

# SERVICE MANUAL

# FE-1 CHASSIS

| <i>MODEL</i>    | <i>COMMANDER</i> | <i>DEST</i> | <i>CHASSIS NO.</i> | <i>MODEL</i>    | <i>COMMANDER</i> | <i>DEST</i> | <i>CHASSIS NO.</i> |
|-----------------|------------------|-------------|--------------------|-----------------|------------------|-------------|--------------------|
| <b>KV-25X5A</b> | RM-883           | Italian     | SCC-Q06E-A         | <b>KV-25X5K</b> | RM-883           | OIRT        | SCC-Q03E-A         |
| <b>KV-25X5B</b> | RM-883           | French      | SCC-Q02E-A         | <b>KV-25X5L</b> | RM-883           | Irish       | SCC-Q07B-A         |
| <b>KV-25X5D</b> | RM-883           | AEP         | SCC-Q04E-A         | <b>KV-25X5R</b> | RM-883           | OIRT        | SCC-Q03F-A         |
| <b>KV-25X5E</b> | RM-883           | Spanish     | SCC-Q05E-A         | <b>KV-25X5U</b> | RM-883           | UK          | SCC-Q01D-A         |



TRINITRON® COLOR TV  
**SONY®**

# KV-25X5

| ITEM MODEL | Television System | Stereo System                                                   | Channel Coverage                                                                                                                                                                                            | Color System                                   |
|------------|-------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Italian    | B/G/H             | GERMAN Stereo                                                   | ITALIA VHF : A-H2 (C) UHF : 21-69 PAL<br>B/G/H VHF : E2-E12 UHF : E21-E69<br>CABLE TV (1) : S1-S41<br>CABLE TV (2) : S01-S05, M1-M10, U1-U10                                                                | PAL<br>NTSC4.43, NTSC3.58<br>(VIDEO IN)        |
| French     | B/G/H, D/K, L, I  | GERMAN/NICAM Stereo                                             | L VHF : F02-F10 UHF : F21-F60<br>CABLE : B-Q B/G/H VHF : E2-E12<br>UHF : E21-E69<br>CABLE TV (1) : S1-S41<br>CABLE TV (2) : S01-S05, M1-M10, U1-U10<br>ITALIA VHF : A-H2 (C) UHF : 21-69<br>I UHF : B21-B69 | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| AEP        | B/G/H, D/K        | GERMAN Stereo                                                   | PAL B/G/H VHF : E2-E12 UHF : E21-E69<br>CABLE TV (1) : S1-S41<br>CABLE TV (2) : S01-S05, M1-M10, U1-U10<br>ITALIA VHF : A-H2 (C) UHF : 21-69<br>D/K VHF : R01-R12 UHF : R21-R69                             | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Spanish    | B/G/H, D/K        | GERMAN/NICAM Stereo                                             | PAL B/G VHF : E2-E12 UHF : E21-E69<br>CABLE TV (1) : S1-S41<br>CABLE TV (2) : S01-S05, M1-M10, U1-U10<br>ITALIA VHF : A-H2 (C) UHF : 21-69                                                                  | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| OIRT       | B/G/H, D/K        | KV-25X5K<br>GERMAN/NICAM Stereo<br><br>KV-25X5R<br>GERMAN Stero | B/G/H VHF : E2-E12 UHF : E21-E69<br>CABLE TV (1) : S1-S41<br>D/K VHF : R01-R12 UHF : R21-R69                                                                                                                | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| Irish      | I                 | NICAM Stereo                                                    | VHF : A-C, D-J VHF : 21-69<br>CABLE CHANNELS S1-S20<br>HYPERBAND S21-S41                                                                                                                                    | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |
| UK         | I                 | NICAM Stereo                                                    | UHF : B21-B69                                                                                                                                                                                               | PAL, SECAM<br>NTSC4.43, NTSC3.58<br>(VIDEO IN) |

| MODEL             | 25X5A | 25X5B | 25X5D | 25X5E | 25X5K | 25X5L | 25X5R | 25X5U |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Power Consumption | 89W   | 97W   | 97W   | 97W   | 97W   | 139W  | 97W   | 139W  |

## [PICTURE TUBE]

Super Trinitron  
Approx. 63cm (25 inches)  
(Approx. 59cm picture measured diagonally)  
110 degree deflection

## [FRONT]

-  Video input - phono jack
-  Audio inputs - phono jacks
-  S Video input 4 pin DIN
-  Headphone jacks : stereo minijack

## Input/Output Terminals

### [REAR]

-  21-pin Euro connector (CENELEC standard).
- Inputs for Audio and Video signals.
- Inputs for RGB.
- Outputs of TV Video and Audio signals.
-  21-pin Euro connector.
- inputs for Audio and Video signals.
- inputs for S Video.
- outputs for Audio and Video signals (selectable).
-  Phono Jack
- Outputs for Audio Signals

Sound output 2 x 20W (Music Power)  
Power requirements 220 - 240V  
Dimensions Approx 593x502x506mm  
Weight Approx 33.2kg  
Supplied accessories RM-883 Remote Commander (1)  
IEC designated R6 battery (1)  
Other features NICAM\*, FASTEXT, TOPTXT  
\*(KV-25X5B/25X5E/25X5K/25X5L/25X5U only)

### [RM-883]

Remote control system Infrared control  
Power requirements 1.5V dc  
1 battery IEC designation  
R6 (size AA)  
Dimensions Approx 65x225x21mm (w/h/d)  
Weight Approx 157g (Not including battery)

**Design and specifications are subject to change without notice.**

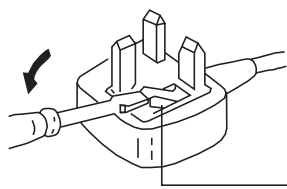
| Model Name<br>Item | KV-25X5A | KV-25X5B | KV-25X5D | KV-25X5E | KV-25X5K | KV-25X5L | KV-25X5R | KV-25X5U |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Pal Comb           | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| PIP                | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| RGB Priority       | OFF      | ON       | ON       | ON       | OFF      | OFF      | OFF      | OFF      |
| Woofers Box        | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| Scart 1            | ON       | ON       | ON       | ON       | ON       | ON       | ON       | ON       |
| Scart 2            | ON       | ON       | ON       | ON       | ON       | ON       | ON       | ON       |
| Front in (3)       | ON       | ON       | ON       | ON       | ON       | ON       | ON       | ON       |
| Scart 4            | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| Projector          | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| AKB in 16:9 mode   | ON       | ON       | ON       | ON       | ON       | ON       | ON       | ON       |
| Norm B/G           | ON       | ON       | ON       | ON       | ON       | OFF      | ON       | OFF      |
| Norm I             | OFF      | ON       | OFF      | OFF      | OFF      | ON       | OFF      | ON       |
| Norm D/K           | OFF      | ON       | ON       | ON       | ON       | OFF      | ON       | OFF      |
| Norm AUS           | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| Norm L             | OFF      | ON       | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| Norm SAT           | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| Norm M             | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      | OFF      |
| Teletext           | ON       | ON       | ON       | ON       | ON       | ON       | ON       | ON       |
| Nicam Stereo       | OFF      | ON       | OFF      | ON       | ON       | ON       | OFF      | ON       |
| Language Preset    | Italian  | French   | German   | Spanish  | OIRT     | English  | OIRT     | English  |

## WARNING (KV-25X5L / KV-25X5U only)

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

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

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



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



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## CAUTION

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

## WARNING !!

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

## SAFETY-RELATED COMPONENT WARNING !!

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

## ATTENTION

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

## ATTENTION !!

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

## ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ !!

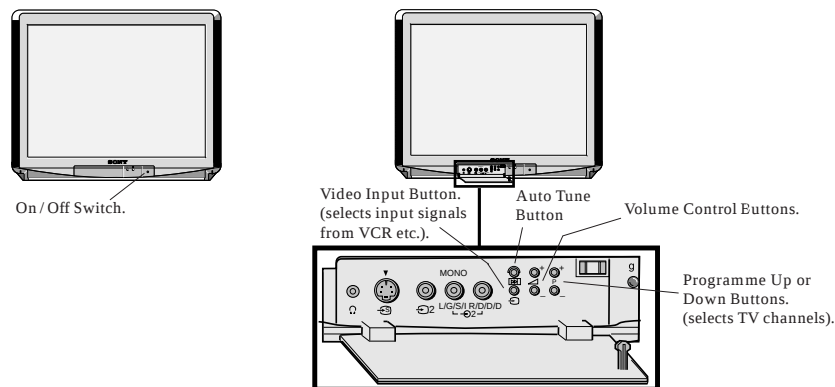
LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL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

## SECTION 1 GENERAL

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

### Basic TV Features

#### Overview of TV Buttons



#### Overview of Remote Control Buttons

##### To Mute Sound

Press to mute TV sound. Press again to restore the sound.

##### To Select Channels

Press to select channels.

For double-digit programme numbers, e.g. 23, press -/- first, then the buttons 2 and 3.

##### To Change Screen Format

Press to view programmes in 16:9 mode. Press again to return to 4:3 mode.

##### To Adjust TV Volume

Press to adjust the volume of the TV.

##### To Temporarily Switch Off TV

Press to temporarily switch off TV. Press again to switch on TV from standby mode.

*To save energy we recommend switching off completely when TV is not in use.*  
NOTE: After 15 -30 minutes without a TV signal and without any button being pressed, the TV switches automatically into standby mode.

##### To Reveal On Screen Information

Press to reveal all on-screen indications. Press again to cancel.

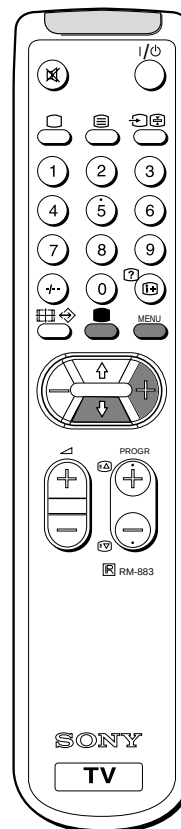
##### To Select Channels

Press to select channels.

### Additional TV Features

#### Using Select Mode

You can select different preset picture and sound modes.



**1** Press the MENU button on the remote control to display the menu on the TV screen.

**2** With the cursor pointing at the  symbol on the TV screen as shown, press the yellow button.

**3** Press the blue button to select the desired mode:

-  reverts to settings made in "Adjusting the Picture and Sound" sections of the manual
-  for films
-  for programmes broadcast live

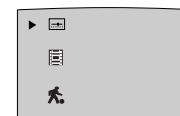
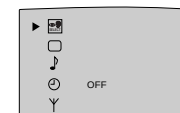
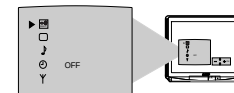
**4** Press the MENU button to remove the menu display from the TV screen.

**Note:** The mode selected in step 3 is now stored.

#### Changing Modes Quickly

**1** Press the  button on the remote control to display the three different modes.

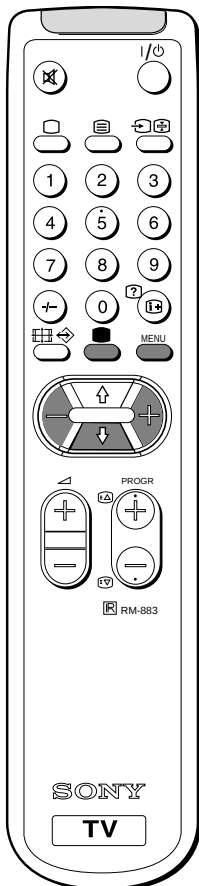
**2** Press the  button again to select your desired mode.



## Additional TV Features

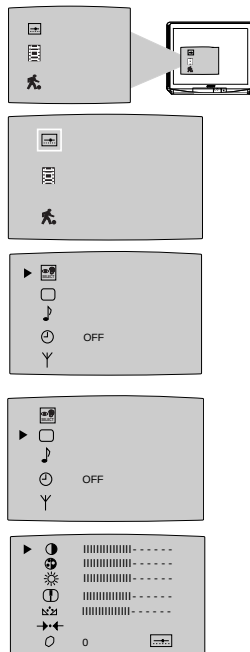
### Adjusting the Picture

Although the picture is adjusted at the factory, you can modify it to suit your own requirement.



- 1 Press the  button on the remote control to display the three different modes on the TV screen.
- 2 Press the  button to highlight the user mode symbol  as shown.
- 3 Press the MENU button to display the menu on the TV screen.
- 4 Press the blue button on the control to select the  symbol on the TV screen then press the yellow button.
- 5 Press the blue button to select the item you wish to change (see below).
- 6 Press the red or yellow button to alter the selected item.
- 7 Press the MENU button to remove the menu display from the TV screen.

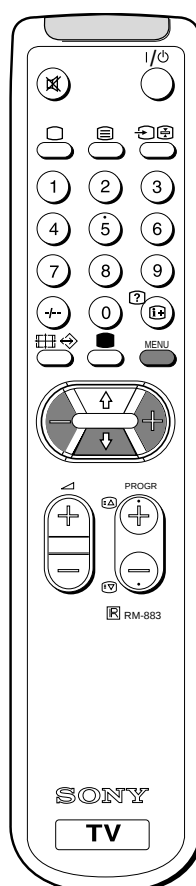
| Symbol                                                                              | Item                                                                |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------|
|  | • Contrast                                                          |
|  | • Colour                                                            |
|  | • Brightness                                                        |
|  | • Sharpness                                                         |
|  | • Hue control (only for NTSC video signals)                         |
|  | • Reset - resets to factory preset picture level                    |
|  | • Picture rotation - adjusts picture tilt (only for KV-29X5U model) |
|  | • Represents the mode selected in the "Using Select Mode" section.  |



## Additional TV Features

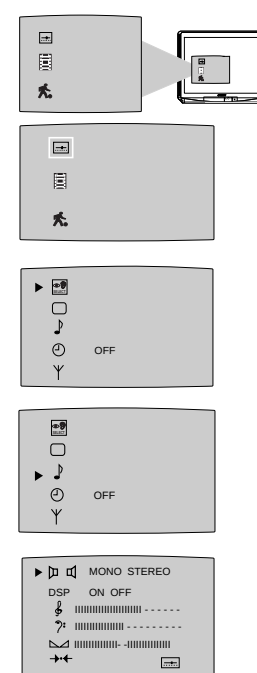
### Adjusting the Sound

Although the sound is adjusted at the factory, you can modify it to suit your own requirement.



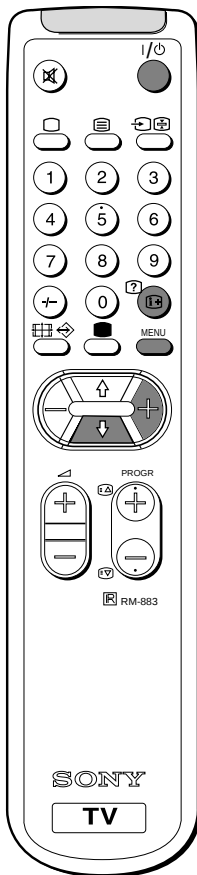
- 1 Press the  button on the remote control to display the three different modes on the TV screen.
- 2 Press the  button to highlight the user mode symbol  as shown.
- 3 Press the MENU button to display the menu on the TV screen.
- 4 Press the blue button to select the  symbol on the TV screen then press the yellow button.
- 5 Press the blue button to select the item you wish to change (see below).
- 6 Press the red or yellow button to alter the selected item.
- 7 Press the MENU button to remove the menu display from the TV screen.

| Symbol                                                                                | Item                                                                                                                               |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|  | • Mono sound/Stereo sound<br>A: Channel 1 sound / B: Channel 2 sound (to select your desired language from a dual sound broadcast) |
| DSP                                                                                   | • On / Off (digital sound processor)                                                                                               |
|  | • Treble                                                                                                                           |
|  | • Bass                                                                                                                             |
|  | • Balance                                                                                                                          |
|  | • Reset (resets to factory preset sound level)                                                                                     |
|  | • Represents the mode selected in the "Using Select Mode" section of the manual.                                                   |



## Using the Sleep Timer

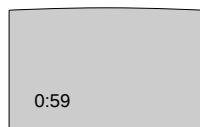
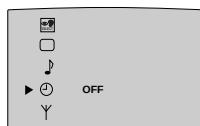
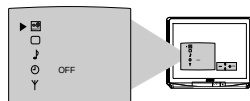
The TV may be set to switch automatically to the standby mode after a length of time chosen by you. You may set the time in 15 minute steps up to 4 hours.



- 1 Press the MENU button on the remote control to display the menu on the TV screen.
- 2 Press the blue button on the control to select the  symbol on the TV screen, then press the yellow button.
- 3 Press the yellow button repeatedly until the required amount of time delay appears on the screen.
- 4 Once the time delay has been selected, press the MENU button to remove the on-screen display.  
  
One minute before standby, the display shown appears on the screen.

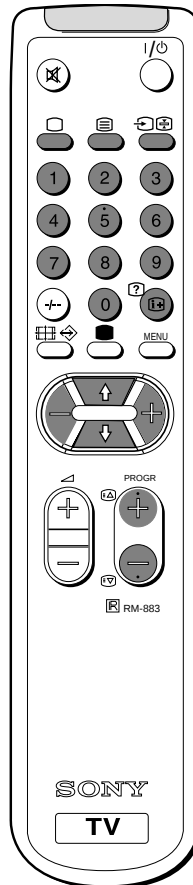
### Notes:

- When watching TV, press the  button to display time remaining.
- To return to normal operation from standby mode, press the I/⏻ button.



## Viewing Teletext

Teletext is an information service transmitted by most TV stations.



### Selecting Teletext

- 1 Press a number button on the remote control to select the channel which carries the teletext service you wish to receive.
- 2 Press the  button on the remote control to switch on teletext.
- 3 Input three digits for the page number using the numbered buttons on the control.
- 4 Press the  button to switch off teletext.

**Note:** Teletext errors may occur if the broadcasting signals are weak.



### Using Other Teletext Functions

#### To Superimpose Teletext on to the TV

Press  once in teletext mode or twice in TV mode to superimpose teletext on to the TV screen.  
Press  again to cancel teletext mode.

#### To Move to Next or Preceding Page

Press PROGR +/- on the remote control to select the previous or next page.

#### To Freeze a Teletext Page

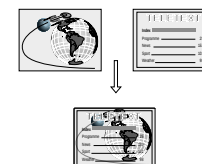
Press  on the control to freeze the page.  
Press  again to cancel the freeze.

#### Revealing concealed information (eg: answers to a quiz).

Press  to reveal information.  
Press again to conceal the information.

#### Using colour buttons to access pages (Fastext)

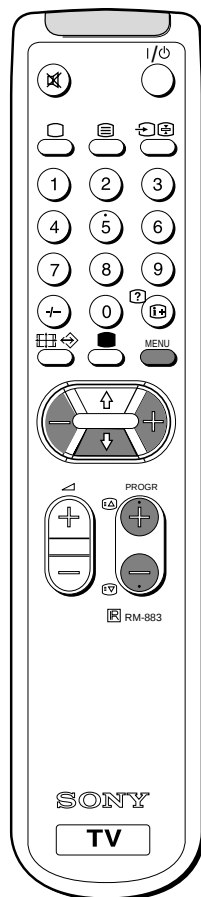
When the colour coded menu appears at the bottom of a page, press the colour button (green, red, yellow or blue) to access the corresponding page.



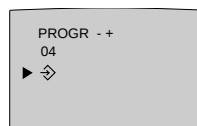
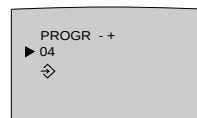
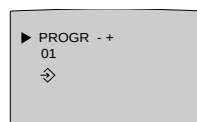
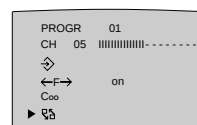
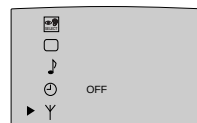
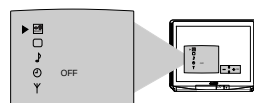
## Additional TV Features

### Exchanging Programme Positions

After tuning you may wish to change the order in which the channels appear on the TV. You may wish for example to exchange the channel on programme number 8 with the channel on programme number 4.



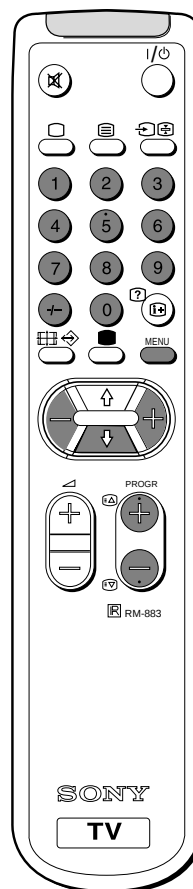
- 1 Press the MENU button on the remote control.
- 2 Press the blue button on the control to select  $\gamma$  on the TV screen, then press the yellow button.
- 3 Press the blue button to select  $\gamma$  then press the yellow button.
- 4 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button until the channel you wish to rearrange appears on screen, then press the blue button once.
- 5 Press the red or yellow button to select the new programme number (e.g. PROGR 04) for your selected channel.
- 6 Press the blue button to select  $\gamma$  then press the yellow button to exchange the channels.
- 7 Repeat steps 4 to 6 if you wish to change the order of the other channels on your TV, then press MENU to return to normal TV screen.
- 8 Press the PROGR+/- button to view your selected channels on their new programme numbers.



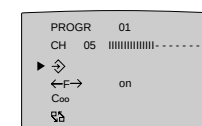
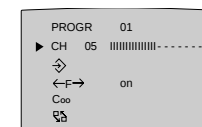
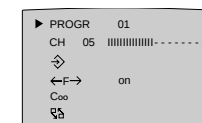
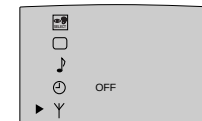
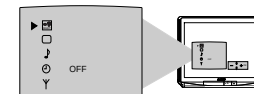
## Additional TV Features

### Manually Tuning the TV

You have already tuned the TV to receive all available channels using the 'Automatically Tuning the TV' procedure at the start of this manual. You can however carry out this operation manually using the following instructions.

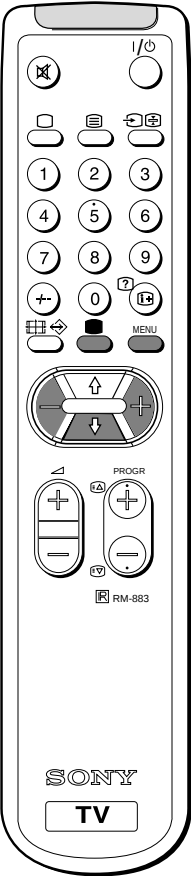


- 1 Press the MENU button on the remote control to display the menu on the TV screen.
- 2 Press the blue button to select the  $\gamma$  symbol on the TV screen then press the yellow button.
- 3 With the cursor pointing at PROGR on the TV screen as shown, press PROGR + or - button on the remote control to allocate a programme number to the channel (eg PROGR 01). For double digit numbers e.g. 55, press the -/-- button on the remote control then the corresponding numbered buttons.
- 4 Press the blue button to select the tuning bar scale then press the yellow or red button once to start the channel search. (Yellow to search up the scale or red to search down). When a channel is found it appears on the TV screen.
- 5 If you do not wish to store this channel on the programme number you selected, press the yellow or red button to continue searching for the desired channel.
- 6 If this is the channel you wish to store, press the blue button to select the  $\gamma$  symbol on the screen then press the yellow button to store.
- 7 Repeat steps 3 to 6 if you wish to store more channels then press the MENU button to remove the menu from the TV screen.

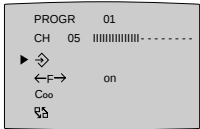
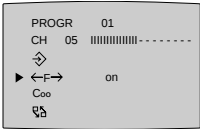
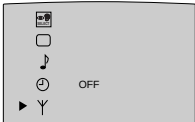
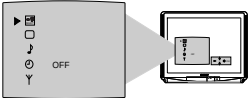


# Fine-Tuning Channels

If a channel is slightly off tune, you can use this fine tune procedure to obtain a better picture reception.



- 1 With the channel you wish to fine-tune on the screen, press the MENU button on the remote control. The menu display appears on the TV screen.
- 2 Press the blue button on the remote control to select the Y symbol on the TV screen then press the yellow button.
- 3 Press the blue button to select the ←F→ symbol on the TV screen then press the red or yellow button to adjust the tuning.
- 4 Press the blue button to select the ⇄ symbol on the TV screen then press the yellow button to store.
- 5 Press the MENU button to remove the menu from the TV screen.



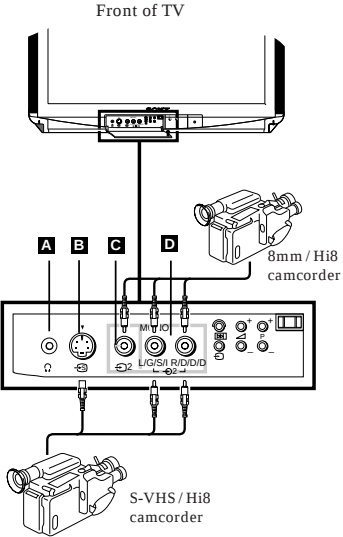
# Using Optional Equipment

You can connect optional audio or video equipment to your TV, such as a VCR, a camcorder or video games as shown.

## Select and View the Input Signal

- 1 Connect your equipment to the designated TV socket.
  - 2 Press the ⇄ button repeatedly on your remote control until the correct input symbol appears on the TV screen.
- | Symbol | Input signals                                                                                                  |
|--------|----------------------------------------------------------------------------------------------------------------|
| ⇄1     | • Audio / video input signal through the Euro AV connector <b>F</b>                                            |
| ⇄2     | • RGB input signal through the Euro AV connector <b>F</b>                                                      |
| ⇄3     | • Audio / video input signal through the Euro AV connector <b>E</b> or the phono sockets <b>C</b> and <b>D</b> |
| ⇄4     | • S video input signal through the socket <b>B</b> .                                                           |
- 3 Switch on the connected equipment.
  - 4 To return to normal TV picture, press the □ button on the remote control.

**Note:** To avoid picture distortion, do not connect equipment to the **B**, **C** or **E** connectors at the same time.



## Additional Information

### Connecting a VCR

We recommend you tune in the VCR signal to TV programme number '0' using the 'Manually Tuning in the TV' section of this instruction manual.

### Connecting Headphones

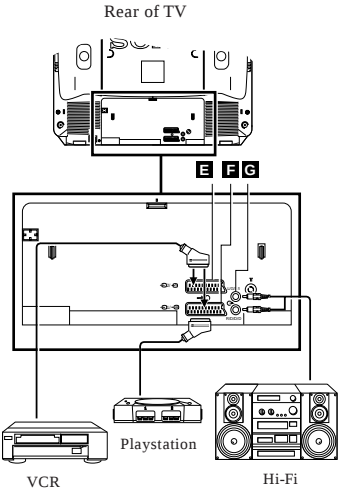
Plug in your headphones to the socket **A** on the front of the TV set.

### Connecting Decoders

Plug in decoders to the socket **F** on the rear of the TV.

### Connecting to External Audio Equipment

Plug in your Hi-Fi equipment to the **G** sockets on the rear of the TV if you wish to amplify the audio output from the TV.



Troubleshooting

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

| Problem                                                          | Solution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No picture (screen is dark), no sound                            | <ul style="list-style-type: none"><li>• Plug the TV in.</li><li>• Press the  button on the front of TV.</li><li>• If the  indicator is on press  button or a programme number button on the remote control.</li><li>• Check the aerial connection.</li><li>• Check that the selected video source is on.</li><li>• Turn the TV off for 3 or 4 seconds and then turn it on again using the  button on the front of the TV.</li></ul> |
| Poor or no picture (screen is dark), but good sound.             | <ul style="list-style-type: none"><li>• Using the MENU system, select the Picture Adjustment display. Adjust the brightness, picture and colour balance levels.</li><li>• From the Picture Adjustment display select  to return to the factory settings.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Poor picture quality when watching a RGB video source.           | <ul style="list-style-type: none"><li>• Press the  button repeatedly on the remote control until the RGB symbol  is displayed on the screen.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Good picture, no sound                                           | <ul style="list-style-type: none"><li>• Press the  +/- button on the remote control.</li><li>• If  is displayed on the screen, press the  button on the remote control.</li></ul>                                                                                                                                                                                                                                                                                                                                    |
| No colour on colour programmes                                   | <ul style="list-style-type: none"><li>• Using the MENU system, select the Picture Adjustment display. Adjust the colour balance.</li><li>• From the Picture Adjustment display select  to return to the factory settings.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Distorted picture when changing programmes or selecting teletext | <ul style="list-style-type: none"><li>• Turn off any equipment connected to the 21 pin Euro connector on the rear of the TV.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Remote control does not function                                 | <ul style="list-style-type: none"><li>• Replace the batteries.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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

Specifications

TV system

I

Colour system

PAL  
NTSC 3.58, 4.43 (only Video In)

Channel coverage

UHF: B21-B69

Picture tube

KV-25X5U:  
Super Trinitron  
Approx. 63 cm (25 inches) (Approx. 59 cm picture measured diagonally), 100° deflection  
KV-29X5U:  
Super Trinitron  
Approx. 72 cm (29 inches) (Approx. 68 cm picture measured diagonally), 100° deflection

Inputs

- Rear Terminals
  -  1 /  21-pin Euro connector (CENELEC standard) including audio / video input, RGB input, TV audio / video output
  -  2 /  S 21-pin Euro connector (CENELEC standard) including audio / video input, S-video input, Monitor audio / video output
- Front Terminals
  -  2 video input - phono jack
  -  2 audio inputs - phono jacks
  -  S S video input - 4 pin DIN

Outputs

-  Headphones jack - minijack stereo
-  Audio outputs (variable) - phono jacks

Sound output:

2 x 10 W (RMS)

Power consumption

KV-25X5U: 139 W  
KV-29X5U: 158.5 W

Standby Power consumption

1 W

Dimensions (wxhxd)

KV-25X5U: Approx. 593 x 502 x 506 mm  
KV-29X5U: Approx. 676 x 557 x 525 mm

Weight

KV-25X5U: Approx. 33.2 kg  
KV-29X5U: Approx. 43.5 kg

Accessories supplied

RM-883 Remote Control (1)  
IEC designated batteries (2)

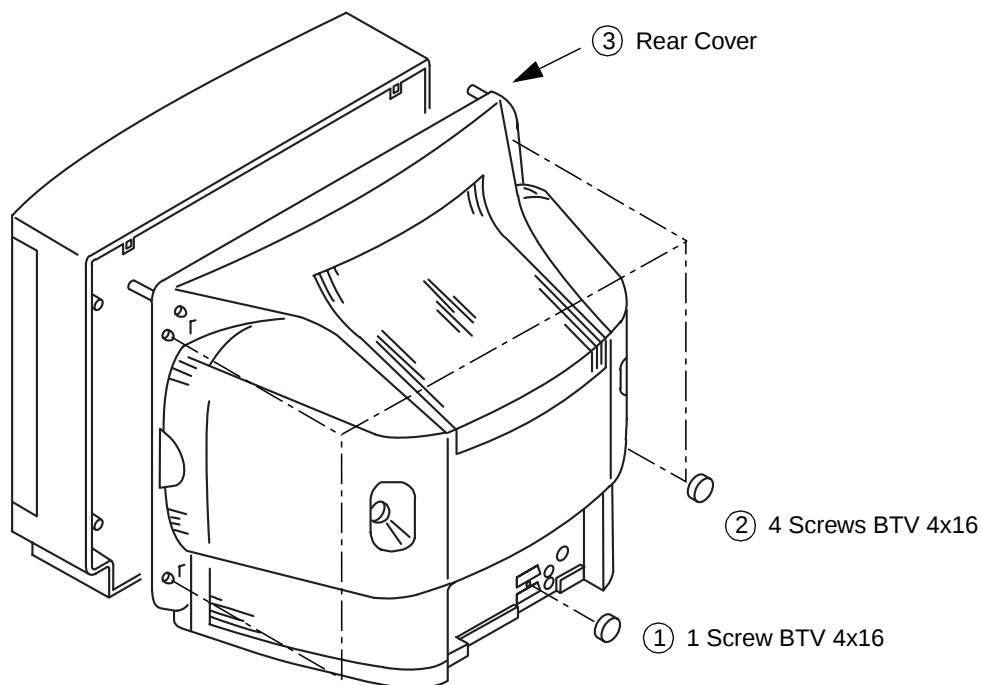
Other features

TELETEXT, Fastext

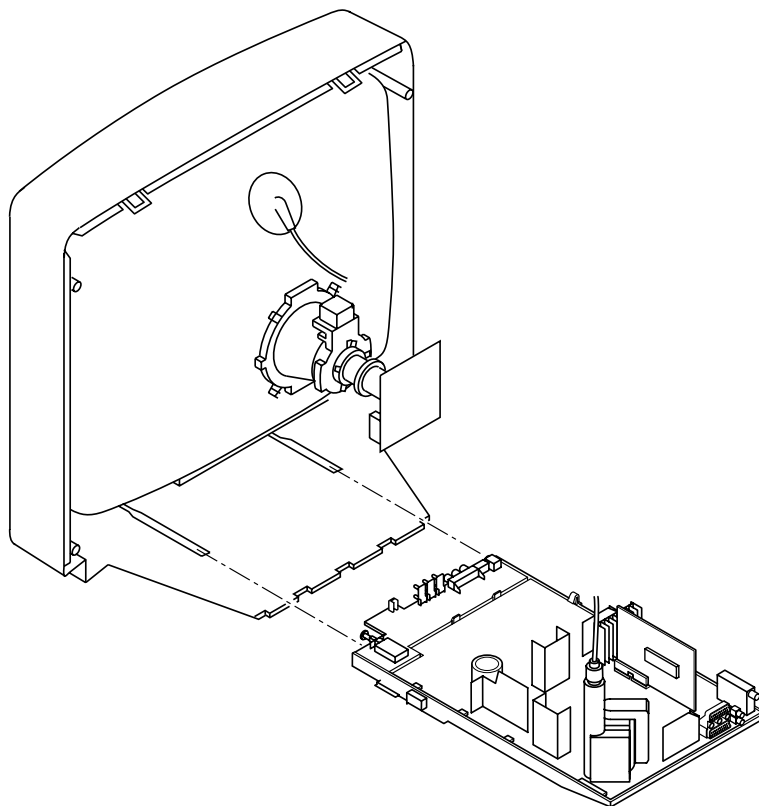
Design and specifications are subject to change without notice.

## SECTION 2 DISASSEMBLY

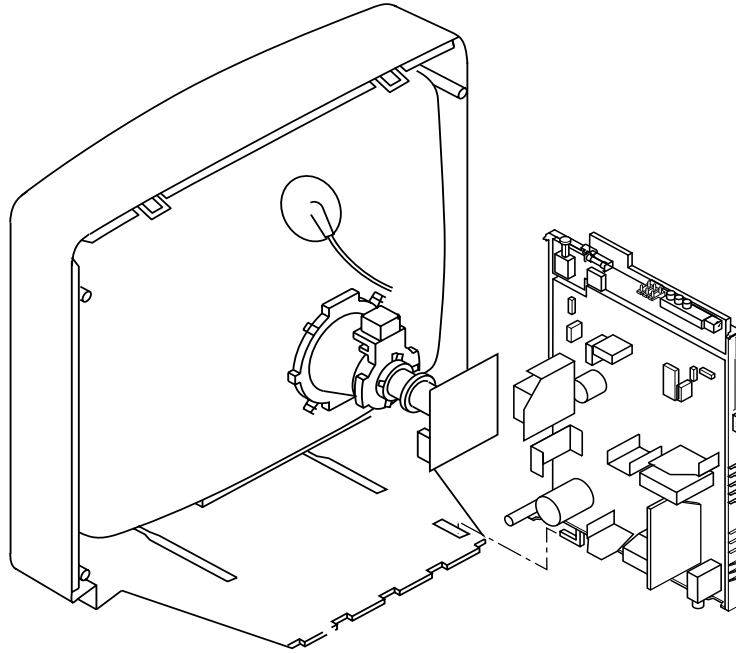
### 2-1. REAR COVER REMOVAL



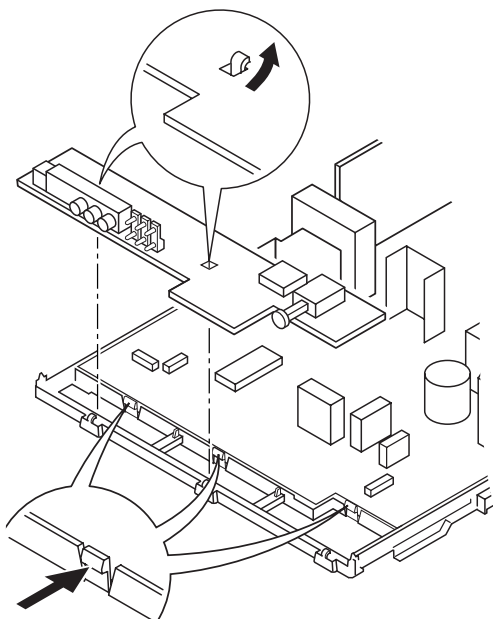
### 2-2. CHASSIS ASSY REMOVAL



## 2-3. SERVICE POSITION

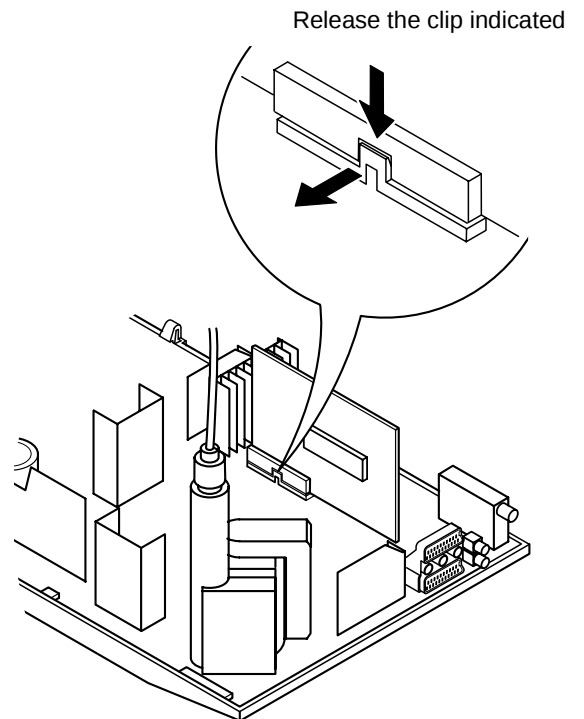


## 2-4. H1 BOARD REMOVAL



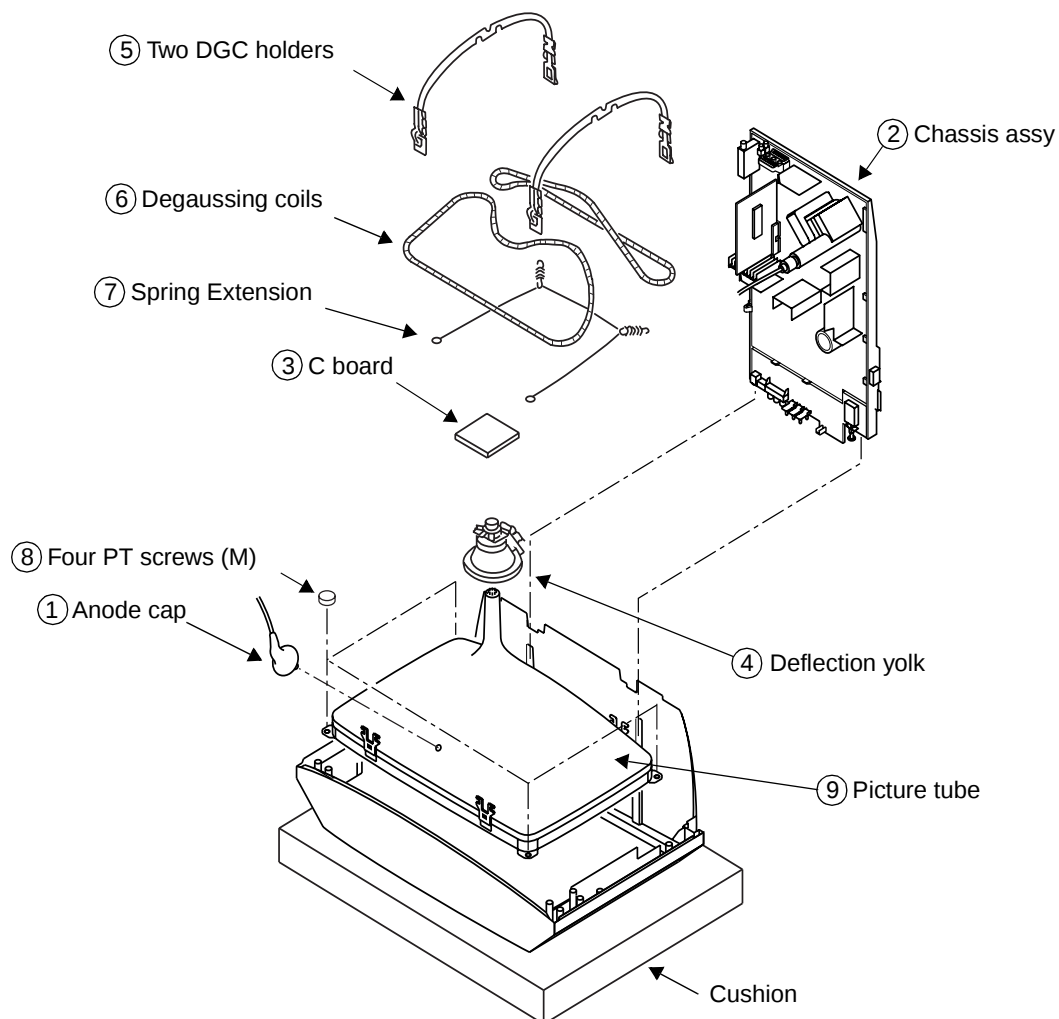
To release, push the claws in the direction of the arrow as indicated.

## 2-5. S1 BOARD REMOVAL



Release the clip indicated

## 2-6. PICTURE TUBE REMOVAL



### • REMOVAL OF ANODE-CAP

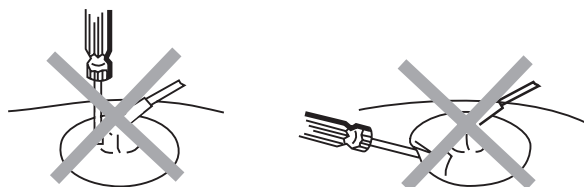
**Note :** Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

#### \* REMOVING PROCEDURES.

- 
- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①
  - ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②
  - ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③

### • HOW TO HANDLE THE ANODE-CAP

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



REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET  
BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the A Board printed wiring board, the bottom plates fitted to the main chassis bracket require to be removed.

This is performed by cutting the gates with a sharp wire cutter at the locations shown and indicated by arrows.

**Note :**There are 2 plates fitted to the main bracket and secured by 4 gates.

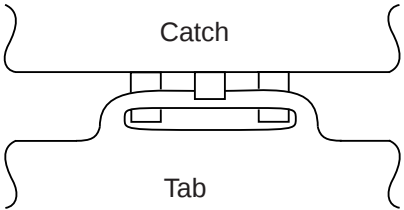
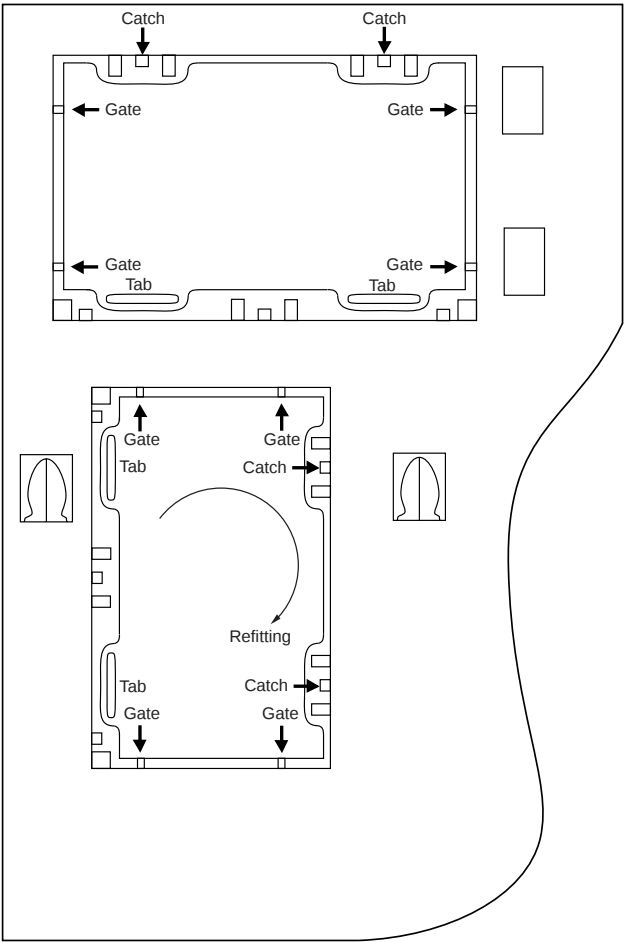
Only remove the necessary plate to gain access to the printed wiring board.

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

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from the cut position to allow the tabs to be fitted in the catch positions.



## SECTION 3 SET-UP ADJUSTMENTS

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

Contrast ..... 80% [or remote control normal]  
 Brightness ..... 50%

Carry out the following adjustments in this order :

- 3-1. Beam Landing
- 3-2. Convergence
- 3-4. Focus
- 3-3. White balance

**Note :** Test equipment required

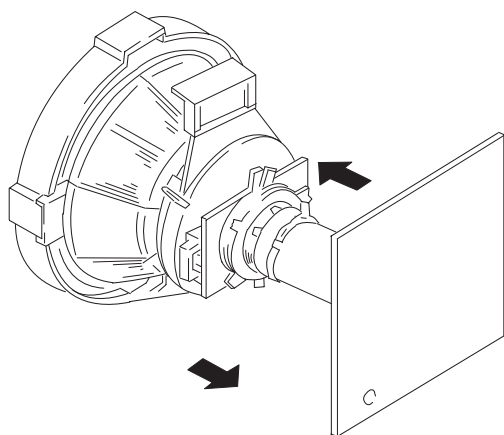
1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.
5. DC Power supply.

### Preparation:

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

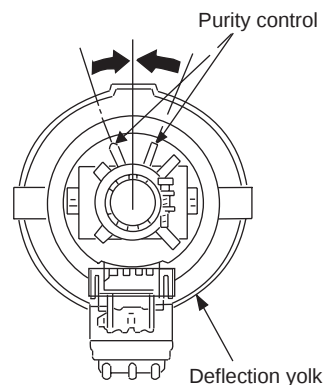
### 3-1. BEAM LANDING

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

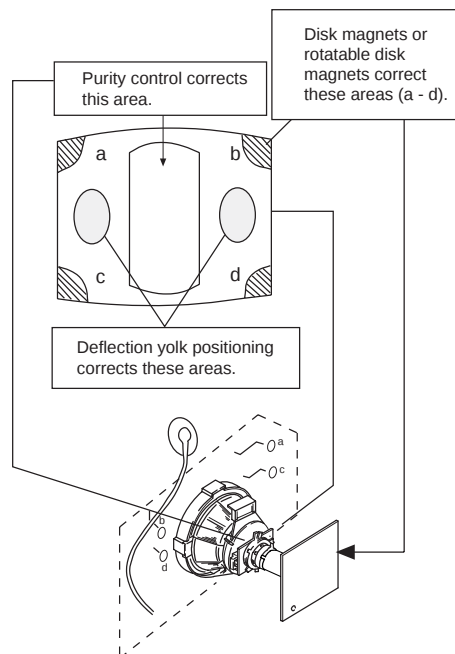
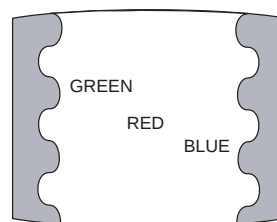


**Fig. 3-1**

**Fig. 3-2**



**Fig. 3-3**



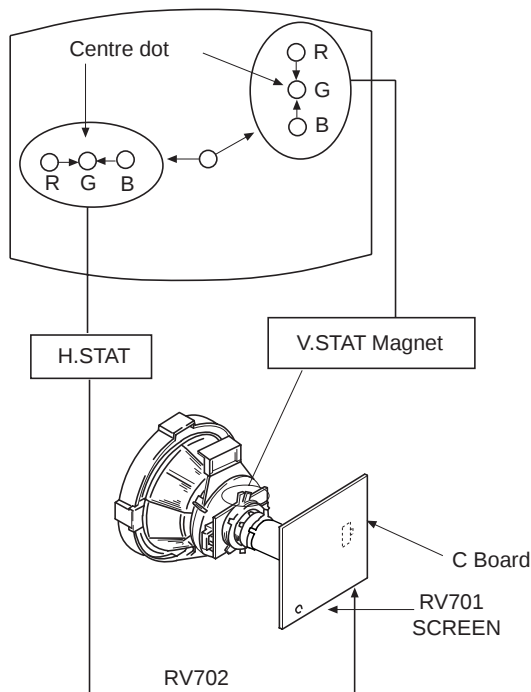
**Fig. 3-4**

### 3-2. CONVERGENCE

#### Preparation:

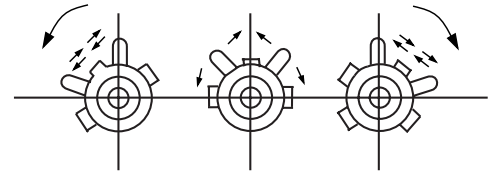
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the Brightness setting.
- Input a dot pattern from the pattern generator.

#### (1) Horizontal and vertical static convergence

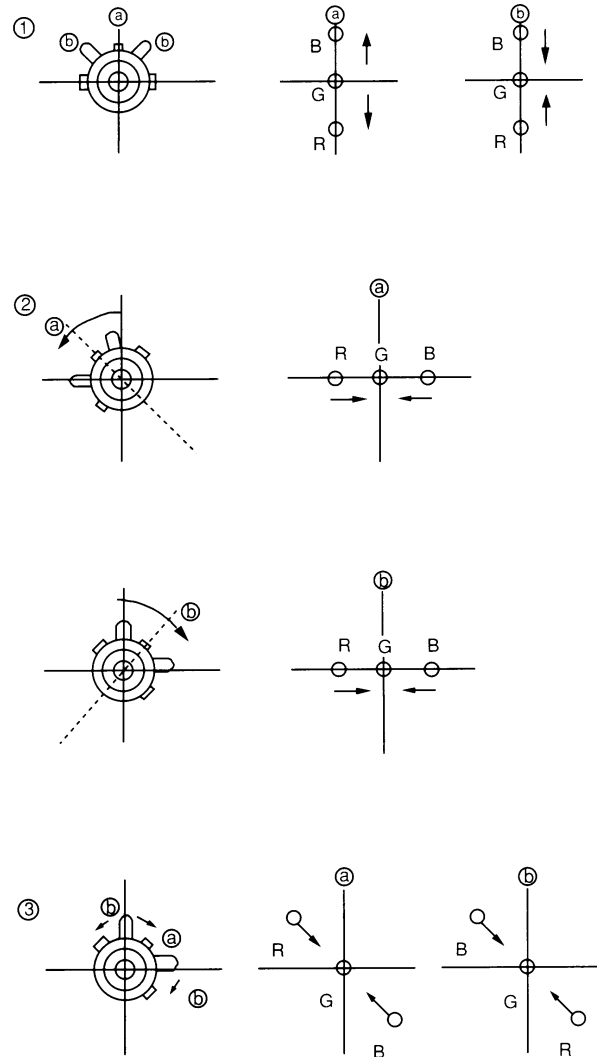


1. [Moving horizontally], adjust the H.STAT control so that the Red, Green and Blue points are on top of each other at the centre of the screen.
2. [Moving vertically], adjust the V.STAT magnet so that the Red, Green and Blue points are on top of each other at the centre of the screen.
3. If the H.STAT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

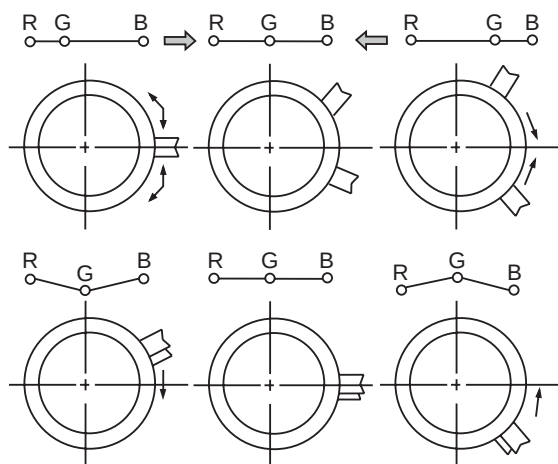
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



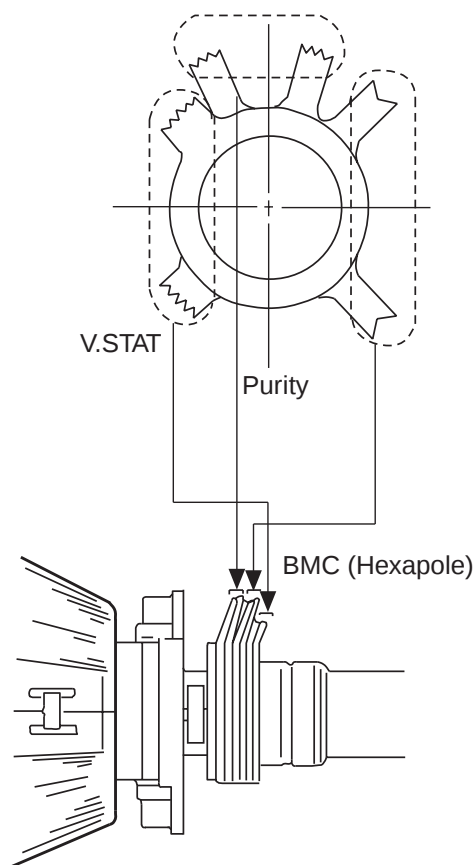
4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the Red, Green and Blue points move as indicated below.



## (2) Operation of the BMC (Hexapole) magnet.



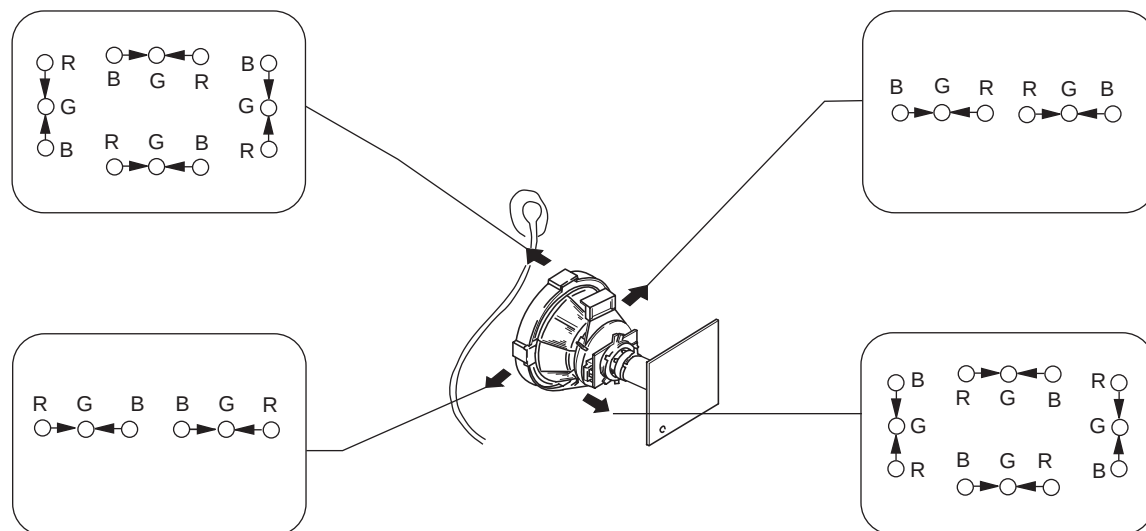
- The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment whilst tracking.  
Use the H.STAT VR to adjust the Red, Green and Blue dots so that they coincide at the centre of the screen [by moving the dots in the horizontal direction].



## (3) Dynamic convergence adjustment.

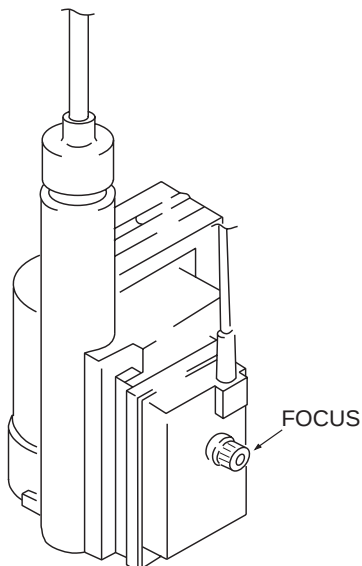
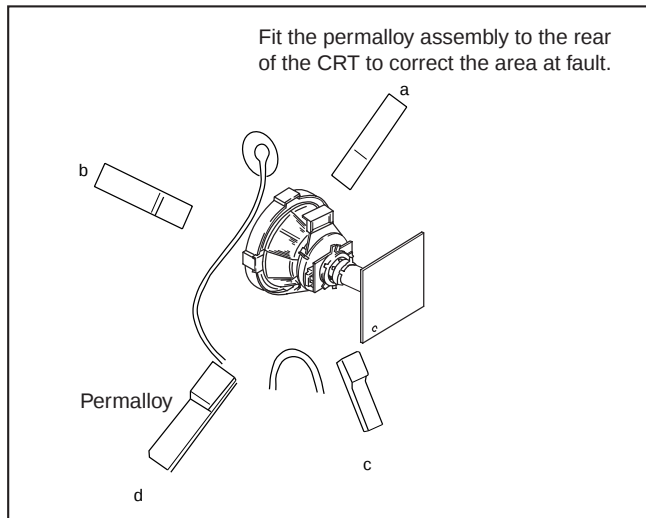
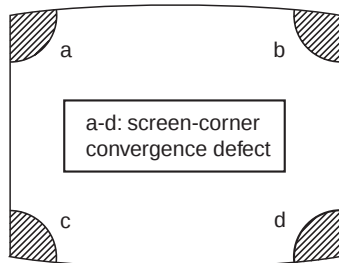
### Preparation:

- Before starting this adjustment, adjust the horizontal and vertical static convergence.
- Slightly loosen the deflection yolk screws.
- Remove the deflection yolk spacer.
- Move the deflection yolk as indicated in the figure below and optimize the convergence.
- Tighten the deflection yolk screws.
- Re-install the deflection yolk spacer.



**(4) Screen corner convergence.**

- If you are unable to adjust the corner convergence properly, this can be corrected by the use of permalloy assemblies.

**3-3. Screen [G2], White balance****G2 Setting**

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 170Vdc from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control [RV701 SCREEN] located on the C Board to the point just before the flyback return lines disappear.

**White balance adjustment**

1. Input a 'PAL' all-white signal from the pattern generator.
2. Enter into the Service Mode.
3. Enter into the 'Picture' service menu.
4. Select the 'Green drive' and adjust so that the White Balance becomes optimum.
5. Select the 'Blue drive' and adjust so that the White Balance becomes optimum.
6. Set the Picture to MIN.
7. Set the 'R-cut-off' to 07.
8. Adjust the 'G-cut-off', and the 'B-cut-off' so that the White Balance becomes optimum.
10. Press the ☐ button to return to TV operation.

**PICTURE**

|                |     |
|----------------|-----|
| R - Drive      | Adj |
| G - Drive      | Adj |
| B - Drive      | Adj |
| R - cut - off  | Adj |
| G - cut - off  | Adj |
| B - cut - off  | Adj |
| ID - start     | 02  |
| ID - stop      | 01  |
| ID - level     | 01  |
| Bellfo         | Adj |
| Sub Colour     | Adj |
| Sub Brightness | Adj |

**3-4. FOCUS**

1. Input a Phillips colour pattern
2. Set the picture settings to normal.
3. Adjust the focus control located on the Flyback transformer to bring the centre of the screen into focus.

**Note** :Bring only the centre area of the screen into focus, switch to an all-white pattern and confirm that the magenta ring is hardly noticed. To obtain optimum focus balance the focus setting between optimum screen centre focus and a reduced magenta ring level.

## SECTION 4

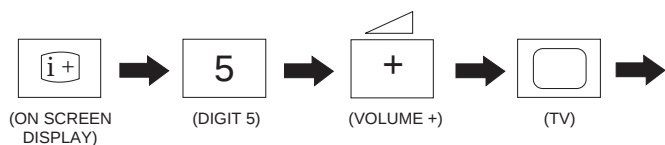
### CIRCUIT ADJUSTMENTS

#### 4-1. ELECTRICAL ADJUSTMENTS

Service adjustments to this model can be performed using the supplied Remote Commander RM-883.

##### HOW TO ENTER INTO SERVICE MODE

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



- 'TT--' will appear in the upper right corner of the screen. Other status information will also be displayed.
3. Press 'MENU' on the remote commander to obtain the following menu on the screen.

| TEST MENU  |
|------------|
| > Picture  |
| Geometry   |
| Sound      |
| TV Status  |
| AGC Adjust |
| Technical  |

4. Move to the corresponding adjustment item using the 'Green' [up] or 'Blue' [down] buttons on the Remote Commander.
5. Press the 'Yellow' button to enter into the required menu item.
6. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

**Note :** The data shown in the 'TV STATUS' table is dependant on destination and country.

##### PICTURE

|                |     |
|----------------|-----|
| R - Drive      | Adj |
| G - Drive      | Adj |
| B - Drive      | Adj |
| R - cut - off  | Adj |
| G - cut - off  | Adj |
| B - cut - off  | Adj |
| ID - start     | 02  |
| ID - stop      | 01  |
| ID - level     | 01  |
| Bellfo         | Adj |
| Sub Colour     | Adj |
| Sub Brightness | Adj |

##### GEOMETRY

|              |     |
|--------------|-----|
| V centre     | Adj |
| V size       | Adj |
| V Lin        | Adj |
| S Corr       | Adj |
| H Cent       | Adj |
| H Size       | Adj |
| Pin Amp      | Adj |
| Corner Pin   | Adj |
| Pin Phase    | Adj |
| V Bow        | Adj |
| V Angle      | Adj |
| Upper V Lin  | Adj |
| Lower V Lin  | Adj |
| Left HBLK    | 07  |
| Right HBLK   | 07  |
| CD Mode (AV) | 01  |

##### SOUND

|                   |                  |
|-------------------|------------------|
| Nicam Error Lower | 20               |
| Nicam Error Upper | 80               |
| Nicam Error Rate  | xx [Status only] |
| AGC Gain Level    | xx [Status only] |

##### TV STATUS

|               |                 |
|---------------|-----------------|
| Destination   | A/L/E/U/D/B/K/R |
| Text Language | East/West       |

## TECHNICAL

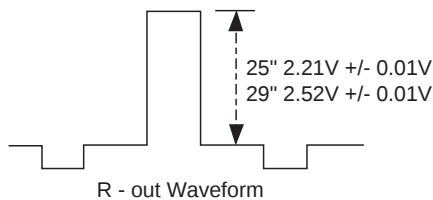
|                |    |
|----------------|----|
| GD - Secam     | 30 |
| BD - Secam     | 31 |
| RC - Secam     | 11 |
| GC - Secam     | 19 |
| BC - Secam     | 10 |
| GD - Sports    | 30 |
| BD - Sports    | 36 |
| RC - Sports    | 14 |
| GC - Sports    | 15 |
| BC - Sports    | 17 |
| Y - Delay (AV) | 07 |

## SUB BRIGHTNESS ADJUSTMENT

1. Input a Phillips colour pattern.
2. Press 'TEST' 'TEST' 13 on the Remote Commander.
3. Adjust the 'Sub-Brightness' data so that there is barely a difference between the 0 IRE and 10 IRE signal levels.

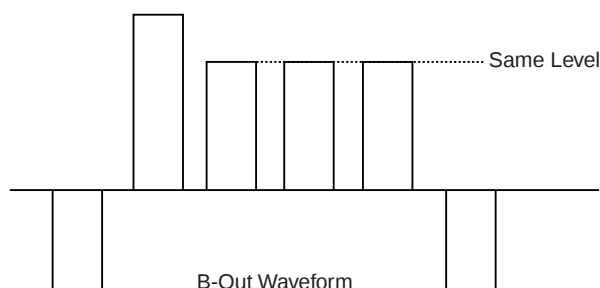
## SUB CONTRAST ADJUSTMENT

1. Input a video signal that contains a small 100% white area on a black background
2. Set the picture control to maximum. ['TT01']
3. Connect an oscilloscope to Pin 1 of CN504 [A Board].
4. Enter into the 'Picture' service menu.
5. Adjust the 'R - Drive' data to obtain the following waveform.



## SUB COLOUR ADJUSTMENT

1. Receive a PAL colour bar signal.
2. Connect an oscilloscope to Pin 3 of CN504 [A Board].
3. Enter into the 'Picture' service menu.
4. Adjust the 'Sub Colour' data so that the Cyan, Magenta and Blue colour bars are of equal levels as indicated below.



**Note:** Ensure that no signal is applied to the Antenna socket while carrying out the following IF adjustments.

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

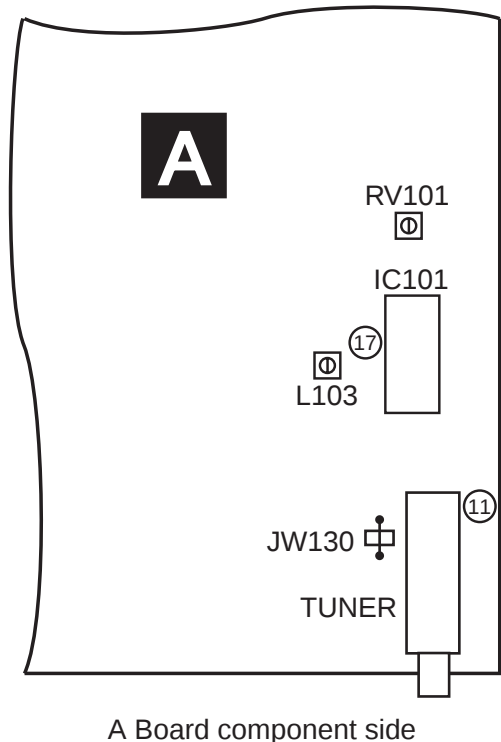
1. Input a 38.9Mhz carrier signal at 100dBuV to Pin 11 [IF output] of the tuner [TU101].
2. Measure the voltage at Pin 17 of [IC101].
3. Adjust L103 [A Board] to obtain a voltage of 2.5V +/- 0.3V.

## SYSTEM L BAND 1 I.F ADJUSTMENT

1. Input a 34.0MHz carrier signal at 100dBuV to Pin 11 [IF output] of the tuner [TU101].
2. Select 'system L' + C00 [channel 00].
3. Measure the voltage at Pin 17 [IC101].
4. Adjust RV101 [A Board] to obtain a voltage of 2.5V +/- 0.3V.

## TUNER AGC ADJUSTMENT

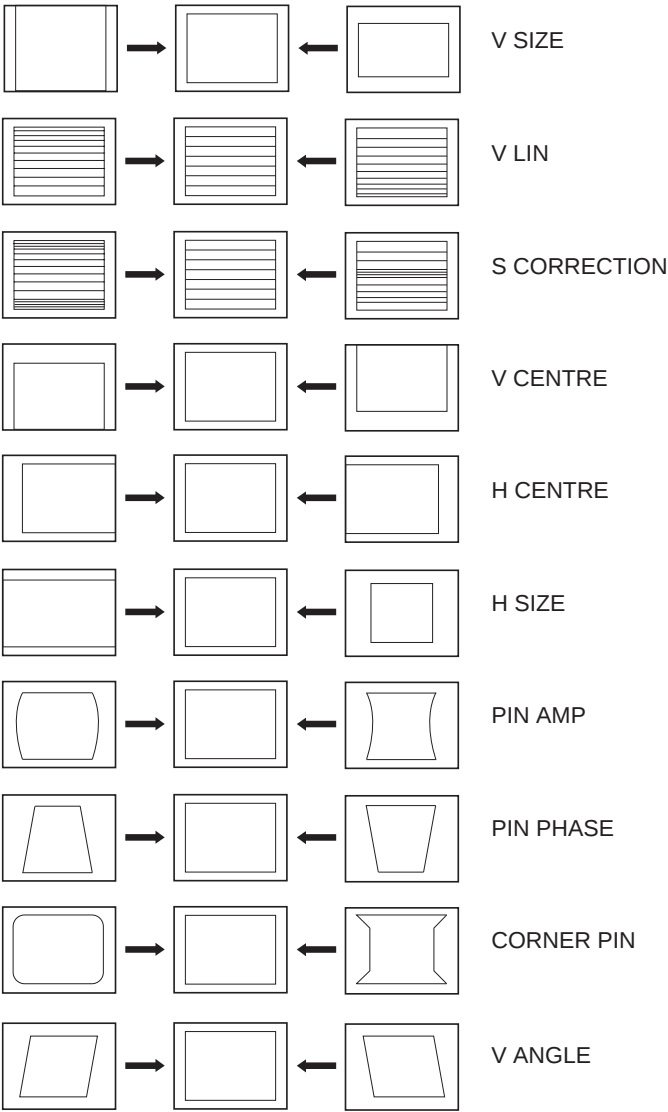
1. Receive a signal of 65dBuV / 75 ohm terminated, via the tuner antenna socket.
2. Connect a voltmeter to JW130 [A Board].
3. Enter into the 'Test Menu'.
3. Select the 'AGC Adjust' menu item.
4. Adjust the data using the Yellow and Green buttons on the Remote Commander to obtain a voltage of 3.0V +/- 0.2V.



DEFLECTION SYSTEM ADJUSTMENT

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

| GEOMETRY     |     |  |
|--------------|-----|--|
| V centre     | Adj |  |
| V size       | Adj |  |
| V Lin        | Adj |  |
| S Corr       | Adj |  |
| H Cent       | Adj |  |
| H Size       | Adj |  |
| Pin Amp      | Adj |  |
| Corner Pin   | Adj |  |
| Pin Phase    | Adj |  |
| V Bow        | Adj |  |
| V Angle      | Adj |  |
| Upper V Lin  | Adj |  |
| Lower V Lin  | Adj |  |
| Left HBLK    | 07  |  |
| Right HBLK   | 07  |  |
| CD Mode (AV) | 01  |  |



## 4-2. TEST MODE 2:

Is available by pressing 'TEST' button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test mode 2, press 0 twice, or switch the TV into stand-by mode, or press the ☐ TV button on the remote commander.

|    |                                           |
|----|-------------------------------------------|
| 00 | Cancel Test mode                          |
| 01 | Picture maximum                           |
| 02 | Picture minimum                           |
| 03 | Volume 35%                                |
| 04 | Volume 50%                                |
| 05 | Volume 65%                                |
| 06 | Volume 80%                                |
| 07 | Ageing mode On/Off                        |
| 08 | Set shipping conditions                   |
| 09 | Display TV Status                         |
| 10 | No function                               |
| 11 | Sub Picture Adjustment                    |
| 12 | Sub Colour Adjustment                     |
| 13 | Sub Brightness Adjustment                 |
| 14 | Text H position Adjustment                |
| 15 | Rotation test                             |
| 16 | Picture level 50%                         |
| 17 | Audio mute ON                             |
| 18 | Disable Blanking                          |
| 19 | No function                               |
| 20 | No function                               |
| 21 | Destination A                             |
| 22 | Destination L                             |
| 23 | Destination E                             |
| 24 | Destination U                             |
| 25 | Destination D                             |
| 26 | Destination B                             |
| 27 | Destination K                             |
| 28 | Destination R                             |
| 29 | No function                               |
| 30 | No function                               |
| 31 | Audio shutoff Disable/Enable              |
| 32 | RGB priority Disable/Enable               |
| 33 | Rotation On/OFF                           |
| 34 | Text language East/West                   |
| 35 | Wide CRT/4:3 CRT                          |
| 36 | VM ON/OFF test                            |
| 37 | No function                               |
| 38 | No function                               |
| 39 | No function                               |
| 40 | No function                               |
| 41 | Re-initialize the NVM [Only when Prog=59] |

|         |                                                     |
|---------|-----------------------------------------------------|
| 42      | Re-initialise geometry settings [Only when Prog=59] |
| 43      | No function                                         |
| 44      | No function                                         |
| 45      | No function                                         |
| 46      | No function                                         |
| 47      | No function                                         |
| 48      | Set NVM as NON Virgin [Only when Prog=59]           |
| 49      | Set NVM as Virgin [Only when Prog=59]               |
| 50      | No function                                         |
| 51      | No function                                         |
| 52      | No function                                         |
| 53      | No function                                         |
| 54      | No function                                         |
| 55      | No function                                         |
| 56      | No function                                         |
| 57      | No function                                         |
| 58      | No function                                         |
| 59      | No function                                         |
| 60      | No function                                         |
| 61      | Auto AGC Adjust                                     |
| 62      | Alternative Dest B Autotuning                       |
| 63      | Enable/Disable Y/C input                            |
| 64      | Signal Quality Check for Auto Tune                  |
| 65      | Signal Quality NOT Checked for Auto Tune            |
| 66      | No function                                         |
| 67      | Manual AGC Adjust                                   |
| 68 -100 | No function                                         |

### 4-3. FE-1 SELF DIAGNOSTIC SOFTWARE

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

**Table 1**

| ERROR                                                    | LED ERROR COUNT |
|----------------------------------------------------------|-----------------|
| No error                                                 | 00              |
| Not allowed (may be confused with Sircs response flash!) | 01              |
| Protection circuit trip < ANY TIME >                     | 02              |
| Reserved                                                 | 03              |
| No vertical sync                                         | 04              |
| AKB                                                      | 05              |
| IIC bus clock and/or data lines low at Power ON          | 06              |
| NVM no IIC bus acknowledge at Power ON                   | 07              |
| Jungle controller no IIC acknowledge at Power ON         | 08              |
| Tuner no acknowledge at Power ON                         | 09              |
| Sound processor no acknowledge at Power ON               | 10              |

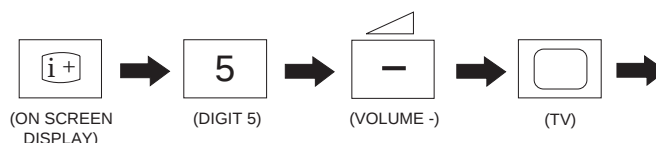
#### Flash Timing Example : e.g. error number 3

StBy LED



#### How to enter into Table 2

1. Turn on the main power switch of the TV set and enter into the 'Standby Mode'.
2. Press the following sequence of buttons on the Remote Commander.



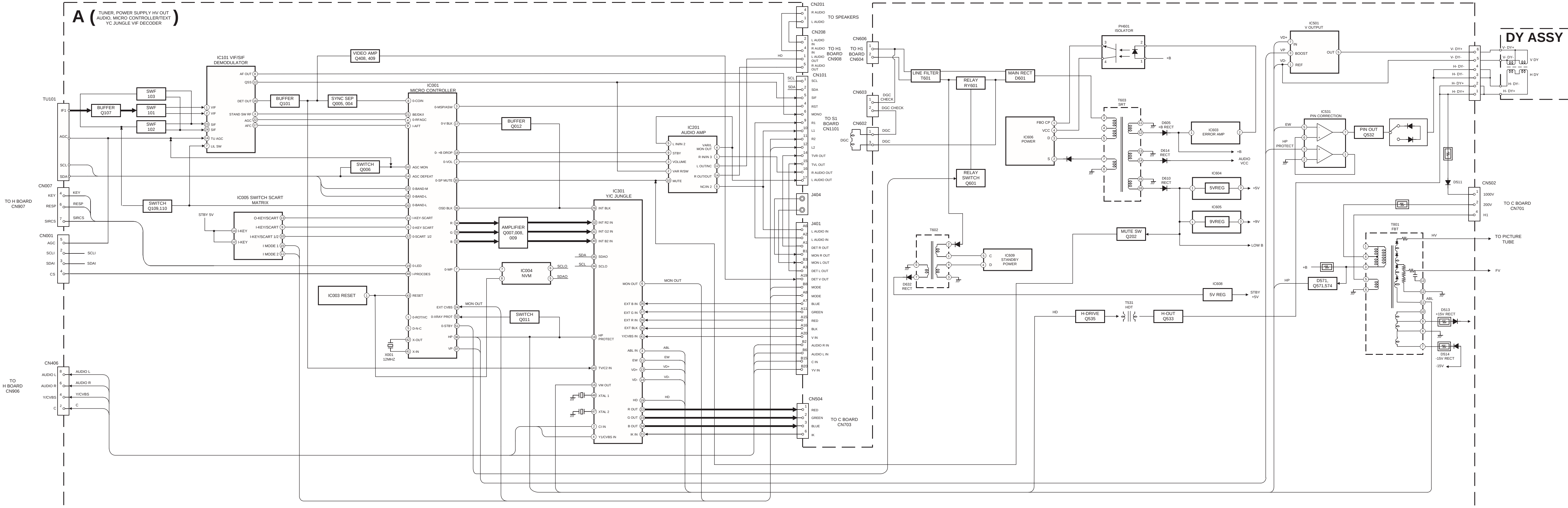
3. The following table will be displayed indicating the error count.

**Table 2**

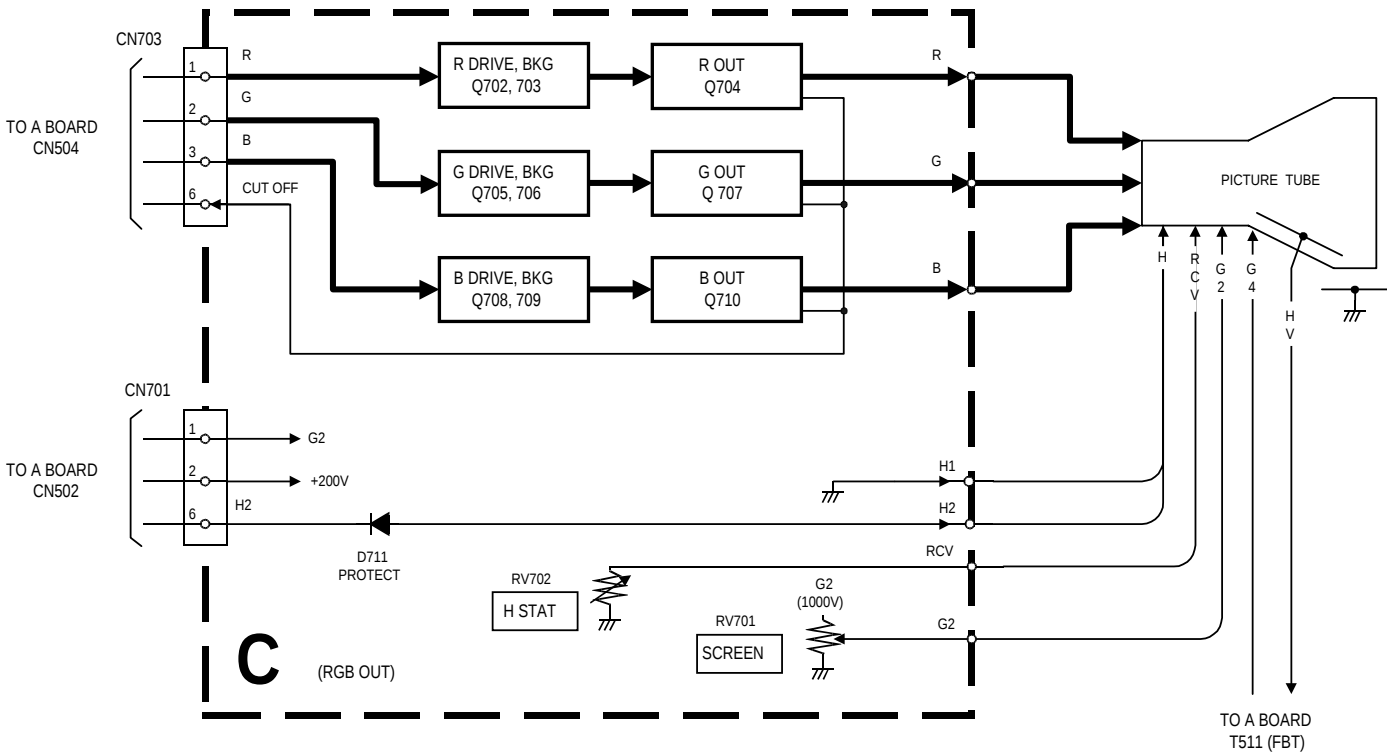
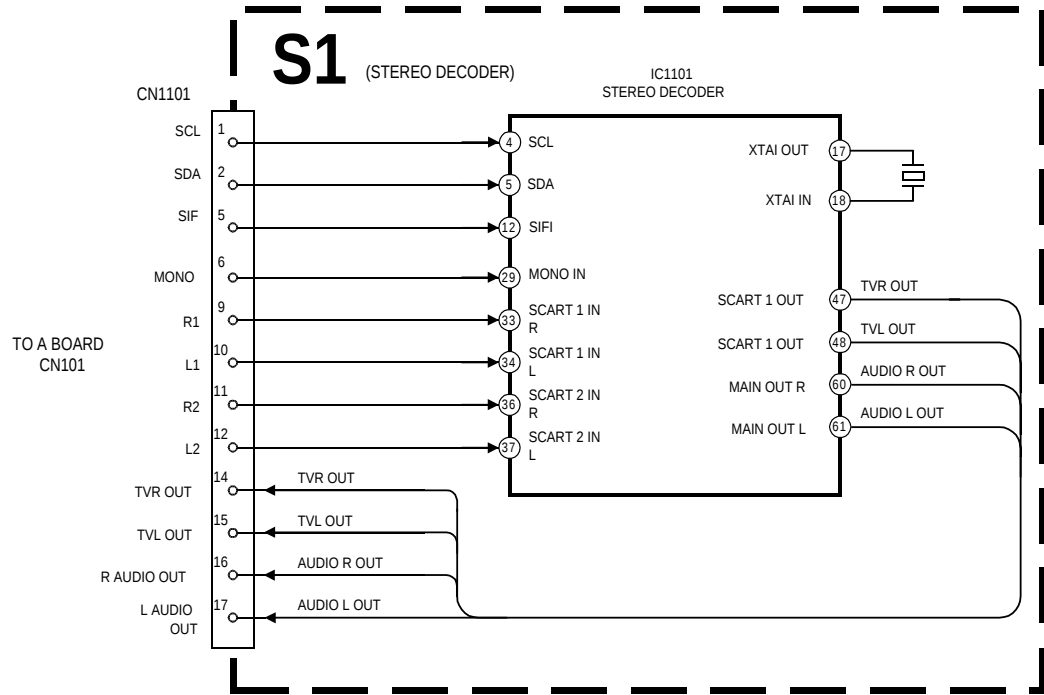
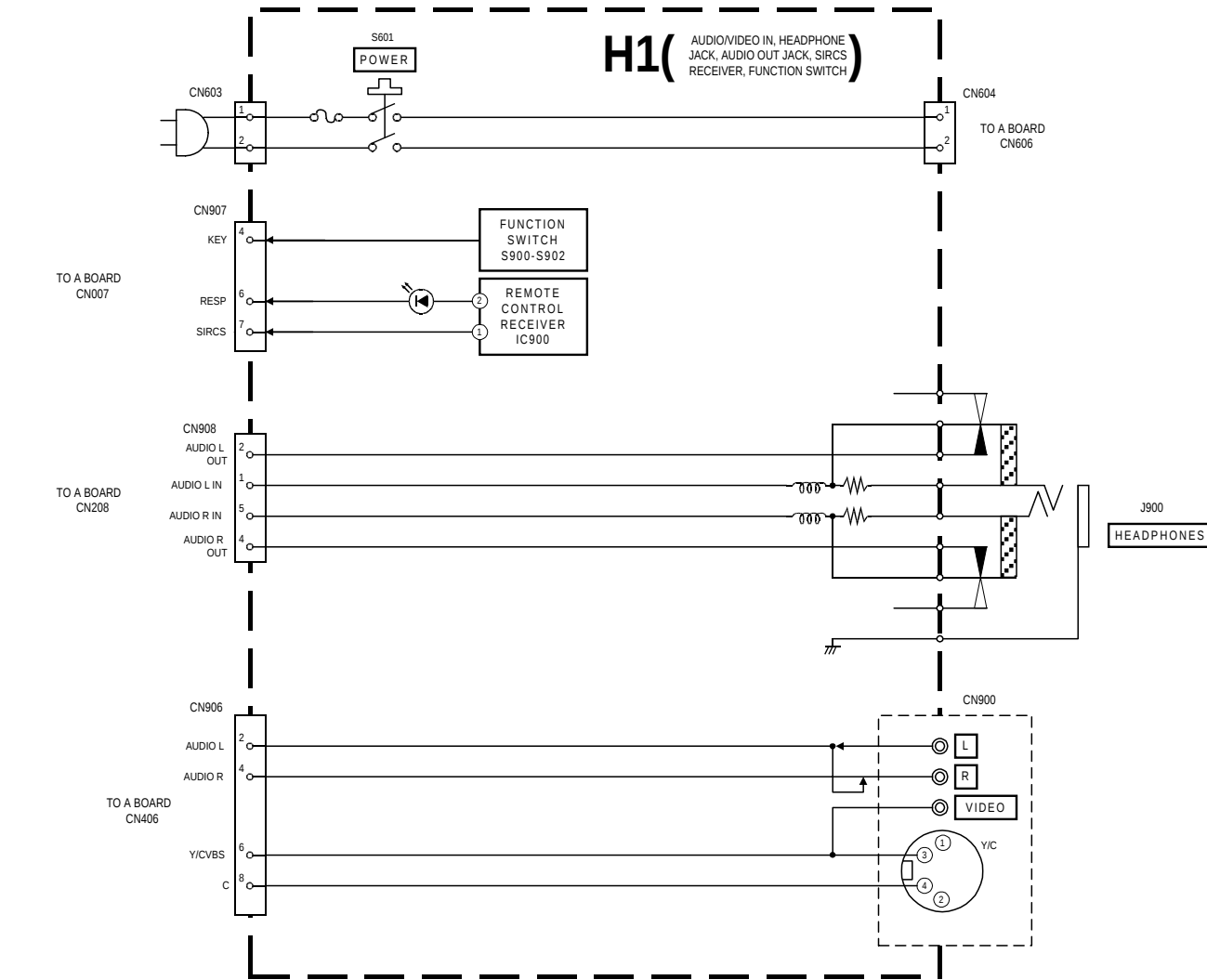
| Error | Times |
|-------|-------|
| 2     | -     |
| 3     | -     |
| 4     | -     |
| 5     | -     |
| 6     | -     |
| 7     | -     |
| 8     | -     |
| 9     | -     |
| 10    | -     |

**Note:** To clear the error count data press '80' on the Remote commander.

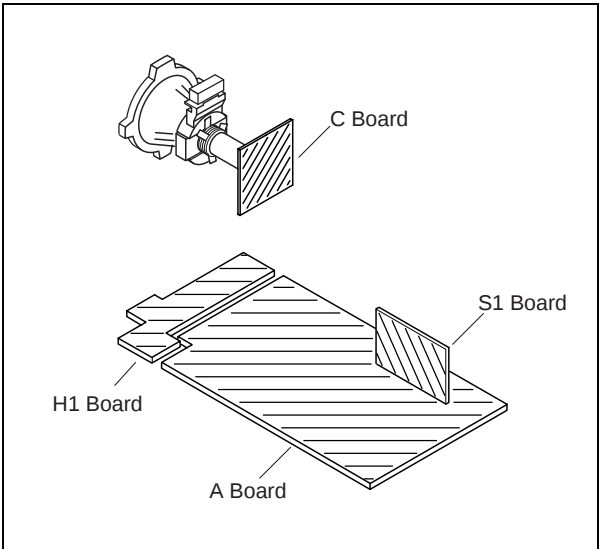
5-1 BLOCK DIAGRAMS (1)



5-1 BLOCK DIAGRAMS (2)



5-2. CIRCUIT BOARD LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note :**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.
  - pF :  $\mu\text{F}$  50WV or less are not indicated except for electrolytic types.
  - Indication of resistance, which does not have one for rating electrical power, is as follows.

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

- Chip resistors are 1/10W
- All resistors are in ohms.
- k = 1000 ohms, M = 1000,000 ohms

- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation or adjustment for repair.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital multimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerances.

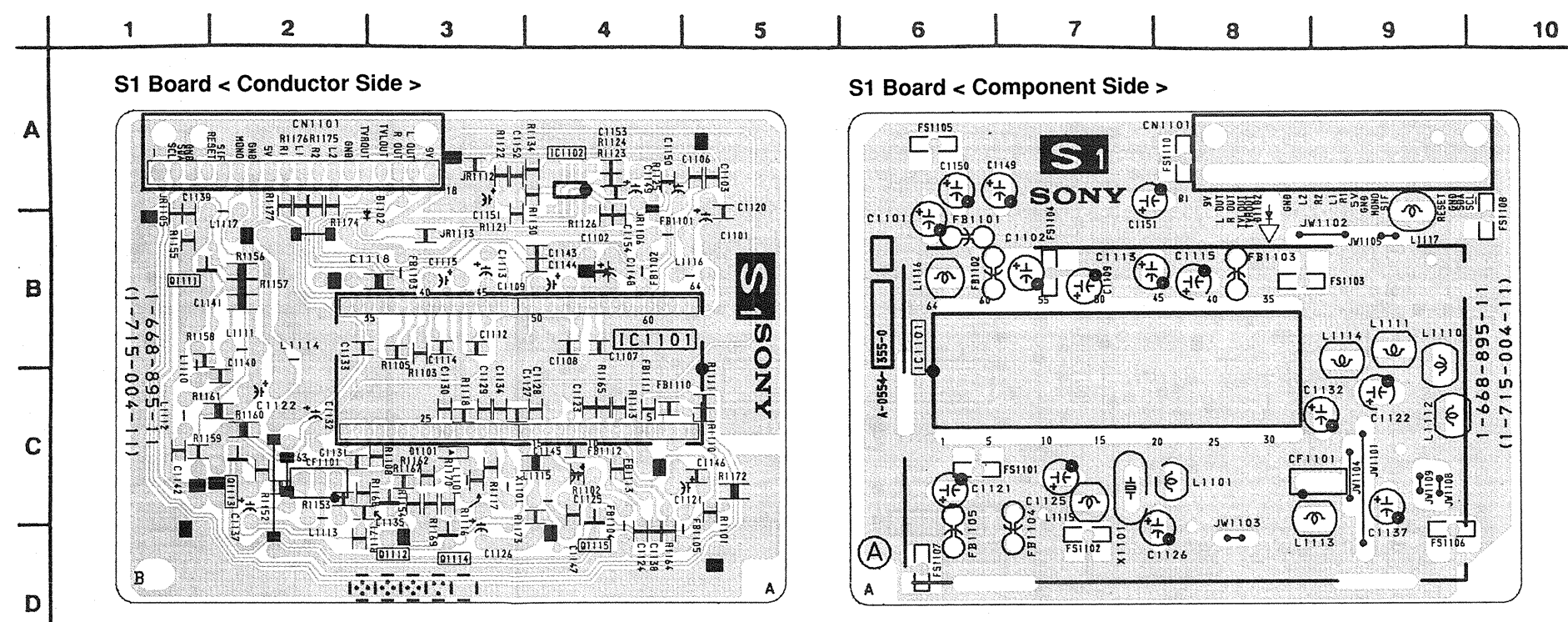
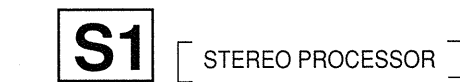
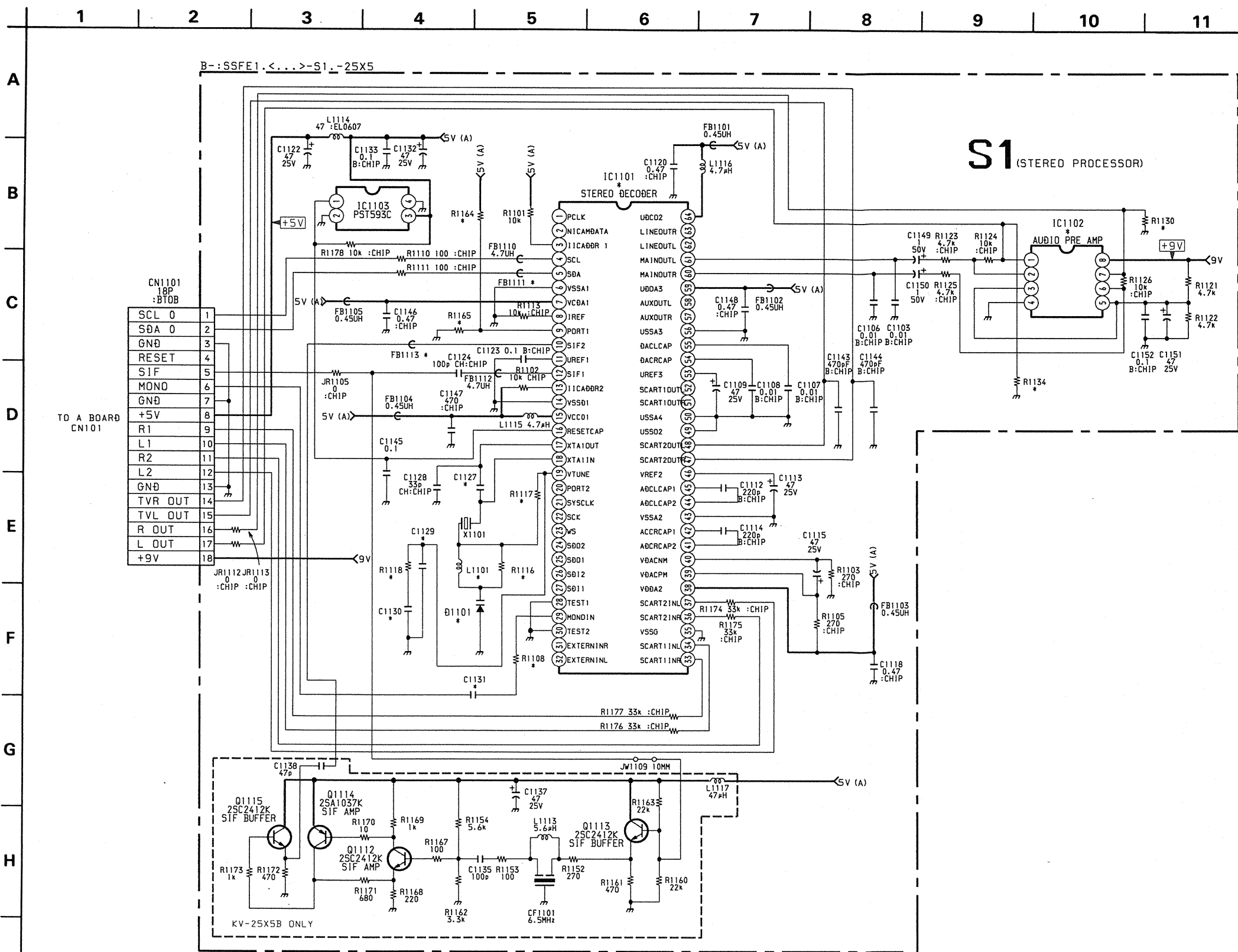
- : B + bus.
- : B - bus.
- : RF signal path.
- : earth - ground.
- : earth - chassis.

Reference Information

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

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

**Note:** Les composants identifiés par une trame et par une marque sont d'une importance critique pour la securite. Ne les remplacer que par des pieces de numero specifique.



### S1 BOARD IC VOLTAGE TABLE

| IC Voltage Table |         |             |
|------------------|---------|-------------|
| Ref No           | Pin No  | Voltage (V) |
| IC1101           | 4       | 3.4         |
|                  | 5       | 3.2         |
|                  | 7       | 4.8         |
|                  | 8       | 2.3         |
|                  | 9       | 4.8         |
|                  | 10 - 12 | 2.3         |
|                  | 13      | 4.8         |
|                  | 15      | 4.8         |
|                  | 16      | 4.8         |
|                  | 17      | 2.6         |
|                  | 18      | 3.5         |
|                  | 19      | 4.0         |
|                  | 33 - 34 | 2.4         |
|                  | 36 - 37 | 2.4         |
|                  | 38 - 39 | 4.8         |
|                  | 41 - 42 | 2.4         |
|                  | 44 - 48 | 2.4         |
|                  | 53 - 55 | 2.4         |
| IC1102           | 59      | 4.8         |
|                  | 60 - 61 | 2.4         |
|                  | 64      | 4.8         |
|                  | 1       | 4.5         |
|                  | 2       | 4.1         |
|                  | 3       | 4.5         |
|                  | 6       | 4.3         |
|                  | 7       | 3.5         |
| 8                | 9.0     |             |

### S1 BOARD TRANSISTOR VOLTAGE TABLE

| Ref No | (B)<br>Base | (C)<br>Collector | (E)<br>Emitter |
|--------|-------------|------------------|----------------|
| Q1111  | 2.0         | 4.1              | 1.3            |
| Q1112  | 1.5         | 3.5              | 0.9            |
| Q1113  | 1.9         | 4.1              | 1.3            |
| Q1114  | 3.5         | 3.3              | 4.1            |
| Q1115  | 3.3         | 4.1              | 2.7            |

**S1 BOARD \* MARK**

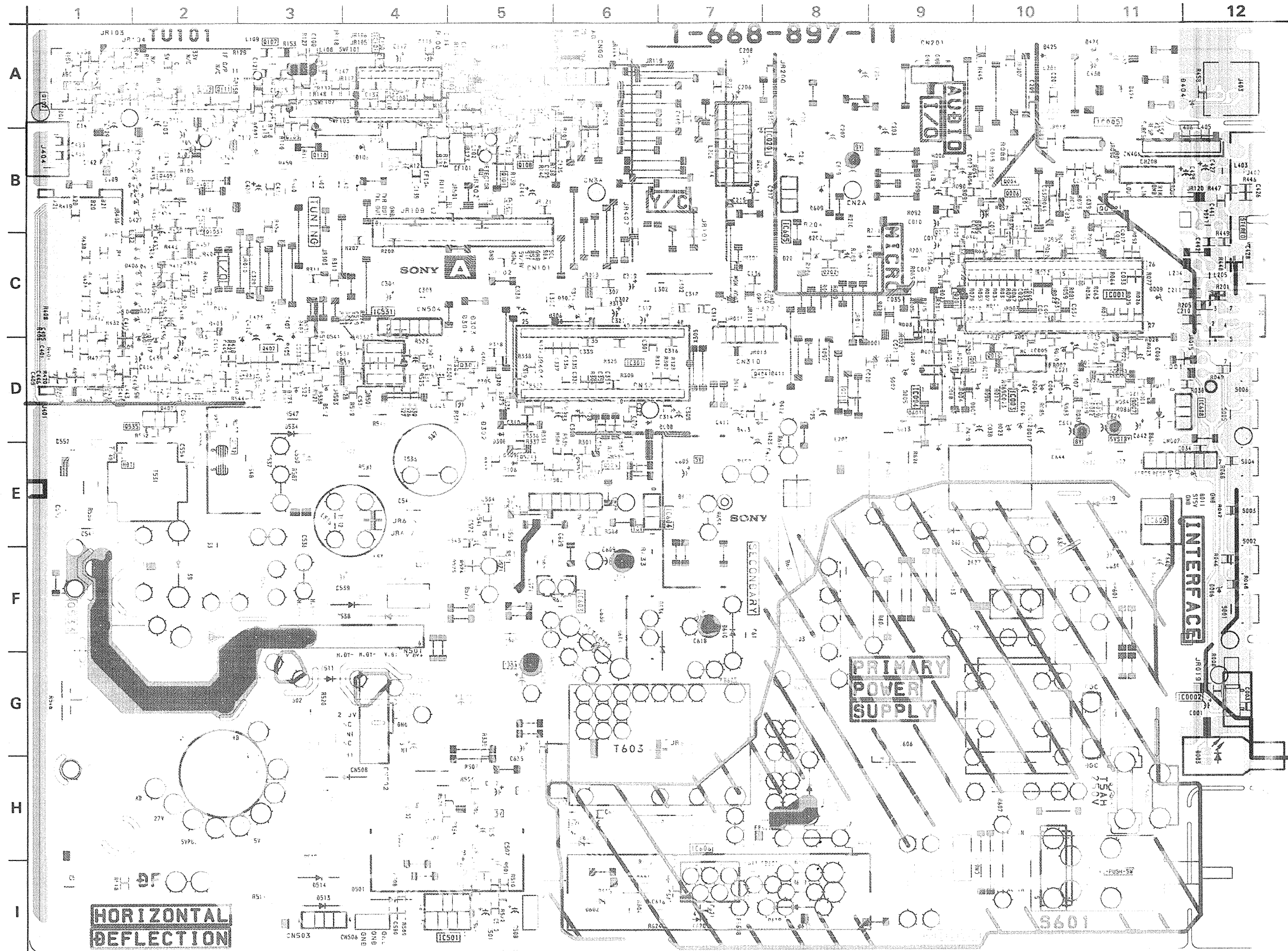
| Ref    | 25X5A   | 25X5B     | 25X5D   | 25X5E     | 25X5K     | 25X5L     | 25X5R   | 25X5U     |
|--------|---------|-----------|---------|-----------|-----------|-----------|---------|-----------|
| C1127  | 22PF    | 33PF      | 22PF    | 33PF      | 33PF      | 33PF      | 22PF    | 33PF      |
| C1129  | -       | 0.033MF   | -       | 0.033MF   | 0.033MF   | 0.033MF   | -       | 0.033MF   |
| C1130  | -       | 0.33MF    | -       | 0.33MF    | 0.33MF    | 0.33MF    | -       | 0.33MF    |
| C1131  | 0.47MF  | 0.47MF    | 0.47MF  | -         | -         | -         | 0.47MF  | -         |
| D1101  | 0       | BB135     | 0       | BB135     | BB135     | BB135     | 0       | BB135     |
| FB1111 | 6.8UH   | 4.7UH     | 6.8UH   | 4.7UH     | 4.7UH     | 4.7UH     | 6.8UH   | 4.7UH     |
| FB1113 | -       | 4.7UH     | -       | -         | -         | -         | -       | -         |
| IC1101 | TDA9870 | TDA9875P  | TDA9870 | TDA9875P  | TDA9875P  | TDA9875P  | TDA9870 | TDA9875P  |
| IC1102 | LM358D  | UPC4558G2 | LM358D  | UPC4558G2 | UPC4558G2 | UPC4558G2 | LM358D  | UPC4558G2 |
| L1101  | -       | 2.7UH     | -       | 2.7UH     | 2.7UH     | 2.7UH     | -       | 2.7UH     |
| L1113  | -       | 5.6UH     | -       | -         | -         | -         | -       | -         |
| L1117  | -       | 47UH      | -       | -         | -         | -         | -       | -         |
| R1108  | 2.2K    | 2.2K      | 2.2K    | -         | -         | -         | 2.2K    | -         |
| R1116  | 0       | 39K       | 0       | 39K       | 39K       | 39K       | 0       | 39K       |
| R1117  | -       | 10K       | -       | 10K       | 10K       | 10K       | -       | 10K       |
| R1118  | -       | 20K       | -       | 20K       | 20K       | 20K       | -       | 20K       |
| R1130  | 10K     | -         | 10K     | -         | -         | -         | 10K     | -         |
| R1134  | 10K     | -         | 10K     | -         | -         | -         | 10K     | -         |
| R1164  | -       | 10K       | -       | 10K       | 10K       | 10K       | -       | 10K       |
| R1165  | 0       | -         | 0       | -         | -         | -         | 0       | -         |

A BOARD

| IC         |        | DIODE |        | D539 | F - 2  |
|------------|--------|-------|--------|------|--------|
| IC001      | C - 11 | D001  | D - 8  | D571 | F - 5  |
| IC003      | D - 10 | D002  | D - 8  | D601 | G - 8  |
| IC004      | D - 9  | D004  | D - 10 | D602 | I - 6  |
| IC005      | B - 11 | D007  | D - 9  | D603 | H - 6  |
| IC101      | A - 4  | D008  | D - 7  | D605 | G - 6  |
| IC201      | B - 7  | D009  | C - 11 | D608 | H - 8  |
| IC301      | D - 6  | D010  | D - 10 | D610 | F - 7  |
| IC501      | I - 4  | D011  | E - 12 | D613 | E - 9  |
| IC531      | C - 4  | D012  | D - 11 | D614 | G - 6  |
| IC603      | F - 6  | D014  | D - 11 | D619 | I - 8  |
| IC604      | E - 6  | D015  | D - 11 | D621 | F - 10 |
| IC605      | C - 8  | D017  | E - 10 | D626 | F - 9  |
| IC606      | I - 7  | D018  | D - 7  | D627 | F - 9  |
| IC608      | D - 12 | D023  | E - 10 | D628 | E - 10 |
| IC609      | E - 11 | D101  | B - 2  | D629 | E - 11 |
| TRANSISTOR |        | D104  | A - 3  | D631 | F - 11 |
| Q004       | B - 9  | D201  | C - 8  | D632 | E - 10 |
| Q005       | C - 10 | D202  | C - 8  | D633 | E - 9  |
| Q006       | B - 9  | D204  | C - 9  |      |        |
| Q007       | D - 10 | D205  | B - 8  |      |        |
| Q008       | D - 11 | D206  | B - 7  |      |        |
| Q009       | D - 11 | D306  | C - 6  |      |        |
| Q010       | D - 10 | D307  | C - 6  |      |        |
| Q011       | D - 8  | D308  | E - 5  |      |        |
| Q012       | B - 11 | D309  | E - 5  |      |        |
| Q013       | B - 9  | D405  | C - 1  |      |        |
| Q101       | B - 5  | D406  | C - 2  |      |        |
| Q107       | A - 3  | D407  | D - 2  |      |        |
| Q109       | B - 2  | D409  | B - 1  |      |        |
| Q110       | B - 2  | D415  | D - 2  |      |        |
| Q111       | A - 2  | D417  | D - 2  |      |        |
| Q112       | A - 2  | D422  | C - 1  |      |        |
| Q202       | C - 8  | D423  | C - 1  |      |        |
| Q401       | B - 2  | D427  | B - 2  |      |        |
| Q405       | B - 2  | D501  | I - 4  |      |        |
| Q408       | B - 2  | D502  | H - 4  |      |        |
| Q501       | I - 5  | D511  | G - 3  |      |        |
| Q532       | E - 2  | D512  | H - 3  |      |        |
| Q533       | F - 1  | D513  | I - 3  |      |        |
| Q535       | D - 1  | D514  | I - 3  |      |        |
| Q571       | F - 5  | D534  | D - 3  |      |        |
| Q574       | E - 5  | D535  | F - 4  |      |        |
| Q575       | E - 6  | D536  | F - 2  |      |        |
| Q576       | E - 6  | D538  | F - 4  |      |        |

**A** POWER SUPPLY,  
DEFLECTION, TUNING, PROCESSOR  
VIDEO SIGNAL PROCESSOR, AV IN OUT

A Board



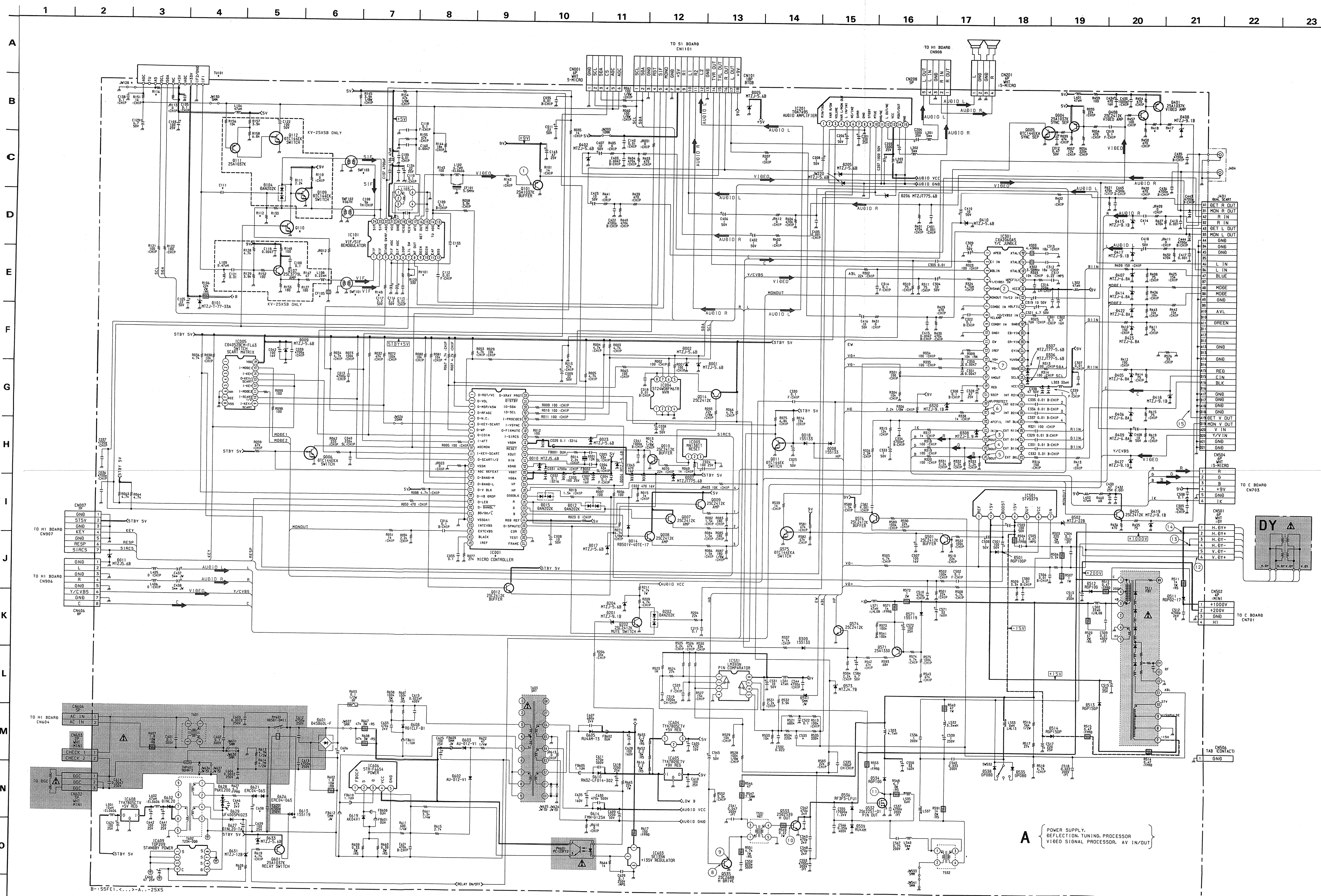
**NOTE:**  
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

A BOARD TRANSISTOR  
VOLTAGE TABLE

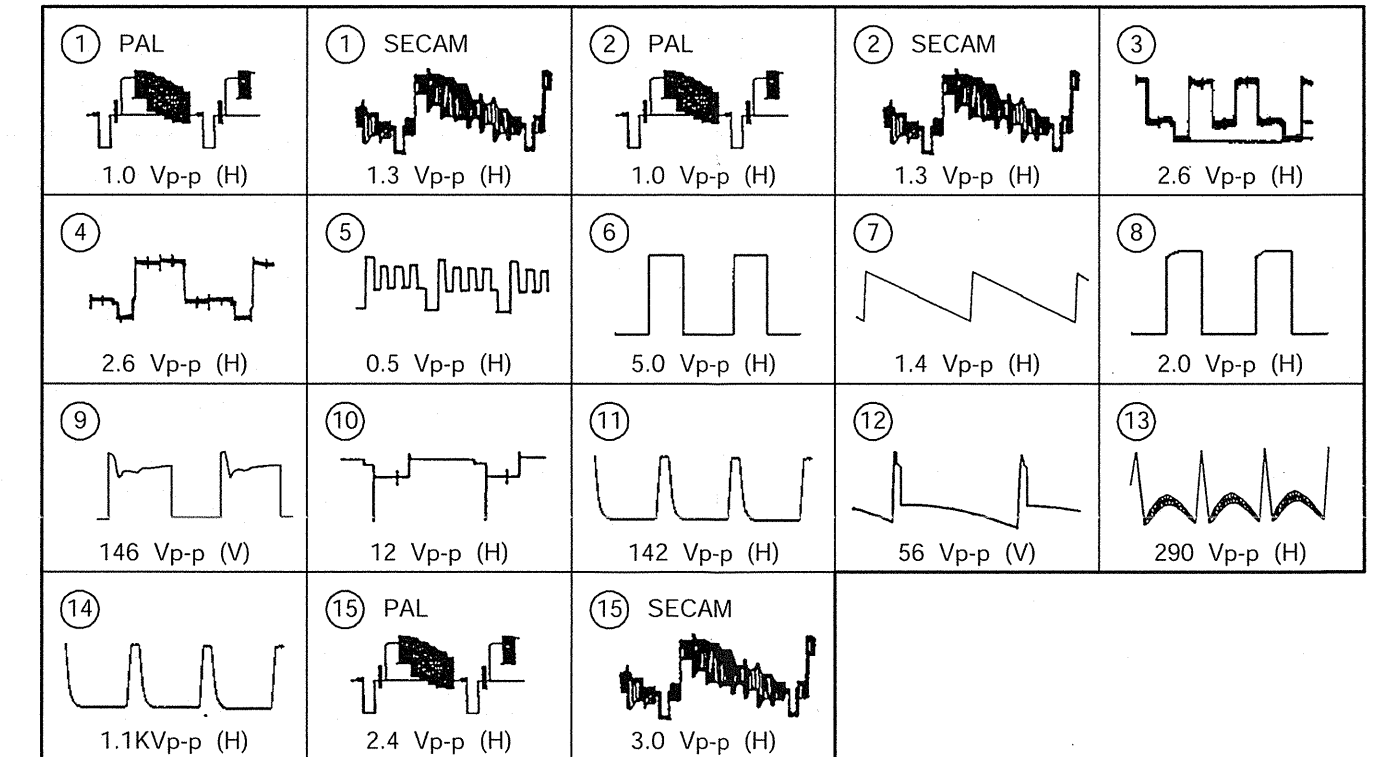
| Transistor Voltage Table |             |                  |                |
|--------------------------|-------------|------------------|----------------|
| Ref No                   | (B)<br>Base | (C)<br>Collector | (E)<br>Emitter |
| Q004                     | 4.7         | 0.7              | 4.9            |
| Q005                     | 0.3         | 4.8              | -              |
| Q006                     | -           | 2.0              | -              |
| Q007                     | -           | 4.9              | -              |
| Q008                     | -           | 4.9              | -              |
| Q009                     | -           | 4.9              | -              |
| Q010                     | 0.6         | -                | -              |
| Q011                     | 0.5         | -                | -              |
| Q012                     | -           | 4.8              | -              |
| Q101                     | 2.0         | -                | 2.6            |
| Q109                     | -           | 4.7              | -              |
| Q110                     | 4.3         | -                | -              |
| Q111                     | 2.3         | 2.9              | 2.9            |
| Q112                     | 2.9         | -                | -              |
| Q202                     | 0.6         | -                | -              |
| Q401                     | 8.0         | 3.4              | 8.6            |
| Q405                     | 4.4         | 8.8              | 3.7            |
| Q408                     | 2.6         | 8.0              | 2.0            |
| Q532                     | 7.3         | 3.1              | -              |
| Q533                     | -0.2        | -152.0           | -              |
| Q535                     | -0.7        | 92.0             | -              |
| Q571                     | 134.2       | -                | 134.4          |
| Q574                     | -           | 2.0              | -              |
| Q576                     | 3.4         | 6.7              | 2.8            |
| Q601                     | 4.0         | 3.6              | 4.8            |

A BOARD IC VOLTAGE TABLE

| IC Voltage Table |         |             |         |         |             |        |         |             |
|------------------|---------|-------------|---------|---------|-------------|--------|---------|-------------|
| Ref No           | Pin No  | Voltage (V) | Ref No  | Pin No  | Voltage (V) | Ref No | Pin No  | Voltage (V) |
| IC001            | 4       | 0.8         | IC101   | 1 - 2   | 3.2         | IC301  | 34 - 35 | 3.3         |
|                  | 6       | 3.2         |         | 3       | 4.8         |        | 41      | 5.0         |
|                  | 7 - 8   | 4.8         |         | 4       | 3.0         |        | 42      | 8.6         |
|                  | 9       | 0.3         |         | 5       | 2.8         |        | 43      | 5.0         |
|                  | 10      | 2.0         |         | 6       | 2.7         |        | 44      | 8.8         |
|                  | 11      | 1.5         |         | 7       | 3.9         |        | 45      | 5.2         |
|                  | 12      | 4.7         |         | 8       | 2.2         | 48     | 1.5     |             |
|                  | 19      | 3.6         |         | 12      | 2.0         | 1      | 15.3    |             |
|                  | 20      | 4.3         |         | 15      | 1.5         | 5      | 15.3    |             |
|                  | 21      | 4.8         |         | 17      | 0.3         | 7      | 15.3    |             |
|                  | 24      | 2.5         |         | 18 - 19 | 2.6         | 10     | 4.5     |             |
|                  | 25      | 2.1         |         | 21      | 4.7         | 12     | 15.3    |             |
|                  | 26      | 2.4         |         | 22      | 0.9         | 13     | 31.2    |             |
|                  | 30      | 4.8         |         | 23 - 24 | 3.2         | 14     | 15.3    |             |
|                  | 31      | 5.0         | 1       | 3.3     | 1           | 1.4    |         |             |
|                  | 36      | 0.2         | 2       | 5.0     | 2           | 14.0   |         |             |
|                  | 37      | 0.1         | 3       | 4.3     | 3           | -13.0  |         |             |
|                  | 38 - 39 | 5.0         | 4       | 5.0     | 4           | -14.0  |         |             |
|                  | 41 - 42 | 2.2         | 6       | 4.4     | 5           | 0.2    |         |             |
|                  | 44      | 4.8         | 8       | 4.5     | 6           | 14.5   |         |             |
|                  | 45      | 2.8         | 11      | 3.9     | 7           | 1.4    |         |             |
|                  | 47      | 0.1         | 12      | 2.4     | 1           | 1.6    |         |             |
|                  | 48      | 2.4         | 13      | 3.5     | 2           | 1.7    |         |             |
|                  | 49      | 3.3         | 14      | 3.4     | 3           | 1.9    |         |             |
| 50               | 3.1     | 15          | 5.6     | 5       | 2.8         |        |         |             |
| 51               | 0.1     | 16          | 7.6     | 6       | 2.0         |        |         |             |
| IC004            | 5 - 6   | 4.8         | 18      | 1.3     | 7           | 7.3    |         |             |
|                  | 7       | 3.3         | 19      | 2.4     | 8           | 8.8    |         |             |
|                  | 8       | 3.2         | 20      | 3.8     | 1 - 2       | -60.0  |         |             |
|                  | 9       | 3.2         | 21      | 1.6     | 4           | -51.3  |         |             |
| IC005            | 10      | 4.7         | 22 - 24 | 1.5     | IC609       | 4      | -58.0   |             |
|                  | 12      | 4.7         | 26 - 28 | 4.5     |             |        |         |             |
|                  | 13      | 1.5         | 30      | 4.5     |             |        |         |             |
|                  | 14      | 4.7         | 31 - 32 | 4.4     |             |        |         |             |
|                  |         | 16          | 4.7     | 33      | 8.1         |        |         |             |



## WAVEFORMS A BOARD

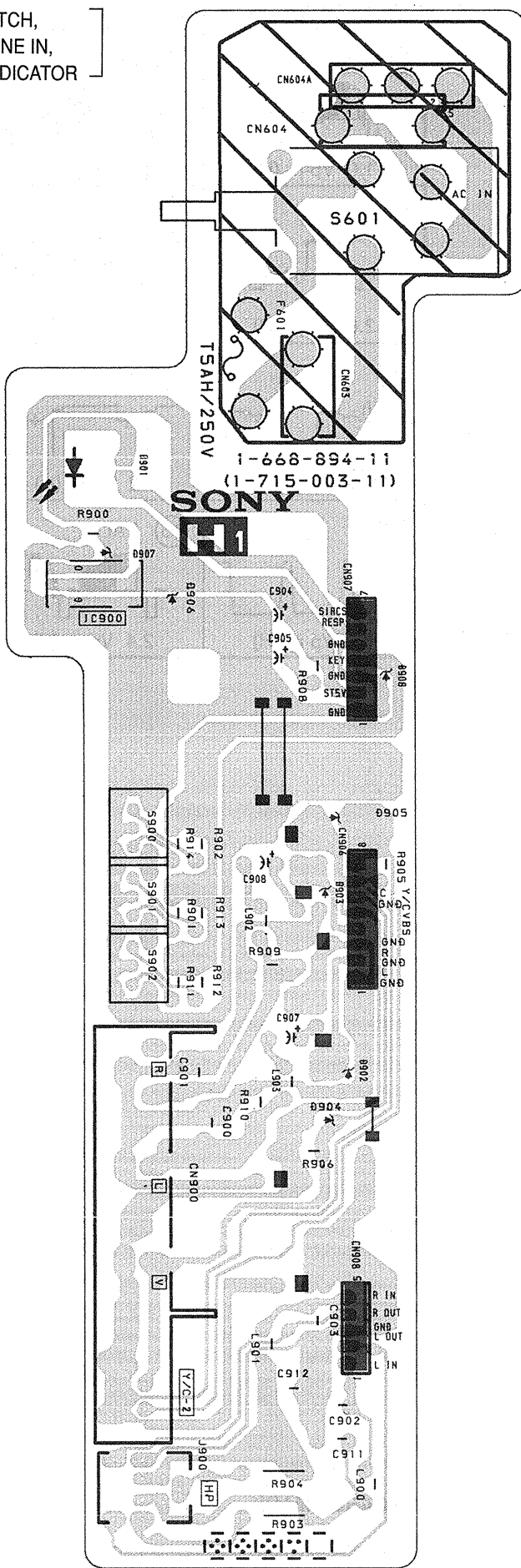


**A BOARD \* MARK**

| Ref    | 25X5A               | 25X5B               | 25X5D               | 25X5E               | 25X5K               | 25X5L               | 25X5R                  | 25X5U               |
|--------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|---------------------|
| C111   | 0                   | 0.01MF 50V          | 0                   | 0                   | 0                   | 0                   | 0                      | 0                   |
| C133   | -                   | 1MF 16V             | -                   | -                   | -                   | -                   | -                      | -                   |
| C533   | -                   | 0.0547MF 50V        | -                   | -                   | -                   | -                   | -                      | -                   |
| C606   | 330MF 400V          | 330MF 400V          | 330MF 400V          | 330MF 400V          | -                   | 330MF 400V          | 330MF 450V             | 330MF 400V          |
| C638   | 10MF 400V           | 10MF 400V           | 10MF 400V           | 10MF 400V           | 10MF 400V           | 10MF 400V           | 10MF 450V              | 10MF 400V           |
| IC001  | SA4549T5M1A/<br>040 | SA4549T5M1A/<br>038 | SA4549T5M1A/<br>038 | SA4549T5M1A/<br>038 | SA4549T5M1A/<br>038 | SA4549T5M1A/<br>038 | SA4549T5M1A/<br>038    | SA4549T5M1A/<br>038 |
| IC011  | TD49817/V1          | TD49818/V1          | TD49817/V1          | TD49817/V1          | TD49817/V1          | TD49817/V1          | TD49817/V1             | TD49817/V1          |
| RJ012  | 0                   | -                   | 0                   | 0                   | 0                   | 0                   | -                      | 0                   |
| JW128  | -                   | -                   | -                   | -                   | -                   | -                   | LEAD JUMPER<br>(5.0MM) | -                   |
| R112   | -                   | 2.2K                | -                   | -                   | -                   | -                   | -                      | -                   |
| R116   | -                   | -                   | -                   | 47K                 | 47K                 | -                   | -                      | 47K                 |
| R133   | 0                   | -                   | 0                   | 0                   | 0                   | 0                   | 0                      | 0                   |
| R149   | -                   | 1K                  | -                   | -                   | -                   | -                   | -                      | -                   |
| R417   | 75                  | 75                  | 75                  | 75                  | 75                  | 75                  | 75                     | 68                  |
| R418   | 470                 | 470                 | 470                 | 470                 | 470                 | 470                 | 470                    | 560                 |
| RV101  | -                   | 22K                 | -                   | -                   | -                   | -                   | -                      | -                   |
| SWF101 | 1-767-874-11        | 1-579-273-11        | 1-767-874-11        | 1-767-874-11        | 1-767-874-11        | 1-579-273-11        | 1-767-874-11           | 1-767-874-11        |
| SWF103 | -                   | 1-767-083-11        | -                   | -                   | -                   | -                   | -                      | -                   |
| TU101  | TELE9-001A          | TELE9-001A          | TELE9-001A          | BTP-AC411           | BTP-AC411           | TELE9-001A          | BTP-AC402              | BTP-AU611           |

H1

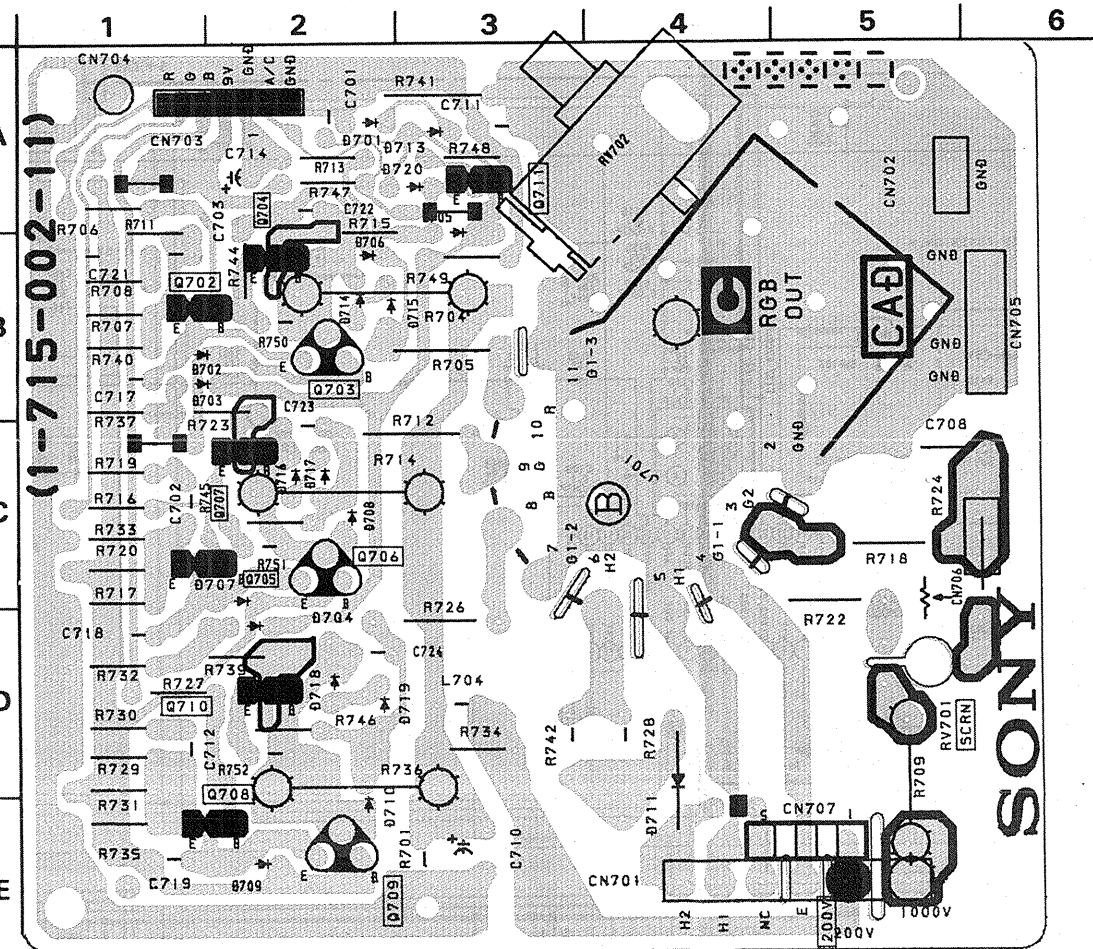
AC SWITCH, CONTROL SWITCH,  
AUDIO IN, Y/C IN, HEADPHONE IN,  
SIRCS RECIEVER, SIRCS INDICATOR



C

[ RGB OUT ]

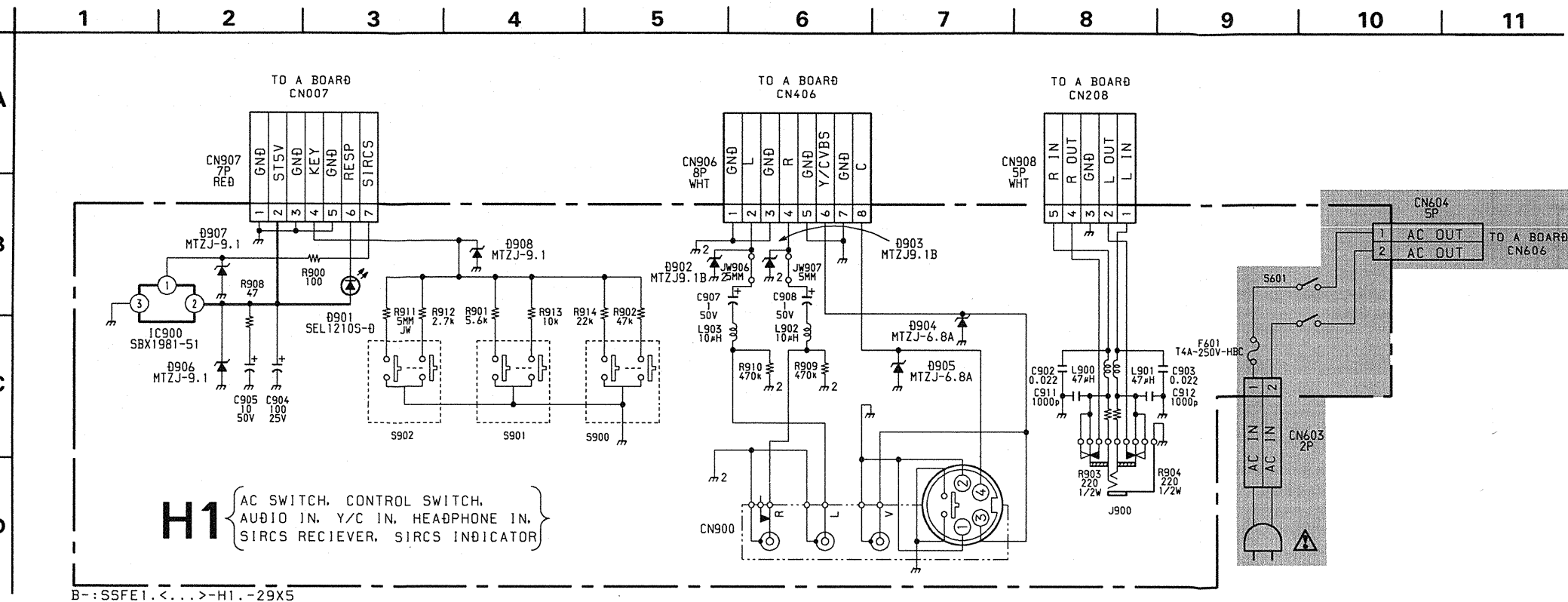
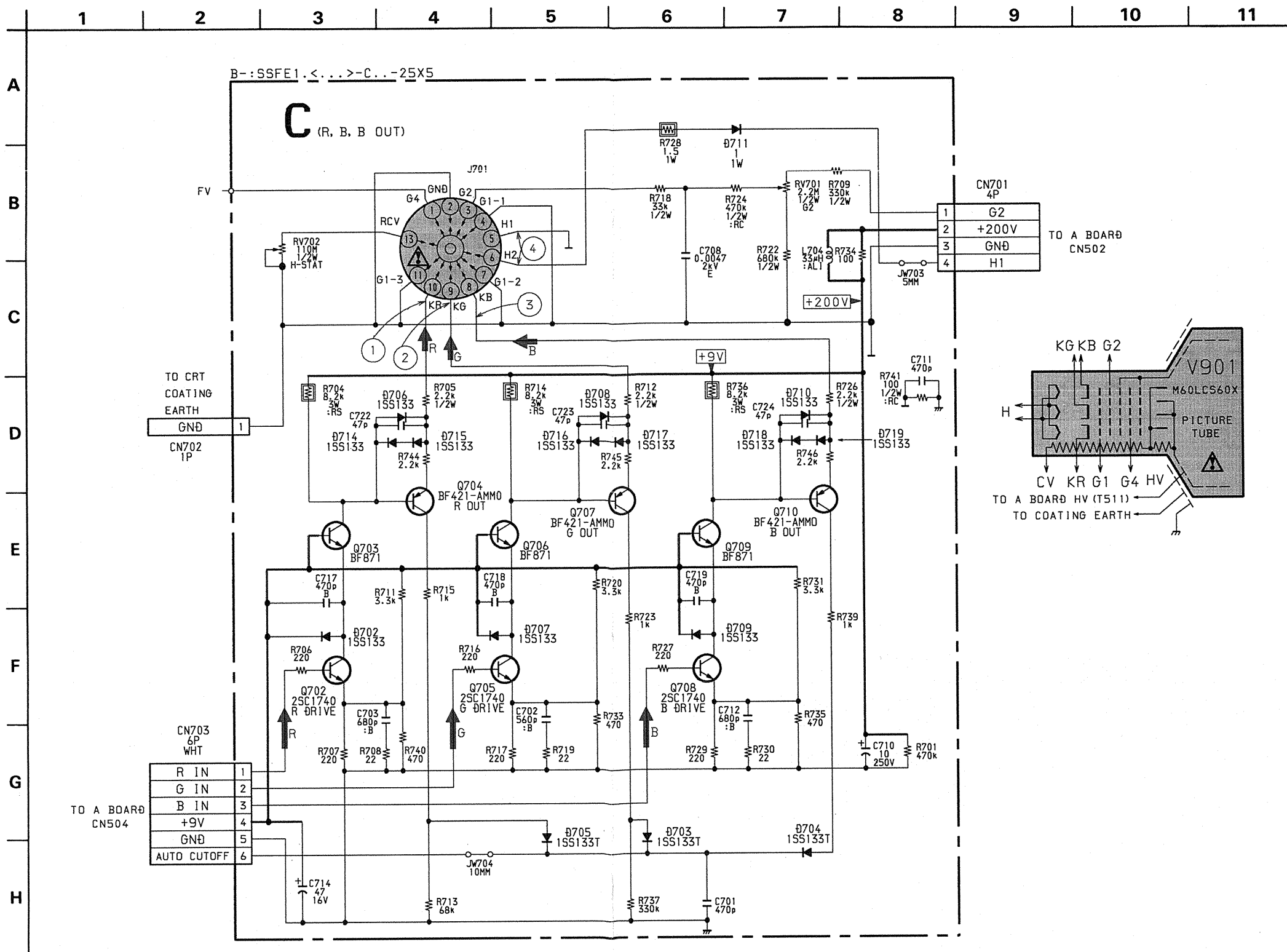
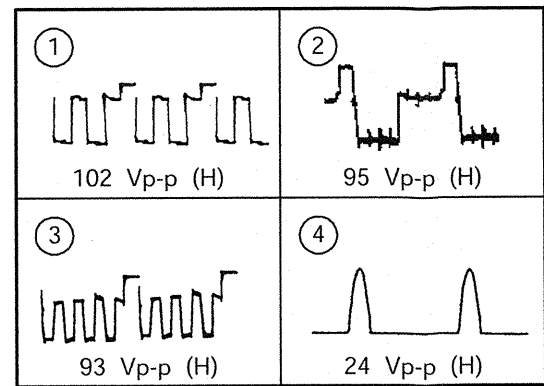
C Board



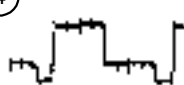
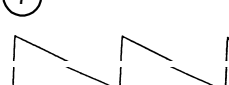
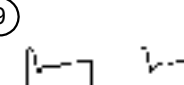
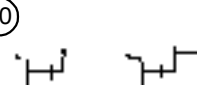
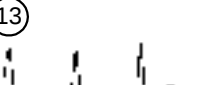
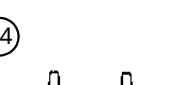
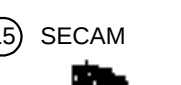
C BOARD TRANSISTOR  
VOLTAGE TABLE

| Transistor Voltage Table |             |                  |                |  |
|--------------------------|-------------|------------------|----------------|--|
| Ref No                   | (B)<br>Base | (C)<br>Collector | (E)<br>Emitter |  |
| Q702                     | 1.5         | 8.3              | 1.1            |  |
| Q703                     | 8.8         | 169.8            | 8.3            |  |
| Q704                     | 169.5       | 1.9              | 209.5          |  |
| Q705                     | 1.5         | 8.3              | 1.1            |  |
| Q706                     | 8.8         | 170.7            | 8.3            |  |
| Q707                     | 170.5       | 1.9              | 215.7          |  |
| Q708                     | 1.5         | 8.3              | 1.0            |  |
| Q709                     | 8.9         | 171.3            | 8.3            |  |
| Q710                     | 171.2       | 1.9              | 206.3          |  |

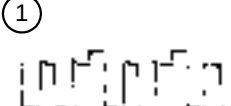
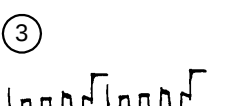
WAVEFORMS C BOARD



## WAVEFORMS A BOARD

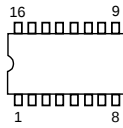
|                                                                                                                    |                                                                                                                      |                                                                                                                      |                                                                                                                       |                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <p>① PAL</p>  <p>1.0 Vp-p (H)</p> | <p>① SECAM</p>  <p>1.3 Vp-p (H)</p> | <p>② PAL</p>  <p>1.0 Vp-p (H)</p>   | <p>② SECAM</p>  <p>1.3 Vp-p (H)</p> | <p>③</p>  <p>2.6 Vp-p (H)</p> |
| <p>④</p>  <p>2.6 Vp-p (H)</p>     | <p>⑤</p>  <p>0.5 Vp-p (H)</p>       | <p>⑥</p>  <p>5.0 Vp-p (H)</p>       | <p>⑦</p>  <p>1.4 Vp-p (H)</p>       | <p>⑧</p>  <p>2.0 Vp-p (H)</p> |
| <p>⑨</p>  <p>146 Vp-p (V)</p>     | <p>⑩</p>  <p>12 Vp-p (H)</p>        | <p>⑪</p>  <p>142 Vp-p (H)</p>       | <p>⑫</p>  <p>56 Vp-p (V)</p>        | <p>⑬</p>  <p>290 Vp-p (H)</p> |
| <p>⑭</p>  <p>1.1KVp-p (H)</p>     | <p>⑮ PAL</p>  <p>2.4 Vp-p (H)</p>   | <p>⑮ SECAM</p>  <p>3.0 Vp-p (H)</p> |                                                                                                                       |                                                                                                                  |

## WAVEFORMS C BOARD

|                                                                                                                  |                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <p>①</p>  <p>102 Vp-p (H)</p> | <p>②</p>  <p>95 Vp-p (H)</p> |
| <p>③</p>  <p>93 Vp-p (H)</p>  | <p>④</p>  <p>24 Vp-p (H)</p> |

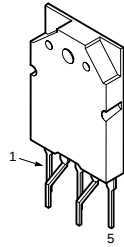
## 5-4 SEMICONDUCTORS (1)

CD4052BCM

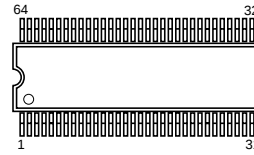


(TOP VIEW)

STR-F6654

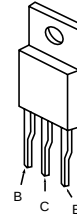


TDA9875  
TDA9870

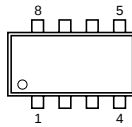


(TOP VIEW)

2SA1837

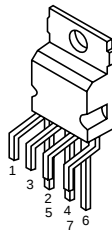


LM358DR-EZ  
NJM4558M-TE2  
NJM2903D

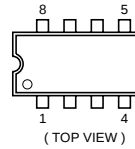


(TOP VIEW)

STV9379



TOP209P

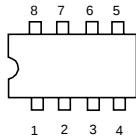


(TOP VIEW)

2SC4793

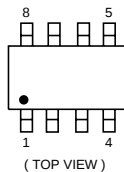


LM393P  
TDA2822M  
TEA2124



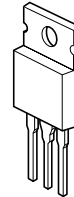
(TOP VIEW)

ST24W08FM6TR

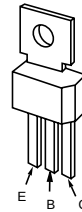


(TOP VIEW)

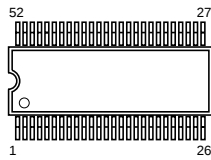
TYA7805CTV  
TYA7809CTV



BF871-127

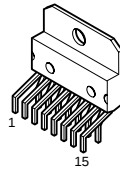


SAA5497PS/MIA/038  
SAA5497PS/MIA/039  
SAA5497PS/MIA040

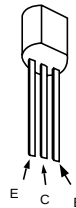


(TOP VIEW)

TDA7495

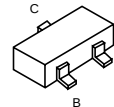
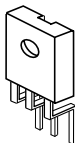


BF421-AMMO  
2SA1091-O

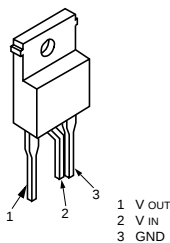


DTA144ESA  
DTA144ESA-TP  
DTC114EK  
DTC114EKA-T146  
DTC143TKA-T146  
DTC144EKA-T-146R  
2SA1037K-T-146-  
R2SA1162-G  
2SC2412K-QR  
2SC2412K-T-146-R

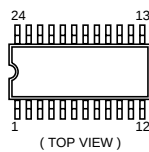
SBX1981-51



SE-135N  
SE135N-LF12

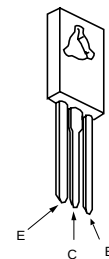


TDA9818-V1  
TDA9817-V1

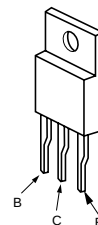


(TOP VIEW)

2SC688-LK

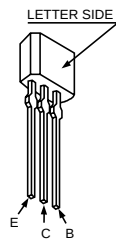


IRF614

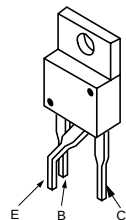


5-4 SEMICONDUCTORS (2)

2SA933AS-QRT  
2SA933AS-RT  
2SC1740S-RT

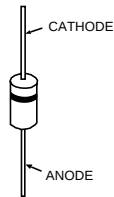


2SK2251-01-F19

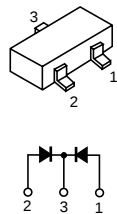


AK04-V1  
AU-012-V1  
BYD33G  
BYD33G-AMMO  
DINL20-TR  
ERB44-06TP1  
EG-1Z-V1  
EL1Z  
ERD28-06S

ERD28-08S  
ERC06-15  
FMN-G12S  
RG1CLF-B1  
RGP10GPKG23  
RU3YX-LF-C4  
RU3YX-V1  
RU-4AM-T3  
1SS292T-77

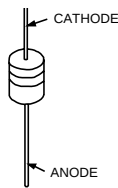


DAN202K  
DAN202K-T146

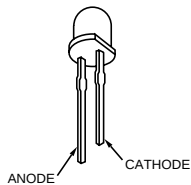


ERA81-004TP1  
ERA83-006  
MTZJ-T-77-3.9B  
MTZJ-T-77-5.6B  
MTZJ-T-77-5.6C  
MTZJ-T-77-6.8A  
MTZJ-T-77-6.8C  
MTZJ-T-77-7.5C  
MTZJ-T-77-9.1A  
MTZJ-T-77-9.1A  
MTZJ-T-77-10

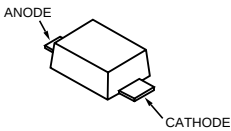
MTZJ-T-77-33A  
MTZJ-33C  
MTZJ-7.5B  
RD3.9ES-B2  
RD5.6ESB2  
RD6.8ES-B2  
RD7.5ESB2  
RD9.1ES-B3  
1SS119-25TD  
1SS133T-77



SEL12108-D

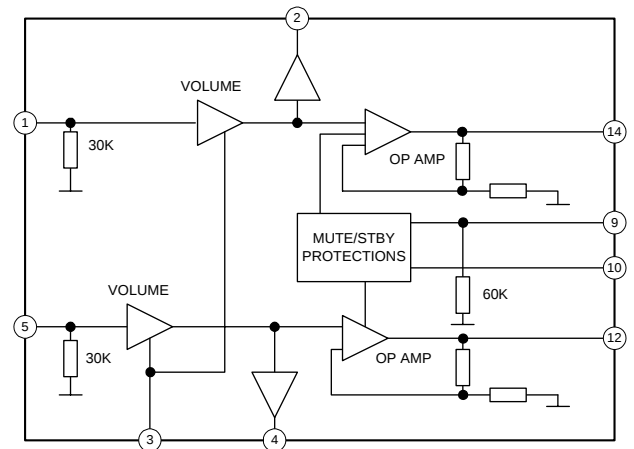


UF4005PK623

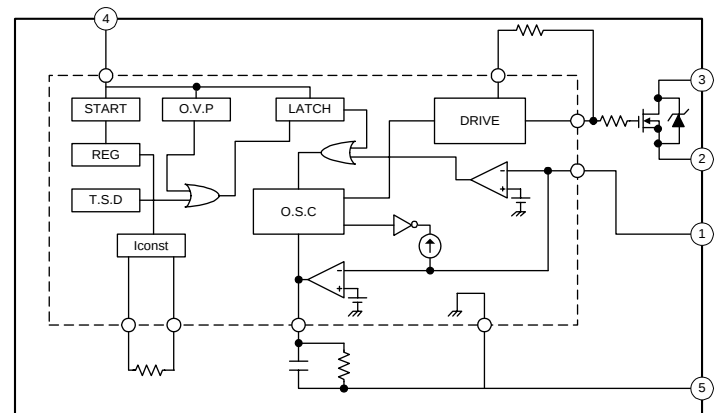


## 5-5. IC BLOCK DIAGRAMS

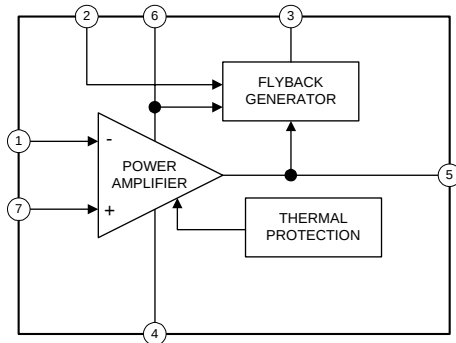
## A BOARD IC201 TDA7495



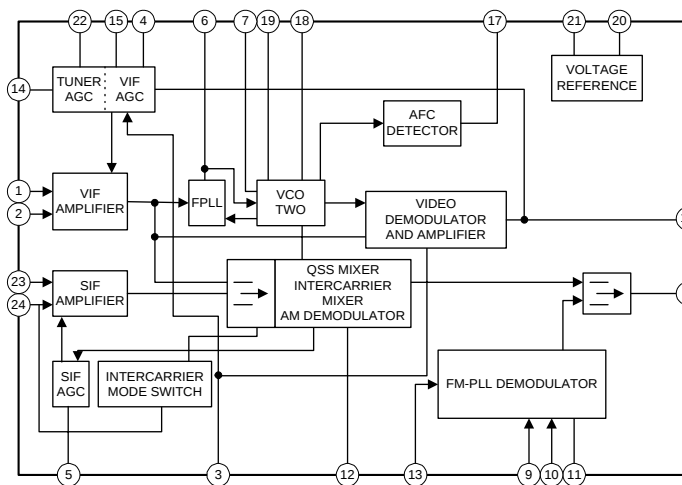
**A BOARD IC606 STR-F6654**



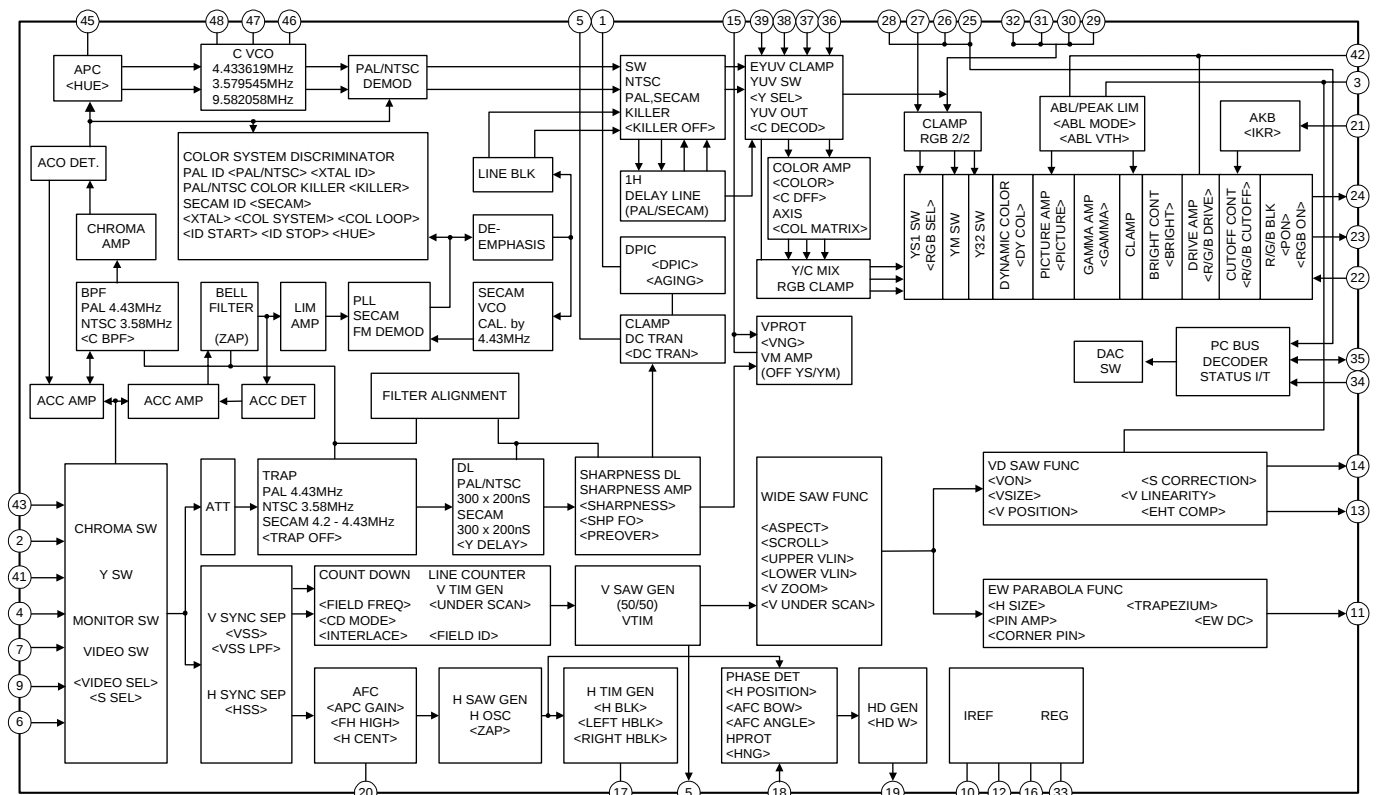
## A BOARD IC501 STV 9379



**A BOARD IC101 TDA9817/V1**



## A BOARD IC301 CXA2060AS



## SECTION 6 EXPLODED VIEWS

### NOTE :

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

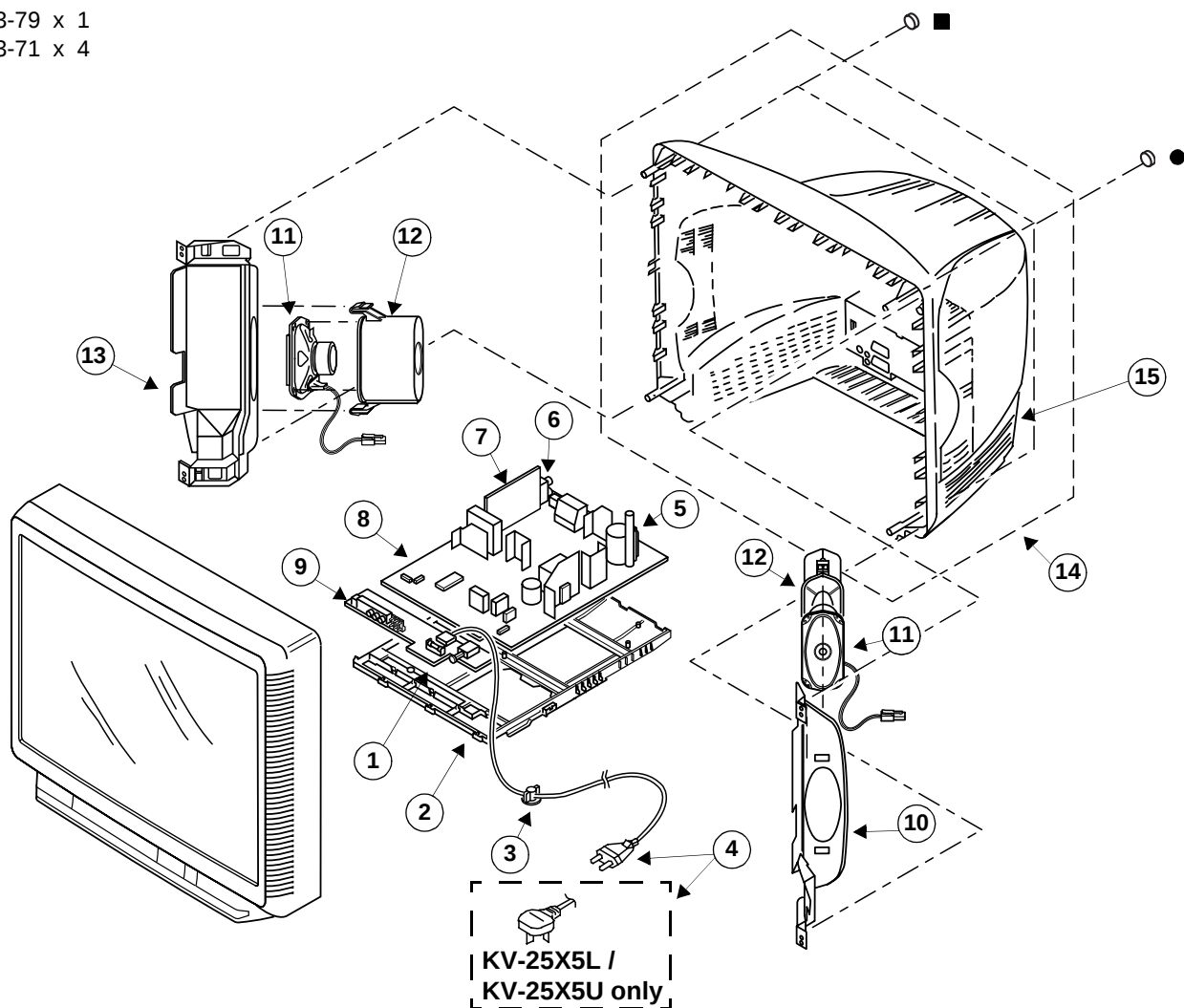
**Note :** Les composants identifiés par une trame et par une marque  $\Delta$  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

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

### 6-1. CHASSIS

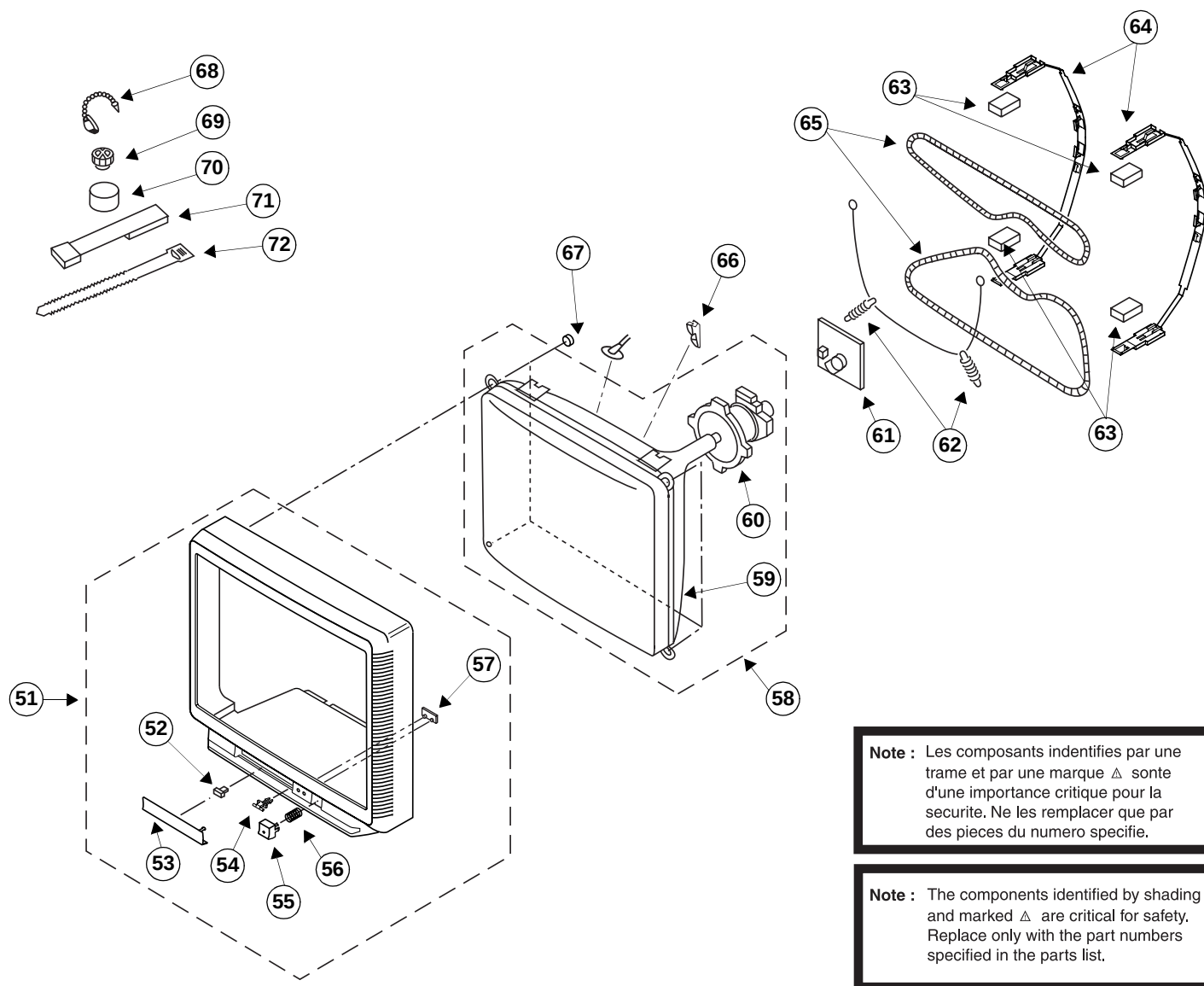
■ 7-685-663-79 x 1

● 7-685-663-71 x 4



| REF. NO. | PART. NO.             | DESCRIPTION                                                | REMARK | REF. NO. | PART. NO.     | DESCRIPTION                  | REMARK |
|----------|-----------------------|------------------------------------------------------------|--------|----------|---------------|------------------------------|--------|
| 1        | $\Delta$ 1-571-433-21 | SWITCH, PUSH (AC POWER)                                    |        | 8        | *A-1632-750-A | A BOARD, COMPLETE (KV-25X5A) |        |
| 2        | *4-204-051-01         | BRACKET, MAIN                                              |        |          | *A-1632-748-A | A BOARD, COMPLETE (KV-25X5B) |        |
| 3        | 4-202-531-01          | AC CORD LOCK (SC)                                          |        |          | *A-1632-746-A | A BOARD, COMPLETE (KV-25X5D) |        |
| 4        | $\Delta$ 1-765-286-11 | CORD, POWER (KV-25X5A/25X5B/25X5D/25X5E/25X5K/25X5R/25X5U) |        |          | *A-1632-747-A | A BOARD, COMPLETE (KV-25X5E) |        |
|          | 1-776-860-11          | CORD, POWER FILTER (UK) (KV-25X5L)                         |        |          | *A-1632-752-A | A BOARD, COMPLETE (KV-25X5K) |        |
| 5        | $\Delta$ 1-453-264-11 | TRANSFORMER ASSY, FLYBACK (NX1680/U2B4)                    |        |          | *A-1632-751-A | A BOARD, COMPLETE (KV-25X5L) |        |
| 6        | 1-693-418-11          | TUNER (TELE9-001A) (KV-25X5A/25X5B/25X5D/25X5L)            |        |          | *A-1632-753-A | A BOARD, COMPLETE (KV-25X5R) |        |
|          | 8-598-432-00          | TUNER (BTP-AC411) (KV-25X5E/25X5K)                         |        |          | *A-1632-749-A | A BOARD, COMPLETE (KV-25X5U) |        |
|          | 8-598-361-01          | TUNER (BTP-AC402) (KV-25X5R)                               |        | 9        | *A-1646-157-A | H1 BOARD, COMPLETE           |        |
|          | 8-598-464-01          | TUNER (BTP-AU611) (KV-25X5U)                               |        | 10       | 4-204-052-01  | BAFFLE BOARD (R)             |        |
| 7        | *A-1652-053-A         | S1 BOARD, COMPLETE (KV-25X5A/25X5D/25X5R)                  |        | 11       | 1-503-902-11  | SPEAKER (15X6.5 CM)          |        |
|          | *A-1652-056-A         | S1 BOARD, COMPLETE (KV-25X5B)                              |        | 12       | 4-204-054-01  | BOX, SPEAKER                 |        |
|          | *A-1652-052-A         | S1 BOARD, COMPLETE (KV-25X5E/25X5K/25X5L/25X5U)            |        | 13       | 4-204-053-01  | BAFFLE BOARD (L)             |        |
|          |                       |                                                            |        | 14       | X-4200-375-1  | REAR COVER ASSY              |        |
|          |                       |                                                            |        | 15       | 4-204-094-01  | COVER, REAR                  |        |

## 6-2. PICTURE TUBE



| REF.NO. | PART.NO               | DESCRIPTION                                                    | REMARK | REF.NO. | PART.NO               | DESCRIPTION                                | REMARK |
|---------|-----------------------|----------------------------------------------------------------|--------|---------|-----------------------|--------------------------------------------|--------|
| 51      | X-4200-377-2          | BEZNET ASSY                                                    | 52-57  | 63      | 4-203-390-11          | CUSHION, DGC                               |        |
| 52      | 4-047-464-01          | CATCHER, PUSH                                                  |        | 64      | 4-202-745-01          | HOLDER, DGC (25")                          |        |
| 53      | 4-204-050-01          | DOOR, CONTROL (PAINTED) (BLACK)                                |        | 65      | $\Delta$ 1-406-806-21 | COIL, DEMAGNETIZATION                      |        |
| 54      | 3-703-035-11          | SHAFT, LID                                                     |        | 66      | 3-704-495-01          | SPACER, DY                                 |        |
| 55      | 4-204-066-01          | BUTTON, POWER                                                  |        | 67      | 4-203-043-01          | SCREW (PT)                                 |        |
| 56      | 4-202-964-01          | SPRING                                                         |        | 68      | 4-308-870-00          | CLIP, LEAD WIRE                            |        |
| 57      | 4-204-067-01          | GUIDE LIGHT                                                    |        | 69      | 1-452-094-00          | MAGNET, ROTATABLE DISK; 15MM $\varnothing$ |        |
| 58      | $\Delta$ 8-733-254-76 | ITC                                                            | 59-60  | 70      | 1-425-032-00          | MAGNET, DISK; 10MM $\varnothing$           |        |
| 59      | $\Delta$ 8-733-254-05 | PICTURE TUBE (SD-257) (M60LCS60X)                              |        | 71      | X-4387-214-1          | PERMALLOY ASSY, CORRECTION                 |        |
| 60      | $\Delta$ 8-451-404-23 | DEFLECTION YOKE (Y25GXABA)                                     |        | 72      | 3-701-007-00          | BAND, BINDING                              |        |
| 61      | *A-1638-111-A         | C BOARD COMPLETE                                               |        |         |                       |                                            |        |
| 62      | 4-200-433-11          | SPRING, EXTENSION (KV-25X5A)                                   |        |         |                       |                                            |        |
|         | 4-369-318-21          | SPRING, TENSION (KV-25X5B/25X5D/25X5E/25X5K/25X5L/25X5R/25X5U) |        |         |                       |                                            |        |

## SECTION 7 ELECTRICAL PARTS LIST

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

CAPACITORS                      COILS  
MF : mF, PF : mmF              MMH : mH , uH

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

**Note :** Les composants identifiés par une trame et par une marque  $\Delta$  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

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

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| REF.NO. | PART.NO       | DESCRIPTION                          | REMARK  | REF.NO. | PART.NO      | DESCRIPTION           | REMARK                                                       |
|---------|---------------|--------------------------------------|---------|---------|--------------|-----------------------|--------------------------------------------------------------|
|         | *A-1632-750-A | A BOARD COMPLETE (KV-25X5A)<br>***** |         | C031    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V                                                      |
|         | *A-1632-748-A | A BOARD COMPLETE (KV-25X5B)<br>***** |         | C032    | 1-163-077-00 | CERAMIC CHIP 0.1MF    | 10% 25V                                                      |
|         | *A-1632-746-A | A BOARD COMPLETE (KV-25X5D)<br>***** |         | C033    | 1-164-004-11 | CERAMIC CHIP 0.1MF    | 10% 25V                                                      |
|         | *A-1632-747-A | A BOARD COMPLETE (KV-25X5E)<br>***** |         | C035    | 1-164-232-11 | CERAMIC CHIP 0.01MF   | 10% 50V                                                      |
|         | *A-1632-752-A | A BOARD COMPLETE (KV-25X5K)<br>***** |         | C036    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V                                                      |
|         | *A-1632-751-A | A BOARD COMPLETE (KV-25X5L)<br>***** |         | C037    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V                                                      |
|         | *A-1632-753-A | A BOARD COMPLETE (KV-25X5R)<br>***** |         | C038    | 1-126-964-11 | ELECT 10MF            | 20% 50V                                                      |
|         | *A-1632-749-A | A BOARD COMPLETE (KV-25X5U)<br>***** |         | C039    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V                                                      |
|         | 4-382-854-01  | SCREW (M3X8) , P, SW (+)             |         | C040    | 1-163-189-00 | CERAMIC CHIP 220PF    | 5% 50V                                                       |
|         | 4-382-854-11  | SCREW (M3X10) , P, SW (+)            |         | C041    | 1-163-205-00 | CERAMIC CHIP 0.001MF  | 10% 50V                                                      |
|         | < CAPACITOR > |                                      |         | C042    | 1-126-933-11 | ELECT 100MF           | 20% 16V                                                      |
| C004    | 1-163-038-00  | CERAMIC CHIP 0.1MF                   | 25V     | C043    | 1-126-935-11 | ELECT 470MF           | 20% 16V                                                      |
| C005    | 1-163-105-00  | CERAMIC CHIP 33PF                    | 5% 50V  | C100    | 1-163-038-00 | CERAMIC CHIP 0.1MF    | 25V<br>(KV-25X5B)                                            |
| C006    | 1-163-105-00  | CERAMIC CHIP 33PF                    | 5% 50V  | C103    | 1-104-665-11 | ELECT 100MF           | 20% 25V                                                      |
| C007    | 1-126-935-11  | ELECT 470MF                          | 20% 16V | C105    | 1-126-965-11 | ELECT 22MF            | 20% 50V                                                      |
| C008    | 1-126-964-11  | ELECT 10MF                           | 20% 50V | C108    | 1-163-465-11 | CERAMIC CHIP 9PF      | 0.25PF 50V                                                   |
| C009    | 1-126-965-11  | ELECT 22MF                           | 20% 50V | C109    | 1-164-004-11 | CERAMIC CHIP 0.1MF    | 10% 25V                                                      |
| C011    | 1-126-965-11  | ELECT 22MF                           | 20% 50V | C110    | 1-163-038-00 | CERAMIC CHIP 0.1MF    | 25V                                                          |
| C012    | 1-126-959-11  | ELECT 0.47MF                         | 20% 50V | C111    | 1-216-296-00 | SHORT 0               | (KV-25X5A/25X5D/25X5E/<br>KV-25X5K/25X5L/25X5R/<br>KV-25X5U) |
| C013    | 1-163-017-00  | CERAMIC CHIP 0.0047MF                | 10% 50V |         | 1-163-059-00 | CERAMIC CHIP 0.01MF   | 50V<br>(KV-25X5B)                                            |
| C016    | 1-164-004-11  | CERAMIC CHIP 0.1MF                   | 10% 25V | C112    | 1-163-031-11 | CERAMIC CHIP 0.01MF   | 50V                                                          |
| C018    | 1-164-232-11  | CERAMIC CHIP 0.01MF                  | 10% 50V | C115    | 1-164-489-11 | CERAMIC CHIP 0.22MF   | 10% 16V                                                      |
| C019    | 1-163-038-00  | CERAMIC CHIP 0.1MF                   | 25V     | C116    | 1-126-961-11 | ELECT 2.2MF           | 20% 50V                                                      |
| C022    | 1-126-935-11  | ELECT 470MF                          | 20% 16V | C117    | 1-126-961-11 | ELECT 2.2MF           | 20% 50V                                                      |
| C024    | 1-104-665-11  | ELECT 100MF                          | 20% 25V | C118    | 1-163-038-00 | CERAMIC CHIP 0.1MF    | 25V                                                          |
| C025    | 1-126-960-11  | ELECT 1MF                            | 20% 50V | C119    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 5% 50V<br>(KV-25X5B)                                         |
| C029    | 1-163-077-00  | CERAMIC CHIP 0.1MF                   | 10% 25V | C121    | 1-163-031-11 | CERAMIC CHIP 0.01MF   | 50V<br>(KV-25X5B)                                            |
| C030    | 1-104-665-11  | ELECT 100MF                          | 20% 25V | C122    | 1-104-665-11 | ELECT 100MF           | 20% 25V<br>(KV-25X5B)                                        |
|         |               |                                      |         | C129    | 1-104-664-11 | ELECT 47MF            | 20% 50V                                                      |

| REF.NO. | PART.NO      | DESCRIPTION         | REMARK            | REF.NO. | PART.NO      | DESCRIPTION           | REMARK   |
|---------|--------------|---------------------|-------------------|---------|--------------|-----------------------|----------|
| C133    | 1-162-638-11 | CERAMIC CHIP 1MF    | 16V<br>(KV-25K5B) | C401    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C134    | 1-128-551-11 | ELECT 22MF          | 20% 25V           | C402    | 1-126-960-11 | ELECT 1MF             | 20% 50V  |
| C135    | 1-164-004-11 | CERAMIC CHIP 0.1MF  | 10% 25V           | C403    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
|         |              |                     |                   | C405    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C137    | 1-163-017-91 | CERAMIC 4700PF      | 10% 50V           | C406    | 1-126-960-11 | ELECT 1MF             | 20% 50V  |
| C138    | 1-165-319-11 | CERAMIC CHIP 0.1MF  | 50V               | C407    | 1-126-964-11 | ELECT 10MF            | 20% 50V  |
| C139    | 1-163-031-11 | CERAMIC CHIP 0.01MF | 50V               | C408    | 1-126-964-11 | ELECT 10MF            | 20% 50V  |
| C140    | 1-163-031-11 | CERAMIC CHIP 0.01MF | 50V               | C410    | 1-126-964-11 | ELECT 10MF            | 20% 50V  |
| C143    | 1-104-664-11 | ELECT 47MF          | 20% 25V           | C413    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C160    | 1-163-017-91 | CERAMIC 4700PF      | 10% 50V           | C414    | 1-126-960-11 | ELECT 1MF             | 20% 50V  |
| C201    | 1-104-666-11 | ELECT 220MF         | 20% 25V           | C415    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
| C203    | 1-126-942-61 | ELECT 1000MF        | 20% 25V           | C416    | 1-126-964-11 | ELECT 10MF            | 20% 50V  |
| C204    | 1-126-942-61 | ELECT 1000MF        | 20% 25V           | C417    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C206    | 1-126-960-11 | ELECT 1MF           | 20% 50V           | C418    | 1-126-960-11 | ELECT 1MF             | 20% 50V  |
| C207    | 1-126-972-11 | ELECT 1000MF        | 20% 50V           | C422    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
| C208    | 1-126-960-11 | ELECT 1MF           | 20% 50V           | C423    | 1-126-964-11 | ELECT 10MF            | 20% 50V  |
| C215    | 1-164-004-11 | CERAMIC CHIP 0.1MF  | 10% 25V           | C430    | 1-104-664-11 | ELECT 47MF            | 20% 25V  |
| C301    | 1-163-038-00 | CERAMIC CHIP 0.1MF  | 25V               | C432    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C302    | 1-126-967-11 | ELECT 47MF          | 20% 16V           | C433    | 1-163-141-00 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C303    | 1-101-004-00 | CERAMIC 0.01MF      | 50V               | C434    | 1-126-935-11 | ELECT 470MF           | 20% 16V  |
| C304    | 1-126-964-11 | ELECT 10MF          | 20% 50V           | C435    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
| C305    | 1-163-005-11 | CERAMIC CHIP 470PF  | 10% 50V           | C436    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
| C307    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C437    | 1-535-465-11 | LEAD, JUMPER (5.0MM)  |          |
| C308    | 1-164-004-11 | CERAMIC CHIP 0.1MF  | 10% 25V           | C438    | 1-535-465-11 | LEAD, JUMPER (5.0MM)  |          |
| C309    | 1-126-963-11 | ELECT 4.7MF         | 20% 50V           | C443    | 1-102-125-00 | CERAMIC 0.0047MF      | 10% 50V  |
| C312    | 1-163-099-00 | CERAMIC CHIP 18PF   | 5% 50V            | C444    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
| C313    | 1-163-099-00 | CERAMIC CHIP 18PF   | 5% 50V            | C445    | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V  |
| C314    | 1-163-038-00 | CERAMIC CHIP 0.1MF  | 25V               | C501    | 1-126-968-11 | ELECT 100MF           | 20% 50V  |
| C316    | 1-163-259-91 | CERAMIC CHIP 220PF  | 5% 50V            | C502    | 1-163-038-00 | CERAMIC CHIP 0.1MF    | 25V      |
| C317    | 1-136-169-00 | FILM 0.22MF         | 5% 50V            | C503    | 1-126-968-11 | ELECT 100MF           | 20% 50V  |
| C319    | 1-126-964-11 | ELECT 10MF          | 20% 50V           | C504    | 1-106-220-00 | MYLAR 0.1MF           | 10% 100V |
| C321    | 1-126-963-11 | ELECT 4.7MF         | 20% 50V           | C505    | 1-136-173-00 | FILM 0.47MF           | 5% 50V   |
| C322    | 1-164-004-11 | CERAMIC CHIP 0.1MF  | 10% 25V           | C506    | 1-164-232-11 | CERAMIC CHIP 0.01MF   | 10% 50V  |
| C328    | 1-104-664-11 | ELECT 47MF          | 20% 25V           | C507    | 1-126-933-11 | ELECT 100MF           | 20% 16V  |
| C329    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C508    | 1-126-960-11 | ELECT 1MF             | 20% 50V  |
| C330    | 1-163-038-00 | CERAMIC CHIP 0.1MF  | 25V               | C509    | 1-137-047-11 | FILM 0.01MF           | 10% 400V |
| C331    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C510    | 1-163-133-00 | CERAMIC CHIP 470PF    | 5% 50V   |
| C332    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C512    | 1-162-114-00 | CERAMIC 0.0047MF      | 2KV      |
| C333    | 1-126-960-91 | ELECT 1MF           | 20% 50V           | C513    | 1-107-662-11 | ELECT 22MF            | 20% 250V |
| C334    | 1-163-071-91 | CERAMIC CHIP 4700PF | 10% 50V           | C515    | 1-104-666-11 | ELECT 220MF           | 20% 25V  |
| C335    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C517    | 1-104-666-11 | ELECT 220MF           | 20% 25V  |
| C336    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C518    | 1-106-375-12 | MYLAR 0.022MF         | 99% 200V |
| C337    | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V           | C519    | 1-163-275-11 | CERAMIC CHIP 0.001MF  | 5% 50V   |
| C338    | 1-126-967-11 | ELECT 47MF          | 20% 50V           | C520    | 1-163-038-00 | CERAMIC CHIP 0.1MF    | 25V      |
| C339    | 1-163-038-00 | CERAMIC CHIP 0.1MF  | 25V               | C522    | 1-130-495-00 | FILM 0.1MF            | 5% 50V   |
| C350    | 1-163-017-91 | CERAMIC 4700PF      | 10% 50V           | C531    | 1-126-964-11 | ELECT 10MF            | 20% 50V  |
| C351    | 1-163-017-91 | CERAMIC 4700PF      | 10% 50V           | C532    | 1-163-037-11 | CERAMIC CHIP 0.022MF  | 10% 50V  |

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

| REF. NO.      | PART.NO      | DESCRIPTION           | REMARK                                               |
|---------------|--------------|-----------------------|------------------------------------------------------|
| C533          | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V<br>(KV-25X5B)                                |
| C535          | 1-163-251-11 | CERAMIC CHIP 100PF    | 5% 50V                                               |
| C536          | 1-115-522-11 | FILM 1MF              | 5% 200V                                              |
| C537          | 1-137-417-11 | MYLAR 0.0047MF        | 10% 200V                                             |
| C538          | 1-164-004-71 | CERAMIC 0.1MF         | 10% 25V                                              |
| C539          | 1-111-230-91 | ELECT 1MF             | 20% 250V                                             |
| C540          | 1-137-051-91 | FILM 0.033MF          | 10% 200V                                             |
| C541          | 1-106-383-00 | MYLAR 0.047MF         | 10% 200V                                             |
| C542          | 1-162-134-11 | CERAMIC 470PF         | 10% 2KV                                              |
| C543          | 1-162-134-11 | CERAMIC 470PF         | 10% 2KV                                              |
| C544          | 1-163-017-00 | CERAMIC CHIP 0.0047MF | 10% 50V                                              |
| C545          | 1-126-960-11 | ELECT 1MF             | 20% 50V                                              |
| C546          | 1-130-895-00 | FILM 0.056MF          | 5% 400V                                              |
| C547          | 1-117-813-11 | FILM 0.75MF           | 5% 200V                                              |
| C548          | 1-162-134-11 | CERAMIC 470PF         | 10% 2KV                                              |
| C550          | 1-107-638-11 | ELECT 33MF            | 20% 160V                                             |
| C552          | 1-102-212-00 | CERAMIC 820PF         | 10% 500V                                             |
| C553          | 1-137-417-11 | MYLAR 0.0047MF        | 10% 200V                                             |
| C555          | 1-117-717-11 | FILM 17000PF          | 3% 1.2KV                                             |
| C571          | 1-123-024-21 | ELECT 33MF            | 160V                                                 |
| C572          | 1-104-665-11 | ELECT 100MF           | 20% 25V                                              |
| C580          | 1-164-232-11 | CERAMIC CHIP 0.01MF   | 10% 50V                                              |
| C582          | 1-163-275-11 | CERAMIC CHIP 0.001MF  | 5% 50V                                               |
| C584          | 1-126-963-11 | ELECT 4.7MF           | 20% 50V                                              |
| C601 $\Delta$ | 1-107-563-11 | FILM 0.1MF            | 20% 300V                                             |
| C602 $\Delta$ | 1-107-563-11 | FILM 0.1MF            | 20% 300V                                             |
| C603 $\Delta$ | 1-117-700-51 | CERAMIC 0.0022MF      | 20% 250V                                             |
| C604 $\Delta$ | 1-117-700-51 | CERAMIC 0.0022MF      | 20% 250V                                             |
| C605          | 1-104-652-11 | ELECT 470MF           | 20% 10V                                              |
| C606          | 1-125-555-11 | ELECT(BLOCK) 330MF    | 20% 400V<br>(KV-25X5A/25X5B/25X5D/25X5E/25X5L/25X5U) |
|               | 1-117-752-11 | ELECT(BLOCK) 330MF    | 20% 450V<br>(KV-25X5R)                               |
| C607          | 1-125-787-51 | CERAMIC 680PF         | 10% 2KV                                              |
| C609          | 1-107-915-51 | ELECT 2200MF          | 20% 50V                                              |
| C610          | 1-104-665-11 | ELECT 100MF           | 20% 25V                                              |
| C611          | 1-165-127-11 | CERAMIC 470PF         | 10% 500V                                             |
| C612 $\Delta$ | 1-161-964-51 | CERAMIC 0.0047MF      | 250V                                                 |
| C613 $\Delta$ | 1-161-964-51 | CERAMIC 0.0047MF      | 250V                                                 |
| C614 $\Delta$ | 1-161-964-51 | CERAMIC 4700PF        | 250V                                                 |
| C615          | 1-130-202-00 | FILM 0.022MF          | 10% 400V                                             |
| C618          | 1-107-890-11 | ELECT 2200MF          | 20% 25V                                              |
| C621          | 1-163-005-11 | CERAMIC CHIP 470PF    | 10% 50V                                              |
| C622 $\Delta$ | 1-161-964-51 | CERAMIC 0.0047MF      | 250V                                                 |
| C624          | 1-104-665-11 | ELECT 100MF           | 20% 25V                                              |
| C625          | 1-104-665-11 | ELECT 100MF           | 20% 25V                                              |

| REF. NO.       | PART.NO       | DESCRIPTION                                                      | REMARK                                                            |
|----------------|---------------|------------------------------------------------------------------|-------------------------------------------------------------------|
| C628           | 1-124-347-00  | ELECT 100MF                                                      | 20% 160V                                                          |
| C629           | 1-136-189-00  | FILM 0.1MF                                                       | 10% 250V                                                          |
| C630           | 1-165-127-11  | CERAMIC 470PF                                                    | 10% 500V                                                          |
| C633           | 1-104-332-11  | CERAMIC 470PF                                                    | 10% 2KV                                                           |
| C635           | 1-107-675-11  | ELECT 1MF                                                        | 20% 160V                                                          |
| C638           | 1-107-670-11  | ELECT 10MF                                                       | 20% 400V<br>(KV-25X5A/25X5B/25X5D/25X5E/<br>KV-25X5K/25X5L/25X5U) |
|                | 1-107-679-91  | ELECT 10MF                                                       | 20% 450V<br>(KV-25X5R)                                            |
| C639           | 1-104-665-11  | ELECT 100MF                                                      | 20% 25V                                                           |
| C640           | 1-104-664-11  | ELECT 47MF                                                       | 20% 25V                                                           |
| C641           | 1-104-665-11  | ELECT 100MF                                                      | 20% 25V                                                           |
| C642           | 1-104-665-11  | ELECT 100MF                                                      | 20% 25V                                                           |
| C646           | 1-107-974-11  | CERAMIC 47PF                                                     | 5% 2KV                                                            |
| < FILTER >     |               |                                                                  |                                                                   |
| CF101          | 1-404-134-00  | TRAP, CERAMIC (5.5MHZ)                                           |                                                                   |
| CF105          | 1-760-154-11  | TRAP, CERAMIC (KV-25X5B)                                         |                                                                   |
| SWF101         | 1-767-874-11  | FILTER, SURFACE WAVE<br>(KV-25X5A/25X5D/25X5E/25X5K/25X5R/25X5U) |                                                                   |
|                | 1-579-273-11  | FILTER, SURFACE WAVE<br>(KV-25X5B/25X5L)                         |                                                                   |
| SWF102         | 1-767-873-11  | FILTER, SURFACE WAVE                                             |                                                                   |
| SWF103         | 1-767-083-11  | FILTER, SURFACE WAVE (KV-25X5B)                                  |                                                                   |
| < CONNECTOR >  |               |                                                                  |                                                                   |
| CN001          | *1-564-508-11 | PLUG, CONNECTOR 5P                                               |                                                                   |
| CN007          | *1-564-510-11 | PLUG, CONNECTOR 7P                                               |                                                                   |
| CN101          | 1-766-922-11  | CONNECTOR, BOARD TO BOARD 18P                                    |                                                                   |
| CN201          | *1-564-507-11 | PLUG, CONNECTOR 4P                                               |                                                                   |
| CN208          | *1-564-508-11 | PLUG, CONNECTOR 5P                                               |                                                                   |
| CN406          | 1-564-511-11  | PLUG, CONNECTOR 8P                                               |                                                                   |
| CN501          | *1-580-798-11 | CONNECTOR PIN (DY) 6P                                            |                                                                   |
| CN502          | 1-691-135-11  | PIN, CONNECTOR (PC BOARD) 4P                                     |                                                                   |
| CN504          | *1-564-509-11 | PLUG, CONNECTOR 6P                                               |                                                                   |
| CN506          | 1-695-915-11  | TAB (CONTACT)                                                    |                                                                   |
| CN602 $\Delta$ | 1-508-765-00  | PIN, CONNECTOR (5MM PITCH) 3P                                    |                                                                   |
| CN603 $\Delta$ | 1-508-786-00  | PIN, CONNECTOR (5MM PITCH) 2P                                    |                                                                   |
| CN606 $\Delta$ | *1-691-291-11 | PIN, CONNECTOR (PC BOARD) 5P                                     |                                                                   |
| < DIODE >      |               |                                                                  |                                                                   |
| D001           | 8-719-109-89  | DIODE RD5.6ESB2                                                  |                                                                   |
| D002           | 8-719-109-89  | DIODE RD5.6ESB2                                                  |                                                                   |
| D004           | 8-719-109-89  | DIODE RD5.6ESB2                                                  |                                                                   |
| D005           | 8-719-109-89  | DIODE RD5.6ESB2                                                  |                                                                   |
| D007           | 8-719-109-89  | DIODE RD5.6ESB2                                                  |                                                                   |

| REF.NO. | PART.NO      | DESCRIPTION           | REMARK     | REF.NO.          | PART.NO      | DESCRIPTION          | REMARK                                                |
|---------|--------------|-----------------------|------------|------------------|--------------|----------------------|-------------------------------------------------------|
| D008    | 8-719-991-33 | DIODE 1SS133T-77      |            | D539             | 8-719-900-26 | DIODE ERD29-08J      |                                                       |
| D009    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D541             | 1-535-465-11 | LEAD, JUMPER (5.0MM) |                                                       |
| D010    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D571             | 8-719-911-19 | DIODE 1SS119-25      |                                                       |
| D011    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D573             | 8-719-921-40 | DIODE MTZJ-4.7C      |                                                       |
| D012    | 8-719-914-43 | DIODE DAN202K         |            | D601             | 8-719-510-53 | DIODE D4SB60L        |                                                       |
| D014    | 8-719-058-24 | DIODE RB501V-40TE-17  |            | D602             | 8-719-046-74 | DIODE AU-01Z-V1      |                                                       |
| D015    | 8-719-914-43 | DIODE DAN202K         |            | D603             | 8-719-312-61 | DIODE EU-1Z          |                                                       |
| D017    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D605             | 8-719-312-10 | DIODE RU4AM-T3       |                                                       |
| D018    | 8-719-991-33 | DIODE 1SS133T-77      |            | D608             | 8-719-067-88 | DIODE RG1CLF-B1      |                                                       |
| D023    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D610             | 8-719-067-78 | DIODE RN3Z-LF014-302 |                                                       |
| D101    | 8-719-982-24 | DIODE MTZJ-33A        |            | D613             | 8-719-911-19 | DIODE 1SS119-25      |                                                       |
| D104    | 8-719-914-43 | DIODE DAN202K         | (KV-25X5B) | D614             | 8-719-058-38 | DIODE FMN-G12S       |                                                       |
| D201    | 8-719-929-15 | DIODE HZS9.1NB2       |            | D619             | 8-719-043-76 | DIODE AK04V0         |                                                       |
| D202    | 8-719-914-43 | DIODE DAN202K         |            | D621             | 8-719-068-00 | DIODE ERC04-06SE     |                                                       |
| D204    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D626             | 8-719-068-00 | DIODE ERC04-06SE     |                                                       |
| D205    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D627             | 8-719-510-26 | DIODE D1NL20         |                                                       |
| D206    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D628             | 8-719-059-23 | DIODE P6KE200AG23    |                                                       |
| D306    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D629             | 8-719-979-64 | DIODE UF4005PKG23    |                                                       |
| D307    | 8-719-109-89 | DIODE RD5.6ESB2       |            | D631             | 8-719-110-31 | DIODE RD12ES-B2      |                                                       |
| D308    | 8-719-109-72 | DIODE RD3.9ESB2       |            | D632             | 8-719-510-64 | DIODE S2LA20F        |                                                       |
| D309    | 8-719-991-33 | DIODE 1SS133T-77      |            | D633             | 8-719-109-89 | DIODE RD5.6ESB2      |                                                       |
| D320    | 8-719-923-67 | DIODE MTZJ-9.1B       |            | < FERRITE BEAD > |              |                      |                                                       |
| D402    | 8-719-923-38 | DIODE MTZJ-5.6B       |            | FB001            | 1-412-911-11 | FERRITE              | 0UH                                                   |
| D405    | 8-719-109-97 | DIODE RD6.8ESB2       |            | FB002            | 1-412-911-11 | FERRITE              | 0UH                                                   |
| D406    | 8-719-109-97 | DIODE RD6.8ESB2       |            | FB601            | 1-412-911-11 | FERRITE              | 0UH                                                   |
| D407    | 8-719-109-97 | DIODE RD6.8ESB2       |            | FB602            | 1-412-911-11 | FERRITE              | 0UH                                                   |
| D408    | 8-719-923-67 | DIODE MTZJ-9.1B       |            | FB605            | 1-410-397-21 | FERRITE              | 1.1UH                                                 |
| D409    | 8-719-109-97 | DIODE RD6.8ESB2       |            | FB608            | 1-412-911-11 | FERRITE              | 0UH                                                   |
| D410    | 8-719-923-38 | DIODE MTZJ-5.6B       |            | FB609            | 1-535-465-11 | LEAD, JUMPER (5.0MM) |                                                       |
| D414    | 8-719-109-97 | DIODE RD6.8ESB2       |            | FB610            | 1-410-397-21 | FERRITE              | 1.1UH                                                 |
| D415    | 8-719-929-15 | DIODE HZS9.1NB2       |            | FB611            | 1-410-397-21 | FERRITE              | 1.1UH                                                 |
| D417    | 8-719-929-15 | DIODE HZS9.1NB2       |            | FB612            | 1-535-465-11 | LEAD, JUMPER (5.0MM) |                                                       |
| D418    | 8-719-923-67 | DIODE MTZJ-9.1B       |            | < IC >           |              |                      |                                                       |
| D419    | 8-719-923-67 | DIODE MTZJ-9.1B       |            | IC001            | 8-759-525-78 | IC SAA5497PS/M1A/040 | (KV-25X5A/25X5D)                                      |
| D422    | 8-719-109-97 | DIODE RD6.8ES-B2      |            |                  | 8-759-526-01 | IC SAA5497PS/M1A/038 | (KV-25X5B/25X5E/25X5K/<br>KV-25X5L/25X5U)             |
| D423    | 8-719-109-97 | DIODE RD6.8ESB2       |            |                  | 8-759-525-77 | IC SAA5497PS/M1A/039 | (KV-25X5R)                                            |
| D427    | 8-719-923-67 | DIODE MTZJ-9.1B       |            | IC003            | 8-759-468-56 | IC MN1381T           |                                                       |
| D501    | 8-719-302-43 | DIODE EL1Z            |            | IC004            | 8-759-432-33 | IC ST24W08FM6TR      |                                                       |
| D502    | 8-719-924-13 | DIODE MTZJ-T-77-22B   |            | IC005            | 8-759-516-41 | IC CD4052BCM         |                                                       |
| D511    | 8-719-028-72 | DIODE RGP02-17EL-6433 |            | IC101            | 8-759-466-49 | IC TDA9817/V1        | (KV-25X5A/25K5D/25K5E/25K5K/<br>KV-25K5L/25K5R/25K5U) |
| D512    | 8-719-302-43 | DIODE EL1Z            |            |                  | 8-759-466-47 | IC TDA9818/V1        | (KV-25X5B)                                            |
| D513    | 8-719-979-85 | DIODE EGP20G          |            | IC201            | 8-759-442-74 | IC TDA7495           |                                                       |
| D514    | 8-719-979-85 | DIODE EGP20G          |            | IC301            | 8-752-082-35 | IC CXA2060AS         |                                                       |
| D534    | 8-719-302-43 | DIODE EL1Z            |            |                  |              |                      |                                                       |
| D535    | 8-719-908-03 | DIODE GP08D           |            |                  |              |                      |                                                       |
| D536    | 8-719-945-80 | DIODE ERC06-15S       |            |                  |              |                      |                                                       |
| D538    | 8-719-908-03 | DIODE GP08D           |            |                  |              |                      |                                                       |

A

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

| REF. NO.          | PART.NO      | DESCRIPTION                | REMARK | REF. NO.       | PART.NO      | DESCRIPTION                 | REMARK                                                         |
|-------------------|--------------|----------------------------|--------|----------------|--------------|-----------------------------|----------------------------------------------------------------|
| IC501             | 8-759-192-71 | IC STV9379                 |        | < TRANSISTOR > |              |                             |                                                                |
| IC531             | 8-759-450-95 | IC LM393N                  |        | Q004           | 8-729-216-22 | TRANSISTOR 2SA1162-G        |                                                                |
| IC603             | 8-749-920-61 | IC SE135N                  |        | Q005           | 1-801-806-11 | TRANSISTOR DTC144EKA        |                                                                |
| IC604             | 8-759-524-82 | IC TYA7805CTV              |        | Q006           | 1-801-806-11 | TRANSISTOR DTC144EKA        |                                                                |
| IC605             | 8-759-524-83 | IC TYA7809CTV              |        | Q007           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| IC606             | 8-749-013-75 | IC STR-F6654               |        | Q008           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| IC608             | 8-759-524-82 | IC TYA7805CTV              |        | Q009           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| IC609             | 8-759-468-89 | IC TOP209P                 |        | Q010           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| < PHOTO COUPLER > |              |                            |        | Q011           | 1-801-806-11 | TRANSISTOR DTC144EKA        |                                                                |
| PH601 $\Delta$    | 8-749-010-64 | PHOTO COUPLER PC123F2      |        | Q012           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| < SOCKET >        |              |                            |        | Q014           | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6     |                                                                |
| J401              | 1-766-296-11 | CONNECTOR, DUAL SCART      |        | Q101           | 8-729-216-22 | TRANSISTOR 2SA1162-G        |                                                                |
| J404              | 1-784-632-11 | JACK, PIN 2P               |        | Q107           | 8-729-022-54 | TRANSISTOR 2SC3779C,D-AA    | (KV-25X5B)                                                     |
| < COIL >          |              |                            |        | Q109           | 1-801-806-11 | TRANSISTOR DTC144EKA        | (KV-25X5B)                                                     |
| L001              | 1-408-603-31 | INDUCTOR                   | 10UH   | Q110           | 1-801-806-11 | TRANSISTOR DTC144EKA        | (KV-25X5B)                                                     |
| L102              | 1-408-599-21 | INDUCTOR                   | 4.7UH  | Q111           | 8-729-216-22 | TRANSISTOR 2SA1162-G        | (KV-25X5B)                                                     |
| L103              | 1-403-686-11 | COIL                       |        | Q112           | 1-801-806-11 | TRANSISTOR DTC144EKA        | (KV-25X5B)                                                     |
| L104              | 1-410-671-31 | INDUCTOR                   | 47UH   | Q202           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| L106              | 1-408-417-00 | INDUCTOR                   | 47UH   | Q401           | 8-729-920-72 | TRANSISTOR 2SA1037K         |                                                                |
| L108              | 1-410-985-11 | INDUCTOR CHIP              | 0.22UH | Q405           | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6     |                                                                |
| L109              | 1-410-789-11 | INDUCTOR                   | 0.47UH | Q408           | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6     |                                                                |
| L201              | 1-535-465-11 | LEAD, JUMPER (5.0MM)       |        | Q501           | 8-729-620-06 | TRANSISTOR 2SC3052-EF       |                                                                |
| L202              | 1-535-465-11 | LEAD, JUMPER (5.0MM)       |        | Q532           | 8-729-038-83 | TRANSISTOR 2SK2251-01-F19   |                                                                |
| L203              | 1-406-979-11 | INDUCTOR                   | 0UH    | Q533           | 8-729-040-62 | TRANSISTOR 2SD2539 (LBSONY) |                                                                |
| L302              | 1-408-417-00 | INDUCTOR                   | 47UH   | Q535           | 8-729-119-80 | TRANSISTOR 2SC2688-LK       |                                                                |
| L303              | 1-408-609-41 | INDUCTOR                   | 33UH   | Q571           | 8-729-105-08 | TRANSISTOR 2SA1330-T106     |                                                                |
| L401              | 1-408-417-00 | INDUCTOR                   | 47UH   | Q574           | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6     |                                                                |
| L402              | 1-408-417-00 | INDUCTOR                   | 47UH   | Q575           | 1-801-806-11 | TRANSISTOR DTC144EKA        |                                                                |
| L405              | 1-216-295-00 | SHORT                      | 0      | Q576           | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6     |                                                                |
| L406              | 1-216-295-00 | SHORT                      | 0      | Q601           | 8-729-216-22 | TRANSISTOR 2SA1162-G        |                                                                |
| L501              | 1-408-417-00 | INDUCTOR                   | 47UH   | < RESISTOR >   |              |                             |                                                                |
| L502              | 1-412-529-11 | INDUCTOR                   | 22UH   | JR012          | 1-216-295-00 | SHORT                       | 0 (KV-25X5A/25X5D/25X5E/<br>KV-25X5K/25X5L/25X5R/<br>KV-25X5U) |
| L503              | 1-412-521-31 | INDUCTOR                   | 4.7UH  | JR023          | 1-216-296-00 | SHORT                       | 0                                                              |
| L532              | 1-412-553-41 | INDUCTOR                   | 3.3MMH | JR031          | 1-216-295-00 | SHORT                       | 0                                                              |
| L533              | 1-406-989-21 | INDUCTOR                   | 0UH    | JR113          | 1-216-295-00 | SHORT                       | 0                                                              |
| L535              | 1-459-111-00 | INDUCTOR                   | 0UH    | JR403          | 1-216-073-00 | RES,CHIP                    | 10K 5% 1/10W                                                   |
| L537              | 1-416-214-11 | COIL, HORIZONTAL LINEARITY |        | JR409          | 1-216-295-00 | SHORT                       | 0                                                              |
| L540              | 1-535-465-11 | LEAD, JUMPER (5.0MM)       |        | JR411          | 1-216-295-00 | SHORT                       | 0                                                              |
| L571              | 1-412-533-21 | INDUCTOR                   | 47UH   | JR412          | 1-216-295-00 | SHORT                       | 0                                                              |
| L602              | 1-408-471-00 | INDUCTOR                   | 47UH   | JR610          | 1-216-296-00 | SHORT                       | 0                                                              |
|                   |              |                            |        | JR613          | 1-216-296-00 | SHORT                       | 0                                                              |
|                   |              |                            |        | JW220          | 8-719-923-38 | DIODE MTZJ-5.6B             |                                                                |
|                   |              |                            |        | R001           | 1-216-025-00 | RES,CHIP                    | 100 5% 1/10W                                                   |

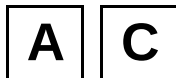
| REF.NO. | PART.NO      | DESCRIPTION | REMARK        | REF.NO. | PART.NO      | DESCRIPTION | REMARK                                                  |
|---------|--------------|-------------|---------------|---------|--------------|-------------|---------------------------------------------------------|
| R002    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W  | R081    | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W                                            |
| R003    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R082    | 1-216-053-00 | RES,CHIP    | 1.5K 5% 1/10W                                           |
| R004    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R083    | 1-216-031-00 | RES,CHIP    | 180 5% 1/10W                                            |
| R005    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R084    | 1-216-053-00 | RES,CHIP    | 1.5K 5% 1/10W                                           |
| R007    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R085    | 1-216-031-00 | RES,CHIP    | 180 5% 1/10W                                            |
| R009    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W  | R086    | 1-216-053-00 | RES,CHIP    | 1.5K 5% 1/10W                                           |
| R010    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W  | R087    | 1-216-180-00 | RES,CHIP    | 180 5% 1/8W                                             |
| R011    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W  | R088    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W                                           |
| R012    | 1-247-807-31 | CARBON      | 100 5% 1/4W   | R093    | 1-216-230-00 | RES,CHIP    | 22K 5% 1/8W                                             |
| R013    | 1-216-214-00 | RES,CHIP    | 4.7K 5% 1/8W  | R094    | 1-216-057-00 | RES,CHIP    | 2.2K 5% 1/10W                                           |
| R014    | 1-216-057-00 | RES,CHIP    | 2.2K 5% 1/10W | R095    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W                                            |
| R015    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W   | R096    | 1-247-807-31 | CARBON      | 100 5% 1/4W                                             |
| R016    | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W  | R097    | 1-247-807-31 | CARBON      | 100 5% 1/4W                                             |
| R019    | 1-216-053-00 | RES,CHIP    | 1.5K 5% 1/10W | R098    | 1-247-807-31 | CARBON      | 100 5% 1/4W                                             |
| R023    | 1-216-295-00 | SHORT       | 0             | R099    | 1-247-807-31 | CARBON      | 100 5% 1/4W                                             |
| R029    | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W  | R101    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W                                             |
| R032    | 1-216-089-00 | RES,CHIP    | 47K 5% 1/10W  | R106    | 1-215-900-11 | METAL OXIDE | 22K 5% 2W F                                             |
| R034    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R110    | 1-216-296-91 | SHORT       | 0 (KV-25X5B)                                            |
| R035    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W   | R111    | 1-216-057-00 | RES,CHIP    | 2.2K 5% 1/10W (KV-25X5B)                                |
| R036    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R112    | 1-216-057-00 | RES,CHIP    | 2.2K 5% 1/10W (KV-25X5B)                                |
| R038    | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W  | R116    | 1-249-437-11 | CARBON      | 47K 5% 1/4W<br>(KV-25X5E/25X5K/25X5U)                   |
| R039    | 1-216-089-00 | RES,CHIP    | 47K 5% 1/10W  | R120    | 1-216-037-00 | RES,CHIP    | 330 5% 1/10W                                            |
| R050    | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W  | R121    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W                                            |
| R051    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W   | R122    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W                                            |
| R053    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R127    | 1-216-031-00 | RES,CHIP    | 180 5% 1/10W (KV-25X5B)                                 |
| R054    | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W  | R128    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W (KV-25X5B)                                |
| R055    | 1-216-081-00 | RES,CHIP    | 22K 5% 1/10W  | R129    | 1-216-063-91 | RES,CHIP    | 3.9K 5% 1/10W (KV-25X5B)                                |
| R056    | 1-216-105-00 | RES,CHIP    | 220K 5% 1/10W | R133    | 1-216-295-00 | SHORT       | 0 (KV-25X5A/25X5D/25X5E/25X5K/<br>KV-25X5L/25X5R/25X5U) |
| R057    | 1-216-075-00 | RES,CHIP    | 12K 5% 1/10W  | R142    | 1-216-295-00 | SHORT       | 0                                                       |
| R058    | 1-216-063-91 | RES,CHIP    | 3.9K 5% 1/10W | R143    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W                                            |
| R059    | 1-216-089-00 | RES,CHIP    | 47K 5% 1/10W  | R144    | 1-216-079-00 | RES,CHIP    | 18K 5% 1/10W                                            |
| R060    | 1-216-174-00 | RES,CHIP    | 100 5% 1/8W   | R145    | 1-216-212-00 | RES,CHIP    | 3.9K 5% 1/8W                                            |
| R061    | 1-216-174-00 | RES,CHIP    | 100 5% 1/8W   | R147    | 1-216-017-91 | RES,CHIP    | 47 5% 1/10W (KV-25X5B)                                  |
| R062    | 1-216-033-00 | RES,CHIP    | 220 5% 1/10W  | R148    | 1-216-174-00 | RES,CHIP    | 100 5% 1/8W (KV-25X5B)                                  |
| R063    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R149    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W (KV-25X5B)                                  |
| R064    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R151    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W                                             |
| R065    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W  | R152    | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W (KV-25X5B)                                 |
| R066    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R153    | 1-216-180-00 | RES,CHIP    | 180 5% 1/8W (KV-25X5B)                                  |
| R067    | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W | R154    | 1-216-238-91 | RES,CHIP    | 47K 5% 1/8W                                             |
| R069    | 1-216-049-00 | RES,CHIP    | 1K 5% 1/10W   | R155    | 1-216-089-00 | RES,CHIP    | 47K 5% 1/10W                                            |
| R070    | 1-216-081-00 | RES,CHIP    | 22K 5% 1/10W  | R156    | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W (KV-25X5B)                                 |
| R071    | 1-216-214-00 | RES,CHIP    | 4.7K 5% 1/8W  | R157    | 1-216-063-91 | RES,CHIP    | 3.9K 5% 1/10W (KV-25X5B)                                |
| R072    | 1-216-097-00 | RES,CHIP    | 100K 5% 1/10W | R158    | 1-216-069-00 | RES,CHIP    | 6.8K 5% 1/10W (KV-25X5B)                                |
| R073    | 1-216-097-00 | RES,CHIP    | 100K 5% 1/10W | R204    | 1-247-863-91 | CARBON      | 22K 5% 1/4W                                             |
| R075    | 1-216-069-00 | RES,CHIP    | 6.8K 5% 1/10W | R206    | 1-216-085-00 | RES,CHIP    | 33K 5% 1/10W                                            |
| R077    | 1-216-083-00 | RES,CHIP    | 27K 5% 1/10W  |         |              |             |                                                         |
| R080    | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W  |         |              |             |                                                         |

A

| REF. NO. | PART.NO      | DESCRIPTION    | REMARK          | REF. NO. | PART.NO      | DESCRIPTION | REMARK                                                              |
|----------|--------------|----------------|-----------------|----------|--------------|-------------|---------------------------------------------------------------------|
| R207     | 1-216-295-00 | SHORT          | 0               | R417     | 1-247-804-11 | CARBON      | 75 5% 1/4W<br>(KV-25X5A/25X5B/25X5D/25X5E/<br>KV-25X5K/25X5L/25X5R) |
| R209     | 1-216-065-00 | RES,CHIP       | 4.7K 5% 1/10W   |          | 1-247-698-11 | CARBON      | 68 5% 1/4W (KV-25X5U)                                               |
| R211     | 1-215-873-00 | METAL OXIDE    | 4.7K 5% 1W F    | R418     | 1-260-095-11 | CARBON      | 470 5% 1/2W<br>(KV-25X5A/25X5D/25X5E/25X5L/25X5R)                   |
| R213     | 1-216-089-00 | RES,CHIP       | 47K 5% 1/10W    |          | 1-249-413-11 | CARBON      | 470 5% 1/4W<br>(KV-25X5B/25X5K)                                     |
| R301     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    |          | 1-249-414-11 | CARBON      | 560 5% 1/4W (KV-25X5U)                                              |
| R302     | 1-216-081-00 | RES,CHIP       | 22K 5% 1/10W    | R419     | 1-216-022-00 | RES,CHIP    | 75 5% 1/10W                                                         |
| R303     | 1-216-073-00 | RES,CHIP       | 10K 5% 1/10W    | R420     | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W                                                        |
| R304     | 1-216-073-00 | RES,CHIP       | 10K 5% 1/10W    | R421     | 1-216-113-00 | RES,CHIP    | 470K 5% 1/10W                                                       |
| R306     | 1-216-206-00 | RES,CHIP       | 2.2K 5% 1/8W    | R422     | 1-216-295-00 | SHORT       | 0                                                                   |
| R309     | 1-216-675-11 | METAL CHIP     | 10K 0.50% 1/10W | R425     | 1-216-077-00 | RES,CHIP    | 15K 5% 1/10W                                                        |
| R310     | 1-216-022-00 | RES,CHIP       | 75 5% 1/10W     | R426     | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W                                                        |
| R311     | 1-216-022-00 | RES,CHIP       | 75 5% 1/10W     | R427     | 1-216-113-00 | RES,CHIP    | 470K 5% 1/10W                                                       |
| R313     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R429     | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W                                                        |
| R314     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R430     | 1-216-113-00 | RES,CHIP    | 470K 5% 1/10W                                                       |
| R315     | 1-216-075-91 | RES,CHIP       | 12K 5% 1/10W    | R431     | 1-216-295-00 | SHORT       | 0                                                                   |
| R316     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R432     | 1-216-113-00 | RES,CHIP    | 470K 5% 1/10W                                                       |
| R317     | 1-216-049-00 | RES,CHIP       | 1K 5% 1/10W     | R435     | 1-216-022-00 | RES,CHIP    | 75 5% 1/10W                                                         |
| R318     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R436     | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W                                                        |
| R319     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R439     | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W                                                        |
| R320     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R440     | 1-216-113-00 | RES,CHIP    | 470K 5% 1/10W                                                       |
| R321     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R441     | 1-216-295-00 | SHORT       | 0                                                                   |
| R323     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R442     | 1-216-077-00 | RES,CHIP    | 15K 5% 1/10W                                                        |
| R324     | 1-412-002-21 | INDUCTOR       | 4.7UH           | R443     | 1-216-073-00 | RES,CHIP    | 10K 5% 1/10W                                                        |
| R325     | 1-412-002-21 | INDUCTOR       | 4.7UH           | R450     | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W                                                        |
| R326     | 1-216-129-00 | RES,CHIP       | 2.2M 5% 1/10W   | R454     | 1-216-041-00 | RES,CHIP    | 470 5% 1/10W                                                        |
| R331     | 1-216-057-00 | RES,CHIP       | 2.2K 5% 1/10W   | R457     | 1-216-025-00 | RES,CHIP    | 100 5% 1/10W                                                        |
| R332     | 1-216-057-00 | RES,CHIP       | 2.2K 5% 1/10W   | R459     | 1-247-807-31 | CARBON      | 100 5% 1/4W                                                         |
| R333     | 1-216-057-00 | RES,CHIP       | 2.2K 5% 1/10W   | R460     | 1-249-403-11 | CARBON      | 68 5% 1/4W                                                          |
| R334     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R501     | 1-216-081-00 | RES,CHIP    | 22K 5% 1/10W                                                        |
| R335     | 1-216-025-00 | RES,CHIP       | 100 5% 1/10W    | R502     | 1-216-097-00 | RES,CHIP    | 100K 5% 1/10W                                                       |
| R337     | 1-216-065-00 | RES,CHIP       | 4.7K 5% 1/10W   | R503     | 1-215-888-00 | METAL OXIDE | 220 5% 2W F                                                         |
| R338     | 1-216-049-00 | RES,CHIP       | 1K 5% 1/10W     | R504     | 1-249-385-11 | CARBON      | 2.2 5% 1/4W F                                                       |
| R401     | 1-216-113-00 | RES,CHIP       | 470K 5% 1/10W   | R505     | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W                                                       |
| R402     | 1-216-295-71 | CONDUCTOR CHIP |                 | R506     | 1-216-061-00 | RES,CHIP    | 3.3K 5% 1/10W                                                       |
| R403     | 1-216-041-00 | RES,CHIP       | 470 5% 1/10W    | R507     | 1-216-349-00 | METAL OXIDE | 1 5% 1W F                                                           |
| R404     | 1-216-113-00 | RES,CHIP       | 470K 5% 1/10W   | R508     | 1-216-065-00 | RES,CHIP    | 4.7K 5% 1/10W                                                       |
| R405     | 1-216-295-00 | SHORT          | 0               | R509     | 1-216-061-00 | RES,CHIP    | 3.3K 5% 1/10W                                                       |
| R406     | 1-216-113-00 | RES,CHIP       | 470K 5% 1/10W   | R510     | 1-216-081-00 | RES,CHIP    | 22K 5% 1/10W                                                        |
| R408     | 1-216-022-00 | RES,CHIP       | 75 5% 1/10W     | R511     | 1-215-869-11 | METAL OXIDE | 1K 5% 1W F                                                          |
| R409     | 1-216-029-71 | RES,CHIP       | 150 5% 1/10W    | R512     | 1-249-377-11 | CARBON      | 0.47 5% 1/4W F                                                      |
| R410     | 1-216-029-71 | RES,CHIP       | 150 5% 1/10W    | R513     | 1-216-097-00 | RES,CHIP    | 100K 5% 1/10W                                                       |
| R411     | 1-216-022-00 | RES,CHIP       | 75 5% 1/10W     | R514     | 1-249-377-11 | CARBON      | 0.47 5% 1/4W F                                                      |
| R412     | 1-216-029-71 | RES,CHIP       | 150 5% 1/10W    | R515     | 1-249-377-11 | CARBON      | 0.47 5% 1/4W F                                                      |
| R413     | 1-216-295-00 | SHORT          | 0               |          |              |             |                                                                     |
| R414     | 1-216-022-00 | RES,CHIP       | 75 5% 1/10W     |          |              |             |                                                                     |
| R415     | 1-216-022-00 | RES,CHIP       | 75 5% 1/10W     |          |              |             |                                                                     |

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

| REF.NO. | PART.NO      | DESCRIPTION          | REMARK        | REF.NO.                      | PART.NO                                  | DESCRIPTION                     | REMARK        |
|---------|--------------|----------------------|---------------|------------------------------|------------------------------------------|---------------------------------|---------------|
| R516    | 1-249-493-11 | CARBON               | 56K 5% 1/2W   | R603                         | 1-202-933-61                             | FUSIBLE 0.1 10% 1/2W            | F             |
| R517    | 1-249-434-11 | CARBON               | 27K 5% 1/4W   | R607 $\Delta$ 1-202-961-11   | CEMENTED                                 | 1.8 5% 10W                      |               |
| R518    | 1-216-065-00 | RES,CHIP             | 4.7K 5% 1/10W | R608                         | 1-215-927-00                             | METAL OXIDE                     | 47K 5% 3W F   |
| R520    | 1-215-884-11 | METAL OXIDE          | 47 5% 2W F    | R611                         | 1-249-415-11                             | CARBON                          | 680 5% 1/4W   |
| R521    | 1-216-117-00 | RES,CHIP             | 680K 5% 1/10W | R613 $\Delta$ 1-240-030-91   | METAL                                    | 4.7M 5% 1/2W                    |               |
| R522    | 1-216-097-00 | RES,CHIP             | 100K 5% 1/10W | R614 $\Delta$ 1-240-030-91   | METAL                                    | 4.7M 5% 1/2W                    |               |
| R523    | 1-216-121-91 | RES,CHIP             | 1M 5% 1/10W   | R615                         | 1-249-422-11                             | CARBON                          | 2.7K 5% 1/4W  |
| R524    | 1-216-083-91 | RES,CHIP             | 27K 5% 1/10W  | R616                         | 1-216-393-00                             | METAL OXIDE                     | 2.2 5% 3W F   |
| R525    | 1-216-057-00 | RES,CHIP             | 2.2K 5% 1/10W | R617                         | 1-249-405-11                             | CARBON                          | 100 5% 1/4W F |
| R526    | 1-216-089-00 | RES,CHIP             | 47K 5% 1/10W  | R619                         | 1-216-065-00                             | RES,CHIP                        | 4.7K 5% 1/10W |
| R527    | 1-216-077-00 | RES,CHIP             | 15K 5% 1/10W  | R622                         | 1-249-401-11                             | CARBON                          | 47 5% 1/4W    |
| R528    | 1-216-246-00 | RES,CHIP             | 100K 5% 1/8W  | R627                         | 1-249-389-11                             | CARBON                          | 4.7 5% 1/4W F |
| R529    | 1-216-073-00 | RES,CHIP             | 10K 5% 1/10W  | R628                         | 1-247-791-91                             | CARBON                          | 22 5% 1/4W    |
| R530    | 1-216-085-00 | RES,CHIP             | 33K 5% 1/10W  | R652                         | 1-216-393-00                             | METAL OXIDE                     | 2.2 5% 3W F   |
| R531    | 1-216-057-00 | RES,CHIP             | 2.2K 5% 1/10W | R653                         | 1-216-393-00                             | METAL OXIDE                     | 2.2 5% 3W F   |
| R532    | 1-216-063-91 | RES,CHIP             | 3.9K 5% 1/10W | R658                         | 1-215-929-11                             | METAL OXIDE                     | 100K 5% 3W F  |
| R533    | 1-216-073-71 | RES,CHIP             | 10K 5% 1/10W  | R659                         | 1-216-383-21                             | METAL OXIDE                     | 0.33 5% 3W F  |
| R534    | 1-216-105-91 | RES,CHIP             | 220K 5% 1/10W | R660                         | 1-216-384-21                             | METAL OXIDE                     | 0.39 5% 3W F  |
| R535    | 1-216-109-00 | RES,CHIP             | 330K 5% 1/10W | R661                         | 1-247-843-91                             | CARBON                          | 3.3K 5% 1/4W  |
| R539    | 1-216-049-00 | RES,CHIP             | 1K 5% 1/10W   | R662                         | 1-215-929-11                             | METAL OXIDE                     | 100K 5% 3W F  |
| R540    | 1-215-861-21 | METAL OXIDE          | 47 5% 1W F    | R664                         | 1-249-417-11                             | CARBON                          | 1K 5% 1/4W    |
| R541    | 1-216-097-00 | RES,CHIP             | 100K 5% 1/10W | R665                         | 1-215-877-11                             | METAL OXIDE                     | 22K 5% 1W F   |
| R542    | 1-216-089-00 | RES,CHIP             | 47K 5% 1/10W  | R667                         | 1-215-927-00                             | METAL OXIDE                     | 47K 5% 3W F   |
| R543    | 1-216-089-00 | RES,CHIP             | 47K 5% 1/10W  | < VARIABLE RESISTOR >        |                                          |                                 |               |
| R546    | 1-249-401-11 | CARBON               | 47 5% 1/4W F  | RV101                        | 1-241-765-11                             | RES, ADJ, CARBON 22K (KV-25X5B) |               |
| R547    | 1-535-143-71 | LEAD, JUMPER (7.5MM) |               | < RELAY >                    |                                          |                                 |               |
| R548    | 1-216-397-11 | METAL OXIDE          | 4.7 5% 3W F   | RY601 $\Delta$ 1-755-245-11  | RELAY, AC POWER                          |                                 |               |
| R549    | 1-216-341-11 | METAL OXIDE          | 0.22 5% 1W F  | < SWITCH >                   |                                          |                                 |               |
| R551    | 1-215-873-21 | METAL OXIDE          | 4.7K 5% 1W F  | SW532                        | 1-572-707-11                             | SWITCH, LEVER                   |               |
| R552    | 1-216-061-00 | RES,CHIP             | 3.3K 5% 1/10W | < TRANSFORMER >              |                                          |                                 |               |
| R553    | 1-249-381-11 | CARBON               | 1 5% 1/4W F   | T511 $\Delta$ 1-453-264-11   | TRANSFORMER ASSY, FLYBACK (NX-1680/U2B4) |                                 |               |
| R571    | 1-249-417-11 | CARBON               | 1K 5% 1/4W F  | T531                         | 1-437-195-11                             | TRANSFORMER, HORIZONTAL DRIVE   |               |
| R572    | 1-216-369-00 | METAL OXIDE          | 1 5% 2W F     | T532                         | 1-431-228-11                             | TRANSFORMER, POWER MODULATION   |               |
| R573    | 1-216-097-00 | RES,CHIP             | 100K 5% 1/10W | T601 $\Delta$ 1-427-962-11   | TRANSFORMER, LINE FILTER                 |                                 |               |
| R574    | 1-216-065-00 | RES,CHIP             | 4.7K 5% 1/10W | T602                         | 1-431-732-11                             | TRANSFORMER, CONVERTER (SRT)    |               |
| R575    | 1-216-097-00 | RES,CHIP             | 100K 5% 1/10W | T603 $\Delta$ 1-431-777-11   | TRANSFORMER, CONVERTER                   |                                 |               |
| R576    | 1-249-399-11 | RES,CHIP             | 33K 5% 1/10W  | < THERMISTOR >               |                                          |                                 |               |
| R581    | 1-216-089-00 | RES,CHIP             | 47K 5% 1/10W  | THP601 $\Delta$ 1-810-961-11 | THERMISTOR, POSITIVE                     |                                 |               |
| R582    | 1-216-089-00 | RES,CHIP             | 47K 5% 1/10W  |                              |                                          |                                 |               |
| R583    | 1-216-081-00 | RES,CHIP             | 22K 5% 1/10W  |                              |                                          |                                 |               |
| R588    | 1-216-053-00 | RES,CHIP             | 1.5K 5% 1/10W |                              |                                          |                                 |               |
| R589    | 1-216-097-00 | RES,CHIP             | 100K 5% 1/10W |                              |                                          |                                 |               |
| R590    | 1-216-081-00 | RES,CHIP             | 22K 5% 1/10W  |                              |                                          |                                 |               |
| R591    | 1-215-892-11 | METAL OXIDE          | 1K 5% 2W F    |                              |                                          |                                 |               |
| R593    | 1-249-439-11 | CARBON               | 68K 5% 1/4W   |                              |                                          |                                 |               |
| R594    | 1-216-057-00 | RES,CHIP             | 2.2K 5% 1/10W |                              |                                          |                                 |               |
| R602    | 1-202-961-11 | CEMENTED             | 1.8 5% 10W    |                              |                                          |                                 |               |



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| REF. NO.                       | PART. NO      | DESCRIPTION         | REMARK                              | REF. NO.       | PART. NO              | DESCRIPTION              | REMARK |
|--------------------------------|---------------|---------------------|-------------------------------------|----------------|-----------------------|--------------------------|--------|
| < TUNER >                      |               |                     |                                     | D711           | 1-216-349-51          | METAL OXIDE 1 5% 1W      |        |
| TU101                          | 1-693-418-11  | TUNER (TELE9-001A)  | (KV-25X5A/25X5B/<br>KV-25X5D/25X5L) | D714           | 8-719-991-33          | DIODE 1SS133T-77         |        |
|                                | 8-598-432-00  | TUNER (BTP-AC411)   | (KV-25X5E/25X5K)                    | D715           | 8-719-991-33          | DIODE 1SS133T-77         |        |
|                                | 8-598-361-00  | TUNER (BTP-AC402)   | (KV-25X5R)                          | D716           | 8-719-991-33          | DIODE 1SS133T-77         |        |
|                                | 8-598-464-01  | TUNER (BTP-AU611)   | (KV-25X5U)                          | D717           | 8-719-991-33          | DIODE 1SS133T-77         |        |
| < CRYSTAL >                    |               |                     |                                     | D718           | 8-719-991-33          | DIODE 1SS133T-77         |        |
| X001                           | 1-578-774-11  | VIBRATOR, CRYSTAL   |                                     | D719           | 8-719-991-33          | DIODE 1SS133T-77         |        |
| X302                           | 1-567-505-11  | OSCILLATOR, CRYSTAL |                                     | < CRT SOCKET > |                       |                          |        |
| X303                           | 1-567-504-11  | OSCILLATOR, CRYSTAL |                                     | J701           | $\Delta$ 1-526-990-21 | SOCKET, CRT              |        |
| *****                          |               |                     |                                     | < COIL >       |                       |                          |        |
| *A-1638-111-A C BOARD COMPLETE |               |                     |                                     | L704           | 1-408-609-41          | INDUCTOR 33UH            |        |
| *****                          |               |                     |                                     | < TRANSISTOR > |                       |                          |        |
| < CAPACITOR >                  |               |                     |                                     | Q702           | 8-729-119-78          | TRANSISTOR 2SC2785-HFE   |        |
| C701                           | 1-102-114-00  | CERAMIC 470PF       | 10% 50V                             | Q703           | 8-729-906-70          | TRANSISTOR BF871-127     |        |
| C702                           | 1-102-115-00  | CERAMIC 560PF       | 10% 50V                             | Q704           | 8-729-200-17          | TRANSISTOR BF421L-AMMO   |        |
| C703                           | 1-102-116-00  | CERAMIC 680PF       | 10% 50V                             | Q705           | 8-729-119-78          | TRANSISTOR 2SC2785-HFE   |        |
| C708                           | 1-162-114-00  | CERAMIC 0.0047MF    | 2KV                                 | Q706           | 8-729-906-70          | TRANSISTOR BF871-127     |        |
| C710                           | 1-107-652-11  | ELECT 10MF          | 20% 250V                            | Q707           | 8-729-200-17          | TRANSISTOR BF421L-AMMO   |        |
| C711                           | 1-102-114-00  | CERAMIC 470PF       | 10% 50V                             | Q708           | 8-729-119-78          | TRANSISTOR 2SC2785-HFE   |        |
| C712                           | 1-102-116-00  | CERAMIC 680PF       | 10% 50V                             | Q709           | 8-729-906-70          | TRANSISTOR BF871-127     |        |
| C714                           | 1-126-967-11  | ELECT 47MF          | 20% 16V                             | Q710           | 8-729-200-17          | TRANSISTOR BF421L-AMMO   |        |
| C717                           | 1-102-114-00  | CERAMIC 470PF       | 10% 50V                             | < RESISTOR >   |                       |                          |        |
| C718                           | 1-102-114-00  | CERAMIC 470PF       | 10% 50V                             | R701           | 1-247-895-91          | CARBON 470K 5% 1/4W      |        |
| C719                           | 1-102-114-00  | CERAMIC 470PF       | 10% 50V                             | R704           | 1-216-486-00          | METAL OXIDE 8.2K 5% 3W F |        |
| C722                           | 1-101-880-00  | CERAMIC 47PF        | 5% 50V                              | R705           | 1-260-103-11          | CARBON 2.2K 5% 1/2W      |        |
| C723                           | 1-101-880-00  | CERAMIC 47PF        | 5% 50V                              | R706           | 1-247-815-91          | CARBON 220 5% 1/4W       |        |
| C724                           | 1-101-880-00  | CERAMIC 47PF        | 5% 50V                              | R707           | 1-247-815-91          | CARBON 220 5% 1/4W       |        |
| < CONNECTOR >                  |               |                     |                                     | R708           | 1-247-791-91          | CARBON 22 5% 1/4W        |        |
| CN701                          | 1-784-633-11  | PIN, CONNECTOR 4P   |                                     | R709           | 1-202-844-00          | SOLID 330K 10% 1/2W      |        |
| CN702                          | 1-695-915-11  | TAB (CONTACT)       |                                     | R711           | 1-247-843-11          | CARBON 3.3K 5% 1/4W      |        |
| CN703                          | *1-564-509-11 | PLUG, CONNECTOR 6P  |                                     | R712           | 1-260-103-11          | CARBON 2.2K 5% 1/2W      |        |
| < DIODE >                      |               |                     |                                     | R713           | 1-247-875-91          | CARBON 68K 5% 1/4W       |        |
| D702                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R714           | 1-216-486-00          | METAL OXIDE 8.2K 5% 3W F |        |
| D703                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R715           | 1-249-417-11          | CARBON 1K 5% 1/4W        |        |
| D704                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R716           | 1-247-815-91          | CARBON 220 5% 1/4W       |        |
| D705                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R717           | 1-247-815-91          | CARBON 220 5% 1/4W       |        |
| D706                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R718           | 1-202-814-11          | SOLID 33K 10% 1/2W       |        |
| D707                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R719           | 1-247-791-91          | CARBON 22 5% 1/4W        |        |
| D708                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R720           | 1-247-843-11          | CARBON 3.3K 5% 1/4W      |        |
| D709                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R722           | 1-202-848-00          | SOLID 680K 10% 1/2W      |        |
| D710                           | 8-719-991-33  | DIODE 1SS133T-77    |                                     | R723           | 1-249-417-11          | CARBON 1K 5% 1/4W        |        |
|                                |               |                     |                                     | R724           | 1-260-131-11          | CARBON 470K 5% 1/2W      |        |

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

KV-25X5

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| REF.NO.                         | PART.NO                | DESCRIPTION                | REMARK          | REF.NO.         | PART.NO               | DESCRIPTION             | REMARK |
|---------------------------------|------------------------|----------------------------|-----------------|-----------------|-----------------------|-------------------------|--------|
| R726                            | 1-260-103-11           | CARBON                     | 2.2K 5% 1/2W    | < DIODE >       |                       |                         |        |
| R727                            | 1-247-815-91           | CARBON                     | 220 5% 1/4W     | D901            | 8-719-302-45          | DIODE SEL1210S-CD       |        |
| R728                            | 1-216-351-00           | METAL OXIDE                | 1.5 5% 1W F     |                 | *4-203-258-01         | HOLDER, LED (D901)      |        |
| R729                            | 1-247-815-91           | CARBON                     | 220 5% 1/4W     | D902            | 8-719-929-15          | DIODE HZS9.1NB2         |        |
| R730                            | 1-247-791-91           | CARBON                     | 22 5% 1/4W      | D903            | 8-719-929-15          | DIODE HZS9.1NB2         |        |
| R731                            | 1-247-843-11           | CARBON                     | 3.3K 5% 1/4W    | D904            | 8-719-109-97          | DIODE RD6.8ES-B2        |        |
| R733                            | 1-247-823-91           | CARBON                     | 470 5% 1/4W     | D905            | 8-719-109-97          | DIODE RD6.8ES-B2        |        |
| R734                            | 1-247-807-31           | CARBON                     | 100 5% 1/4W     | D906            | 8-719-923-60          | DIODE MTZJ-T-77-9.1A    |        |
| R735                            | 1-247-823-91           | CARBON                     | 470 5% 1/4W     | D907            | 8-719-923-60          | DIODE MTZJ-T-77-9.1A    |        |
| R736                            | 1-216-486-00           | METAL OXIDE                | 8.2K 5% 3W F    | D908            | 8-719-923-60          | DIODE MTZJ-T-77-9.1A    |        |
| R737                            | 1-247-891-91           | CARBON                     | 330K 5% 1/4W    | < FUSE >        |                       |                         |        |
| R739                            | 1-249-417-11           | CARBON                     | 1K 5% 1/4W      | F601            | 1-576-232-21          | FUSE (H.B.C.) 5AMP 250V |        |
| R740                            | 1-247-823-91           | CARBON                     | 470 5% 1/4W     |                 | *1-533-725-11         | HOLDER, FUSE (F601)     |        |
| R741                            | 1-202-549-00           | SOLID                      | 100 20% 1/2W    | < IC >          |                       |                         |        |
| R744                            | 1-249-421-11           | CARBON                     | 2.2K 5% 1/4W    | IC900           | 8-742-014-11          | HYB IC SBX1981-51       |        |
| R745                            | 1-249-421-11           | CARBON                     | 2.2K 5% 1/4W    | < JACK SOCKET > |                       |                         |        |
| R746                            | 1-249-421-11           | CARBON                     | 2.2K 5% 1/4W    | J900            | 1-764-606-11          | JACK                    |        |
| < VARIABLE RESISTOR >           |                        |                            |                 | < COIL >        |                       |                         |        |
| RV701                           | 1-230-641-11           | RES, ADJ, METAL GLAZE 2.2M |                 | L900            | 1-412-533-21          | INDUCTOR 47UH           |        |
| RV702                           | 1-241-656-21           | RES, ADJ, METAL FILM 110M  |                 | L901            | 1-412-533-21          | INDUCTOR 47UH           |        |
| *****                           |                        |                            |                 | L902            | 1-408-603-31          | INDUCTOR 10UH           |        |
| *A-1646-157-A H1 BOARD COMPLETE |                        |                            |                 | L903            | 1-408-603-31          | INDUCTOR 10UH           |        |
| *****                           |                        |                            |                 | < RESISTOR >    |                       |                         |        |
| < CAPACITOR >                   |                        |                            |                 | R900            | 1-247-807-31          | CARBON 100 5% 1/4W      |        |
| C902                            | 1-137-372-11           | FILM                       | 0.022MF 5% 50V  | R901            | 1-249-426-11          | CARBON 5.6K 5% 1/4W     |        |
| C903                            | 1-137-372-11           | FILM                       | 0.022MF 5% 50V  | R902            | 1-249-437-11          | CARBON 47K 5% 1/4W      |        |
| C904                            | 1-104-665-11           | ELECT                      | 100MF 20% 25V   | R903            | 1-260-091-11          | CARBON 220 5% 1/2W      |        |
| C905                            | 1-126-964-11           | ELECT                      | 10MF 20% 50V    | R904            | 1-260-091-11          | CARBON 220 5% 1/2W      |        |
| C907                            | 1-126-960-11           | ELECT                      | 1MF 20% 50V     | R908            | 1-249-401-11          | CARBON 47 5% 1/4W       |        |
| C908                            | 1-126-960-11           | ELECT                      | 1MF 20% 50V     | R909            | 1-247-895-91          | CARBON 470K 5% 1/4W     |        |
| C911                            | 1-102-074-00           | CERAMIC                    | 0.001MF 10% 50V | R910            | 1-247-895-91          | CARBON 470K 5% 1/4W     |        |
| C912                            | 1-102-074-00           | CERAMIC                    | 0.001MF 10% 50V | R911            | 1-535-465-11          | LEAD, JUMPER (5.0MM)    |        |
| < CONNECTOR >                   |                        |                            |                 | R912            | 1-249-422-11          | CARBON 2.7K 5% 1/4W     |        |
| CN603                           | $\Delta$ *1-580-844-11 | PIN, CONNECTOR (POWER)     |                 | R913            | 1-249-429-11          | CARBON 10K 5% 1/4W      |        |
| CN604                           | $\Delta$ *1-695-292-11 | PIN, CONNECTOR (POWER)     |                 | R914            | 1-247-863-91          | CARBON 22K 5% 1/4W      |        |
| CN900                           | 1-779-947-12           | TERMINAL BLOCK, S          |                 | < SWITCH >      |                       |                         |        |
| CN906                           | *1-564-511-11          | PLUG, CONNECTOR 8P         |                 | S601            | $\Delta$ 1-571-433-21 | SWITCH, PUSH (AC POWER) |        |
| CN907                           | *1-564-510-11          | PLUG, CONNECTOR 7P         |                 | S900            | 1-692-979-21          | SWITCH, TACTILE         |        |
| CN908                           | *1-564-508-11          | PLUG, CONNECTOR 5P         |                 | S901            | 1-692-979-21          | SWITCH, TACTILE         |        |
|                                 |                        |                            |                 | S902            | 1-692-979-21          | SWITCH, TACTILE         |        |

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| REF.NO.       | PART.NO      | DESCRIPTION                           | REMARK  | REF.NO. | PART.NO      | DESCRIPTION                                | REMARK  |
|---------------|--------------|---------------------------------------|---------|---------|--------------|--------------------------------------------|---------|
| *A-1652-053-A | S1           | BOARD COMPLETE (KV-25X5A/25X5D/25X5R) |         | C1150   | 1-126-960-11 | ELECT 1MF                                  | 20% 50V |
|               | *****        |                                       |         | C1151   | 1-104-664-11 | ELECT 47MF                                 | 20% 25V |
| *A-1652-056-A | S1           | BOARD COMPLETE (KV-25X5B)             |         | C1152   | 1-164-004-11 | CERAMIC CHIP 0.1MF                         | 10% 25V |
|               | *****        |                                       |         |         |              | < FILTER >                                 |         |
| *A-1652-052-A | S1           | BOARD COMPLETE (KV-25X5E/25X5K/       |         | CF1101  | 1-409-327-00 | TRAP, CERAMIC (6.5MHZ) (KV-25X5B)          |         |
|               | *****        | KV-25X5L/25X5U)                       |         |         |              | < CONNECTOR >                              |         |
|               |              | < CAPACITOR >                         |         | CN1101  | 1-766-925-11 | CONNECTOR, BOARD TO BOARD 18P              |         |
| C1103         | 1-164-232-11 | CERAMIC CHIP 0.01MF                   | 10% 50V |         |              | < DIODE >                                  |         |
| C1106         | 1-164-232-11 | CERAMIC CHIP 0.01MF                   | 10% 50V | D1101   | 8-216-295-00 | SHORT 0 (KV-25X5A/25X5D/25X5R)             |         |
| C1107         | 1-164-232-11 | CERAMIC CHIP 0.01MF                   | 10% 50V |         | 8-719-066-72 | DIODE BB135 (KV-25X5B/25X5E/25X5K/         |         |
| C1108         | 1-164-232-11 | CERAMIC CHIP 0.01MF                   | 10% 50V |         |              | KV-25X5L/25X5U)                            |         |
| C1109         | 1-104-664-11 | ELECT 47MF                            | 20% 25V |         |              | < FERRITE BEAD >                           |         |
| C1112         | 1-163-001-11 | CERAMIC CHIP 220PF                    | 10% 50V | FB1101  | 1-410-396-41 | FERRITE 0.45UH                             |         |
| C1113         | 1-104-664-11 | ELECT 47MF                            | 20% 25V | FB1102  | 1-410-396-41 | FERRITE 0.45UH                             |         |
| C1114         | 1-163-001-11 | CERAMIC CHIP 220PF                    | 10% 50V | FB1103  | 1-410-396-41 | FERRITE 0.45UH                             |         |
| C1115         | 1-104-664-11 | ELECT 47MF                            | 20% 25V | FB1104  | 1-410-396-41 | FERRITE 0.45UH                             |         |
| C1118         | 1-162-637-11 | CERAMIC CHIP 0.47MF                   | 16V     | FB1105  | 1-410-396-41 | FERRITE 0.45UH                             |         |
| C1120         | 1-164-005-11 | CERAMIC CHIP 0.47MF                   | 25V     | FB1110  | 1-412-002-31 | INDUCTOR CHIP 4.7UH                        |         |
| C1122         | 1-104-664-11 | ELECT 47MF                            | 20% 25V | FB1111  | 1-412-004-31 | INDUCTOR CHIP 6.8UH (KV-25X5A/25X5D/25X5R) |         |
| C1123         | 1-164-004-11 | CERAMIC CHIP 0.1MF                    | 10% 25V |         | 1-412-002-31 | INDUCTOR CHIP 4.7UH (KV-25X5B/25X5E/25X5K/ |         |
| C1124         | 1-163-251-11 | CERAMIC CHIP 100PF                    | 5% 50V  |         |              | KV-25X5L/25X5U)                            |         |
| C1127         | 1-163-235-11 | CERAMIC CHIP 22PF                     | 5% 50V  | FB1112  | 1-412-002-31 | INDUCTOR CHIP 4.7UH                        |         |
|               |              | (KV-25X5A/25X5D/25X5R)                |         | FB1113  | 1-412-002-31 | INDUCTOR CHIP 4.7UH (KV-25X5B)             |         |
|               | 1-163-239-11 | CERAMIC CHIP 33PF                     | 5% 50V  |         |              | < IC >                                     |         |
|               |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U)    |         | IC1101  | 8-759-522-62 | IC TDA9870 (KV-25X5A/25X5D/25X5R)          |         |
| C1128         | 1-163-239-11 | CERAMIC CHIP 33PF                     | 5% 50V  |         | 8-759-466-48 | IC TDA9875P (KV-25X5B/25X5E/25X5K/         |         |
| C1129         | 1-163-989-11 | CERAMIC CHIP 0.033MF                  | 10% 25V |         |              | KV-25X5L/25X5U)                            |         |
|               |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U)    |         | IC1102  | 8-759-998-98 | IC LM358D (KV-25X5A/25X5D/25X5R)           |         |
| C1130         | 1-110-501-11 | CERAMIC CHIP 0.33MF                   | 10% 16V |         | 8-759-100-96 | IC UPC4558G2 (KV-25X5B/25X5E/25X5K/        |         |
|               |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U)    |         |         |              | KV-25X5L/25X5U)                            |         |
| C1131         | 1-164-005-11 | CERAMIC CHIP 0.47MF                   | 25V     | IC1103  | 8-759-394-57 | IC PST593C-MMP-4P                          |         |
|               |              | (KV-25X5A/25X5B/25X5D/25X5R)          |         |         |              | < COIL >                                   |         |
| C1132         | 1-104-664-11 | ELECT 47MF                            | 20% 25V | L1101   | 1-408-596-31 | INDUCTOR 2.7UH (KV-25X5B/25X5E/25X5K/      |         |
| C1133         | 1-164-004-11 | CERAMIC CHIP 0.1MF                    | 10% 25V |         |              | KV-25X5L/25X5U)                            |         |
| C1135         | 1-163-117-00 | CERAMIC CHIP 100PF                    | 5% 50V  | L1113   | 1-408-600-31 | INDUCTOR 5.6UH (KV-25X5B)                  |         |
|               |              | (KV-25X5B)                            |         | L1114   | 1-410-671-31 | INDUCTOR 47UH                              |         |
| C1137         | 1-104-664-11 | ELECT 47MF                            | 20% 25V | L1115   | 1-408-599-31 | INDUCTOR 4.7UH                             |         |
|               |              | (KV-25X5B)                            |         | L1116   | 1-408-599-31 | INDUCTOR 4.7UH                             |         |
| C1138         | 1-163-109-00 | CERAMIC CHIP 47PF                     | 5% 50V  | L1117   | 1-410-671-31 | INDUCTOR 47UH (KV-25X5B)                   |         |
|               |              | (KV-25X5B)                            |         |         |              |                                            |         |
| C1143         | 1-163-005-11 | CERAMIC CHIP 470PF                    | 10% 50V |         |              |                                            |         |
| C1144         | 1-163-005-11 | CERAMIC CHIP 470PF                    | 10% 50V |         |              |                                            |         |
| C1145         | 1-163-077-00 | CERAMIC CHIP 0.1MF                    | 10% 25V |         |              |                                            |         |
| C1146         | 1-164-005-11 | CERAMIC CHIP 0.47MF                   | 25V     |         |              |                                            |         |
| C1147         | 1-164-005-11 | CERAMIC CHIP 0.47MF                   | 25V     |         |              |                                            |         |
| C1148         | 1-164-005-11 | CERAMIC CHIP 0.47MF                   | 25V     |         |              |                                            |         |
| C1149         | 1-126-960-11 | ELECT 1MF                             | 20% 50V |         |              |                                            |         |

| REF.NO.        | PART.NO      | DESCRIPTION                        | REMARK                 | REF.NO.     | PART.NO      | DESCRIPTION       | REMARK           |
|----------------|--------------|------------------------------------|------------------------|-------------|--------------|-------------------|------------------|
| < TRANSISTOR > |              |                                    |                        | R1168       | 1-216-033-00 | RES,CHIP 220 5%   | 1/10W (KV-25X5B) |
| Q1112          | 8-729-620-06 | TRANSISTOR 2SC3052-EF (KV-25X5B)   |                        | R1169       | 1-216-049-00 | RES,CHIP 1K 5%    | 1/10W (KV-25X5B) |
| Q1113          | 8-729-620-06 | TRANSISTOR 2SC3052-EF (KV-25X5B)   |                        | R1170       | 1-216-001-00 | RES,CHIP 10 5%    | 1/10W (KV-25X5B) |
| Q1114          | 8-729-216-22 | TRANSISTOR 2SA1162-G (KV-25X5B)    |                        | R1171       | 1-216-045-00 | RES,CHIP 680 5%   | 1/10W (KV-25X5B) |
| Q1115          | 8-729-620-06 | TRANSISTOR 2SC3052-EF (KV-25X5B)   |                        | R1172       | 1-216-190-00 | RES,CHIP 470 5%   | 1/8W (KV-25X5B)  |
| < RESISTOR >   |              |                                    |                        | R1173       | 1-216-049-00 | RES,CHIP 1K 5%    | 1/10W (KV-25X5B) |
| JR1105         | 1-216-295-00 | SHORT 0                            |                        | R1174       | 1-216-085-00 | RES,CHIP 33K 5%   | 1/10W            |
| JR1112         | 1-216-295-71 | CONDUCTOR CHIP                     |                        | R1175       | 1-216-085-00 | RES,CHIP 33K 5%   | 1/10W            |
| JR1113         | 1-216-295-71 | CONDUCTOR CHIP                     |                        | R1176       | 1-216-085-00 | RES,CHIP 33K 5%   | 1/10W            |
| R1101          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  | R1177       | 1-216-085-00 | RES,CHIP 33K 5%   | 1/10W            |
| R1102          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  | R1178       | 1-216-073-71 | RES,CHIP 10K 5%   | 1/10W            |
| R1103          | 1-216-035-00 | RES,CHIP 270 5%                    | 1/10W                  | < CRYSTAL > |              |                   |                  |
| R1105          | 1-216-035-00 | RES,CHIP 270 5%                    | 1/10W                  | X1101       | 1-767-813-21 | VIBRATOR, CRYSTAL |                  |
| R1108          | 1-216-057-00 | RES,CHIP 2.2K 5%                   | 1/10W                  | *****       |              |                   |                  |
|                |              | (KV-25X5A/25X5B/25X5D/25X5R)       |                        |             |              |                   |                  |
| R1110          | 1-216-025-00 | RES,CHIP 100 5%                    | 1/10W                  |             |              |                   |                  |
| R1111          | 1-216-025-00 | RES,CHIP 100 5%                    | 1/10W                  |             |              |                   |                  |
| R1113          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
| R1116          | 1-216-295-00 | SHORT 0                            | (KV-25X5A/25X5D/25X5R) |             |              |                   |                  |
|                | 1-216-689-11 | METAL CHIP 39K 0.50%               | 1/10W                  |             |              |                   |                  |
|                |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U) |                        |             |              |                   |                  |
| R1117          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
|                |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U) |                        |             |              |                   |                  |
| R1118          | 1-216-682-11 | METAL CHIP 20K 0.50%               | 1/10W                  |             |              |                   |                  |
|                |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U) |                        |             |              |                   |                  |
| R1121          | 1-216-065-71 | RES,CHIP 4.7K 5%                   | 1/10W                  |             |              |                   |                  |
| R1122          | 1-216-065-71 | RES,CHIP 4.7K 5%                   | 1/10W                  |             |              |                   |                  |
| R1123          | 1-216-065-71 | RES,CHIP 4.7K 5%                   | 1/10W                  |             |              |                   |                  |
| R1124          | 1-216-073-71 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
| R1125          | 1-216-065-71 | RES,CHIP 4.7K 5%                   | 1/10W                  |             |              |                   |                  |
| R1126          | 1-216-073-71 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
| R1130          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
|                |              | (KV-25X5A/25X5D/25X5R)             |                        |             |              |                   |                  |
| R1134          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
|                |              | (KV-25X5A/25X5D/25X5R)             |                        |             |              |                   |                  |
| R1152          | 1-216-035-00 | RES,CHIP 270 5%                    | 1/10W (KV-25X5B)       |             |              |                   |                  |
| R1153          | 1-216-025-00 | RES,CHIP 100 5%                    | 1/10W (KV-25X5B)       |             |              |                   |                  |
| R1154          | 1-216-067-00 | RES,CHIP 5.6K 5%                   | 1/10W (KV-25X5B)       |             |              |                   |                  |
| R1160          | 1-216-230-00 | RES,CHIP 22K 5%                    | 1/8W (KV-25X5B)        |             |              |                   |                  |
| R1161          | 1-216-190-00 | RES,CHIP 470 5%                    | 1/8W (KV-25X5B)        |             |              |                   |                  |
| R1162          | 1-216-061-00 | RES,CHIP 3.3K 5%                   | 1/10W (KV-25X5B)       |             |              |                   |                  |
| R1163          | 1-216-230-00 | RES,CHIP 22K 5%                    | 1/8W (KV-25X5B)        |             |              |                   |                  |
| R1164          | 1-216-073-00 | RES,CHIP 10K 5%                    | 1/10W                  |             |              |                   |                  |
|                |              | (KV-25X5B/25X5E/25X5K/25X5L/25X5U) |                        |             |              |                   |                  |
| R1165          | 1-216-295-00 | SHORT 0                            | (KV-25X5A/25X5D/25X5R) |             |              |                   |                  |
| R1167          | 1-216-025-00 | RES,CHIP 100 5%                    | 1/10W (KV-25X5B)       |             |              |                   |                  |

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

| REF.NO.                                      | PART.NO               | DESCRIPTION                                                                                   | REMARK | REF.NO.                   | PART.NO      | DESCRIPTION                      | REMARK |
|----------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------|--------|---------------------------|--------------|----------------------------------|--------|
| < MISCELLANEOUS ><br>*****                   |                       |                                                                                               |        | REMOTE COMMANDER<br>***** |              |                                  |        |
|                                              | $\Delta$ 1-406-806-21 | COIL, DEMAGNETIZATION                                                                         |        |                           |              |                                  |        |
|                                              | 1-452-032-00          | MAGNET, DISC; 10MM $\emptyset$                                                                |        |                           | 1-475-765-11 | COMMANDER STANDARD TYPE (RM-883) |        |
|                                              | 1-452-094-00          | MAGNET, ROTATABLE DISC; 15MM $\emptyset$                                                      |        | *****                     |              |                                  |        |
|                                              | $\Delta$ 1-453-264-11 | TRANSFORMER ASSY, FLYBACK (NX1680-U2B4)                                                       |        |                           |              |                                  |        |
|                                              | 1-503-902-11          | SPEAKER (15X6.5CM)                                                                            |        |                           |              |                                  |        |
|                                              | $\Delta$ 1-571-433-21 | SWITCH, PUSH (AC POWER)                                                                       |        |                           |              |                                  |        |
|                                              | $\Delta$ 1-756-286-11 | CORD, POWER (KV-25X5A/25X5B/25X5D/25X5E/<br>KV-25X5K/25X5R/25X5U)                             |        |                           |              |                                  |        |
|                                              | $\Delta$ 1-776-860-11 | CORD, POWER FILTER (UK) (KV-25X5L)                                                            |        |                           |              |                                  |        |
|                                              | 1-693-418-11          | TUNER (TELE9-001A) (KV-25X5A/25X5B/25X5D/<br>KV-25X5L)                                        |        |                           |              |                                  |        |
|                                              | 8-598-432-00          | TUNER (BTP-AC411) (KV-25X5E/25X5K)                                                            |        |                           |              |                                  |        |
|                                              | 8-598-361-01          | TUNER (BTP-AC402) (KV-25X5R)                                                                  |        |                           |              |                                  |        |
|                                              | 8-598-464-01          | TUNER (BTP-AU611) (KV-25X5U)                                                                  |        |                           |              |                                  |        |
|                                              | $\Delta$ 8-733-254-05 | PICTURE TUBE (SD-257) (M60LCS60X)                                                             |        |                           |              |                                  |        |
|                                              | $\Delta$ 8-451-404-23 | DEFLECTION YOKE (Y25GXABA)                                                                    |        |                           |              |                                  |        |
|                                              | $\Delta$ 8-733-254-76 | ITC                                                                                           |        |                           |              |                                  |        |
| *****                                        |                       |                                                                                               |        |                           |              |                                  |        |
| ACCESSORIES AND PACKAGING MATERIALS<br>***** |                       |                                                                                               |        |                           |              |                                  |        |
|                                              | *4-042-476-01         | BAG, PROTECTION                                                                               |        |                           |              |                                  |        |
|                                              | *4-204-034-01         | INDIVIDUAL CARTON                                                                             |        |                           |              |                                  |        |
|                                              | *4-204-035-01         | CUSHION (UPPER) (ASSY)                                                                        |        |                           |              |                                  |        |
|                                              | *4-204-036-01         | CUSHION (LOWER) (ASSY)                                                                        |        |                           |              |                                  |        |
|                                              | 4-204-043-41          | MANUAL, INSTRUCTION (KV-25X5A)<br>(ITALIAN)                                                   |        |                           |              |                                  |        |
|                                              | 4-204-043-51          | MANUAL, INSTRUCTION (KV-25X5B)<br>(FRENCH/GERMAN/ITALIAN/DUTCH)                               |        |                           |              |                                  |        |
|                                              | 4-204-074-11          | MANUAL, INSTRUCTION (KV-25X5D)<br>(GERMAN/GREEK/DUTCH/<br>ENGLISH/TURKISH)                    |        |                           |              |                                  |        |
|                                              | 4-204-043-71          | MANUAL, INSTRUCTION (KV-25X5E)<br>(SPANISH)                                                   |        |                           |              |                                  |        |
|                                              | 4-204-043-81          | MANUAL, INSTRUCTION (KV-25X5E)<br>(FINNISH/NORWEGIAN/HUNGARIAN/<br>PORTUGUESE/DANISH/SWEDISH) |        |                           |              |                                  |        |
|                                              | 4-204-043-61          | MANUAL, INSTRUCTION (KV-25X5L/25X5U)<br>(ENGLISH)                                             |        |                           |              |                                  |        |
|                                              | 4-204-074-91          | MANUAL, INSTRUCTION (KV-25X5K)<br>(CZECH/ENGLISH/POLISH/HUNGARIAN)                            |        |                           |              |                                  |        |
|                                              | 4-204-074-91          | MANUAL, INSTRUCTION (KV-25X5R)<br>(RUSSIAN/BULGARIAN/ENGLISH)                                 |        |                           |              |                                  |        |

