI.DIODE		*
	D3302-03	1SS133-T2	SI.DIODE		*
	TRANSISTOR				
	Q3101	2SA1309A/QR/-T	SI.TRANSISTOR		*
	Q3102-03	2SC3311A/QR/-T	SI.TRANSISTOR		
	Q3104	2SA1309A/QR/-T	SI.TRANSISTOR		*
	Q3105	2SA1837	SI.TRANSISTOR		*
	Q3106	2SC4793	SI.TRANSISTOR		*
	Q3107	2SC3311A/QR/-T	SI.TRANSISTOR		
	Q3108	2SC1906-T	SI.TRANSISTOR		*
	Q3301	2PA1015/YG/-T	SI.TRANSISTOR		*
	Q3302	2SC2655/Y/-T	SI.TRANSISTOR		*
	Q3303	2PA1015/YG/-T	SI.TRANSISTOR		*
	IC				
	IC3201-03	TDA6111Q	I.C.(MONO-ANA)		*
	OTHERS				
	K3101-04	CE41492-001Z	CHOKE COIL		*
	K3105	CE41433-001Z	BEADS CORE		*
⚠	SK3001	CE42670-001	C.R.T.SOCKET		

CRT SOCKET PW BOARD ASS'Y (SMC-3003A-U2)

AV-28WH3EP

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R3101	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3102	QRE141J-153Y	C R	15kΩ 1/4W J	*
	R3103	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3104	QRE141J-820Y	C R	82Ω 1/4W J	*
	R3105	QRE141J-331Y	C R	330Ω 1/4W J	*
	R3106	QRJ146J-100X	C R	10Ω 1/4W J	*
	R3107-08	QRE141J-470Y	C R	47Ω 1/4W J	*
⚠	R3109	QRZ9021-561	FUSI.R		*
	R3110	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3111	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3112	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3113-14	QRE141J-563Y	C R	56kΩ 1/4W J	*
	R3115	QRE141J-821Y	C R	820Ω 1/4W J	*
	R3116	QRE141J-2R7Y	C R	2.7Ω 1/4W J	*
	R3117	QRE141J-390Y	C R	39Ω 1/4W J	*
	R3118	QRE141J-121Y	C R	120Ω 1/4W J	*
	R3119	QRL029J-391	OM R	390Ω 2W J	*
	R3120	QRE141J-222Y	C R	2.2kΩ 1/4W J	*
	R3121	QRE141J-472Y	C R	4.7kΩ 1/4W J	*
	R3122	QRE141J-221Y	C R	220Ω 1/4W J	*
	R3123	QRE141J-473Y	C R	47kΩ 1/4W J	*
	R3124	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R3125	QRE141J-181Y	C R	180Ω 1/4W J	*
	R3126	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R3127	QRE141J-681Y	C R	680Ω 1/4W J	*
	R3128	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3130	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3204-06	QRE141J-152Y	C R	1.5kΩ 1/4W J	*
	R3207	QRE141J-562Y	C R	5.6kΩ 1/4W J	*
	R3208	QRE141J-823Y	C R	82kΩ 1/4W J	*
	R3211	QRE141J-334Y	C R	330kΩ 1/4W J	*
	R3223-25	QRE141J-182Y	C R	1.8kΩ 1/4W J	*
	R3227	QRE141J-272Y	C R	2.7kΩ 1/4W J	*
	R3228	QRE141J-822Y	C R	8.2kΩ 1/4W J	*
	R3229-31	QRG016J-823	OM R	82kΩ 1W J	*
	R3232-34	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R3235-37	QRC121K-152Z	COMP.R	1.5kΩ 1/2W K	*
	R3239	QRC121K-474Z	COMP.R	470kΩ 1/2W K	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R3240	QRC121K-102Z	COMP.R	1kΩ 1/2W K	*
R3241	QRC121K-105Z	COMP.R	1MΩ 1/2W K	*
R3301-02	QRE121J-474Y	C.R	470kΩ 1/2W J	*
R3303-04	QRE141J-223Y	C.R	22kΩ 1/4W J	*
R3305	QRE141J-562Y	C.R	5.6kΩ 1/4W J	*
R3306	QRE141J-392Y	C.R	3.9kΩ 1/4W J	*
R3307	QRE141J-101Y	C.R	100Ω 1/4W J	*
R3308	QRE141J-471Y	C.R	470Ω 1/4W J	*
R3309	QRE141J-390Y	C.R	39Ω 1/4W J	*
CAPACITOR				
C3101	QETN1HM-106Z	E.CAP.	10μF 50V M	*
C3102	QFLC1HJ-103Z	M.CAP.	0.01μF 50V J	*
C3103	QETN1HM-335Z	E.CAP.	3.3μF 50V M	*
C3104	QETN1CM-107Z	E.CAP.	100μF 16V M	*
C3105	QCS31HJ-101Z	C.CAP.	100pF 50V J	*
C3106	QCS31HJ-181Z	C.CAP.	180pF 50V J	*
C3107	QETN2CM-106Z	E.CAP.	10μF 160V M	*
C3108-09	QCB32HK-472Z	C.CAP.	4700pF 500V K	*
C3110	QETN2CM-106Z	E.CAP.	10μF 160V M	*
C3111-12	QETN1AM-107Z	E.CAP.	100μF 10V M	*
C3113	QETN1AM-337Z	E.CAP.	330μF 10V M	*
C3114	QCS32HJ-470Z	C.CAP.	47pF 500V J	*
C3115	QCS31HJ-5R0Z	C.CAP.	5.0pF 50V J	*
C3116	QCS31HJ-390Z	C.CAP.	39pF 50V J	*
C3117	QCS31HJ-151Z	C.CAP.	150pF 50V J	*
C3118	QETN1HM-106Z	E.CAP.	10μF 50V M	*
C3201-03	QCS31HJ-8R0Z	C.CAP.	8.0pF 50V J	*
C3204-09	QCZ0120-104Z	C.CAP.	0.1μF 25V Z	*
C3210-12	QFK62EK-104Z	MM.CAP.	0.1μF 250V K	*
C3213-15	QCS31HJ-181Z	C.CAP.	180pF 50V J	*
C3216	QETN1CM-107Z	E.CAP.	100μF 16V M	*
C3218	QETM2EM-336	E.CAP	33μF 250V M	*
C3219	QFZ0097-223	M.M.CAP.	0.022μF 1250V K	*
C3221	QETN2EM-106Z	E.CAP.	10μF 250V M	*
C3301	QETN1CM-107Z	E.CAP.	100μF 16V M	*
COIL				
L3101	QQL01BK-150Z	COIL	15μH K	*
L3201-03	QQL01BK-4R7Z	COIL	4.7μH K	*
DIODE				
D3101-02	RH1S-T3	SI.DIODE		*
D3103	MA165-T2	SI.DIODE		*
D3151	1SS133-T2	SI.DIODE		*
D3204-06	EU01N-T2	SI.DIODE		
D3301	1SS252-T2	SI.DIODE		*
D3302-03	1SS133-T2	SI.DIODE		*
TRANSISTOR				
Q3101	2SA1309A/QR/-T	SI.TRANSISTOR		*
Q3102-03	2SC3311A/QR/-T	SI.TRANSISTOR		
Q3104	2SA1309A/QR/-T	SI.TRANSISTOR		*
Q3105	2SA1837	SI.TRANSISTOR		*
Q3106	2SC4793	SI.TRANSISTOR		*
Q3107	2SC3311A/QR/-T	SI.TRANSISTOR		
Q3108	2SC1906-T	SI.TRANSISTOR		*
Q3301	2PA1015/YG/-T	SI.TRANSISTOR		*
Q3302	2SC2655/Y/-T	SI.TRANSISTOR		*
Q3303	2PA1015/YG/-T	SI.TRANSISTOR		*
IC				
IC3201-03	TDA6111Q	I.C.(MONO-ANA)		*
OTHERS				
K3101-04	CE41492-001Z	CHOKE COIL		*
K3105	CE41433-001Z	BEADS CORE		*
⚠ SK3001	CE42535-001J1	C.R.T.SOCKET		*

AUDIO PW BOARD ASS'Y (SMC-6002A-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R6102	QRE141J-104Y	C.R	100kΩ 1/4W J	*
R6103	QRE141J-102Y	C.R	1kΩ 1/4W J	*
R6104-05	QRE141J-104Y	C.R	100kΩ 1/4W J	*
R6106	QRE141J-102Y	C.R	1kΩ 1/4W J	*
R6107-09	QRE141J-103Y	C.R	10kΩ 1/4W J	*
R6110	QRE141J-153Y	C.R	15kΩ 1/4W J	*
R6111	QRE141J-102Y	C.R	1kΩ 1/4W J	*
R6112-13	QRE141J-561Y	C.R	560Ω 1/4W J	*
R6114-15	QRE141J-183Y	C.R	18kΩ 1/4W J	*
R6116-17	QRK126J-4R7X	C.R	4.7Ω 1/2W J	*
R6120-22	QRE141J-104Y	C.R	100kΩ 1/4W J	*
CAPACITOR				
C6101-02	QETN1HM-105Z	E.CAP.	1μF 50V M	*
C6105-08	QFV71HJ-224Z	MF.CAP.	0.22μF 50V J	*
C6109	QETN1HM-475Z	E.CAP.	4.7μF 50V M	*
C6110-11	QFV71HJ-104Z	MF.CAP.	0.1μF 50V J	
C6112-13	QETM1EM-228	E.CAP.	2200μF 25V M	*
C6115	QENC1EM-226Z	BP E.CAP.	22μF 25V M	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
DIODE				
D6101-04	1SS133-T2	SI.DIODE		*
TRANSISTOR				
Q6101	2PA1015/YG/-T	SI.TRANSISTOR		*
Q6102-03	DTC323TS-T	DIGI.TRANSISTOR		*
Q6104	DTC144ESA-T	DIGI.TRANSISTOR		*
Q6107-08	2PC1815/YG/-T	SI.TRANSISTOR		*
IC				
IC6001	TDA7265	I.C.(DIGI-OTHER)		*
OTHERS				
K6001-02	CE41433-001Z	BEADS CORE		*

AV TERMINAL PW BOARD ASS'Y (SMC0J001A-U2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0104	QRE141J-750Y	C.R	75Ω 1/4W J	*
R0106	QRE141J-750Y	C.R	75Ω 1/4W J	*
R0108	QRE141J-750Y	C.R	75Ω 1/4W J	*
R0112	QRE141J-750Y	C.R	75Ω 1/4W J	*
R0204	QRE141J-750Y	C.R	75Ω 1/4W J	*
CAPACITOR				
C0102-04	QEKC1CM-106Z	E.CAP.	10μF 16V M	
C0105-08	QCB31HK-472Z	C.CAP.	4700pF 50V K	*
C0109	QETN1AM-108Z	E.CAP.	1000μF 10V M	*
C0202	QCB31HK-103Z	C.CAP.	0.01μF 50V K	*
C0203-06	QCB31HK-472Z	C.CAP.	4700pF 50V K	*
C0209	QETN1AM-108Z	E.CAP.	1000μF 10V M	*
COIL				
L0101-04	QQL211K-5R6Y	COIL	5.6μH K	*
L0105	CE41832-001Z	LEAD CORE		*
L0201-04	QQL211K-5R6Y	COIL	5.6μH K	*
L0205	CE41832-001Z	LEAD CORE		*
DIODE				
D0101-03	MTZJ13B-T2	ZENER DIODE		*
OTHERS				
J0001-02	CE40529-006	SCART CONNECTOR		

FRONT CONTROL PW BOARD ASS'Y

(SMC-8002A-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R8001-02	QRE121J-271Y	C R	270Ω 1/2W J	*
	R8003	QRE141J-223Y	C R	22kΩ 1/4W J	*
	R8004	QRE141J-103Y	C R	10kΩ 1/4W J	*
	R8005	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R8008	QRE141J-682Y	C R	6.8kΩ 1/4W J	*
	R8009	QRE141J-105Y	C R	1MΩ 1/4W J	*
	R8010	QRE141J-183Y	C R	18kΩ 1/4W J	*
	R8011	QRE141J-273Y	C R	27kΩ 1/4W J	*
	R8012	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R8013	QRE141J-332Y	C R	3.3kΩ 1/4W J	*
	R8014	QRE141J-123Y	C R	12kΩ 1/4W J	*
	R8015-17	QRE141J-750Y	C R	75Ω 1/4W J	*
	R8020-21	QRE141J-102Y	C R	1kΩ 1/4W J	*
	R8035	QRE141J-391Y	C R	390Ω 1/4W J	*
	R8037	QRE141J-561Y	C R	560Ω 1/4W J	*
	R8039	QRE141J-821Y	C R	820Ω 1/4W J	*
	CAPACITOR				
	C8001-02	QCB31HK-222Z	C CAP.	2200pF 50V K	*
	C8003	QETN1HM-106Z	E CAP.	10μF 50V M	*
	C8004	QCZ0120-104Z	C CAP.		*
	C8005	QETN1CM-476Z	E CAP.	47μF 16V M	*
	C8010-11	QCB31HK-472Z	C CAP.	4700pF 50V K	*
	C8019	QETC1CM-107Z	E CAP.	100μF 16V M	*
	C8021	QCZ0120-104Z	C CAP.	0.1μF 25V Z	*
⚠	C8901	QFZ9040-474	M.F.CAP	0.47μF	*
	COIL				
	L8001	CE41832-001Z	LEAD CORE		*
	L8002-03	QQL211K-5R6Y	COIL	5.6μH K	*
	L8004-05	CE41832-001Z	LEAD CORE		*
	L8010-11	QQL211K-270Y	COIL	27μH K	*
	L8012	CE41832-001Z	LEAD CORE		*
	DIODE				
	D8007	P1201	C.D.S.		*
	D8008	1SS133-T2	SI.DIODE		*
	D8009	SLR-342MG-T16	L.E.D.(GRN)	ECO	*
	D8010	SPR-39MVWF	L.E.D.	POWER	*
	D8011	1SS133-T2	SI.DIODE		*
	D8012	SLR-342DU-T16	L.E.D.(ORG)	TIMER	*
	D8013	SLR-342YY-T16	L.E.D.(YLW)	MULTIM SOUND	*
	D8014	MTZJ6.8A-T2	ZENER DIODE		*
	D8018	MTZJ5.1B-T2	ZENER DIODE		*
	TRANSISTOR				
	Q8001	2PC1815/YG/-T	SI.TRANSISTOR		*
	Q8002	DTC144ESA-T	DIGI.TRANSISTOR		*
	Q8003-04	DTA144ESA-T	DIGI.TRANSISTOR		*
	IC				
	IC8001	GP1U281Q	IFR DETECT UNIT		*
	OTHERS				
		CM36548-001-E	L.E.D.HOLDER		*
		CM35921-A04-H	CDS HOLDER		*
		CEMG002-001Z	FUSE CLIP	x2	*
⚠	F8901	QMF51D2-3R15J1	FUSE	3.15A	*
	J8001	QMS3007-C01	HEADPHONE JACK		*
	J8003	QMD2B04-002	MINI CONNECTOR		*
	J8004	CEMN011-001	JACK		*
	J8005	CEMN011-002	JACK		*
	J8006	CEMN011-003	JACK		*
⚠	LF8901	CELF012-001J7	LINE FILTER		*
⚠	LF8902	CELF012-001J7	LINE FILTER		*
	S8001	CESP001-001	PUSH SWITCH	CH UP/DOWN	*
	S8002	CESP001-001	PUSH SWITCH	MENU	*
⚠	S8901	QSP4K21-C01	PUSH SWITCH	MAIN POWER	*

100Hz PW BOARD ASS'Y (SMC0Z001A-U2)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R0001-02	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0004-05	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0008-09	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0011-16	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0018-27	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0101	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0102	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0103	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0104	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0105	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0106	NRSA02J-181X	MG R	180Ω 1/10W J	*
	R0107	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0108	NRSA02J-150X	MG R	15Ω 1/10W J	*
	R0109	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0110	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0111	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0112	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0113	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0114	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0115	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0116	NRSA02J-181X	MG R	180Ω 1/10W J	*
	R0117	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0118	NRSA02J-330X	MG R	33Ω 1/10W J	*
	R0119	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0120	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0121	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0122	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0123	NRSA02J-273X	MG R	27kΩ 1/10W J	*
	R0124	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0125	NRSA02J-181X	MG R	180Ω 1/10W J	*
	R0126	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0127	NRSA02J-330X	MG R	33Ω 1/10W J	*
	R0128	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
	R0129-30	NRSA02J-471X	MG R	470Ω 1/10W J	*
	R0131	NRSA02J-391X	MG R	390Ω 1/10W J	*
	R0132	NRSA02J-821X	MG R	820Ω 1/10W J	*
	R0133	NRSA02J-750X	MG R	75Ω 1/10W J	*
	R0134	NRSA02J-100X	MG R	10Ω 1/10W J	*
	R0135-37	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0145-47	NRSA02J-221X	MG R	220Ω 1/10W J	*
	R0148	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0149-51	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0152	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0153-55	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0201-24	NRSA02J-101X	MG R	100Ω 1/10W J	*
	R0302	NRVA02D-153X	MF R	15kΩ 1/10W D	*
	R0303	NRVA02D-113X	MF R	11kΩ 1/10W D	*
	R0304-06	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0307	NRSA02J-682X	MG R	6.8kΩ 1/10W J	*
	R0308	NRSA02J-151X	MG R	150Ω 1/10W J	*
	R0309	NRSA02J-104X	MG R	100kΩ 1/10W J	*
	R0310	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0311-12	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0313	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0314-15	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0316	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0317-18	NRSA02J-102X	MG R	1kΩ 1/10W J	*
	R0319	NRSA02J-152X	MG R	1.5kΩ 1/10W J	*
	R0320	NRSA02J-683X	MG R	68kΩ 1/10W J	*
	R0321	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
	R0322	NRSA02J-473X	MG R	47kΩ 1/10W J	*
	R0323	NRSA02J-103X	MG R	10kΩ 1/10W J	*
	R0324	NRSA02J-271X	MG R	270Ω 1/10W J	*
	R0325	NRSA02J-181X	MG R	180Ω 1/10W J	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R0326	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0327	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0328	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0329	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0330	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0332	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R0333	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R0334	NRSA02J-271X	MG R	270Ω 1/10W J	*
R0335	NRSA02J-181X	MG R	180Ω 1/10W J	*
R0336	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0337	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0338	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0339	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0340	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0342	NRSA02J-473X	MG R	47kΩ 1/10W J	*
R0343	NRSA02J-103X	MG R	10kΩ 1/10W J	*
R0344	NRSA02J-271X	MG R	270Ω 1/10W J	*
R0345	NRSA02J-181X	MG R	180Ω 1/10W J	*
R0346	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0347	NRSA02J-121X	MG R	120Ω 1/10W J	*
R0348	NRSA02J-222X	MG R	2.2kΩ 1/10W J	*
R0349	NRSA02J-471X	MG R	470Ω 1/10W J	*
R0350	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0351	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R0352	NRSA02J-560X	MG R	56Ω 1/10W J	*
R0353	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0354-56	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0361	NRSA02J-102X	MG R	1kΩ 1/10W J	*
R0362	NRSA02J-560X	MG R	56Ω 1/10W J	*
R0363	NRSA02J-561X	MG R	560Ω 1/10W J	*
R0401	NRSA02J-221X	MG R	220Ω 1/10W J	*
R0402	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0403	NRSA02J-271X	MG R	270Ω 1/10W J	*
R0404	NRSA02J-333X	MG R	33kΩ 1/10W J	*
R0405	NRSA02J-223X	MG R	22kΩ 1/10W J	*
R0406	NRSA02J-122X	MG R	1.2kΩ 1/10W J	*
R0407	NRSA02J-181X	MG R	180Ω 1/10W J	*
R0408-09	NRSA02J-680X	MG R	68Ω 1/10W J	*
R0410	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0412	NRSA02J-180X	MG R	18Ω 1/10W J	*
R0414	NRSA02J-560X	MG R	56Ω 1/10W J	*
R0415-16	NRSA02J-101X	MG R	100Ω 1/10W J	*
R0417	NRSA02J-680X	MG R	68Ω 1/10W J	*
R0418	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
R0421	QRN143J-221X	C R	220Ω 1/4W J	*
R0423	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
CAPACITOR				
C0001	NEH70JM-107X	E CAP.	100μF 6.3V M	
C0002	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0003	NEH70JM-107X	E CAP.	100μF 6.3V M	
C0004	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0005	NEH70JM-107X	E CAP.	100μF 6.3V M	
C0006	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0007	QETN1CM-107Z	E CAP.	100μF 16V M	*
C0008	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0009-10	QETM1AM-108	E CAP.	1000μF 10V M	*
C0101	NCS21HJ-151X	C CAP.	150pF 50V J	*
C0102	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0103	NCS21HJ-271X	C CAP.	270pF 50V J	*
C0104	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C0106	NEH71HM-105X	E CAP.	1μF 50V M	
C0107	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0108	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0109	NEH71CM-476X	E CAP.	47μF 16V M	

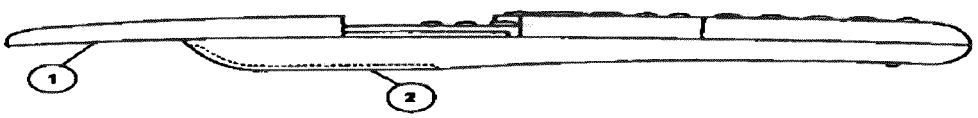
⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C0111	NCS21HJ-151X	C CAP.	150pF 50V J	*
C0112	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0113	NCS21HJ-271X	C CAP.	270pF 50V J	*
C0114	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C0116	NEH71HM-105X	E CAP.	1μF 50V M	
C0117	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0118	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0121	NCS21HJ-151X	C CAP.	150pF 50V J	*
C0122	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0123	NCS21HJ-271X	C CAP.	270pF 50V J	*
C0124	NRSA02J-0R0X	MG R	0.0Ω 1/10W J	*
C0126	NEH71CM-106X	E CAP.	10μF 16V M	
C0127	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0128	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0131	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0132	NEH71CM-476X	E CAP.	47μF 16V M	
C0133-34	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0135-36	NEH71CM-106X	E CAP.	10μF 16V M	
C0137	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0138	NEH71CM-476X	E CAP.	47μF 16V M	
C0139	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0142-47	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0148	NEH71CM-476X	E CAP.	47μF 16V M	
C0151-54	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0155	NDC21HJ-390X	C CAP.	39pF 50V J	*
C0201	NEH71CM-476X	E CAP.	47μF 16V M	
C0202-05	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0301	NEH71CM-476X	E CAP.	47μF 16V M	
C0302-07	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0308	NEH71CM-476X	E CAP.	47μF 16V M	
C0309	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0313	NCS21HJ-152X	C CAP.	1500pF 50V J	*
C0314-18	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0321	NEH71HM-105X	E CAP.	1μF 50V M	
C0322	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0323	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0324	NEH71CM-476X	E CAP.	47μF 16V M	
C0331	NEH71HM-105X	E CAP.	1μF 50V M	
C0332	NCF21HZ-224X	C CAP.	0.22μF 50V Z	*
C0333	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0341	NEH71CM-106X	E CAP.	10μF 16V M	
C0342	NEH71HM-105X	E CAP.	1μF 50V M	
C0343	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0401	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0402	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0403	NEH71CM-476X	E CAP.	47μF 16V M	
C0404	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0405	NEH71CM-476X	E CAP.	47μF 16V M	
C0406-07	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0408	NEH71CM-476X	E CAP.	47μF 16V M	
C0409-10	NDC21HJ-270X	C CAP.	27pF 50V J	*
C0411	NDC21HJ-180X	C CAP.	18pF 50V J	*
C0412-13	NCB21HK-103X	C CAP.	0.01μF 50V K	*
C0414	NEH71CM-476X	E CAP.	47μF 16V M	
C0415-16	NCF21EZ-104X	C CAP.	0.1μF 25V Z	*
C0417	NDC21HJ-270X	C CAP.	27pF 50V J	*
COIL				
L0001-02	NQL02BJ-4R7X	COIL	4.7μH	*
L0003-04	NQL02BJ-100X	COIL	10μH	*
L0005-07	NQL02BJ-4R7X	COIL	4.7μH	*
L0008	NQL02BJ-100X	COIL	10μH	*
L0009	NQL02BJ-4R7X	COIL	4.7μH	*
L0101	NQL011K-3R3X	COIL	3.3μH	*
L0111	NQL011K-3R3X	COIL	3.3μH	*

⚠ Symbol No.	Part No.	Part Name	Description	Local
COIL				
L0121	NQL011K-3R3X	COIL	3.3μH	*
L0301-04	NQL02BJ-100X	COIL	10μH	*
L0401-02	NQL02BJ-330X	COIL	33μH	*
DIODE				
D0401	MA3027-X	CHIP ZENER DIODE		*
TRANSISTOR				
Q0101	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0102	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0103	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0104	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0111	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0112	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0113	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0114	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0121	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0122	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0123	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0124	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0131	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0321	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0322	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0323	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0324	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0331	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0332	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0333	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0334	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0341	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0342	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0343	2SC2712/YG/-X	SI.TRANSISTOR		*

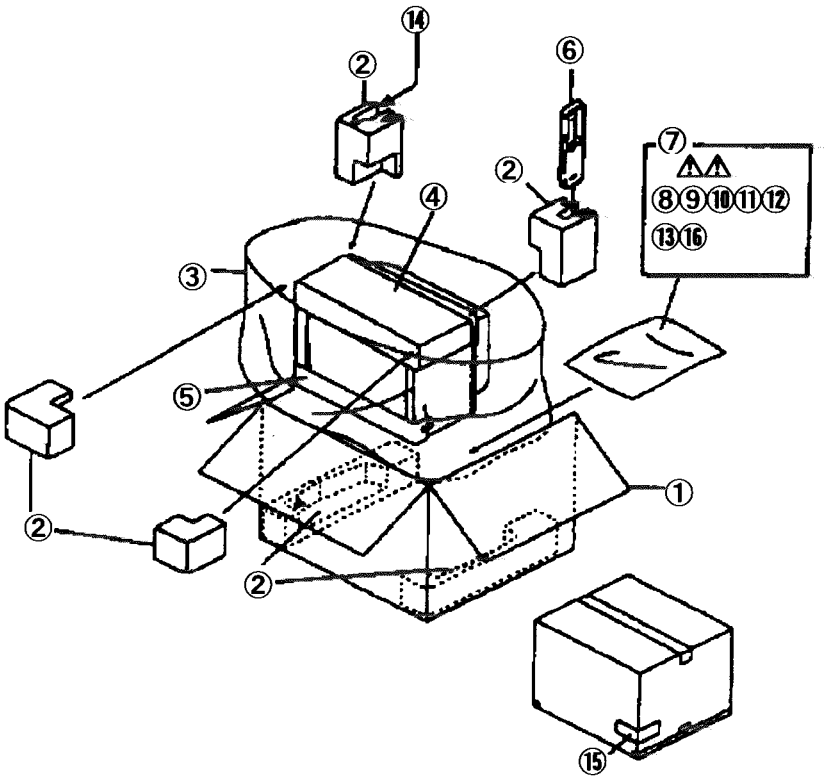
⚠ Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR				
Q0344-45	2SA1162/YG/-X	SI.TRANSISTOR		*
Q0351	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0361	2SC2712/YG/-X	SI.TRANSISTOR		*
Q0401	2SC2712/YG/-X	SI.TRANSISTOR		*
IC				
IC0101	SDA9205-2-W	I.C.(DIGI-MOS)		*
IC0201	SDA9255	IC		
IC0301	SDA9280-W	I.C.(DIGI-OTHER)		*
IC0401	SDA9257	I.C.(DIGI-OTHER)		*
IC0402	MC74F04M-X	I C		
IC0403	TC74AC00F-X	I C		
OTHERS				
DL0321	NQR0241-001X	L.P.F		*
DL0331	NQR0241-001X	L.P.F		*
DL0341	NQR0242-001X	L.P.F		*
EF0001-05	CE42482-103Y	EMI FILTER		*
EF0006	CE42482-101Y	EMI FILTER		
EF0101	CE42482-470Y	EMI FILTER		*
EF0111	CE42482-470Y	EMI FILTER		*
EF0121	CE42482-470Y	EMI FILTER		*
EF0131	CE42482-103Y	EMI FILTER		*
EF0132	CE42482-101Y	EMI FILTER		
EF0321	CE42482-470Y	EMI FILTER		*
EF0331	CE42482-470Y	EMI FILTER		*
EF0341-42	CE42482-470Y	EMI FILTER		*
EF0351	CE42482-470Y	EMI FILTER		*
EF0361	CE42482-101Y	EMI FILTER		
EF0401	CE42482-470Y	EMI FILTER		*
EF0402	CE42126-101Y	EMI FILTER		
K0001	CE41433-001Z	BEADS CORE		*
X0401	QAX0350-001	X'TAL		

REMOTE CONTROL UNIT PARTS LIST (RM-C795-1E)

⚠ Symbol No.	Part No.	Part Name.	Description	Local
1	BGV110303A	SLIDE COVER		*
2	BGV110201A	BATTERY COVER		*



PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
			AV-32WH3EP		
	1	AEM1002-A43-E	PACKING CASE		*
	2	CP11549-B0B-E	CUSHION ASSY		*
	3	AEM1004-A07-E	SET COVER		*
	4	AEM3022-003-E	CUSHION SHEET		*
	5	CP40193-010-E	CUSHION SHEET		*
	6	RM-C795-1E	REMOCON UNIT		*
	7	AEM3021-001-E	POLY BAG		*
	8	BT-20066A-E	ADDRESS CARD		*
⚠	9	LCT0155-001A-U	INST BOOK		*
⚠	10	LCT0156-001A-U	INST BOOK		*
	11	BT-54008-1E	WARRANTY CARD		*
	12	LC10102-003A-U	X-RAY CARD		*
	13	LCT0065-001A-U	WARNING SHEET		*
	14	AEEAK001-200	RF CABLE		*
	15	AEM1038-089-E	EURO LABEL		*
	16	2832WH3EP-HSAE	S.DIAGRAM	ONLY ITALY	*

⚠	Ref.No.	Part No.	Part Name	Description	Local
			AV-28WH3EP		
	1	AEM1002-A44-E	PACKING CASE		*
	2	CP11547-A0B-E	CUSHION ASSY		*
	3	AEM1004-A06-E	SET COVER		*
	4	CP40193-009-E	CUSHION SHEET		*
	5	CP40193-010-E	CUSHION SHEET		*
	6	RM-C795-1E	REMOCON UNIT		*
	7	AEM3021-001-E	POLY BAG		*
	8	BT-20066A-E	ADDRESS CARD		*
⚠	9	LCT0155-001A-U	INST BOOK		*
⚠	10	LCT0156-001A-U	INST BOOK		*
	11	BT-54008-1E	WARRANTY CARD		*
	12	LC10102-004A-U	X-RAY CARD		*
	13	LCT0065-001A-U	WARNING SHEET		*
	14	AEEAK001-200	RF CABLE		*
	15	AEM1038-090-E	EURO LABEL		*
	16	2832WH3EP-HSAE	S.DIAGRAM	ONLY ITALY	*

JVC

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TELEVISION RECEIVER DIVISION 1106 Heta, Iwai-city, Ibaraki-prefecture, 306-0698, Japan

32WH3EP-CKD #4
28WH3EP-CKD #4

Printed in Japan
V.P. 9804
DP2052 HK.NN