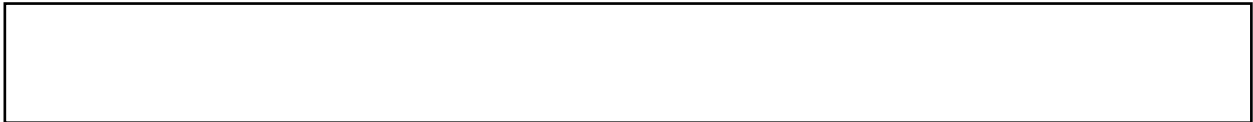


Video Cassette Recorder

Service
Service
Service

VR330/58
VR530/58
VR630/58
VR730/58

VR732/58
VR830/58
VRQ45/16/39/58



Service Manual

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Chapter	
Sec. 1: Adjustment Procedure	
Schematic Diagrams and CBA's	
Exploded Views	
Mechanical and Electrical Parts Lists	
Sec. 2: Standard Maintenance	
Mechanism Alignment Procedures	
Disassembly / Assembly of Mechanism	
Deck Exploded Views	

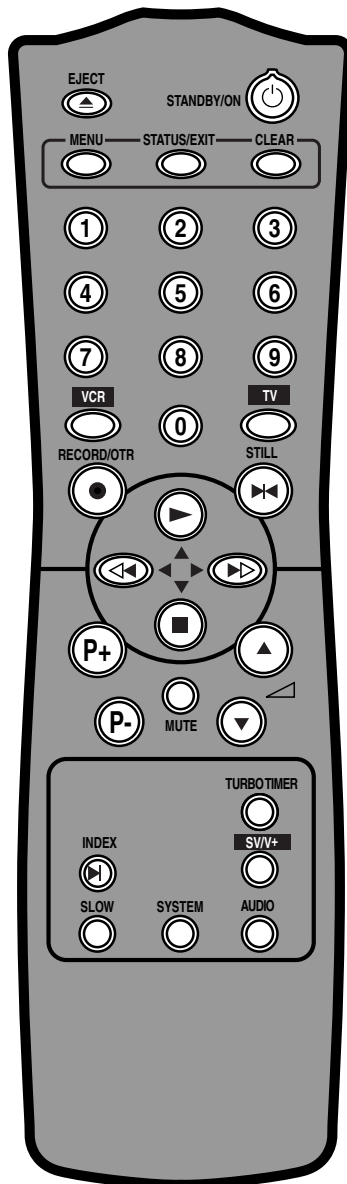
Survey of versions:

/02	PAL B/G, VPS/PDC
/07	PAL I, Ireland
/16	PAL B/G, Spain
/39	SECAM L, L' & PAL B/G, I
/58	PAL/SECAM B/G, D/K

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.



[VR630/58]



Press button VCR on the remote control before doing VCR related functions on the remote. By pressing button TV it is possible to navigate some functions on PHILIPS TV sets.

Buttons for VCR feature only

VCR To operate the VCR with the remote control.

EJECT To eject the cassette.

CLEAR To delete last entry/Clear programmed recording (TIMER).

RECORD/OTR To record the TV channel selected at this moment or press repeatedly to start a One-Touch Recording.

STILL To stop the tape and slow a still picture.

P+ **P-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.

INDEX In combination with **<<** **>>**: to search for previous or next recording on the cassette.

SLOW To view the picture in slow motion.

AUDIO To change stereo sound and 2nd language.

SYSTEM Doesn't work in these models. [VR630/02, VR630/07, VR630/16]

To change the video (colour) system. [VR630/39]

TURBO TIMER To programme a recording with the function TURBO TIMER.

SV/V+ To make a TIMER programming with SHOWVIEW.

MENU To call up main menu of VCR.

▶▶ To play a tape, select an item in the menu of VCR.

▼■ To stop the tape, select an item in the menu of VCR

▶▶▶ When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen. To store or confirm entry in the menu.

<<< When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen. To return the cursor in the menu.

Buttons with TV feature

TV To call up additional TV functions.

STANDBY/ON To switch VCR or Philips TV on or off, interrupt menu function.

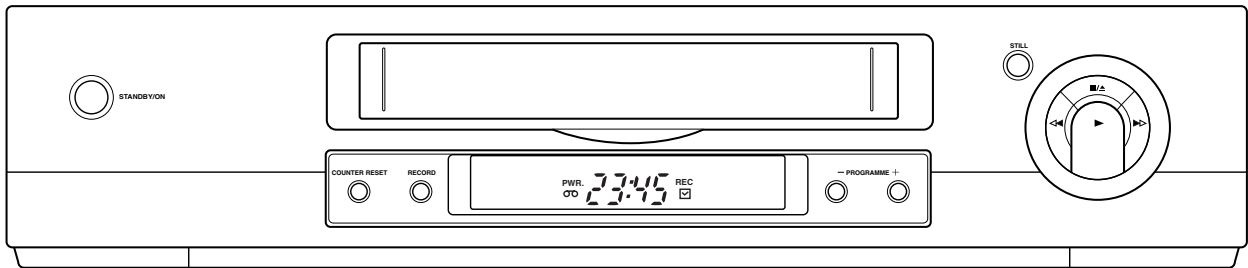
STATUS/EXIT To access or remove the VCR's on-screen status display. To exit on-screen menus. Or, to access or remove a status display or menu of Philips TV.

0..9 Press to select channels at VCR or Philips TV.

MUTE To mute the TV's sound. Press again to restore the volume.

▲ **▼** To adjust the TV's volume.

Front of the device



STANDBY/ON To switch off or on, interrupt a function.

PROGRAMME+ **PROGRAMME-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.

RECORD To record the TV channel selected at this moments.

▶▶ When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen.

◀◀ When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.

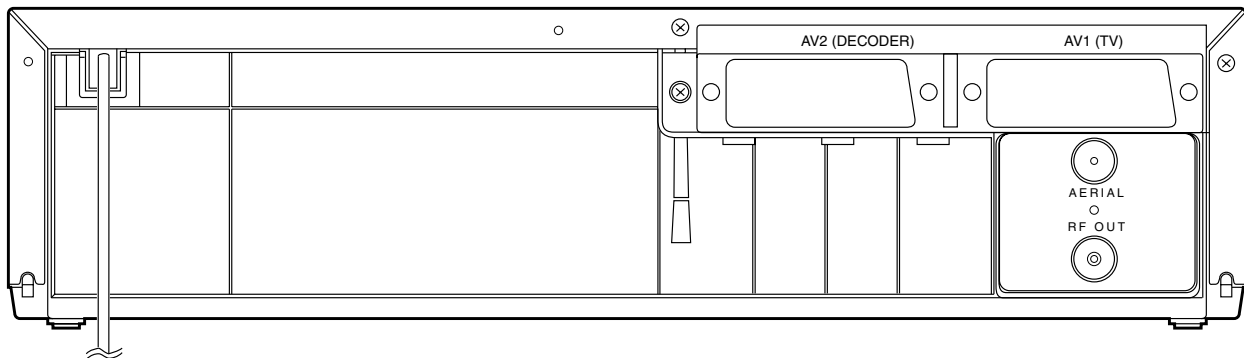
▶ To play a tape.

■/▲ To stop the tape and eject the cassette.

STILL To stop the tape and show a still picture.

COUNTER RESET To reset the counter.

Back of the set



AUDIO OUTPUT L R To connect a HI-FI-set.

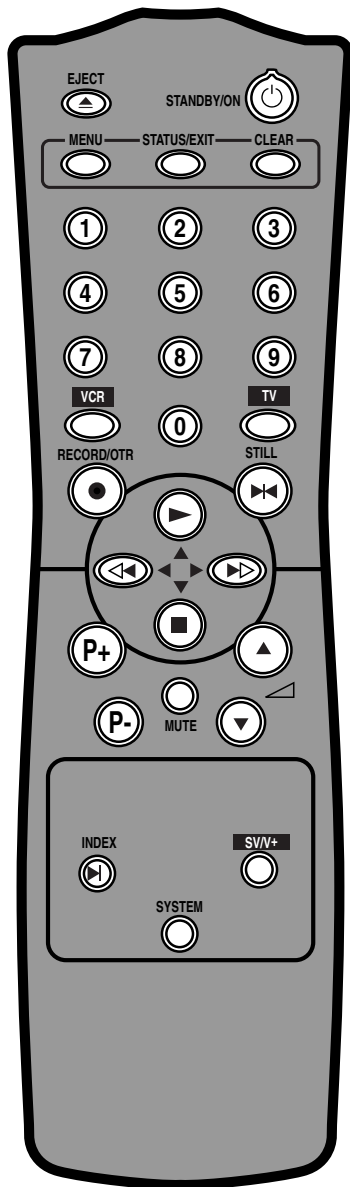
AV2(DECODER) To connect a satellite receiver, decoder, video recorder,etc.

AV1(TV) To connect the TV set.

AERIAL To connect the aerial cable.

RF OUT To connect the TV set.

[VR330/58]



Press button VCR on the remote control before doing VCR related functions on the remote. By pressing button TV it is possible to navigate some functions on PHILIPS TV sets.

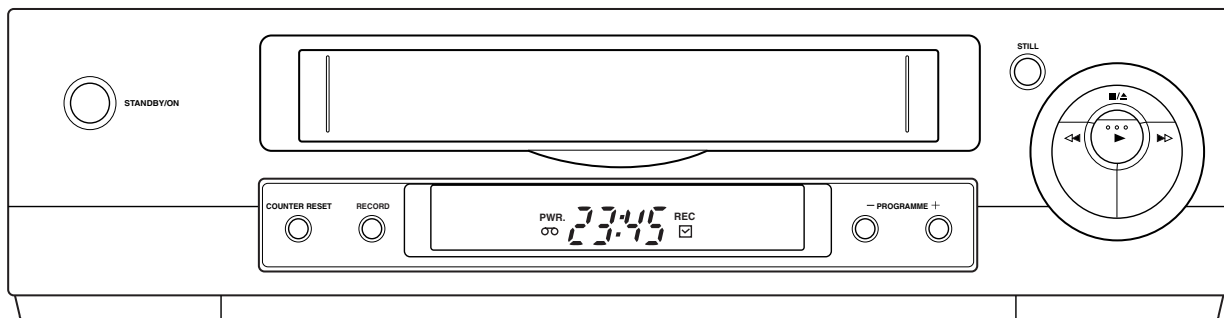
Buttons for VCR feature only

- VCR** To operate the VCR with the remote control.
- EJECT** To eject the cassette.
- CLEAR** To delete last entry/Clear programmed recording (TIMER).
- RECORD/OTR** To record the TV channel selected at this moment or press repeatedly to start a One-Touch Recording.
- STILL** To stop the tape and slow a still picture.
- P+** **P-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.
- INDEX** In combination with :to search for previous or next recording on the cassette.
- SYSTEM** To change the video (colour) system. [VR330/39]
- SV/V+** To make a TIMER programming with SHOWVIEW.
- MENU** To call up main menu of VCR.
- To play a tape, select an item in the menu of VCR.
- To stop the tape, select an item in the menu of VCR
- When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen. To store or confirm entry in the menu.
- When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen. To return the cursor in the menu.

Buttons with TV feature

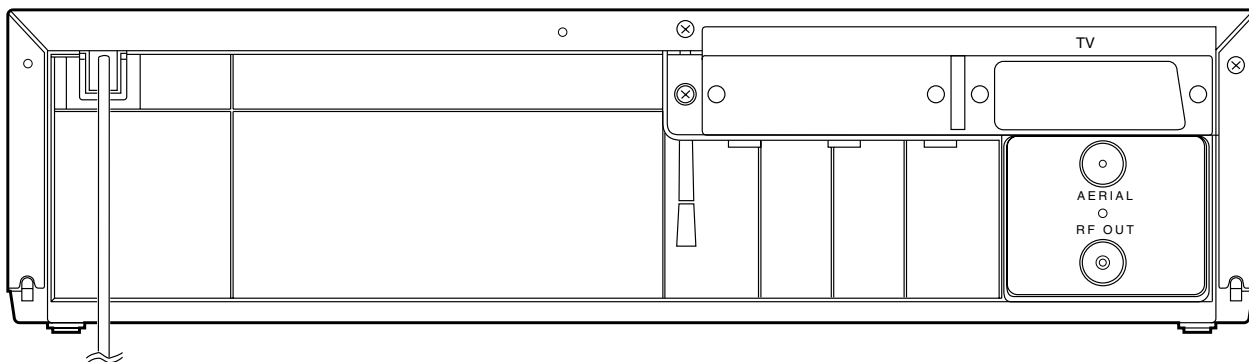
- TV** To call up additional TV functions.
- STANDBY/ON** To switch VCR or Philips TV on or off, interrupt menu function.
- STATUS/EXIT** To access or remove the VCR's on-screen status display. To exit on-screen menus. Or, to access or remove a status display or menu of Philips TV.
- 0..9** Press to select channels at VCR or Philips TV.
- MUTE** To mute the TV's sound. Press again to restore the volume.
- To adjust the TV's volume.

Front of the device



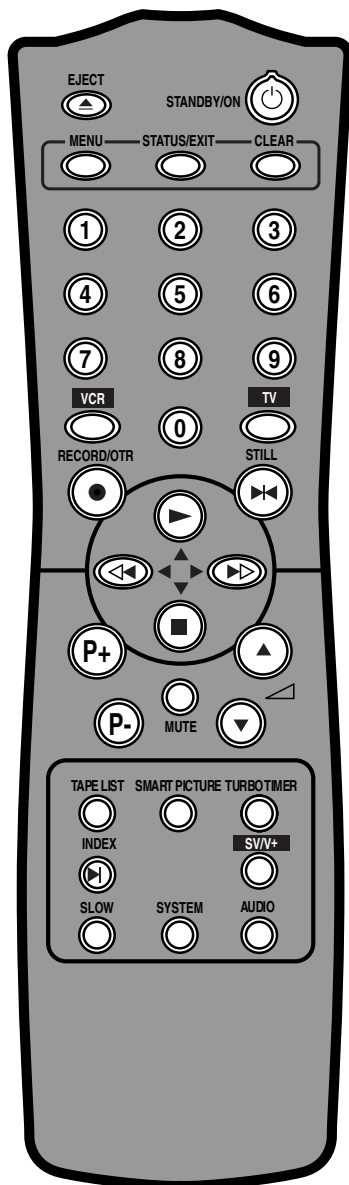
- STANDBY/ON** To switch off or on, interrupt a function.
- PROGRAMME+** **PROGRAMME-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.
- RECORD** To record the TV channel selected at this moments.
- ▶▶** When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen.
- ◀◀** When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.
- ▶** To play a tape.
- /▲** To stop the tape and eject the cassette.
- STILL** To stop the tape and show a still picture.
- COUNTER RESET** To reset the counter.

Back of the set



- TV** To connect the TV set(programme number).
- AERIAL** To connect the aerial cable.
- RF OUT** To connect the TV set.

[VR730/58,VR732/58]



Press button VCR on the remote control before doing VCR related functions on the remote. By pressing button TV it is possible to navigate some functions on PHILIPS TV sets.

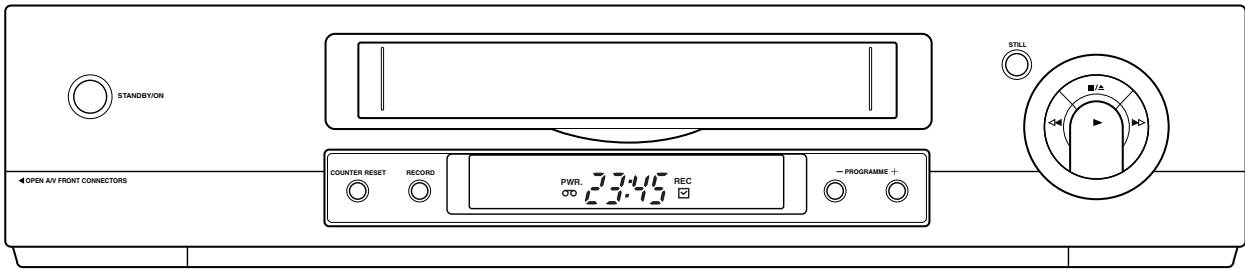
Buttons for VCR feature only

- VCR** To operate the VCR with the remote control.
- EJECT** To eject the cassette.
- CLEAR** To delete last entry/Clear programmed recording (TIMER).
- RECORD/OTR** To record the TV channel selected at this moment or press repeatedly to start a One-Touch Recording.
- STILL** To stop the tape and slow a still picture.
- P+** **P-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.
- INDEX** In combination with **<<** **>>**: to search for previous or next recording on the cassette.
- SLOW** To view the picture in slow motion.
- AUDIO** To change stereo sound and 2nd language.
- SYSTEM** Doesn't work in these models.
- TAPE LIST** To call up the Tape List.
- SMART PICTURE** To select a smart picture mode.
- TURBO TIMER** To programme a recording with the function TURBO TIMER.
- SV/V+** To make a TIMER programming with Video Plus+ system.
- MENU** To call up main menu of VCR.
- ▶** To play a tape, select an item in the menu of VCR.
- ▼** To stop the tape, select an item in the menu of VCR
- >>** When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen. To store or confirm entry in the menu.
- <<** When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen. To return the cursor in the menu.

Buttons with TV feature

- TV** To call up additional TV functions.
- STANDBY/ON** To switch VCR or Philips TV on or off, interrupt menu function.
- STATUS/EXIT** To access or remove the VCR's on-screen status display. To exit on-screen menus. Or, to access or remove a status display or menu of Philips TV.
- 0..9** Press to select channels at VCR or Philips TV.
- MUTE** To mute the TV's sound. Press again to restore the volume.
- ▲** **▼** To adjust the TV's volume.

Front of the device



STANDBY/ON To switch off or on, interrupt a function.

PROGRAMME+ **PROGRAMME-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.

RECORD To record the TV channel selected at this moments.

▶▶ When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen.

<<◀ When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.

▶ To play a tape.

■/▲ To stop the tape and eject the cassette.

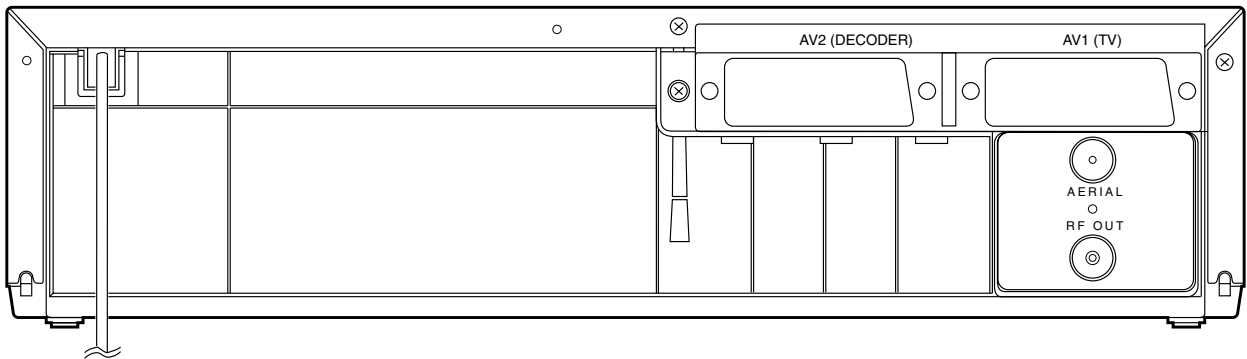
STILL To stop the tape and show a still picture.

COUNTER RESET To reset the counter.

AV FRONT CONNECTORS

White and red socket Audio input socket left/right: To connect a camera recorder or video recorder
Yellow socket Video input socket: To connect a camera recorder or video recorder.

Back of the set



AUDIO OUTPUT L R To connect a HIFI-set.

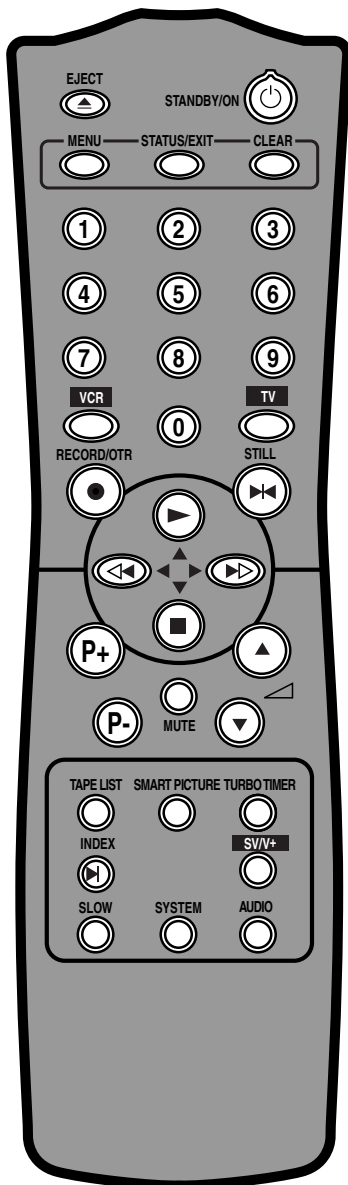
AV2(DECODER) To connect a satellite receiver, decoder, video recorder, etc.

AV1(TV) To connect the TV set.

AERIAL To connect the aerial cable.

RF OUT To connect the TV set.

[VR830/58]



Buttons for VCR feature only

VCR To operate the VCR with the remote control.

EJECT To eject the cassette.

CLEAR To delete last entry/Clear programmed recording (TIMER).

RECORD/OTR To record the TV channel selected at this moment or press repeatedly to start a One-Touch Recording.

STILL To stop the tape and slow a still picture.

P+ **P-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.

INDEX In combination with **<<** **>>** to search for previous or next recording on the cassette.

SLOW To view the picture in slow motion.

AUDIO To change stereo sound and 2nd language.

SYSTEM Doesn't work in these models.

TAPE LIST To call up the Tape List.

SMART PICTURE To select a smart picture mode.

TURBO TIMER To programme a recording with the function TURBO TIMER.

SV/V+ To make a TIMER programming with SHOWVIEW.

MENU To call up main menu of VCR.

▶ To play a tape, select an item in the menu of VCR.

▼ To stop the tape, select an item in the menu of VCR

>> When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen. To store or confirm entry in the menu.

<< When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen. To return the cursor in the menu.

Buttons with TV feature

TV To call up additional TV functions.

STANDBY/ON To switch VCR or Philips TV on or off, interrupt menu function.

STATUS/EXIT To access or remove the VCR's on-screen status display. To exit on-screen menus. Or, to access or remove a status display or menu of Philips TV.

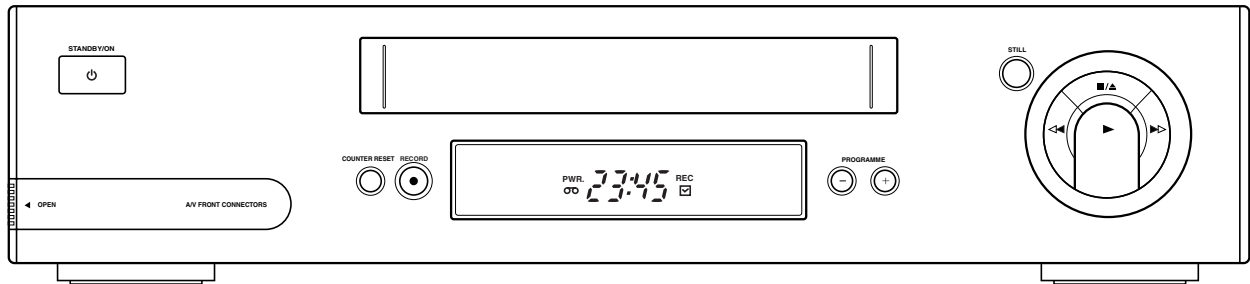
0..9 Press to select channels at VCR or Philips TV.

MUTE To mute the TV's sound. Press again to restore the volume.

▲ **▼** To adjust the TV's volume.

Press button VCR on the remote control before doing VCR related functions on the remote. By pressing button TV it is possible to navigate some functions on PHILIPS TV sets.

Front of the device



STANDBY/ON To switch off or on, interrupt a function.

PROGRAMME+ **PROGRAMME-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.

RECORD To record the TV channel selected at this moments.

▶▶ When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen.

◀◀ When tape playback is stoped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.

▶ To play a tape.

■/▲ To stop the tape and eject the cassette.

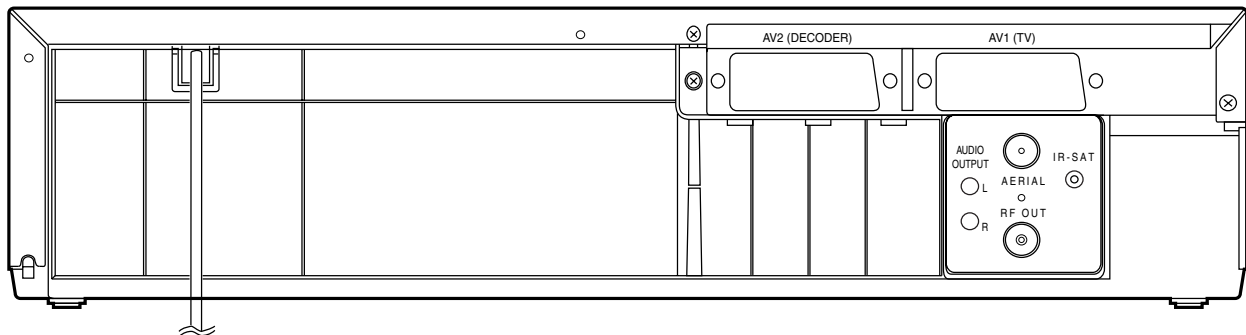
STILL To stop the tape and show a still picture.

COUNTER RESET To reset the counter.

AV FRONT CONNECTORS

White and red socket Audio input socket left/right: To connect a camera recorder or video recorder
Yellow socket Video input socket: To connect a camera recorder or video recorder.

Back of the set



AUDIO OUTPUT L R To connect a HIFI-set.

AV2(DECODER) To connect a satellite receiver, decoder, video recorder, etc.

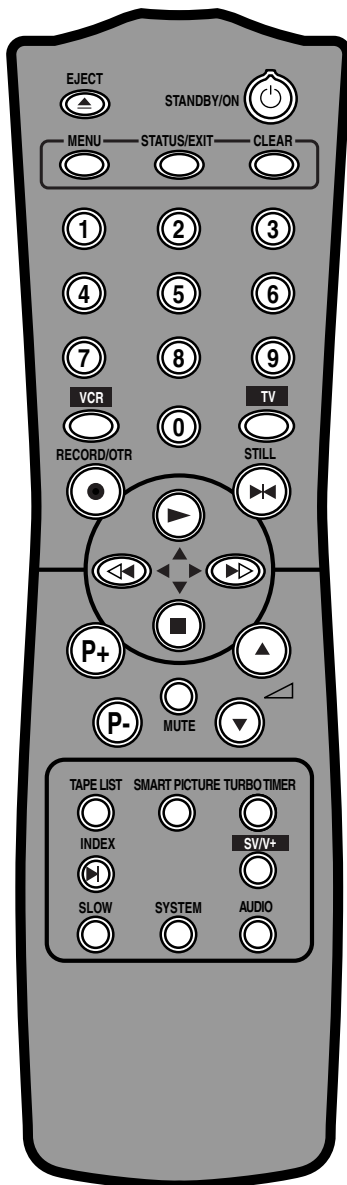
AV1(TV) To connect the TV set.

AERIAL To connect the aerial cable.

RF OUT To connect the TV set.

IR-SAT To connect the SAT MOUSE.

[VRQ45/16,VRQ45/39,VRQ45/58]



Buttons for VCR feature only

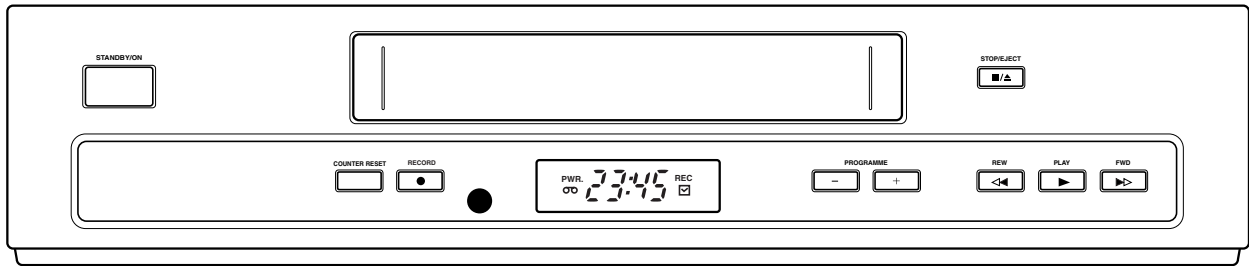
- VCR** To operate the VCR with the remote control.
- EJECT** To eject the cassette.
- CLEAR** To delete last entry/Clear programmed recording (TIMER).
- RECORD/OTR** To record the TV channel selected at this moment or press repeatedly to start a One-Touch Recording.
- STILL** To stop the tape and slow a still picture.
- P+** **P-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.
- INDEX** In combination with :to search for previous or next recording on the cassette.
- SLOW** To view the picture in slow motion.
- AUDIO** To change stereo sound and 2nd language.
- SYSTEM** Doesn't work in these models.
- TAPE LIST** To call up the Tape List.
- SMART PICTURE** To select a smart picture mode.
- TURBO TIMER** To programme a recording with the function TURBO TIMER.
- SV/V+** To make a TIMER programming with SHOWVIEW.
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- To play a tape, select an item in the menu of VCR.
- To stop the tape, select an item in the menu of VCR
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- When tape playback is stoped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.To return the cursor in the menu.

Buttons with TV feature

- TV** To call up additional TV functions.
- STANDBY/ON** To switch VCR or Philips TV on or off, interrupt menu function.
- STATUS/EXIT** To access or remove the VCR's on-screen status display. To exit on-screen menus. Or, to access or remove a status display or menu of Philips TV.
- 0..9** Press to select channels at VCR or Philips TV.
- MUTE** To mute the TV's sound. Press again to restore the volume.
- To adjust the TV's volume.

Press button VCR on the remote control before doing VCR related functions on the remote. By pressing button TV it is possible to navigate some functions on PHILIPS TV sets.

Front of the device



STANDBY/ON To switch off or on, interrupt a function.

PROGRAMME+ **PROGRAMME-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.

RECORD To record the TV channel selected at this moments.

▶▶ When tape playback is stopped, press to fast forward the tape at high speed. During playback, press to fast forward the tape while the picture stay on the screen.

◀◀ When tape playback is stopped, press to rewind the tape at high speed. During playback, press to rewind the tape while the picture stay on the screen.

▶ To play a tape.

■/▲ To stop the tape and eject the cassette.

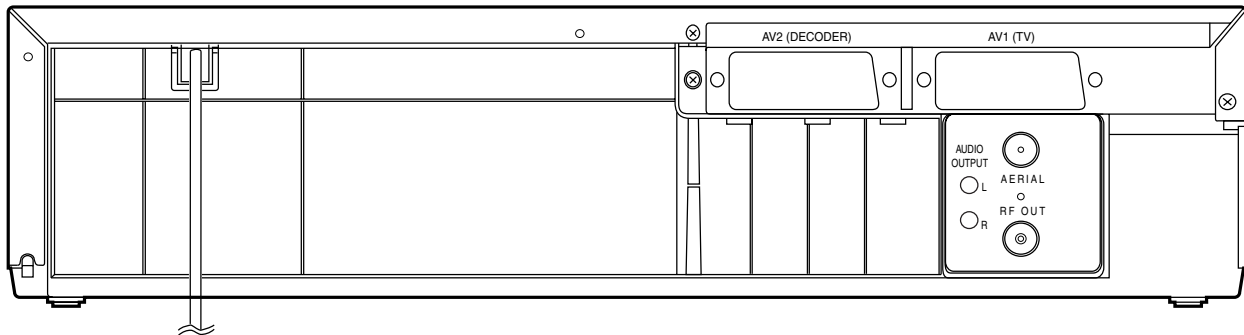
STILL To stop the tape and show a still picture.

COUNTER RESET To reset the counter.

AV FRONT CONNECTORS

White and red socket Audio input socket left/right: To connect a camera recorder or video recorder
Yellow socket Video input socket: To connect a camera recorder or video recorder.

Back of the set



AUDIO OUTPUT L R To connect a HIFI-set.

AV2(DECODER) To connect a satellite receiver, decoder, video recorder, etc.

AV1(TV) To connect the TV set.

AERIAL To connect the aerial cable.

RF OUT To connect the TV set.

IR-SAT To connect the SAT MOUSE.

[VR530/58,VR630/58,VR330/58,VR730/58,VR732/58,VR830/58,VRQ45/16,VRQ45/39,VRQ45/58]

Signal Name	Function
8POUT-1	SCART 1 8Pin Output Control Signal
8POUT-2	SCART 2 8Pin Output Control Signal
A-MODE	Hi-Fi Tape Detection Signal
A-MUTE-H	Audio Mute Control Signal (Mute = "H")
A-PB/REC	Normal Audio Play Back/Record Signal
AFC	Automatic Frequency Control Signal
AGC	IF AGC Control Signal
AL+15V/+12V	Always +15V/+12V with AC Plug Connected
AL+5V	Always +5V with AC Plug Connected
AL+9V	Always +9V with AC Plug Connected
AMPC	CTL AMP Connected Terminal
AMPVcc	AMPVcc
AMPVREF _{IN}	V-Ref for CTL AMP
AMPVss	AMPVss (GND)
AVcc	A/D Converter Power Input/ Standard Voltage Input
C	C Terminal
C-CONT	Capstan Motor Control Signal
C-F/R	Capstan Motor FWD/REV Control Signal (FWD="L"/REV="H")
C-FG	Capstan Motor Rotation Detection Pulse
C-POWER-SW	Capstan Power Switching Pulse
C-ROTA	Color Phase Rotary Changeover Signal
C-SYNC	Composite Synchronized Pulse
CLKSEL	Clock Select (GND)
COLOR-IN	SECAM or MESECAM Chroma Video Input Signal at Super Impose
CTL (+)	Playback/Record Control Signal (+)
CTL (-)	Playback/Record Control Signal (-)

Signal Name	Function
CTLAMPout	To Monitor for CTL AMP Output
D-CONT	Drum Motor Control Signal
D-FG	Drum Motor Rotation Detection Pulse
D-PG	Drum Motor Pulse Generator
D-REC-H	Delayed Record Signal
D-V- SYNC	Dummy V-sync Output
DAVN-L	VPS/PDC Data Receive = "L"
DRV-CLK	LED Clock Driver IC Control Clock
DRV-DATA	LED Clock Driver IC Control Data
DRV-STB	LED Clock Driver IC Chip Select Signal
END-S	Tape End Position Detect Signal
FE-H GND	Ground for Full Erase Head
FF/REW-L	CTL Amp Gain Switching Signal (FF/REW="L")
FSC-IN [4.43MHz]	4.43MHz Clock Input
FTV-IN	Comparator Input of Video Signal for Follow TV
H-A-COMP	Head Amp Comparator Signal
H-A-SW	Video Head Amp Switching Pulse
Hi-Fi-A (L)	Hi-Fi Audio Head (L)
Hi-Fi-A (R)	Hi-Fi Audio Head (R)
Hi-Fi-COM	Hi-Fi Audio Head Common
HiFi-H-SW	HiFi Audio Head Switching Pulse
HLF	LPF Connected Terminal (Slicer)
I ² C BUS- SCL	I ² C BUS Control Clock
I ² C BUS- SDA	I ² C BUS Control Data
JK1-8P-OUT-1	SCART 1 8Pin Output Control Signal
JK1-8P-OUT-2	SCART 2 8Pin Output Control Signal
KEY-1	Key Scan Input Signal 1
KEY-2	Key Scan Input Signal 2
LD-SW	Deck Mode Position Detector Signal
LINK-IN	Easy Link Data Input

Signal Name	Function
LINK-OUT	Easy Link Data Output
LM-FWD/REV	Loading Motor Control Signal
MOD-A	Modulator Audio Output Signal
N-A-PB	Normal Audio Playback
N-A-REC	Normal Audio Recording
OSCIN	Clock Input for letter size
OSCOU	Clock Output for letter size
OSDVcc	OSDVcc
OSDVss	OSDVss
P-DOWN-L	Power Voltage Down Detector Signal
P-ON+44V	+44V at Power-On Signal
P-ON+5V	+5V at Power-On Signal
P-ON+9V	+9V at Power-On Signal
P-ON-H	Power On Signal at High
PG-DELAY	Video Head Switching Pulse Signal Adjusted Voltage
POW-SAF	P-ON Power Detection Input Signal
REC-SAF	Recording Safety SW Detect (With Record tab="L"/With out Record tab="H")
REMOCON-IN	Remote Control Sensor
RESET	System Reset Signal (Reset="L")
RF-SW	Video Head Switching Pulse
RGB-THROUGH	SCART 2 RGB Through Control Signal
S-REEL	Supply Reel Rotation Signal
SAT-MOUSE	SAT-MOUSE Data Control Signal Output
SC2-IN	Input Signal from Pin 8 of SCART2
SECAM-H	SECAM Mode at High
ST-S	Tape Start Position Detector Signal
T-REEL	Take Up Reel Rotation Signal
TIMER+5V	+5V at Timer
TRICK-H	Special Playback = "H" in SECAM Mode
TU-AUDIO	Tuner Audio Input Signal
TU-VIDEO	Tuner Video Input Signal

Signal Name	Function
V-ENV	Video Envelope Comparator Signal
Vcc	Vcc
VIDEO-IN	Video Signal Input
VIDEO-OUT	Video Signal Output
Vss	Vss(GND)
X-IN	Main Clock Input
X-OUT	Main Clock Input
XC-IN	Sub Clock
XC-OUT	Sub Clock

Servo/System Control Block Diagram

Comparison Chart of Models & Marks

Model	Mark	Model	Mark
VR530/58	W	VR830/58	AB
VR630/58	X	VRQ45/16	AC
VR330/58	Y	VRQ45/39	AD
VR730/58	Z	VRQ45/58	AE
VR732/58	AA		

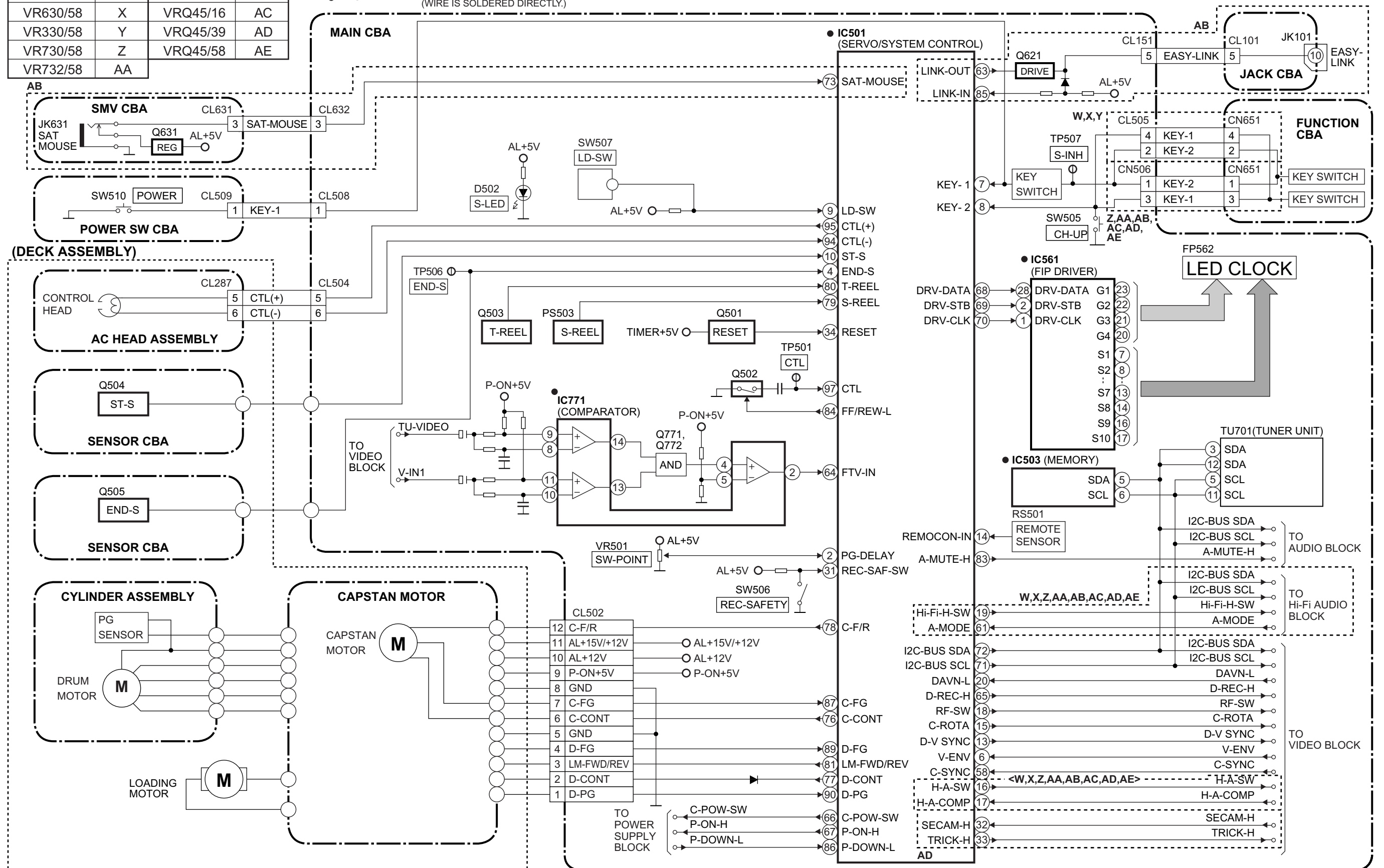
"•" = SMD

NOTE FOR WIRE CONNECTORS:

1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

TEST POINT INFORMATION

- ⊙ : INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ⊞ : USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊚ : USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- : USED TO INDICATE A TEST POINT WITH A TEST PIN.



Video Block Diagram (W,X,Z,AA,AB,AC,AD,AE)

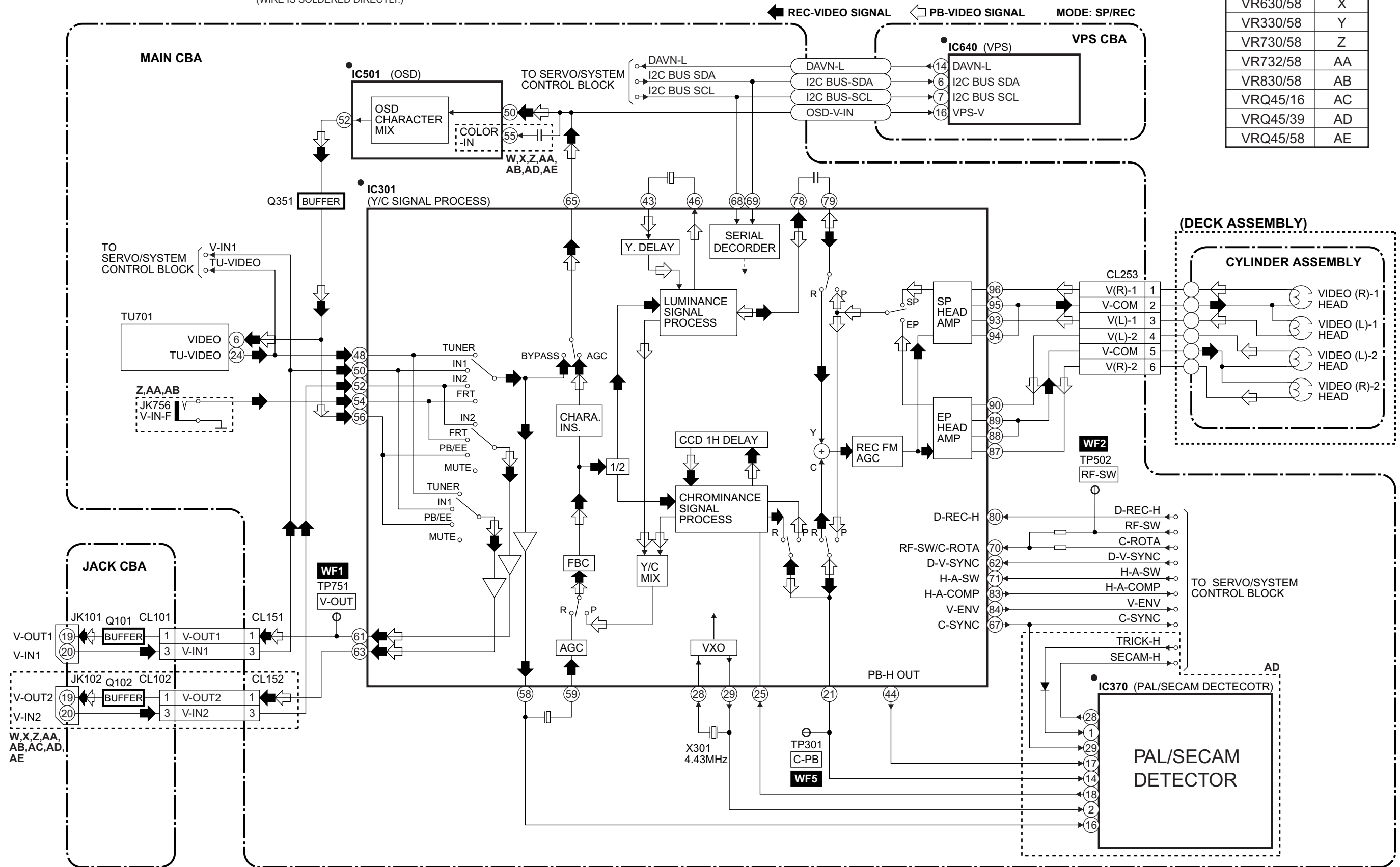
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 1. PREFIX SYMBOL "CN" MEANS CONNECTOR.
 (CAN DISCONNECT AND RECONNECT.)
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 HOLES OF THE PCB.
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Comparison Chart of Models & Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



Video Block Diagram (Y)

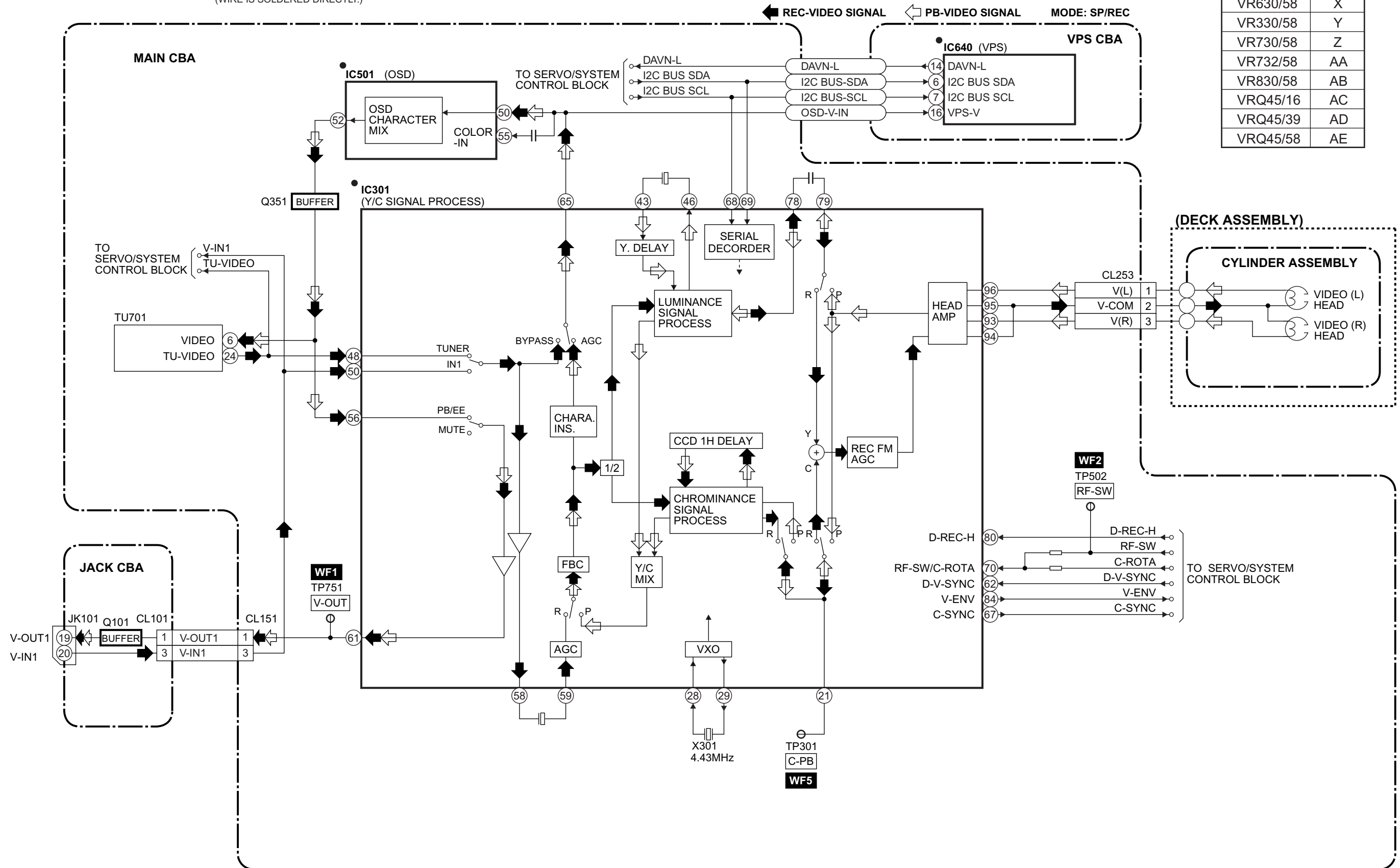
NOTE FOR WIRE CONNECTORS:
 1. PREFIX SYMBOL "CN" MEANS CONNECTOR.
 (CAN DISCONNECT AND RECONNECT.)
 2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER
 HOLES OF THE PCB.
 (WIRE IS SOLDERED DIRECTLY.)

"●" = SMD

TEST POINT INFORMATION
 ○ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
 □ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
 ⊙ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
 ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

Comparison Chart of Models & Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



Audio Block Diagram (W,X,Z,AA,AB,AC,AD,AE)

Comparison Chart of Models & Marks

Model	Mark	Model	Mark
VR530/58	W	VR830/58	AB
VR630/58	X	VRQ45/16	AC
VR330/58	Y	VRQ45/39	AD
VR730/58	Z	VRQ45/58	AE
VR732/58	AA		

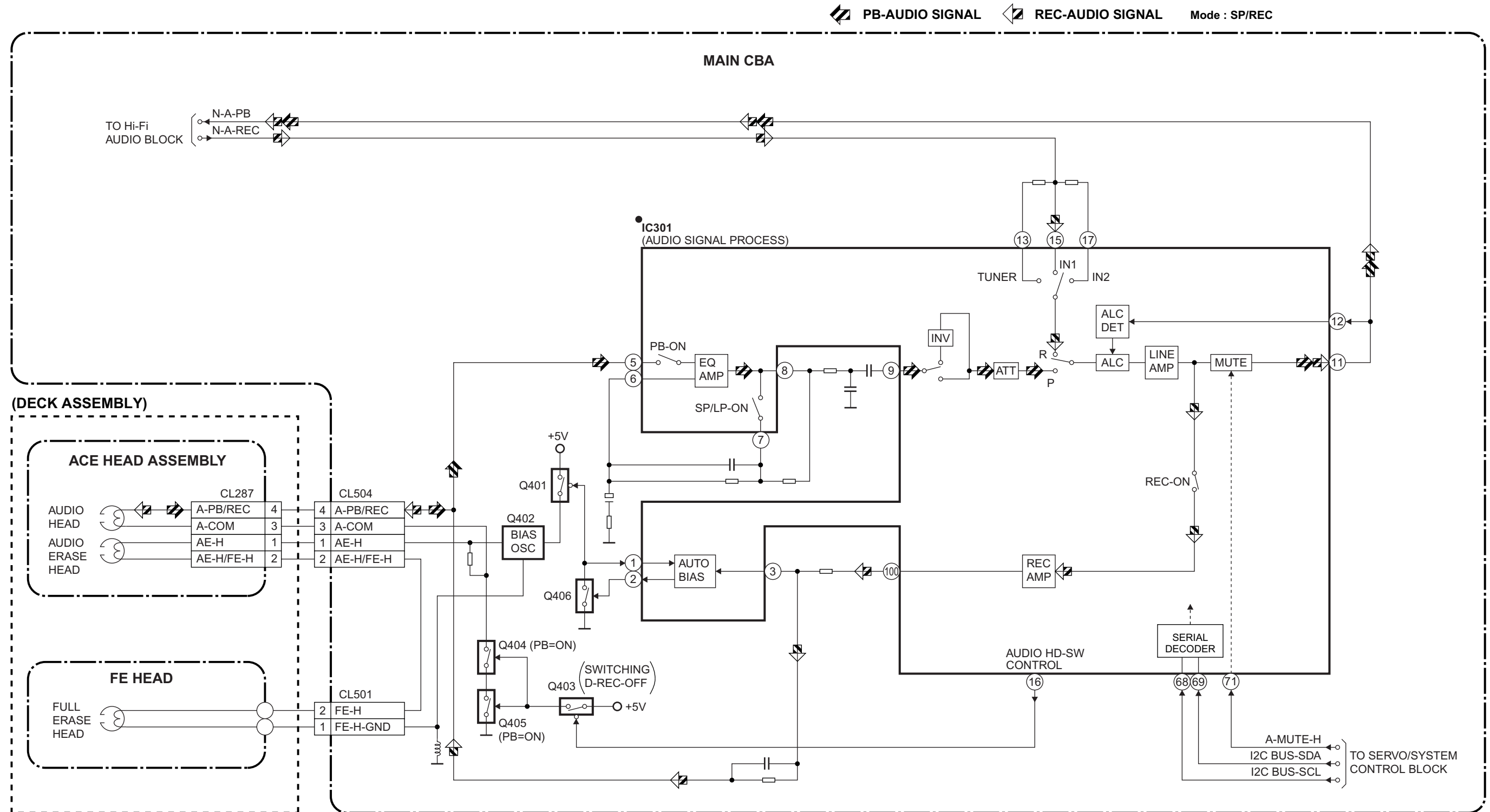
NOTE FOR WIRE CONNECTORS:

1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

"●" = SMD

TEST POINT INFORMATION

- ⊕ : INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ⇨ : USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊗ : USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- : USED TO INDICATE A TEST POINT WITH A TEST PIN.



PB-AUDIO SIGNAL REC-AUDIO SIGNAL Mode : SP/REC

Audio Block Diagram (Y)

"•" = SMD

NOTE FOR WIRE CONNECTORS:

1. PREFIX SYMBOL "CN" MEANS CONNECTOR. (CAN DISCONNECT AND RECONNECT.)
2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB. (WIRE IS SOLDERED DIRECTLY.)

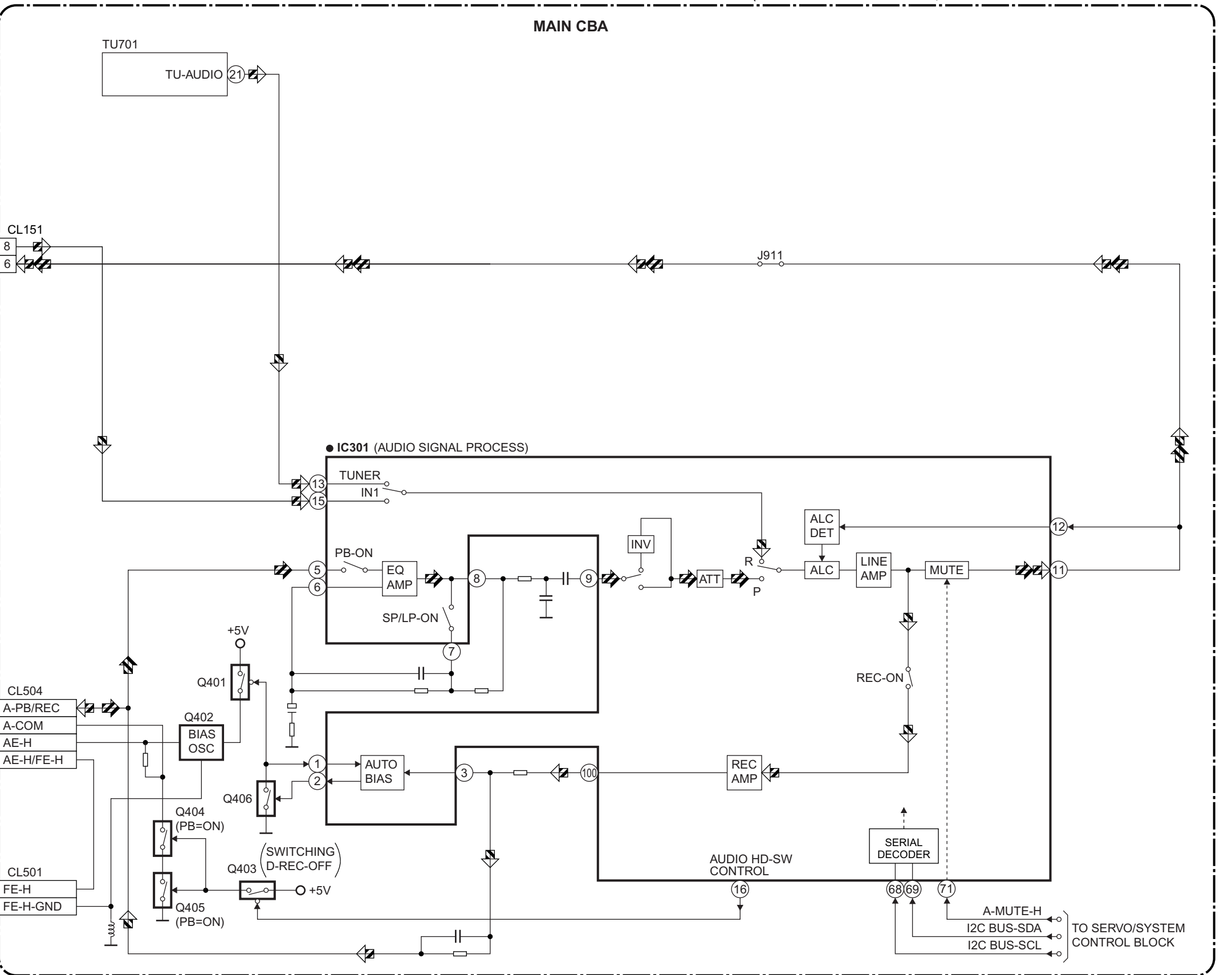
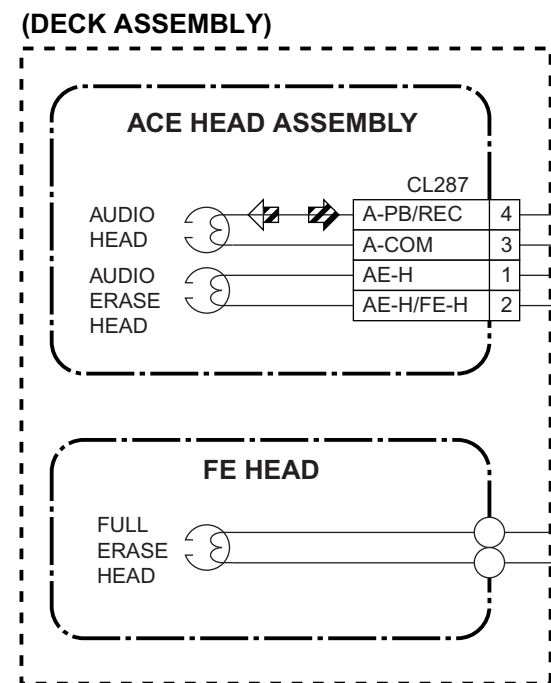
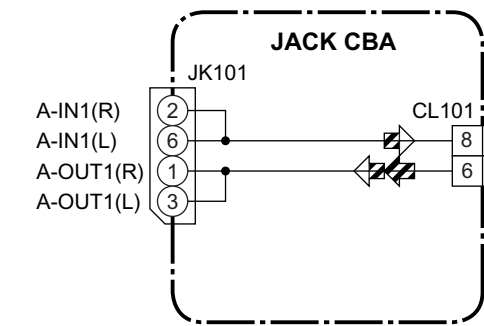
TEST POINT INFORMATION

- ⊙ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
- ◻ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
- ⊗ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- :USED TO INDICATE A TEST POINT WITH A TEST PIN.

▶ PB-AUDIO SIGNAL ◀ REC-AUDIO SIGNAL Mode : SP/REC

Comparison Chart of Models & Marks

Model	Mark	Model	Mark
VR530/58	W	VR830/58	AB
VR630/58	X	VRQ45/16	AC
VR330/58	Y	VRQ45/39	AD
VR730/58	Z	VRQ45/58	AE
VR732/58	AA		



Hi-Fi Audio Block Diagram (W,X,Z,AA,AB,AC,AD,AE)

NOTE FOR WIRE CONNECTORS:
 1. PREFIX SYMBOL "CN" MEANS CONNECTOR.
 (CAN DISCONNECT AND RECONNECT.)
 2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER
 HOLES OF THE PCB.
 (WIRE IS SOLDERED DIRECTLY.)

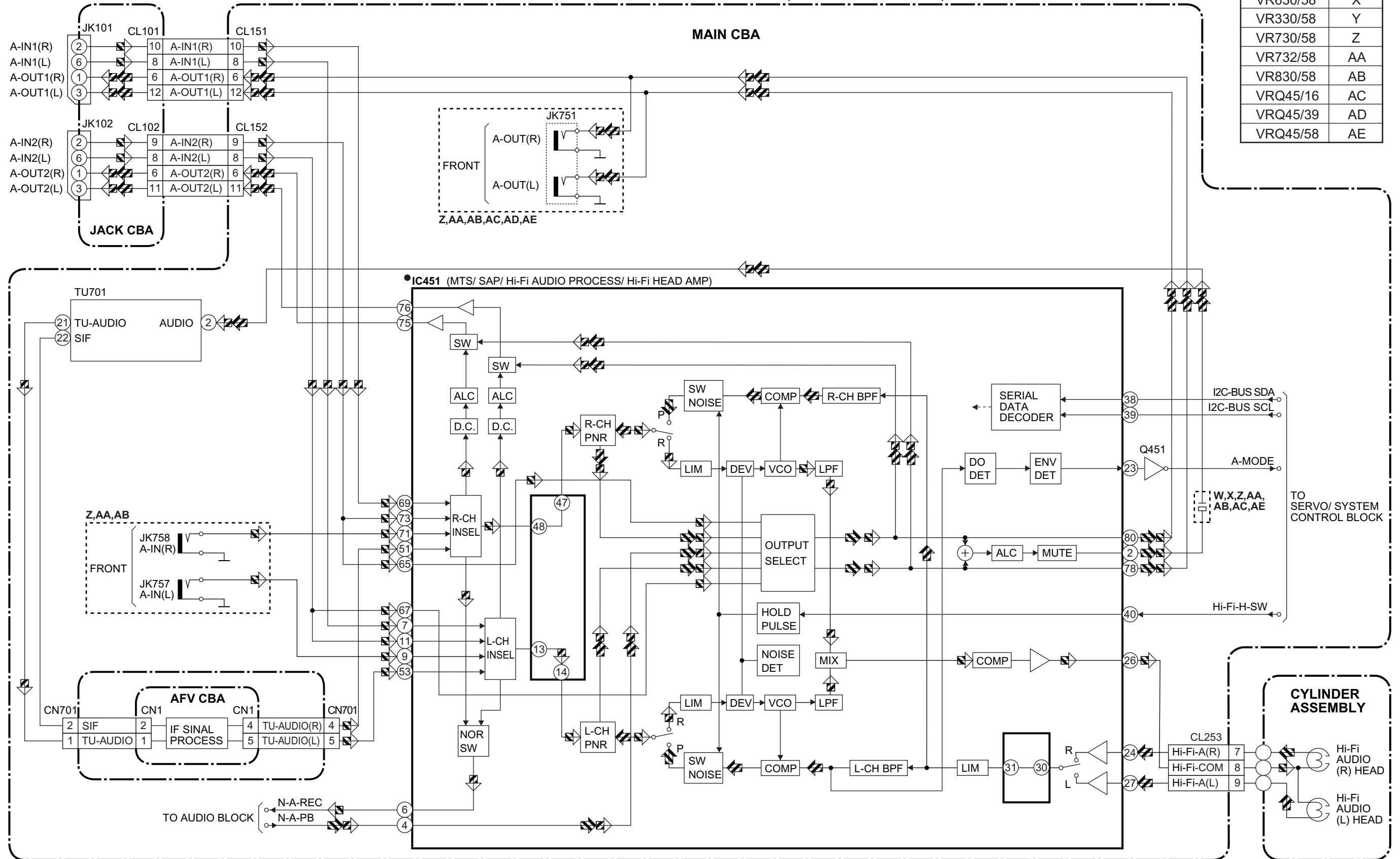
TEST POINT INFORMATION
 ⊕ :INDICATES A TEST POINT WITH A JUMPER WIRE ACROSS A HOLE IN THE PCB.
 ⇨ :USED TO INDICATE A TEST POINT WITH A COMPONENT LEAD ON FOIL SIDE.
 ⊙ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
 ● :USED TO INDICATE A TEST POINT WITH A TEST PIN.

"●" = SMD

⇨ PB-AUDIO SIGNAL ⇨ REC-AUDIO SIGNAL Mode : SP/REC

Comparison Chart of Models & Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



Power Supply Block Diagram

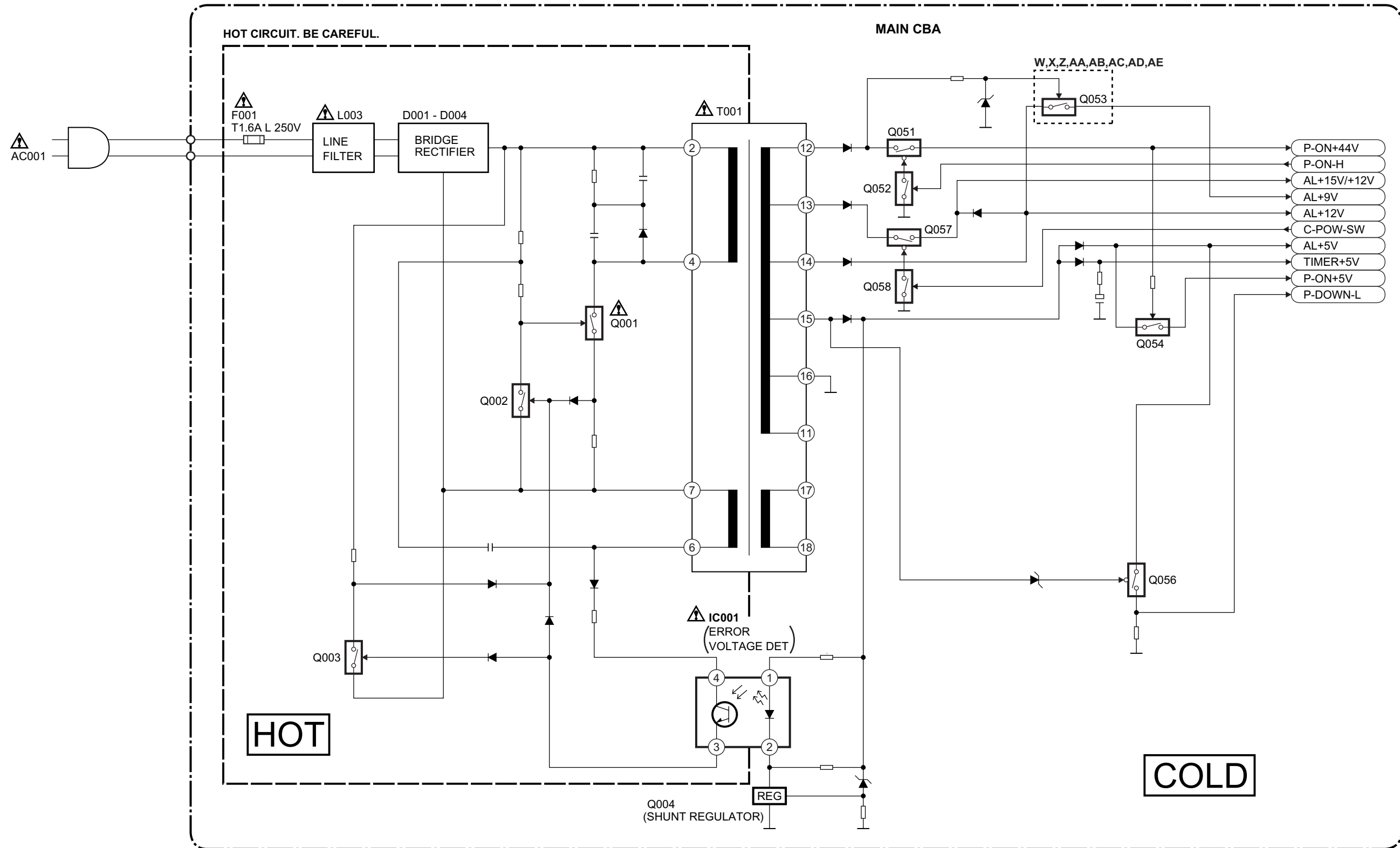
NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE T1.6A/250V FUSE.

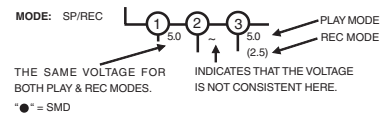
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

Comparison Chart of Models & Marks

Model	Mark	Model	Mark
VR530/58	W	VR830/58	AB
VR630/58	X	VRQ45/16	AC
VR330/58	Y	VRQ45/39	AD
VR730/58	Z	VRQ45/58	AE
VR732/58	AA		



Main 1/6 Schematic Diagram

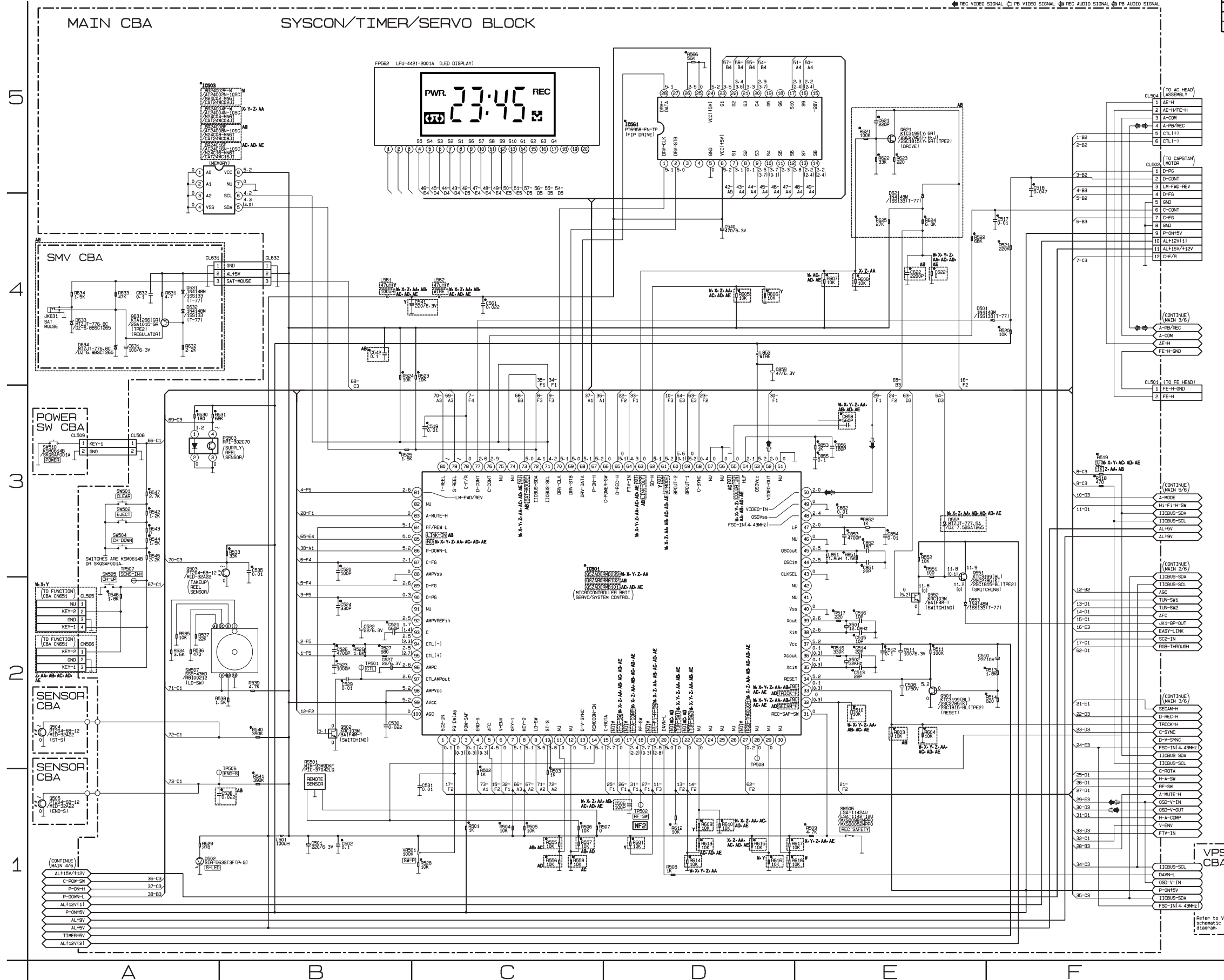


Comparison Chart of Models and Marks

MODEL	MARK	MODEL	MARK
VR530/58	W	VR830/58	AB
VR630/58	X	VRQ45/16	AC
VR330/58	Y	VRQ45/39	AD
VR730/58	Z	VRQ45/58	AE
VR732/58	AA		

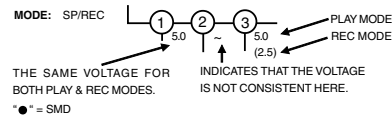
IC501 KEY VOLTAGE CHART

	KEY 1 (7PIN)	KEY 2 (8 PIN) (W.X.Y.Z.AA.AB)	KEY 2 (8 PIN) (AC.AD.AE)
0.00 - 0.51V	POWER		
0.51 - 0.92V		REW	REW
0.92 - 1.27V	CLEAR	PLAY	PLAY
1.27 - 1.61V	EJECT	FF	FF
1.61 - 1.98V	CH DOWN	PAUSE	
1.98 - 2.39V	S-INH		
2.39 - 2.90V		STOP/EJECT	STOP/EJECT
2.90 - 3.60V			
3.60 - 4.30V			
4.30 - 5.00V	KEY OFF	KEY OFF	KEY OFF



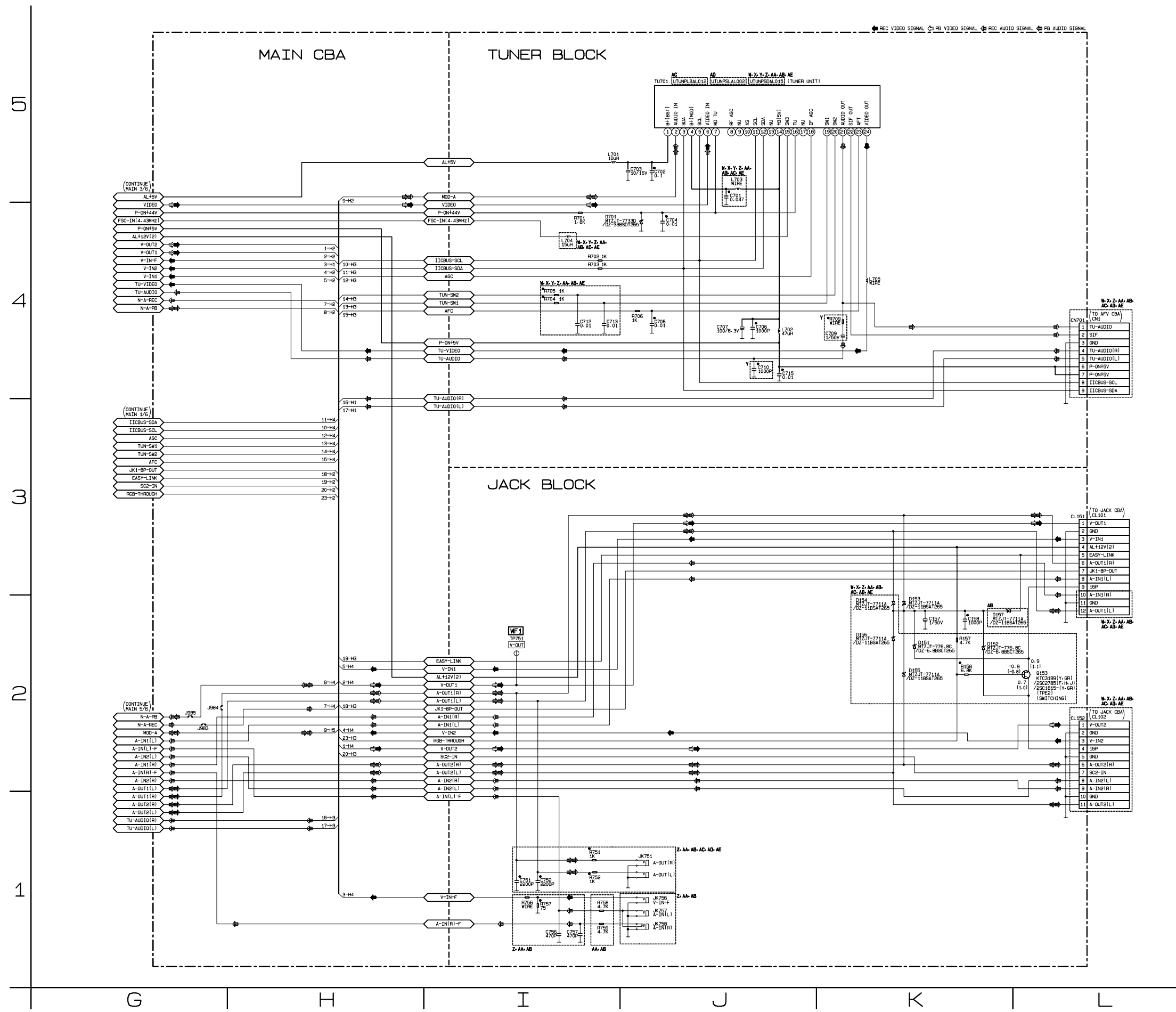
MAIN 1/6 Schematic Diagram Parts Location Guide

Ref No.	Position	Ref No.	Position
CAPACITORS			
C501	B-1	R511	E-2
C502	B-1	R513	F-2
C506	D-1	R514	F-2
C508	E-2	R516	E-2
C510	E-2	R517	E-2
C511	E-2	R518	F-3
C512	E-2	R519	F-3
C513	E-2	R520	F-4
C514	E-2	R521	F-4
C515	E-2	R522	E-4
C516	E-2	R523	C-4
C517	F-4	R524	B-4
C518	F-5	R525	B-3
C519	C-3	R526	B-2
C520	B-3	R527	B-2
C521	B-2	R528	C-1
C522	B-2	R529	A-1
C523	B-2	R530	A-3
C524	B-2	R531	A-3
C526	B-2	R533	B-3
C527	B-2	R534	A-2
C529	B-2	R535	A-2
C530	B-2	R536	A-2
C531	C-1	R537	A-2
C535	B-3	R538	B-2
C538	B-3	R539	B-2
C540	D-4	R540	B-2
C541	C-4	R541	B-1
C542	B-4	R542	A-3
C561	C-4	R543	A-3
C621	E-5	R544	A-3
C622	E-4	R545	A-2
C631	A-4	R546	A-2
C632	A-4	R547	A-3
C851	E-3	R551	E-3
C852	E-3	R552	E-3
C853	E-3	R555	C-1
C854	E-3	R556	C-1
C855	E-3	R557	C-1
C856	E-3	R558	C-1
C858	E-3	R566	D-5
C859	D-4	R601	D-1
C862	E-3	R603	E-2
CONNECTORS			
CL501	F-4	R605	D-4
CL502	F-5	R606	D-4
CL504	F-5	R607	E-4
CL505	A-2	R608	E-4
CL508	A-3	R609	D-1
CL509	A-3	R610	D-1
CN506	A-2	R612	D-1
		R613	D-1
DIODES			
D501	E-4	R614	D-1
D502	A-1	R615	D-1
D552	E-3	R616	D-1
D553	E-2	R617	D-1
D621	E-5	R618	D-1
D631	A-4	R621	E-5
D632	A-4	R622	E-5
D633	A-4	R623	E-5
D634	A-4	R624	E-4
ICs			
IC501	C-3	R631	A-4
IC503	A-5	R632	A-4
IC561	D-5	R633	A-4
COILS			
L501	B-1	R851	E-3
L561	B-4	R852	E-3
L562	C-4	R853	E-3
L851	E-3	SWITCHES	
L853	D-4	SW501	A-3
TRANSISTORS			
Q501	E-2	SW504	A-3
Q502	B-2	SW505	A-2
Q503	A-3	SW506	E-1
Q504	A-2	SW507	A-2
Q505	A-1	VARIABLE RESISTORS	
Q551	E-3	VR501	B-1
Q552	E-2	CRYSTAL OSCILLATORS	
Q621	E-5	X501	E-2
Q631	A-4	X502	E-2
RESISTORS			
R501	C-1	FP562	B-5
R502	C-1	JK631	A-4
R503	C-1	PS503	B-3
R504	C-1	RS501	B-2
R505	C-1	TEST POINTS	
R506	C-1	TP501	B-2
R507	C-1	TP502	D-1
R508	D-1	TP506	B-2
R509	E-1	TP507	A-2
R510	E-2	TP508	D-1



Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



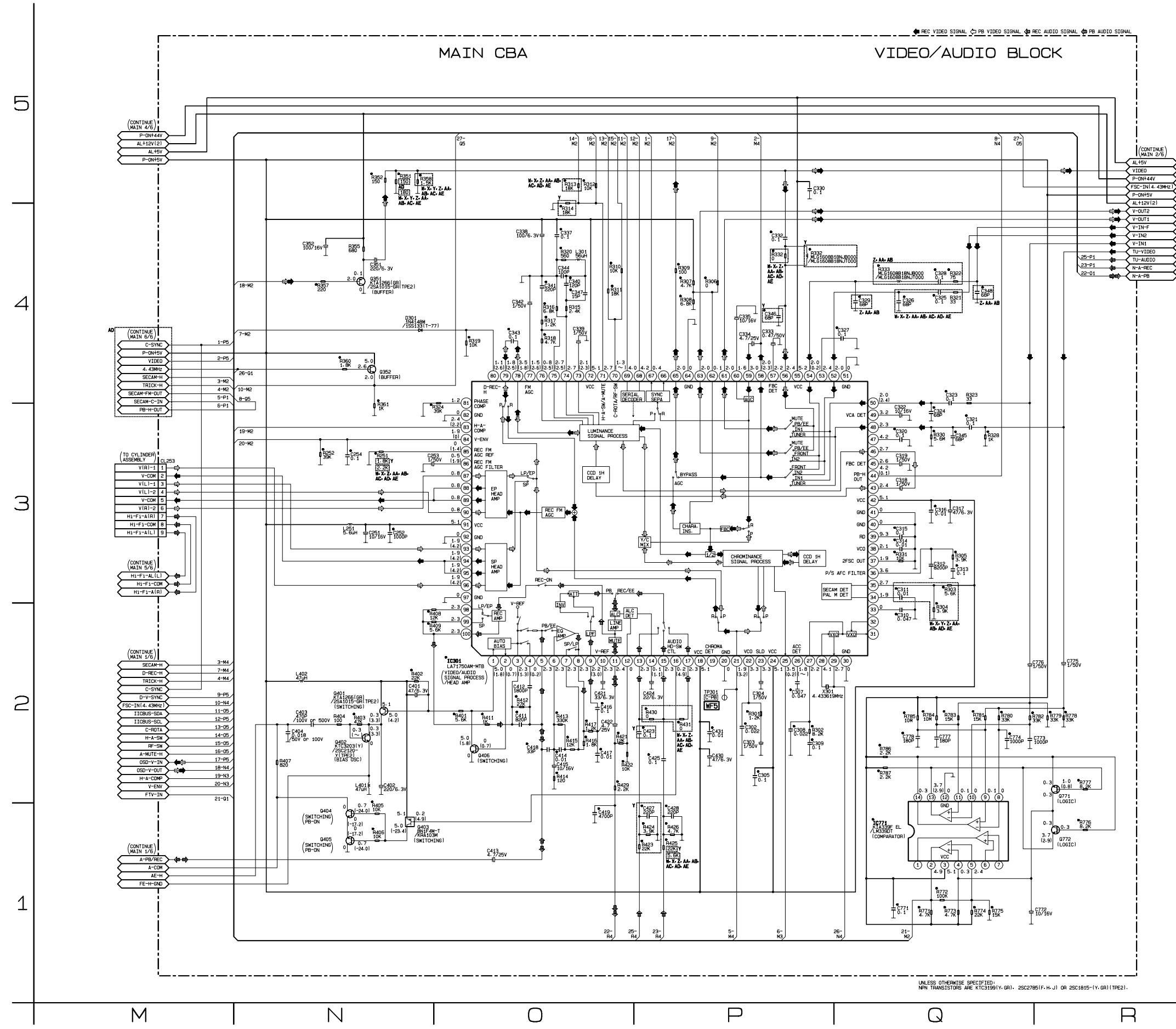
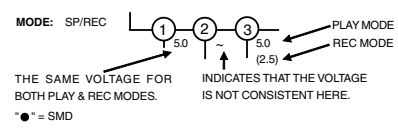
MAIN 2/6 Schematic Diagram Parts Location Guide

Ref No.	Position
CAPACITORS	
C157	K-2
C158	K-2
C701	J-5
C702	J-5
C703	J-5
C704	J-4
C706	J-4
C707	J-4
C708	J-4
C709	K-4
C710	J-4
C712	I-4
C713	I-4
C715	J-4
C751	I-1
C752	I-1
CONNECTORS	
CL151	L-3
CL152	L-2
CN701	L-4
DIODES	
D151	K-2
D152	K-2
D153	K-2
D154	K-2
D155	K-2
D156	K-2
D157	K-2
D701	I-4
COILS	
L701	I-5
L702	J-4
L703	J-5
L704	I-4
L705	K-4
TRANSISTOR	
Q153	L-2
RESISTORS	
R157	K-2
R158	K-2
R701	I-4
R702	I-4
R703	I-4
R704	I-4
R705	I-4
R706	J-4
R709	K-4
R751	I-1
R752	I-1
R756	I-1
R757	I-1
R758	I-1
R759	I-1
MISCELLANEOUS	
JK751	J-1
JK756	J-1
JK757	J-1
JK758	J-1
TU701	J-5
TEST POINT	
TP751	I-2

Main 3/6 Schematic Diagram

Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



MAIN 3/6 Schematic Diagram Parts Location Guide

Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS					
C251	N-3	C422	O-2	R321	Q-4
C252	N-3	C423	P-2	R322	Q-4
C253	O-3	C424	P-2	R323	Q-4
C254	N-3	C425	P-2	R324	O-3
C302	P-2	C427	P-1	R328	Q-3
C303	P-2	C428	P-1	R330	Q-3
C304	P-2	C430	P-2	R331	Q-3
C305	P-2	C431	P-2	R332	P-4
C307	P-2	C756	I-1	R333	Q-4
C308	P-2	C757	I-1	R351	N-5
C309	P-2	C771	Q-1	R352	N-5
C310	Q-2	C772	R-1	R355	N-4
C311	Q-3	C773	R-2	R357	N-4
C312	Q-3	C774	Q-2	R358	N-5
C313	Q-3	C775	R-2	R360	N-4
C314	Q-3	C776	Q-2	R361	N-3
C315	Q-3	C777	Q-2	R401	O-2
C316	Q-3	C778	Q-2	R402	N-2
C317	Q-3	CONNECTOR		R403	N-2
C318	Q-3	CL253	M-3	R404	N-2
C319	Q-3	DIODE		R405	N-1
C320	Q-3	D301	N-4	R406	N-1
C321	Q-3	ICS		R407	N-2
C322	Q-3	IC301	O-2	R408	O-2
C323	Q-4	IC771	Q-1	R409	O-2
C324	Q-3	COILS		R411	O-2
C325	Q-4	L251	N-3	R412	O-2
C326	Q-4	L301	O-4	R413	O-2
C327	Q-4	L401	N-2	R414	O-2
C328	Q-4	L402	N-2	R415	O-2
C329	Q-4	TRANSISTORS		R416	O-2
C330	P-5	Q351	N-4	R417	O-2
C332	P-4	Q352	N-4	R421	O-2
C333	P-4	Q401	N-2	R422	O-2
C334	P-4	Q402	N-2	R423	P-1
C335	P-4	Q403	N-1	R424	P-1
C337	O-4	Q404	N-1	R425	P-1
C338	O-4	Q405	N-1	R426	P-1
C339	O-4	Q406	O-2	R429	O-2
C340	O-4	Q771	R-2	R430	P-2
C341	O-4	Q772	R-1	R431	P-2
C342	O-4	RESISTORS		R771	Q-1
C343	O-4	R251	N-3	R772	Q-1
C344	O-4	R252	N-3	R773	Q-1
C345	Q-4	R301	P-2	R774	Q-1
C346	P-4	R302	P-2	R775	Q-1
C347	O-4	R303	Q-3	R776	R-2
C348	Q-4	R304	Q-2	R777	R-2
C351	N-4	R305	Q-3	R778	R-2
C352	N-4	R306	P-4	R779	R-2
C401	N-2	R307	P-4	R780	Q-2
C402	N-2	R308	P-4	R781	Q-2
C403	N-2	R309	P-4	R782	Q-2
C404	N-2	R310	O-4	R783	Q-2
C411	O-2	R311	O-4	R784	Q-2
C412	O-2	R312	O-5	R785	Q-2
C413	O-1	R313	O-5	R786	Q-2
C414	O-2	R314	O-4	R787	Q-2
C415	O-2	R315	O-4	CRYSTAL OSCILLATOR	
C416	O-2	R316	O-4	X301	P-2
C417	O-2	R317	O-4	TEST POINT	
C418	O-2	R318	O-4	TP301	P-2
C419	O-1	R319	O-4		
C421	O-2	R320	O-4		

Main 4/6 Schematic Diagram

Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

CAUTION !

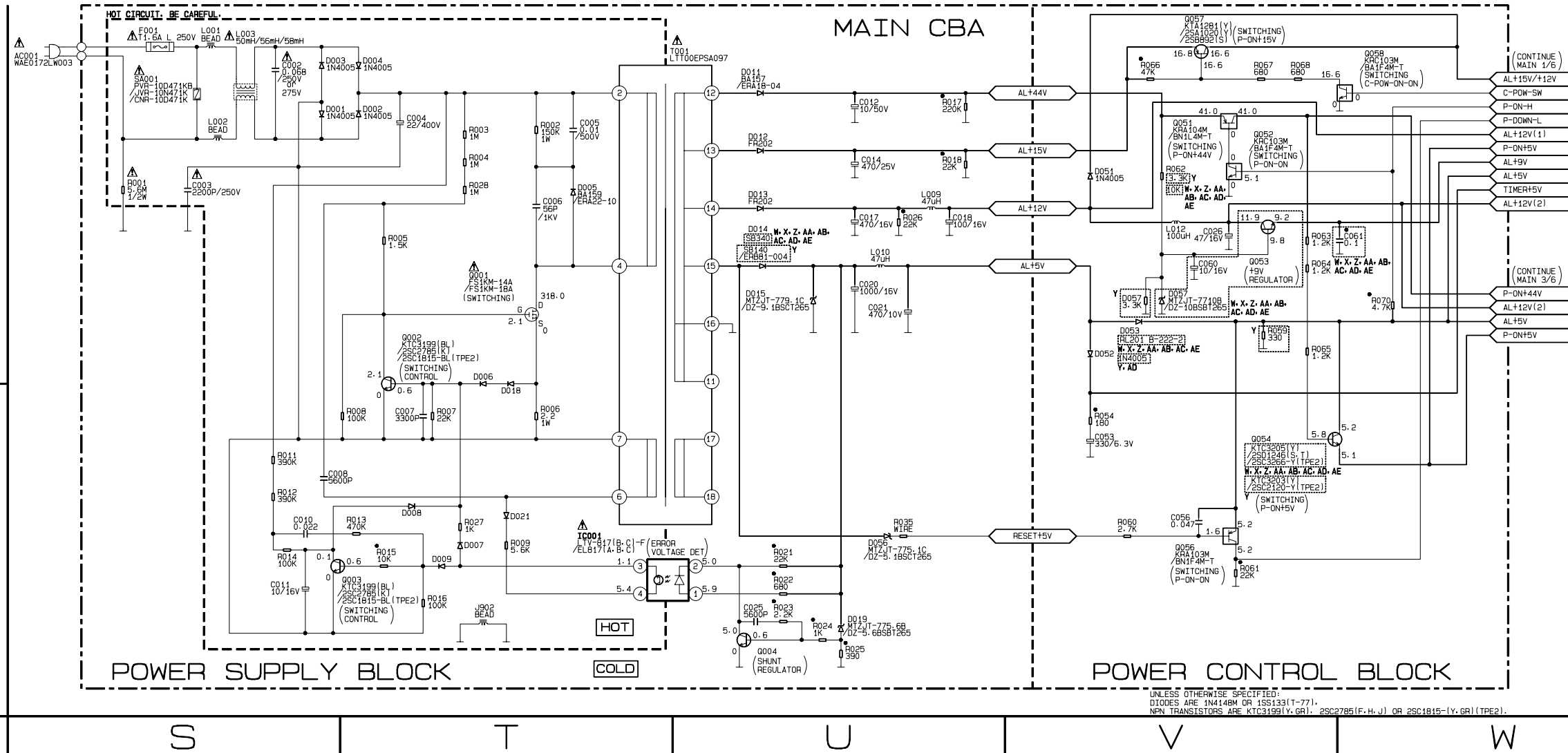
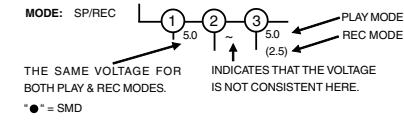
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

NOTE :

The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION

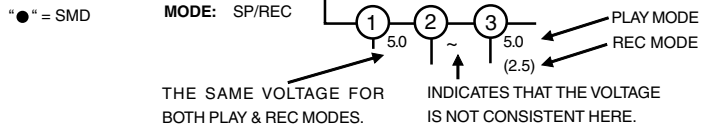
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.



MAIN 4/6 Schematic Diagram Parts Location Guide

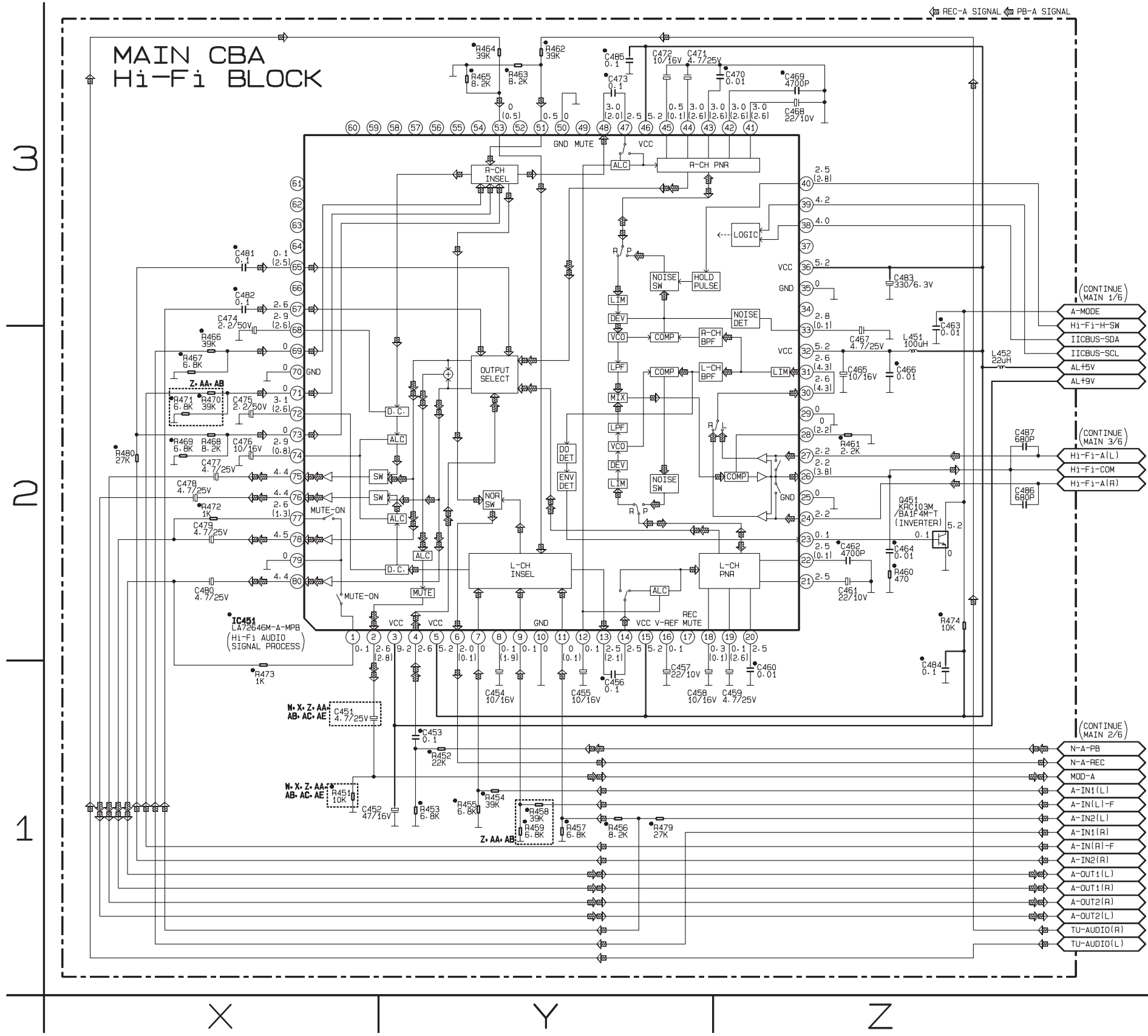
Ref No.	Position	Ref No.	Position
CAPACITORS			
C002	S-2	Q002	T-2
C003	S-2	Q003	T-1
C004	T-2	Q004	U-1
C005	T-2	Q051	V-2
C006	T-2	Q052	V-2
C007	T-1	Q053	V-2
C008	S-1	Q054	V-1
C010	S-1	Q056	V-1
C011	S-1	Q057	V-2
C012	U-2	Q058	W-2
C014	U-2	RESISTORS	
C017	U-2	R001	S-2
C018	U-2	R002	T-2
C020	U-2	R003	T-2
C021	U-2	R004	T-2
C025	U-1	R005	T-2
C026	V-2	R006	T-1
C053	V-1	R007	T-1
C056	V-1	R008	T-1
C060	V-2	R009	T-1
C061	W-2	R011	S-1
DIODES			
D001	S-2	R012	S-1
D002	T-2	R013	T-1
D003	S-2	R014	S-1
D004	T-2	R015	T-1
D005	T-2	R016	T-1
D006	T-2	R017	U-2
D007	T-1	R018	U-2
D008	T-1	R021	U-1
D009	T-1	R022	U-1
D011	U-2	R023	U-1
D012	U-2	R024	U-1
D013	U-2	R025	U-1
D014	U-2	R026	U-2
D015	U-2	R027	T-1
D018	T-1	R028	T-2
D019	U-1	R035	U-1
D021	T-1	R054	V-1
D051	V-2	R059	V-2
D052	V-2	R060	V-1
D053	V-2	R061	V-1
D056	U-1	R062	V-2
D057	V-2	R063	V-2
D057	V-2	R064	V-2
IC			
IC001	T-1	R065	V-2
COILS			
J902	T-1	R066	V-2
L001	S-2	R067	V-2
L002	S-2	R068	V-2
L003	S-2	R070	W-2
L009	U-2	MISCELLANEOUS	
L010	U-2	AC001	S-2
L012	V-2	F001	S-2
TRANSISTORS			
Q001	T-2	SA001	S-2
		T001	T-2

Main 5/6 Schematic Diagram (W,X,Z,AA,AB,AC,AD,AE)



Comparison Chart of Models and Marks

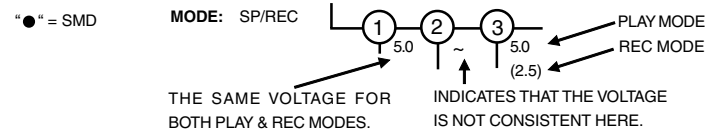
MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



MAIN 5/6 Schematic Diagram Parts Location Guide

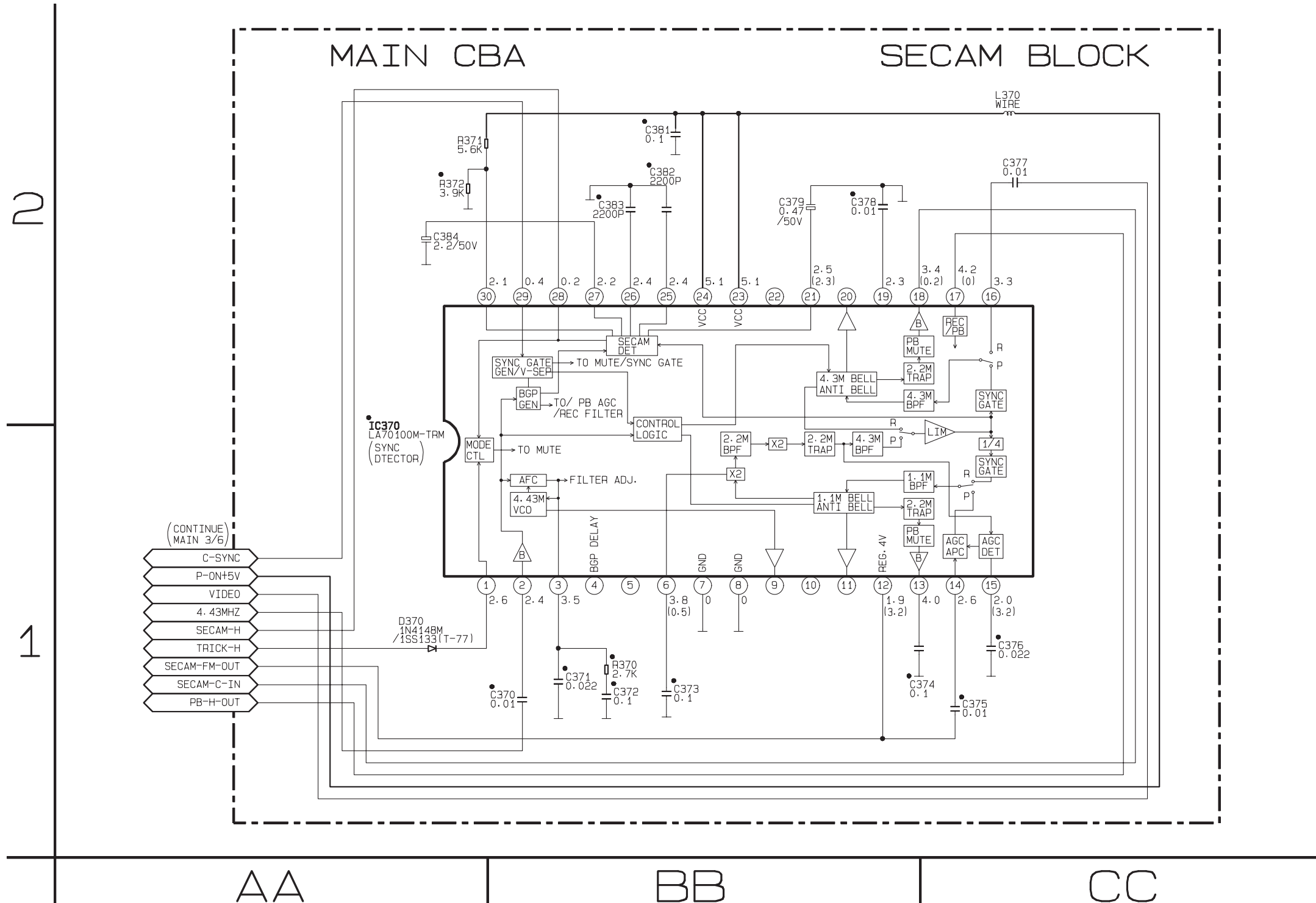
Ref No.	Position	Ref No.	Position
CAPACITORS			
C451	X-1	C487	Z-2
C452	X-1	IC	
C453	Y-1	IC451	X-2
C454	Y-1	COILS	
C455	Y-1	L451	Z-2
C456	Y-1	L452	Z-2
C457	Y-1	TRANSISTOR	
C458	Y-1	Q451	Z-2
C459	Z-1	RESISTORS	
C460	Z-1	R451	X-1
C461	Z-2	R452	Y-1
C462	Z-2	R453	Y-1
C463	Z-2	R454	Y-1
C464	Z-2	R455	Y-1
C465	Z-2	R456	Y-1
C466	Z-2	R457	Y-1
C467	Z-2	R458	Y-1
C468	Z-3	R459	Y-1
C469	Z-3	R460	Z-2
C470	Z-3	R461	Z-2
C471	Y-3	R462	Y-3
C472	Y-3	R463	Y-3
C473	Y-3	R464	Y-3
C474	X-3	R465	Y-3
C475	X-2	R466	X-2
C476	X-2	R467	X-2
C477	X-2	R468	X-2
C478	X-2	R469	X-2
C479	X-2	R470	X-2
C480	X-2	R471	X-2
C481	X-3	R472	X-2
C482	X-3	R473	X-1
C483	Z-3	R474	Z-2
C484	Z-1	R479	Y-1
C485	Y-3	R480	X-2
C486	Z-2		

Main 6/6 Schematic Diagram (AD)



Comparison Chart of Models and Marks

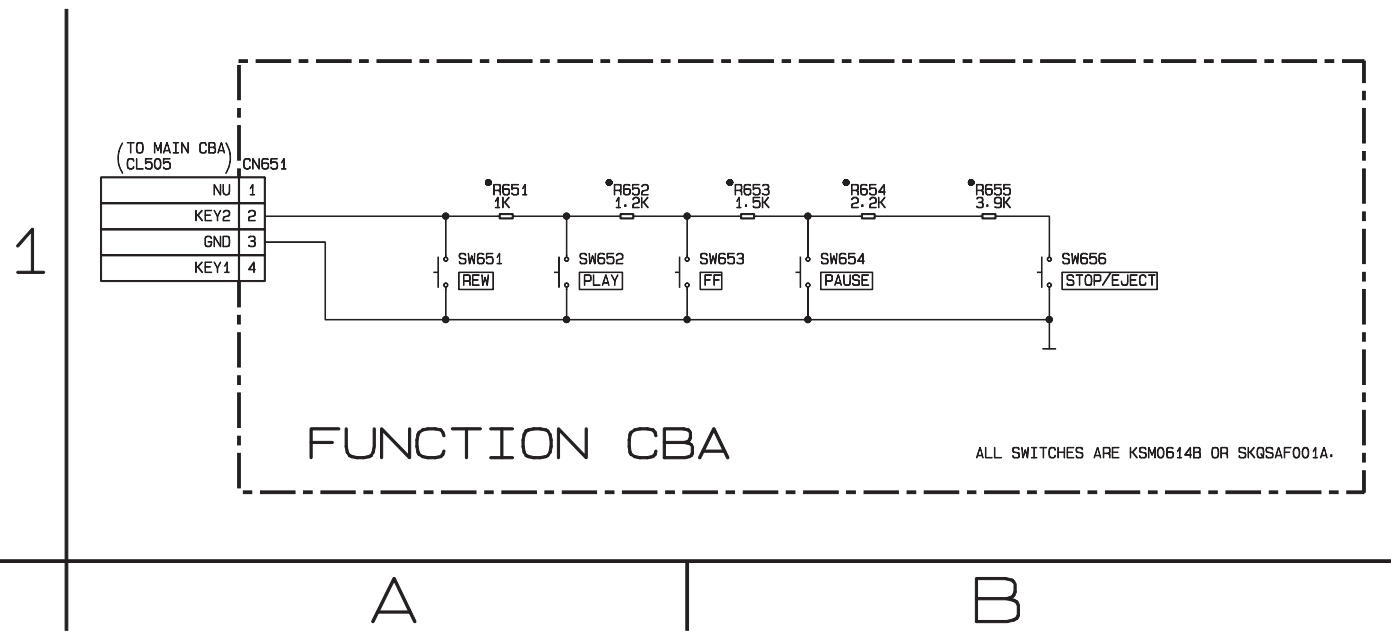
MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



MAIN 6/6 Schematic Diagram Parts Location Guide (AD)

Ref No.	Position
CAPACITORS	
C370	BB-1
C371	BB-1
C372	BB-1
C373	BB-1
C374	BB-1
C375	CC-1
C376	CC-1
C377	CC-2
C378	BB-2
C379	BB-2
C381	BB-2
C382	BB-2
C383	BB-2
C384	AA-2
DIODE	
D370	AA-1
IC	
IC370	AA-1
COILS	
L370	CC-2
RESISTORS	
R370	BB-1
R371	AA-2
R372	AA-2

Function Schematic Diagram (W,X,Y)



HC460SCF

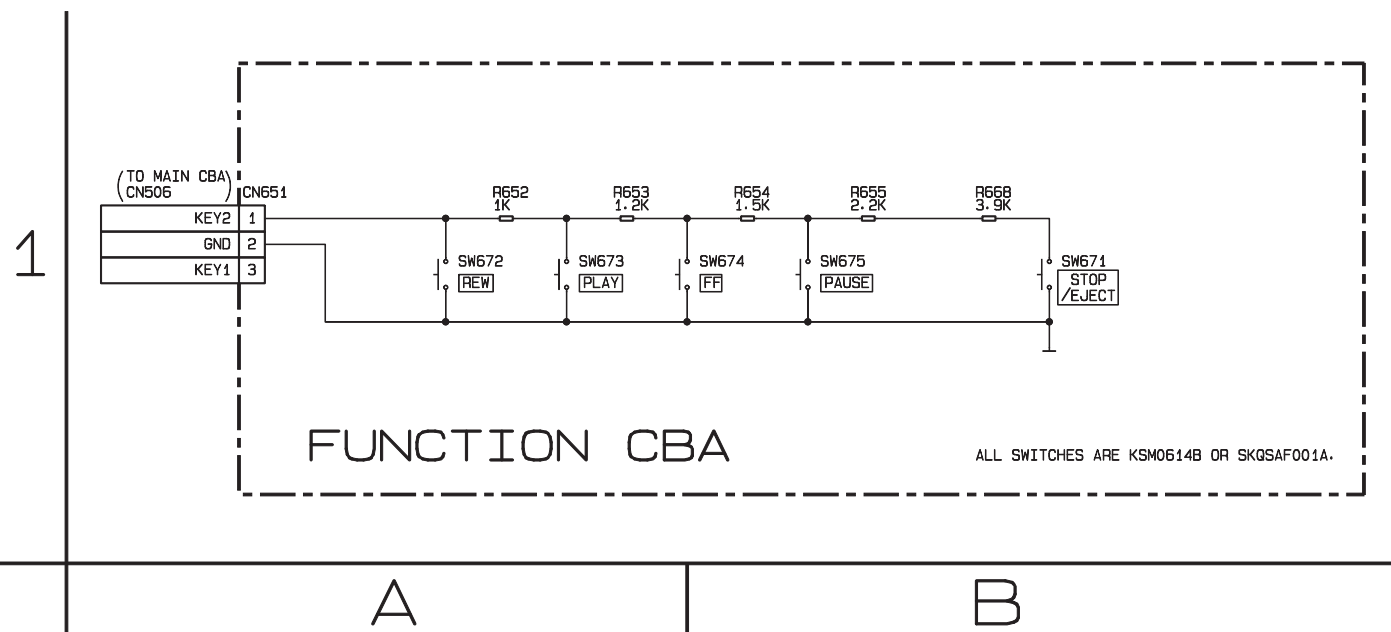
Function Schematic Diagram Location Guide (W,X,Y)

Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW651	A-1
RESISTORS		SW652	A-1
R651	A-1	SW653	B-1
R652	A-1	SW654	B-1
R653	B-1	SW656	B-1
R654	B-1		
R655	B-1		

Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

Function Schematic Diagram (Z,AA)

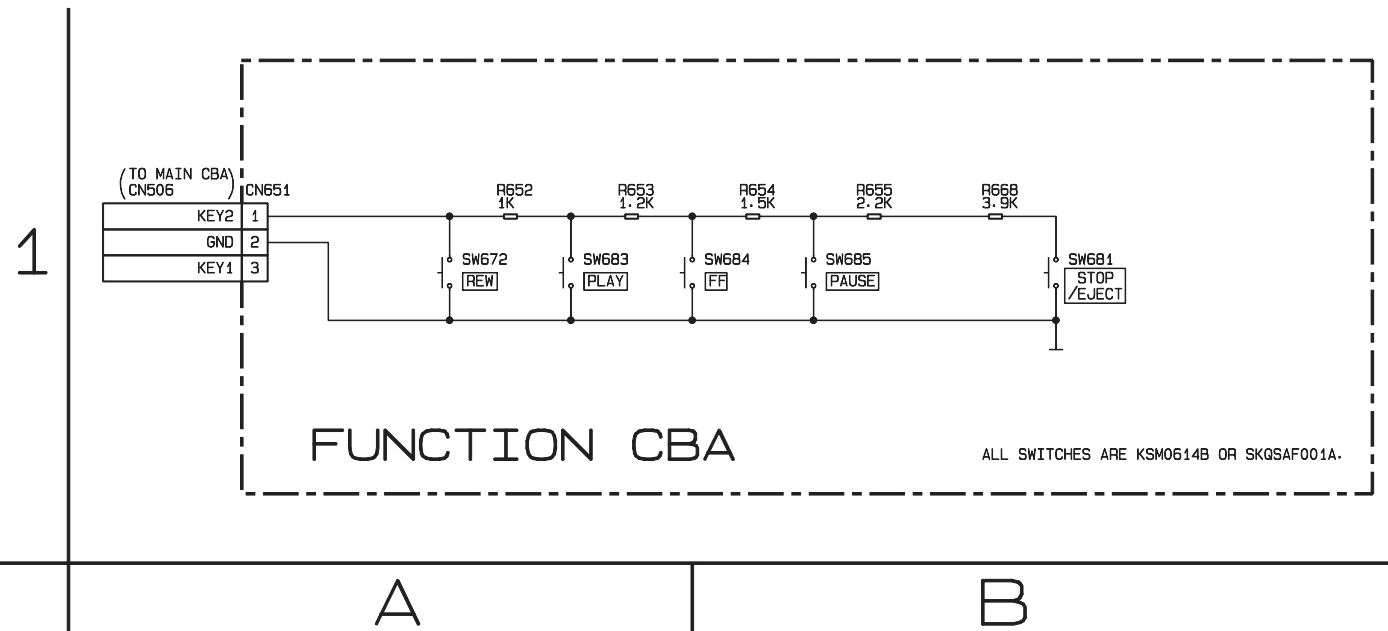


HC470SCF

Function Schematic Diagram Location Guide (Z,AA)

Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW671	B-1
RESISTORS		SW672	A-1
R652	A-1	SW673	A-1
R653	A-1	SW674	B-1
R654	B-1	SW675	B-1
R655	B-1		
R668	B-1		

Function Schematic Diagram (AB)



HC480SCF

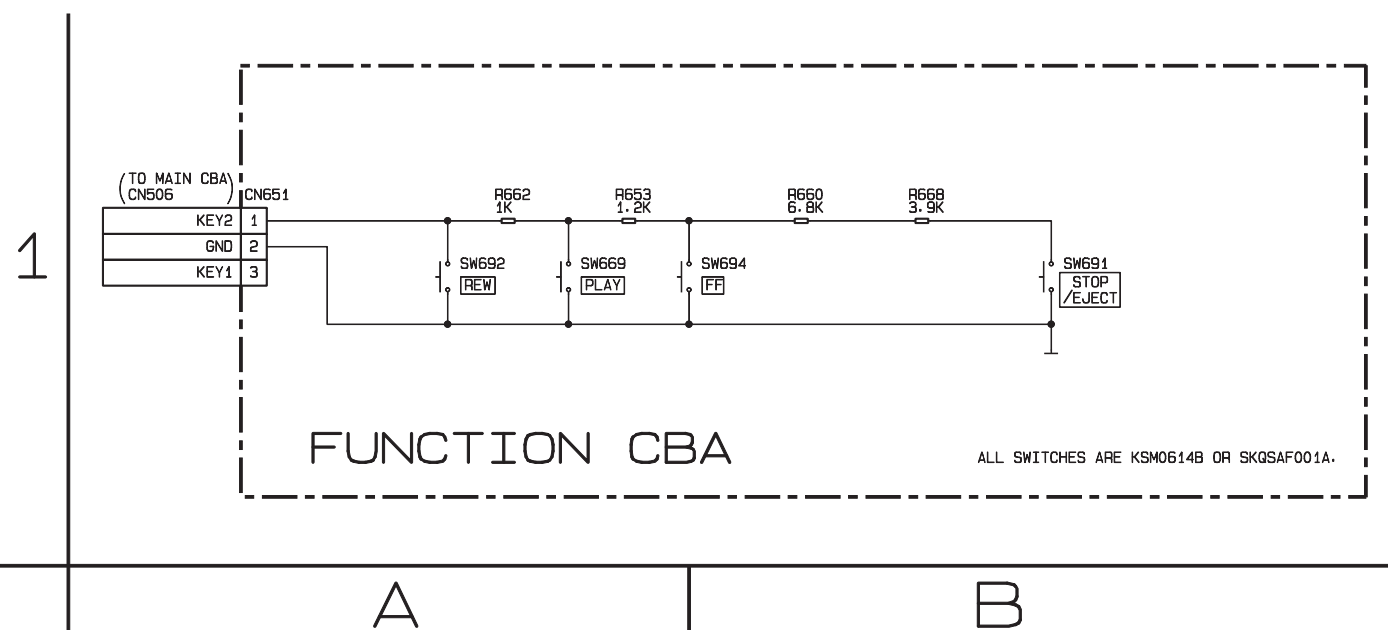
Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

Function Schematic Diagram Location Guide (AB)

Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW672	A-1
RESISTORS		SW681	B-1
R652	A-1	SW683	A-1
R653	A-1	SW684	B-1
R654	B-1	SW685	B-1
R655	B-1		
R668	B-1		

Function Schematic Diagram (AC,AD,AE)



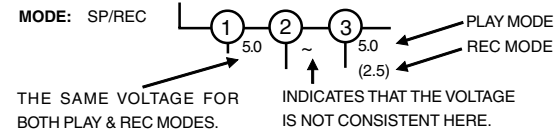
HC490SCF

Function Schematic Diagram Location Guide (AC,AD,AE)

Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW669	A-1
RESISTORS		SW691	B-1
R660	B-1	SW692	A-1
R662	A-1	SW694	B-1
R663	A-1		
R668	B-1		

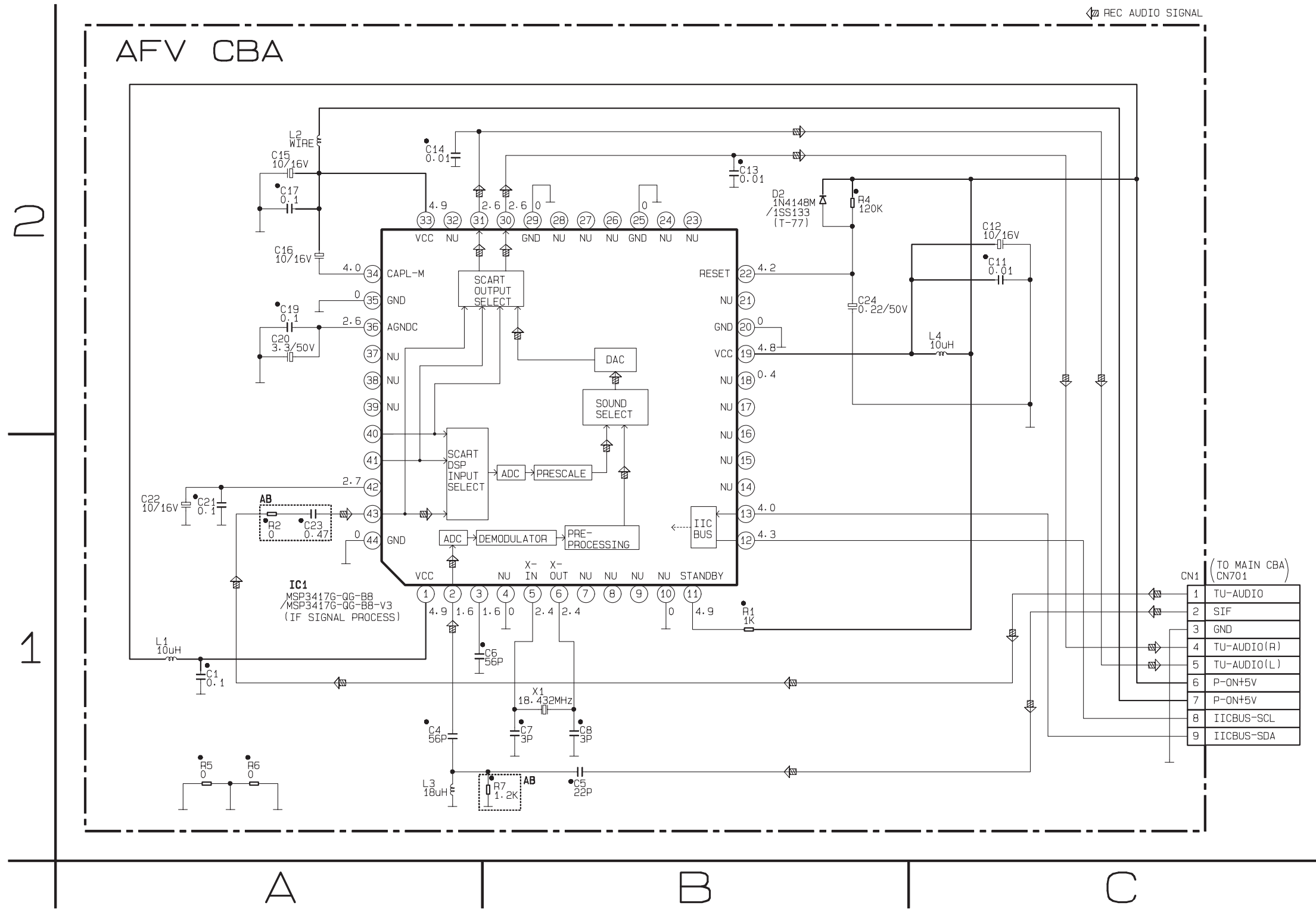
AFV Schematic Diagram (W,X,Z,AA,AB,AC,AD,AE)

● = SMD



Comparison Chart of Models and Marks

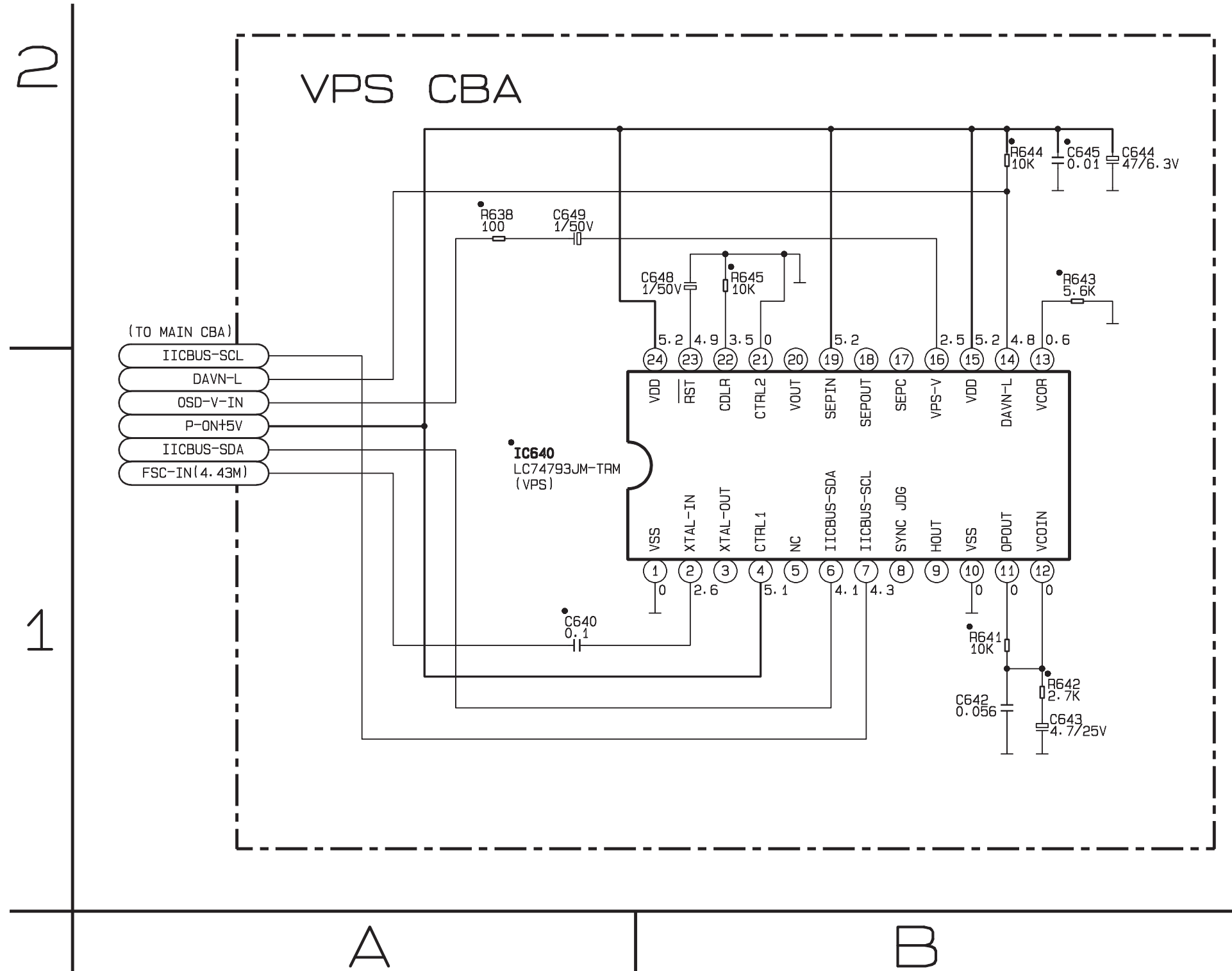
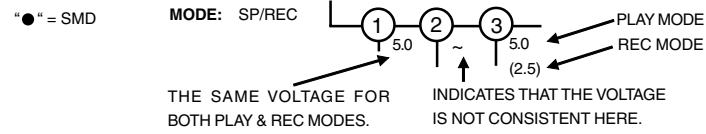
MODEL	MARK	MODEL	MARK
VR530/58	W	VR830/58	AB
VR630/58	X	VRQ45/16	AC
VR330/58	Y	VRQ45/39	AD
VR730/58	Z	VRQ45/58	AE
VR732/58	AA		



AFV Schematic Diagram Parts Location Guide

Ref No.	Position
CAPACITORS	
C1	A-1
C4	A-1
C5	B-1
C6	B-1
C7	B-1
C8	B-1
C11	C-2
C12	C-2
C13	B-2
C14	A-2
C15	A-2
C16	A-2
C17	A-2
C19	A-2
C20	A-2
C21	A-1
C22	A-1
C23	A-1
C24	B-2
CONNECTOR	
CN1	C-1
DIODE	
D2	B-2
IC	
IC1	A-1
COILS	
L1	A-1
L2	A-2
L3	A-1
L4	C-2
RESISTORS	
R1	B-1
R2	A-1
R4	B-2
R5	A-1
R6	A-1
R7	B-1
CRYSTAL OSCILLATORS	
X1	B-1

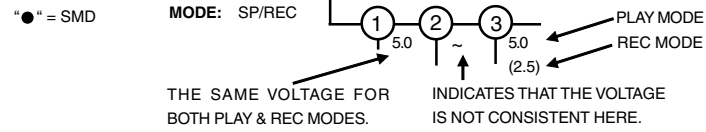
VPS Schematic Diagram



VPS Schematic Diagram
Parts Location Guide

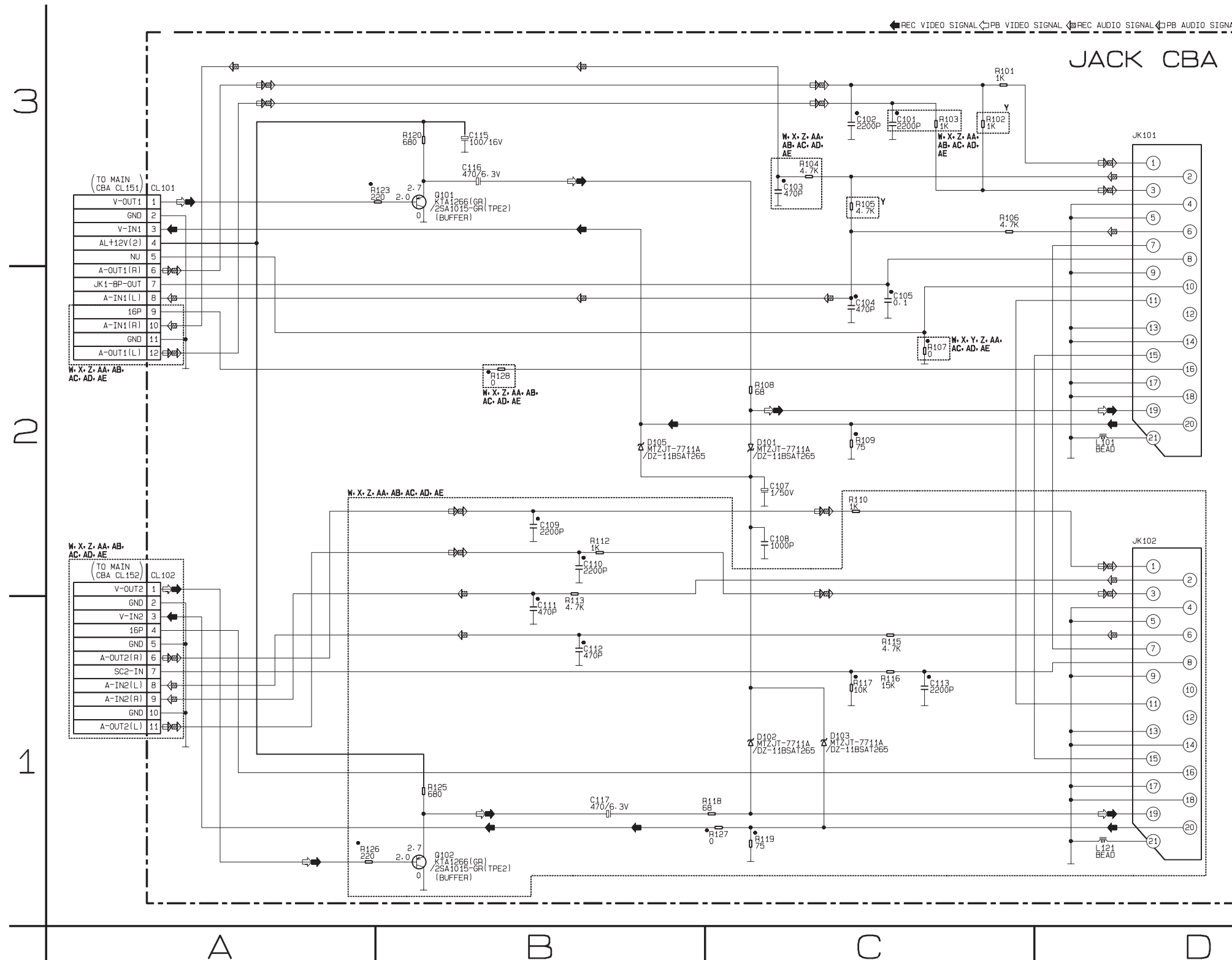
Ref No.	Position
CAPACITORS	
C640	A-1
C642	B-1
C643	B-1
C644	B-2
C645	B-2
C648	B-2
C649	A-2
IC	
IC640	A-2
RESISTORS	
R638	A-2
R641	B-1
R642	B-1
R643	B-2
R644	B-2
R645	B-2

Jack Schematic Diagram



Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



Jack Schematic Diagram Parts Location Guide

Ref No.	Position	Ref No.	Position
CAPACITORS		TRANSISTORS	
C101	C-3	Q102	B-1
C102	C-3	RESISTORS	
C103	C-3	R101	B-1
C104	C-2	R102	C-3
C105	C-2	R103	C-3
C107	C-2	R104	C-3
C108	C-2	R105	C-3
C109	B-2	R106	C-3
C110	B-2	R107	C-2
C111	B-1	R108	C-2
C112	B-1	R109	C-2
C113	C-1	R110	C-2
C115	B-3	R112	B-2
C116	B-3	R113	B-1
C117	B-1	R115	C-1
CONNECTORS		R116	C-1
CL101	A-3	R117	C-1
CL102	A-2	R118	C-1
DIODES		R119	C-1
D101	C-2	R120	B-3
D102	C-1	R123	B-3
D103	C-1	R125	B-1
D105	B-2	R126	A-1
COILS		R127	C-1
L101	D-2	R128	B-2
L121	D-1	MISCELLANEOUS	
TRANSISTORS		JK101	D-3
Q101	B-3	JK102	D-2

Main CBA Parts Location Guide

Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		CAPACITORS		CAPACITORS		CAPACITORS		ICS		RESISTORS		RESISTORS		RESISTORS		RESISTORS	
C002	G-3	C345	D-3	C476	B-3	C778	F-3	IC561	E-1	R008	G-3	R357	D-2	R510	C-1	R705	B-1
C003	F-3	C346	C-3	C477	B-3	C851	C-2	IC771	F-4	R009	F-2	R358	C-3	R511	C-2	R706	A-1
C004	G-3	C347	C-3	C478	B-3	C852	C-2	COILS		R011	G-3	R360	D-3	R513	C-2	R709	A-1
C005	G-3	C348	D-2	C479	B-3	C853	D-2	J902	F-3	R012	G-3	R361	D-3	R514	C-2	R751	B-4
C006	G-2	C351	C-3	C480	B-3	C854	D-2	L001	G-4	R013	F-3	R370	E-3	R516	C-1	R752	A-3
C007	F-3	C352	D-2	C481	C-3	C855	C-1	L002	F-3	R014	F-3	R371	E-3	R517	C-1	R756	A-1
C008	F-2	C370	D-3	C482	C-3	C856	C-1	L003	F-3	R015	F-3	R372	E-3	R518	C-2	R757	A-1
C010	G-3	C371	E-3	C483	C-3	C858	D-2	L009	G-1	R016	F-3	R401	C-4	R519	C-2	R758	A-1
C011	G-3	C372	D-3	C484	C-3	C859	C-1	L010	G-2	R017	F-2	R402	C-4	R520	E-2	R759	A-1
C012	F-2	C373	E-3	C485	C-3	C862	D-2	L012	F-1	R018	F-2	R403	B-4	R521	E-2	R771	E-4
C014	G-2	C374	D-3	C486	C-3	CONNECTORS		L251	C-3	R021	F-2	R404	B-4	R522	D-2	R772	E-4
C017	G-2	C375	D-3	C487	C-4	CL151	A-3	L301	C-3	R022	F-2	R405	D-4	R523	C-1	R773	F-4
C018	G-1	C376	D-3	C501	E-1	CL152	A-3	L370	E-3	R023	F-2	R406	D-4	R524	C-1	R774	E-4
C020	G-2	C377	D-3	C502	D-1	CL253	C-4	L401	B-4	R024	F-2	R407	D-4	R525	C-1	R775	E-4
C021	G-1	C378	D-3	C506	C-1	CL501	B-4	L402	D-3	R025	F-2	R408	C-3	R526	E-1	R776	F-4
C025	F-2	C379	E-4	C508	C-1	CL502	E-2	L451	C-3	R026	G-2	R409	C-3	R527	D-1	R777	F-3
C026	F-1	C381	E-3	C510	C-2	CL504	E-4	L452	C-2	R027	G-2	R411	C-4	R528	A-1	R778	E-4
C053	F-1	C382	E-4	C511	C-1	CL505	F-1	L501	E-1	R028	G-3	R412	D-4	R529	D-2	R779	E-4
C056	G-1	C383	E-3	C512	C-1	CL508	B-1	L561	E-1	R035	G-2	R413	D-4	R530	C-2	R780	E-4
C060	F-1	C384	E-4	C513	C-1	CL509	B-1	L562	E-1	R054	F-1	R414	D-4	R531	C-2	R781	E-4
C061	F-1	C401	C-4	C514	C-1	CN506	G-1	L701	A-4	R059	F-1	R415	D-3	R533	E-2	R782	E-4
C157	B-4	C402	C-4	C515	C-1	CN701	A-2	L702	A-2	R060	G-1	R416	D-3	R534	F-2	R783	E-4
C158	B-3	C403	C-4	C516	C-1	DIODES		L703	A-2	R061	F-1	R417	D-3	R535	F-2	R784	E-4
C251	C-3	C404	C-4	C517	E-2	D001	G-4	L704	B-2	R062	F-1	R421	D-4	R536	F-2	R785	F-4
C252	C-3	C411	D-4	C518	E-2	D002	G-3	L705	A-2	R063	F-1	R422	D-4	R537	F-1	R786	F-4
C253	C-3	C412	D-4	C519	D-1	D003	G-3	L851	C-2	R064	F-1	R423	D-3	R538	E-2	R787	F-4
C254	C-3	C413	D-4	C520	D-1	D004	G-3	L853	C-1	R065	F-1	R424	D-3	R539	F-1	R851	C-2
C302	D-3	C414	D-4	C521	D-1	D005	G-3	TRANSISTORS		R066	F-2	R425	D-4	R540	B-1	R852	D-2
C303	D-3	C415	D-4	C522	D-1	D006	G-3	Q001	G-2	R067	F-1	R426	D-4	R541	B-1	R853	C-1
C304	D-3	C416	D-3	C523	E-1	D007	F-2	Q002	G-2	R068	F-1	R429	D-3	R542	B-1	SWITCHES	
C305	D-3	C417	D-3	C524	E-1	D008	G-3	Q003	F-3	R070	F-1	R430	D-3	R543	E-1	SW501	B-1
C307	D-3	C418	D-4	C526	E-1	D009	F-3	Q004	F-2	R157	B-2	R431	D-3	R544	E-1	SW502	B-1
C308	D-3	C419	D-3	C527	D-1	D011	F-2	Q051	F-2	R158	B-2	R451	B-3	R545	F-1	SW504	E-1
C309	D-3	C421	D-4	C529	D-1	D012	F-2	Q052	F-2	R251	C-3	R452	B-3	R546	G-1	SW505	F-1
C310	D-3	C422	D-3	C530	D-1	D013	F-2	Q053	F-1	R252	C-3	R453	B-3	R547	B-1	SW506	C-1
C311	D-3	C423	D-3	C531	C-1	D014	G-2	Q054	F-1	R301	D-3	R454	B-3	R551	C-2	SW507	F-1
C312	D-3	C424	D-4	C535	D-2	D015	G-2	Q056	F-1	R302	D-3	R455	B-3	R552	C-2	VARIABLE RESISTOR	
C313	D-3	C425	D-3	C538	A-3	D018	G-3	Q057	F-1	R303	D-3	R456	B-4	R555	C-1	VR501	A-1
C314	D-3	C427	D-3	C540	E-1	D019	F-2	Q058	G-1	R304	D-3	R457	B-3	R556	C-1	CRYSTAL OSCILLATORS	
C315	D-3	C428	D-4	C541	E-1	D021	F-2	Q153	B-2	R305	D-3	R458	B-3	R557	C-1	X301	D-3
C316	D-3	C430	D-3	C542	A-1	D051	F-2	Q351	C-2	R306	C-2	R459	C-3	R558	C-1	X501	C-1
C317	D-3	C431	C-3	C561	E-1	D052	F-1	Q352	D-3	R307	C-3	R460	C-4	R566	E-1	X502	C-1
C318	D-3	C451	B-3	C621	D-2	D053	G-1	Q401	C-4	R308	C-3	R461	C-3	R601	C-2	MISCELLANEOUS	
C319	D-3	C452	B-3	C622	D-2	D056	G-2	Q402	B-4	R309	C-3	R462	C-3	R603	C-1	AC001	F-4
C320	D-3	C453	B-3	C701	A-3	D057	F-1	Q403	D-4	R310	B-2	R463	C-3	R604	C-1	F001	G-4
C321	D-3	C454	B-4	C702	A-4	D151	B-4	Q404	D-4	R311	B-2	R464	C-3	R605	D-2	FP562	D-1
C322	D-3	C455	B-4	C703	A-3	D152	A-3	Q405	D-4	R312	C-2	R465	C-3	R606	D-2	JK751	B-4
C323	D-2	C456	C-3	C704	A-3	D153	B-3	Q406	D-4	R313	C-2	R466	B-3	R607	D-2	JK756	A-1
C324	D-3	C457	B-4	C706	A-2	D154	B-3	Q451	C-3	R314	C-3	R467	B-3	R608	D-2	JK757	A-1
C325	D-3	C458	C-4	C707	A-2	D155	A-3	Q501	C-1	R315	C-3	R468	B-3	R609	C-1	JK758	A-1
C326	D-3	C459	C-4	C708	A-2	D156	A-3	Q502	D-1	R316	C-3	R469	B-3	R610	C-1	PS503	C-2
C327	D-3	C460	C-3	C709	B-2	D157	B-4	Q503	D-2	R317	C-3	R470	B-3	R612	B-1	RS501	C-1
C328	D-3	C461	C-3	C710	A-2	D301	C-3	Q504	F-3	R318	C-3	R471	B-3	R613	B-1	SA001	F-4
C329	C-3	C462	C-4	C712	A-2	D370	D-3	Q505	A-3	R319	C-3	R472	B-3	R614	B-1	T001	G-2
C330	D-3	C463	C-3	C713	A-2	D501	E-1	Q551	C-2	R320	C-3	R473	B-3	R615	B-1	TU701	A-3
C332	C-3	C464	C-4	C715	A-1	D502	D-2	Q552	C-2	R321	D-3	R474	C-3	R616	C-1	TEST POINTS	
C333	C-3	C465	C-3	C751	B-4	D552	C-2	Q621	D-2	R322	D-3	R479	B-3	R617	C-2	TP301	G-1
C334	C-3	C466	C-3	C752	A-3	D553	C-2	Q771	F-3	R323	D-2	R480	B-3	R618	C-1	TP501	G-1
C335	C-3	C467	C-3	C756	A-1	D621	D-2	Q772	F-3	R324	C-3	R501	C-1	R621	D-2	TP502	B-1
C337	C-3	C468	C-3	C757	A-1	D701	A-2	RESISTORS		R328	D-3	R502	B-1	R622	D-2	TP506	A-2
C338	C-3	C469	C-3	C771	E-4	ICS		R001	F-3	R330	D-3	R503	C-1	R623	E-2	TP507	G-1
C339	C-3	C470	C-3	C772	F-4	IC001	F-2	R002	G-3	R331	D-3	R504	C-1	R624	D-2	TP508	C-1
C340	C-3	C471	C-3	C773	E-4	IC301	C-3	R003	G-3	R332	D-3	R505	C-1	R625	D-5	TP751	B-2
C341	C-3	C472	C-3	C774	F-3	IC370	E-3	R004	G-3	R333	D-2	R506	C-1	R701	A-2		
C342	C-3	C473	C-3	C775	E-3	IC451	C-3	R005	G-3	R351	C-2	R507	C-1	R702	A-1		
C343	C-3	C474	C-3	C776	E-3	IC501	D-1	R006	G-3	R352	C-2	R508	A-1	R703	A-1		

Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

Main CBA Top View

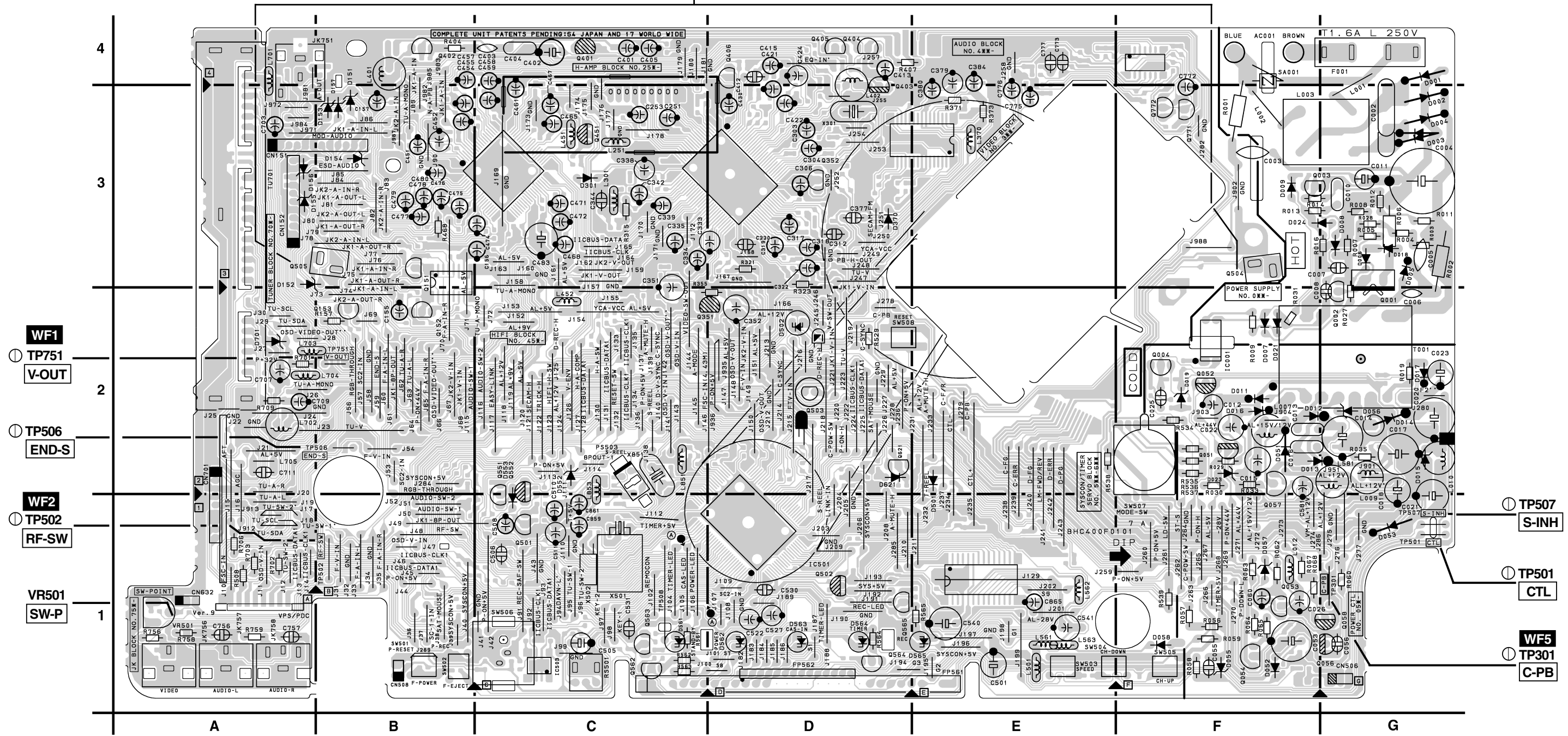
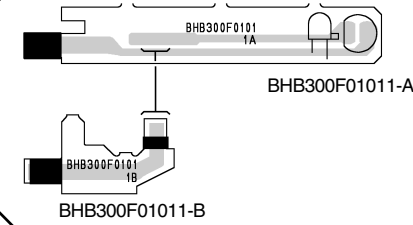
BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

Sensor CBA Top View



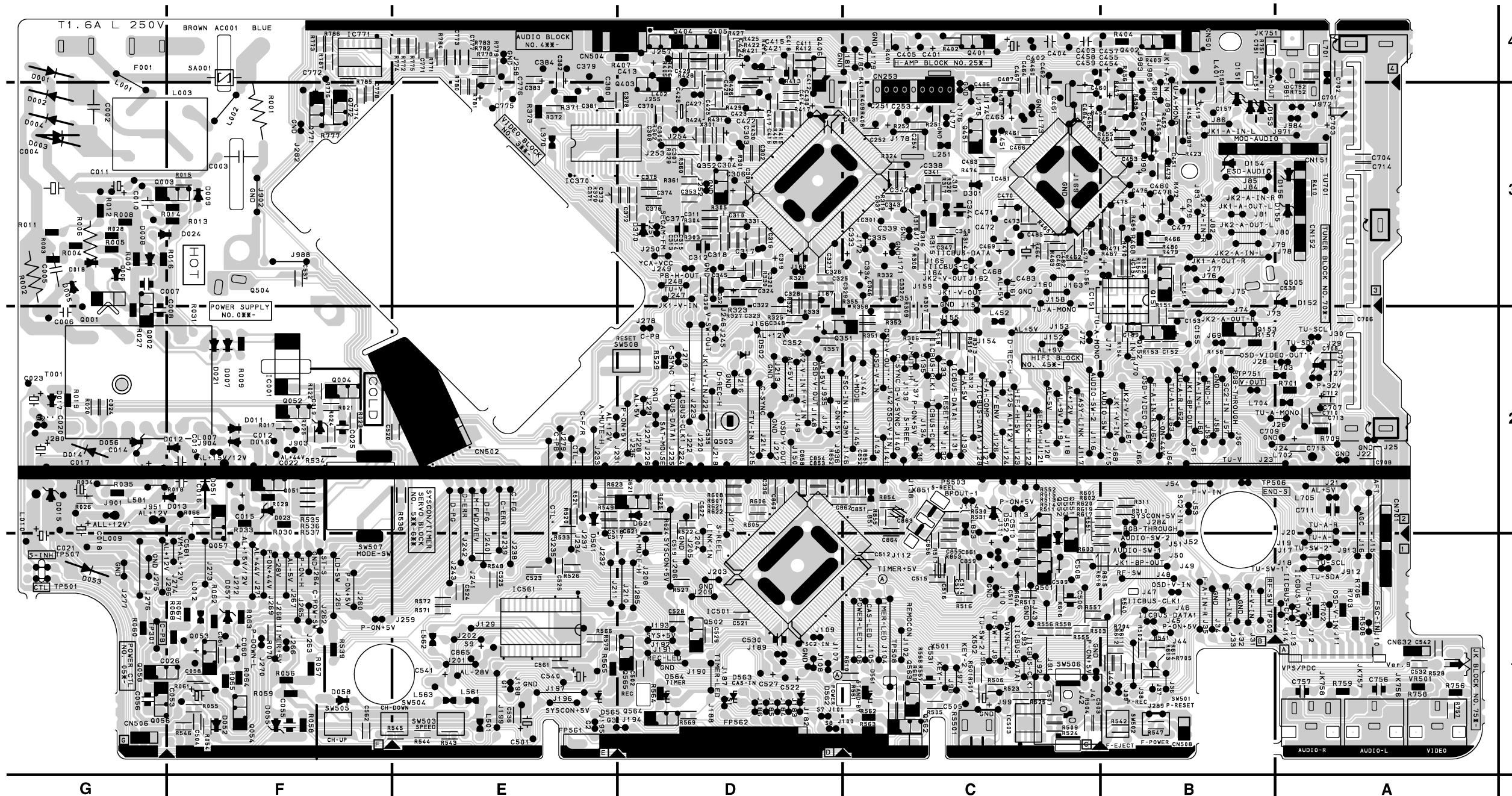
Main CBA Bottom View

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

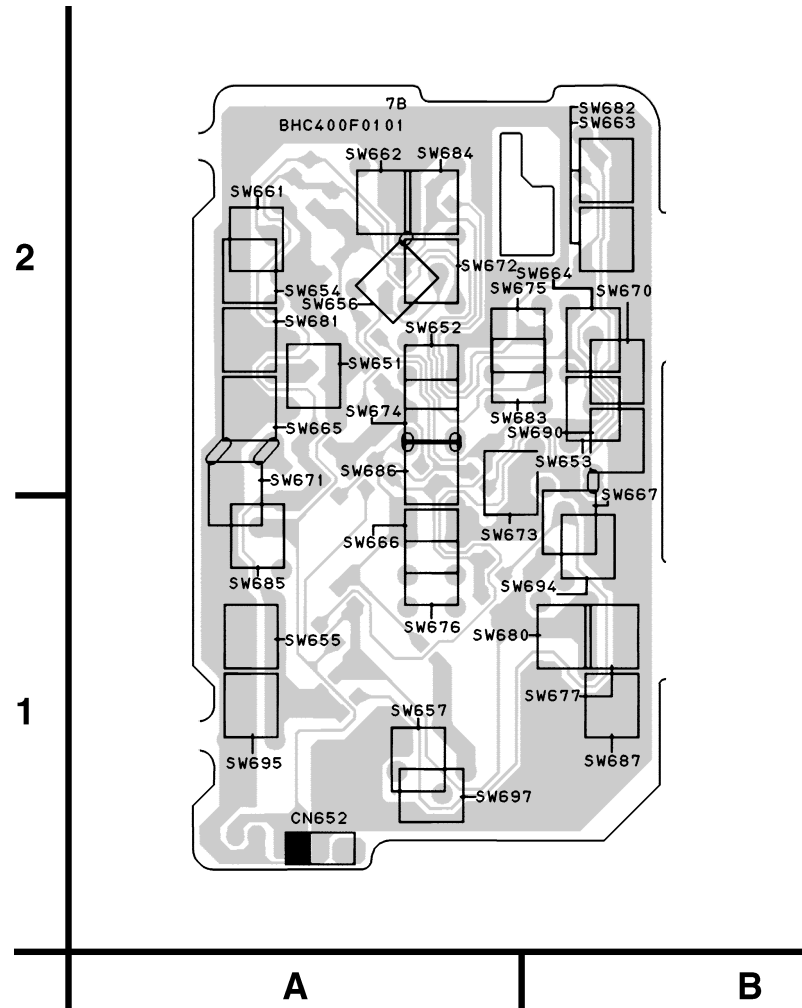
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

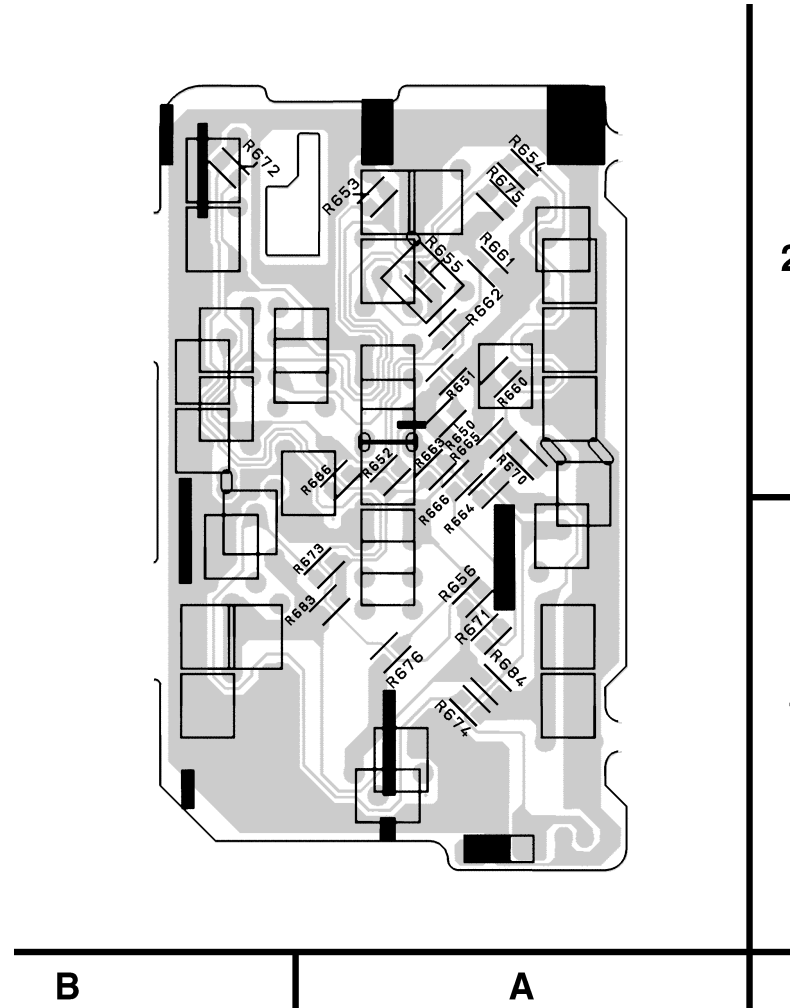
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



Function CBA Top View (W,X,Y)



Function CBA Bottom View (W,X,Y)



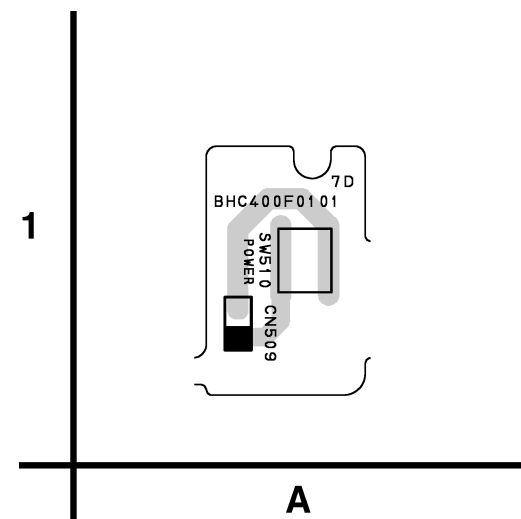
Comparison Chart of Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

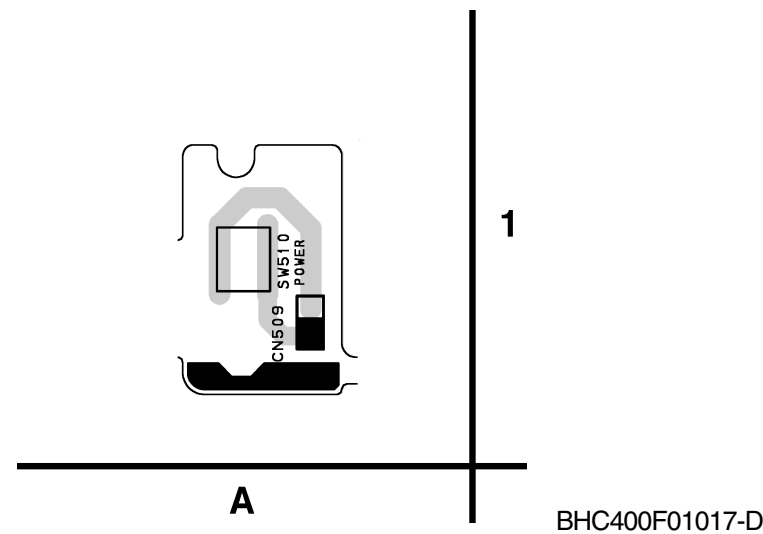
Function CBA Parts Location Guide (W,X,Y)

Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW651	A-2
RESISTORS		SW652	A-2
R651	A-2	SW653	B-2
R652	A-1	SW654	A-2
R653	A-2	SW656	A-2
R654	A-2		
R655	A-2		

Power SW CBA Top View



Power SW CBA Bottom View

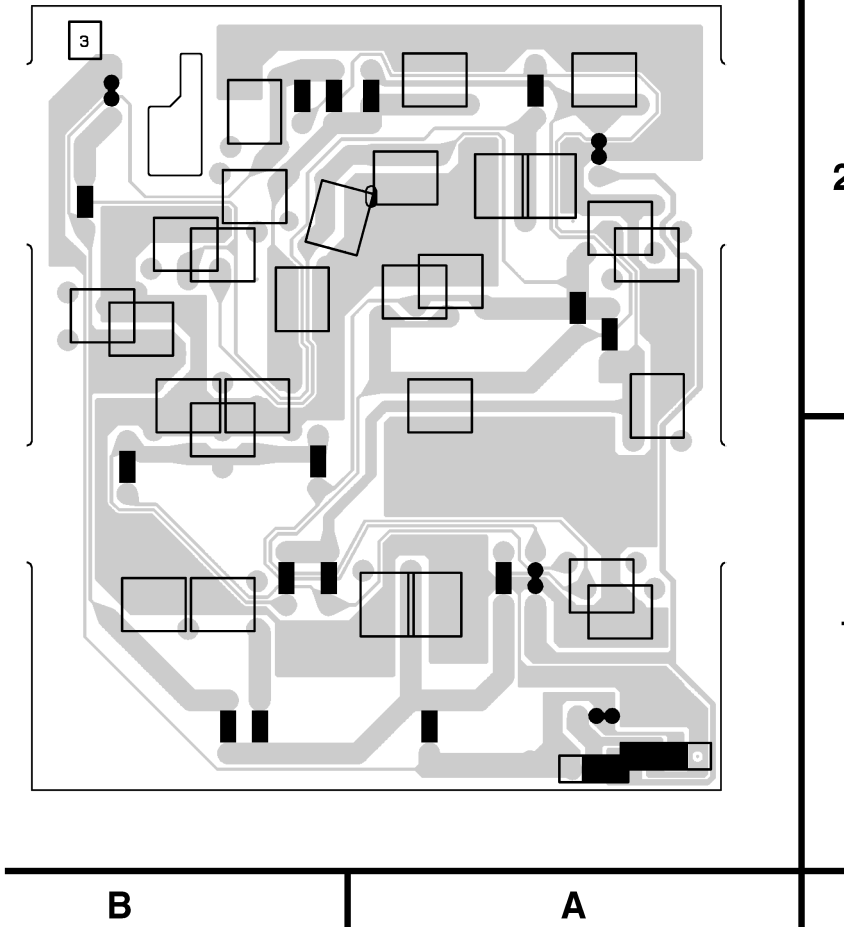
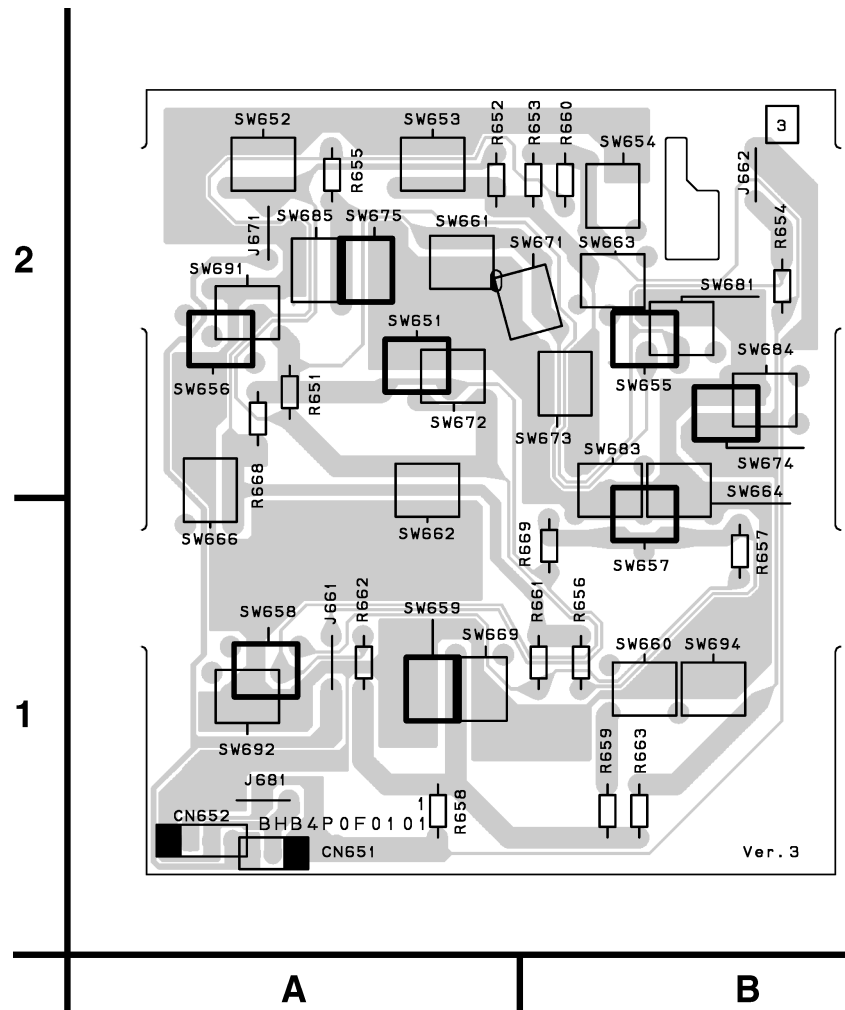


**Function CBA Top View
(Z,AA,AB,AC,AD,AE)**

**Function CBA Bottom View
(Z,AA,AB,AC,AD,AE)**

**Comparison Chart of
Models and Marks**

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



Function CBA Parts Location Guide (Z,AA)

Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW671	A-1
RESISTORS		SWITCHES	
R652	A-2	SW672	A-1
R653	A-2	SW673	B-1
R654	A-2	SW674	B-1
R655	A-2	SW675	B-1
R668	B-2		

Function CBA Parts Location Guide (AB)

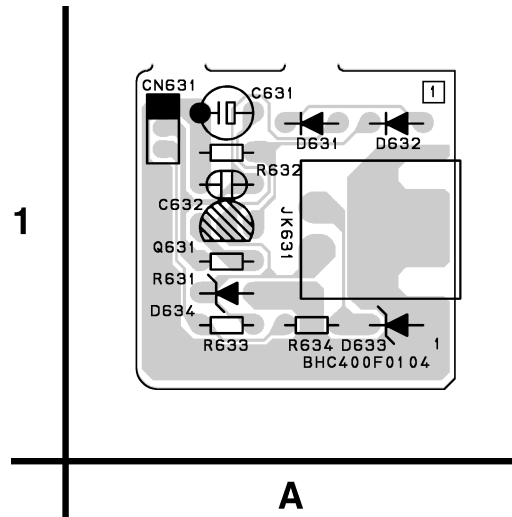
Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW672	A-2
RESISTORS		SWITCHES	
R652	A-2	SW681	B-2
R653	A-2	SW683	B-2
R654	A-2	SW684	B-2
R655	A-2	SW685	A-2
R668	B-2		

Function CBA Parts Location Guide (AC,AD,AE)

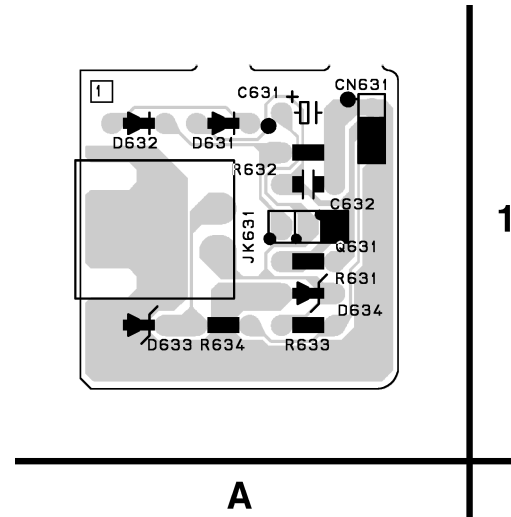
Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW669	A-1
RESISTORS		SWITCHES	
R660	B-2	SW691	A-1
R662	A-1	SW692	B-1
R663	B-1	SW694	B-1
R668	A-1		

BHB4P0F01011

SMV CBA Top View (AB)



SMV CBA Bottom View (AB)



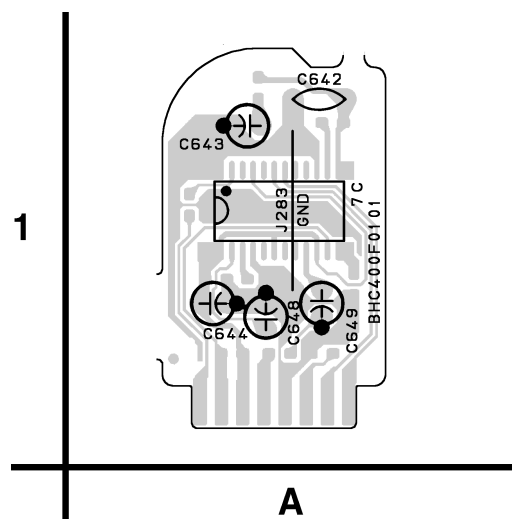
SMV CBA
Parts Location Guide (AB)

Ref No.	Position
CAPACITORS	
C631	A-1
C632	A-1
DIODES	
D631	A-1
D632	A-1
D633	A-1
D634	A-1
TRANSISTORS	
Q631	A-1
RESISTORS	
R631	A-1
R632	A-1
R633	A-1
R634	A-1
MISCELLANEOUS	
JK631	A-1

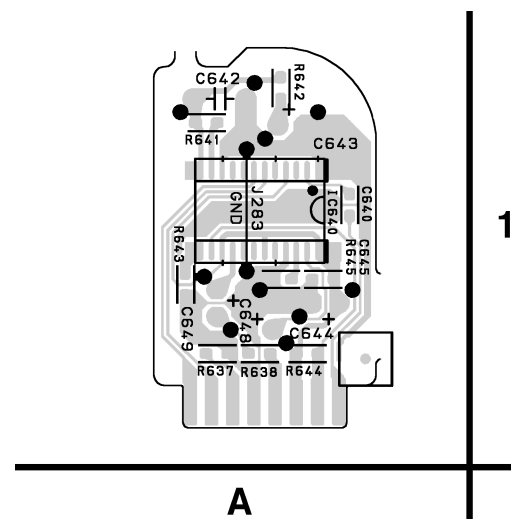
Comparison Chart of
Models and Marks

MODEL	MARK
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

VPS CBA Top View



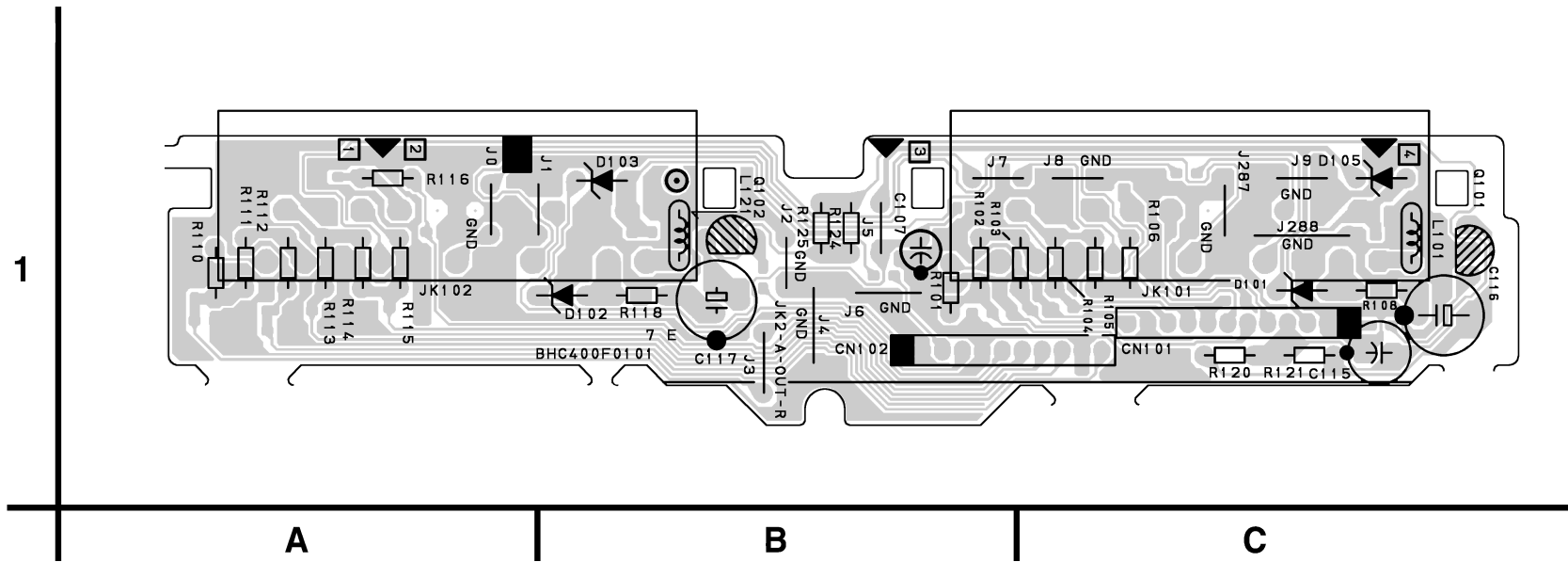
VPS CBA Bottom View



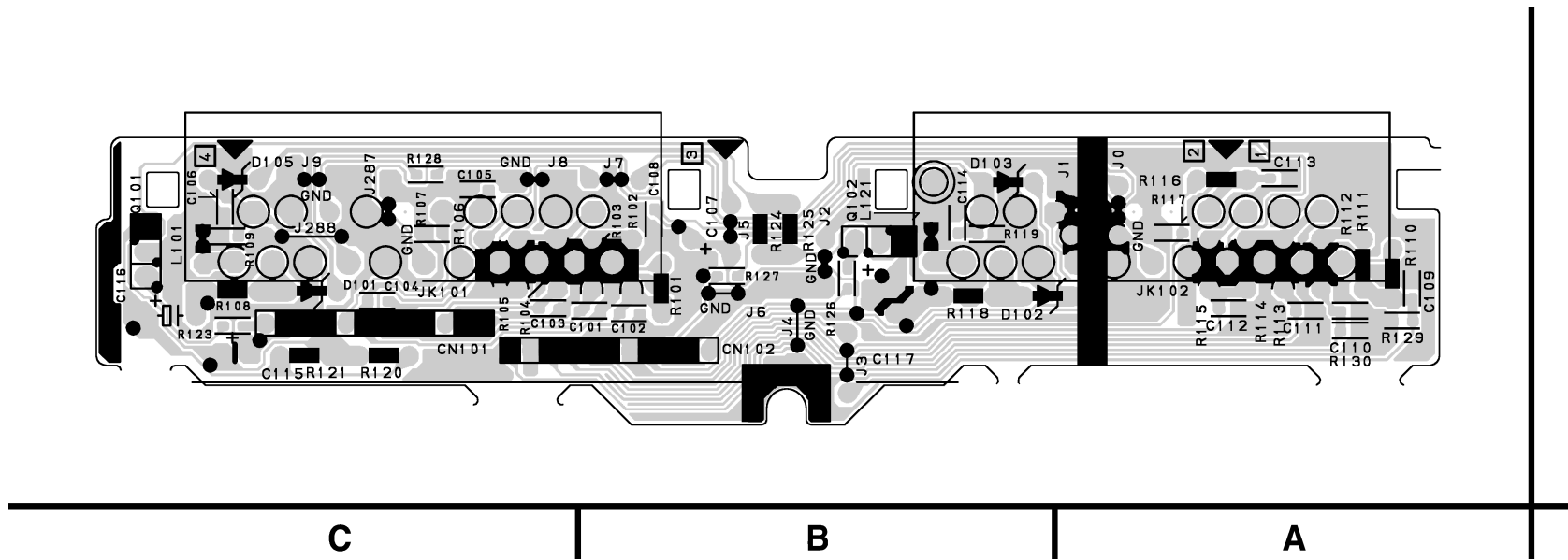
VPS CBA
Parts Location Guide

Ref No.	Position
CAPACITORS	
C640	A-1
C642	A-1
C643	A-1
C644	A-1
C645	A-1
C648	A-1
C649	A-1
ICS	
IC640	A-1
RESISTORS	
R638	A-1
R641	A-1
R642	A-1
R643	A-1
R644	A-1
R645	A-1

Jack CBA Top View



Jack CBA Bottom View



JACK CBA Parts Location Guide

Ref No.	Position	Ref No.	Position
CAPACITORS		TRANSISTORS	
C101	C-1	Q102	B-1
C102	B-1	RESISTORS	
C103	C-1	R101	B-1
C104	C-1	R102	B-1
C105	C-1	R103	B-1
C107	B-1	R104	C-1
C108	B-1	R105	C-1
C109	A-1	R106	C-1
C110	A-1	R107	C-1
C111	A-1	R108	C-1
C112	A-1	R109	C-1
C113	A-1	R110	A-1
C115	C-1	R112	A-1
C116	C-1	R113	A-1
C117	B-1	R115	A-1
CONNECTORS		R116	A-1
CL101	C-1	R117	A-1
CL102	B-1	R118	B-1
DIODES		R119	B-1
D101	C-1	R120	C-1
D102	B-1	R123	C-1
D103	B-1	R125	B-1
D105	C-1	R126	B-1
COILS		R127	B-1
L101	C-1	R128	C-1
L121	B-1	MISCELLANEOUS	
TRANSISTORS		JK101	C-1
Q101	C-1	JK102	A-1

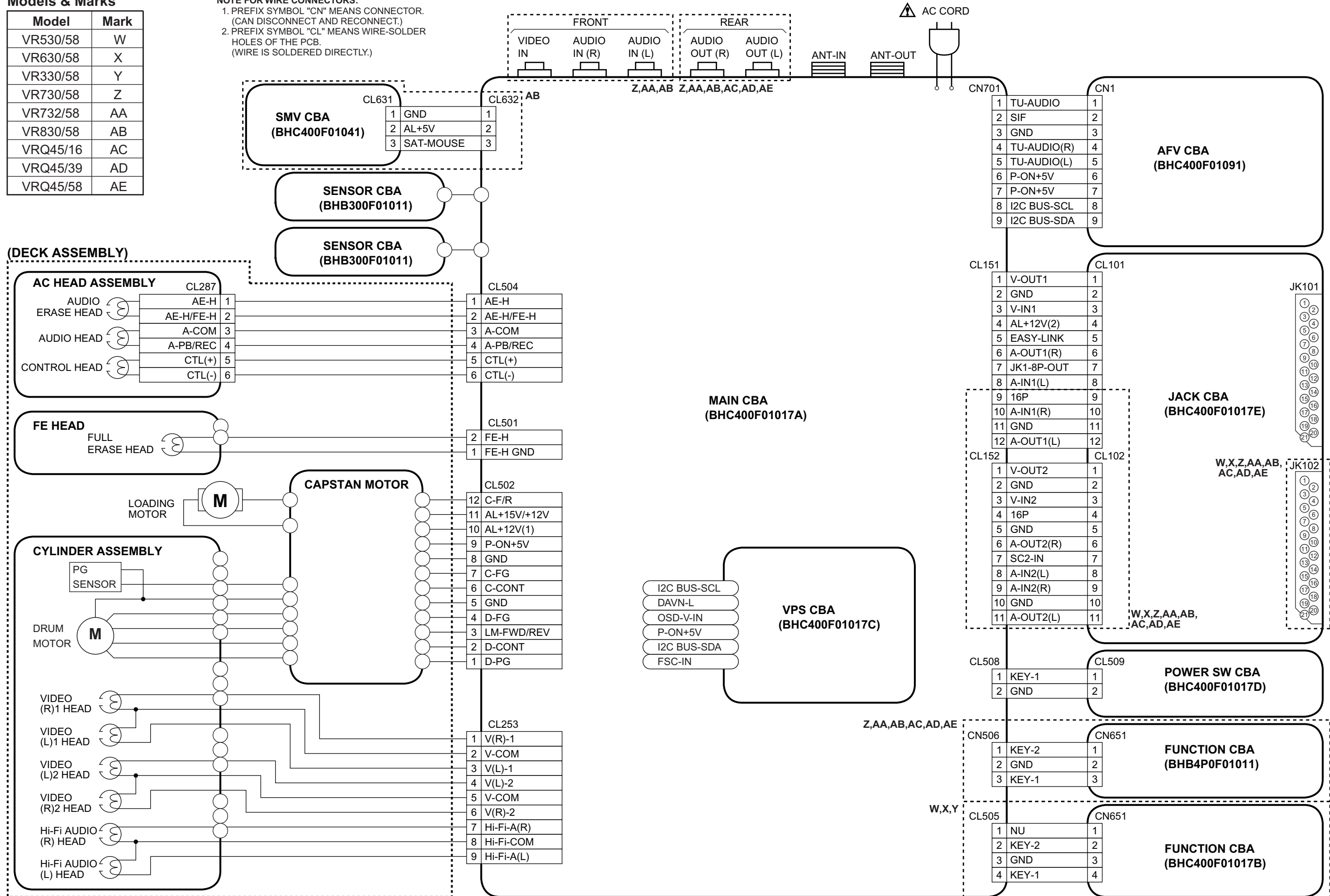
BHC400F01017-E

Comparison Chart of Models & Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

NOTE FOR WIRE CONNECTORS:
 1. PREFIX SYMBOL "CN" MEANS CONNECTOR.
 (CAN DISCONNECT AND RECONNECT.)
 2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER HOLES OF THE PCB.
 (WIRE IS SOLDERED DIRECTLY.)

WIRING DIAGRAM



[VR530/58,VR630/58,VR330/58,
VR730/58,VR732/58,VR830/58,
VRQ45/16,VRQ45/39,VRQ45/58]

Comparison Chart of Models and Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

IC501(SERVO / SYSTEM CONTROL IC)

“H” ≥ 4.5V, “L” ≤ 1.0V

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
1		IN	SC2-IN	Input Signal from Pin 8 of SCART2	L/Hi-z
2		IN	PG-DELAY	Video Head Switching Pulse Signal Adjusted Voltage	A/D
3		IN	POW-SAF	P-ON Power Detection Input Signal	A/D
4		IN	END-S	Tape End Position Detect Signal	A/D
5		IN	AFC	Automatic Frequency Control Signal	A/D
6		IN	V-ENV	Video Envelope Comparator Signal	A/D
7		IN	KEY-1	Key Scan Input Signal 1	A/D
8		IN	KEY-2	Key Scan Input Signal 2	A/D
9		IN	LD-SW	Deck Mode Position Detector Signal	A/D
10		OUT	ST-S	Tape Start Position Detector Signal	A/D
11		-	N.U.	Not Used	-

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
12		-	N.U.	Not Used	-
13		OUT	D-V-SYNC	Dummy V-sync Output	H/Hi-z
14		IN	REMOC ON-IN	Remote Control Sensor	L
15		OUT	C-ROTA	Color Phase Rotary Changeover Signal	H/L
16	Y	-	N.U.	Not Used	-
	W,X,Z, AA, AB, AC, AD, AE	OUT	H-A-SW	Video Head Amp Switching Pulse	H/L
17	Y	-	N.U.	Not Used	-
	W,X,Z, AA, AB, AC, AD, AE	IN	H-A-COMP	Head Amp Comparator Signal	H/L
18		OUT	RF-SW	Video Head Switching Pulse	H/L
19	Y	-	N.U.	Not Used	-
	W,X,Z, AA, AB, AC, AD, AE	OUT	HiFi-H-SW	HiFi Audio Head Switching Pulse	H/L
20		IN	DAVN-L	VPS/PDC Data Receive = “L”	L
21	AC, AD	-	N.U.	Not Used	-
	W,X,Y,Z, AA, AB, AE	OUT	TUN-SW1	Tuner System Control Signal Output	H/L
22	AC, AD	-	N.U.	Not Used	-
	W,X,Y,Z, AA, AB, AE	OUT	TUN-SW2	Tuner System Control Signal Output	H/L
23		-	N.U.	Not Used	-
24		-	N.U.	Not Used	-
25		-	N.U.	Not Used	-

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
26		-	N.U.	Not Used	-
27	Y	-	N.U.	Not Used	-
	W,X, Z, AA, AB, AC, AD, AE	OUT	RGB-THROUGH	SCART 2 RGB Through Control Signal	L/Hi-z
28		-	N.U.	Not Used	-
29		-	N.U.	Not Used	-
30		-	N.U.	Not Used	-
31		IN	REC-SAF-SW	Recording Safety SW Detect (With Record tab="L"/ With out Record tab="H")	H
32	W,X, Y,Z, AA, AB, AC, AE	-	N.U.	Not Used	-
	AD	IN	SECAM-H	SECAM Mode at High	H/L
33	W,X, Y,Z, AA, AB, AC, AE	-	N.U.	Not Used	-
	AD	OUT	TRICK-H	Special Playback = "H" in SECAM Mode	H
34		IN	RESET	System Reset Signal (Reset="L")	L
35		IN	XC-IN	Sub Clock	-
36		OUT	XC-OUT	Sub Clock	-
37		-	Vcc	Vcc	-
38		IN	X-IN	Main Clock Input	-
39		OUT	X-OUT	Main Clock Input	-
40		-	Vss	Vss(GND)	-
41		-	N.U.	Not Used	-
42		-	N.U.	Not Used	-
43		IN	CLKSEL	Clock Select (GND)	L
44		IN	OSCIN	Clock Input for letter size	-
45		OUT	OSCOU	Clock Output for letter size	-

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
46		-	N.U.	Not Used	-
47		-	LP	LP	-
48		IN	FSC-IN [4.43MHz]	4.43MHz Clock Input	-
49		-	OSDVss	OSDVss	-
50		IN	VIDEO-IN	Video Signal Input	-
51		-	N.U.	Not Used	-
52		OUT	VIDEO-OUT	Video Signal Output	-
53		-	OSDVcc	OSDVcc	-
54		-	HLF	LPF Connected Terminal (Slicer)	-
55	AC	-	N.U.	Not Used	-
	W,X, Y,Z, AA, AB, AD, AE	IN	COLOR-IN	SECAM or MESECAM Chroma Video Input Signal at Super Impose	Z/L
56		-	N.U.	Not Used	-
57		-	N.U.	Not Used	-
58		IN	C-SYNC	Composite Synchronized Pulse	PULSE
59		OUT	8POUT-1	SCART 1 8Pin Output Control Signal	H/L
60		OUT	8POUT-2	SCART 2 8Pin Output Control Signal	H/L
61	Y	-	N.U.	Not Used	-
	W,X, Z, AA, AB, AC, AD, AE	IN	A-MODE	Hi-Fi Tape Detection Signal	L
62		OUT	SD-H	SD-H	-
63	W,X, Y,Z, AA, AC, AD, AE	-	N.U.	Not Used	-
	AB	OUT	LINK-OUT	Easy Link Data Output	Z/L
64		IN	FTV-IN	Comparator Input of Video Signal for Follow TV	L/Hi-z

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
65		OUT	D-REC-H	Delayed Record Signal	L
66		OUT	C-POWER-SW	Capstan Power Switching Pulse	L/Hi-z
67		IN	P-ON-H	Power On Signal at High	H
68		OUT	DRV-DATA	LED Clock Driver IC Control Data	H/L
69		OUT	DRV-STB	LED Clock Driver IC Chip Select Signal	H/L
70		OUT	DRV-CLK	LED Clock Driver IC Control Clock	H/L
71		OUT	I ² C BUS-SCL	I ² C BUS Control Clock	H/L
72		IN/OUT	I ² C BUS-SDA	I ² C BUS Control Data	H/L
73	W,X, Y,Z, AA, AC, AD, AE	-	N.U.	Not Used	-
	AB	OUT	SAT-MOUSE	SAT-MOUSE Data Control Signal Output	L
74		-	N.U.	Not Used	-
75		-	N.U.	Not Used	-
76		OUT	C-CONT	Capstan Motor Control Signal	PWM
77		OUT	D-CONT	Drum Motor Control Signal	PWM
78		OUT	C-F/R	Capstan Motor FWD/REV Control Signal (FWD="L"/REV="H")	H/L
79		IN	S-REEL	Supply Reel Rotation Signal	PULSE
80		IN	T-REEL	Take Up Reel Rotation Signal	PULSE
81		OUT	LM-FWD/REV	Loading Motor Control Signal	H/L/Hi-z
82		-	N.U.	Not Used	-
83		OUT	A-MUTE-H	Audio Mute Control Signal (Mute = "H")	H
84		OUT	FF/REW-L	CTL Amp Gain Switching Signal (FF/REW="L")	L

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
85	W,X, Y,Z, AA, AC, AD, AE	-	N.U.	Not Used	-
	AB	IN	LINK-IN	Easy Link Data Input	Z/L
86		IN	P-DOWN-L	Power Voltage Down Detector Signal	L
87		IN	C-FG	Capstan Motor Rotation Detection Pulse	PULSE
88		-	AMPVss	AMPVss (GND)	-
89		IN	D-FG	Drum Motor Rotation Detection Pulse	PULSE
90		IN	D-PG	Drum Motor Pulse Generator	PULSE
91		-	N.U.	Not Used	-
92		-	AMPVRE FIN	V-Ref for CTL AMP	-
93		-	C	C Terminal	-
94		OUT	CTL (-)	Playback/Record Control Signal (-)	H/L
95		OUT	CTL (+)	Playback/Record Control Signal (+)	H/L
96		-	AMPC	CTL AMP Connected Terminal	-
97		-	CTLAMP out	To Monitor for CTL AMP Output	PULSE
98		-	AMPVcc	AMPVcc	-
99		-	AVcc	A/D Converter Power Input/ Standard Voltage Input	-
100		IN	AGC	IF AGC Control Signal	H/L/Hi-z

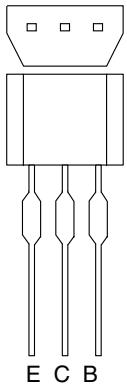
Notes:

Abbreviation for Active Level:

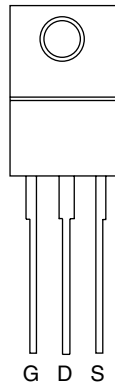
PWM -----Pulse Wide Modulation

A/D-----Analog - Digital Converter

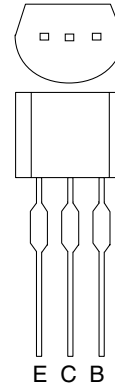
[VR530/58,VR630/58,VR330/58,VR730/58,VR732/58,VR830/58,VRQ45/16,
VRQ45/39,VRQ45/58]



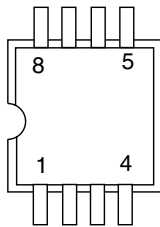
BN1F4M-T
BA1F4M-T
KTA1266(GR)
KRA104M
KTC3199(Y,GR,BL)
2SC2785(J.H.F.K)
KTC3205(Y)
KRA103M
KRC103M
BN1L4M-T



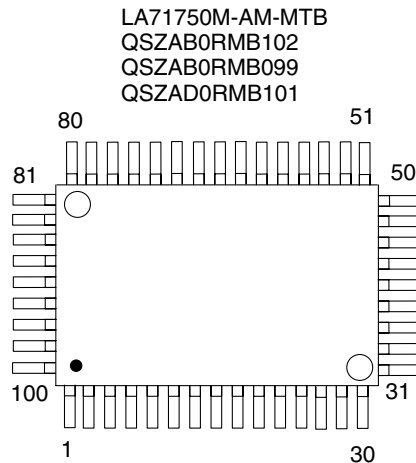
FS1KM-18A
FS1KM-14A



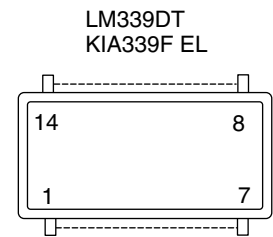
2SC1815-Y(TPE2)
2SC1815-GR(TPE2)
KTA1281(Y)
2SC2120-Y(TPE2)
KTC3203(Y)
2SC1815-BL(TPE2)
2SA1020(Y)
2SB892(S)
2SD1246(S,T)
2SA1015-GR(TPE2)
2SC3266-Y(TPE2)



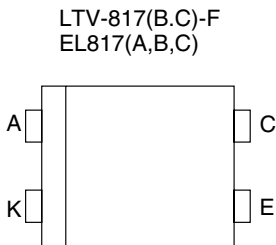
BR24C02F-W
AT24C02N-10SC
CAT24WC02JI
BR24C04F-W
AT24C04N-10SC
M24C04-MN6T
CAT24WC04JI
BR24C08F-W
AT24C08N-10SC
M24C08-MN6T
CAT24WC08JI
BR24C16F
AT24C16N-10SC
M24C16-MN6T



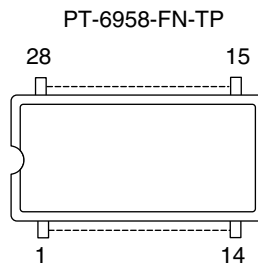
LA71750M-AM-MTB
QSZAB0RMB102
QSZAB0RMB099
QSZAD0RMB101



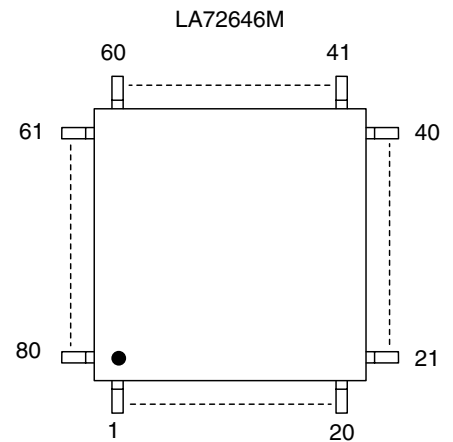
LM339DT
KIA339F EL



LTV-817(B,C)-F
EL817(A,B,C)

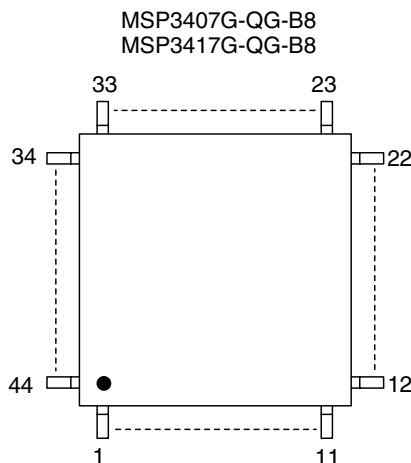
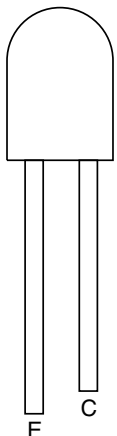


PT-6958-FN-TP

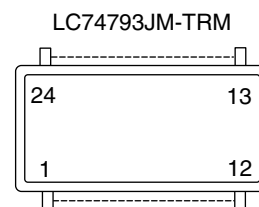


LA72646M

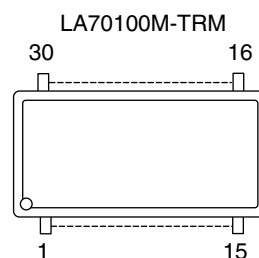
PT204-6B-12
MID-32A22



MSP3407G-QG-B8
MSP3417G-QG-B8



LC74793JM-TRM



LA70100M-TRM

Note:

- A: Anode
- K: Cathode
- E: Emitter
- C: Collector
- B: Base
- R: Reference
- S: Source
- G: Gate
- D: Drain

ELECTRICAL PARTS LIST

ELECTRICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲	12 NC	Description								
D002		4822 130 31933	RECTIFIER DIODE 1N4005	1	1	1	1	1	1	1	1
D003		4822 130 31933	RECTIFIER DIODE 1N4005	1	1	1	1	1	1	1	1
D004		4822 130 31933	RECTIFIER DIODE 1N4005	1	1	1	1	1	1	1	1
D005		5322 130 34979	RECTIFIER DIODE BA159	1	1	1	1	1	1	1	1
D006		4822 130 30621	SWITCHING DIODE 1N4148M	1	1	1	1	1	1	1	1
D007		4822 130 30621	SWITCHING DIODE 1N4148M	1	1	1	1	1	1	1	1
D008		4822 130 30621	SWITCHING DIODE 1N4148M	1	1	1	1	1	1	1	1
D009		4822 130 30621	SWITCHING DIODE 1N4148M	1	1	1	1	1	1	1	1
D011		4822 130 41487	RECTIFIER DIODE BA157	1	1	1	1	1	1	1	1
D012		4822 130 83883	RECTIFIER DIODE FR202	1	1	1	1	1	1	1	1
D013		4822 130 83883	RECTIFIER DIODE FR202	1	1	1	1	1	1	1	1
D014		5322 130 81917	SCHOTTKY BARRIER DIODE SB140	1							
D014		4822 130 32715	SCHOTTKY BARRIER DIODE SB340		1	1	1	1	1	1	1
D015		4822 130 80319	ZENER DIODE MTZJT-779.1C	1	1	1	1	1	1	1	1
D018		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D019		9965 000 05249	ZENER DIODE MTZJT-775.6B	1	1	1	1	1	1	1	1
D021		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D051		4822 130 31933	RECTIFIER DIODE 1N4005	1	1	1	1	1	1	1	1
D052		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D053		9965 000 12176	RECTIFIER DIODE RL201 B-222-2		1	1	1	1	1		1
D053		4822 130 31933	RECTIFIER DIODE 1N4005	1							
D053		9965 000 09322	RECTIFIER DIODE FR302							1	
D056		9965 000 05694	ZENER DIODE MTZJT-775.1C	1	1	1	1	1	1	1	1
D057		4822 130 80998	ZENER DIODE MTZJT-7710B		1	1	1	1	1	1	1
D057		9965 000 12891	CARBON RES. 1/4W J 3.3K OHM	1							
D151		9965 000 12177	ZENER DIODE DZ-6.8BSCT265		1	1	1	1	1	1	1
D152		9965 000 12177	ZENER DIODE DZ-6.8BSCT265		1	1	1	1	1	1	1
D153		9965 000 12178	ZENER DIODE DZ-11BSAT265	1	1	1	1	1	1	1	1
D154		9965 000 12178	ZENER DIODE DZ-11BSAT265		1	1	1	1	1	1	1
D155		9965 000 12178	ZENER DIODE DZ-11BSAT265		1	1	1	1	1	1	1
D156		9965 000 12178	ZENER DIODE DZ-11BSAT265		1	1	1	1	1	1	1
D157		9965 000 12178	ZENER DIODE DZ-11BSAT265					1			
D301		4822 130 30621	SWITCHING DIODE 1N4148M	1	1	1	1	1	1	1	1
D370		4822 130 30621	SWITCHING DIODE 1N4148M							1	
D501		4822 130 30621	SWITCHING DIODE 1N4148M	1	1	1	1	1	1	1	1
D502		9965 000 05250	LED SIR-563ST3F P	1	1	1	1	1	1	1	1
D552		4822 130 10094	ZENER DIODE MTZJT-777.5A		1	1	1	1	1	1	1
D553		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D621		4822 130 32778	SWITCHING DIODE 1SS133(T-77)					1			
D701		4822 130 81729	ZENER DIODE MTZJT-7733D	1	1	1	1	1	1	1	1
F001	▲	9965 000 12179	FUSE 21301.6M	1	1	1	1	1	1	1	1
FH001		4822 256 10461	FUSE HOLDER MSF-015	1	1	1	1	1	1	1	1
FH002		4822 256 10461	FUSE HOLDER MSF-015	1	1	1	1	1	1	1	1
FP562		9965 000 09307	LED DISPLAY LFU-4421-2001A	1	1	1	1	1	1	1	1
IC's											
IC001	▲	4822 130 11655	PHOTOCOUPLER LTV-817B-F	1	1	1	1	1	1	1	1
IC301		9965 000 12180	IC:Y/C/A LA71750AM-MTB	1	1	1	1	1	1	1	1
IC370		9965 000 12255	IC:SECAM LA70100M-TRM							1	
IC451		9965 000 12181	IC:HIFI LA72646M-A-MPB		1	1	1	1	1	1	1
IC501		9965 000 13029	MICROCONTROLLER 16BIT M37762MFA-1B8GP	1	1	1	1	1			1
IC501		9965 000 12408	MICROCONTROLLER 16BIT M37762MFA-1B7GP					1			
IC501		9965 000 12556	MICROCONTROLLER 16BIT M37762MFA-1B9GP						1	1	
IC503		9965 000 06554	IC:MEMORY BR24C02F-W		1						
IC503		9965 000 13030	IC:EEPROM CAT24WC04JI	1		1	1	1			
IC503		9965 000 12409	IC:EEPROM M24C08-MN6T					1			
IC503		9965 000 13046	IC:EEPROM M24C16-MN6T						1	1	1
IC561		9965 000 12183	IC:LED DRIVER PT6958-FN-TP	1	1	1	1	1	1	1	1
IC771		9965 000 12410	IC:COMPARATOR LM339DT	1	1	1	1	1	1	1	1
J902		4822 526 10685	BEAD CORE HF70BB3.5X10X1.3	1	1	1	1	1	1	1	1
JW001		9965 000 12411	FLAT CABLE, 11P AWG26#2651/P1.25/150		1	1	1	1	1	1	1
JW001		9965 000 12892	FLAT CABLE, 8P AWG26#2651/P1.25/150	1							

ELECTRICAL PARTS LIST

ELECTRICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲	12 NC	Description								
JW002		9965 000 12412	FLAT CABLE, 12P AWG26#2651/P1.25/150		1	1	1	1	1	1	1
JW003		9965 000 12413	FLAT CABLE, 2P AWG26#2651/P1.25/120	1	1	1	1	1	1	1	1
COILS											
L001		4822 526 10685	BEAD CORE HF70BB3.5X10X1.3	1	1	1	1	1	1	1	1
L002		4822 526 10685	BEAD CORE HF70BB3.5X10X1.3	1	1	1	1	1	1	1	1
L003	▲	9965 000 09877	LINE FILTER 56MH TLF14CB5630R2	1	1	1	1	1	1	1	1
L009		9965 000 05627	CHOKO COIL 47UH-K	1	1	1	1	1	1	1	1
L010		9965 000 05627	CHOKO COIL 47UH-K	1	1	1	1	1	1	1	1
L012		4822 157 10649	INDUCTOR 100UH-K-26T	1	1	1	1	1	1	1	1
L251		9965 000 08652	INDUCTOR 5.6UH-K-26T	1	1	1	1	1	1	1	1
L301		4822 157 63316	INDUCTOR 56UH-K-26T	1	1	1	1	1	1	1	1
L370			PCB JUMPER D0.6-P5.0							1	
L401		9965 000 05627	CHOKO COIL 47UH-K	1	1	1	1	1	1	1	1
L402		9965 000 05627	CHOKO COIL 47UH-K	1	1	1	1	1	1	1	1
L451		4822 157 10649	INDUCTOR 100UH-K-26T		1	1	1	1	1	1	1
L452		4822 157 10347	INDUCTOR 22UH-K-26T		1	1	1	1	1	1	1
L501		4822 157 10649	INDUCTOR 100UH-K-26T	1	1	1	1	1	1	1	1
L561		4822 157 10649	INDUCTOR 100UH-K-26T		1	1	1	1	1	1	1
L561		4822 157 11509	INDUCTOR 47UH-K-26T	1							
L562			PCB JUMPER D0.6-P5.0		1	1	1	1	1	1	1
L562		4822 157 11509	INDUCTOR 47UH-K-26T	1							
L701		4822 157 10889	INDUCTOR 10UH-K-26T	1	1	1	1	1	1	1	1
L702		9965 000 05627	CHOKO COIL 47UH-K	1	1	1	1	1	1	1	1
L703			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1		1
L704		4822 157 11511	INDUCTOR 15UH-K-26T	1	1	1	1	1	1		1
L705			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1	1
L851		9965 000 08629	INDUCTOR 1.8UH-K-26T	1	1	1	1	1	1	1	1
L853			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1	1
PS503		9965 000 12189	PHOTO INTERRUPTER RPI-302C70	1	1	1	1	1	1	1	1
TRANSISTORS											
Q001		9965 000 06568	FET FS1KM-18A	1	1	1	1	1	1	1	1
Q002		4822 130 41319	TRANSISTOR 2SC1815-BL(TPE2)	1	1	1	1	1	1	1	1
Q003		4822 130 41319	TRANSISTOR 2SC1815-BL(TPE2)	1	1	1	1	1	1	1	1
Q004		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
Q051		9965 000 09287	RES. BUILT-IN TRANSISTOR BN1L4M-T	1	1	1	1	1	1	1	1
Q052		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M	1	1	1	1	1	1	1	1
Q053		4822 130 10103	TRANSISTOR KTC3199(Y)		1	1	1	1	1	1	1
Q054		9965 000 09389	TRANSISTOR 2SD1246(S)		1	1	1	1	1	1	1
Q054		4822 130 42292	TRANSISTOR 2SC2120-Y(TPE2)	1							
Q056		4822 130 10145	RES. BUILT-IN TRANSISTOR KRA103M	1	1	1	1	1	1	1	1
Q057		9965 000 12190	TRANSISTOR KTA1281(Y)	1	1	1	1	1	1	1	1
Q058		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M	1	1	1	1	1	1	1	1
Q153		4822 130 10103	TRANSISTOR KTC3199(Y)		1	1	1	1	1	1	1
Q351		4822 130 42959	TRANSISTOR KTA1266(GR)	1	1	1	1	1	1	1	1
Q352		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
Q401		4822 130 42959	TRANSISTOR KTA1266(GR)	1	1	1	1	1	1	1	1
Q402		4822 130 42292	TRANSISTOR KTC3203(Y)	1	1	1	1	1	1	1	1
Q403		4822 130 10145	RES. BUILT-IN TRANSISTOR KRA103M	1	1	1	1	1	1	1	1
Q404		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
Q405		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
Q406		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
Q451		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M		1	1	1	1	1	1	1
Q501		4822 130 10923	TRANSISTOR KTC3199(BL)	1	1	1	1	1	1	1	1
Q502		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M	1	1	1	1	1	1	1	1
Q503		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12	1	1	1	1	1	1	1	1
Q551		4822 130 10923	TRANSISTOR KTC3199(BL)	1	1	1	1	1	1	1	1
Q552		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M	1	1	1	1	1	1	1	1
Q621		4822 130 10103	TRANSISTOR KTC3199(Y)					1			
Q771		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
Q772		4822 130 10103	TRANSISTOR KTC3199(Y)	1	1	1	1	1	1	1	1
RESISTORS											

ELECTRICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲	12 NC	Description								
SA001	▲	4822 252 11373	SURGE ABSORBER JVR-10N471K	1	1	1	1	1	1	1	1
SWITCHES											
SW501		4822 276 13954	TACT SWITCH KSM0614B	1	1	1	1	1	1	1	1
SW502		4822 276 13954	TACT SWITCH KSM0614B	1	1	1	1	1	1	1	1
SW504		4822 276 13954	TACT SWITCH KSM0614B	1	1	1	1	1	1	1	1
SW505		4822 276 13954	TACT SWITCH KSM0614B	1	1	1	1	1	1	1	1
SW506		9965 000 12285	LEAF SWITCH LSA-1142AU	1	1	1	1	1	1	1	1
SW507		9965 000 09194	ROTARY MODE SWITCH R8100212	1	1	1	1	1	1	1	1
T001	▲	9965 000 09203	PULSE TRANS SA-00901B	1	1	1	1	1	1	1	1
TP301			PCB JUMPER D0.6-P9.5	1	1	1	1	1	1	1	1
TP501			PCB JUMPER D0.6-P6.0	1	1	1	1	1	1	1	1
TP502			PCB JUMPER D0.6-P10.0	1	1	1	1	1	1	1	1
TP506			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1	1
TP507			PCB JUMPER D0.6-P6.0	1	1	1	1	1	1	1	1
TP508			PCB JUMPER D0.6-P23.0	1	1	1	1	1	1	1	1
TP751			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1	1
TU701		9965 000 13033	TUNER UNIT TMDG2-731A	1	1	1	1	1			1
TU701		9965 000 12265	TUNER UNIT TMDG2-631A						1		
TU701		9965 000 12256	TUNER UNIT TMDZ2-731A							1	
VR501		9965 000 05260	CARBON P.O.T. 100K OHM B	1	1	1	1	1	1	1	1
X301		9965 000 05629	X'TAL 4.433619MHZ	1	1	1	1	1	1	1	1
X501		9965 000 12194	X'TAL 12.000MHZ	1	1	1	1	1	1	1	1
X502		9965 000 12288	X'TAL 32.768KHZ(20PPM)	1	1	1	1	1	1	1	1
FUNCTION CBA (MCV-B)											
CN651		9965 000 09213	ANGLE PIN HEADER, 3P 6029B-1-03Z002-T	1	1	1					
RESISTORS											
R651			CHIP RES.(1608) 1/10W J 1K OHM	1	1	1					
R652			CHIP RES.(1608) 1/10W J 1.2K OHM	1	1	1					
R653			CHIP RES.(1608) 1/10W J 1.5K OHM	1	1	1					
R654			CHIP RES.(1608) 1/10W J 2.2K OHM	1	1	1					
R655			CHIP RES.(1608) 1/10W J 3.9K OHM	1	1	1					
SWITCHES											
SW651		4822 276 13954	TACT SWITCH KSM0614B	1	1	1					
SW652		4822 276 13954	TACT SWITCH KSM0614B	1	1	1					
SW653		4822 276 13954	TACT SWITCH KSM0614B	1	1	1					
SW654		4822 276 13954	TACT SWITCH KSM0614B	1	1	1					
SW656		4822 276 13954	TACT SWITCH KSM0614B	1	1	1					
VPS CBA (MCV-C)											
CAPACITORS											
C640			CHIP CERAMIC CAP. F Z 0.1UF/50V	1	1	1	1	1	1	1	1
C642			SEMICONDUCTOR CAP. SR K 0.056UF/25V	1	1	1	1	1	1	1	1
C643			ELECTROLYTIC CAP. 4.7UF/25V M H7	1	1	1	1	1	1	1	1
C644			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1	1
C645			CHIP CERAMIC CAP. B K 0.01UF/50V	1	1	1	1	1	1	1	1
C648			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C649			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
IC's											
IC640		9965 000 12198	IC:VPS/PDC SLICER LC74793JM-TRM	1	1	1	1	1	1	1	1
J283			PCB JUMPER D0.6-P15.0	1	1	1	1	1	1	1	1
RESISTORS											
R638			CHIP RES.(1608) 1/10W J 100 OHM	1	1	1	1	1	1	1	1
R641			CHIP RES.(1608) 1/10W J 10K OHM	1	1	1	1	1	1	1	1
R642			CHIP RES.(1608) 1/10W J 2.7K OHM	1	1	1	1	1	1	1	1
R643			CHIP RES.(1608) 1/10W J 5.6K OHM	1	1	1	1	1	1	1	1
R644			CHIP RES.(1608) 1/10W J 10K OHM	1	1	1	1	1	1	1	1
R645			CHIP RES.(1608) 1/10W J 10K OHM	1	1	1	1	1	1	1	1
			POWER SW CBA (MCV-D)	1	1	1	1	1	1	1	1
SW510		4822 276 13954	TACT SWITCH KSM0614B	1	1	1	1	1	1	1	1
			JACK CBA (MCV-E)	1	1	1	1	1	1	1	1
2L022		4822 502 30752	SCREW, P-TIGHT M3X10 WASHER HEAD+	1	1	1	1	1	1	1	1
A5		9965 000 12196	JACK BOARD(2-21P) HC460ED		1	1					

ELECTRICAL PARTS LIST

ELECTRICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲ 12 NC	Description									
A5	9965 000 12894	JACK BOARD(1-21P) HC461BD	1								
A5	9965 000 12263	JACK BOARD(2-21P) HC470ED				1		1	1	1	1
A5	9965 000 12273	JACK BOARD(2-21P) HC475ED					1				
CAPACITORS											
C101		CHIP CERAMIC CAP. B K 2200PF/50V		1	1	1	1	1	1	1	1
C102		CHIP CERAMIC CAP. B K 2200PF/50V	1	1	1	1	1	1	1	1	1
C103		CHIP CERAMIC CAP. CH J 470PF/50V		1	1	1	1	1	1	1	1
C104		CHIP CERAMIC CAP. CH J 470PF/50V	1	1	1	1	1	1	1	1	1
C105		CHIP CERAMIC CAP. F Z 0.1UF/50V	1	1	1	1	1	1	1	1	1
C107		ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1	1
C108		CHIP CERAMIC CAP. B K 1000PF/50V	1	1	1	1	1	1	1	1	1
C109		CHIP CERAMIC CAP. B K 2200PF/50V		1	1	1	1	1	1	1	1
C110		CHIP CERAMIC CAP. B K 2200PF/50V		1	1	1	1	1	1	1	1
C111		CHIP CERAMIC CAP. CH J 470PF/50V	1	1	1	1	1	1	1	1	1
C112		CHIP CERAMIC CAP. CH J 470PF/50V		1	1	1	1	1	1	1	1
C113		CHIP CERAMIC CAP. B K 2200PF/50V		1	1	1	1	1	1	1	1
C115		ELECTROLYTIC CAP. 100UF/16V M H7	1	1	1	1	1	1	1	1	1
C116		ELECTROLYTIC CAP. 470UF/6.3V M	1	1	1	1	1	1	1	1	1
C117		ELECTROLYTIC CAP. 470UF/6.3V M		1	1	1	1	1	1	1	1
DIODES											
D101	9965 000 12178	ZENER DIODE DZ-11BSAT265	1	1	1	1	1	1	1	1	1
D102	9965 000 12178	ZENER DIODE DZ-11BSAT265		1	1	1	1	1	1	1	1
D103	9965 000 12178	ZENER DIODE DZ-11BSAT265		1	1	1	1	1	1	1	1
D105	9965 000 12178	ZENER DIODE DZ-11BSAT265	1	1	1	1	1	1	1	1	1
JK101	9965 000 12197	RGB CONNECTOR MRC-021V-01	1	1	1	1	1	1	1	1	1
JK102	9965 000 12197	RGB CONNECTOR MRC-021V-01		1	1	1	1	1	1	1	1
JK751	9965 000 13039	RCA JACK MSP-282V-12 PBSN				1	1	1	1	1	1
JK756	4822 265 11659	RCA JACK(YELLOW) MSP-281V4-B				1	1	1			
JK757	4822 265 11661	RCA JACK(WHITE) MSP-281V1-B				1	1	1			
JK758	9965 000 00423	RCA JACK(RED) MSP-281V3-A				1	1	1			
COILS											
L101	4822 526 10685	BEAD CORE HF70BB3.5X10X1.3	1	1	1	1	1	1	1	1	1
L121	4822 526 10685	BEAD CORE HF70BB3.5X10X1.3		1	1	1	1	1	1	1	1
TRANSISTORS											
Q101	4822 130 11101	TRANSISTOR 2SA1015-GR(TPE2)	1	1	1	1	1	1	1	1	1
Q102	4822 130 11101	TRANSISTOR 2SA1015-GR(TPE2)		1	1	1	1	1	1	1	1
RESISTORS											
R101		CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1	1	1
R102		CARBON RES. 1/4W J 1K OHM	1								
R103		CARBON RES. 1/4W J 1K OHM		1	1	1	1	1	1	1	1
R104		CARBON RES. 1/6W J 4.7K OHM		1	1	1	1	1	1	1	1
R105		CARBON RES. 1/6W J 4.7K OHM	1								
R106		CARBON RES. 1/6W J 4.7K OHM	1	1	1	1	1	1	1	1	1
R107		CHIP RES.(1608) 1/10W 0 OHM	1	1	1	1	1	1	1	1	1
R108		CARBON RES. 1/4W J 68 OHM	1	1	1	1	1	1	1	1	1
R109		CHIP RES.(1608) 1/10W J 75 OHM	1	1	1	1	1	1	1	1	1
R110		CARBON RES. 1/4W J 1K OHM		1	1	1	1	1	1	1	1
R112		CARBON RES. 1/4W J 1K OHM		1	1	1	1	1	1	1	1
R113		CARBON RES. 1/6W J 4.7K OHM		1	1	1	1	1	1	1	1
R115		CARBON RES. 1/6W J 4.7K OHM		1	1	1	1	1	1	1	1
R116		CARBON RES. 1/6W J 15K OHM		1	1	1	1	1	1	1	1
R117		CHIP RES.(1608) 1/10W J 10K OHM		1	1	1	1	1	1	1	1
R118		CARBON RES. 1/4W J 68 OHM		1	1	1	1	1	1	1	1
R119		CHIP RES.(1608) 1/10W J 75 OHM		1	1	1	1	1	1	1	1
R120		CARBON RES. 1/6W J 680 OHM	1	1	1	1	1	1	1	1	1
R123		CHIP RES.(1608) 1/10W J 220 OHM	1	1	1	1	1	1	1	1	1
R125		CARBON RES. 1/6W J 680 OHM		1	1	1	1	1	1	1	1
R126		CHIP RES.(1608) 1/10W J 220 OHM		1	1	1	1	1	1	1	1
R127		CHIP RES.(1608) 1/10W 0 OHM		1	1	1	1	1	1	1	1
R128		CHIP RES.(1608) 1/10W 0 OHM		1	1	1	1	1	1	1	1
SENSOR CBA											

ELECTRICAL PARTS LIST

ELECTRICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲	12 NC	Description								
Q504		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12								
Q505		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12								
SMV CBA											
CAPACITORS											
C631			ELECTROLYTIC CAP. 100UF/6.3V M								
C632			CERAMIC CAP.(AX) F Z 0.1UF/50V								
DIODES											
D631		4822 130 30621	SWITCHING DIODE 1N4148M								
D632		4822 130 30621	SWITCHING DIODE 1N4148M								
D633		9965 000 12177	ZENER DIODE DZ-6.8BSCT265								
D634		9965 000 12177	ZENER DIODE DZ-6.8BSCT265								
JK631		9965 000 12415	MINIATURE JACK WTJ035-10DBT								
JW004		9965 000 12414	FLAT CABLE, 3P AWG26#2651/P1.25/150								
TRANSISTORS											
Q631		4822 130 42959	TRANSISTOR KTA1266(GR)								
RESISTORS											
R631			CARBON RES. 1/6W J 4.7K OHM								
R632			CARBON RES. 1/6W J 2.2K OHM								
R633			CARBON RES. 1/6W J 47K OHM								
R634			CARBON RES. 1/6W J 1.5K OHM								
FUNCTION CBA											
			FUNCTION CBA								
			FUNCTION CBA								
			FUNCTION CBA								
CN651		9965 000 09213	ANGLE PIN HEADER, 3P 6029B-1-03Z002-T								
RESISTORS											
R652			CARBON RES. 1/6W J 1K OHM								
R653			CARBON RES. 1/6W J 1.2K OHM								
R654			CARBON RES. 1/6W J 1.5K OHM								
R655			CARBON RES. 1/6W J 2.2K OHM								
R660			CARBON RES. 1/6W J 6.8K OHM								
R662			CARBON RES. 1/6W J 1K OHM								
R663			CARBON RES. 1/6W J 1.2K OHM								
R668			CARBON RES. 1/6W J 3.9K OHM								
R668			PCB JUMPER D0.6-P5.0								
SWITCHES											
SW669		4822 276 13954	TACT SWITCH KSM0614B								
SW671		4822 276 13954	TACT SWITCH KSM0614B								
SW672		4822 276 13954	TACT SWITCH KSM0614B								
SW673		4822 276 13954	TACT SWITCH KSM0614B								
SW674		4822 276 13954	TACT SWITCH KSM0614B								
SW675		4822 276 13954	TACT SWITCH KSM0614B								
SW681		4822 276 13954	TACT SWITCH KSM0614B								
SW683		4822 276 13954	TACT SWITCH KSM0614B								
SW684		4822 276 13954	TACT SWITCH KSM0614B								
SW685		4822 276 13954	TACT SWITCH KSM0614B								
SW691		4822 276 13954	TACT SWITCH KSM0614B								
SW692		4822 276 13954	TACT SWITCH KSM0614B								
SW694		4822 276 13954	TACT SWITCH KSM0614B								
AFV CBA											
			AFV CBA								
			AFV CBA								
CAPACITORS											
C1			CHIP CERAMIC CAP. F Z 0.1UF/50V								
C4			CHIP CERAMIC CAP. CH J 56PF/50V								
C5			CHIP CERAMIC CAP. CH J 22PF/50V								
C6			CHIP CERAMIC CAP. CH J 56PF/50V								
C7			CHIP CERAMIC CAP. CH D 3PF/50V								
C8			CHIP CERAMIC CAP. CH D 3PF/50V								
C11			CHIP CERAMIC CAP. B K 0.01UF/50V								
C12			ELECTROLYTIC CAP. 10UF/16V M H7								

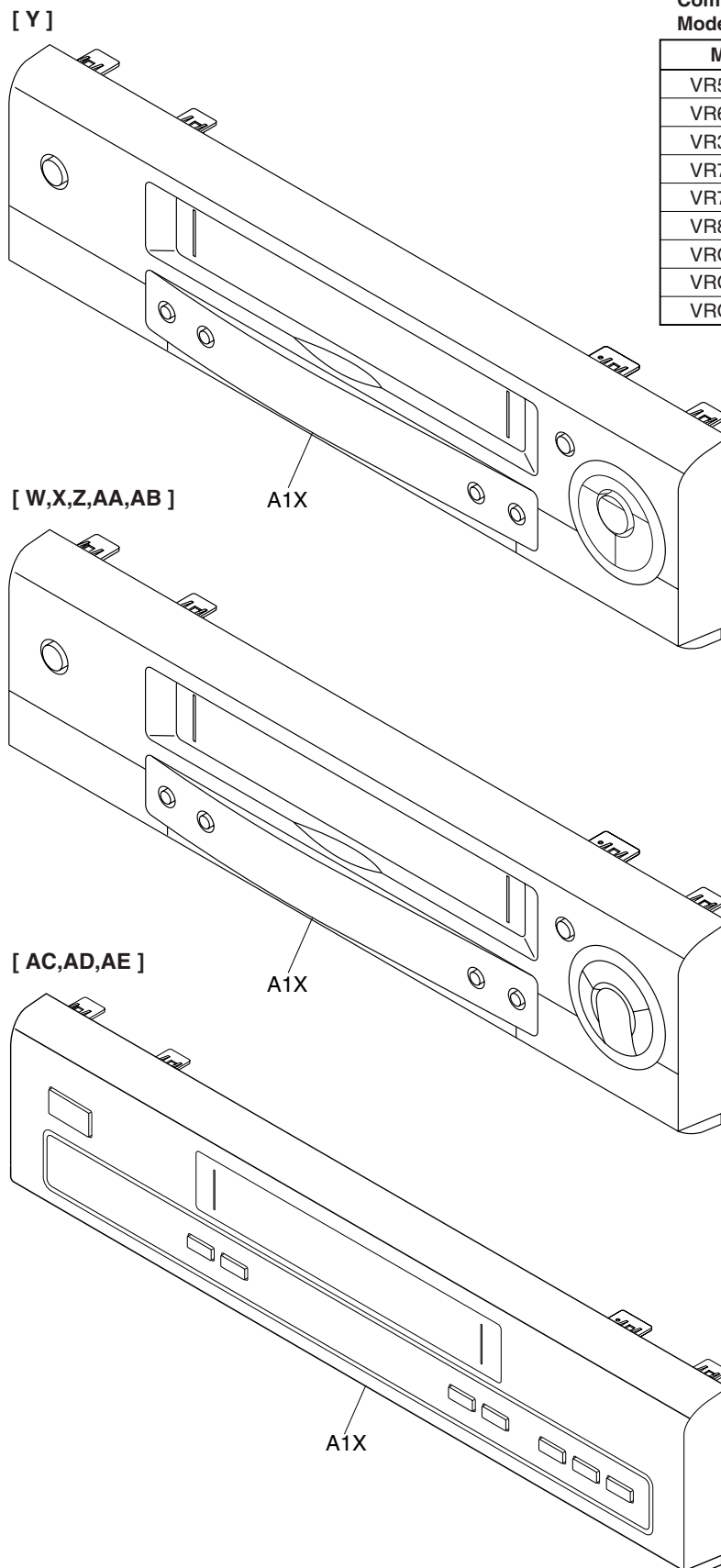
ELECTRICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲	12 NC	Description								
C13			CHIP CERAMIC CAP. B K 0.01UF/50V								
C14			CHIP CERAMIC CAP. B K 0.01UF/50V								
C15			ELECTROLYTIC CAP. 10UF/16V M H7								
C16			ELECTROLYTIC CAP. 10UF/16V M H7								
C17			CHIP CERAMIC CAP. F Z 0.1UF/50V								
C19			CHIP CERAMIC CAP. F Z 0.1UF/50V								
C20			ELECTROLYTIC CAP. 3.3UF/50V M H7								
C21			CHIP CERAMIC CAP. F Z 0.1UF/50V								
C22			ELECTROLYTIC CAP. 10UF/16V M H7								
C23			CHIP CERAMIC CAP. F Z 0.47UF/10V								
C24			ELECTROLYTIC CAP. 0.22UF/50V M H7								
CN1		4822 265 11267	ANGLE PIN HEADER, 9P 6029B-1-09Z003-T								
DIODES											
D2		4822 130 30621	SWITCHING DIODE 1N4148M								
IC's											
IC1		9965 000 12199	IC:AUDIO PROCESSOR MSP3417G-QG-B8								
COILS											
L1		4822 157 10889	INDUCTOR 10UH-K-26T								
L2			PCB JUMPER D0.6-P5.0								
L3		4822 157 11318	INDUCTOR 18UH-K-26T								
L4		4822 157 10889	INDUCTOR 10UH-K-26T								
RESISTORS											
R1		9965 000 13036	CHIP RES.(1608) 1/10W J 1K OHM								
R2		9965 000 09942	CHIP RES.(1608) 1/10W 0 OHM								
R4		9965 000 13037	CHIP RES.(1608) 1/10W J 120K OHM								
R5		9965 000 09942	CHIP RES.(1608) 1/10W 0 OHM								
R6		9965 000 09942	CHIP RES.(1608) 1/10W 0 OHM								
R7		9965 000 09966	CHIP RES.(1608) 1/10W J 1.2K OHM								
X1		9965 000 12200	X'TAL 18.432MHZ								

[VR530/58,VR630/58,VR330/58,VR730/58,VR732/58,VR830/58,VRQ45/16,
VRQ45/39,VRQ45/58]

Front Panel

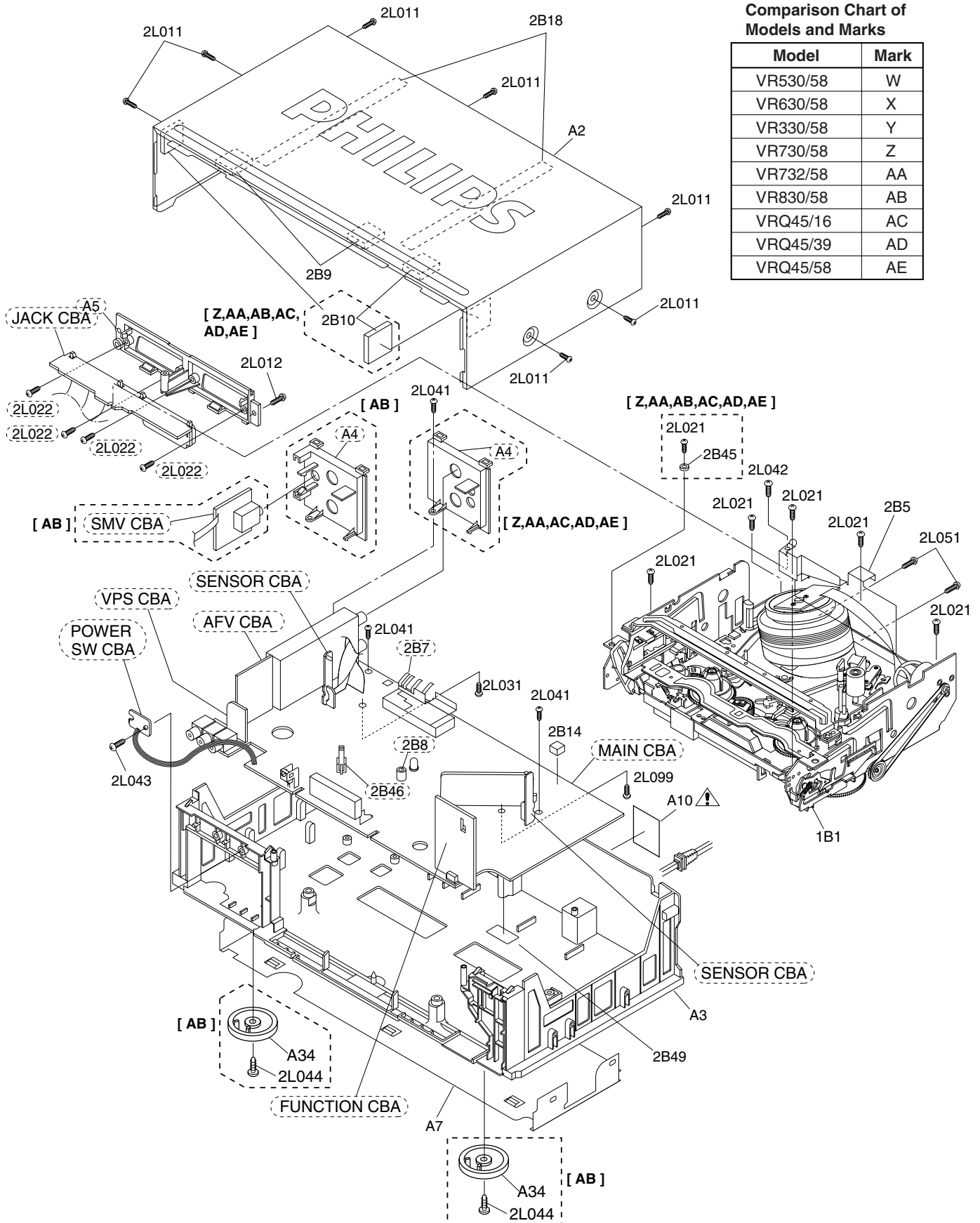
Comparison Chart of Models and Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



[VR530/58,VR630/58,VR330/58,VR730/58,VR732/58,VR830/58,VRQ45/16,
VRQ45/39,VRQ45/58]

Cabinet

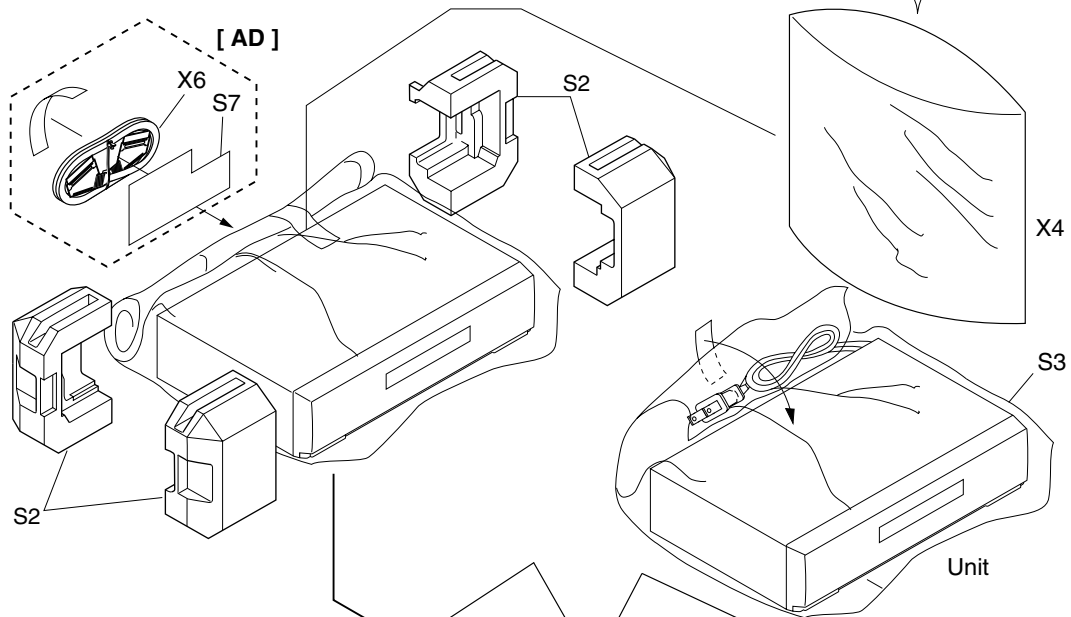
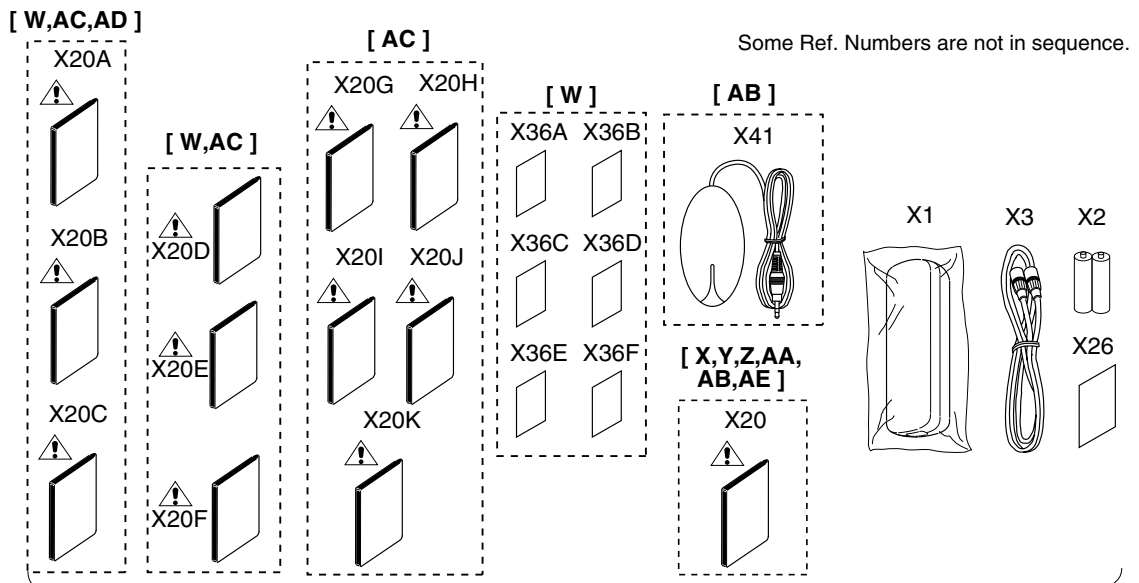


Comparison Chart of Models and Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE

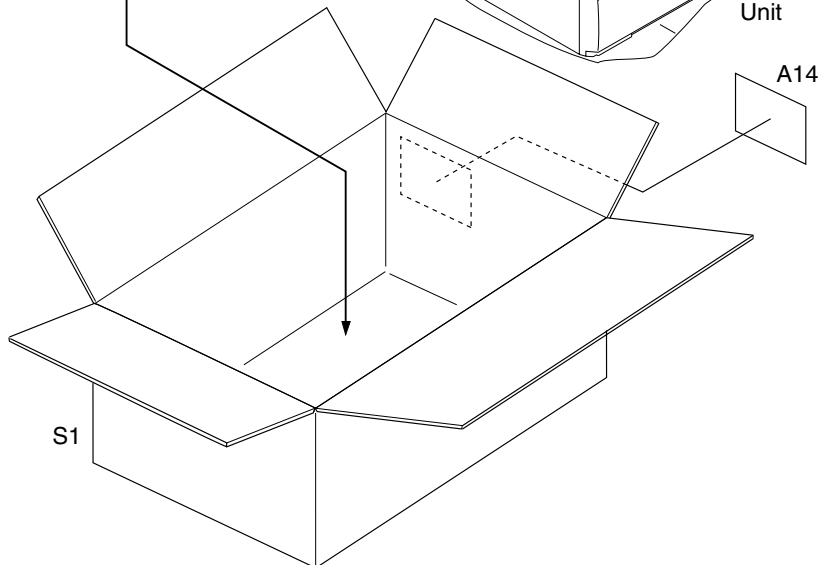
[VR530/58,VR630/58,VR330/58,VR730/58,VR732/58,VR830/58,
VRQ45/16,VRQ45/39,VRQ45/58]

Packing



Comparison Chart of Models and Marks

Model	Mark
VR530/58	W
VR630/58	X
VR330/58	Y
VR730/58	Z
VR732/58	AA
VR830/58	AB
VRQ45/16	AC
VRQ45/39	AD
VRQ45/58	AE



PRODUCT SAFETY NOTE: Products marked with a ▲

have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

MECHANICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲ 12 NC	Description									
A1X	9965 000 12292	FRONT ASSEMBLY HC462ED		1							
A1X	9965 000 12912	FRONT ASSEMBLY HC467ED			1						
A1X	9965 000 12888	FRONT ASSEMBLY HC265ED	1								
A1X	9965 000 12264	FRONT ASSEMBLY HC472ED				1					
A1X	9965 000 12277	FRONT ASSEMBLY HC477ED					1				
A1X	9965 000 13040	FRONT ASSEMBLY HC484ED						1			
A1X	9965 000 13047	FRONT ASSEMBLY HC491ED							1		1
A1X	9965 000 13049	FRONT ASSEMBLY HC492FD								1	
A2	9965 000 12164	CASE, TOP HC460ED	1	1	1						
A2	9965 000 12258	CASE, TOP HC470ED				1		1	1	1	1
A2	9965 000 12268	CASE, TOP(BLACK) HC475ED					1				
A3	9965 000 12165	CHASSIS HC461BD	1	1	1						
A3	9965 000 12259	CHASSIS(U25PAL FTZ) HC470ED				1			1	1	1
A3	9965 000 12269	CHASSIS(435/BLACK) HC475ED					1				
A3	9965 000 12398	CHASSIS HC480ED						1			
A7	9965 000 12166	PANEL, BOTTOM HC461BD	1	1	1						
A7	9965 000 12260	PANEL, BOTTOM HC470ED				1	1	1	1	1	1
A8	9965 000 13034	DOOR, CASSETTE HC462ED		1							
A8	9965 000 12167	DOOR, CASSETTE HC466BD			1	1				1	
A8	9965 000 13026	DOOR, CASSETTE HC265ED	1								
A8	9965 000 12276	DOOR, CASSETTE HC476BD					1				
A8	9965 000 13041	DOOR, CASSETTE HC481BD						1			
A8	9965 000 13048	DOOR, CASSETTE HC492FD							1		1
A9	9965 000 09192	SPRING, DOOR H7220UD U15	1	1	1	1	1	1	1	1	1
A10	▲	LABEL, RATING HC464ED		1							
A10	▲	LABEL, RATING HC469ED			1						
A10	▲	LABEL, RATING HC268ED	1								
A10	▲	LABEL, RATING HC474ED				1					
A10	▲	LABEL, RATING HC479ED					1				
A10	▲	LABEL, RATING HC484ED						1			
A10	▲	LABEL, RATING HC491ED							1		
A10	▲	LABEL, RATING HC492FD								1	
A10	▲	LABEL, RATING HC493ED									1
A14		LABEL, BAR CODE HC464ED		1							
A14		LABEL, BAR CODE HC469ED			1						
A14		LABEL, BAR CODE HC268ED	1								
A14		LABEL, BAR CODE HC474ED				1					
A14		LABEL, BAR CODE HC479ED					1				
A14		LABEL, BAR CODE HC484ED						1			
A14		LABEL, BAR CODE HC491ED							1		
A14		LABEL, BAR CODE HC492FD								1	
A14		LABEL, BAR CODE HC493ED									1
1B1	9965 000 12399	DECK ASSEMBLY CZD011/VM15E0		1	1	1	1	1	1	1	1
1B1	9965 000 12889	DECK ASSEMBLY CZD011/VM15A0	1								
2B5	9965 000 12168	SHEILD, CYLINDER HC460ED	1	1	1	1	1	1	1	1	1
2B9	9965 000 12378	CUSHION HC460ED	1	1	1	1	1	1	1	1	1
2B10		SIDE CUSHION HC470ED				1	1	1	1	1	1

MECHANICAL PARTS LIST			VR330/58	VR530/58	VR630/58	VR730/58	VR732/58	VR830/58	VRQ45/16	VRQ45/39	VRQ45/58
Pos.	▲ 12 NC	Description									
2B49	9965 000 12402	CHASSIS FIBER HC460ED	1	1	1	1	1	1	1	1	1
2L011	9965 000 12403	SCREW, P-TIGHT 3X12 BIND HEAD+	1	1	1	1	1	1	1	1	1
2L012	9965 000 12403	SCREW, P-TIGHT 3X12 BIND HEAD+	1	1	1	1	1	1	1	1	1
2L021	4822 502 30752	SCREW, P-TIGHT M3X10 WASHER HEAD+	1	1	1	1	1	1	1	1	1
2L031	9965 000 12171	SCREW, B-TIGHT M3X8 BIND HEAD+	1	1	1	1	1	1	1	1	1
2L041	4822 502 14012	P-TIGHT SCREW 3X8 BIND +	1	1	1	1	1	1	1	1	1
2L042	4822 502 14012	P-TIGHT SCREW 3X8 BIND +	1	1	1	1	1	1	1	1	1
2L043	4822 502 14012	P-TIGHT SCREW 3X8 BIND +	1	1	1	1	1	1	1	1	1
2L044	4822 502 14012	P-TIGHT SCREW 3X8 BIND +						1			
2L051	4822 502 14018	SCREW, S-TIGHT M3X5 BIND HEAD+	1	1	1	1	1	1	1	1	1
2L099	9965 000 13027	SCREW, P-TIGHT M3X8 BIND HEAD+	1	1	1	1	1	1	1	1	1
		PACKING									
S1		GIFT BOX CARTON HC460ED		1							
S1		GIFT BOX CARTON HC465ED			1						
S1		GIFT BOX CARTON HC265ED	1								
S1		GIFT BOX CARTON HC470ED				1					
S1		GIFT BOX CARTON HC475ED					1				
S1		GIFT BOX CARTON HC480ED						1	1	1	1
S2		STYROFOAM HC460ED	1	1	1	1	1		1	1	1
S2		STYROFOAM HC480ED						1			
S3		UNIT, BAG V4010PA	1	1	1						
S3		UNIT, BAG E5500UD				1	1	1	1	1	1
X1	9965 000 13035	REMOTE CONTROL UNIT 364/CRC006		1							
X1	9965 000 12172	REMOTE CONTROL UNIT 364/CRC006			1	1					
X1	9965 000 13028	REMOTE CONTROL UNIT 364/CRC006	1								
X1	9965 000 12271	REMOTE CONTROL UNIT 364/CRC006					1				
X1	9965 000 12404	REMOTE CONTROL UNIT 364/CRC006						1			
X1	9965 000 13044	REMOTE CONTROL UNIT 364/CRC006							1	1	1
X3	4822 320 50377	RF CORD PAL 1.2M	1	1	1	1	1	1	1	1	1
X4		ACCESSORY BAG K8092BA	1	1	1	1	1	1	1	1	1
X6	9965 000 12420	21P SCART CABLE								1	
X41	9965 000 12405	SATMOUSE 8622-666-10101						1			

DECK PARTS LIST		
Pos.	▲ 12 NC	Description
B2	9965 000 12201	CYLINDER ASS. MK11 PAL 4HD HIFI
B2	9965 000 12895	CYLINDER ASS. MK11 PAL 2HD 2SP / for VR330/58
B3	9965 000 12202	LOADING MOTOR ASS. MK11
B8	9965 000 12203	PULLEY ASS. MK11
B9	9965 000 08560	MOVING GUIDE MK10
B10	9965 000 08431	MOVING GUIDE MK10
B11	9965 000 12204	LOADING ARM ASS. MK11
B12	9965 000 12205	LOADING ARM ASS. MK11
B27	9965 000 12206	TENSION LEVER MK11
B31	9965 000 12207	AC HEAD ASS. MK11
B35	9965 000 12208	TAPE GUIDE ASS. MK11
B37	9965 000 12209	CAPSTAN MOTOR
B52	9965 000 08593	CAP BELT MK10
B73	9965 000 12210	FE HEAD ASS. MK11
B74	9965 000 08555	PRISM MK10
B121	9965 000 12211	WORM MK11
B126	9965 000 12212	PULLEY MK11
B133	9965 000 12213	IDLER ASS.(2) MK10
B148	4822 462 11189	TG CAP MK6
B300	9965 000 12214	C DRIVE LEVER R MK11
B303	9965 000 12215	F DOOR OPENER MK11
B347	9965 000 08445	GUIDE HOLDER A MK10
B354	9965 000 12216	SLIDER R MK11
B355	9965 000 12217	SLIDER L MK11
B359	9965 000 12416	CLEANER LEVER MK11
B360	9965 000 06561	CLEANER ROLLER MK9
B410	9965 000 12218	PINCH ARM(A) ASS. MK11
B411	9965 000 08453	PINCH SPRING MK10
B414	9965 000 12219	M BRAKE S(HI) ASS. MK11
B416	9965 000 12220	M BRAKE T(HI) ASS. MK11
B417	9965 000 12221	TENSION SPG(190265) MK11
B425	9965 000 08457	LOCK LEVER SPRING MK10
B426	9965 000 08458	KICK PULLEY MK10
B482	9965 000 12222	C PLATE MK11
B483	9965 000 08461	LOCK LEVER MK10
B487	9965 000 08462	BAND BRAKE MK10
B488	9965 000 12223	MODE LEVER(HI) MK11
B491	9965 000 12224	CAM GEAR(A) MK11
B492	9965 000 12225	MODE GEAR MK11
B494	9965 000 12226	DOOR OPENER B MK11
B499	9965 000 08467	T LEVER HOLDER MK10
B501	9965 000 12227	WORM HOLDER MK11
B502	9965 000 08469	CAM GEAR(B) MK10
B505	9965 000 12372	PSCW(625504) MK11
B507	9965 000 05342	REEL WASHER MK9 5*2.1*0.5
B508	9965 000 08470	S BRAKE SPRING MK10
B513	9965 000 08471	PSCW(752605) MK10

DECK PARTS LIST		
Pos.	▲ 12 NC	Description
B514	9965 000 12228	SCREW RACK MK11
B516	9965 000 05342	REEL WASHER MK9 5*2.1*0.5
B518	4822 532 13159	P.S.W CUT 1.6X4.0X0.5T
B520	9965 000 12229	T BRAKE SPRING HI(F) MK11
B521	9965 000 08482	SOFT SPRING MK10
B522	9965 000 08483	TG POST ASS. MK10
B525	9965 000 12230	LDG BELT MK11
B529	9965 000 12231	CLEANER ASS. MK11
B551	9965 000 12232	FF ARM(HI) MK10
B553	9965 000 12233	REV SPRING MK11
B555	9965 000 12234	RACK ASS. MK11
B557	9965 000 08519	MOTOR PULLEY U5
B558	9965 000 12235	LOADING MOTOR
B559	9965 000 12236	CLUTCH ASS.(HI)(2) MK11
B560	9965 000 08522	KICK SPRING MK10
B562	9965 000 08524	C DRIVE LEVER L MK10
B563	9965 000 08525	SLIDER SHAFT MK10
B564	9965 000 12237	M GEAR(HYT) N12G5F*
B565	9965 000 12238	SENSOR GEAR MK11
B567	9965 000 08544	PINCH ARM(B) MK10
B568	9965 000 08545	BT ARM MK10
B569	9965 000 12239	CAM HOLDER F MK11
B570	9965 000 12240	CAM RACK SPRING(HI) MK11
B571	4822 532 13158	P.S.W F 6*2.55*0.5
B572	4822 532 13159	P.S.W CUT 1.6X4.0X0.5T
B573	9965 000 12241	REEL S MK11
B574	9965 000 12376	REEL T MK10
B578	9965 000 12243	TR GEAR A MK10
B579	9965 000 12244	TR GEAR B MK10
B580	9965 000 12245	TR GEAR C MK11
B581	9965 000 12246	CENTER GEAR(HYT) N12G5F*
B582	9965 000 12247	TR GEAR SPRING MK10
B583	9965 000 05342	REEL WASHER MK9 5*2.1*0.5
B584	9965 000 12248	TR GEAR SHAFT MK10
B585	9965 000 12249	PSW(2957505) MK11
L1051	9965 000 05359	SCREW, B-TIGHT M2.6X6 PAN HEAD+
L1053	9965 000 05375	SCREW, S-TIGHT M2.6X8 WASHER HEAD+
L1151	9965 000 08642	SCREW, SEMS M2.6X4 PAN HEAD+
L1191	9965 000 05375	SCREW, S-TIGHT M2.6X8 WASHER HEAD+
L1321	4822 502 14009	SCREW, S-TIGHT M3X6 BIND HEAD+
L1341	4822 502 14669	SCREW, P-TIGHT M2.6X6 BIND HEAD+
L1406	9965 000 08643	AC HEAD SCREW MK9
L1407	9965 000 12250	SCREW, S-TIGHT M2.6X10 DISH HEAD+
L1450	4822 502 14671	SCREW, SEMS M2.6X5 PAN HEAD+
L1461	4822 502 30471	SCREW, P-TIGHT M2.6X6 WASHER HEAD+
L1466	9965 000 05364	SCREW, S-TIGHT M2.6X6 BIND HEAD+
L1467	9965 000 12251	SCREW, S-TIGHT M2.6X5 WASHER HEAD+
L1468	9965 000 12252	SCREW, B-TIGHTM1.7X12