

Service
Service
Service

VR330/02/07/39

VR530/39

VR630/02/07/16/39

Service Manual

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.



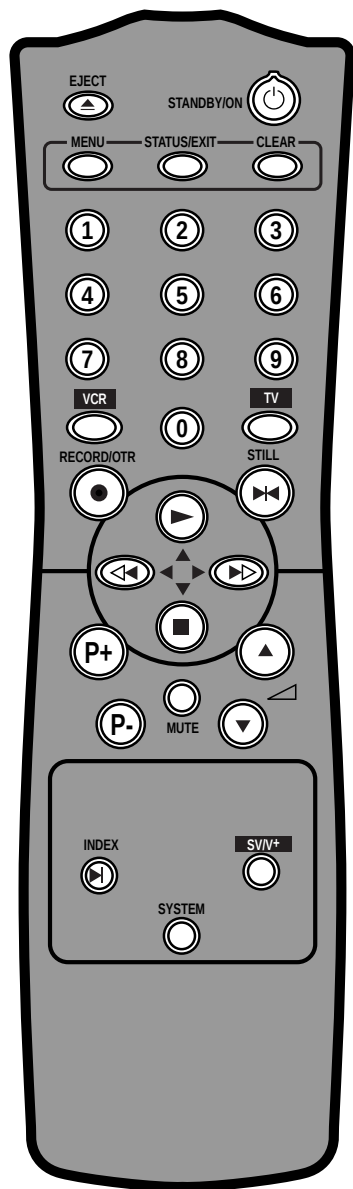
MAIN SECTION

VIDEO CASSETTE RECORDER

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[VR330/02, VR330/07, VR330/39]



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 Doesn't work in these models. [VR330/02, VR330/07]
To change the video (colour) system. [VR330/39]

SVIV+ 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.

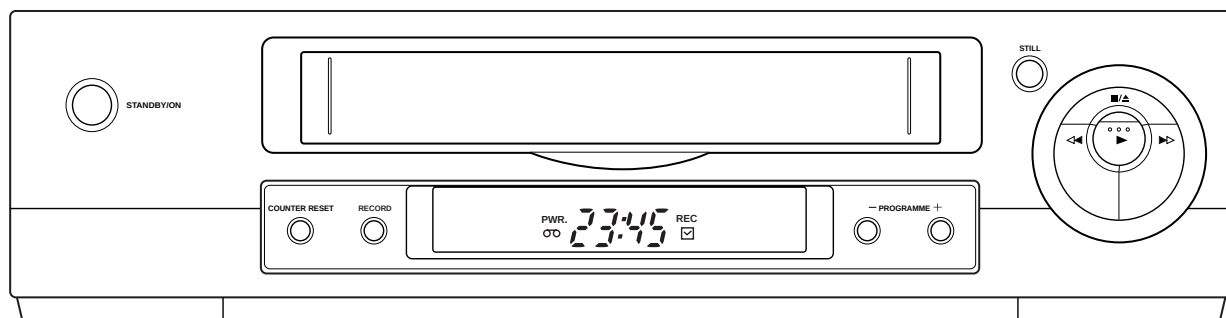
0..9 Press to select channels at VCR or Philips TV.

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

▲ **▼** To adjust the TV's volume.

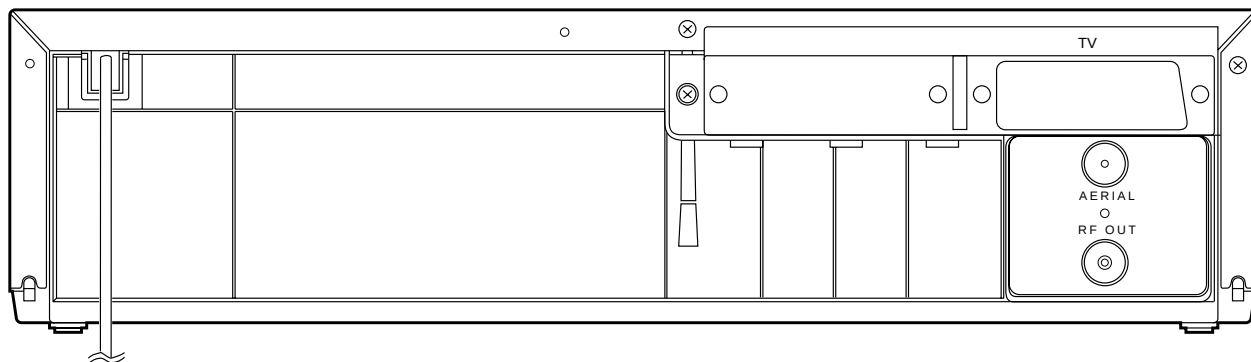
Press button VCR on the remote control before doing VCR related functions on the remote. By pressing button TV it is possible to navigate some functions on PHILIPS TV sets.

Front of the device



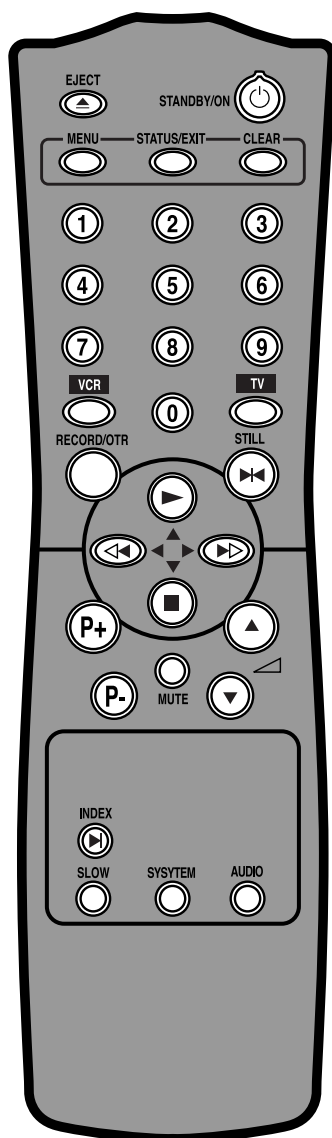
- STANDBY/ON** To switch off or on, interrupt a function.
- PROGRAMME+** **PROGRAMME-** To select the programme number. During normal or slow motion playback, press to adjust the tracking.
- RECORD** To record the TV channel selected at this moments.
- ▶▶** When tape playback is stopped, press to fast 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 hight 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.

[VR530/39]



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.

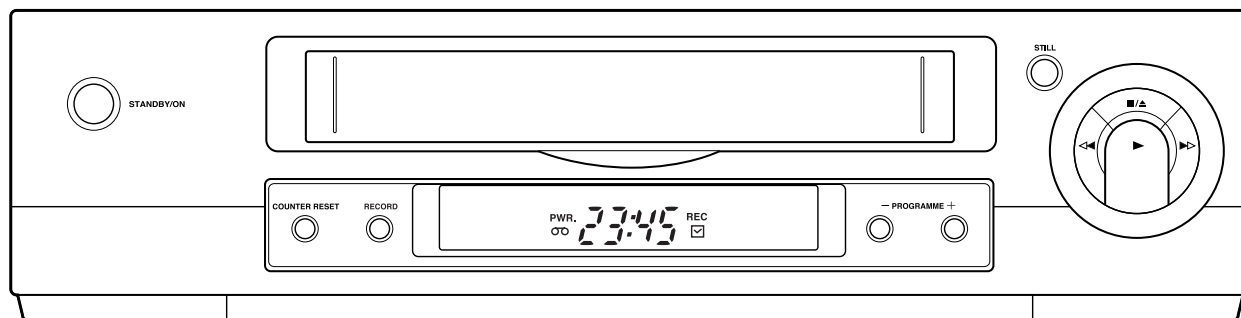
Buttons for VCR feature only

- 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** To change the video (colour) system.
- MENU** To call up main 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 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.
- To play a tape, select an item in the menu of VCR.
- To stop the tape, select an item in the menu of VCR.

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 eliminate 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 stoped, press to rewind the tape at hight speed. During playback, press to rewind the tape while the picture stay on the screen.

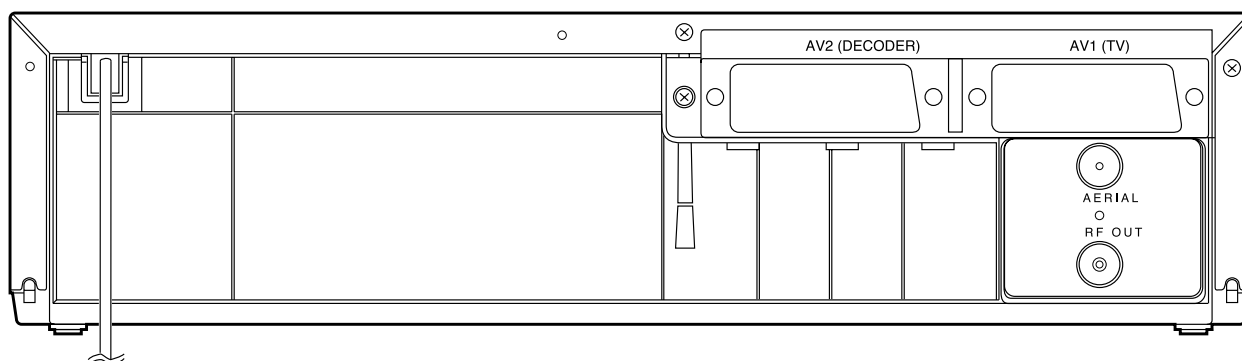
To play a tape.

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



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

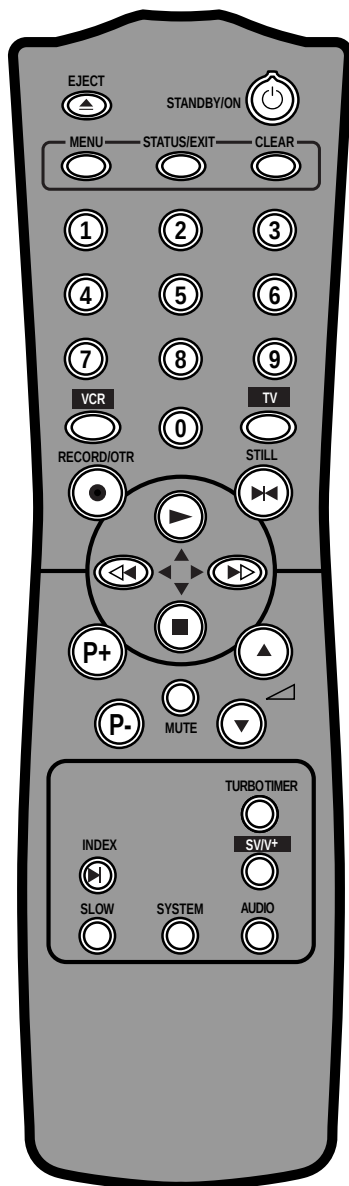
AV1(TV) To connect the TV set(programme number).

AERIAL To connect the aerial cable.

RF OUT To connect the TV set.

[VR630/02, VR630/07, VR630/16, VR630/39]

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 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.

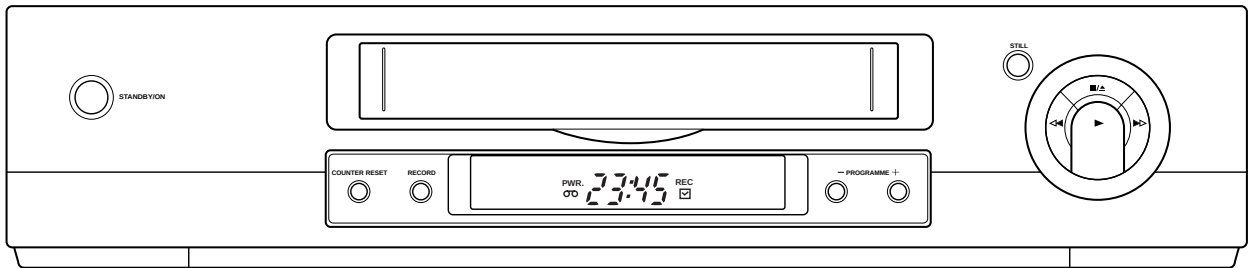
0..9 Press to select channels at VCR or Philips TV.

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.

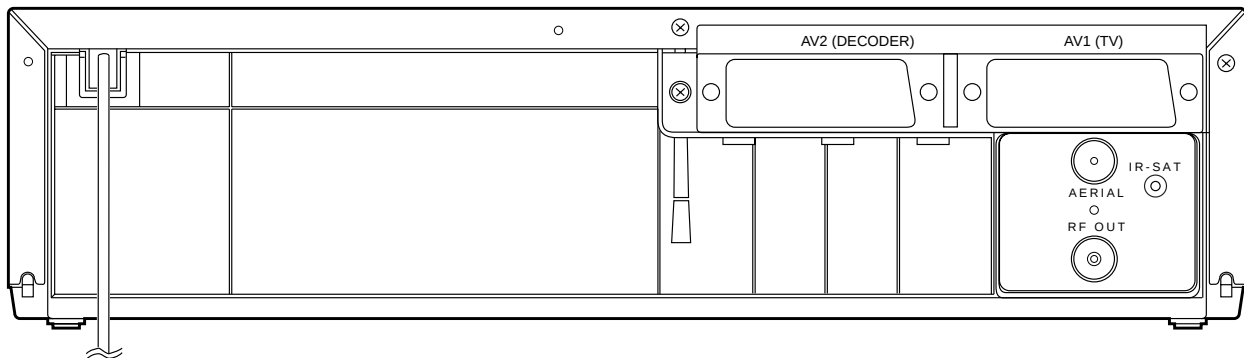
▶ To play a tape.

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

STILL To stop the tape and show a still picture.

COUNTER RESET To reset the counter.

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. [VR830]

[VR330/02,VR330/07,VR330/39,VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]

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+5V	Always +5V with AC Plug Connected
AL+9V	Always +9V with AC Plug Connected
AL+15V/+12V	Always +15V/+12V with AC Plug Connected
AMPC	CTL AMP Connected Terminal
AMPVcc	AMPVcc
AMPVREF _{IN}	V-Ref for CTL AMP
AMPVss	AMPVss (GND)
AUDIO-SW1	Audio Input/Output Switching Control Signal 1 (Mono)
AUDIO-SW2	Audio Input/Output Switching Control Signal 2 (Mono)
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 Inpose

Signal Name	Function
CTL (+)	Playback/Record Control Signal (+)
CTL (-)	Playback/Record Control Signal (-)
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 Coparator 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

Signal Name	Function
LINK-IN	Easy Link Data Input
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
OSC _{IN}	Clock Input for letter size
OSC _{OUT}	Clock Output for letter size
OSDV _{cc}	OSDV _{cc}
P-DOWN-L	Power Voltage Down Detector Signal
P-ON+5V	+5V at Power-On Signal
P-ON+9V	+9V at Power-On Signal
P-ON+44V	+44V 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
SC2-IN	Input Signal from Pin 8 of SCART2
SD-H	SD-H
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
V-ENV	Video Envelope Comparator Signal
V _{cc}	V _{cc}

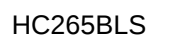
Signal Name	Function
VIDEO-IN	Video Signal Input
VIDEO-OUT	Video Signal Output
V _{ss}	V _{ss} (GND)
X-IN	Main Clock Input
X-OUT	Main Clock Input
XC-IN	Sub Clock
XC-OUT	Sub Clock

BLOCK DIAGRAMS

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.)

- ① :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 (D, E, F)

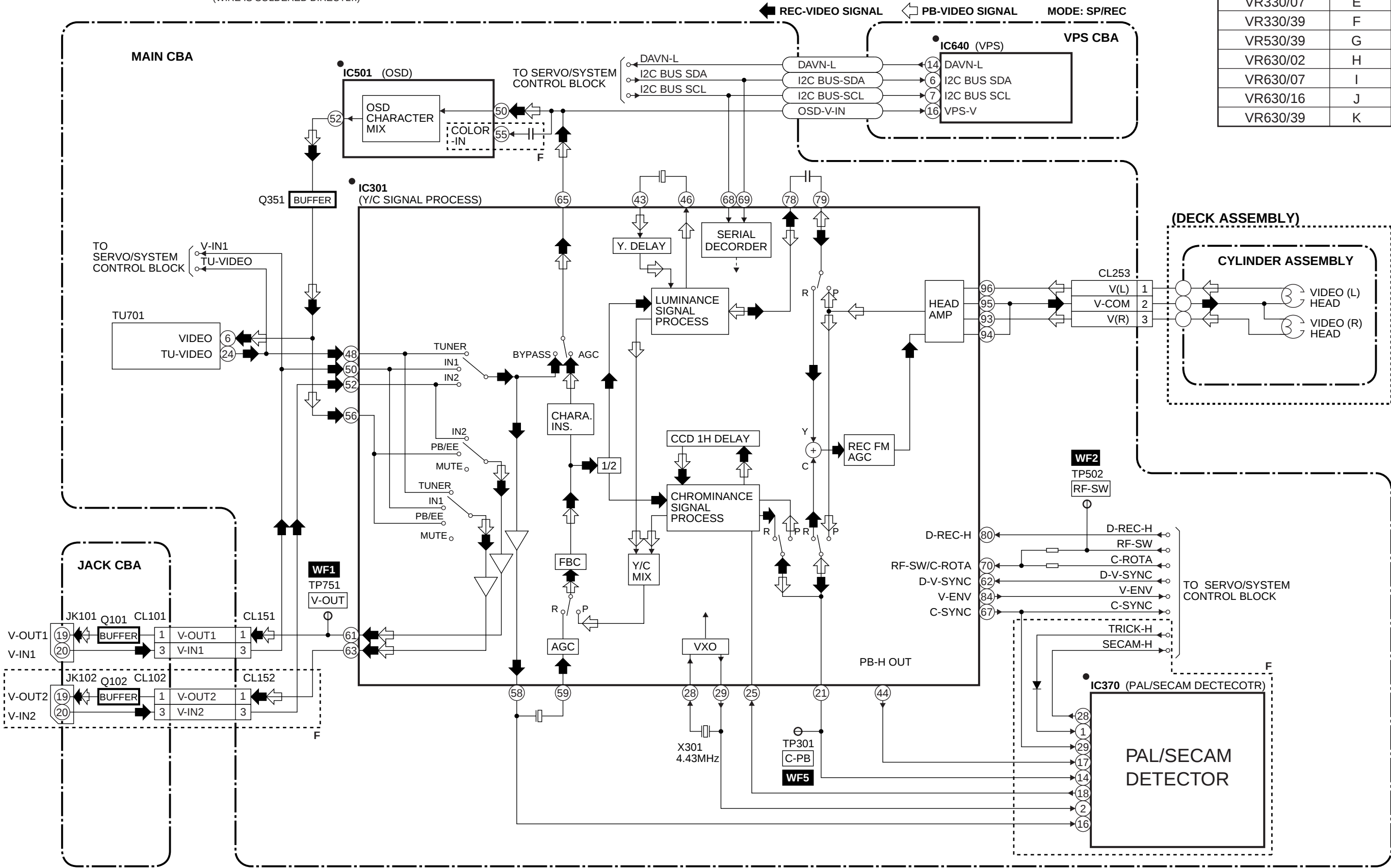
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2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER
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"●" = SMD

TEST POINT INFORMATION
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⊙ :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
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K



Video Block Diagram (G, H, I, J, K)

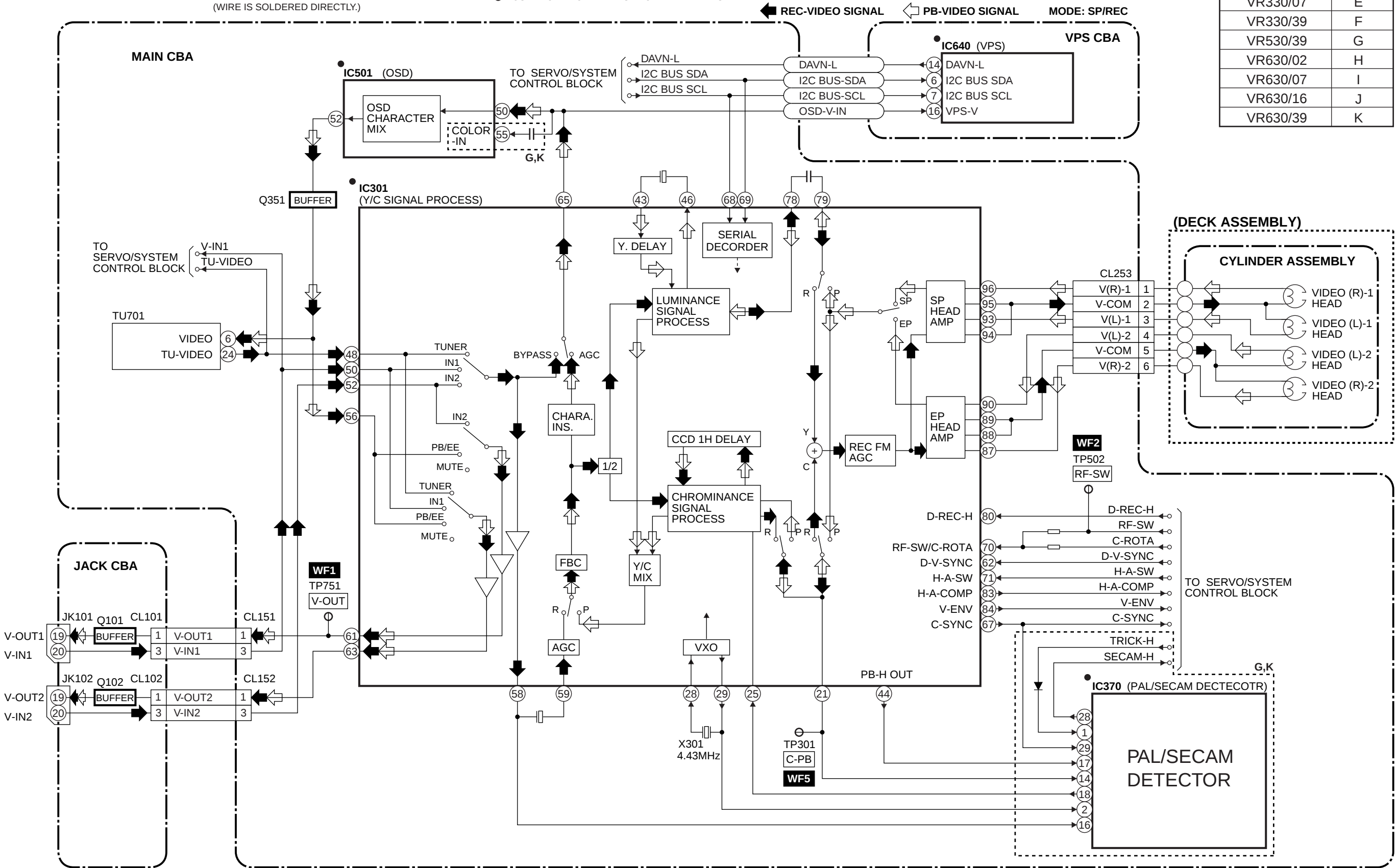
"●" = SMD

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⊗ :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
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K



Audio Block Diagram (D, E, F)

Comparison Chart of Models & Marks

Model	Mark
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

"●" = SMD

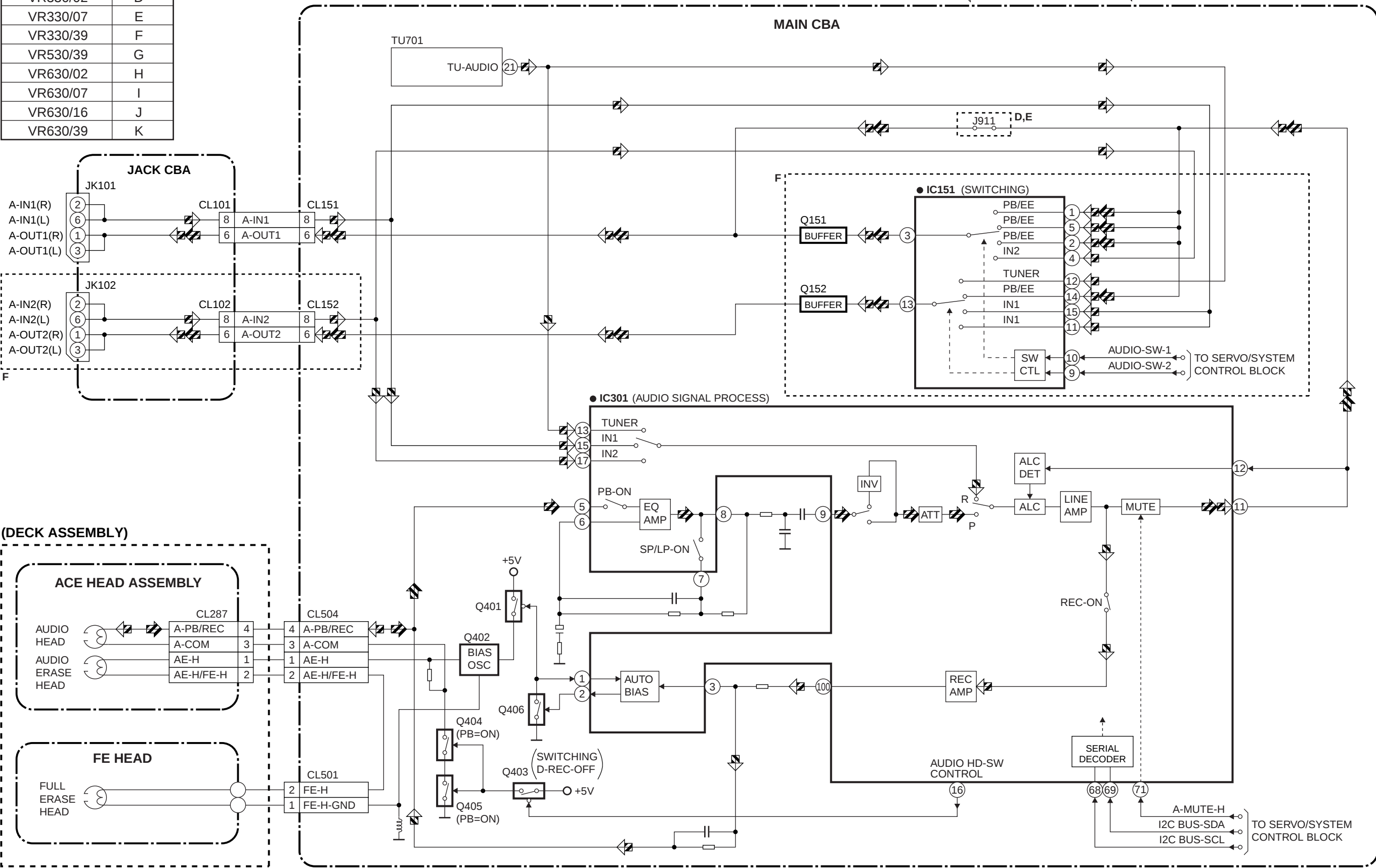
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- ⊗ :USED TO INDICATE A TEST POINT WITH NO TEST PIN.
- :USED TO INDICATE A TEST POINT WITH A TEST PIN.

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



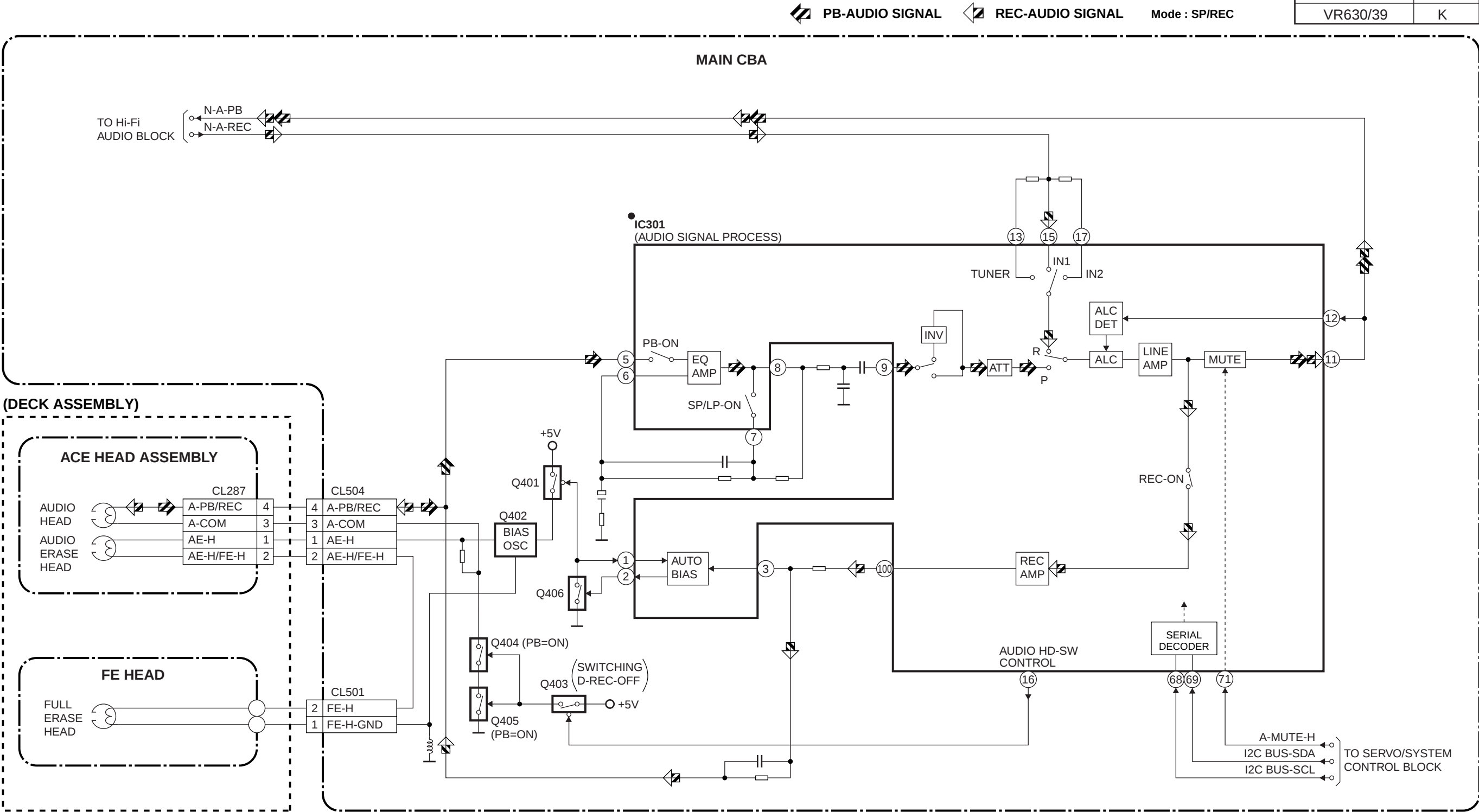
Audio Block Diagram (G, H, I, J, K)

"●" = SMD

NOTE FOR WIRE CONNECTORS:
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2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER
HOLES OF THE PCB.
(WIRE IS SOLDERED DIRECTLY.)

TEST POINT INFORMATION
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⊞ :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
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K



Hi-Fi Audio Block Diagram (G, H, I, J, K)

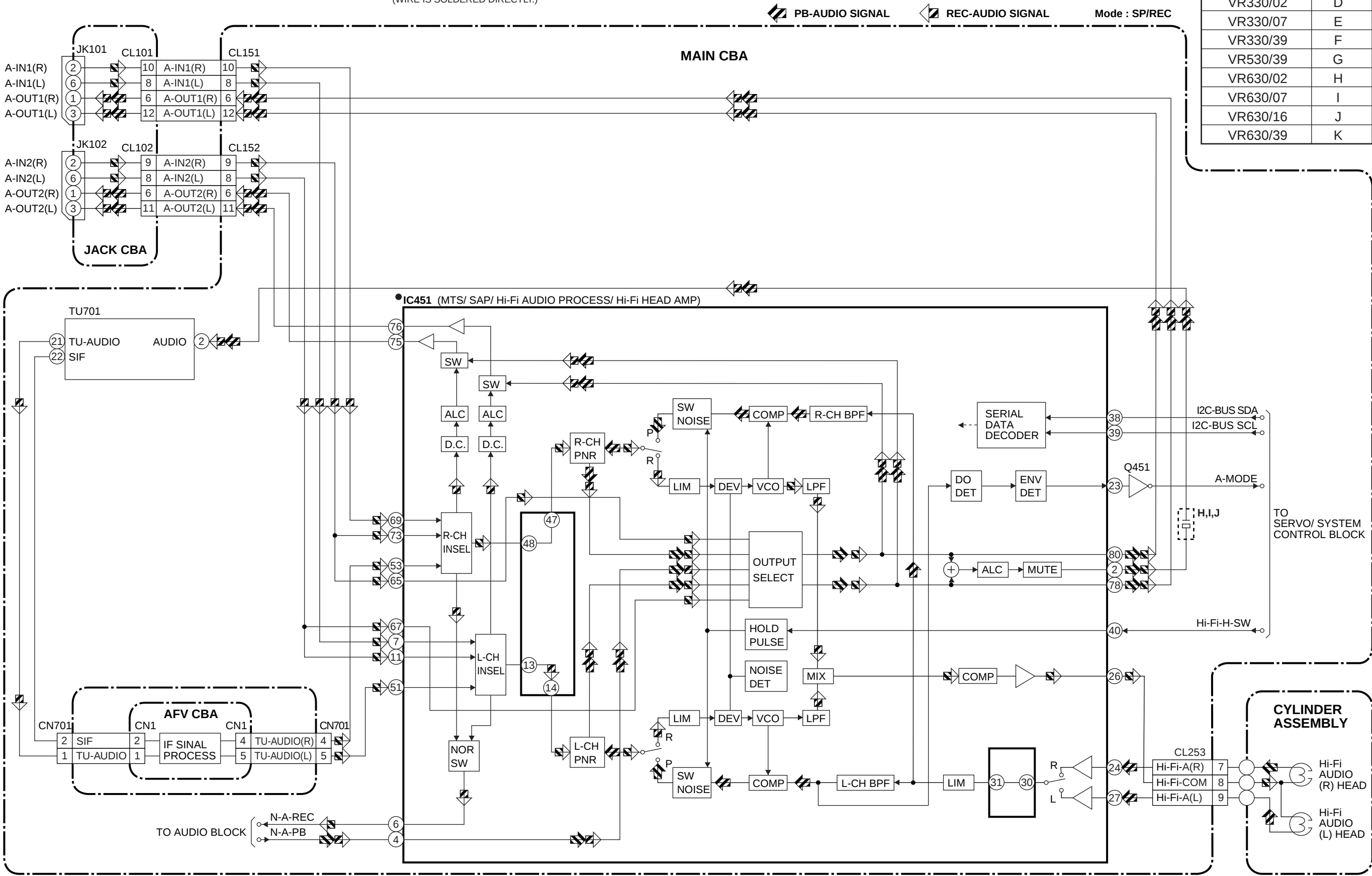
"●" = SMD

NOTE FOR WIRE CONNECTORS:
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2. PREFIX SYMBOL "CL" MEANS WIRE-SOLDER
HOLES OF THE PCB.
(WIRE IS SOLDERED DIRECTLY.)

TEST POINT INFORMATION
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⊗ :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
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K



Power Supply Block Diagram

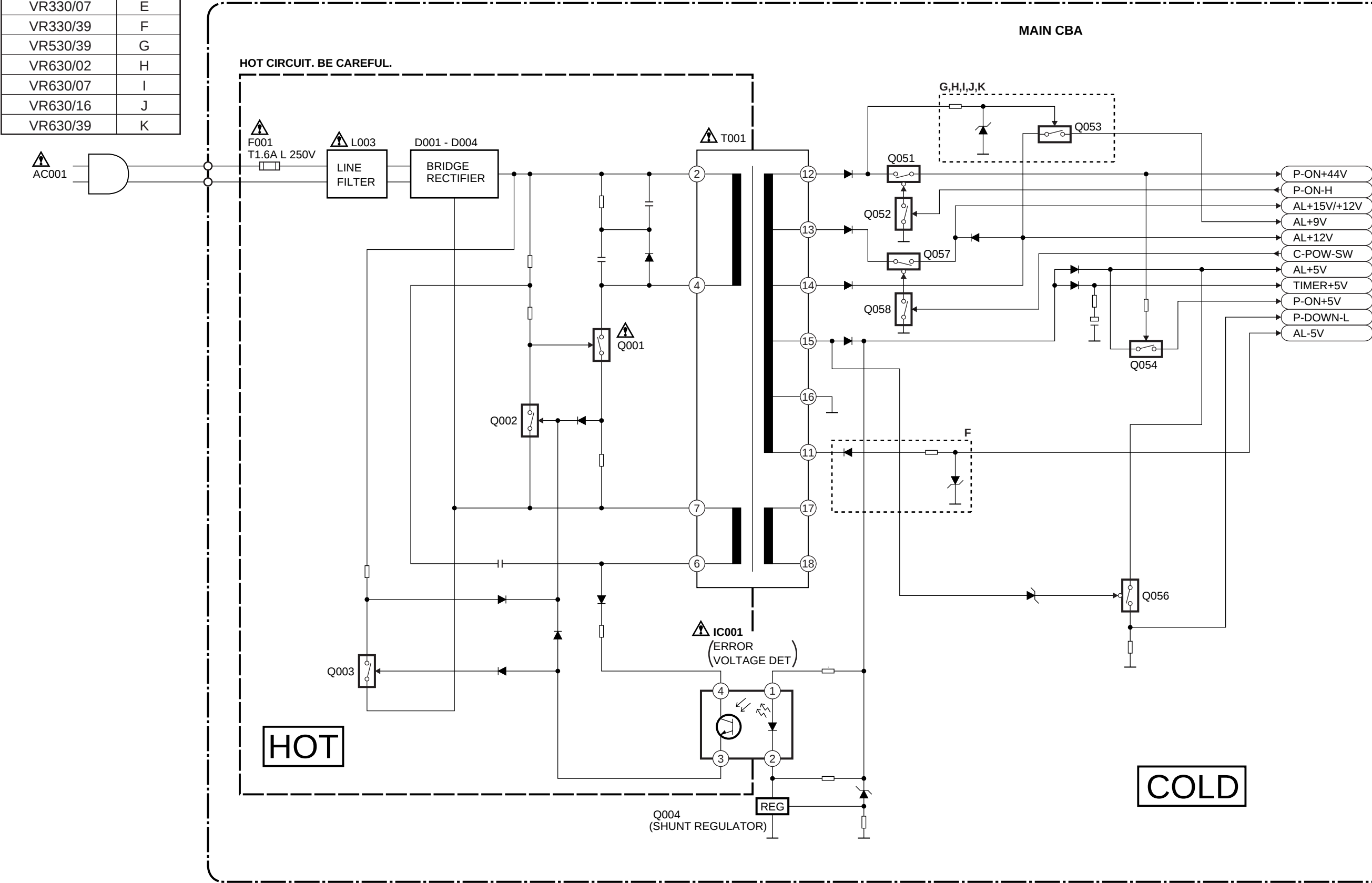
Comparison Chart of Models & Marks

Model	Mark
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
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VR630/39	K

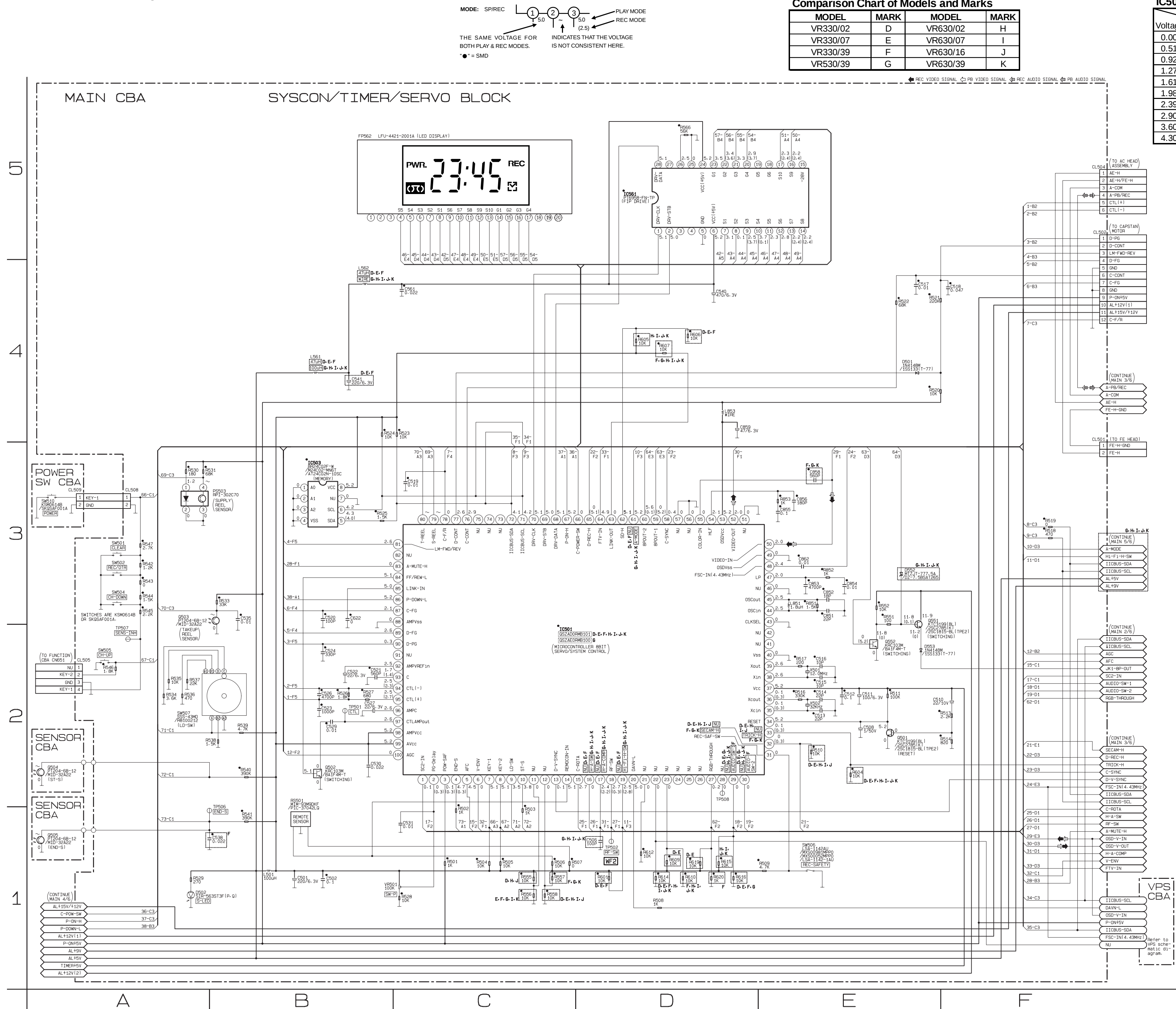
NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

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.



Main 1/6 Schematic Diagram



Comparison Chart of Models and Marks

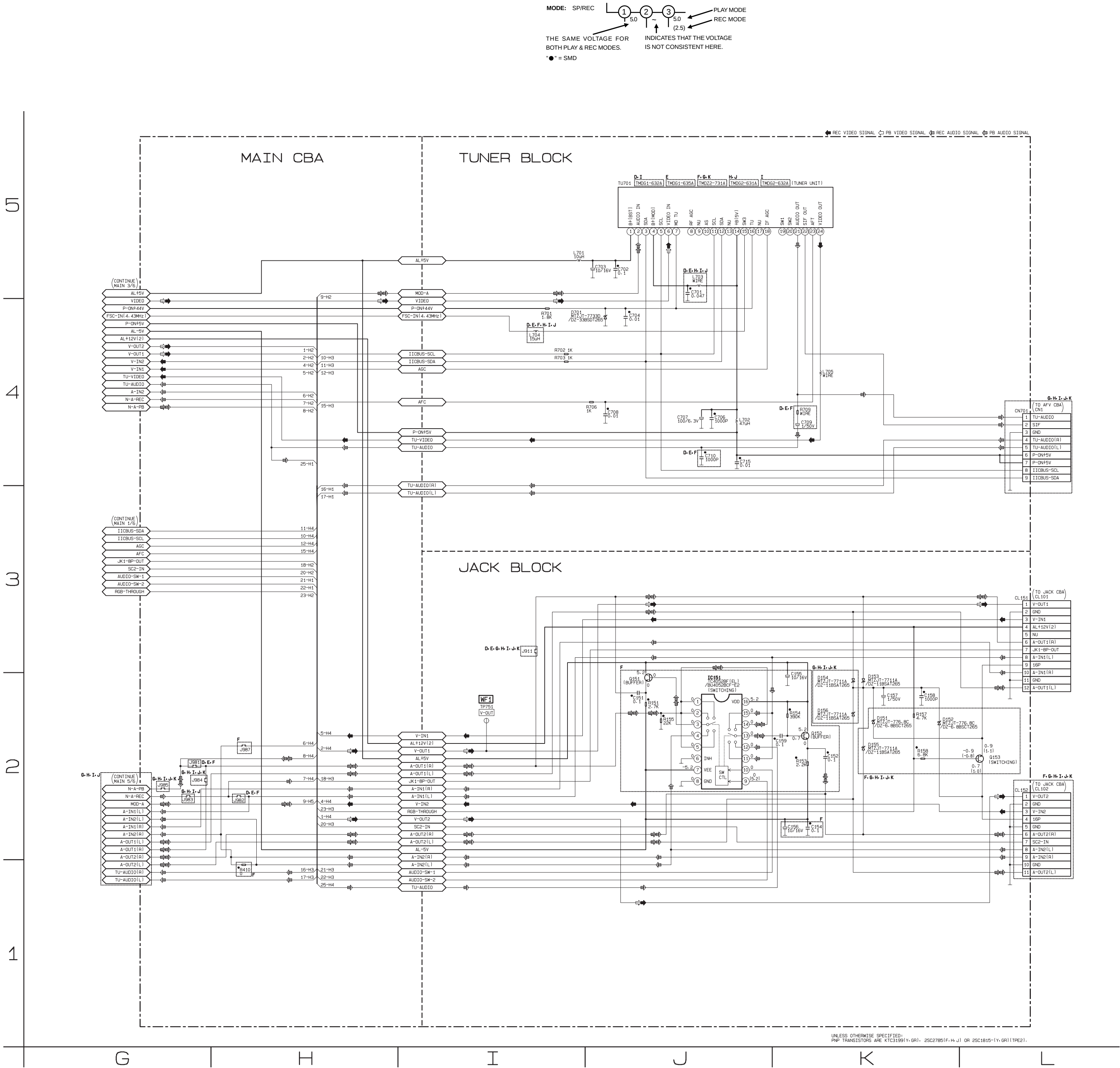
MODEL	MARK	MODEL	MARK
VR330/02	D	VR630/02	H
VR330/07	E	VR630/07	I
VR330/39	F	VR630/16	J
VR530/39	G	VR630/39	K

IC501 KEY VOLTAGE CHART

Pin No.	KEY 1 (7PIN)	KEY 2 (8 PIN)
0.00 ~ 0.51V	POWER	-----
0.51 ~ 0.92V	-----	REW
0.92 ~ 1.27V	COUNTER RESET	PLAY
1.27 ~ 1.61V	REC/OTR	FF
1.61 ~ 1.98V	CH DOWN	PAUSE
1.98 ~ 2.39V	S-INH	-----
2.39 ~ 2.90V	-----	STOP/EJECT
2.90 ~ 3.60V	-----	-----
3.60 ~ 4.30V	-----	-----
4.30 ~ 5.00V	KEY OFF	KEY OFF

MAIN 1/6 Schematic Diagram Parts Location Guide

Ref No.	Position	Ref No.	Position
CAPACITORS		RESISTORS	
C501	B-1	R513	F-2
C502	B-1	R514	F-2
C506	D-1	R516	E-2
C508	E-2	R517	E-2
C510	F-2	R518	F-3
C511	E-2	R519	F-3
C512	E-2	R520	E-4
C513	E-2	R521	E-4
C514	E-2	R522	E-4
C515	E-2	R523	C-4
C516	E-2	R524	B-4
C517	E-4	R525	B-3
C518	F-4	R526	B-2
C519	C-3	R527	B-2
C520	B-3	R528	C-1
C521	B-2	R529	A-1
C522	B-2	R530	A-3
C523	B-2	R531	A-3
C524	B-2	R533	B-3
C526	B-2	R534	A-2
C527	B-2	R535	A-2
C529	B-2	R536	A-2
C530	B-2	R537	A-2
C531	C-1	R538	B-2
C535	B-3	R539	B-2
C538	A-1	R540	B-2
C540	D-4	R541	B-1
C541	B-4	R542	A-3
C561	C-4	R543	A-3
C622	B-3	R544	A-3
C851	E-3	R545	A-2
C852	E-3	R546	A-2
C853	E-3	R547	A-3
C854	E-3	R551	E-3
C855	E-3	R552	E-3
C856	E-3	R555	C-1
C858	E-3	R556	C-1
C859	D-4	R557	C-1
C862	E-3	R558	C-1
CONNECTORS		R566	D-5
CL501	F-4	R601	D-1
CL502	F-5	R604	E-2
CL504	F-5	R605	D-4
CL505	A-2	R606	D-4
CL508	A-3	R607	D-4
CL509	A-3	R609	D-1
DIODES		R610	D-1
D501	E-4	R612	D-1
D502	A-1	R614	D-1
D552	E-3	R615	D-1
D553	E-2	R616	D-1
ICs		R619	D-1
IC501	C-2	R620	D-1
IC503	B-3	R851	E-3
IC561	D-5	R852	E-3
COILS		R853	E-3
L501	B-1	SWITCHES	
L561	B-4	SW501	A-3
L562	B-4	SW502	A-3
L851	E-3	SW504	A-3
L853	D-4	SW505	A-2
TRANSISTORS		SW506	E-1
Q501	E-2	SW507	A-2
Q502	B-2	SW510	A-3
Q503	A-3	VARIABLE RESISTORS	
Q551	E-3	VR501	B-1
Q562	E-2	CRYSTAL OSCILLATORS	
RESISTORS		X501	E-2
R501	C-1	X502	E-2
R502	C-1	MISCELLANEOUS	
R503	C-1	FP562	B-5
R504	C-1	PS503	B-3
R505	C-1	RS501	B-2
R506	C-1	TEST POINTS	
R507	C-1	TP501	B-2
R508	D-1	TP502	D-1
R509	E-1	TP506	B-2
R510	E-2	TP507	A-2
R511	E-2	TP508	D-1



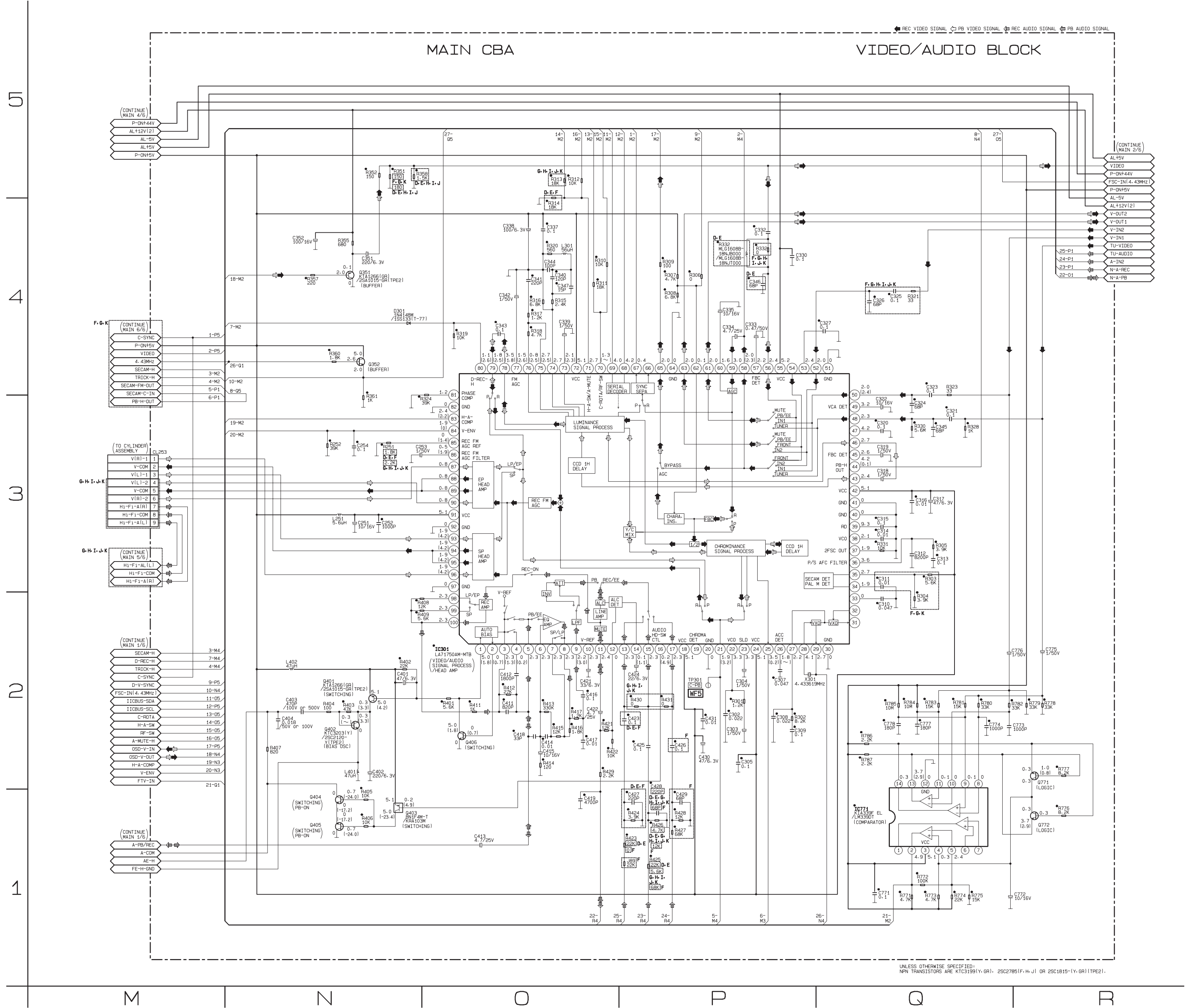
Comparison Chart of Models and Marks

MODEL	MARK
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

MAIN 2/6 Schematic Diagram Parts Location Guide

Ref No.	Position
CAPACITORS	
C151	J-2
C152	K-2
C154	K-2
C155	K-2
C156	K-2
C157	K-2
C158	K-2
C159	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
C715	J-4
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
D701	I-4
IC	
IC151	J-2
COILS	
L701	I-5
L702	J-4
L703	J-5
L704	I-4
L705	K-4
TRANSISTORS	
Q151	J-2
Q152	K-2
Q153	L-2
RESISTORS	
R151	J-2
R153	K-2
R154	K-2
R155	J-2
R157	K-2
R158	K-2
R410	H-1
R701	I-4
R702	I-4
R703	I-4
R706	J-4
R709	K-4
MISCELLANEOUS	
TU701	J-5
TEST POINT	
TP751	I-2

Main 3/6 Schematic Diagram



Comparison Chart of Models and Marks

MODEL	MARK
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

MAIN 3/6 Schematic Diagram Parts Location Guide

Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS			CAPACITORS		
C251	N-3	C425	P-2	R321	Q-4
C252	N-3	C426	P-2	R323	Q-4
C253	O-3	C427	P-1	R324	Q-3
C254	N-3	C428	P-1	R328	Q-3
C302	P-2	C429	P-1	R330	Q-3
C303	P-2	C430	P-2	R331	Q-3
C304	P-2	C431	P-2	R332	P-4
C305	P-2	C756	I-1	R351	N-5
C307	P-2	C757	I-1	R352	N-5
C308	P-2	C771	Q-1	R355	N-4
C309	P-2	C772	R-1	R357	N-4
C310	Q-2	C773	R-2	R358	O-5
C311	Q-3	C774	Q-2	R360	N-4
C312	Q-3	C775	R-2	R361	N-3
C313	Q-3	C776	Q-2	R401	O-2
C314	Q-3	C777	Q-2	R402	N-2
C315	Q-3	C778	Q-2	R403	N-2
C316	Q-3	CONNECTORS		R404	N-2
C317	Q-3	CL253	M-3	R405	N-1
C318	Q-3	DIODE		R406	N-1
C319	Q-3	D301	N-4	R407	N-2
C320	Q-3	ICS		R408	O-2
C321	Q-3	IC301	O-2	R409	O-2
C322	Q-3	IC771	Q-1	R411	O-2
C323	Q-4	COILS		R412	O-2
C324	Q-3	L251	N-3	R413	O-2
C325	Q-4	L301	O-4	R414	O-2
C326	Q-4	L401	N-2	R415	O-2
C327	Q-4	L402	N-2	R416	O-2
C330	P-4	TRANSISTORS		R417	O-2
C332	P-4	Q351	N-4	R421	O-2
C333	P-4	Q352	N-4	R422	O-2
C334	P-4	Q401	N-2	R423	P-1
C335	P-4	Q402	N-2	R424	P-1
C337	O-4	Q403	N-1	R425	P-1
C338	O-4	Q404	N-1	R426	P-1
C339	O-4	Q405	N-1	R427	P-1
C340	O-4	Q406	O-2	R428	P-1
C341	O-4	Q771	R-2	R429	O-2
C342	O-4	Q772	R-1	R430	P-2
C343	O-4	RESISTORS		R431	P-2
C344	O-4	J89	P-1	R771	Q-1
C345	Q-4	R251	O-3	R772	Q-1
C346	P-4	R252	N-3	R773	Q-1
C347	O-4	R301	P-2	R774	Q-1
C351	N-4	R302	P-2	R775	Q-1
C352	N-4	R303	Q-3	R776	R-2
C401	N-2	R304	Q-2	R777	R-2
C402	N-2	R305	Q-3	R778	R-2
C403	N-2	R306	P-4	R779	R-2
C404	N-2	R307	P-4	R780	Q-2
C411	O-2	R308	P-4	R781	Q-2
C412	O-2	R309	P-4	R782	Q-2
C413	O-1	R310	O-4	R783	Q-2
C414	O-2	R311	O-4	R784	Q-2
C415	O-2	R312	O-5	R785	Q-2
C416	O-2	R313	O-5	R786	Q-2
C417	O-2	R314	O-4	R787	Q-2
C418	O-2	R315	O-4	CRYSTAL OSCILLATORS	
C419	O-1	R316	O-4	X301	P-2
C421	O-2	R317	O-4	TEST POINT	
C422	O-2	R318	O-4	TP301	P-2
C423	P-2	R319	O-4		
C424	P-2	R320	O-4		

Main 4/6 Schematic Diagram

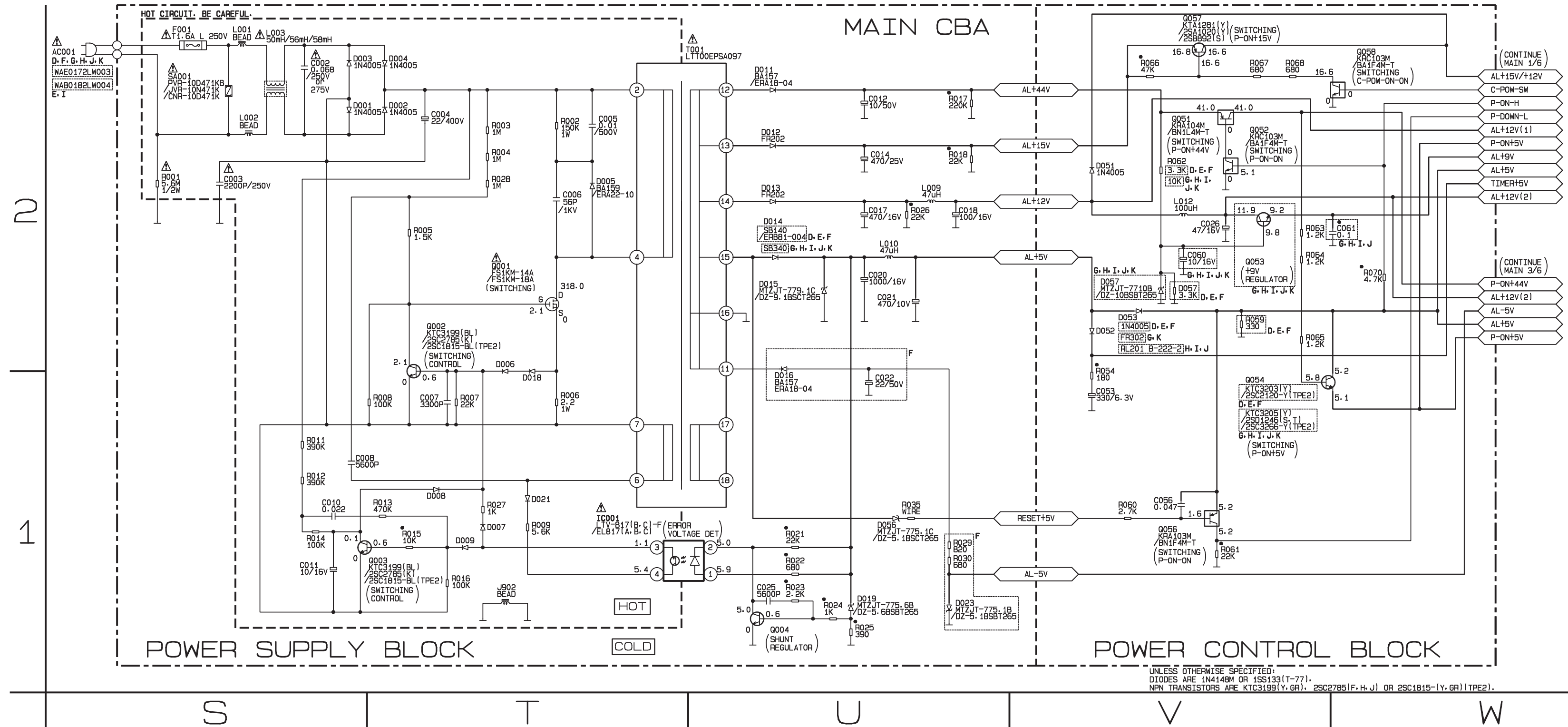
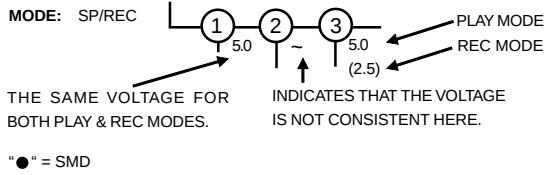
Comparison Chart of Models and Marks

MODEL	MARK
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

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.

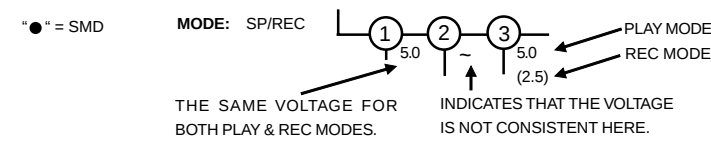
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply
circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in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



3

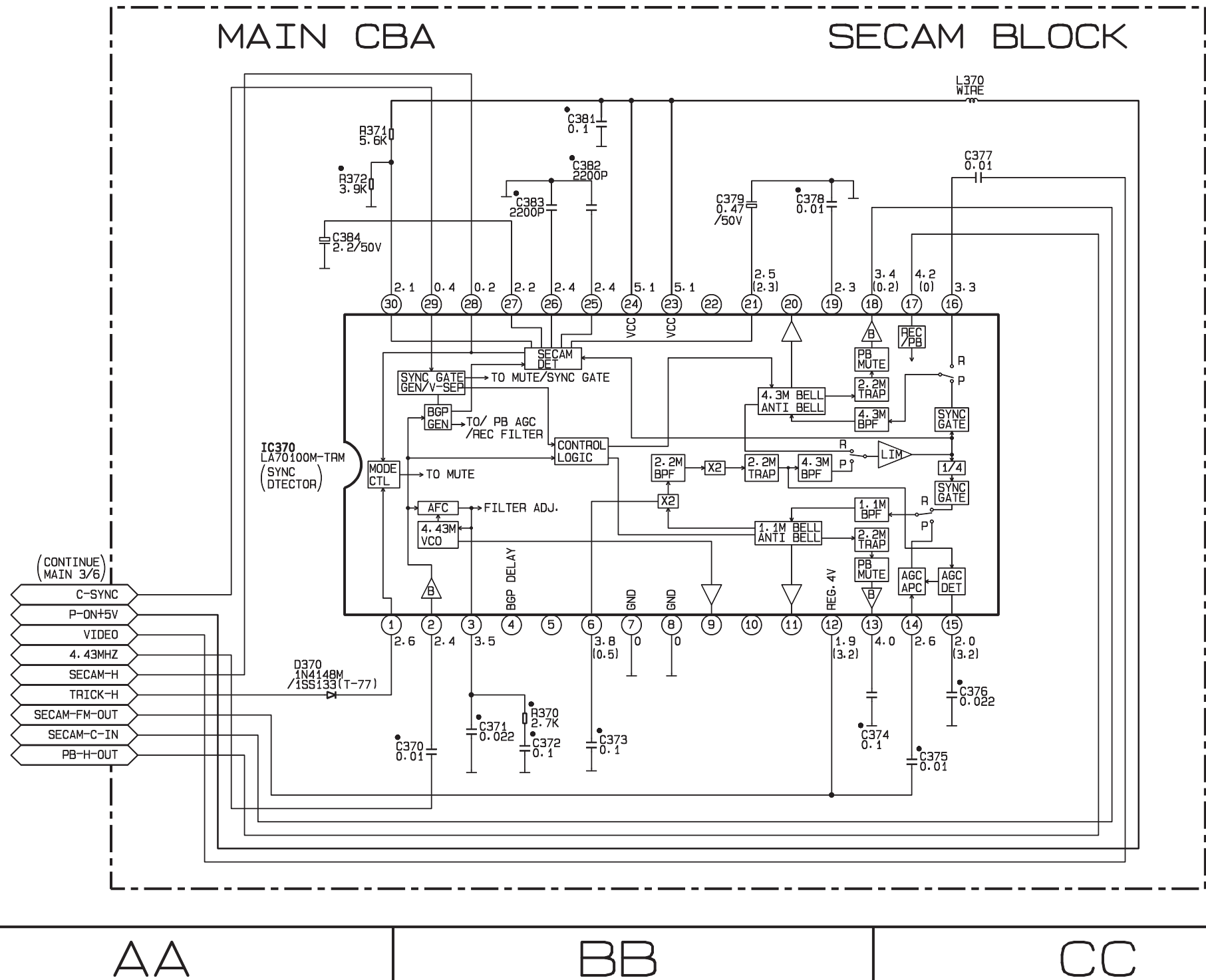


Main 6/6 Schematic Diagram (F, G,K)



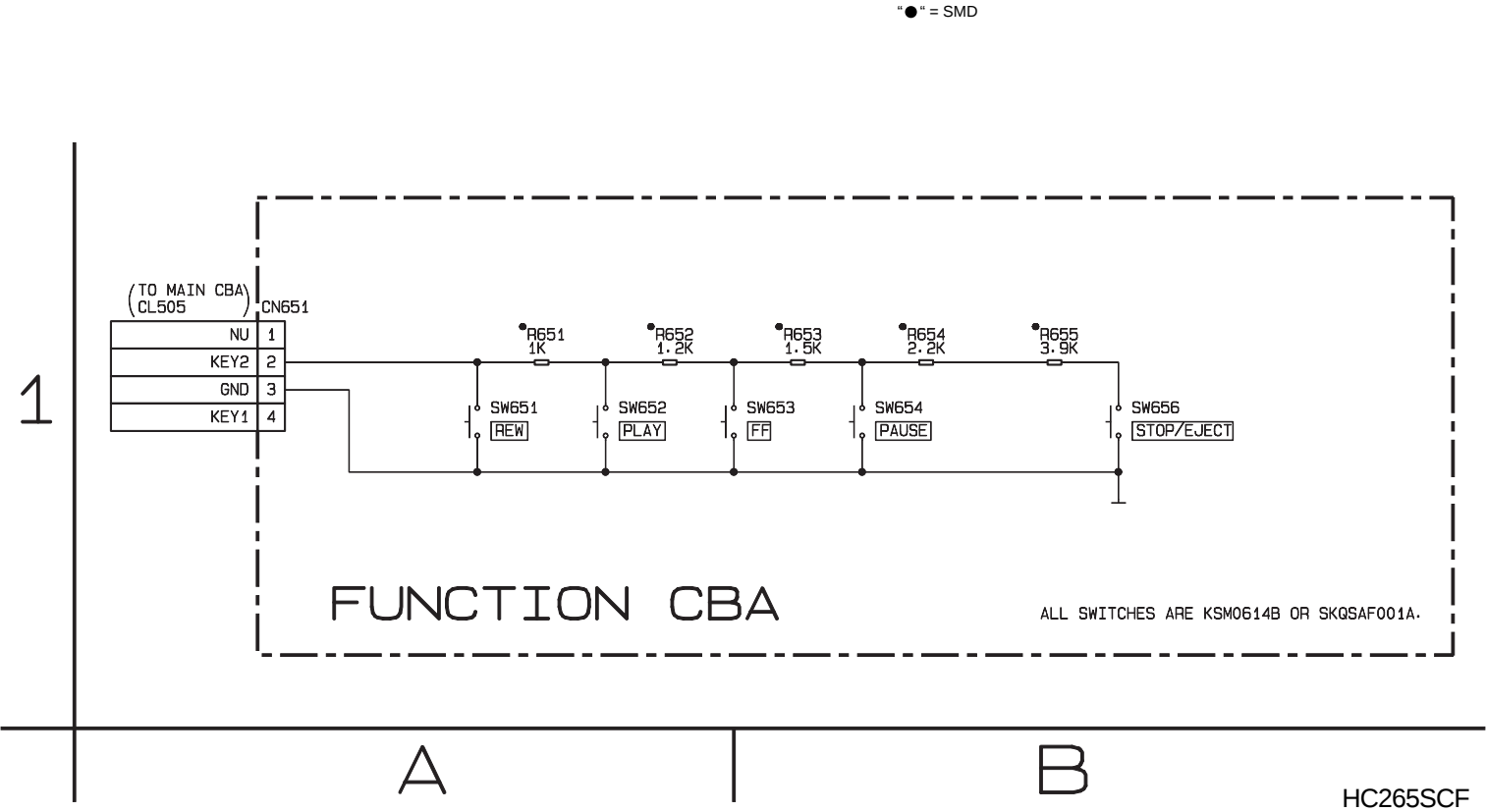
Comparison Chart of Models and Marks

MODEL	MARK
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K



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

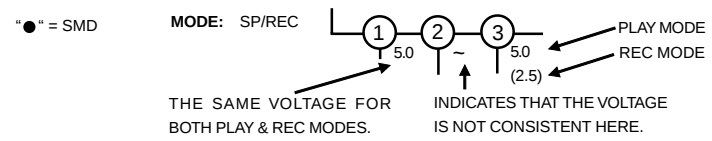
Function Schematic Diagram



Function Schematic Diagram
Parts Location Guide

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

AFV Schematic Diagram (G, H, I, J,K)



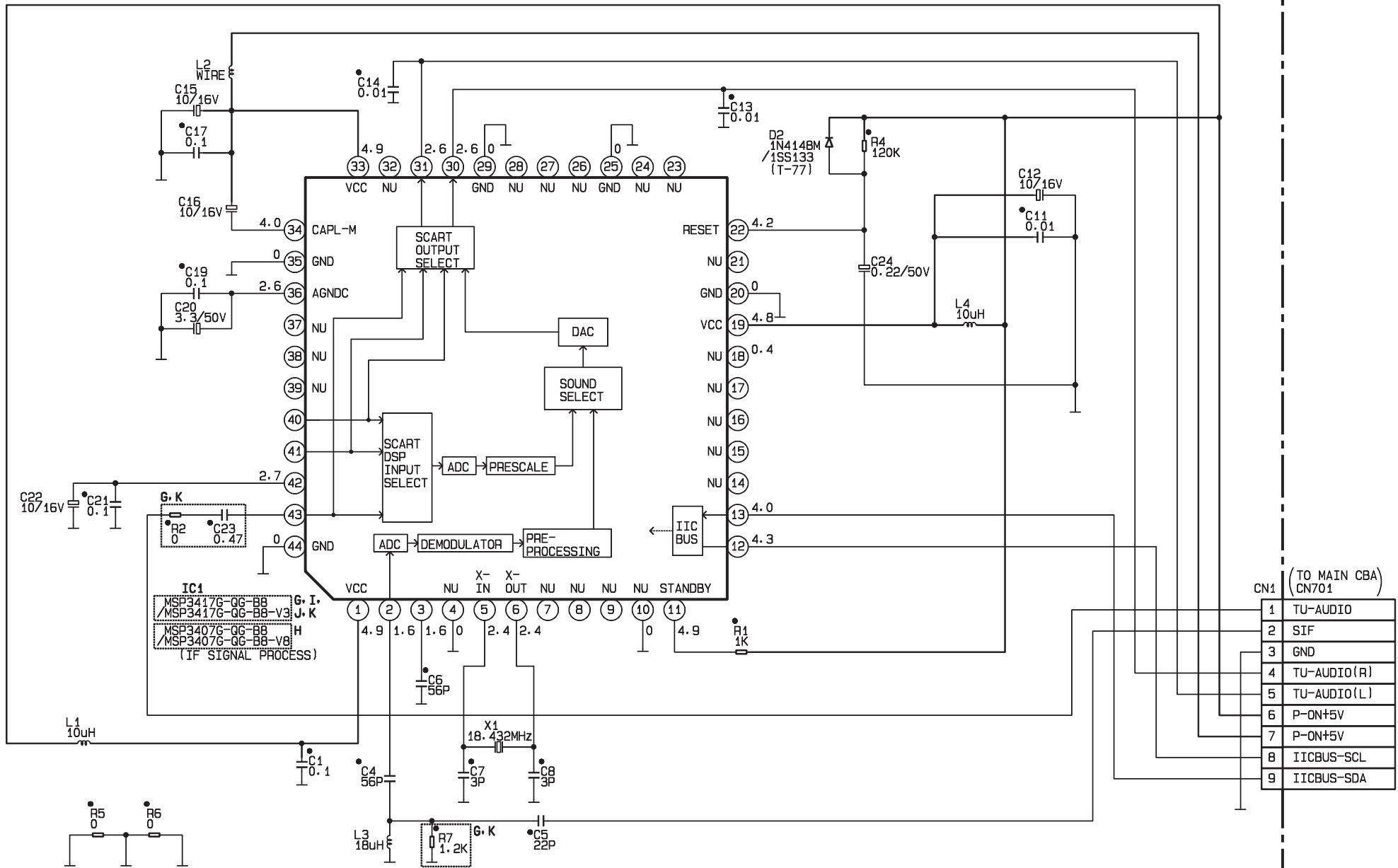
Comparison Chart of Models and Marks

MODEL	MARK	MODEL	MARK
VR330/02	D	VR630/02	H
VR330/07	E	VR630/07	I
VR330/39	F	VR630/16	J
VR530/39	G	VR630/39	K

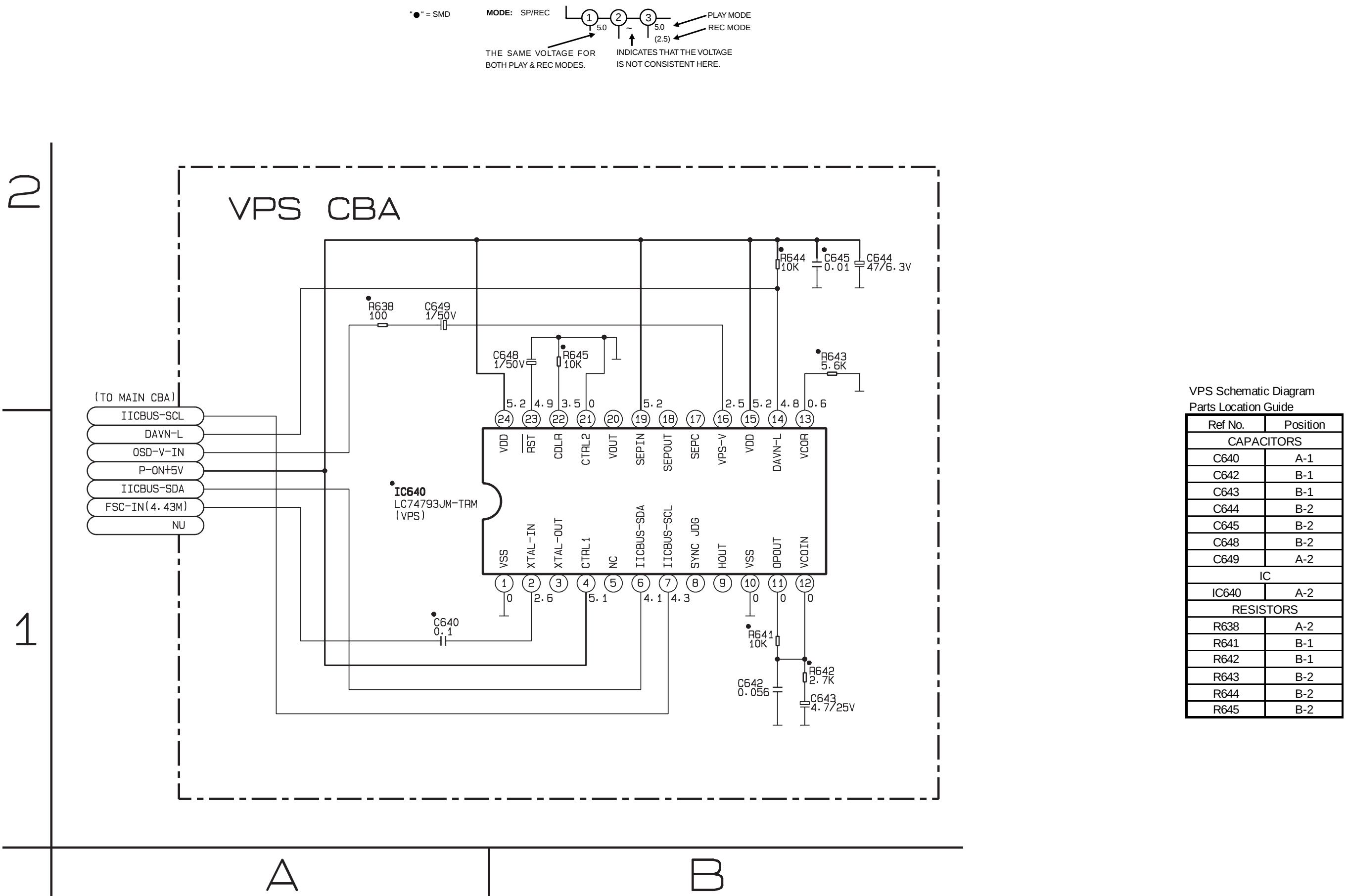
AFV Schematic Diagram
Parts Location Guide (G,H,I,J,K)

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

AFV CBA



VPS Schematic Diagram



3



Ref No.	Position	Ref No.	Position
CAPACITORS		RESISTORS	
C101	C-3	R101	C-3
C102	C-3	R102	C-3
C103	C-3	R103	C-3
C104	C-2	R104	C-3
C105	C-2	R105	C-3
C107	C-2	R106	C-3
C108	C-2	R107	C-2
C109	B-2	R108	C-2
C110	B-2	R109	C-2
C111	B-1	R110	C-2
C112	B-1	R111	B-2
C113	C-1	R112	B-2
C115	B-3	R113	B-1
C116	B-3	R114	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
Q102	B-1		

Main CBA Top View

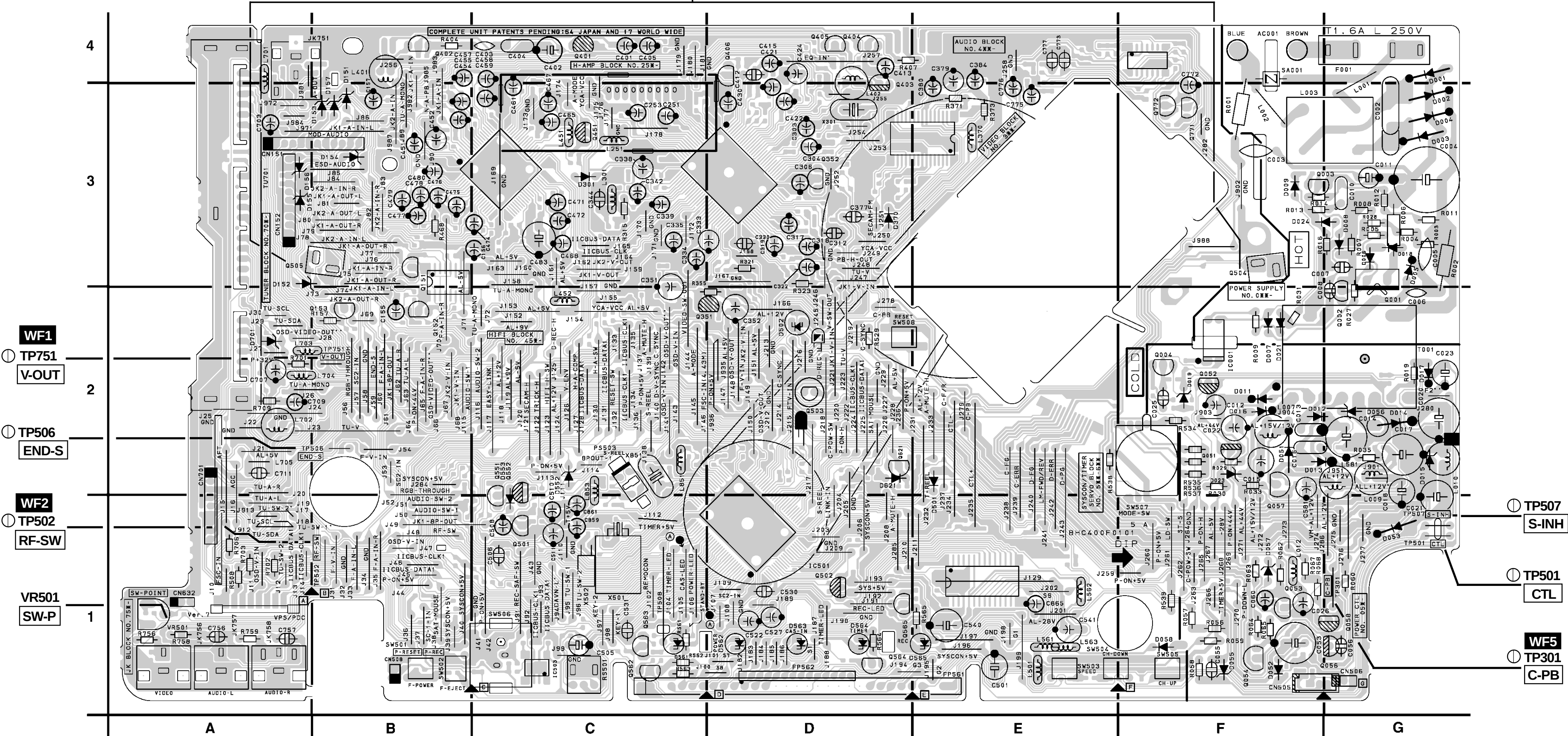
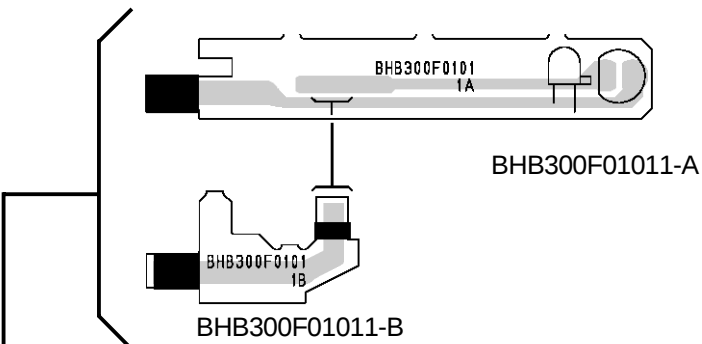
BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

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

CAUTION !
Fixed voltage 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



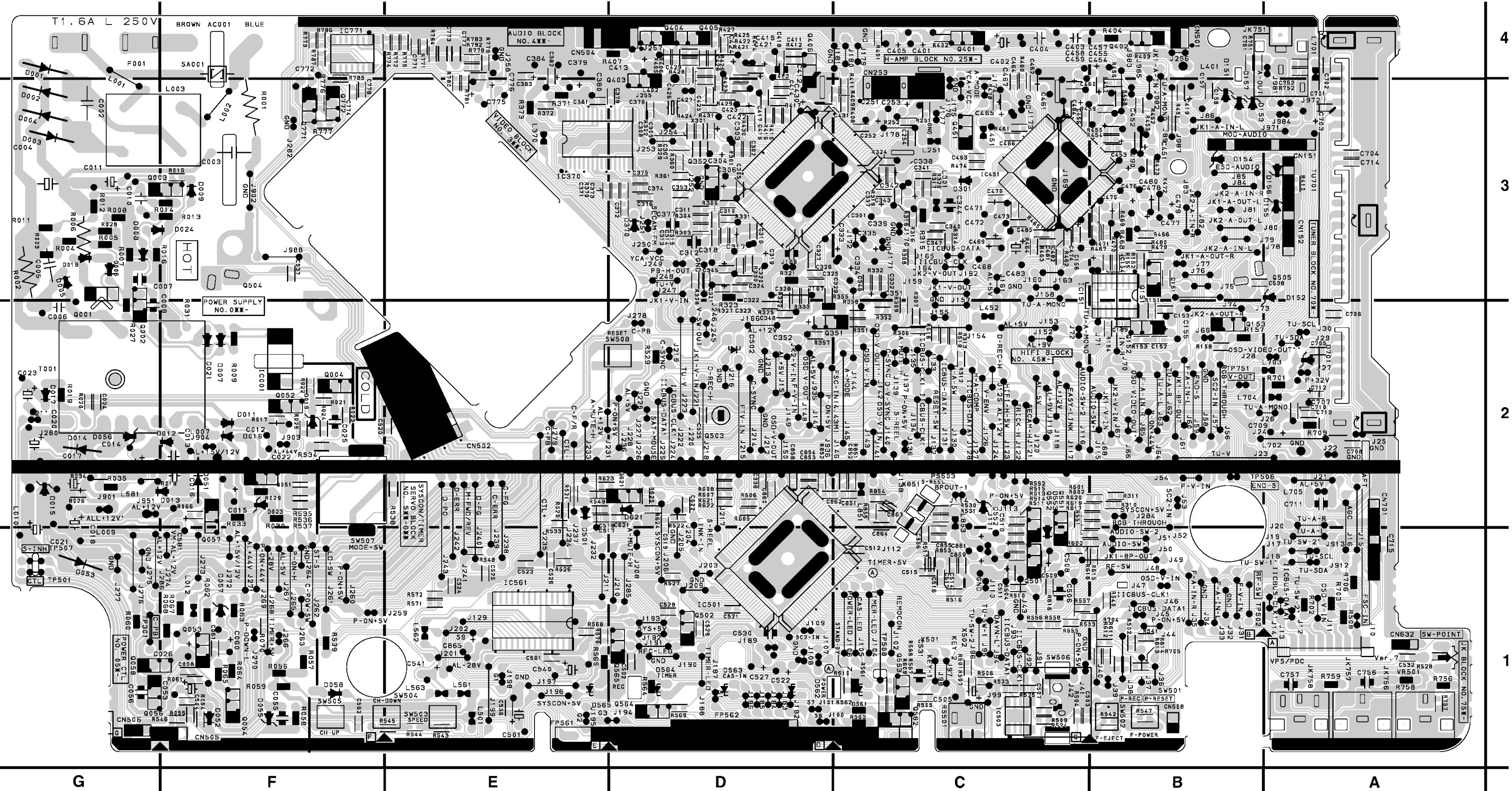
Main CBA Bottom View

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 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.



Main CBA Parts Location Guide

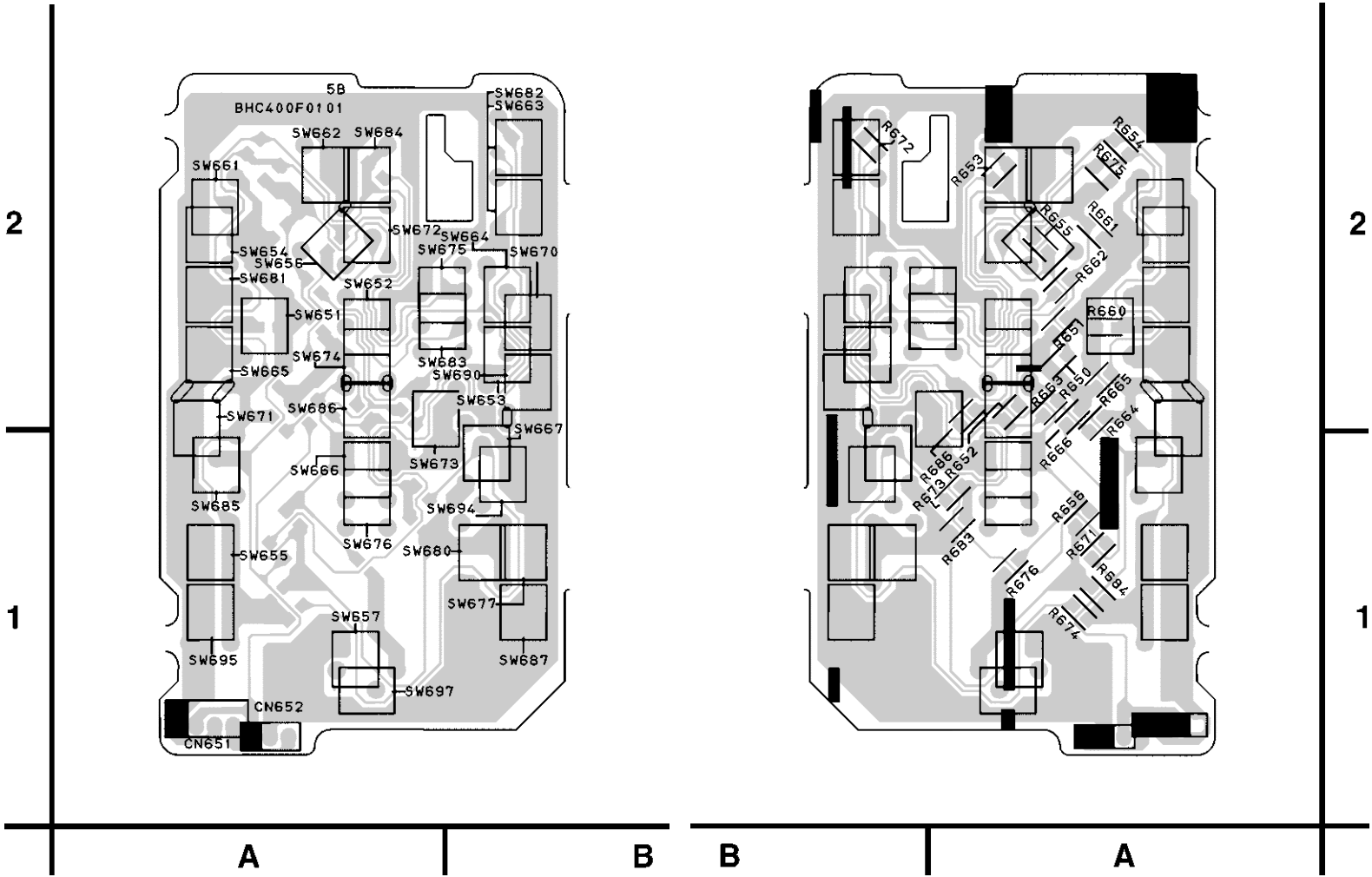
Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position	Ref No.	Position
CAPACITORS		CAPACITORS		CAPACITORS		CONNECTORS		ICS		RESISTORS		RESISTORS		RESISTORS		RESISTORS	
C002	G-3	C338	C-3	C466	C-3	C776	E-3	IC370	E-3	R002	G-3	R319	C-3	R473	B-3	R616	C-1
C003	F-3	C339	C-3	C467	C-3	C777	E-4	IC451	C-3	R003	G-3	R320	C-3	R474	C-3	R619	C-2
C004	G-3	C340	C-3	C468	C-3	C778	F-3	IC501	D-1	R004	G-3	R321	D-3	R479	B-3	R620	C-2
C005	G-3	C341	C-3	C469	C-3	C851	C-2	IC503	C-1	R005	G-3	R323	D-2	R480	B-3	R701	A-2
C006	G-2	C342	C-3	C470	C-3	C852	C-2	IC561	E-1	R006	G-3	R324	C-3	R501	C-1	R702	A-1
C007	F-3	C343	C-3	C471	C-3	C853	D-2	IC771	F-4	R007	G-3	R328	D-3	R502	B-1	R703	A-1
C008	F-2	C344	C-3	C472	C-3	C854	D-2	COILS		R008	G-3	R330	D-3	R503	C-1	R706	A-1
C010	G-3	C345	D-3	C473	C-3	C855	C-1	J902	F-3	R009	F-2	R331	D-3	R504	C-1	R709	A-2
C011	G-3	C346	C-3	C474	C-3	C856	C-1	L001	G-4	R011	G-3	R332	D-3	R505	C-1	R771	E-4
C012	F-2	C347	C-3	C475	B-3	C858	D-2	L002	F-3	R012	G-3	R351	C-2	R506	C-1	R772	E-4
C014	G-2	C351	C-3	C476	B-3	C859	C-1	L003	F-3	R013	F-3	R352	C-2	R507	C-1	R773	F-4
C017	G-2	C352	D-2	C477	B-3	C862	D-2	L009	G-1	R014	F-3	R355	C-2	R508	A-1	R774	E-4
C018	G-1	C370	D-3	C478	B-3	CONNECTORS		L010	G-2	R015	F-3	R357	D-2	R509	C-1	R775	E-4
C020	G-2	C371	E-3	C479	B-3	CL151	A-3	L012	F-1	R016	F-3	R358	C-3	R510	C-1	R776	F-4
C021	G-1	C372	D-3	C480	B-3	CL152	A-3	L251	C-3	R017	F-2	R360	D-3	R511	C-2	R777	F-3
C022	F-2	C373	E-3	C481	C-3	CL253	C-4	L301	C-3	R018	F-2	R361	D-3	R513	C-2	R778	E-4
C025	F-2	C374	D-3	C482	C-3	CL501	B-4	L370	E-3	R021	F-2	R370	E-3	R514	C-2	R779	E-4
C026	F-1	C375	D-3	C483	C-3	CL502	E-2	L401	B-4	R022	F-2	R371	E-3	R516	C-1	R780	E-4
C053	F-1	C376	D-3	C484	C-3	CL504	E-4	L402	D-3	R023	F-2	R372	E-3	R517	C-1	R781	E-4
C056	G-1	C377	D-3	C485	C-3	CL505	F-1	L451	C-3	R024	F-2	R401	C-4	R518	C-2	R782	E-4
C060	F-1	C378	D-3	C501	E-1	CL508	B-1	L452	C-2	R025	F-2	R402	C-4	R519	C-2	R783	E-4
C061	F-1	C379	E-4	C502	D-1	CL509	B-1	L501	E-1	R026	G-2	R403	B-4	R520	E-2	R784	E-4
C151	B-3	C381	E-3	C506	C-1	CN701	A-2	L561	E-1	R027	G-2	R404	B-4	R521	E-2	R785	F-4
C152	B-2	C382	E-4	C508	C-1	DIODES		L562	E-1	R028	G-3	R405	D-4	R522	D-2	R786	F-4
C154	B-3	C383	E-3	C510	C-2	D001	G-4	L701	A-4	R029	F-2	R406	D-4	R523	C-1	R787	F-4
C155	B-2	C384	E-4	C511	C-1	D002	G-3	L702	A-2	R030	F-2	R407	D-4	R524	C-1	R851	C-2
C156	C-3	C401	C-4	C512	C-1	D003	G-3	L703	A-2	R035	G-2	R408	C-3	R525	C-1	R852	D-2
C157	B-4	C402	C-4	C513	C-1	D004	G-3	L704	B-2	R054	F-1	R409	C-3	R526	E-1	R853	C-1
C158	B-3	C403	C-4	C514	C-1	D005	G-3	L705	A-2	R059	F-1	R410	A-3	R527	D-1	SWITCHES	
C159	B-2	C404	C-4	C515	C-1	D006	G-3	L851	C-2	R060	G-1	R411	C-4	R528	A-1	SW501	B-1
C251	C-3	C411	D-4	C516	C-1	D007	F-2	L853	C-1	R061	F-1	R412	D-4	R529	D-2	SW502	B-1
C252	C-3	C412	D-4	C517	E-2	D008	G-3	TRANSISTORS		R062	F-1	R413	D-4	R530	C-2	SW504	E-1
C253	C-3	C413	D-4	C518	E-2	D009	F-3	Q001	G-2	R063	F-1	R414	D-4	R531	C-2	SW505	F-1
C254	C-3	C414	D-4	C519	D-1	D011	F-2	Q002	G-2	R064	F-1	R415	D-3	R533	E-2	SW506	C-1
C302	D-3	C415	D-4	C520	D-1	D012	F-2	Q003	F-3	R065	F-1	R416	D-3	R534	F-2	SW507	F-1
C303	D-3	C416	D-3	C521	D-1	D013	F-2	Q004	F-2	R066	F-2	R417	D-3	R535	F-2	SW510	B-1
C304	D-3	C417	D-3	C522	D-1	D014	G-2	Q051	F-2	R067	F-1	R421	D-4	R536	F-2	VARIABLE RESISTORS	
C305	D-3	C418	D-4	C523	E-1	D015	G-2	Q052	F-2	R068	F-1	R422	D-4	R537	F-1	VR501	A-1
C307	D-3	C419	D-3	C524	E-1	D016	F-2	Q053	F-1	R070	F-1	R423	D-3	R538	E-2	CRYSTAL OSCILLATORS	
C308	D-3	C421	D-4	C526	E-1	D018	G-3	Q054	F-1	R151	B-2	R424	D-3	R539	F-1	X301	D-3
C309	D-3	C422	D-3	C527	D-1	D019	F-2	Q056	F-1	R153	B-2	R425	D-4	R540	B-1	X501	C-1
C310	D-3	C423	D-3	C529	D-1	D021	F-2	Q057	F-1	R154	B-2	R426	D-4	R541	B-1	X502	C-1
C311	D-3	C424	D-4	C530	D-1	D023	F-2	Q058	G-1	R155	B-3	R427	D-4	R542	B-1	MISCELLANEOUS	
C312	D-3	C425	D-3	C531	C-1	D051	F-2	Q151	B-3	R157	B-2	R428	D-4	R543	E-1	AC001	F-4
C313	D-3	C426	D-3	C535	D-2	D052	F-1	Q152	B-2	R158	B-2	R429	D-3	R544	E-1	F001	G-4
C314	D-3	C427	D-3	C538	A-3	D053	G-1	Q153	B-2	R251	C-3	R430	D-3	R545	F-1	FP562	D-1
C315	D-3	C428	D-4	C540	E-1	D056	G-2	Q351	C-2	R252	C-3	R431	D-3	R546	G-1	PS503	C-2
C316	D-3	C429	D-3	C541	E-1	D057	F-1	Q352	D-3	R301	D-3	R451	B-3	R547	B-1	RS501	C-1
C317	D-3	C430	D-3	C561	E-1	D151	B-4	Q401	C-4	R302	D-3	R452	B-3	R551	C-2	SA001	F-4
C318	D-3	C431	C-3	C622	D-2	D152	A-3	Q402	B-4	R303	D-3	R453	B-3	R552	C-2	T001	G-2
C319	D-3	C451	B-3	C701	A-3	D153	B-3	Q403	D-4	R304	D-3	R454	B-3	R555	C-1	TU701	A-3
C320	D-3	C452	B-3	C702	A-4	D154	B-3	Q404	D-4	R305	D-3	R455	B-3	R556	C-1	TEST POINTS	
C321	D-3	C453	B-3	C703	A-3	D155	A-3	Q405	D-4	R306	C-2	R456	B-4	R557	C-1	TP301	G-1
C322	D-3	C454	B-4	C704	A-3	D156	A-3	Q406	D-4	R307	C-3	R457	B-3	R558	C-1	TP501	G-1
C323	D-2	C455	B-4	C706	A-2	D301	C-3	Q451	C-3	R308	C-3	R460	C-4	R566	E-1	TP502	B-1
C324	D-3	C456	C-3	C707	A-2	D370	D-3	Q501	C-1	R309	C-3	R461	C-3	R601	C-2	TP506	A-2
C325	D-3	C457	B-4	C708	A-2	D501	E-1	Q502	D-1	R310	B-2	R462	C-3	R604	C-1	TP507	G-1
C326	D-3	C458	C-4	C709	A-2	D502	D-2	Q503	D-2	R311	B-2	R463	C-3	R605	D-2	TP508	C-1
C327	D-3	C459	C-4	C710	A-2	D552	C-2	Q551	C-2	R312	C-2	R464	C-3	R606	D-2	TP751	B-2
C330	D-3	C460	C-3	C715	A-1	D553	C-2	Q552	C-2	R313	C-2	R465	C-3	R607	D-2		
C332	C-3	C461	C-3	C771	E-4	D701	A-2	Q771	F-3	R314	C-3	R466	B-3	R609	C-1		
C333	C-3	C462	C-4	C772	F-4	ICS		Q772	F-3	R315	C-3	R467	B-3	R610	C-1		
C334	C-3	C463	C-3	C773	E-4	IC001	F-2	RESISTORS		R316	C-3	R468	B-3	R612	B-1		
C335	C-3	C464	C-4	C774	F-3	IC151	C-3	J89	B-3	R317	C-3	R469	B-3	R614	B-1		
C337	C-3	C465	C-3	C775	E-3	IC301	C-3	R001	F-3	R318	C-3	R472	B-3	R615	B-1		

Comparison Chart of Models and Marks

MODEL	MARK
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

Function CBA Top View

Function CBA Bottom View



Function CBA Parts Location Guide

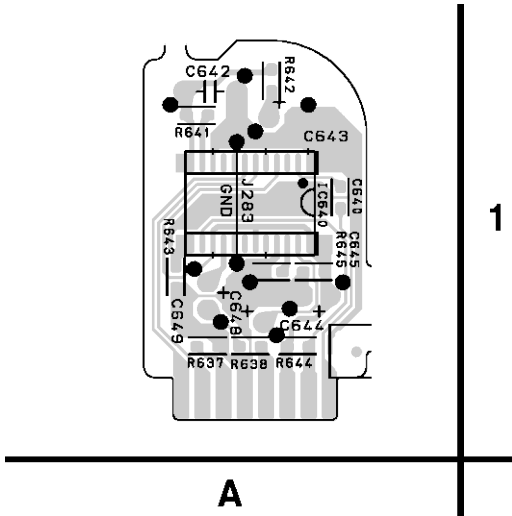
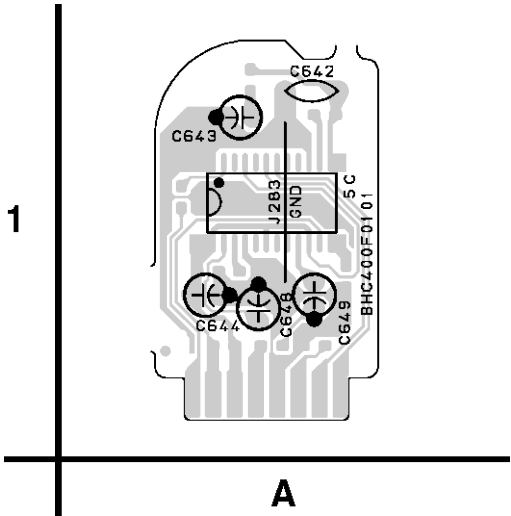
Ref No.	Position	Ref No.	Position
CONNECTORS		SWITCHES	
CN651	A-1	SW651	A-2
RESISTORS		SW652	A-2
R651	A-2	SW653	B-2
R652	A-1	SW654	A-2
R653	A-2	SW656	A-2
R654	A-2		
R655	A-2		

BHC400F01015-B

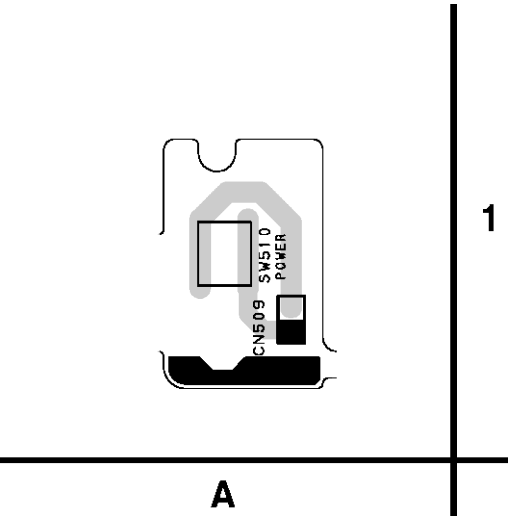
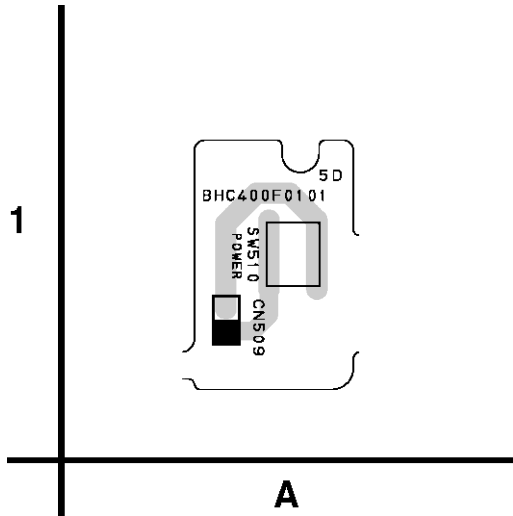
VPS CBA Top View

VPS CBA Bottom View

Power SW CBA Top View Power SW CBA Bottom View



BHC400F01015-C



BHC400F01015-D

VPS CBA Parts Location Guide

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

[illegible]

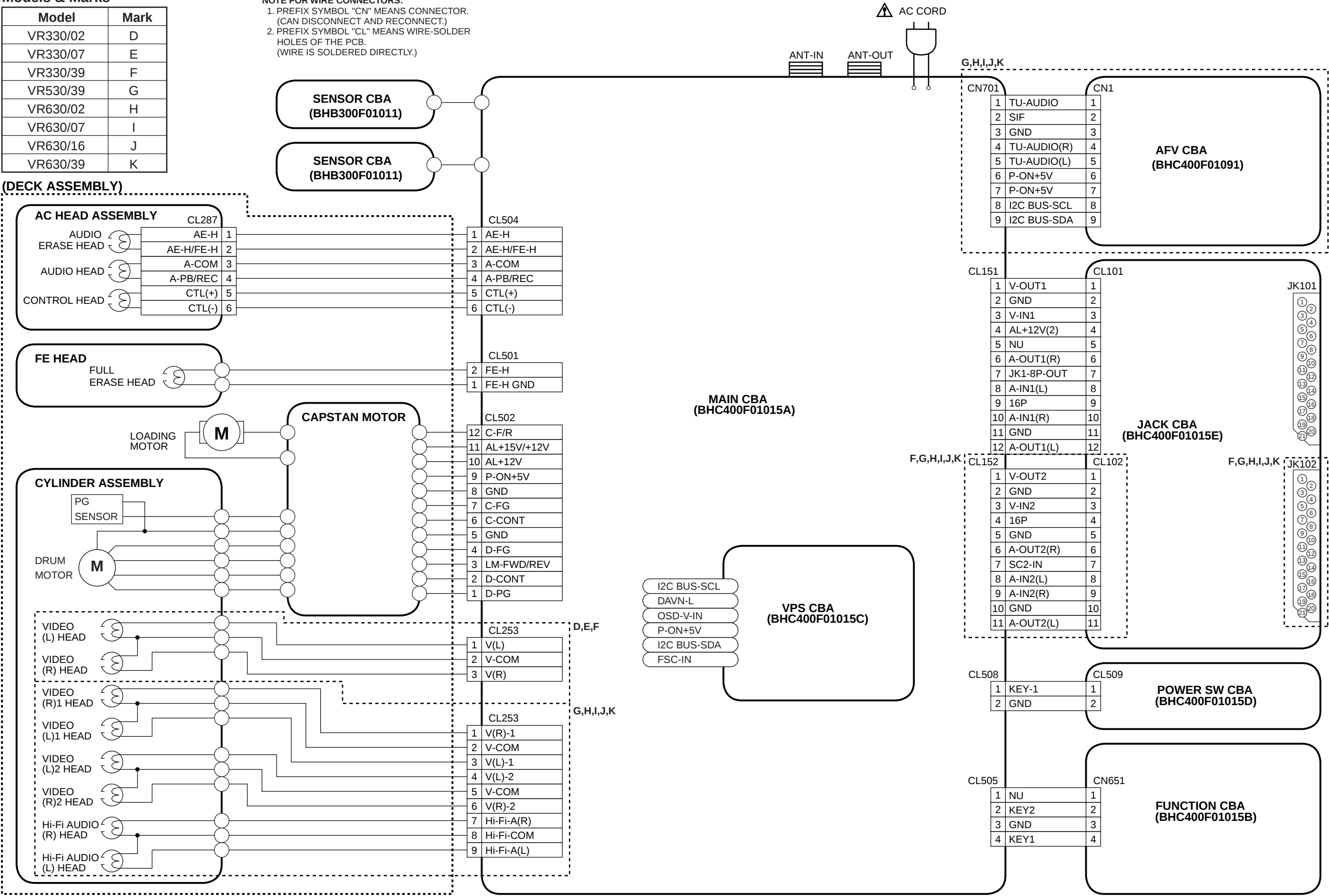
Ref No.	Position	Ref No.	Position
CAPACITORS		RESISTORS	
C101	C-1	R101	B-1
C102	B-1	R102	B-1
C103	C-1	R103	B-1
C104	C-1	R104	C-1
C105	C-1	R105	C-1
C106	C-1	R106	C-1
C107	B-1	R107	C-1
C108	B-1	R108	C-1
C109	A-1	R109	C-1
C110	A-1	R110	A-1
C111	A-1	R111	A-1
C112	A-1	R112	A-1
C113	A-1	R113	A-1
C115	C-1	R114	A-1
C116	C-1	R115	A-1
C117	B-1	R116	A-1
CONNECTORS		R117	A-1
CL101	C-1	R118	B-1
CL102	B-1	R119	B-1
DIODES		R120	C-1
D101	C-1	R123	C-1
D102	B-1	R125	B-1
D103	B-1	R126	B-1
D105	C-1	R127	B-1
COILS		R128	C-1
L101	C-1	MISCELLANEOUS	
L121	B-1	JK101	C-1
TRANSISTORS		JK102	A-1
Q101	C-1		
Q102	B-1		

Comparison Chart of Models & Marks

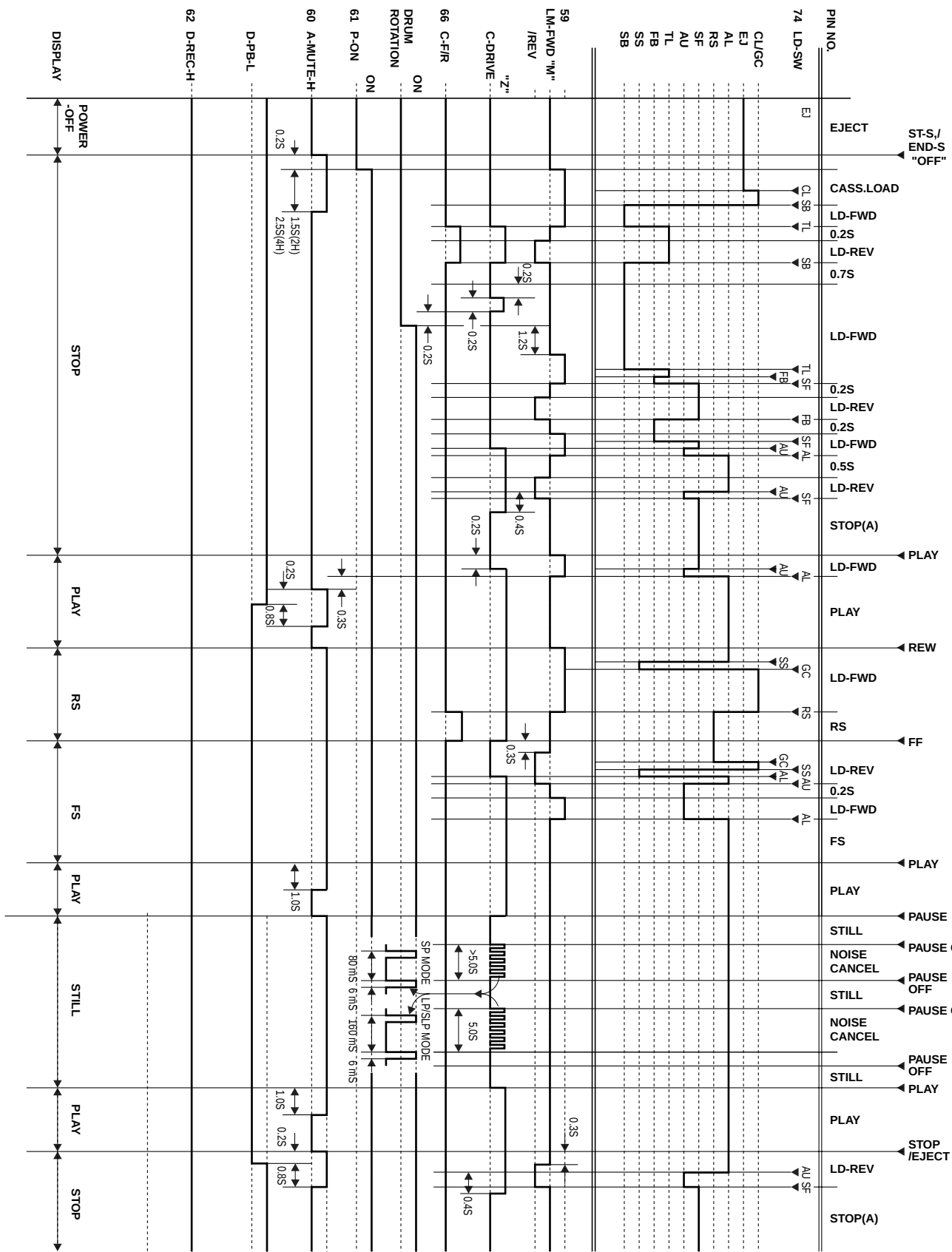
Model	Mark
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

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.)

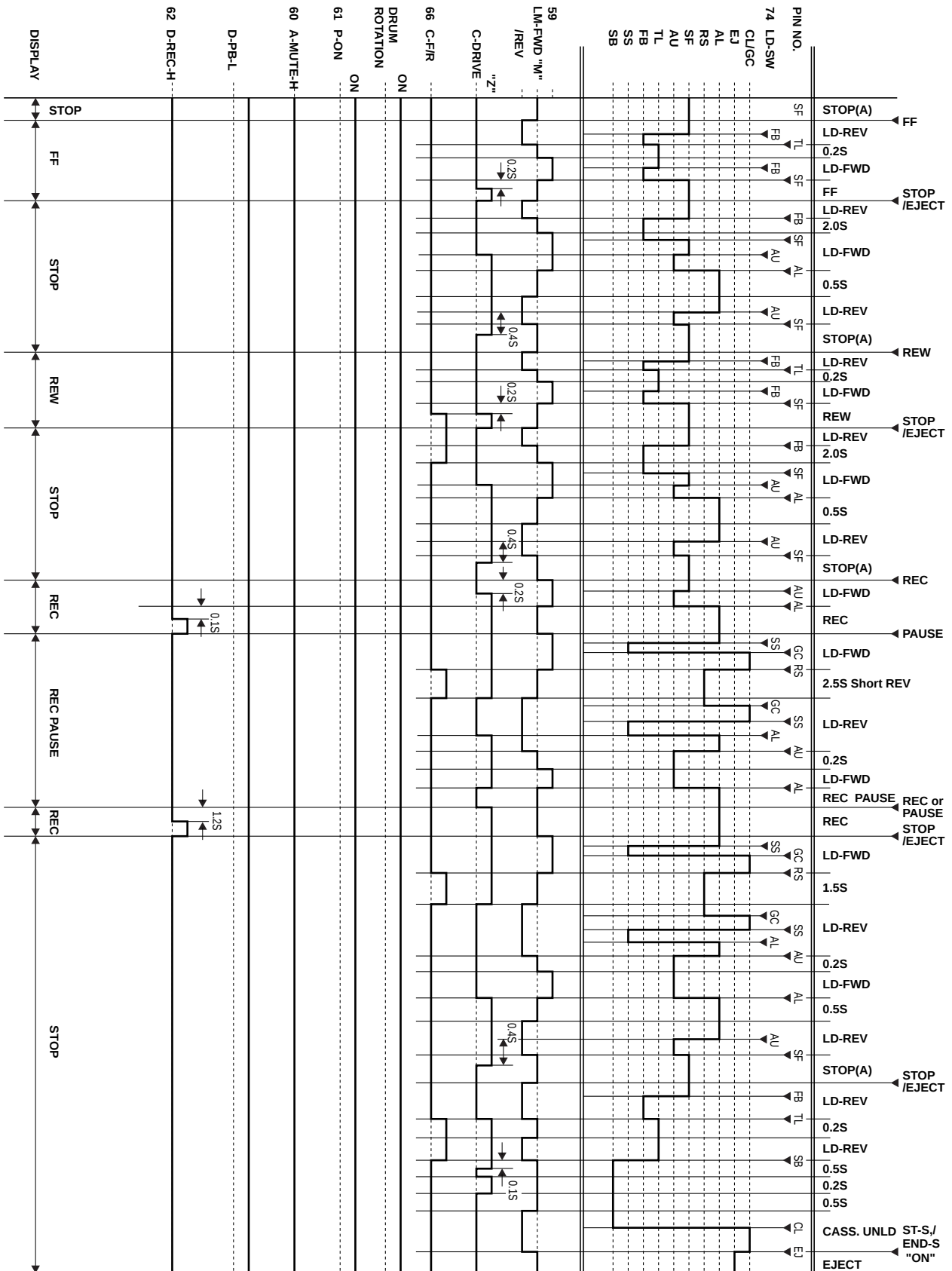
WIRING DIAGRAM



1. EJECT (POWER OFF) -> CASSETTE IN (POWER ON) -> STOP(B) -> STOP(A) -> PLAY -> RS -> FS -> PLAY -> STILL -> PLAY -> STOP(A)



2. STOP(A) -> FF -> STOP(A) -> REW -> STOP(A) -> REC -> PAUSE -> PAUSE or REC -> STOP(A) -> EJECT



[VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]

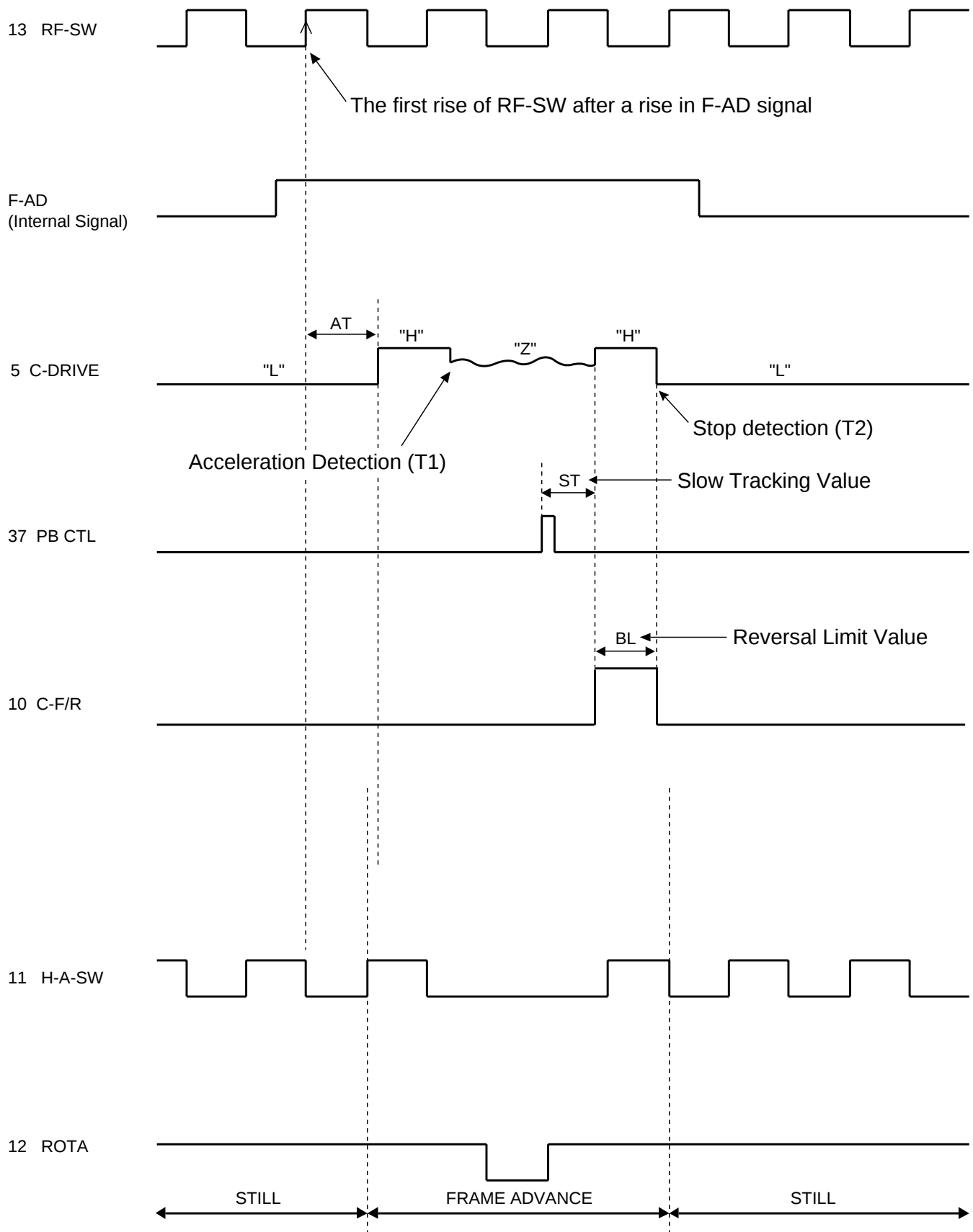


Fig. 3

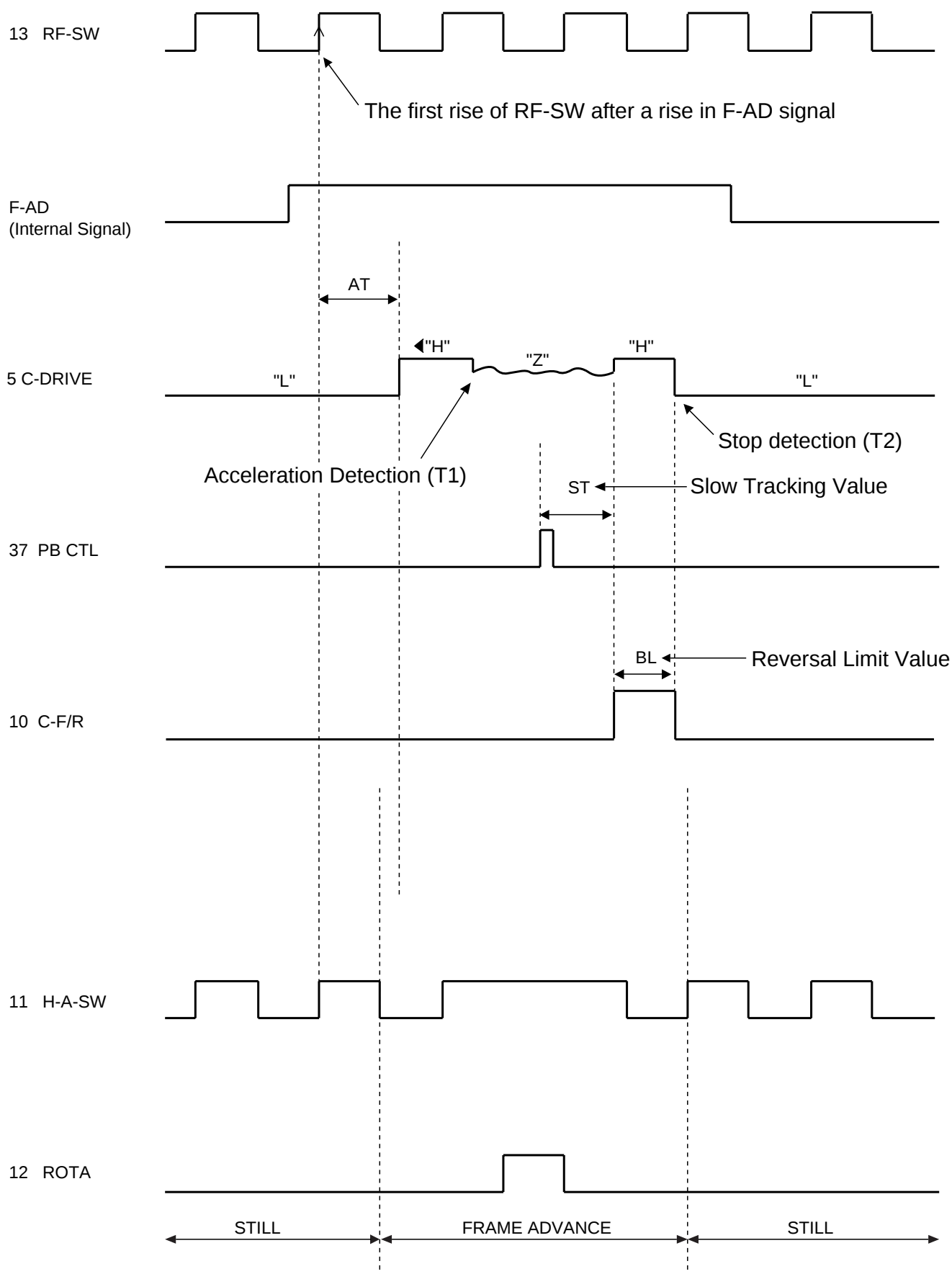
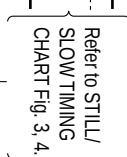


Fig. 4

ST-S,/
END-S
"OFF"



1-13-10

2. STOP(A) -> FF -> STOP(A) -> REW -> STOP(A) -> REC -> PAUSE -> PAUSE or REC -> STOP(A) -> EJECT

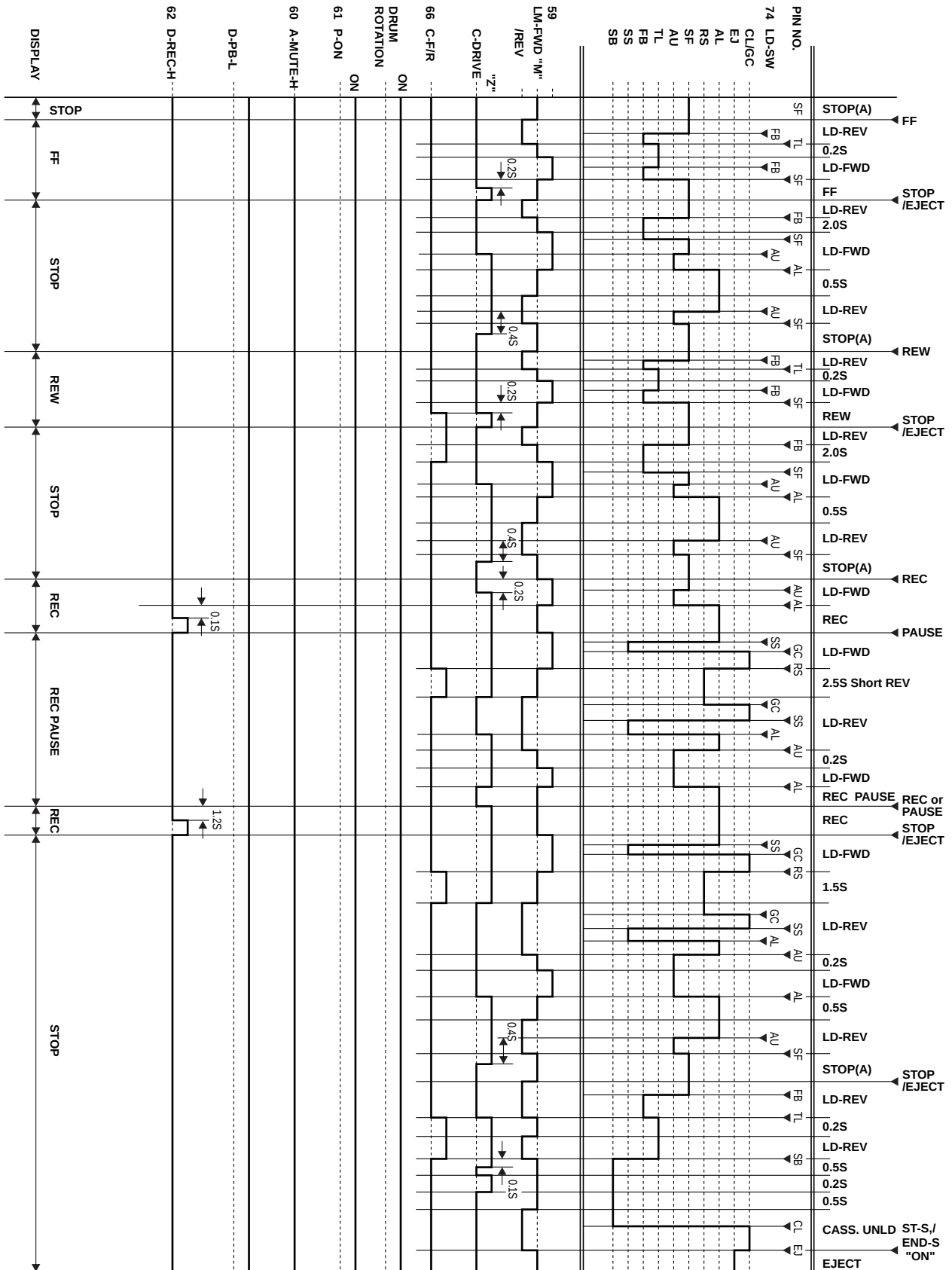


Fig. 6

[VR330/02,VR330/07,VR330/39,VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]

Comparison Chart of Models and Marks

Model	Mark
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

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	-
12		-	N.U.	Not Used	-
13		OUT	D-V-SYNC	Dummy V-sync Output	H/Hi-z

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
14		IN	REMOC ON-IN	Remote Control Sensor	L
15		OUT	C-ROTA	Color Phase Rotary Changeover Signal	H/L
16	D,E,F	-	N.U.	Not Used	-
	G,H,I,J,K	OUT	H-A-SW	Video Head Amp Switching Pulse	H/L
17	D,E,F	-	N.U.	Not Used	-
	G,H,I,J,K	IN	H-A-COMP	Head Amp Comparator Signal	H/L
18		OUT	RF-SW	Video Head Switching Pulse	H/L
19	D,E,F	-	N.U.	Not Used	-
	G,H,I,J,K	OUT	HiFi-H-SW	HiFi Audio Head Switching Pulse	H/L
20		IN	DAVN-L	VPS/PDC Data Receive = “L”	L
21		-	N.U.	Not Used	-
22		-	N.U.	Not Used	-
23		-	N.U.	Not Used	-
24		-	N.U.	Not Used	-
25		-	N.U.	Not Used	-
26		-	N.U.	Not Used	-
27		OUT	RGB-THROUGH	SCART 2 RGB Through Control Signal	L/Hi-z
28		-	N.U.	Not Used	-
29	D,E,G,H,I,J,K	OUT	AUDIO-SW1	Audio Input/ Output Switching Control Signal 1 (Mono)	Z/L
	F	-	N.U.	Not Used	-
30	D,E,G,H,I,J,K	OUT	AUDIO-SW2	Audio Input/ Output Switching Control Signal 2 (Mono)	Z/L
	F	-	N.U.	Not Used	-
31		IN	REC-SAF	Recording Safety SW Detect (With Record tab=“L”/ With out Record tab=“H”)	H

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
32	D,E, H,I,J	-	N.U.	Not Used	-
	F,G, K	IN	SECAM-H	SECAM Mode at High	H/L
33	D,E, H,I,J	-	N.U.	Not Used	-
	F,G, K	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	-
46		-	N.U.	Not Used	-
47		-	N.U.	Not Used	-
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	D,E, H,I,J	-	N.U.	Not Used	-
	F,G, K	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	-

Pin No.	Mark	IN/OUT	Signal Name	Function	Active Level
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	D,E, F	-	N.U.	Not Used	-
	G,H, I,J,K	IN	A-MODE	Hi-Fi Tape Detection Signal	L
62		OUT	SD-H	SD-H	-
63		-	N.U.	Not Used	-
64		IN	FTV-IN	Comparator Input of Video Signal for Follow TV	L/Hi-z
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		-	N.U.	Not Used	-
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

Pin No.	Mark	IN/ OUT	Signal Name	Function	Active Level
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
85		-	N.U.	Not Used	-
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		-	AMPVREF _{IN}	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

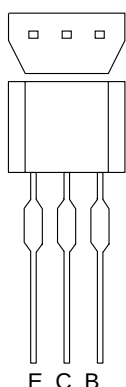
Notes:

Abbreviation for Active Level:

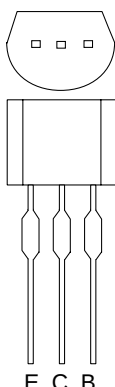
PWM -----Pulse Wide Modulation

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

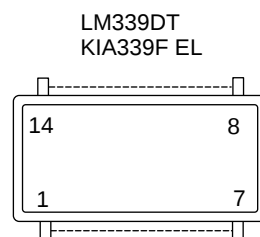
[VR330/02,VR330/07,VR330/39,VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]



BN1F4M-T
BA1F4M-T
KTA1266(GR)
KTC3199(Y,GR,BL)
2SC2785(J.H.F.K)
KRA103M
KRC103M
2SA1015-GR(TPE2)
KRA104M
2SD1246(S,T)
KTC3205(Y)
BN1L4M-T
KTA1281(Y)



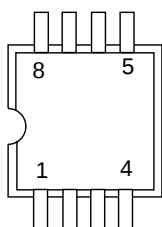
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2SC3266-Y (TPE2)
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KTC3203(Y)
2SC1815-BL(TPE2)
2SA1020(Y)
2SB892(S)



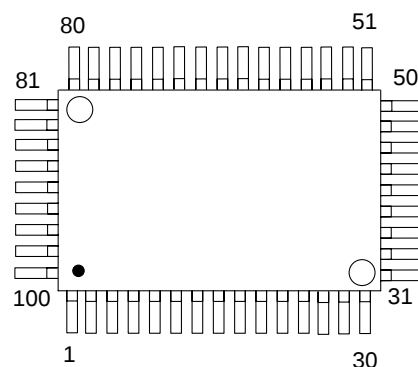
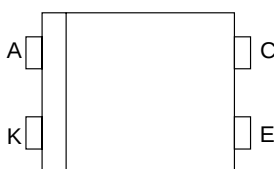
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KIA339F EL

LA71750AM-MTB
QSZAD0RMB101
QSZAE0RMB100

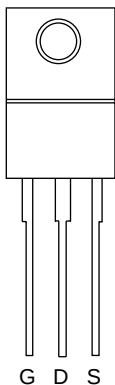
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M24C02-MN6



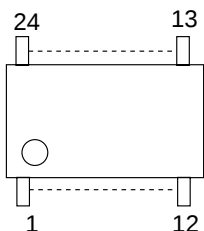
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EL817(A,B,C)



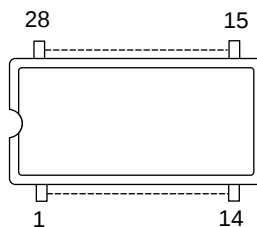
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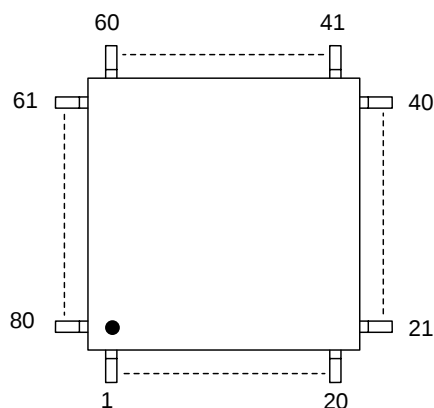
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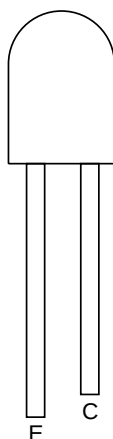
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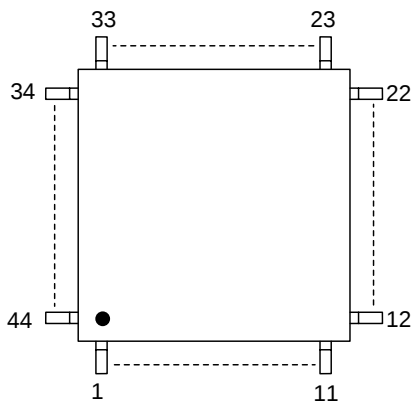
LA72646M-A-MPB



PT204-6B-12
MID-32A22



MSP3407G-QG-B8
MSP3407G-QG-B8-V8
MSP3417G-QG-B8
MSP3417G-QG-B8-V3



Note:

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

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
			MCV CBA	1							
			MCV CBA		1						
			MCV CBA			1					
			MCV CBA				1				
			MCV CBA					1			
			MCV CBA						1		
			MCV CBA							1	
			MCV CBA								1
Consists of the following											
			MAIN CBA (MCV-A CBA)	1	1	1	1	1	1	1	1
			FUNCTION CBA (MCV-B CBA)	1	1	1	1	1	1	1	1
			VPS CBA (MCV-C CBA)	1	1	1	1	1	1	1	1
			POWER SW CBA (MCV-D CBA)	1	1	1	1	1	1	1	1
			JACK CBA (MCV-E CBA)	1	1	1	1	1	1	1	1
			SENSOR CBA	1	1	1	1	1	1	1	1
			AFV CBA								
			MAIN CBA (MCV-A CBA)	1	1	1	1	1	1	1	1
2B7		9965 000 12286	SHIELD ASSEMBLY HC460ED	1	1	1	1	1	1	1	1
2B8		9965 000 08566	BUSH, LED(F) H3700UD	1	1	1	1	1	1	1	1
2B46		9965 000 12173	ROHM HOLDER H7770JD	1	1	1	1	1	1	1	1
AC001	▲	9965 000 08666	AC CORD PE8B2CB1H0A-057	1		1	1	1		1	1
AC001	▲	9965 000 12174	AC CORD PQ8B1V51H0A-05B		1				1		
CAPACITORS											
C002	▲	9965 000 09743	METALLIZED FILM CAP. 0.068UF/250V M	1	1	1	1	1	1	1	1
C003	▲	9965 000 06522	SAFETY CAP. 2200PF/250V	1	1	1	1	1	1	1	1
C004		9965 000 06566	ELECTROLYTIC CAP. 22UF/400V M(L?Z) or	1	1	1	1	1	1	1	1
C005		4822 126 14142	CERAMIC CAP. B K 0.01UF/500V	1	1	1	1	1	1	1	1
C006		4822 126 14141	CERAMIC CAP. SL K 56PF/1KV or	1	1	1	1	1	1	1	1
C007			CERAMIC CAP.(AX) X K 3300PF/16V	1	1	1	1	1	1	1	1
C008			CERAMIC CAP.(AX) X K 5600PF/16V	1	1	1	1	1	1	1	1
C010			FILM CAP.(P) 0.022UF/50V J or	1	1	1	1	1	1	1	1
C011			ELECTROLYTIC CAP. 10UF/16V M or	1	1	1	1	1	1	1	1
C012			ELECTROLYTIC CAP. 10UF/50V M H7	1	1	1	1	1	1	1	1
C014			ELECTROLYTIC CAP. 470UF/25V M or	1	1	1	1	1	1	1	1
C017			ELECTROLYTIC CAP. 470UF/16V M or	1	1	1	1	1	1	1	1
C018			ELECTROLYTIC CAP. 100UF/16V M or	1	1	1	1	1	1	1	1
C020			ELECTROLYTIC CAP. 1000UF/16V M	1	1	1	1	1	1	1	1
C021			ELECTROLYTIC CAP. 470UF/10V M or	1	1	1	1	1	1	1	1
C022			ELECTROLYTIC CAP. 22UF/50V M H7			1					
C025			CERAMIC CAP.(AX) X K 5600PF/16V	1	1	1	1	1	1	1	1
C026			ELECTROLYTIC CAP. 47UF/16V M H7	1	1	1	1	1	1	1	1
C053			ELECTROLYTIC CAP. 330UF/6.3V M or	1	1	1	1	1	1	1	1
C056			CERAMIC CAP.(AX) F Z 0.047UF/16V	1	1	1	1	1	1	1	1
C060			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C061			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C151			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1					
C152			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1					
C154			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1					
C155			ELECTROLYTIC CAP. 10UF/16V M H7			1					
C156			ELECTROLYTIC CAP. 10UF/16V M H7			1					
C157			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C158			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1	1	1	1	1	1
C159			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1					
C251			ELECTROLYTIC CAP. 10UF/16V M H7	1	1	1	1	1	1	1	1
C252			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1	1	1	1	1	1
C253			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C254			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C302			CHIP CERAMIC CAP. B K 0.022UF/50V or	1	1	1	1	1	1	1	1
C303			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C304			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C305			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C307			CHIP CERAMIC CAP. B K 0.047UF/50V or	1	1	1	1	1	1	1	1
C308			CHIP CERAMIC CAP. B K 0.022UF/50V or	1	1	1	1	1	1	1	1
C309			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C310			CHIP CERAMIC CAP. B K 0.047UF/50V or	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
C311			CHIP CERAMIC CAP. B K 0.01UF/50V or			1	1				1
C312			CERAMIC CAP.(AX) Y M 8200PF/16V	1	1	1	1	1	1	1	1
C313			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C314			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C315			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C316			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C317			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1	1
C318			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C319			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C320			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C321			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C322			ELECTROLYTIC CAP. 10UF/16V M H7	1	1	1	1	1	1	1	1
C323			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C324			CHIP CERAMIC CAP. CH J 68PF/50V or	1	1	1	1	1	1	1	1
C325			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1	1	1	1	1	1
C326			CHIP CERAMIC CAP. CH J 68PF/50V or			1	1	1	1	1	1
C327			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C330			CERAMIC CAP.(AX) F Z 0.1UF/50V	1	1	1	1	1	1	1	1
C332			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C333			ELECTROLYTIC CAP. 0.47UF/50V M H7	1	1	1	1	1	1	1	1
C334			ELECTROLYTIC CAP. 4.7UF/25V M NP H7	1	1	1	1	1	1	1	1
C335			ELECTROLYTIC CAP. 10UF/16V M H7	1	1	1	1	1	1	1	1
C337			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C338			ELECTROLYTIC CAP. 100UF/6.3V H7	1	1	1	1	1	1	1	1
C339			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C340			CHIP CERAMIC CAP. CH J 120PF/50V or	1	1	1	1	1	1	1	1
C341			CHIP CERAMIC CAP. CH J 220PF/50V or	1	1	1	1	1	1	1	1
C342			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C343			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C344			CERAMIC CAP.(AX) B K 100PF/50V or	1	1	1	1	1	1	1	1
C345			CHIP CERAMIC CAP. CH J 68PF/50V or	1	1	1	1	1	1	1	1
C346			CHIP CERAMIC CAP. CH J 68PF/50V or	1	1						
C347			CHIP CERAMIC CAP. CH J 15PF/50V or	1	1	1	1	1	1	1	1
C351			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1	1	1	1	1	1
C352			ELECTROLYTIC CAP. 100UF/16V M H7	1	1	1	1	1	1	1	1
C370			CHIP CERAMIC CAP. B K 0.01UF/50V or			1	1				1
C371			CHIP CERAMIC CAP. B K 0.022UF/50V or			1	1				1
C372			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1	1				1
C373			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1	1				1
C374			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1	1				1
C375			CHIP CERAMIC CAP. B K 0.01UF/50V or			1	1				1
C376			CHIP CERAMIC CAP. B K 0.022UF/50V or			1	1				1
C377			CERAMIC CAP.(AX) Y M 0.01UF/16V			1	1				1
C378			CHIP CERAMIC CAP. B K 0.01UF/50V or			1	1				1
C379			ELECTROLYTIC CAP. 0.47UF/50V M H7			1	1				1
C381			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1	1				1
C382			CHIP CERAMIC CAP. B K 2200PF/50V or			1	1				1
C383			CHIP CERAMIC CAP. B K 2200PF/50V or			1	1				1
C384			ELECTROLYTIC CAP. 2.2UF/50V M H7			1	1				1
C401			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1	1
C402			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1	1	1	1	1	1
C403			CERAMIC CAP. B K 470PF/100V or	1	1	1	1	1	1	1	1
C404			FILM CAP.(P) 0.018UF/100V J or	1	1	1	1	1	1	1	1
C411			CHIP CERAMIC CAP. CH J 820PF/50V or	1	1	1	1	1	1	1	1
C412			CERAMIC CAP.(AX) X K 1800PF/16V	1	1	1	1	1	1	1	1
C413			ELECTROLYTIC CAP. 4.7UF/25V M H7	1	1	1	1	1	1	1	1
C414			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C415			ELECTROLYTIC CAP. 10UF/16V M H7	1	1	1	1	1	1	1	1
C416			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C417			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C418			CHIP CERAMIC CAP. CH J 33PF/50V or	1	1	1	1	1	1	1	1
C419			CHIP CERAMIC CAP. B K 4700PF/50V or	1	1	1	1	1	1	1	1
C421			ELECTROLYTIC CAP. 33UF/6.3V M H7	1	1	1	1	1	1	1	1
C422			ELECTROLYTIC CAP. 4.7UF/25V M H7	1	1	1	1	1	1	1	1
C423			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1					

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
C424			ELECTROLYTIC CAP. 22UF/6.3V M H7	1	1	1	1	1	1	1	1
C425			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C426			CHIP CERAMIC CAP. F Z 0.1UF/50V or			1					
C427			CHIP CERAMIC CAP. CH J 220PF/50V or	1	1	1					
C428			CHIP CERAMIC CAP. CH J 220PF/50V or	1	1		1	1	1	1	1
C429			CHIP CERAMIC CAP. CH J 68PF/50V or			1					
C430			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1	1
C431			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C451			ELECTROLYTIC CAP. 4.7UF/25V M H7					1	1	1	
C452			ELECTROLYTIC CAP. 47UF/16V M H7				1	1	1	1	1
C453			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C454			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C455			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C456			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C457			ELECTROLYTIC CAP. 22UF/10V M H7				1	1	1	1	1
C458			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C459			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C460			CHIP CERAMIC CAP. B K 0.01UF/50V or				1	1	1	1	1
C461			ELECTROLYTIC CAP. 22UF/10V M H7				1	1	1	1	1
C462			CHIP CERAMIC CAP. B K 4700PF/50V or				1	1	1	1	1
C463			CHIP CERAMIC CAP. B K 0.01UF/50V or				1	1	1	1	1
C464			CHIP CERAMIC CAP. B K 0.01UF/50V or				1	1	1	1	1
C465			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C466			CHIP CERAMIC CAP. B K 0.01UF/50V or				1	1	1	1	1
C467			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C468			ELECTROLYTIC CAP. 22UF/10V M H7				1	1	1	1	1
C469			CHIP CERAMIC CAP. B K 4700PF/50V or				1	1	1	1	1
C470			CHIP CERAMIC CAP. B K 0.01UF/50V or				1	1	1	1	1
C471			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C472			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C473			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C474			ELECTROLYTIC CAP. 2.2UF/50V M H7				1	1	1	1	1
C475			ELECTROLYTIC CAP. 2.2UF/50V M H7				1	1	1	1	1
C476			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C477			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C478			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C479			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C480			ELECTROLYTIC CAP. 4.7UF/25V M H7				1	1	1	1	1
C481			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C482			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C483			ELECTROLYTIC CAP. 330UF/6.3V M H7				1	1	1	1	1
C484			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C485			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C501			ELECTROLYTIC CAP. 220UF/6.3V M or	1	1	1	1	1	1	1	1
C502			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C506			CERAMIC CAP.(AX) B K 100PF/50V or				1	1	1	1	1
C508			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C510			ELECTROLYTIC CAP. 22UF/10V M H7	1	1	1	1	1	1	1	1
C511			ELECTROLYTIC CAP. 100UF/6.3V H7	1	1	1	1	1	1	1	1
C512			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C513			CHIP CERAMIC CAP. CH J 22PF/50V or	1	1	1	1	1	1	1	1
C514			CHIP CERAMIC CAP. CH J 22PF/50V or	1	1	1	1	1	1	1	1
C515			CHIP CERAMIC CAP. CH D 10PF/50V or	1	1	1	1	1	1	1	1
C516			CHIP CERAMIC CAP. CH D 10PF/50V or	1	1	1	1	1	1	1	1
C517			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C518			CHIP CERAMIC CAP. B K 0.047UF/50V or	1	1	1	1	1	1	1	1
C519			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C520			CHIP CERAMIC CAP. CH J 100PF/50V or	1	1	1	1	1	1	1	1
C521			CHIP CERAMIC CAP. CH J 560PF/50V or	1	1	1	1	1	1	1	1
C522			ELECTROLYTIC CAP. 22UF/6.3V M H7	1	1	1	1	1	1	1	1
C523			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1	1	1	1	1	1
C524			CHIP CERAMIC CAP. CH J 330PF/50V or	1	1	1	1	1	1	1	1
C526			CHIP CERAMIC CAP. B K 4700PF/50V or	1	1	1	1	1	1	1	1
C527			ELECTROLYTIC CAP. 22UF/6.3V M H7	1	1	1	1	1	1	1	1
C529			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
C530			CERAMIC CAP.(AX) F Z 0.022UF/25V	1	1	1	1	1	1	1	1
C531			CERAMIC CAP.(AX) Y M 0.01UF/16V	1	1	1	1	1	1	1	1
C535			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C538			CHIP CERAMIC CAP. B K 0.022UF/50V or			1					
C540			ELECTROLYTIC CAP. 470UF/6.3V M or	1	1	1	1	1	1	1	1
C541			ELECTROLYTIC CAP. 220UF/6.3V M H7	1	1	1					
C561			CHIP CERAMIC CAP. B K 0.022UF/50V or	1	1	1	1	1	1	1	1
C622			CHIP RES.(1608) 1/10W 0 OHM or	1	1	1	1	1	1	1	1
C701			CHIP CERAMIC CAP. B K 0.047UF/50V or	1	1			1	1	1	
C702			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C703			ELECTROLYTIC CAP. 10UF/16V M H7	1	1	1	1	1	1	1	1
C704			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C706			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1	1	1	1	1	1
C707			ELECTROLYTIC CAP. 100UF/6.3V H7	1	1	1	1	1	1	1	1
C708			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C709			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1					
C710			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1					
C715			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C771			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C772			ELECTROLYTIC CAP. 10UF/16V M H7	1	1	1	1	1	1	1	1
C773			CERAMIC CAP.(AX) B K 1000PF/50V or	1	1	1	1	1	1	1	1
C774			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1	1	1	1	1	1
C775			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C776			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C777			CERAMIC CAP.(AX) B K 180PF/50V or	1	1	1	1	1	1	1	1
C778			CHIP CERAMIC CAP. CH J 180PF/50V or	1	1	1	1	1	1	1	1
C851			CHIP CERAMIC CAP. CH J 22PF/50V or	1	1	1	1	1	1	1	1
C852			CHIP CERAMIC CAP. CH J 18PF/50V or	1	1	1	1	1	1	1	1
C853			CHIP CERAMIC CAP. B K 4700PF/50V or	1	1	1	1	1	1	1	1
C854			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
C855			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C856			CHIP CERAMIC CAP. CH J 180PF/50V or	1	1	1	1	1	1	1	1
C858			CHIP CERAMIC CAP. CH J 560PF/50V or			1	1				1
C859			ELECTROLYTIC CAP. 47UF/6.3V M H7	1	1	1	1	1	1	1	1
C862			CHIP CERAMIC CAP. B K 0.01UF/50V or	1	1	1	1	1	1	1	1
CN701		9965 000 12254	AFV PCB ASSEMBLY CP2500/C463				1				1
DIODES											
D001		4822 130 31933	RECTIFIER DIODE 1N4005	1	1	1	1	1	1	1	1
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		4822 130 81244	RECTIFIER DIODE ERA22-10	1	1	1	1	1	1	1	1
D006		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D007		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D008		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D009		4822 130 32778	SWITCHING DIODE 1SS133(T-77)	1	1	1	1	1	1	1	1
D011		4822 130 10933	FAST RECOVERY DIODE ERA18-04	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		4822 130 32715	SCHOTTKY BARRIER DIODE SB340				1	1	1	1	1
D015		4822 130 80319	ZENER DIODE MTZJT-779.1C	1	1	1	1	1	1	1	1
D016		4822 130 10933	FAST RECOVERY DIODE ERA18-04			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
D023		9965 000 12904	ZENER DIODE DZ-5.1BSBT265 or			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		4822 130 31933	RECTIFIER DIODE 1N4005	1	1	1					
D053		9965 000 09322	RECTIFIER DIODE FR302				1				1
D053		9965 000 12176	RECTIFIER DIODE RL201 B-222-2					1	1	1	
D056		9965 000 05694	ZENER DIODE MTZJT-775.1C	1	1	1	1	1	1	1	1
D057		9965 000 12891	CARBON RES. 1/4W J 3.3K OHM	1	1	1					
D057		9965 000 09283	ZENER DIODE DZ-10BSBT265 or				1	1	1	1	1
D151		9965 000 12177	ZENER DIODE DZ-6.8BSCT265 or			1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
D152		9965 000 12177	ZENER DIODE DZ-6.8BSCT265 or			1	1	1	1	1	1
D153		9965 000 12178	ZENER DIODE DZ-11BSAT265 or	1	1	1	1	1	1	1	1
D154		9965 000 12178	ZENER DIODE DZ-11BSAT265				1	1	1	1	1
D155		9965 000 12178	ZENER DIODE DZ-11BSAT265 or			1	1	1	1	1	1
D156		9965 000 12178	ZENER DIODE DZ-11BSAT265 or				1	1	1	1	1
D301		4822 130 30621	SWITCHING DIODE 1N4148M or	1	1	1	1	1	1	1	1
D370		4822 130 30621	SWITCHING DIODE 1N4148M or			1	1				1
D501		4822 130 30621	SWITCHING DIODE 1N4148M or	1	1	1	1	1	1	1	1
D502		9965 000 05250	LED SIR-563ST3F P or	1	1	1	1	1	1	1	1
D552		4822 130 10094	ZENER DIODE MTZJT-777.5A				1	1	1	1	1
D553		4822 130 30621	SWITCHING DIODE 1N4148M or	1	1	1	1	1	1	1	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 or	1	1	1	1	1	1	1	1
IC151		5322 209 17147	IC:SWITCHING TC4052BF(EL) or			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	1				1
IC451		9965 000 12181	IC:HIFI LA72646M-A-MPB				1	1	1	1	1
IC501		9965 000 12556	MICROCONTROLLER 16BIT M37762MFA-1B9GP	1	1	1		1	1	1	1
IC501		9965 000 12557	MICROCONTROLLER 16BIT M37762MCA-1B5GP				1				
IC503		9965 000 06554	IC:MEMORY BR24C02F-W or	1	1	1	1	1	1	1	1
IC561		9965 000 12183	IC:LED DRIVER PT6958-FN-TP	1	1	1	1	1	1	1	1
IC771		9965 000 12184	IC:COMPARATOR KIA339F EL or	1	1	1	1	1	1	1	1
J902		4822 526 10685	BEAD CORE B16 RH 3.5X10X1.3 or	1	1	1	1	1	1	1	1
JW001		9965 000 12892	FLAT CABLE, 8P AWG26#2651/P1.25/150	1	1	1					
JW001		9965 000 12411	FLAT CABLE, 11P AWG26#2651/P1.25/150				1	1	1	1	1
JW002		9965 000 12905	FLAT CABLE, 9P AWG26#2651/P1.25/150			1					
JW002		9965 000 12412	FLAT CABLE, 12P AWG26#2651/P1.25/150				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 B16 RH 3.5X10X1.3 or	1	1	1	1	1	1	1	1
L002		4822 526 10685	BEAD CORE B16 RH 3.5X10X1.3 or	1	1	1	1	1	1	1	1
L003	▲	9965 000 12188	LINE FILTER 50MH LF-4Z-E503 or	1	1	1	1	1	1	1	1
L003	▲	9965 000 09877	LINE FILTER 56MH TLF14CB5630R2 or	1	1	1	1	1	1	1	1
L009		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1	1
L010		9965 000 05627	CHOKE 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		4822 157 10332	PCB JUMPER D0.6-P5.0			1	1				1
L401		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1	1
L402		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1	1
L451		4822 157 10649	INDUCTOR 100UH-K-26T				1	1	1	1	1
L452		4822 157 10347	INDUCTOR 22UH-K-26T				1	1	1	1	1
L501		4822 157 10649	INDUCTOR 100UH-K-26T	1	1	1	1	1	1	1	1
L561		4822 157 11509	INDUCTOR 47UH-K-26T	1	1	1					
L561		4822 157 10649	INDUCTOR 100UH-K-26T				1	1	1	1	1
L562		4822 157 11509	INDUCTOR 47UH-K-26T	1	1	1					
L562		4822 157 10332	PCB JUMPER D0.6-P5.0				1	1	1	1	1
L701		4822 157 10889	INDUCTOR 10UH-K-26T	1	1	1	1	1	1	1	1
L702		9965 000 05627	CHOKE COIL 47UH-K	1	1	1	1	1	1	1	1
L703		4822 157 10332	PCB JUMPER D0.6-P5.0	1	1			1	1	1	
L704		4822 157 11511	INDUCTOR 15UH-K-26T	1	1	1		1	1	1	
L705		4822 157 10332	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		4822 157 10332	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 or	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 10923	TRANSISTOR KTC3199(BL) or	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
Q004		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
Q051		4822 130 42292	RES. BUILT-IN TRANSISTOR KRA104M or	1	1	1	1	1	1	1	1
Q052		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M or	1	1	1	1	1	1	1	1
Q053		4822 130 10103	TRANSISTOR KTC3199(Y) or				1	1	1	1	1
Q054		4822 130 42292	TRANSISTOR KTC3203(Y) or	1	1	1					
Q054		9965 000 09389	TRANSISTOR 2SD1246(S) or				1	1	1	1	1
Q056		9965 000 05388	RES. BUILT-IN TRANSISTOR BN1F4M-T	1	1	1	1	1	1	1	1
Q057		9965 000 12190	TRANSISTOR KTA1281(Y) or	1	1	1	1	1	1	1	1
Q058		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M or	1	1	1	1	1	1	1	1
Q151		4822 130 10103	TRANSISTOR KTC3199(Y) or			1					
Q152		4822 130 10103	TRANSISTOR KTC3199(Y) or			1					
Q153		4822 130 10103	TRANSISTOR KTC3199(Y) or			1	1	1	1	1	1
Q351		4822 130 42959	TRANSISTOR KTA1266(GR) or	1	1	1	1	1	1	1	1
Q352		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
Q401		4822 130 42959	TRANSISTOR KTA1266(GR) or	1	1	1	1	1	1	1	1
Q402		4822 130 42292	TRANSISTOR KTC3203(Y) or	1	1	1	1	1	1	1	1
Q403		4822 130 10145	RES. BUILT-IN TRANSISTOR KRA103M or	1	1	1	1	1	1	1	1
Q404		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
Q405		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
Q406		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
Q451		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M or				1	1	1	1	1
Q501		4822 130 10923	TRANSISTOR KTC3199(BL) or	1	1	1	1	1	1	1	1
Q502		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M or	1	1	1	1	1	1	1	1
Q503		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12 or	1	1	1	1	1	1	1	1
Q551		4822 130 10923	TRANSISTOR KTC3199(BL) or	1	1	1	1	1	1	1	1
Q552		4822 130 10098	RES. BUILT-IN TRANSISTOR KRC103M or	1	1	1	1	1	1	1	1
Q771		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
Q772		4822 130 10103	TRANSISTOR KTC3199(Y) or	1	1	1	1	1	1	1	1
RESISTORS											
J89			CARBON RES. 1/6W J 22K OHM			1					
R001		9965 000 08653	CARBON RES. 1/2W K 5.6M OHM	1	1	1	1	1	1	1	1
R002		9965 000 08635	METAL OXIDE FILM RES. 1W J 150K OHM or	1	1	1	1	1	1	1	1
R003			CARBON RES. 1/4W J 1M OHM	1	1	1	1	1	1	1	1
R004			CARBON RES. 1/4W J 1M OHM	1	1	1	1	1	1	1	1
R005		4822 116 52243	CARBON RES. 1/4W G 1.5K OHM	1	1	1	1	1	1	1	1
R006			METAL OXIDE FILM RES. 1W J 2.2 OHM or	1	1	1	1	1	1	1	1
R007			CARBON RES. 1/6W J 22K OHM or	1	1	1	1	1	1	1	1
R008			CARBON RES. 1/6W J 100K OHM or	1	1	1	1	1	1	1	1
R009			CARBON RES. 1/6W G 5.6K OHM or	1	1	1	1	1	1	1	1
R011			CARBON RES. 1/4W J 390K OHM	1	1	1	1	1	1	1	1
R012			CARBON RES. 1/4W J 390K OHM	1	1	1	1	1	1	1	1
R013			CARBON RES. 1/6W J 470K OHM or	1	1	1	1	1	1	1	1
R014			CARBON RES. 1/6W J 100K OHM or	1	1	1	1	1	1	1	1
R015			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R016			CARBON RES. 1/6W J 100K OHM or	1	1	1	1	1	1	1	1
R017			CHIP RES.(1608) 1/10W J 220K OHM or	1	1	1	1	1	1	1	1
R018			CHIP RES.(1608) 1/10W J 22K OHM or	1	1	1	1	1	1	1	1
R021			CHIP RES.(1608) 1/10W J 22K OHM or	1	1	1	1	1	1	1	1
R022			CHIP RES.(1608) 1/10W J 680 OHM or	1	1	1	1	1	1	1	1
R023			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R024			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R025			CHIP RES.(1608) 1/10W J 390 OHM or	1	1	1	1	1	1	1	1
R026			CHIP RES.(1608) 1/10W J 22K OHM or	1	1	1	1	1	1	1	1
R027			CARBON RES. 1/6W J 1K OHM or	1	1	1	1	1	1	1	1
R028			CARBON RES. 1/4W J 1M OHM	1	1	1	1	1	1	1	1
R029			CARBON RES. 1/4W J 820 OHM			1					
R030			CARBON RES. 1/4W J 680 OHM			1					
R035			PCB JUMPER D0.6-P5.0	1	1	1	1	1	1	1	1
R054			CHIP RES.(1608) 1/10W J 180 OHM or	1	1	1	1	1	1	1	1
R059			CARBON RES. 1/6W J 330 OHM or	1	1	1					
R060			CARBON RES. 1/6W J 2.7K OHM or	1	1	1	1	1	1	1	1
R061			CHIP RES.(1608) 1/10W J 22K OHM or	1	1	1	1	1	1	1	1
R062			CARBON RES. 1/4W J 3.3K OHM	1	1	1					
R062			CARBON RES. 1/4W J 10K OHM				1	1	1	1	1
R063			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
R064			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1	1
R065			CARBON RES. 1/4W J 1.2K OHM	1	1	1	1	1	1	1	1
R066			CHIP RES.(1608) 1/10W J 47K OHM or	1	1	1	1	1	1	1	1
R067			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1	1
R068			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1	1
R070			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1	1	1	1	1	1	1
R151			CHIP RES.(1608) 1/10W J 2.7K OHM or			1					
R153			CHIP RES.(1608) 1/10W J 2.2K OHM or			1					
R154			CHIP RES.(1608) 1/10W J 390K OHM or			1					
R155			CHIP RES.(1608) 1/10W J 22K OHM or			1					
R157			CARBON RES. 1/6W J 4.7K OHM or			1	1	1	1	1	1
R158			CHIP RES.(1608) 1/10W J 6.8K OHM or			1	1	1	1	1	1
R251			CHIP RES.(1608) 1/10W J 1.8K OHM or	1	1	1					
R251			CHIP RES.(1608) 1/10W J 2.2K OHM or				1	1	1	1	1
R252			CHIP RES.(1608) 1/10W J 39K OHM or	1	1	1	1	1	1	1	1
R301			CHIP RES.(1608) 1/10W J 1.2K OHM or	1	1	1	1	1	1	1	1
R302			CHIP RES.(1608) 1/10W J 8.2K OHM or	1	1	1	1	1	1	1	1
R303			CHIP RES.(1608) 1/10W J 5.6K OHM or			1	1				1
R304			CHIP RES.(1608) 1/10W J 3.9K OHM or			1	1				1
R305			CHIP RES.(1608) 1/10W J 3.9K OHM or	1	1	1	1	1	1	1	1
R306			CHIP RES.(1608) 1/10W 0 OHM or	1	1	1	1	1	1	1	1
R307			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1	1	1	1	1	1	1
R308			CHIP RES.(1608) 1/10W J 6.8K OHM or	1	1	1	1	1	1	1	1
R309			CHIP RES.(1608) 1/10W J 100 OHM or	1	1	1	1	1	1	1	1
R310			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R311			CHIP RES.(1608) 1/10W J 18K OHM or	1	1	1	1	1	1	1	1
R312			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R313			CHIP RES.(1608) 1/10W J 18K OHM or				1	1	1	1	1
R314			CHIP RES.(1608) 1/10W J 18K OHM or	1	1	1					
R315			CARBON RES. 1/6W J 2.4K OHM or	1	1	1	1	1	1	1	1
R316			CHIP RES.(1608) 1/10W J 6.8K OHM or	1	1	1	1	1	1	1	1
R317			CHIP RES.(1608) 1/10W J 1.2K OHM or	1	1	1	1	1	1	1	1
R318			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1	1	1	1	1	1	1
R319			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R320			CHIP RES.(1608) 1/10W J 560 OHM or	1	1	1	1	1	1	1	1
R321			CARBON RES. 1/6W J 33 OHM or			1	1	1	1	1	1
R323			CARBON RES. 1/6W J 33 OHM or	1	1	1	1	1	1	1	1
R324			CHIP RES.(1608) 1/10W J 39K OHM or	1	1	1	1	1	1	1	1
R328			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R330			CHIP RES.(1608) 1/10W J 5.6M OHM or	1	1	1	1	1	1	1	1
R331			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R332			CHIP INDUCTOR MLG1608B18NJB000 or	1	1						
R332			CHIP RES.(1608) 1/10W 0 OHM or			1	1	1	1	1	1
R351			CHIP RES.(1608) 1/10W J 180 OHM or	1	1			1	1	1	
R351			CHIP RES.(1608) 1/10W J 150 OHM or			1	1				1
R352			CHIP RES.(1608) 1/10W J 150 OHM or	1	1	1	1	1	1	1	1
R355			CARBON RES. 1/4W J 680 OHM	1	1	1	1	1	1	1	1
R357			CHIP RES.(1608) 1/10W J 220 OHM or	1	1	1	1	1	1	1	1
R358			CHIP RES.(1608) 1/10W J 1.5K OHM or	1	1			1	1	1	
R360			CHIP RES.(1608) 1/10W J 1.8K OHM or	1	1	1	1	1	1	1	1
R361			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R370			CHIP RES.(1608) 1/10W J 2.7K OHM or			1	1				1
R371			CARBON RES. 1/6W J 5.6K OHM or			1	1				1
R372			CHIP RES.(1608) 1/10W J 3.9K OHM or			1	1				1
R401			CHIP RES.(1608) 1/10W J 5.6K OHM or	1	1	1	1	1	1	1	1
R402			CHIP RES.(1608) 1/10W J 22K OHM or	1	1	1	1	1	1	1	1
R403			CHIP RES.(1608) 1/10W J 47K OHM or	1	1	1	1	1	1	1	1
R404			CARBON RES. 1/6W J 100 OHM or	1	1	1	1	1	1	1	1
R405			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R406			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R407			CARBON RES. 1/4W J 820 OHM	1	1	1	1	1	1	1	1
R408			CHIP RES.(1608) 1/10W J 12K OHM or	1	1	1	1	1	1	1	1
R409			CHIP RES.(1608) 1/10W J 5.6K OHM or	1	1	1	1	1	1	1	1
R410			CHIP RES.(1608) 1/10W 0 OHM or			1					
R411			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
R412			CHIP RES.(1608) 1/10W J 27K OHM or	1	1	1	1	1	1	1	1
R413			CHIP RES.(1608) 1/10W J 330K OHM or	1	1	1	1	1	1	1	1
R414			CHIP RES.(1608) 1/10W J 120 OHM or	1	1	1	1	1	1	1	1
R415			CHIP RES.(1608) 1/10W J 12K OHM or	1	1	1	1	1	1	1	1
R416			CHIP RES.(1608) 1/10W J 1.8K OHM or	1	1	1	1	1	1	1	1
R417			CHIP RES.(1608) 1/10W J 1.2K OHM or	1	1	1	1	1	1	1	1
R421			CHIP RES.(1608) 1/10W J 12K OHM or	1	1	1	1	1	1	1	1
R422			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R423			CHIP RES.(1608) 1/10W J 22K OHM or	1	1						
R423			CHIP RES.(1608) 1/10W 0 OHM or			1					
R424			CHIP RES.(1608) 1/10W J 3.9K OHM or	1	1	1					
R425			CHIP RES.(1608) 1/10W J 22K OHM or	1	1						
R425			CHIP RES.(1608) 1/10W J 68K OHM or			1					
R425			CHIP RES.(1608) 1/10W J 5.6K OHM or				1	1	1	1	1
R426			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1		1	1	1	1	1
R426			CHIP RES.(1608) 1/10W J 12K OHM or			1					
R427			CHIP RES.(1608) 1/10W J 68K OHM or			1					
R428			CHIP RES.(1608) 1/10W J 12K OHM or			1					
R429			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R430			CHIP RES.(1608) 1/10W 0 OHM or				1	1	1	1	1
R431			CHIP RES.(1608) 1/10W 0 OHM or				1	1	1	1	1
R451			CHIP RES.(1608) 1/10W J 10K OHM or					1	1	1	
R452			CHIP RES.(1608) 1/10W J 22K OHM or				1	1	1	1	1
R453			CHIP RES.(1608) 1/10W J 6.8K OHM or				1	1	1	1	1
R454			CHIP RES.(1608) 1/10W J 39K OHM or				1	1	1	1	1
R455			CHIP RES.(1608) 1/10W J 6.8K OHM or				1	1	1	1	1
R456			CHIP RES.(1608) 1/10W J 8.2K OHM or				1	1	1	1	1
R457			CHIP RES.(1608) 1/10W J 6.8K OHM or				1	1	1	1	1
R460			CHIP RES.(1608) 1/10W J 470 OHM or				1	1	1	1	1
R461			CHIP RES.(1608) 1/10W J 2.2K OHM or				1	1	1	1	1
R462			CHIP RES.(1608) 1/10W J 39K OHM or				1	1	1	1	1
R463			CHIP RES.(1608) 1/10W J 8.2K OHM or				1	1	1	1	1
R464			CHIP RES.(1608) 1/10W J 39K OHM or				1	1	1	1	1
R465			CHIP RES.(1608) 1/10W J 8.2K OHM or				1	1	1	1	1
R466			CHIP RES.(1608) 1/10W J 39K OHM or				1	1	1	1	1
R467			CHIP RES.(1608) 1/10W J 6.8K OHM or				1	1	1	1	1
R468			CARBON RES. 1/6W J 8.2K OHM or				1	1	1	1	1
R469			CHIP RES.(1608) 1/10W J 6.8K OHM or				1	1	1	1	1
R472			CHIP RES.(1608) 1/10W J 1K OHM or				1	1	1	1	1
R473			CHIP RES.(1608) 1/10W J 1K OHM or				1	1	1	1	1
R474			CHIP RES.(1608) 1/10W J 10K OHM or				1	1	1	1	1
R479			CHIP RES.(1608) 1/10W J 27K OHM or				1	1	1	1	1
R480			CHIP RES.(1608) 1/10W J 27K OHM or				1	1	1	1	1
R501			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R502			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R503			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R504			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R505			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R506			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R507			CHIP RES.(1608) 1/10W 0 OHM or	1	1	1	1	1	1	1	1
R508			CARBON RES. 1/6W J 1K OHM or	1	1	1	1	1	1	1	1
R509			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1	1	1	1	1	1	1
R510			CHIP RES.(1608) 1/10W J 10K OHM or	1	1			1	1	1	
R511			CHIP RES.(1608) 1/10W J 100K OHM or	1	1	1	1	1	1	1	1
R513			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R514			CHIP RES.(1608) 1/10W J 820 OHM or	1	1	1	1	1	1	1	1
R516			CHIP RES.(1608) 1/10W J 330K OHM or	1	1	1	1	1	1	1	1
R517			CHIP RES.(1608) 1/10W J 220 OHM or	1	1	1	1	1	1	1	1
R518			CHIP RES.(1608) 1/10W J 470 OHM or	1	1	1	1	1	1	1	1
R519			CHIP RES.(1608) 1/10W 0 OHM or	1	1	1	1	1	1	1	1
R520			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R521			CHIP RES.(1608) 1/10W J 220K OHM or	1	1	1	1	1	1	1	1
R522			CHIP RES.(1608) 1/10W J 68K OHM or	1	1	1	1	1	1	1	1
R523			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R524			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
R525			CHIP RES.(1608) 1/10W J 1.5K OHM or	1	1	1	1	1	1	1	1
R526			CHIP RES.(1608) 1/10W J 1.8K OHM or	1	1	1	1	1	1	1	1
R527			CHIP RES.(1608) 1/10W J 680 OHM or	1	1	1	1	1	1	1	1
R528			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R529			CARBON RES. 1/4W J 270 OHM	1	1	1	1	1	1	1	1
R530			CHIP RES.(1608) 1/10W J 180 OHM or	1	1	1	1	1	1	1	1
R531			CHIP RES.(1608) 1/10W J 68K OHM or	1	1	1	1	1	1	1	1
R533			CHIP RES.(1608) 1/10W J 33K OHM or	1	1	1	1	1	1	1	1
R534			CARBON RES. 1/6W G 3.6K OHM or	1	1	1	1	1	1	1	1
R535			CARBON RES. 1/6W G 10K OHM or	1	1	1	1	1	1	1	1
R536			CARBON RES. 1/6W G 470 OHM or	1	1	1	1	1	1	1	1
R537			CARBON RES. 1/6W G 22K OHM or	1	1	1	1	1	1	1	1
R538			CARBON RES. 1/6W G 1.5K OHM or	1	1	1	1	1	1	1	1
R539			CARBON RES. 1/6W G 4.7K OHM or	1	1	1	1	1	1	1	1
R540			CHIP RES.(1608) 1/10W J 390K OHM or	1	1	1	1	1	1	1	1
R541			CHIP RES.(1608) 1/10W J 390K OHM or	1	1	1	1	1	1	1	1
R542			CHIP RES.(1608) 1/10W J 1.2K OHM or	1	1	1	1	1	1	1	1
R543			CHIP RES.(1608) 1/10W 0 OHM or	1	1	1	1	1	1	1	1
R544			CHIP RES.(1608) 1/10W J 1.5K OHM or	1	1	1	1	1	1	1	1
R545			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R546			CHIP RES.(1608) 1/10W J 1.8K OHM or	1	1	1	1	1	1	1	1
R547			CHIP RES.(1608) 1/10W J 2.7K OHM or	1	1	1	1	1	1	1	1
R551			CHIP RES.(1608) 1/10W J 100 OHM or	1	1	1	1	1	1	1	1
R552			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R555			CHIP RES.(1608) 1/10W J 10K OHM or	1				1		1	
R556			CHIP RES.(1608) 1/10W J 10K OHM or		1	1	1		1		1
R557			CHIP RES.(1608) 1/10W J 10K OHM or			1	1				1
R558			CHIP RES.(1608) 1/10W J 10K OHM or	1	1			1	1	1	
R566			CHIP RES.(1608) 1/10W J 56K OHM or	1	1	1	1	1	1	1	1
R601			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1					
R604			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1		1	1	1	1
R605			CHIP RES.(1608) 1/10W J 10K OHM or					1	1	1	1
R606			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1					
R607			CHIP RES.(1608) 1/10W J 10K OHM or			1	1	1	1	1	1
R609			CHIP RES.(1608) 1/10W J 10K OHM or	1	1						
R610			CHIP RES.(1608) 1/10W J 10K OHM or			1		1	1	1	1
R612			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R614			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1		1	1	1	1
R615			CHIP RES.(1608) 1/10W J 10K OHM or					1	1	1	1
R616			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1				
R619			CHIP RES.(1608) 1/10W J 10K OHM or	1	1						
R620			CHIP RES.(1608) 1/10W J 1K OHM or			1					
R701			CARBON RES. 1/6W J 1.8K OHM or	1	1	1	1	1	1	1	1
R702			CARBON RES. 1/6W J 1K OHM or	1	1	1	1	1	1	1	1
R703			CARBON RES. 1/6W J 1K OHM or	1	1	1	1	1	1	1	1
R706			CARBON RES. 1/6W J 1K OHM or	1	1	1	1	1	1	1	1
R709			PCB JUMPER D0.6-P5.0	1	1	1					
R771			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1	1	1	1	1	1	1
R772			CHIP RES.(1608) 1/10W J 100K OHM or	1	1	1	1	1	1	1	1
R773			CHIP RES.(1608) 1/10W J 4.7K OHM or	1	1	1	1	1	1	1	1
R774			CHIP RES.(1608) 1/10W J 22K OHM or	1	1	1	1	1	1	1	1
R775			CHIP RES.(1608) 1/10W J 15K OHM or	1	1	1	1	1	1	1	1
R776			CHIP RES.(1608) 1/10W J 8.2K OHM or	1	1	1	1	1	1	1	1
R777			CHIP RES.(1608) 1/10W J 8.2K OHM or	1	1	1	1	1	1	1	1
R778			CHIP RES.(1608) 1/10W J 33K OHM or	1	1	1	1	1	1	1	1
R779			CHIP RES.(1608) 1/10W J 33K OHM or	1	1	1	1	1	1	1	1
R780			CHIP RES.(1608) 1/10W J 33K OHM or	1	1	1	1	1	1	1	1
R781			CHIP RES.(1608) 1/10W J 15K OHM or	1	1	1	1	1	1	1	1
R782			CHIP RES.(1608) 1/10W J 33K OHM or	1	1	1	1	1	1	1	1
R783			CHIP RES.(1608) 1/10W J 15K OHM or	1	1	1	1	1	1	1	1
R784			CHIP RES.(1608) 1/10W J 10M OHM or	1	1	1	1	1	1	1	1
R785			CHIP RES.(1608) 1/10W J 10M OHM or	1	1	1	1	1	1	1	1
R786			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R787			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R851			CHIP RES.(1608) 1/10W J 1.5K OHM or	1	1	1	1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
R852			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R853			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
			REMOTE RECEIVER								
RS501		9965 000 12287	REMOTE RECEIVER MIM-93M9DKF or	1	1	1	1	1	1	1	1
SA001	▲	4822 252 11373	SURGE ABSORBER JVR-10N471K	1	1	1	1	1	1	1	1
SWITCHES											
SW501		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW502		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW504		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW505		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW506		9965 000 12285	LEAF SWITCH LSA-1142AU or	1	1	1	1	1	1	1	1
SW507		9965 000 08561	ROTARY MODE SWITCH SSS-43MD or	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 12893	TUNER UNIT TMDG1-632A	1					1		
TU701		9965 000 12901	TUNER UNIT TMDG1-635A		1						
TU701		9965 000 12256	TUNER UNIT TMDZ2-731A			1	1				1
TU701		9965 000 12265	TUNER UNIT TMDG2-631A					1		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 or	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) or	1	1	1	1	1	1	1	1
			FUNCTION CBA (MCV-B CBA)	1	1	1	1	1	1	1	1
CN651			ANGLE PIN HEADER, 3P 6029B-1-03Z002-T	1	1	1	1	1	1	1	1
R651			CHIP RES.(1608) 1/10W J 1K OHM or	1	1	1	1	1	1	1	1
R652			CHIP RES.(1608) 1/10W J 1.2K OHM or	1	1	1	1	1	1	1	1
R653			CHIP RES.(1608) 1/10W J 1.5K OHM or	1	1	1	1	1	1	1	1
R654			CHIP RES.(1608) 1/10W J 2.2K OHM or	1	1	1	1	1	1	1	1
R655			CHIP RES.(1608) 1/10W J 3.9K OHM or	1	1	1	1	1	1	1	1
SW651		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW652		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW653		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW654		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
SW656		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
			VPS CBA (MCV-C CBA)	1	1	1	1	1	1	1	1
CAPACITORS											
C640			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C642		9965 000 12290	SEMICONDUCTOR CAP. SR K 0.056UF/25V or	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 or	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
RESISTORS											
R638			CHIP RES.(1608) 1/10W J 100 OHM or	1	1	1	1	1	1	1	1
R641			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R642			CHIP RES.(1608) 1/10W J 2.7K OHM or	1	1	1	1	1	1	1	1
R643			CHIP RES.(1608) 1/10W J 5.6K OHM or	1	1	1	1	1	1	1	1
R644			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
R645			CHIP RES.(1608) 1/10W J 10K OHM or	1	1	1	1	1	1	1	1
			POWER SW CBA (MCV-D CBA)	1	1	1	1	1	1	1	1
SW510		4822 276 13954	TACT SWITCH KSM0614B or	1	1	1	1	1	1	1	1
			JACK CBA (MCV-E CBA)	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 12894	JACK BOARD(1-21P) HC461BD or	1	1						
A5		9965 000 12196	JACK BOARD(2-21P) HC460ED			1	1	1	1	1	1
CAPACITORS											

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
C101			CHIP CERAMIC CAP. B K 2200PF/50V or				1	1	1	1	1
C102			CHIP CERAMIC CAP. B K 2200PF/50V or	1	1	1	1	1	1	1	1
C103			CHIP CERAMIC CAP. CH J 470PF/50V or				1	1	1	1	1
C104			CHIP CERAMIC CAP. CH J 470PF/50V or	1	1	1	1	1	1	1	1
C105			CHIP CERAMIC CAP. F Z 0.1UF/50V or	1	1	1	1	1	1	1	1
C107			ELECTROLYTIC CAP. 1UF/50V M H7	1	1	1	1	1	1	1	1
C108			CHIP CERAMIC CAP. B K 1000PF/50V or	1	1	1	1	1	1	1	1
C109			CHIP CERAMIC CAP. B K 2200PF/50V or			1	1	1	1	1	1
C110			CHIP CERAMIC CAP. B K 2200PF/50V or				1	1	1	1	1
C111			CHIP CERAMIC CAP. CH J 470PF/50V or				1	1	1	1	1
C112			CHIP CERAMIC CAP. CH J 470PF/50V or			1	1	1	1	1	1
C113			CHIP CERAMIC CAP. B K 2200PF/50V or			1	1	1	1	1	1
C115			ELECTROLYTIC CAP. 100UF/16V M H7	1	1	1	1	1	1	1	1
C116			ELECTROLYTIC CAP. 470UF/6.3V M or	1	1	1	1	1	1	1	1
C117			ELECTROLYTIC CAP. 470UF/6.3V M or			1	1	1	1	1	1
DIODES											
D101		9965 000 12178	ZENER DIODE DZ-11BSAT265 or	1	1	1	1	1	1	1	1
D102		9965 000 12178	ZENER DIODE DZ-11BSAT265 or			1	1	1	1	1	1
D103		9965 000 12178	ZENER DIODE DZ-11BSAT265 or			1	1	1	1	1	1
D105		9965 000 12178	ZENER DIODE DZ-11BSAT265 or	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
JK102		9965 000 12197	RGB CONNECTOR MRC-021V-01			1	1	1	1	1	1
COILS											
L101		4822 526 10685	BEAD CORE B16 RH 3.5X10X1.3 or	1	1	1	1	1	1	1	1
L121		4822 526 10685	BEAD CORE B16 RH 3.5X10X1.3 or			1	1	1	1	1	1
TRANSISTORS											
Q101		4822 130 42959	TRANSISTOR KTA1266(GR) or	1	1	1	1	1	1	1	1
Q102		4822 130 42959	TRANSISTOR KTA1266(GR) or			1	1	1	1	1	1
RESISTORS											
R101			CARBON RES. 1/4W J 1K OHM	1	1	1	1	1	1	1	1
R102			CARBON RES. 1/4W J 1K OHM	1	1	1					
R103			CARBON RES. 1/4W J 1K OHM				1	1	1	1	1
R104			CARBON RES. 1/6W J 4.7K OHM or				1	1	1	1	1
R105			CARBON RES. 1/6W J 4.7K OHM or	1	1	1					
R106			CARBON RES. 1/6W J 4.7K OHM or	1	1	1	1	1	1	1	1
R107			CHIP RES.(1608) 1/10W 0 OHM or	1	1	1	1	1	1	1	1
R108			CARBON RES. 1/4W J 68 OHM	1	1	1	1	1	1	1	1
R109			CHIP RES.(1608) 1/10W J 75 OHM or	1	1	1	1	1	1	1	1
R110			CARBON RES. 1/4W J 1K OHM			1	1	1	1	1	1
R111			CARBON RES. 1/4W J 1K OHM			1					
R112			CARBON RES. 1/4W J 1K OHM				1	1	1	1	1
R113			CARBON RES. 1/6W J 4.7K OHM or				1	1	1	1	1
R114			CARBON RES. 1/6W J 4.7K OHM or			1					
R115			CARBON RES. 1/6W J 4.7K OHM or			1	1	1	1	1	1
R116			CARBON RES. 1/6W J 15K OHM or			1	1	1	1	1	1
R117			CHIP RES.(1608) 1/10W J 10K OHM or			1	1	1	1	1	1
R118			CARBON RES. 1/4W J 68 OHM			1	1	1	1	1	1
R119			CHIP RES.(1608) 1/10W J 75 OHM or			1	1	1	1	1	1
R120			CARBON RES. 1/6W J 680 OHM or	1	1	1	1	1	1	1	1
R123			CHIP RES.(1608) 1/10W J 220 OHM or	1	1	1	1	1	1	1	1
R125			CARBON RES. 1/6W J 680 OHM or			1	1	1	1	1	1
R126			CHIP RES.(1608) 1/10W J 220 OHM or			1	1	1	1	1	1
R127			CHIP RES.(1608) 1/10W 0 OHM or			1	1	1	1	1	1
R128			CHIP RES.(1608) 1/10W 0 OHM or			1	1	1	1	1	1
			SENSOR CBA	1	1	1	1	1	1	1	1
Q504		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12 or	1	1	1	1	1	1	1	1
Q505		9965 000 08630	PHOTO TRANSISTOR PT204-6B-12 or	1	1	1	1	1	1	1	1
			AFV CBA				1	1	1	1	1
CAPACITORS											
C1			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C4			CHIP CERAMIC CAP. CH J 56PF/50V or				1	1	1	1	1
C5			CHIP CERAMIC CAP. CH J 22PF/50V or				1	1	1	1	1
C6			CHIP CERAMIC CAP. CH J 56PF/50V or				1	1	1	1	1
C7			CHIP CERAMIC CAP. CH D 3PF/50V or				1	1	1	1	1
C8			CHIP CERAMIC CAP. CH D 3PF/50V or				1	1	1	1	1

ELECTRICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
C11			CHIP CERAMIC CAP. B K 0.01UF/50V				1	1	1	1	1
C12			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C13			CHIP CERAMIC CAP. B K 0.01UF/50V				1	1	1	1	1
C14			CHIP CERAMIC CAP. B K 0.01UF/50V				1	1	1	1	1
C15			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C16			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C17			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C19			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C20			ELECTROLYTIC CAP. 3.3UF/50V M H7				1	1	1	1	1
C21			CHIP CERAMIC CAP. F Z 0.1UF/50V or				1	1	1	1	1
C22			ELECTROLYTIC CAP. 10UF/16V M H7				1	1	1	1	1
C23			CHIP CERAMIC CAP. F Z 0.47UF/10V or				1				1
C24			ELECTROLYTIC CAP. 0.22UF/50V M H7				1	1	1	1	1
CN1			ANGLE PIN HEADER, 9P 6029B-1-09Z003-T				1	1	1	1	1
DIODES											
D2		4822 130 30621	SWITCHING DIODE 1N4148M or				1	1	1	1	1
IC1		9965 000 12199	IC:AUDIO PROCESSOR MSP3417G-QG-B8 or				1		1	1	1
IC1		9965 000 12274	IC:AUDIO PROCESSOR MSP3407G-QG-B8 or					1			
COILS											
L1		4822 157 10889	INDUCTOR 10UH-K-26T				1	1	1	1	1
L2		4822 157 10332	PCB JUMPER D0.6-P5.0				1	1	1	1	1
L3		4822 157 11318	INDUCTOR 18UH-K-26T				1	1	1	1	1
L4		4822 157 10889	INDUCTOR 10UH-K-26T				1	1	1	1	1
RESISTORS											
R1			CHIP RES.(1608) 1/10W J 1K OHM				1	1	1	1	1
R2			CHIP RES.(1608) 1/10W 0 OHM				1				1
R4			CHIP RES.(1608) 1/10W J 120K OHM				1	1	1	1	1
R5			CHIP RES.(1608) 1/10W 0 OHM				1	1	1	1	1
R6			CHIP RES.(1608) 1/10W 0 OHM				1	1	1	1	1
R7			CHIP RES.(1608) 1/10W J 1.2K OHM				1				1
X1		9965 000 12200	X'TAL 18.432MHZ				1	1	1	1	1

PRODUCT SAFETY NOTE: Products marked with a ▲

have special characteristics important to safety.

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NOTES:

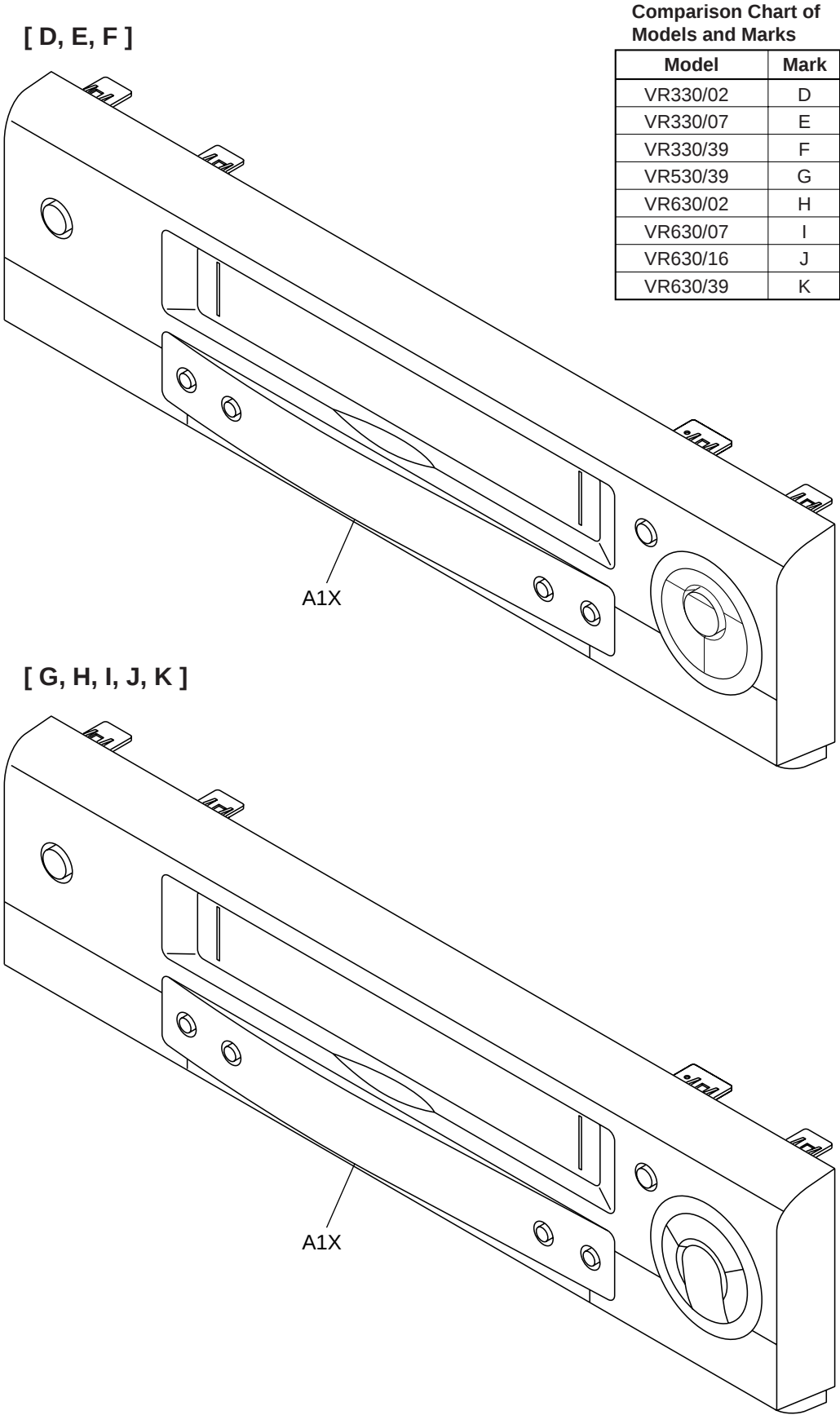
Parts that not assigned part numbers (-----) are not available.

Tolerance of Capacitors and Resistors are noted with the following symbols.

C...	D.....±0.5%	F.....±1%
G...	J.....±5%	K.....±10%
M...	N.....±30%	Z.....+80/-20%

[VR330/02,VR330/07,VR330/39,VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]

Front Panel

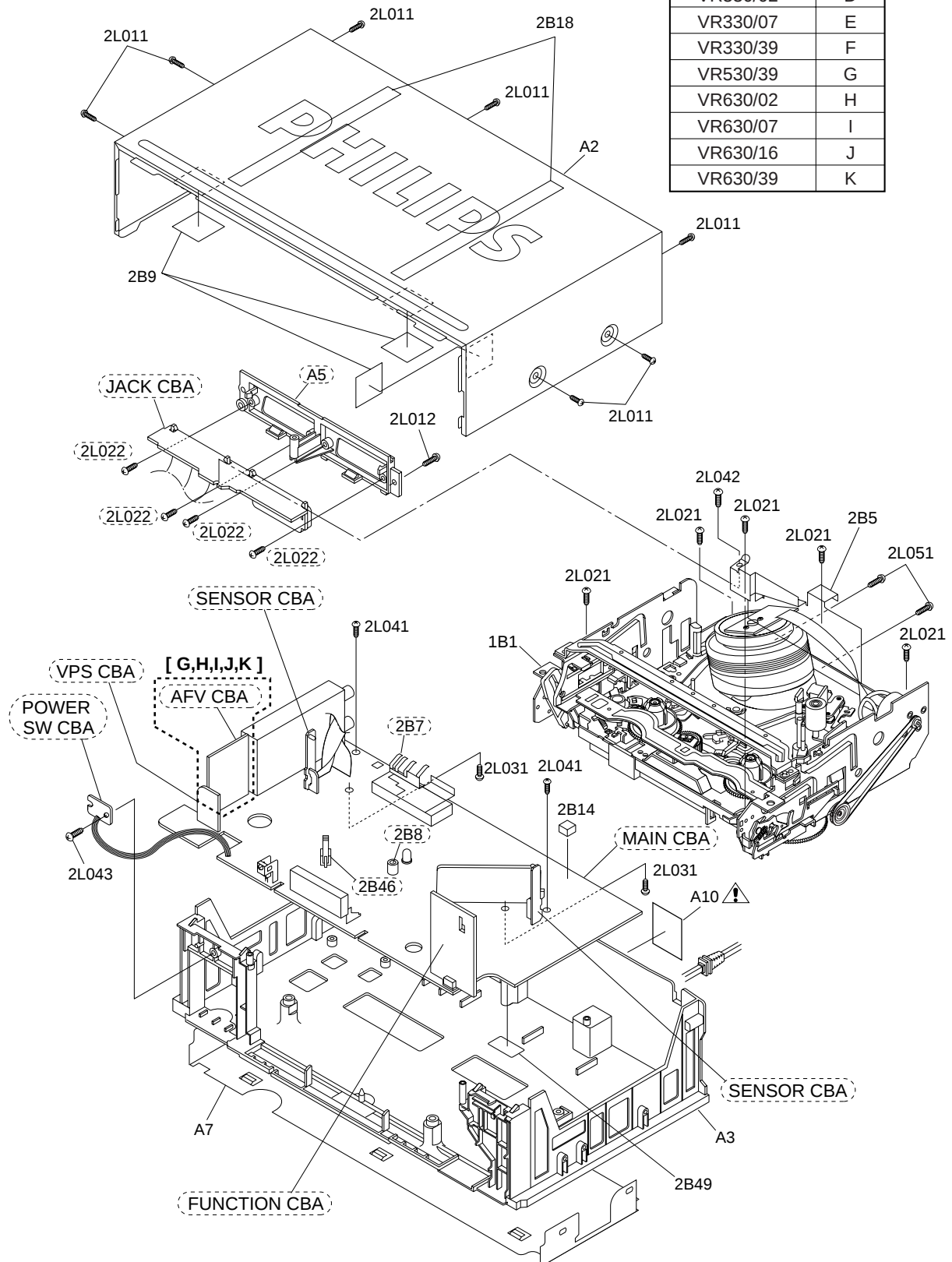


[VR330/02,VR330/07,VR330/39,VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]

Cabinet

Comparison Chart of Models and Marks

Model	Mark
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

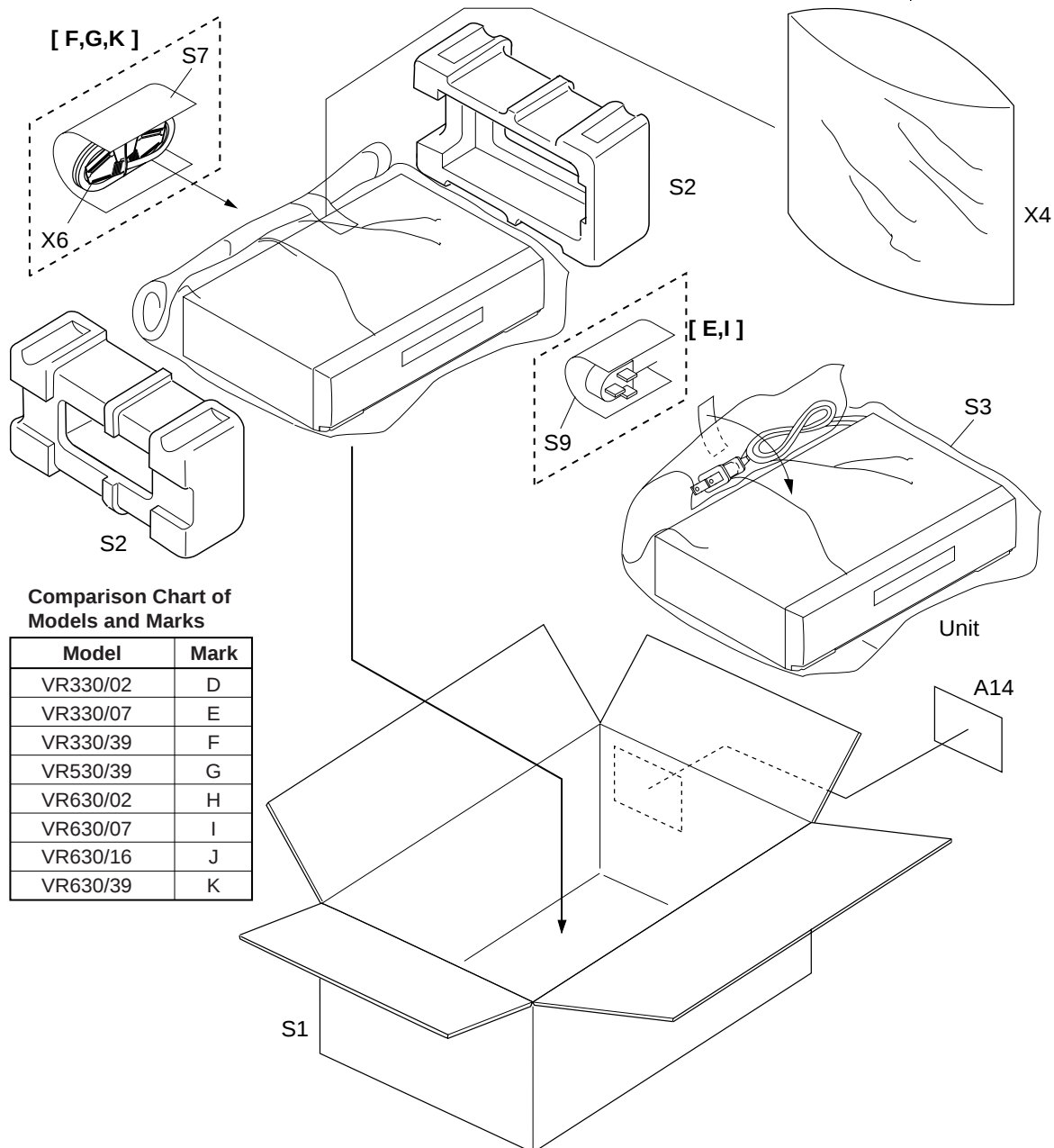
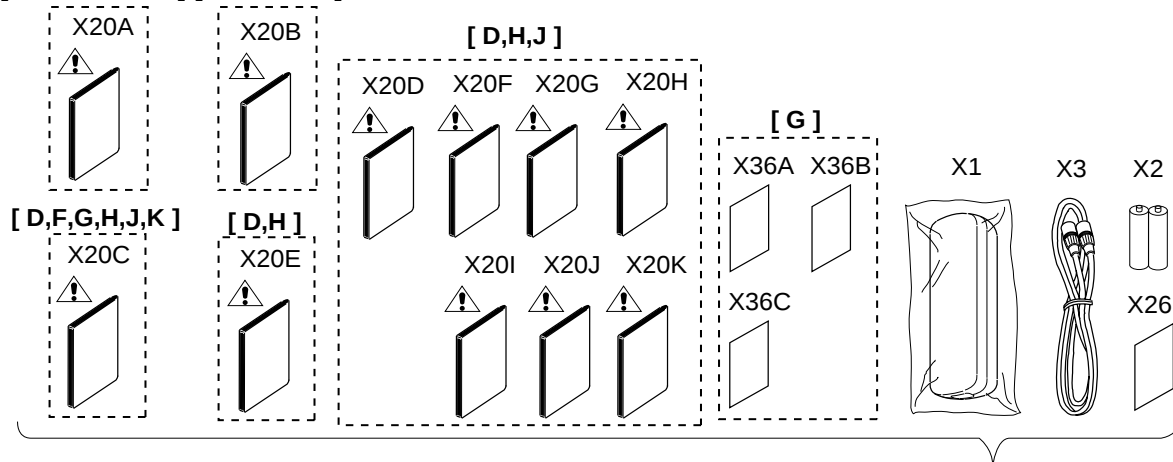


[VR330/02,VR330/07,VR330/39,VR530/39,VR630/02,VR630/07,VR630/16,VR630/39]

Packing

[D,E,F,G,H,I,K] [D,F,G,H,K]

Some Ref. Numbers are not in sequence.



Comparison Chart of Models and Marks

Model	Mark
VR330/02	D
VR330/07	E
VR330/39	F
VR530/39	G
VR630/02	H
VR630/07	I
VR630/16	J
VR630/39	K

MECHANICAL PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
A1X		9965 000 12888	FRONT ASSEMBLY HC265ED	1							
A1X		9965 000 12900	FRONT ASSEMBLY HC266BD		1						
A1X		9965 000 12902	FRONT ASSEMBLY HC267FD			1					
A1X		9965 000 12910	FRONT ASSEMBLY HC463FD				1				
A1X		9965 000 12911	FRONT ASSEMBLY HC465ED					1			
A1X		9965 000 12163	FRONT ASSEMBLY HC466BD						1		
A1X		9965 000 12912	FRONT ASSEMBLY HC467ED							1	
A1X		9965 000 12253	FRONT ASSEMBLY HC468FD								1
A2		9965 000 12164	CASE, TOP HC460ED	1	1	1	1	1	1	1	1
A3		9965 000 12165	CHASSIS HC461BD	1	1	1	1	1	1	1	1
A7		9965 000 12166	PANEL, BOTTOM HC461BD	1	1	1	1	1	1	1	1
A10	▲		LABEL, RATING HC265ED	1							
A10	▲		LABEL, RATING HC468FD		1						1
A10	▲		LABEL, RATING HC267FD			1					
A10	▲		LABEL, RATING HC463FD				1			1	
A10	▲		LABEL, RATING HC465ED					1	1		
A14			LABEL, BAR CODE HC265ED	1							
A14			LABEL, BAR CODE HC468FD		1						1
A14			LABEL, BAR CODE HC267FD			1					
A14			LABEL, BAR CODE HC463FD				1			1	
A14			LABEL, BAR CODE HC465ED					1	1		
1B1		9965 000 12889	DECK ASSEMBLY CZD011/VM15A0	1	1						
1B1		9965 000 12903	DECK ASSEMBLY CZD011/VM15A1			1					
1B1		9965 000 12399	DECK ASSEMBLY CZD011/VM15E0				1	1	1	1	1
2B5		9965 000 12168	SHEILD, CYLINDER HC460ED	1	1	1	1	1	1	1	1
2B18		9965 000 12400	FIBER, TOP CASE HC460ED	1	1	1	1	1	1	1	1
2B49		9965 000 12402	CHASSIS FIBER HC460ED	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
2L012		9965 000 12403	SCREW, P-TIGHT 3X12 BIND HEAD+	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
2L031		9965 000 12171	SCREW, B-TIGHT M3X8 BIND HEAD+	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
2L042		4822 502 14012	P-TIGHT SCREW 3X8 BIND +	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
2L051		4822 502 14018	SCREW, S-TIGHT M3X5 BIND HEAD+	1	1	1	1	1	1	1	1
X1		9965 000 12890	REMOTE CONTROL UNIT 364/CRC006 or	1	1	1					
X1		9965 000 12281	REMOTE CONTROL UNIT 364/CRC006 or				1				
X1		9965 000 12172	REMOTE CONTROL UNIT 364/CRC006					1	1	1	1
X3		9965 000 09742	RF CORD PAL 1.2M	1	1	1	1	1	1	1	1
X6		9965 000 12420	21P SCART CABLE or			1	1				1

PRODUCT SAFETY NOTE: Products marked with a ▲

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[ALL MODEL]

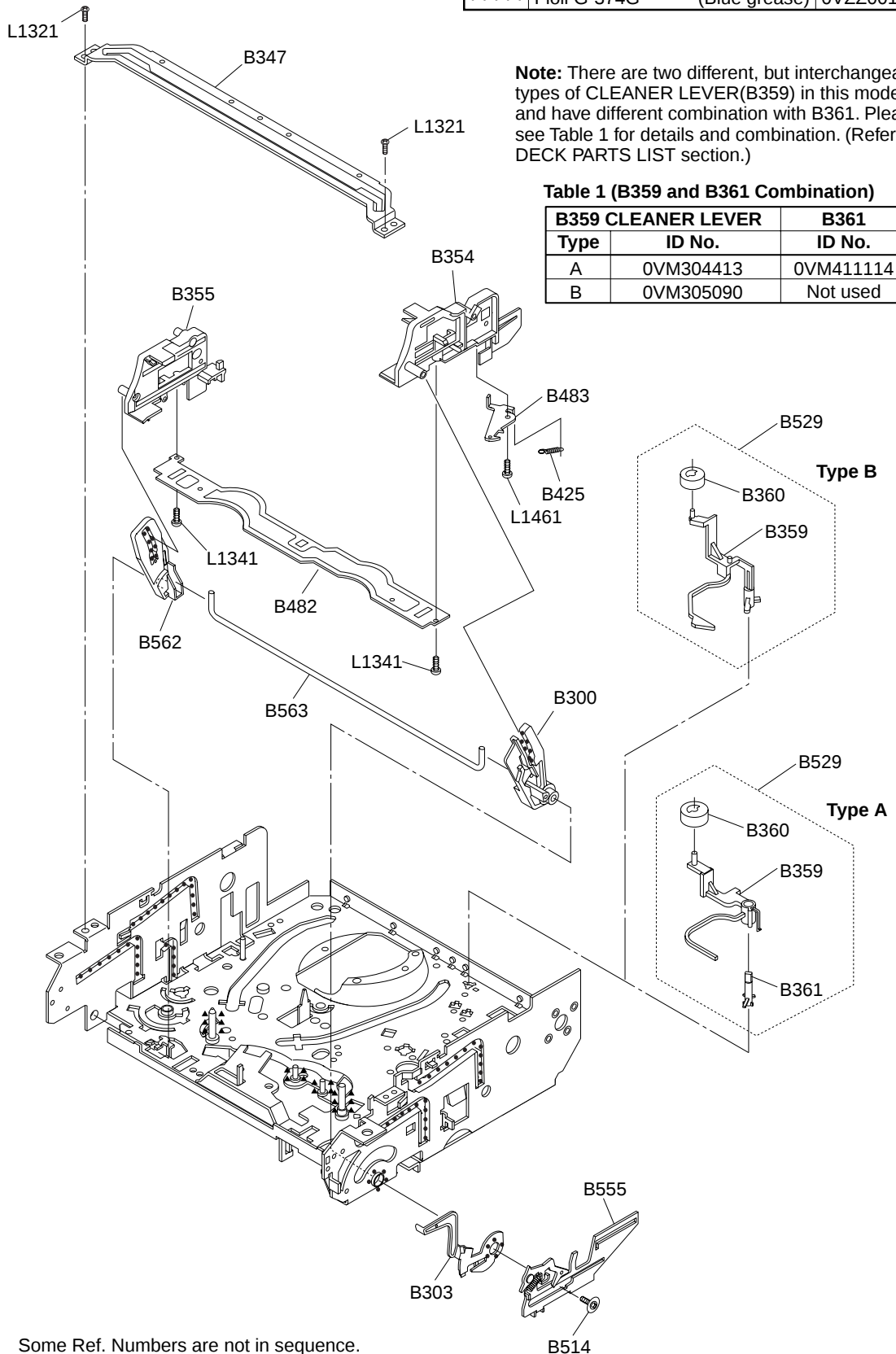
Deck Mechanism View 3

Mark	Description	Part No.
•••••	Foil G-374G (Blue grease)	0VZZ00109

Note: There are two different, but interchangeable types of CLEANER LEVER(B359) in this model, and have different combination with B361. Please see Table 1 for details and combination. (Refer to DECK PARTS LIST section.)

Table 1 (B359 and B361 Combination)

B359 CLEANER LEVER		B361
Type	ID No.	ID No.
A	0VM304413	0VM411114
B	0VM305090	Not used



DECK PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
B2		9965 000 12895	CYLINDER ASS'Y MK11 PAL 2HD 2SP	1	1						
B2		9965 000 12909	CYLINDER ASS'Y MK11 PAL 2HD 1SP			1					
B2		9965 000 12201	CYLINDER ASS'Y MK11 PAL 4HD HIFI or				1	1	1	1	1
B3		9965 000 12202	LOADING MOTOR ASS'Y MK11	1	1	1	1	1	1	1	1
B8		9965 000 12203	PULLEY ASS'Y MK11	1	1	1	1	1	1	1	1
B9		9965 000 08560	MOVING GUIDE S PREPARATION MK10	1	1	1	1	1	1	1	1
B10		9965 000 08431	MOVING GUIDE T PREPARATION MK10	1	1	1	1	1	1	1	1
B11		9965 000 12204	LOADING ARM T(B) ASS'Y MK11	1	1	1	1	1	1	1	1
B12		9965 000 12205	LOADING ARM S(B) ASS'Y MK11	1	1	1	1	1	1	1	1
B27		9965 000 12206	TENSION LEVER SUB ASS'Y MK11	1	1	1	1	1	1	1	1
B31		9965 000 12207	AC HEAD ASS'Y MK11	1	1	1	1	1	1	1	1
B35		9965 000 12208	TAPE GUIDE ASS'Y MK11	1	1	1	1	1	1	1	1
B37		9965 000 12209	CAPSTAN MOTOR 288/VCCM011	1	1	1	1	1	1	1	1
B52		9965 000 08593	CAP BELT MK10	1	1	1	1	1	1	1	1
B73		9965 000 12210	FE HEAD ASS'Y MK11 or	1	1	1	1	1	1	1	1
B73		9965 000 12896	FE HEAD ASS'Y MK11	1	1	1	1	1	1	1	1
B74		9965 000 08555	PRISM MK10	1	1	1	1	1	1	1	1
B121		9965 000 12211	WORM MK11	1	1	1	1	1	1	1	1
B126		9965 000 12212	PULLEY MK11	1	1	1	1	1	1	1	1
B133		9965 000 12213	IDLER ASS'Y(2) MK10	1	1	1	1	1	1	1	1
B148		4822 462 11189	TG CAP MK6	1	1	1	1	1	1	1	1
B300		9965 000 12214	C DRIVE LEVER R MK11	1	1	1	1	1	1	1	1
B303		9965 000 12215	F DOOR OPENER MK11	1	1	1	1	1	1	1	1
B347		9965 000 08445	GUIDE HOLDER A MK10	1	1	1	1	1	1	1	1
B354		9965 000 12216	SLIDER R MK11	1	1	1	1	1	1	1	1
B355		9965 000 12217	SLIDER L MK11	1	1	1	1	1	1	1	1
B359		9965 000 08449	CLEANER LEVER MK10 or	1	1	1	1	1	1	1	1
B359		9965 000 12416	CLEANER LEVER MK11	1	1	1	1	1	1	1	1
B360		9965 000 06561	CLEANER ROLLER MK9	1	1	1	1	1	1	1	1
B361		9965 000 08450	CL POST MK10	1	1	1	1	1	1	1	1
B410		9965 000 12218	PINCH ARM(A) ASS'Y MK11	1	1	1	1	1	1	1	1
B411		9965 000 08453	PINCH SPRING MK10	1	1	1	1	1	1	1	1
B414		9965 000 12219	M BRAKE S(HI) ASS'Y MK11	1	1	1	1	1	1	1	1
B416		9965 000 12220	M BRAKE T(HI) ASS'Y MK11	1	1	1	1	1	1	1	1
B417		9965 000 12221	TENSION SPG(190265) MK11	1	1	1	1	1	1	1	1
B425		9965 000 08457	LOCK LEVER SPRING MK10	1	1	1	1	1	1	1	1
B426		9965 000 08458	KICK PULLEY MK10	1	1	1	1	1	1	1	1
B482		9965 000 12222	C PLATE MK11	1	1	1	1	1	1	1	1
B483		9965 000 08461	LOCK LEVER MK10	1	1	1	1	1	1	1	1
B487		9965 000 08462	BAND BRAKE MK10	1	1	1	1	1	1	1	1
B488		9965 000 12223	MODE LEVER(HI) MK11	1	1	1	1	1	1	1	1
B491		9965 000 12224	CAM GEAR(A) MK11	1	1	1	1	1	1	1	1
B492		9965 000 12225	MODE GEAR MK11	1	1	1	1	1	1	1	1
B494		9965 000 12226	DOOR OPENER B MK11	1	1	1	1	1	1	1	1
B499		9965 000 08467	T LEVER HOLDER MK10	1	1	1	1	1	1	1	1
B501		9965 000 12227	WORM HOLDER MK11	1	1	1	1	1	1	1	1
B502		9965 000 08469	CAM GEAR(B) MK10	1	1	1	1	1	1	1	1
B505		9965 000 12372	PSCW(625504) MK11	1	1	1	1	1	1	1	1
B507		9965 000 05342	REEL WASHER MK9 5*2.1*0.5	1	1	1	1	1	1	1	1
B508		9965 000 08470	S BRAKE SPRING MK10	1	1	1	1	1	1	1	1
B513		9965 000 08471	PSCW(752605) MK10	1	1	1	1	1	1	1	1
B514		9965 000 12228	SCREW RACK MK11	1	1	1	1	1	1	1	1
B516		9965 000 05342	REEL WASHER MK9 5*2.1*0.5	1	1	1	1	1	1	1	1
B518		4822 532 13159	P.S.W CUT 1.6X4.0X0.5T	1	1	1	1	1	1	1	1
B520		9965 000 12229	T BRAKE SPRING HI(F) MK11	1	1	1	1	1	1	1	1
B521		9965 000 08482	SOFT SPRING MK10	1	1	1	1	1	1	1	1
B522		9965 000 08483	TG POST ASS'Y MK10	1	1	1	1	1	1	1	1
B525		9965 000 12230	LDG BELT MK11	1	1	1	1	1	1	1	1

DECK PARTS LIST				VR330/02	VR330/07	VR330/39	VR530/39	VR630/02	VR630/07	VR630/16	VR630/39
Pos.	▲	12 NC	Description								
B529		9965 000 12231	CLEANER ASS'Y MK11	1	1	1	1	1	1	1	1
B551		9965 000 12232	FF ARM(HI) MK10	1	1	1	1	1	1	1	1
B553		9965 000 12233	REV SPRING MK11	1	1	1	1	1	1	1	1
B555		9965 000 12234	RACK ASS'Y MK11	1	1	1	1	1	1	1	1
B557		9965 000 08519	MOTOR PULLEY U5	1	1	1	1	1	1	1	1
B558		9965 000 12235	LOADING MOTOR M31E-1 R14 7351	1	1	1	1	1	1	1	1
B559		9965 000 12236	CLUTCH ASS'Y(HI)(2) MK11	1	1	1	1	1	1	1	1
B560		9965 000 08522	KICK SPRING MK10	1	1	1	1	1	1	1	1
B562		9965 000 08524	C DRIVE LEVER L MK10	1	1	1	1	1	1	1	1
B563		9965 000 08525	SLIDER SHAFT MK10	1	1	1	1	1	1	1	1
B564		9965 000 12237	M GEAR(HYT) N12G5F*	1	1	1	1	1	1	1	1
B565		9965 000 12238	SENSOR GEAR MK11	1	1	1	1	1	1	1	1
B567		9965 000 08544	PINCH ARM(B) MK10	1	1	1	1	1	1	1	1
B568		9965 000 08545	BT ARM MK10	1	1	1	1	1	1	1	1
B569		9965 000 12239	CAM HOLDER F MK11	1	1	1	1	1	1	1	1
B570		9965 000 12240	CAM RACK SPRING(HI) MK11	1	1	1	1	1	1	1	1
B571		4822 532 13158	P.S.W F 6*2.55*0.5	1	1	1	1	1	1	1	1
B572		4822 532 13159	P.S.W CUT 1.6X4.0X0.5T	1	1	1	1	1	1	1	1
B573		9965 000 12241	REEL S MK11	1	1	1	1	1	1	1	1
B574		9965 000 12376	REEL T MK10	1	1	1	1	1	1	1	1
B578		9965 000 12243	TR GEAR A MK10	1	1	1	1	1	1	1	1
B579		9965 000 12244	TR GEAR B MK10	1	1	1	1	1	1	1	1
B580		9965 000 12245	TR GEAR C MK11	1	1	1	1	1	1	1	1
B581		9965 000 12246	CENTER GEAR(HYT) N12G5F*	1	1	1	1	1	1	1	1
B582		9965 000 12247	TR GEAR SPRING MK10	1	1	1	1	1	1	1	1
B583		9965 000 05342	REEL WASHER MK9 5*2.1*0.5	1	1	1	1	1	1	1	1
B584		9965 000 12248	TR GEAR SHAFT MK10	1	1	1	1	1	1	1	1
B585		9965 000 12249	PSW(2957505) MK11	1	1	1	1	1	1	1	1
L1051		9965 000 05359	SCREW, B-TIGHT M2.6X6 PAN HEAD+	1	1	1	1	1	1	1	1
L1053		9965 000 05375	SCREW, S-TIGHT M2.6X8 WASHER HEAD+	1	1	1	1	1	1	1	1
L1151		9965 000 08642	SCREW, SEMS M2.6X4 PAN HEAD+	1	1	1	1	1	1	1	1
L1191		9965 000 05375	SCREW, S-TIGHT M2.6X8 WASHER HEAD+	1	1	1	1	1	1	1	1
L1321		4822 502 14009	SCREW, S-TIGHT M3X6 BIND HEAD+	1	1	1	1	1	1	1	1
L1341		4822 502 14669	SCREW, P-TIGHT M2.6X6 BIND HEAD+	1	1	1	1	1	1	1	1
L1406		9965 000 08643	AC HEAD SCREW MK9	1	1	1	1	1	1	1	1
L1407		9965 000 12250	SCREW, S-TIGHT M2.6X10 DISH HEAD+	1	1	1	1	1	1	1	1
L1450		4822 502 14671	SCREW, SEMS M2.6X5 PAN HEAD+	1	1	1	1	1	1	1	1
L1461		4822 502 30471	SCREW, P-TIGHT M2.6X6 WASHER HEAD+	1	1	1	1	1	1	1	1
L1466		9965 000 05364	SCREW, S-TIGHT M2.6X6 BIND HEAD+	1	1	1	1	1	1	1	1
L1467		9965 000 12251	SCREW, S-TIGHT M2.6X5 WASHER HEAD+	1	1	1	1	1	1	1	1
L1468		9965 000 12252	SCREW, B-TIGHT M1.7X12	1	1	1	1	1	1	1	1
L1471		9965 000 05364	SCREW, S-TIGHT M2.6X6 BIND HEAD+	1	1	1	1	1	1	1	1

Note: There are two different, but interchangeable types of CLEANER LEVER (B359) in this model, and have different combination with B361. Please see table 1 for details and combination.

Table 1 (B359and B361 Combination)

B359 CLEANER LEVER		B361
Type	ID No.	ID No.
A	9965 000 08449	9965 000 08450
B	9965 000 12416	not used