Self Diagnosis Supported model

SERVICE MANUAL

BA-5D CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KV-27FV300	RM-Y181	US	SCC-S65AA
KV-27FV300	RM-Y181	CND	SCC-S64AA
KV-29FV300	RM-Y181	LATIN NORTH	SCC-S62BA
KV-29FV300	RM-Y181	LATIN SOUTH	SCC-S62CA
KV-32FV300	RM-Y182	US	SCC-S65BA
KV-32FV300	RM-Y182	CND	SCC-S64BA
KV-36FV300	RM-Y182	US	SCC-S65CA
KV-36FV300	RM-Y182	CND	SCC-S64CA
KV-36FV300	RM-Y182	HAWAII	SCC-S67AA



KV-36FV300



RM-Y182

TRINITRON® COLOR TELEVISION

SONY®

9-965-924-04

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SPECIFICATIONS

	KV-27FV300 KV-29FV300	KV-32FV300	KV-36FV300
Power Requirements	120V, 60Hz		
Number of Inputs/Outputs			
Video [1]	3		
S Video [2]	2		
Y, P_B, P_R [3]	1		
Audio [4]	3		
Audio Out [5]	1		
Monitor Out	1		
Speaker Output (W)	7.5 W x 2, 15 Wsubwoofer		
Power Consumption (W)			
In Use (Max)	220 W	230 W	230 W
In Standby	1W	1W	1W
Dimensions (W x H x D)			
mm	784 x 601.5 x 520 mm	898 x 682 x 584 mm	1020 x 760 x 640 mm
in	$30^{7/8}$ x $23^{11/16}$ x $20^{1/2}$in	$35^{3/8}$ x $26^{7/8}$ x 23 in	$40^{1/4}$ x 30 x $25^{1/4}$ in
Mass			
kg	48 kg	78 kg	102 kg
lbs	105 lbs. 13 oz.	171 lbs. 15 oz.	224 lbs. 14 oz.

1) 1 Vp-p 75 ohms unbalanced, sync negative
2) Y: 1 Vp-p 75 ohms unbalanced, sync negative
   C: 0.286 Vp-p (Burst signal), 75 ohms
3) Y: 1.0 Vp-p, 75 ohms, sync negative;
   PB: 0.7 Vp-p, 75 ohms
   PR: Vp-p, 75 ohms
4) 500 mVrms (100% modulation), Impedance: 47 kilohms
5) More than 408 mVrms at the maximum volume setting (variable)
   More than 408 mVrms (fix)

Television system
American TV standard, NTSC

Channel coverage
VHF: 2-13/ UHF: 14-69/ CATV: 1-125

Picture tube
FD Trinitron® tube

Visible screen size
27 inch picture measured diagonally (KV-27FV300/29FV300)
32 inch picture measured diagonally (KV-32FV300)
36 inch picture measured diagonally (KV-36FV300)

Actual screen size
29 inch measured diagonally (KV-27FV300/29FV300)
34 inch measured diagonally (KV-32FV300)
38 inch measured diagonally (KV-36FV300)

Antenna
75-ohm external antenna terminal for VHF/UHF

Supplied Accessories
Size AA (R6) batteries (2)
Remote Control RM-Y181 (1) (KV-27FV300/29FV300)
Remote Control RM-Y182 (1) (KV-32FV300/36FV300)
Wireless Headphones (1) (KV-32FV300/36FV300)

Optional Accessories
TV Stand: SU-27HV2 for (KV-27KV300/29FV300)
SU-32HV3 for (KV-32KV300)
SU-36HV3 for (KV-36KV300)

Design and specifications are subject to change without notice.

XBR
TruSurround™ by SRS (●)®

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WARNINGS AND CAUTIONS

CAUTION

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

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.

⚠ SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

ATTENTION!!

Apres avoir deconnecte le cap de l'anode, court-circuiter l'anode du tube cathodique et celui de l'anode du cap au chassis metallique de l'appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d'eviter tout risque d'electrocution provenant d'un châssis sous tension, un transformateur d'isolement doit etre utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.

⚠ ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifies par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d'une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l'importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.

3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.

4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.

5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.

7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.

8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instructions.

2. A battery-operated AC milliampmeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson’s 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

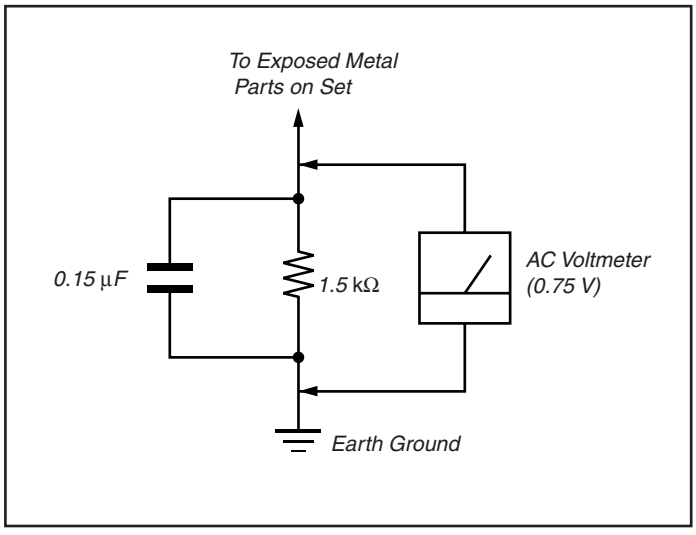


Figure A. Using an AC voltmeter to check AC leakage.

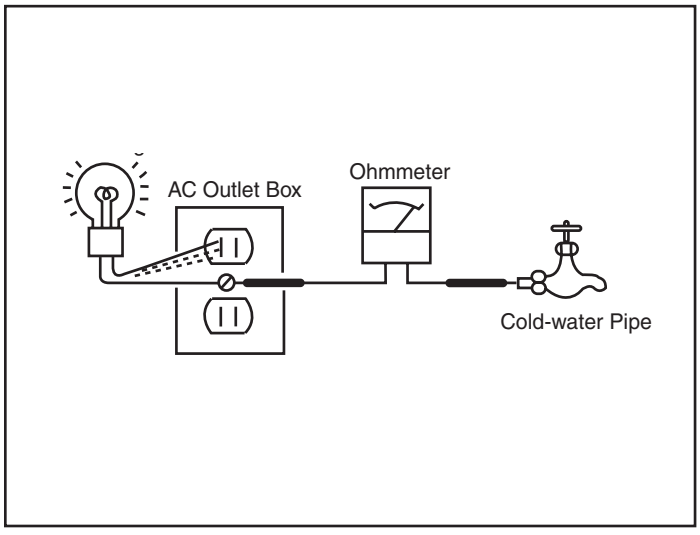


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION

Self Diagnosis Supported model

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

Diagnostic Test Indicators

When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

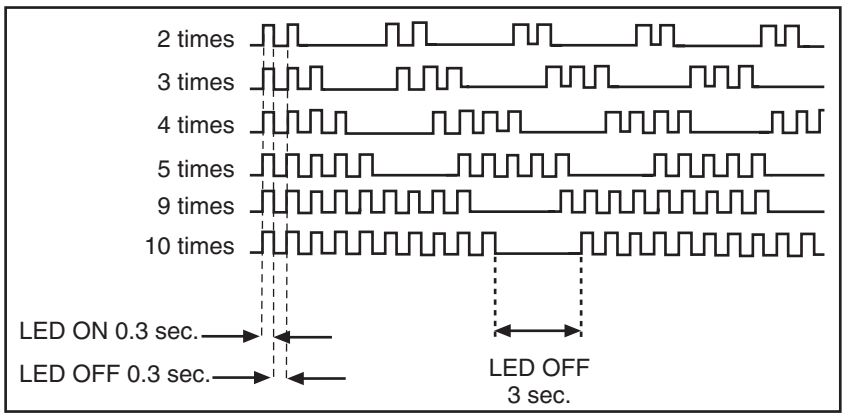
Results for all of the following diagnostic items are displayed on screen. If the screen displays a "0", an error has occurred.

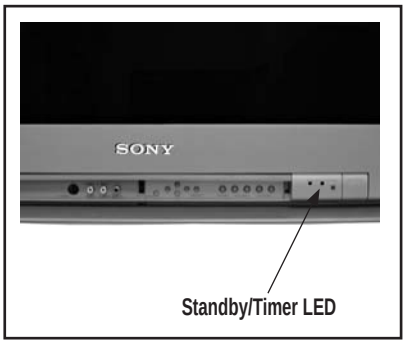
Diagnostic Item	No. of times STANDBY / TIMER lamp flashes	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	• Power cord is not plugged in. • Fuse is burned out (F601). (GK Board)	• Power does not come on. • No power is supplied to the TV. • AC Power supply is faulty.
+B overcurrent (OCP)*	2 times	• H.OUT (Q502) is shorted. (A Board) • IC702 is shorted. (C Board)	• Power does not come on. • Load on power line shorted.
+B overvoltage (OVP)	3 times	• IC501 is faulty. (A Board) • If a high is supplied to pin 2 of IC501. (A Board)	• Has entered standby mode.
I-Prot	4 times	• +12V is not supplied. (A Board) • IC561 is faulty. (A Board)	• Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
IK (AKB)	5 times	• Video OUT (IC561) is faulty. (A Board) • IC702 is faulty. (C Board) • Screen (G2) is improperly adjusted. **	• No raster is generated. • CRT Cathode current detection reference pulse output is small.
Zero Cross	9 times	• No zero cross pulses on pin 45 IC1001. (A Board)	• Power does not come on.
9V Check	10 times	• Relay failed (RY600)	• Power does not come on.

* If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on the screen.

** Refer to Screen (G2) Adjustments in Section 2-4 of this manual

Display of Standby/Timer LED Flash Count





Diagnostic Item	Flash Count*
+B Overcurrent	2 times
+B Overvoltage	3 times
V-STOP	4 times
IK (AKB)	5 times
Zero Cross	9 times
9V	10 times

*One flash count is not used for self-diagnostic.

Stopping the Standby/Timer LED Flash

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER LAMP from flashing.

Self-Diagnostic Screen Display

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

To Bring Up Screen Test

In standby mode, press buttons on the Remote Commander sequentially, in rapid succession, as shown below:

DISPLAY ➡ Channel 5 ➡ Sound volume - ➡ Power ON.

SELF DIAGNOSIS	
2: +B OCP	0
3: +B OVP	0
4: VSTOP	0
5: AKB	1
9: ZCD	0
10: 9VON	0
101: WDT	0
Serial: xxxxxxx	
Model: xxxxxxx	

Numeral “0” means that no fault was detected.
Numeral “1” means a fault was detected one time only.

Handling of Self-Diagnostic Screen Display

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.
Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

Clearing the Result Display

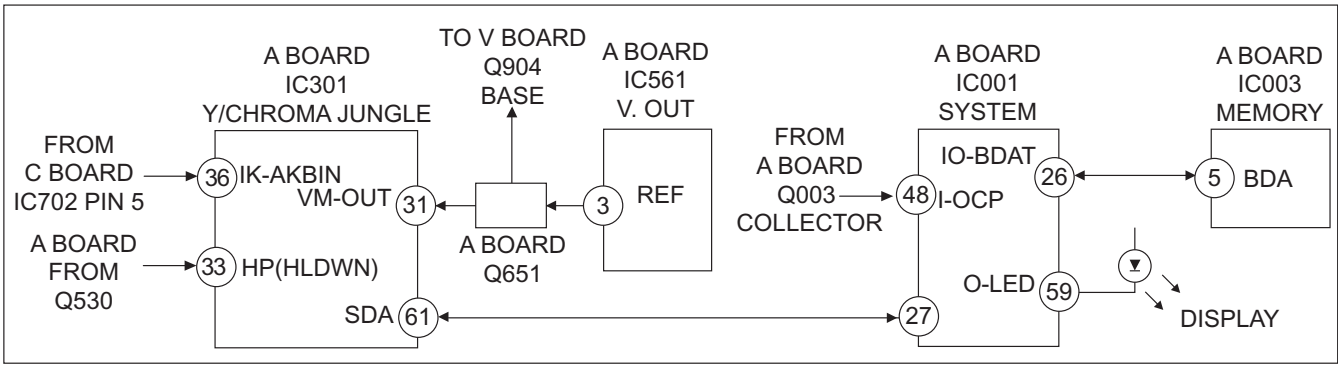
To clear the result display to “0”, press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

Channel 8 ➡ ENTER

Quitting the Self-Diagnostic Screen

To quit the entire self-diagnostic screen, turn off the power switch on the Remote Commander or the main unit.

Self-Diagnostic Circuit



+B overcurrent (OCP)
Occurs when an overcurrent on the +B (135V) line is detected by pin 48 of IC001 (A Board). If the voltage of pin 48 of IC001 (A Board) is less than 1V when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.

+B overvoltage (OVP)
Occurs when a high is felt onpin 2 of IC501 (A Board).

I-PROT
Occurs when an absence of the vertical deflection pulse is detected by pin 31 of IC301 (A Board). Power supply will shut down when waveform interval exceeds 2 seconds.

IK (AKB)
If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC301 (A Board). TV will stay on, but there will be no picture.

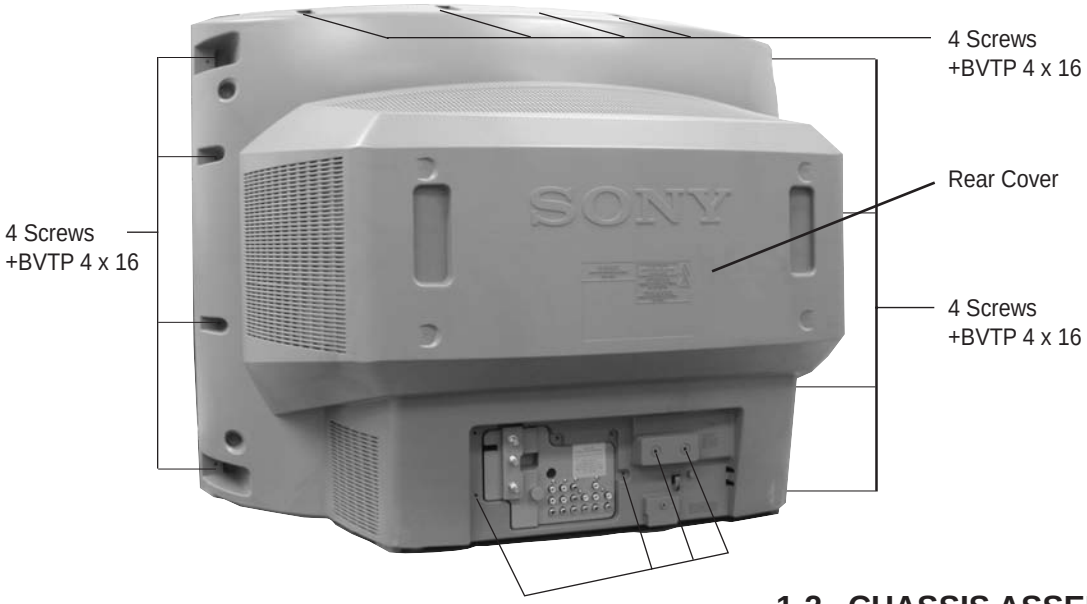
*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

Zero Cross
Check Q691 collector (GK Board) 7.5V STBY goes to 0V when the set is turned on.

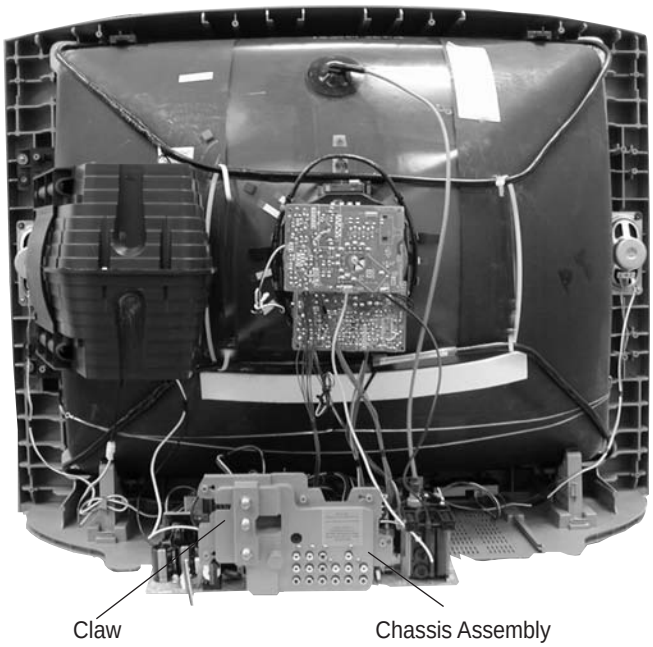
9V Check
Check Q691 collector (GK Board) 7.5V STBY goes to 0V when the set is turned on.

SECTION 1: DISASSEMBLY

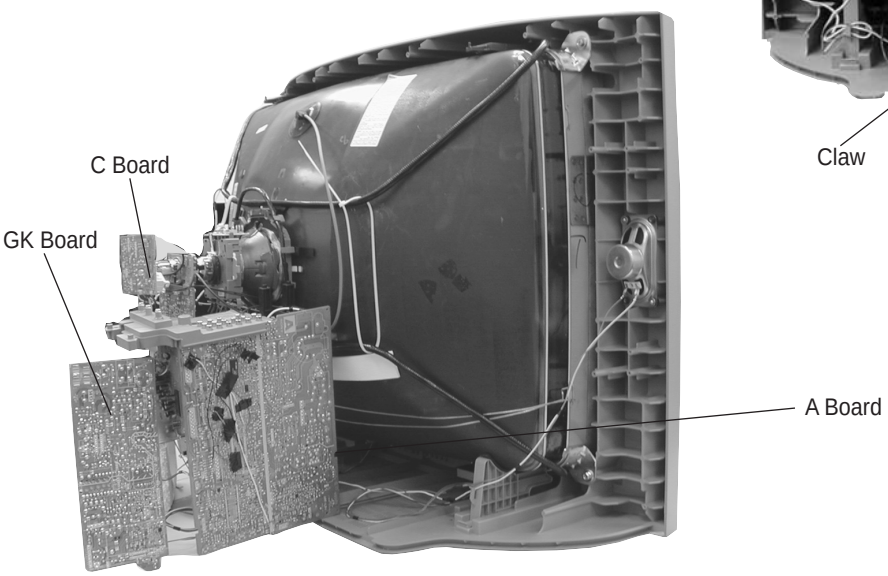
1-1. REAR COVER REMOVAL



1-2. CHASSIS ASSEMBLY REMOVAL

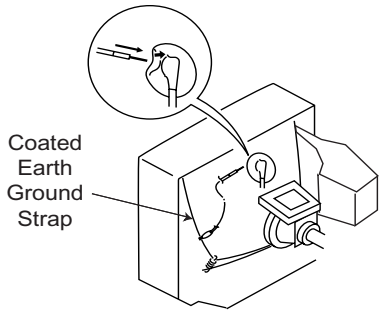


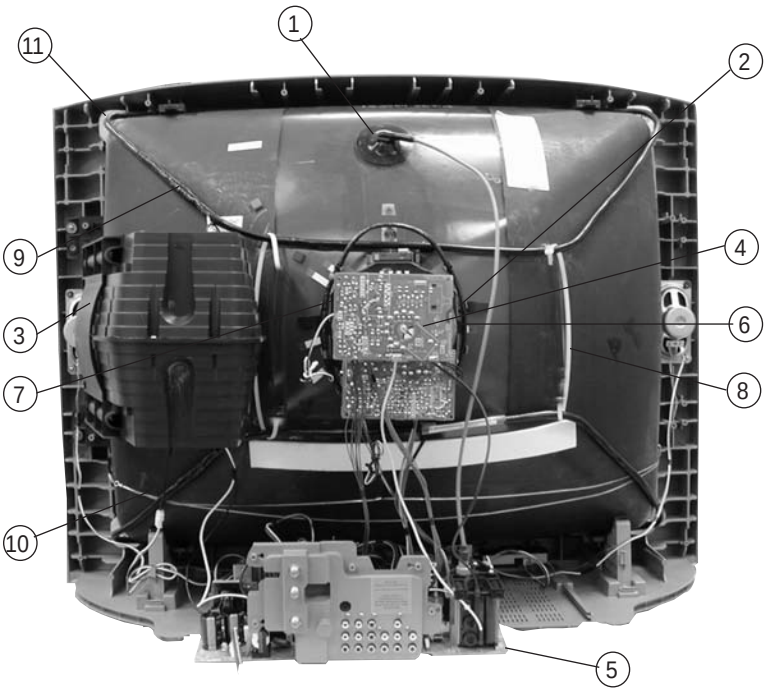
1-3. SERVICE POSITION



1-4. PICTURE TUBE REMOVAL

WARNING: BEFORE REMOVING THE ANODE CAP
High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.





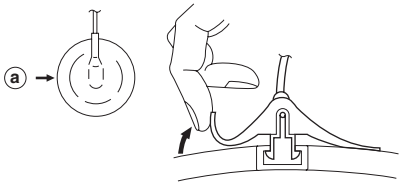
1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the deflection yoke, neck assembly, degaussing coils and CRT grounding strap.
3. Remove the Sub-Woofer Assemblies.
4. Remove the C Board from the CRT.
5. Remove the chassis assembly.
6. Loosen the neck assembly fixing screw and remove.
7. Loosen the deflection yoke fixing screw and remove.
8. Place the set with the CRT face down on a cushion and remove the degaussing coil holders.
9. Remove the degaussing coils.
10. Remove the CRT grounding strap and spring tension devices.
11. Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT [Take care not to handle the CRT by the neck].

ANODE CAP REMOVAL PROCEDURE

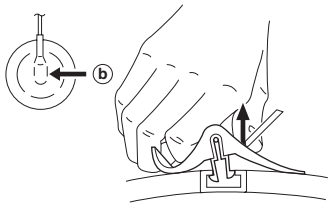
WARNING: High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. After removing the anode cap, short circuit to either the metal chassis, CRT shield, or carbon painted on the CRT.

NOTE: After removing the anode cap, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield or carbon painted on the CRT.

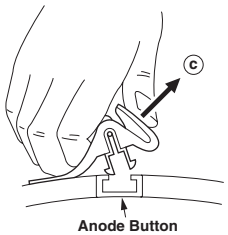
REMOVAL PROCEDURES



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



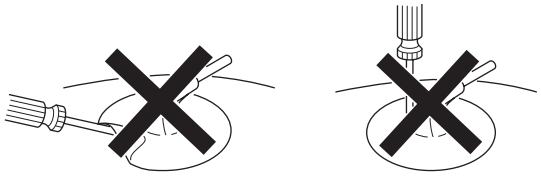
Use your thumb to pull the rubber cap firmly in the direction indicated by arrow b .



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

HOW TO HANDLE AN ANODE CAP

1. Do not use sharp objects which may cause damage to the surface of the anode cap.
2. To avoid damaging the anode cap, do not squeeze the rubber covering too hard. A material fitting called a shatter-hook terminal is built into the rubber.
3. Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



SECTION 2: SET-UP ADJUSTMENTS

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

The controls and switch should be set as follows unless otherwise noted:

PICTURE CONTROL: normal
BRIGHTNESS CONTROL: normal

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)/White Balance

Test Equipment Required:

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter
5. Oscilloscope
6. CRT Analyzer

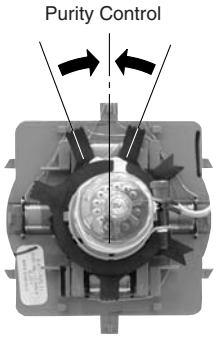
2-1. BEAM LANDING

Preparation:

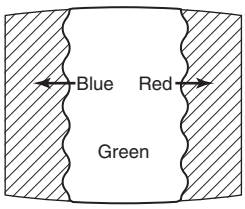
- Input a white pattern signal.
- Face the picture tube in an East or West direction to reduce the influence of geomagnetism.

NOTE: Do not use the hand degausser; it magnetizes the CRT .

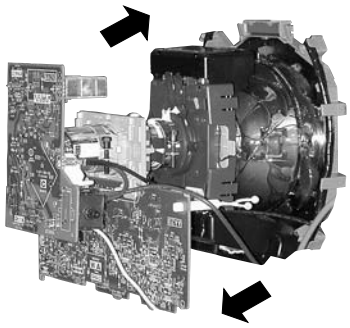
1. Input white pattern from pattern generator.
2. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown below:



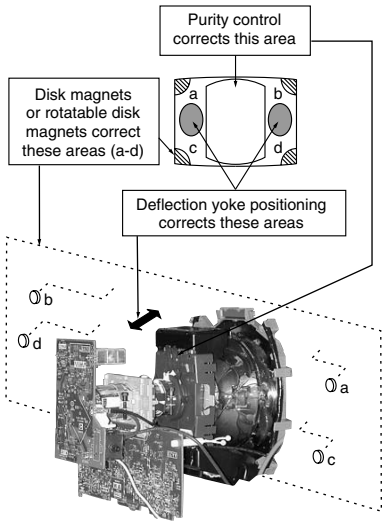
3. Input green pattern from pattern generator.
4. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are even on both sides.



5. Move the deflection yoke forward, and adjust so that the entire screen becomes green.



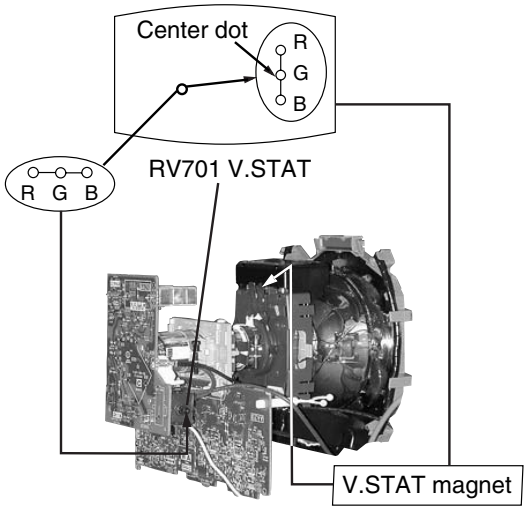
6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. When landing at the corner is not right, adjust by using the disk magnets.



2-2. CONVERGENCE

Preparation:

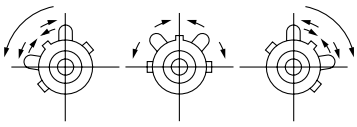
- Perform FOCUS, V. LIN and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Input dot pattern.



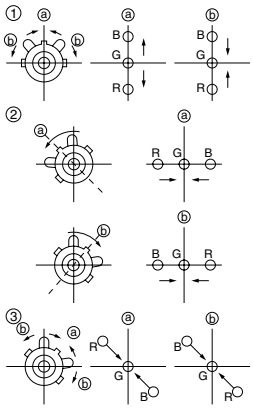
VERTICAL AND HORIZONTAL STATIC CONVERGENCE

1. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen (Vertical movement).

   Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



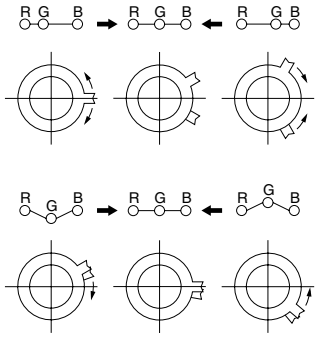
2. When the V. STAT magnet is moved in the direction of arrow a and b, red, green, and blue dots move as shown below:



OPERATION OF BMC (HEXAPOLE) MAGNET

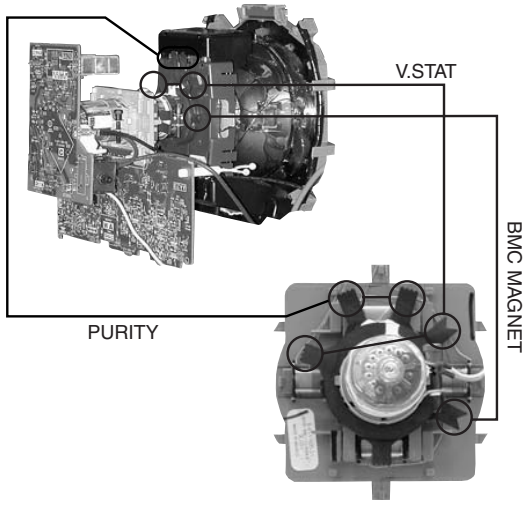
The respective dot positions resulting from moving each magnet interact, so perform adjustment while tracking.

1 Use the V.STAT tabs to adjust the red, green, and blue dots so they line up at the center of the screen (move the dots in a horizontal direction).



Y SEPARATION AXIS CORRECTION MAGNET ADJUSTMENT

1. Input cross-hatch pattern, adjust PICTURE to minimum and BRIGHTNESS to normal.
2. Adjust the deflection yoke upright so it touches the CRT.
3. Adjust so that the Y separation axis correction magnet on the neck assembly is symmetrical from top to bottom (open state).

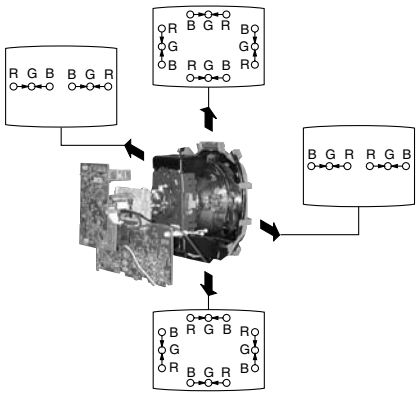


4. Return the deflection yoke to its original position.

DYNAMIC CONVERGENCE ADJUSTMENT

Before starting, perform Vertical and Horizontal Static Convergence Adjustment.

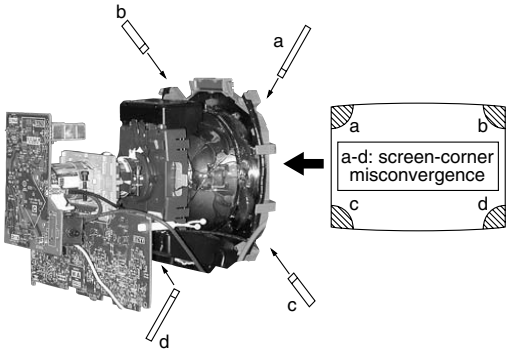
1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below:



4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.

SCREEN-CORNER CONVERGENCE

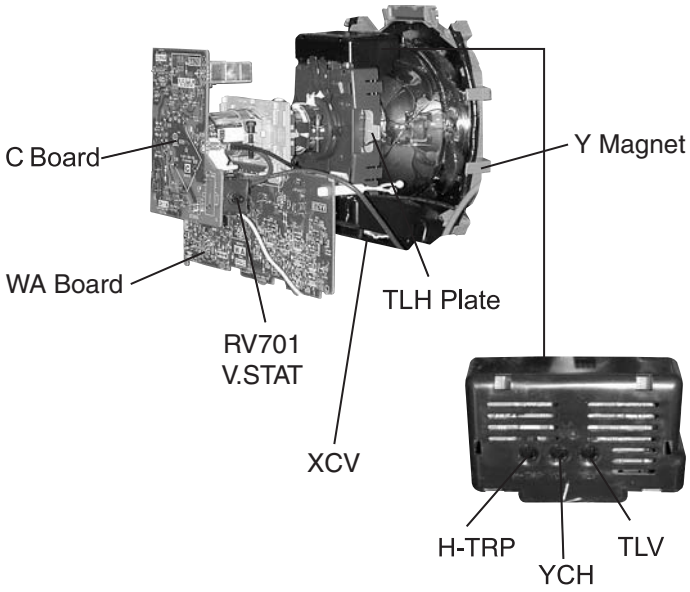
1. Affix a permalloy assembly corresponding to the misconverged areas:

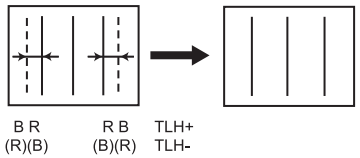


TLH PLATE ADJUSTMENT

Preparation:

- Input crosshatch pattern.
- Adjust Picture Quality to standard, Picture and Brightness to 50%, and Other to standard.
- Adjust the Horizontal Convergence of red and blue dots by tilting the TLH plate on the deflection yoke.



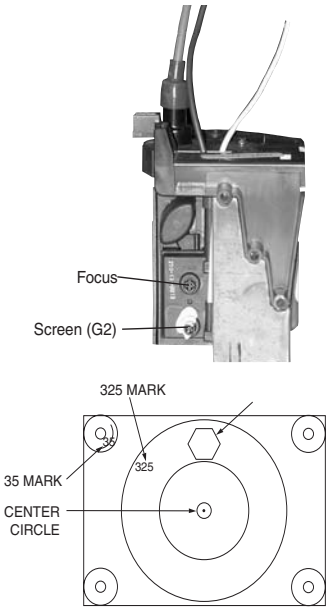


1. Adjust XCV core to balance X axis.
2. Adjust YCH VR to balance Y axis.
3. Adjust vertical red and blue convergence with V.TILT (TLV VR.) Perform adjustments while tracking items 1 and 2.
4. Adjust Y MAGNET to correct V.BOW Geometry Distortion.
5. Adjust H-TRP to correct H.Trapezoid Geometry Distortion.

After adjusting items 4 and 5, confirm overall geometry again.

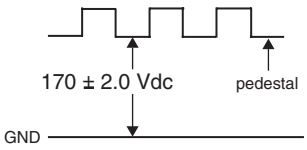
2-3. FOCUS

1. Input monoscope signal.
2. Set user controls to normal.
3. Set video mode to STANDARD.
4. Set the PICTURE to maximum.
5. Adjust at 325 Mark for best center/corner focus balance.
6. Receive an entire white signal. Make sure Magenta Ring is at an acceptable level.



2-4. SCREEN (G2)

1. Input dot pattern from the pattern generator.
2. Set the user controls to NORMAL.
3. Attach the G2-Jig to the C Board.
4. Adjust RCUT, GCUT, BCUT, and SBRT in service mode with an oscilloscope so that voltages on the red, green, and blue cathodes are 170 ± 2.0Vdc.
5. Observe the screen and adjust SCREEN (G2) VR to obtain the faintly visible background of dot signal.
6. Push the TEST + JUMP (+ Channel) to cut off the signal. The screen should be bright or dark. Brightness of raster must be increased when adjusting.
7. Adjust screen VR until the screen is slightly cut off, or scarcely lights up. A signal cannot be seen when the brightness of the raster is high.
8. Push the JUMP again to release the cut off.



2-5. WHITE BALANCE ADJUSTMENTS

Adj.	NO.	Disp.	Item	All Models
VID_ADJ	0	RDRV	Red Drive	41
VID_ADJ	1	GDRV	Green Drive	32
VID_ADJ	2	BDRV	Blue Drive	29
VID_ADJ	3	RCUT	Red Cut-off	31
VID_ADJ	4	GCUT	Green Cut-off	14
VID_ADJ	5	BCUT	Blue Cut-off	17
VP2	4	SBRT	Sub Bright	16

1. Set program palette to STANDARD and push RESET.
2. Input an entire white signal.
3. Set to Service Adjustment Mode.
4. Set the PICTURE and BRIGHT to minimum.
5. Adjust with SBRT if necessary.
6. Set RCUT to “14”.
7. Select GCUT and BCUT with 3 and 5 .
8. Adjust by pressing 1 and 4 for the best white balance.
9. Set the PICTURE and BRIGHT to maximum.
10. Select GDRV and BDRV with and .
11. Adjust with 3 and 6 for the best white balance.
12. Write into the memory by pressing 3 then 5.
13. Repeat steps 1-12 for GDR4, BDR4, GCU4 and BCU4 using Video 4 input.

* Use values from Sub Contrast Adjustments

White balance should be adjusted after Sub Contrast because RDRV is also used in Sub Contrast Adjustment. (See page 22).

SECTION 3: SAFETY RELATED ADJUSTMENTS

3-1. ⋈ R530, R531 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

Always perform the following adjustments when replacing the following components marked with a ◪ mark on the schematic diagram:

Part Replaced (◪)	Adjustment (⋈)
A BOARD: R550, T503, T504, D519, IC501, R533, D521, R532, D520, C531, R529, R530, R531, C532	**HV HOLD DOWN** R530, R531

PREPARATION BEFORE CONFIRMATION

1. Using a Variac, apply AC input voltage: 120+2.0 VAC.
2. Turn the POWER switch ON.
3. Input a white signal and set the PICTURE and BRIGHT controls to maximum.
4. Confirm that the voltage of more than 23.0 VDC appears between TP85 and ground on the A Board.

HOLD-DOWN OPERATION CONFIRMATION

1. Connect the current meter between Pin 11 of the FBT (T503) and the PWB land where Pin 11 would normally attach. (See Figure 1).
2. Input a dot signal and set PICTURE and BRIGHTNESS to minimum: IABL = 2175 + 100/ -325 µA.
3. Confirm the voltage of A Board TP91 is 135 ± 1.5 VDC.
4. Connect the digital voltmeter and the DC power supply to TP85 and ground. (See Figure 1 above).
5. Increase the DC power voltage gradually until the picture blanks out.
6. Turn DC power source off immediately.
7. Read the digital voltmeter indication (standard = 27.24 + 0.0/ - 0.1 VDC).
8. Input a white signal and set PICTURE and BRIGHTNESS to maximum: IABL = 2175 + 100/ -325 µA.
9. Repeat steps 4 to 7.

HOLD-DOWN READJUSTMENT

If the setting indicated in Step 2 of Hold-Down Operation Confirmation cannot be met, readjustment should be performed by altering the resistance value of R530, R531 component marked with ⋈.

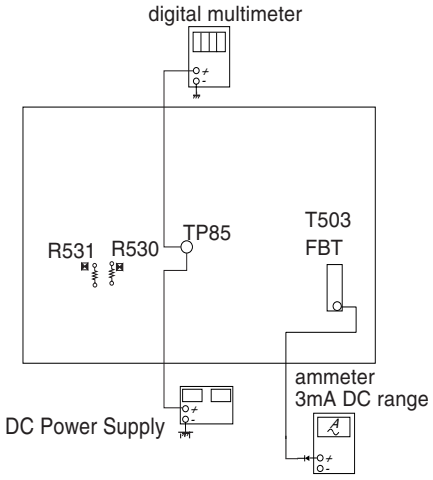


Figure 1

3-2. B+ VOLTAGE CONFIRMATION AND ADJUSTMENT

Always perform the following adjustments when replacing the following components, which are marked with ◪ on the schematic diagram on the GK Board:

GK BOARD: IC600, PH602

1. Using a Variac, apply AC input voltage: 130 + 2.0/-0.0 VAC
2. Input a monoscope signal.
3. Set the PICTURE control and the BRIGHT control to minimum.
4. Confirm the voltage on A Board between TP23 and ground is less than 136.5 VDC.
5. If step 4 is not satisfied, replace R530 and R531 on A Board and repeat the above steps.

SECTION 4: CIRCUIT ADJUSTMENTS

ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

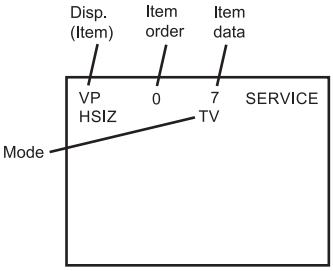
Use the Remote Commander (RM-Y181, RM-Y182) to perform the circuit adjustments in this section.

Test Equipment Required: 1. Pattern generator 2. Frequency counter 3. Digital multimeter 4. Audio oscillator

4-1. SETTING SERVICE ADJUSTMENT MODE

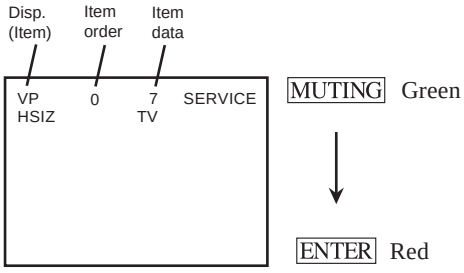
1. Standby mode (Power off).
2. Press the following buttons on the remote commander within a second of each other:
   DISPLAY → Channel 5 → Sound Volume + → Power

SERVICE ADJUSTMENT MODE IN

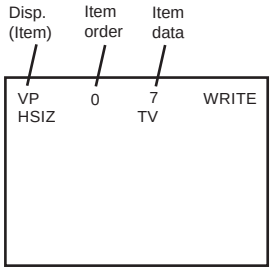


3. The CRT displays the item being adjusted.
4. Press 1 or 2 on the Remote Commander to select the item.
5. Press 3 or 6 on the Remote Commander to change the data.
6. Press MUTING then ENTER to write into memory.

SERVICE ADJUSTMENT MODE MEMORY



7. Press then on the Remote Commander to initialize.

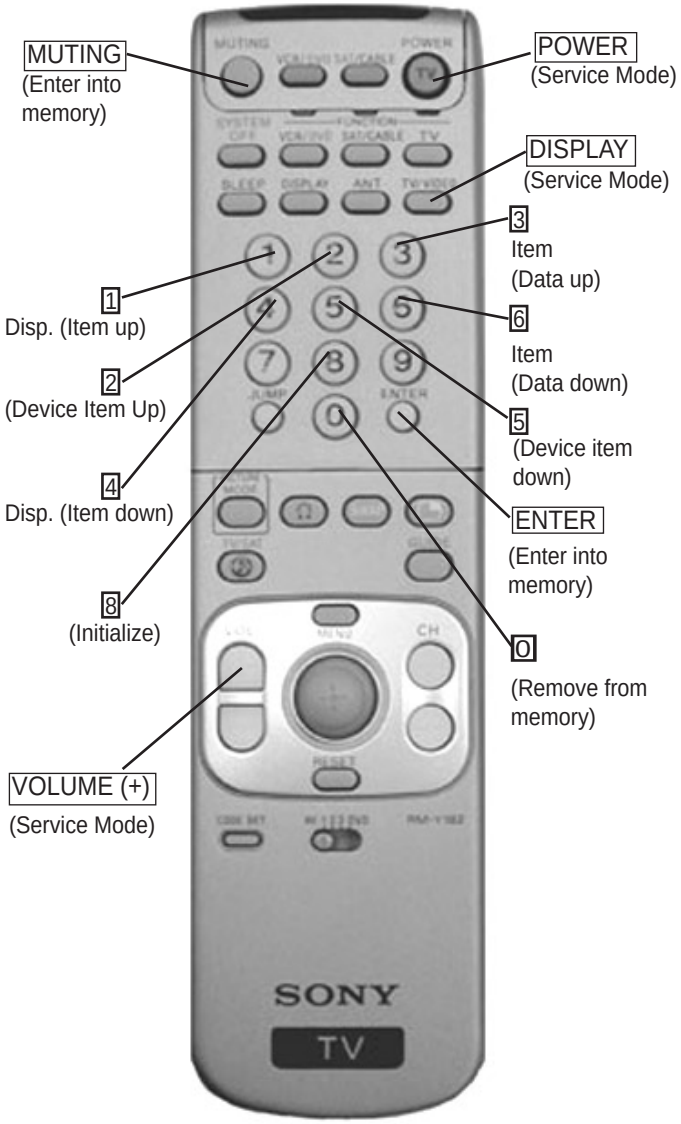


8. DO NOT turn off set until SERVICE appears.

4-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

4-3. REMOTE ADJUSTMENT BUTTONS AND INDICATORS



RM-Y182

4-4. SERVICE DATA LISTS

Non-Volatile Memory (NVM) Reference for BA5D Service List

Service Group	No.	Name	Description	Bit Mask	Common		
					Slave Addr	Sub Addr	Init Data
VERSION	0	VER	Microprocessor version information	11111111	=	=	0

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common				NTSC / PAL-M			PAL-N		
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data
VP1	0	HSIZ	Var	H SIZE (11/ 2-7)	11111100					A4	A8		A4	B4	
	1	HPOS	Var	HPOS (12 / 2-7)	11111100					A4	A9		A4	B5	
	2	VBOW	Var	AFC BOW (16 / 4-7)	11110000					A4	AE		A4	BA	
	3	VANG	Var	AFC ANGLE (16 / 0-3)	00001111					A4	AE		A4	BA	
	4	VTRP	Var	TRAPEZIUM (20 / 3-7)	11111000					A4	AF		A4	BB	
	5	HTRP	Var	H. TRAPEZOID (15 / 4-7)	11110000					A4	AD		A4	B9	
	6	TROT	Fix	TILT ROTATION (0-63)	11111100					A4	A4		A4	B0	
	7	PAMP	Var	PIN AMP (13 / 2-7)	11111100					A4	AA		A4	B6	
	8	UPIN	Var	UP-CPIN (14 / 2-7)	11111100					A4	AB		A4	B7	
	9	LPIN	Var	LO-CPIN (1C / 2-7)	11111100					A4	AC		A4	B8	
	10	VSIZ	Var	V SIZE (0E / 2-7)	11111100					A4	A5		A4	B1	
	11	VPOS	Var	V POSITION (0E / 2-7)	11111100					A4	A6		A4	B2	
	12	VLIN	Var	V LINEARITY (10 / 0-3)	00001111					A4	A7		A4	B3	
	13	SCOR	Var	S CORRECTION (10 / 4-7)	11110000					A4	A7		A4	B3	
	14	VZOM	Fix	16:9 CRT Z Mode on/off	10000000	A4	85								
	15	EHT	Fix	Vertical High-Voltage Compensation	00001111	A4	80								
	16	ASP	Fix	Aspect Ratio control (4:3 Mode)	11111100	A4	FB	47							
	17	ASP1	Fix	Aspect Ratio control (16:9 Mode)	11111100	A4	FC	47							
	18	SCRL	Fix	16:9 CRT Z Mode Trans. Scroll	00111111	A4	86								
	19	HBLK	Fix	Horizontal Blanking on/off	00010000	A4	85								
	20	LBLK	Fix	Left Blanking Adjustment	11110000	A4	80								
	21	RBLK	Fix	Rigth Blanking Adjustment	00001111	A4	81								
	22	HDW	Fix	Horizontal Drive Pulse Width	00001000	A4	85								
	23	EWDC	Fix	"Parabola" EW, D.C. Adjustment	00000100	A4	88								
	24	LVLN	Fix	Lower Screen BTM Vertical Line Adj.	11110000	A4	81								
	25	UVLN	Fix	Uppe Screen BTM Vertical Line Adj.	00001111	A4	82								
	26	INTL	Fix	INTERLACE	00110000	A4	84								
	27	HOSC	Fix	Horizontal VCO Oscillation Freq.	11110000	A4	82								
	28	VSS	Fix	Vertical Sync Slice Level	11000000	A4	84								
	29	HSS	Fix	Horizontal Sync Slice Level	00001000	A4	88								
	30	HMSK	Fix	For Macro Vision	00010000	A4	88								
	31	VTMS	Fix	Select Signal VTIM Pin	01100000	A4	85								
	32	TCMD	Fix	Vertical Count Down Mode Switching (for TV)	00000011	A4	8C								
	33	VCMD	Fix	Vertical Count Down Mode Switching (for Video)	00000011	A4	8D								
	34	AFC	Fix	AFC Loop Gain Switching	11000000	A4	86								
	35	FIFR	Fix	Field Frequency	11000000	A4	87								
	36	VBLK	Fix	VBLKW	00000011	A4	88								
	37	HTSW	Fix	H-Trap Switch : NEW	00100000	A4	88								

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common				NTSC			PAL-M			PAL-N		
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data
VP2	0	REFP	Fix	REFP	01000000	A4	88	0										
	1	JPSW	Fix	Jump SW	00000001	=	=											
	2	SHUE	Var	Sub HUE adjustment	11110000	A4	8C											
	3	SCOL	Var	Sub COLOR adjustment	00001111					A4	8E		A4	90	7	A4	92	
	4	SBRT	Var	Sub BRIGHTNESS adjustment	00011111	A4	87											
	5	AXPL	Fix	Axis PAL	00000001	A4	89	0										
	6	AXNT	Fix	Axis NTSC	00000010	A4	89	1										
	7	CBPF	Fix	Chroma BPF on/off	00000100	A4	89	1										
	8	CTRP	Fix	Y TRAP FILTER on/off	00000001	=	=											
	9	COFF	Fix	Color On/off	00000010	=	=											
	10	KOFF	Fix	Set Color Killer	00100000	A4	89	0										
	11	SSHP	Fix	Sub SHARPNESS	11110000	A4	83											
	12	TSPF	Fix	SHARPNESS Circuit Fo (for TV)	00001100	A4	8C											
	13	VSPF	Fix	SHARPNESS Circuit Fo (for Video)	00001100	A4	8D											
	14	PREL	Fix	Pre-Shoot/ Over-Shoot	01000000	A4	89	1										
	15	ABLM	Fix	ABL Mode Switch	10000000	A4	89	1										
	16	VTH	Fix	ABL CD VHT Switching	00000001	=	=											
	17	YDEL	Fix	Y Delay Time Control	00001111	A4	84											
	18	NCOL	Fix	No Color ID	00000001	A4	85											
	19	FSC	Fix	FSC Out on/off	00000010	A4	85	1										
	20	KID	Fix	Killer ID Control on/off	00000100	A4	85	0										

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common				NTSC			PAL-M			PAL-N		
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data
VID_ADJ	0	RDRV	var	R DRIVE (0A / 7-2)	11111100	A4	9E	41										
	1	GDRV	Var	G DRIVE (0B / 7-2)	11111100	A4	9F											
	2	BDRV	Var	B DRIVE (0C / 7-2)	11111100	A4	A0											
	3	RCUT	Var	R CUT OFF (07 / 7-2)	11111100	A4	A1	31										
	4	GCUT	Var	G CUT OFF (08 / 7-2)	11111100	A4	A2											
	5	BCUT	Var	B CUT OFF (09 / 7-2)	11111100	A4	A3											
	6	SCON	Var	Sub Contrast adjusment	00001111	A4	8A											
	7	CHUE	Var	Sub HUE adjustment for TV	00011111	A4	94	16										
	8	CCOL	Var	Sub COLOR adjustment for TV	00011111					A4	8F	18	A4	91	18	A4	93	23
	9	UOFS	Var	YUV U offset	00001111	A4	8B											
	10	VOFS	Var	YUV V offset	11110000	A4	8B											
	11	RON	Fix	R ON (01 / 3)	00001000	=	=											
	12	GON	Fix	G ON (01 / 2)	00000100	=	=											
	13	BON	Fix	B ON (01 / 1)	00000010	=	=											
	14	HUEV	Var	Sub HUE adjustment for Video	11110000	A4	8D											
	15	COLV	Var	Sub COLOR adjustment for Video	11110000					A4	8E		A4	90		A4	92	

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
COL_TMP	0	GDOF	Fix	G DRIVE Offset	11111000	A4	9A	4
	1	BDOF	Fix	B DRIVE Offset	11111000	A4	9B	15
	2	GCOF	Fix	G CUT Offset	11111000	A4	9C	7
	3	BCOF	Fix	B CUT Offset	11111000	A4	9D	14
	4	DCOL	Fix	Dinamic Color	00000010	=	=	

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
PIC_IMP	0	BLAD	Fix	Black area detect (01 / 6-7)	11000000	A4	09	0
	1	SRTS	Fix	SRT level (01 / 4-5)	00110000	A4	09	3
	2	YNR	Fix	YNR(01 / 2)	00000100	A4	09	1
	3	GIRE	Fix	Gamma correction(01 / 0-1)	00000011	A4	09	3
	4	DAC1	Fix	DAC1(02 / 7)	10000000	A4	0A	0
	5	DAC2	Fix	DAC2(02 / 6)	01000000	A4	0A	0
	6	VMGA	Fix	VM on 1226 (02/5-4)	00110000	A4	0A	0
	7	GCUR	Fix	Gamma curve(02 / 2)	00000100	A4	0A	1
	8	BLKC	Fix	Black Compensation (02 / 1)	00000010	A4	0A	1
	9	TEST	Fix	TEST(03 / 6-7)	11000000	A4	0B	3
	10	RS	Fix	RS (03 / 3-5)	00111000	A4	0B	0
	11	RTC	Fix	RTC(03 / 0-2)	00000111	A4	0B	2
	12	APAC	Fix	APAC	10000000	A4	0B	0
	13	SRTH	Fix	SRT bit for Dynablack = High	10000000	A4	5C	1
	14	SRTL	Fix	SRT bit for Dynablack = Low	10000000	A4	5D	1
	15	SRTO	Fix	SRT bit for Dynablack = Off	10000000	A4	5E	0
	16	SHPH	Fix	Sharpness level for Dynablack = High	01111111	A4	5C	54
	17	SHPL	Fix	Sharpness level for Dynablack = Low	01111111	A4	5D	43
	18	SHPO	Fix	Sharpness level for Dynablack = Off	01111111	A4	5E	0

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Palette = VIVID			Palette = STANDARD			Palette = MOVIE			Palette = SPORTS		
						Slave Addr	Sub Addr	Fix Data	Slave Addr	Sub Addr	Fix Data	Slave Addr	Sub Addr	Fix Data	Slave Addr	Sub Addr	Fix Data
PALETTE	0	VPIC	Fix	User picture setting 0:min, 63: max	11111100	A4	5F	63	A4	65	50	A4	6B	38	A4	71	63
	1	VBRT	Fix	User brightness setting 0:min, 63: max	11111100	A4	60	31	A4	66	31	A4	6C	31	A4	72	31
	2	VCOL	Fix	User color setting 0:min, 63: max	11111100	A4	61	35	A4	67	31	A4	6D	31	A4	73	40
	3	VSHP	Fix	User sharpness setting 0:min, 63: max	11111100	A4	62	31	A4	68	31	A4	6E	34	A4	74	31
	4	VVM	Fix	0: OFF, 1: Low, 2: High, 3: N/A	00000011	A4	5F	2	A4	65	1	A4	6B	0	A4	71	2
	5	VTRI	Fix	0: Cool, 1: Nutral, 2: Warm, 3: N/A	00000011	A4	60	0	A4	66	1	A4	6C	2	A4	72	0
	6	VGMA	Fix	0: OFF, 1: Low, 2: Mid, 3: Max	00000011	A4	63	2	A4	69	2	A4	6F	2	A4	75	2
	7	VNRM	Fix	0: 3D, 1: 2D	00000010	A4	61	0	A4	67	0	A4	6D	0	A4	73	0
	8	VYDC	Fix	DC Transmission Ratio 0,1: 100%, 2: 92%, 3: 85	00000011	A4	62	3	A4	68	3	A4	6E	2	A4	74	3
	9	VVEN	Fix	Vertoca; Enhancement	00011100	A4	63	5	A4	69	3	A4	6F	3	A4	75	5
	10	VHK0	Fix	Horizontal Peaking 0:On, 1:Off	00000001	A4	61	0	A4	67	0	A4	6D	0	A4	73	0
	11	VDBK	Fix	User Dynablack 0: OFF, 1: Low, 2: High, 3: N/A	01100000	A4	63	2	A4	69	1	A4	6F	1	A4	75	1
	12	VYPL	Fix	Y-Peaking Limit	00000011	A4	64	1	A4	6A	0	A4	70	0	A4	76	1

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
3L_COMB	0	FUNN	Fix	Function (0 / 7-6) for NTSC	11000000	A4	3C	3
	1	FUNP	Fix	Function (0 / 7-6) for PAL-N, PAL-M	00110000	A5	3C	3
	2	DRNG	Fix	DRANG (0 / 2)	00000100	A4	3C	0
	3	YCSM	Fix	Y/C Sep Mode (0 / 1-0)	00000011	A4	3C	0
	4	CNRK	Fix	CNRK (1 / 7-6)	11000000	A4	3D	1
	5	CNRL	Fix	CNR Lim (1 / 5-4)	00110000	A4	3D	1
	6	CLPF	Fix	C-LPF(1 / 3)	00001000	A4	3D	1
	7	SLPF	Fix	SelC-LPF(1 / 2)	00000100	A4	3D	0
	8	MODE	Fix	Mode1 (1 / 1)	00000010	A4	3D	0
	9	YPG	Fix	Y - Peaking Gain (2 / 7-6)	11000000	A4	3E	3
	10	PDSC	Fix	Pds. Clip (2 / 3)	00001000	A4	3E	0
	11	YLPF	Fix	Y-LPF(2 / 2)	00000100	A4	3E	1
	12	VENL	Fix	V-Emph N.L (3 / 4-2)	00011100	A4	3F	4
	13	VEC	Fix	V - Emph Core (3 / 1-0)	00000011	A4	3F	3

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
3D_COMB	0	COUT	Fix	COUTS(00 / 2-3)	00001100	A4	21	3
	1	YAPS	Fix	YAPS(00 / 0-1)	00000011	A4	21	1
	2	NSDS	Fix	NSDS(01 / 4-5)	00110000	A4	22	0
	3	MSS	Fix	MSS(01 / 2-3)	00001100	A4	22	0
	4	KILS	Fix	KILS (01 / 1-0)	00000011	A4	22	1
	5	DYC	Fix	DYCOS (02 / 7-6)	11000000	A4	23	2
	6	EXAD	Fix	EXADINS(02 / 5)	00100000	A4	23	0
	7	EXCS	Fix	EXCSS(02 / 1- 0)	00000011	A4	23	1
	8	CPP	Fix	CPP(03 / 6)	01000000	A4	24	0
	9	HDP	Fix	HDP(03 / 3-5)	00111000	A4	24	6
	10	CDL	Fix	CDL(03 / 0-2)	00000111	A4	24	6
	11	DYCO	Fix	DYCOR(04 / 4-7)	11110000	A4	25	2
	12	DYGA	Fix	DYGAIN(04 / 0-3)	00001111	A4	25	10
	13	DCCO	Fix	DCCOR(05 / 4-7)	11110000	A4	26	2
	14	DCGA	Fix	DCGAIN(05 / 0-3)	00001111	A4	26	9
	15	YNRL	Fix	YNRLIM(06 / 4-5)	00110000	A4	27	1
	16	CNRL	Fix	CNRLIM(06 / 0-1)	00000011	A4	27	1
	17	ID1O	Fix	ID1ON(07 / 7)	10000000	A4	28	0
	18	ID1W	Fix	ID1W0A1(07 / 6)	01000000	A4	28	0
	19	ID1N	Fix	ID1W0A2(07 / 5)	00100000	A4	28	0
	20	WSC	Fix	WSC(08 / 6-7)	11000000	A4	29	1
	21	VTRH	Fix	VTRH(08 / 4-5)	00110000	A4	29	1
	22	VTRR	Fix	VTRR(08 / 2-3)	00001100	A4	29	1
	23	LDSR	Fix	LDSR(08 / 0-1)	00000011	A4	29	2
	24	WSS	Fix	WSS (09 / 7)	10000000	A4	2A	0
	25	ID1E	Fix	ID1ECON (09 / 6)	01000000	A4	2A	1
	26	TT	Fix	TT (09 / 4 -5)	00110000	A4	2A	0
	27	FELC	Fix	FELCHK (09 / 3)	00001000	A4	2A	1
	28	TH	Fix	TH (09 / 1 -2)	00000110	A4	2A	0
	29	VAPG	Fix	VAPGAIN(0A / 5-7)	11100000	A4	2B	3
	30	VAPI	Fix	VAPINV(0A / 0-4)	00011111	A4	2B	25

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
3D_COMB	31	YPFT	Fix	YPFT(0B / 4-5)	00110000	A4	2C	3
	32	YPFG	Fix	YPFG(0B / 0-3)	00001111	A4	2C	8
	33	V1PS	Fix	V1PS(0C / 6-7)	11000000	A4	2D	3
	34	VEGS	Fix	VEGS(0C / 4-5)	00110000	A4	2D	2
	35	CC3N	Fix	CC3N(0C / 3)	00001000	A4	2D	0
	36	C0HS	Fix	C0HS(0C / 2)	00000100	A4	2D	0
	37	SEL2	Fix	SELD2FH(0C / 0)	00000001	A4	2D	1
	38	SEL1	Fix	SELD1FL(0D / 5)	00100000	A4	2E	1
	39	YHCO	Fix	YHCOR(10 / 6-7)	11000000	A4	31	0
	40	YHCG	Fix	YHCGAIN(10 / 5)	00100000	A4	31	1
	41	OVST	Fix	+OVST(10 / 3)	00001000	A4	31	0
	42	CSHD	Fix	CSHDT(10 / 2)	00000100	A4	31	0
	43	KCTT	Fix	KCTT(10 / 0-1)	00000011	A4	31	0
	44	SHT	Fix	SHT(11 / 7-6)	11000000	A4	32	0
	45	VCT	Fix	VCT(11/ 5)	00100000	A4	32	0
	46	CGAT	Fix	CLKGAT (11 / 4)	00010000	A4	32	0
	47	CG2D	Fix	CLK2D (11 / 3)	00001000	A4	32	1
	48	CGGT	Fix	CLKGGT (11 / 2)	00000100	A4	32	0
	49	CGEB	Fix	CLKGEB (11 / 1)	00000010	A4	32	0
	50	CGT	Fix	CLKGT (11 / 0)	00000001	A4	32	0
	51	HPLL	Fix	HPLLFS(12 / 7)	10000000	A4	33	1
	52	BPLL	Fix	BPLLFS (12 / 6)	01000000	A4	33	0
	53	FSCF	Fix	FSCFG(12 /5)	00100000	A4	33	0
	54	PLLF	Fix	PLLFG(12 / 4)	00010000	A4	33	1
	55	KILR	Fix	KILR(12 / 0-3)	00001111	A4	33	3
	56	HSSL	Fix	HSSL(13 / 4-7)	11110000	A4	34	12
	57	VSSL	Fix	VSSL(13 / 0-3)	00001111	A4	34	8
	58	BGPS	Fix	BGPS(14 / 4-7)	11110000	A4	35	4
	59	BGPW	Fix	BGPW(14 / 0-3)	00001111	A4	35	10
	60	ADCL	Fix	ADCLKS(15 / 6-7)	11000000	A4	36	3
	61	NSDW	Fix	NSDSW(15 / 4)	00010000	A4	36	1
	62	HIZE	Fix	HIZEN (16 / 4)	00010000	A4	37	0
	63	HCNT	Fix	HCNTFSYN (17 / 6)	01000000	A4	38	0

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
PIP	0	PFRN	Fix	VCXO oscilation	00000010	A4	40	0
	1	PRVS	Fix	HD/VD input synchronous mode selection	00000001	A4	40	1
	2	PCON	Fix	PIP sub contrast control	01111111	A4	41	97
	3	PUCO	Fix	PIP U level control	01111111	A4	42	5
	4	PVCO	Fix	PIP V level control	01111111	A4	43	17
	5	PHUE	Fix	PIP sub hue control	00111111	A4	57	12
	6	PKIL	Fix	Color killer	10000000	A4	42	0
	7	PSEP	Fix	C-sync sep input selection	11000000	A4	44	1
	8	PDCN	Fix	Sub pic sync sep. Thereshold setting	00110000	A4	44	3
	9	PBGS	Fix	bgp position setting	00111111	A4	45	15
	10	PDL0	Fix	Y/C delay adjust (for video)	00001111	A4	46	11
	11	PDL1	Fix	Y/C delay adjust (for yuv)	11110000	A4	46	13
	12	PBRT	Fix	Y bryghtness control	00011111	A4	48	25
	13	PVP1	Fix	V pedestal level for YUV	11110000	A4	49	0
	14	PUP1	Fix	U pedestal level for YUV	00001111	A4	49	0
	15	PVP2	Fix	V pedestal level for main w/ burst	11110000	A4	4A	0
	16	PUP2	Fix	U pedestal level for main w/ burst	00001111	A4	4A	0
	17	PVP3	Fix	V pedestal level for main w/o burst	11110000	A4	4B	0
	18	PUP3	Fix	U pedestal level for main w/o burst	00001111	A4	4B	0
	19	PACS	Fix	0D, 0Eh setting mode	01000000	A4	4C	1
	20	PSYS	Fix	Color system	00110000	=	=	
	21	PSDL	Fix	Sync delay control	00000011	A4	4C	0
	22	PCCL	Fix	YUV color level	11110000	A4	4D	11
	23	PCGA	Fix	Croma gain	00001000	A4	4D	0
	24	PAAF	Fix	Auto AFC	00000100	A4	4D	1

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
PIP	25	PSU2	Fix	For test	00000010	A4	4D	0
	26	PCVF	Fix	Internal 1H comb filter	00000001	A4	4D	0
	27	PBIT	Fix	Y clamp time constant	10000000	A4	4E	0
	28	PAFC	Fix	AFC time constant	01000000	A4	4E	0
	29	PACC	Fix	Color decoder amplitude	00111111	A4	4E	21
	30	PSDT	Fix	System automatic judgment	10000000	=	=	
	31	PBUR	Fix	VCXO mode selection	01000000	A4	4F	0
	32	PEVE	Fix	Main picture PAL-N	00100000	A4	4F	0
	33	PINW	Fix	Invert sub picture field definition	00010000	A4	4F	0
	34	PINR	Fix	Invert main picture field definition	00001000	A4	4F	0
	35	PVMD	Fix	Vertical display mode when pal-n	00000100	=	=	
	36	PREF	Fix	Main picture field fix	00000010	A4	4F	0
	37	PARE	Fix	Automatic 50/60 Hz judgement	00000001	A4	4F	0
	38	PBWD	Fix	BW det. Treshold setting	00110000	A4	50	1
	39	PFRA	Fix	Freq. Adjustment for free run mode	00001111	A4	51	0
	40	PPAL	Fix	Parameter setting for PAL-M judgment	11111111	A4	52	52
	41	PHPO	Fix	Sub picture h position	00111111	A4	58	3
	42	PVPO	Fix	Sub picture v position	00111111	A4	59	22
	43	PHTI	Fix	Display timing adjust	00001111	A4	44	3
	44	PHAJ	Fix	Main/Sub switch delay control	11110000	A4	47	2
	45	PBGY	Fix	Back ground Y level setting	00001111	A4	53	0
	46	PCRO	Fix	Sub picture read mode	10000000	A4	54	0
	47	PPAR	Fix	Thereshold contol for ident judgement of sub	00001111	A4	50	1
	48	PHPF	Fix	Y output HPF	00010000	A4	51	0
	49	PFSC	Fix	FSC output	10000000	A4	43	0
	50	PVCH	Fix	15h,16h,17h, setting mode	00000100	A4	4C	0
	51	PVON	Fix	V-chip decode mode	10000000	A4	53	1
	52	PVLN	Fix	V-chip data slicer line selection	00011111	A4	54	17
	53	PVSB	Fix	V-chip data slicer start bit detection parameter	11111111	A4	55	64
	54	PVLV	Fix	V-chip data slicer slice parameter	11111111	A4	56	130
	55	SUSW	Fix	Sub-Unlock bit position switch	01000000	A4	59	0

SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	KV-27FV300/29FV300				KV-32FV300/36FV300			
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Fix Data	Var Data
AP	0	SBAL	Fix	Sub Balance	00000111	A8	41		4	A8	41		4
	1	SBAS	Fix	Sub Bass	00000111	A8	43		4	A8	43		4
	2	STRE	Fix	Sub Treble	00000111	A8	42		0	A8	42		0
	3	SRL	Fix	Surround level	00000001	A8	44		0	A8	44		0
	4	BBOH	Fix	Surround Off - BBE high	11110000	A8	45		10	A8	45		10
	5	BBOL	Fix	Surround Off - BBE low	00001111	A8	45		5	A8	45		5
	6	BBSH	Fix	Simulated - BBE high	11110000	A8	46		0	A8	46		0
	7	BBSL	Fix	Simulated - BBE low	00001111	A8	46		0	A8	46		0
	8	BBMH	Fix	Surround - BBE high	11110000	A8	47		0	A8	47		0
	9	BBML	Fix	Surround - BBE low	00001111	A8	47		0	A8	47		0
	10	BBGH	Fix	WOW - BBE high	11110000	A8	48		6	A8	48		6
	11	BBGL	Fix	WOW - BBE low	00001111	A8	48		9	A8	48		9
	12	BBTH	Fix	Trusurround - BBE high	11110000	A8	49		7	A8	49		7
	13	BBTL	Fix	Trusurround - BBE low	00001111	A8	49		8	A8	49		8
	14	VFIX	Fix	Audio output fix data	11111111	A8	4A		244	A8	4A		244
	15	AGCL	Fix	AGC Level	00000110	A8	44		2	A8	44		2

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
CCD	0	DUM0	Fix	Only for testing	11111111	=	=	
	1	VOSD	Fix	Only for testing	00000001	=	=	

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
OP	0	DISP	Fix	OSD Display position	00111111	A4	06	28
	1	RAMW	Fix		00000001	=	=	
	2	ICMP	Fix	Comparison data to determine Non-interlace signal for OSD	00011111	A4	39	4
	3	IPOR	Fix	0:Even, 1: Odd, Other: do not change	00000011	A4	3A	1
	4	FAWD	Fix	1: Forced to auto wide mode, 0:normal	00000100	A0	5D	0
	5	HCLW	Fix	H-Count Lower limit	11111111	A4	02	67
	6	HCHG	Fix	H-Count Higher limit	11111111	A4	03	254
	7	9VTM	Fix	Delay for 9V check subsystem	11111111	A4	04	55
	8	ZDET	Fix	Zero detect relay delay	11111111	A4	05	123

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Slave Addr	Sub Addr	Var Data
ID	0	ID0	Fix	Model variation ID0	11111111	A4	78	SEE ID MAP
	1	ID1	Fix	Model variation ID1	11111111	A4	79	SEE ID MAP
	2	ID2	Fix	Model variation ID2	11111111	A4	7A	SEE ID MAP
	3	ID3	Fix	Model variation ID3	11111111	A4	7B	SEE ID MAP
	4	ID4	Fix	Model variation ID4	11111111	A4	7C	SEE ID MAP
	5	ID5	Fix	Model variation ID5	11111111	A4	7D	SEE ID MAP
	6	ID6	Fix	Model variation ID6	11111111	A4	7E	SEE ID MAP
	7	ID7	Fix	Model variation ID7	11111111	A4	7F	SEE ID MAP

To determine ID's value, ID map must be refered

4-5. ID MAP TABLE

Model	Destination	ID-O	ID-1	ID-2	ID-3	ID-4	ID-5	ID-6	ID-7
KV-27FV300	US	89	63	237	98	78	128	6	16
KV-27FV300	CND	89	63	237	82	78	128	6	16
KV-29FV300	E	81	63	237	194	110	128	6	80
KV-32FV300	US	89	63	237	98	78	128	6	24
KV-32FV300	CND	89	63	237	82	78	128	6	24
KV-36FV300	US/HAW	89	63	237	98	78	128	6	24
KV-36FV300	CND	89	63	237	82	78	128	6	24

4-6. A BOARD ADJUSTMENTS

H. FREQUENCY (FREE RUN) CHECK

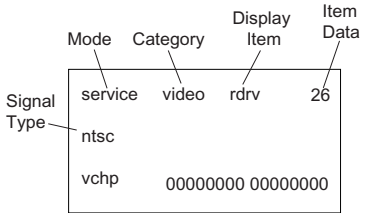
1. Input a TV mode (RF) with no signal.
2. Connect a frequency counter to base of Q501 (TP-25 H. DRIVE) on the A Board.
3. Check H. Frequency for 15734 ± 400/-200 Hz.

V. FREQUENCY (FREE RUN) CHECK

1. Select video 1 with no signal input.
2. Set the conditions for a standard setting.
3. Connect the frequency counter to TP-27 (V OUT) or CN501 pin ⑥ (V DY+) and ground on the A Board .
4. Check that V. Frequency shows 60 ± 5 Hz.

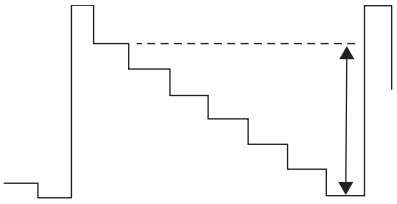
SUBCONTRAST ADJUSTMENT (RDRV)

1. Input a color-bar signal and set the level to 75%.
2. Set in Standard mode.
3. Activate the Service Adjustment Mode. Set color min pic max.
4. Set GON and BON items. Using 3 and 6 set each to the following values. Leave RON set to “1”.



R ON: ON (1)
G ON: OFF (0)
B ON: OFF (0)

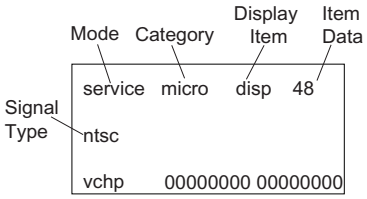
5. Connect an oscilloscope probe to C Board, CN705 pin 3 (Red Out) (TP35).
6. Select SCON with 1 and 4 .
7. Adjust the value of SCON with 3 and 6 for 1.90 ± 0.05Vpp for 27/29/32/34”, or 1.95 ± 0.05Vpp for 36/38”.



8. Reset AALS, ABLS, GON and BON values to “1”.
   R ON: ON (1)
   G ON: ON (1)
   B ON: ON (1)
9. Press MUTING then ENTER to save into the memory.

DISPLAY POSITION ADJUSTMENT (DISP)

1. Input a color-bar signal.
2. Set to Service Adjustment Mode.
3. Select DISP with 1 and 4 .
4. Adjust values of DISP with 3 and 6 to adjust characters to the center.
5. Write to memory by pressing MUTING then ENTER .
6. Check to see if the text is displayed on the screen.



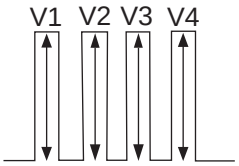
SUB BRIGHT ADJUSTMENT (SBRT)

1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Set the PICTURE and BRIGHTNESS to minimum.
4. Select the SBRT item with 1 and 4 .
5. Adjust the values of SBRT with 3 and 6 to obtain a faintly visible crosshatch.
6. Press MUTING then ENTER to save into the memory.

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1. Input color-bar signal at 75%.
2. Activate the Service Adjustment Mode.
3. Set (PIC) to Max and (COL) to 50%.
4. Connect an oscilloscope probe to C Board, CN705Pin ④ Blue Out.
5. Select the SHUE and SCOL item with 1 and 4 .

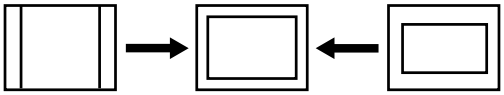
6. While showing the SHUE item, adjust the waveform with 1 and 4 until the second and third bars show the same level (V2 = V3 < 0.15Vp-p).
7. While showing the SCOL item, adjust the waveform with 3 and 6 until the first and fourth bars show the same level (V1 = V4 < 0.15Vp-p).



8. Press MUTING then ENTER to save into the memory.

V. SIZE ADJUSTMENT (VSIZ)

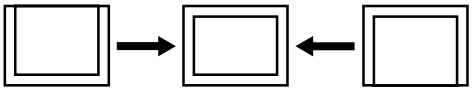
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VSIZ item with 1 and 4 .
4. Adjust value of VPOS with 1 and 4 for the best vertical center.
5. Press MUTING then ENTER to save into the memory.



V. CENTER ADJUSTMENT (VPOS)

Perform this adjustment after performing H. Frequency (Free Run) Check.

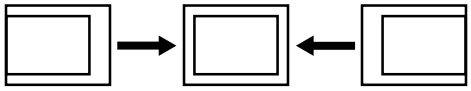
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VPOS item with 1 and 4 .
4. Adjust value of VPOS with 3 and 6 for the best vertical center.
5. Press MUTING then ENTER to save into the memory.



H. CENTER ADJUSTMENT (HPOS)

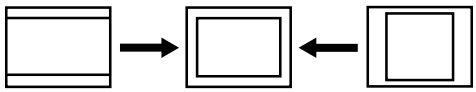
Perform this adjustment after performing H. Frequency (Free Run) Check.

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the HPOS item with 1 and 4 .
4. Adjust the value of HPOS with 3 and 6 for the best horizontal center.
5. Press MUTING then ENTER to save into the memory.



H. SIZE ADJUSTMENT (HSIZ)

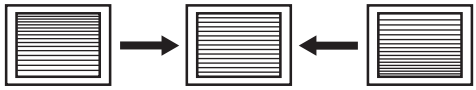
1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Select HSIZ with 1 and 4 .
4. Adjust with 3 and 6 for the best horizontal size.
5. Press MUTING then ENTER to save into the memory.



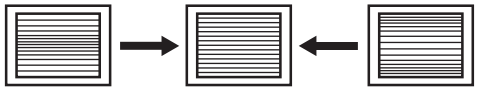
V. LINEARITY (VLIN), V. CORRECTION (SCOR), PIN AMP (PAMP), AND HORIZONTAL TRAPEZOID (HTRP) ADJUSTMENTS

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VLIN, SCOR, PAMP, and HTRP with with 1 and 4.
4. Adjust with 3 and 6 for the best horizontal size.
5. Press MUTING then ENTER to save into the memory.

V LINEARITY (VLIN)



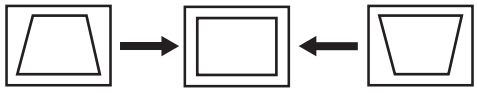
V CORRECTION (SCOR)



PIN AMP (PAMP)

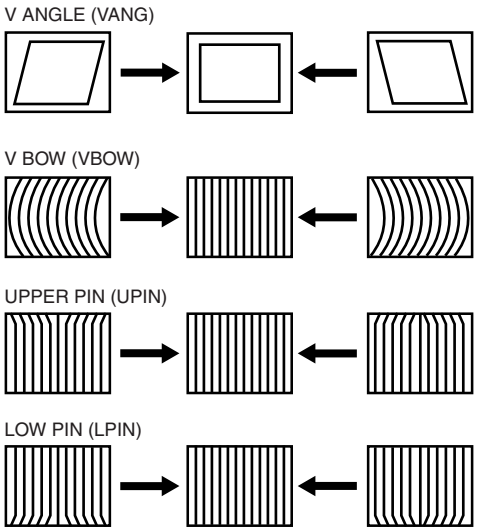


HORIZONTAL TRAPEZOID (HTRP)



V. ANGLE (VANG), V. BOW (VBOW), UPPER PIN (UPIN) AND LOW PIN (LPIN) ADJUSTMENTS

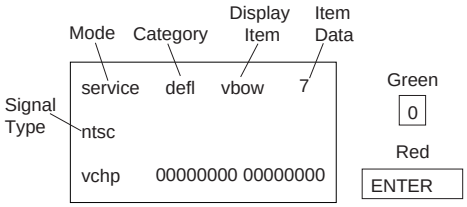
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VANG, VBOW, UPIN, and LPIN with 1 and 4.
4. Adjust with 3 and 6 for the best picture.
5. Press MUTING then ENTER to save into the memory.



SERVICE ADJUSTMENT MODE MEMORY

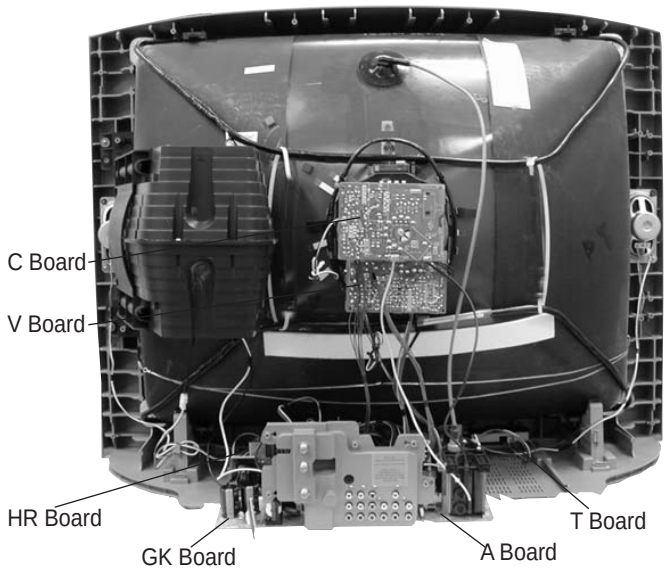
1. After completing all adjustments, press 0 then ENTER .

Read From Memory



SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. kΩ=1000Ω, MΩ=1000kΩ

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $^1/_4$ W

$^1/_4$ W in resistance, $^1/_{10}$ W and $^1/_8$ W in chip resistance.

: nonflammable resistor

: fusible resistor

: internal component

: panel designation and adjustment for repair

: earth ground

: earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a 10MΩ digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

: B+line

: B-line (Actual measured value may be different).

: signal path (RF)

Circled numbers are waveform references.

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

The symbol indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

The components identified by ⋈ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by ◪, make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by ⋈ and repeat the adjustment until the specified value is achieved.

(Refer to R530 and R531 adjustment on page 16.)

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced (◪)	Adjustment (⋈)
A BOARD: R550, T503, T504, D519, IC501, R533, D521, R532, D520, C531, R529, R530, R531, C532	**HV HOLD DOWN** R530, R531

REFERENCE INFORMATION

RESISTOR

: RN	METAL FILM
: RC	SOLID
: FPRD	NONFLAMMABLE CARBON
: FUSE	NONFLAMMABLE FUSIBLE
: RW	NONFLAMMABLE WIREWOUND
: RS	NONFLAMMABLE METAL OXIDE
: RB	NONFLAMMABLE CEMENT
: ※	ADJUSTMENT RESISTOR

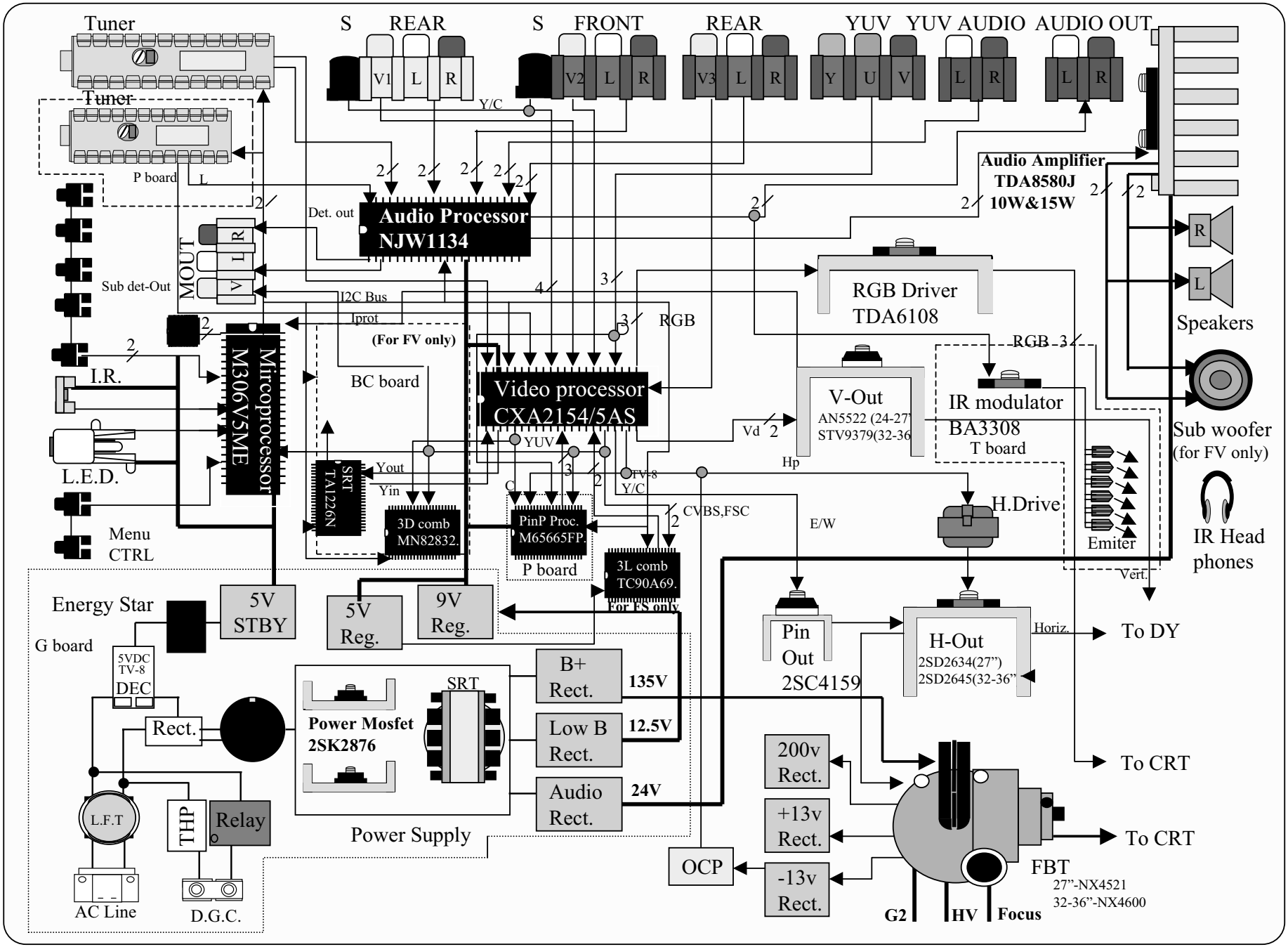
CAPACITOR

: TA	TANTALUM
: PS	STYROL
: PP	POLYPROPYLENE
: PT	MYLAR
: MPS	METALIZED POLYESTER
: MPP	METALIZED POLYPROPYLENE
: ALB	BIPOLAR
: ALT	HIGH TEMPERATURE
: ALR	HIGH RIPPLE

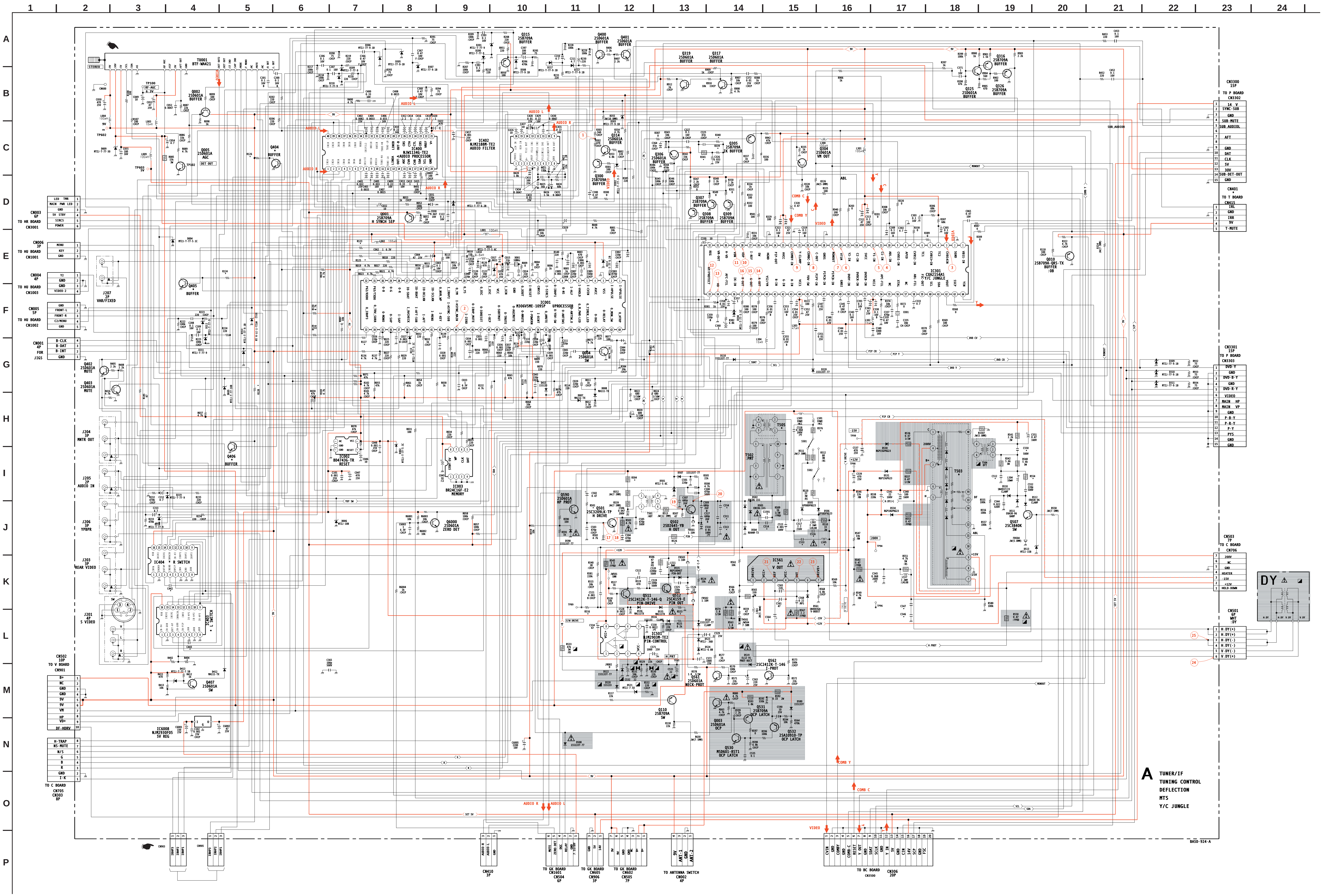
COIL

: LF-8L	MICRO INDUCTOR

5-3. BLOCK DIAGRAM AND SCHEMATICS

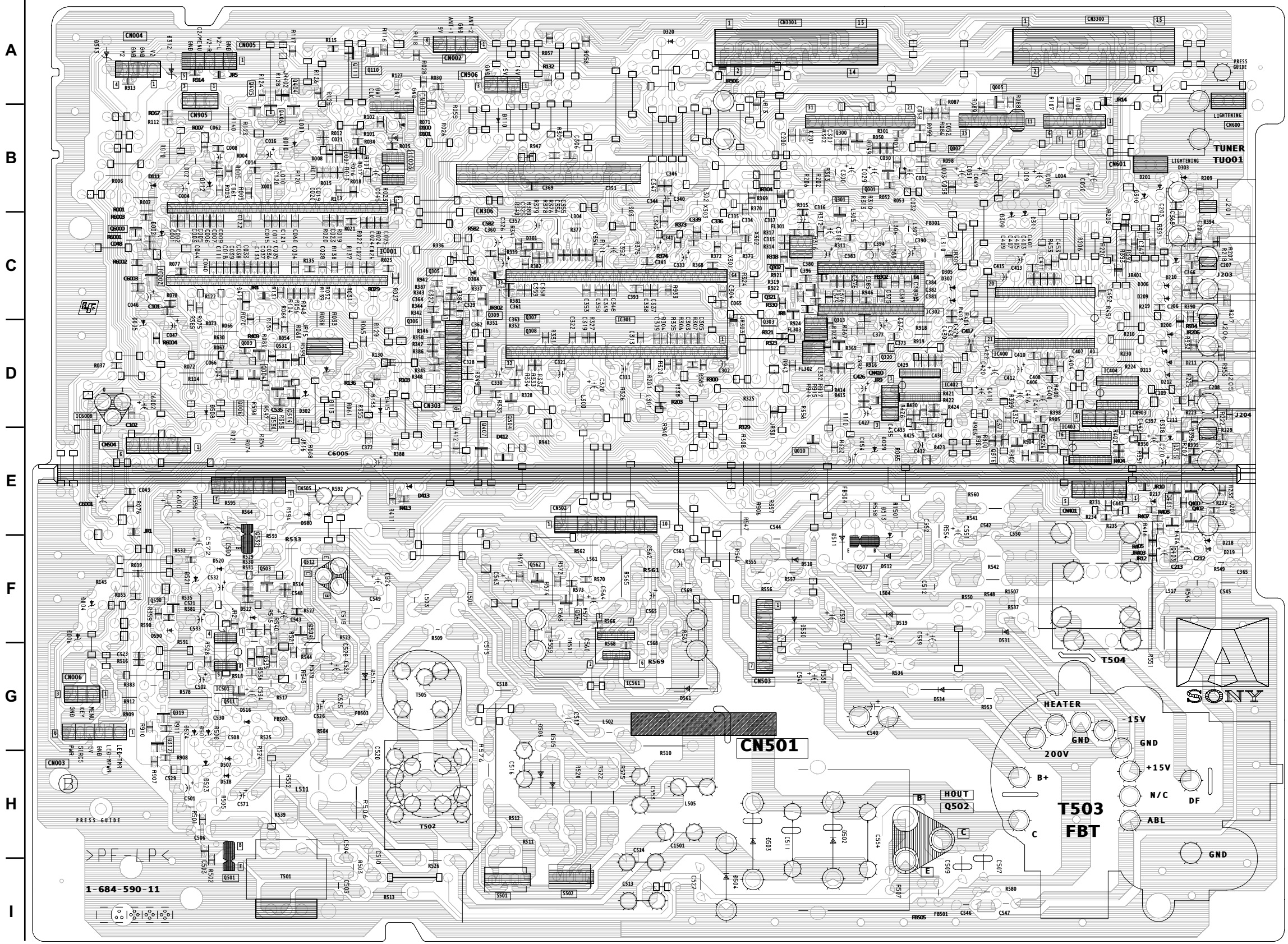


A BOARD SCHEMATIC DIAGRAM



A

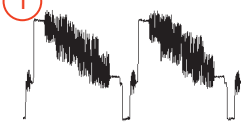
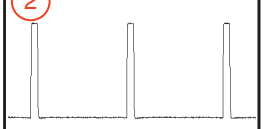
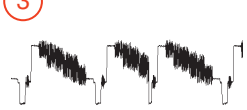
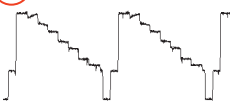
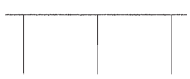
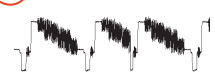
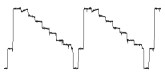
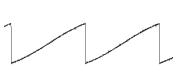
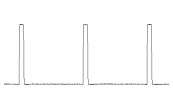
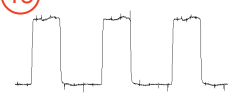
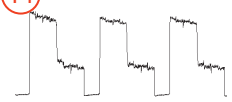
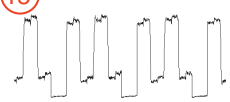
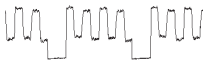
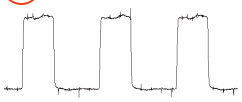
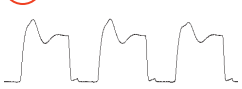
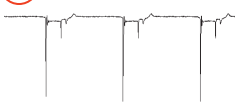
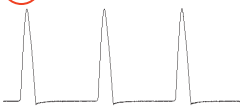
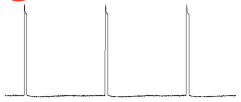
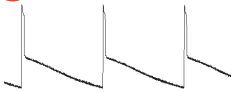
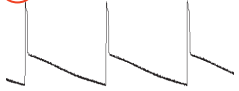
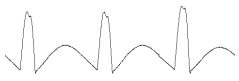
[TUNING CONTROL, DEFLECTION, TUNER/IF, Y/C JUNGLE, MTS]



A BOARD LOCATOR LIST

DIODE		D501	G-2	TRANSISTOR	
D002	C-2	D502	H-8	Q001	B-8
D004	F-1	D503	H-7	Q002	B-9
D005	D-2	D504	I-7	Q003	D-3
D006	F-1	D505	H-5	Q004	D-3
D007	B-4	D507	H-2	Q005	A-10
D008	B-3	D508	D-2	Q010	E-8
D009	E-8	D510	F-8	Q110	A-4
D010	B-3	D511	F-8	Q111	A-4
D110	B-5	D512	F-9	Q300	B-8
D111	B-2	D513	F-9	Q304	D-5
D112	B-2	D515	G-4	Q305	C-4
D113	D-3	D516	G-3	Q306	D-4
D200	D-11	D518	H-2	Q307	C-5
D201	B-11	D519	F-9	Q308	D-5
D209	C-11	D520	F-2	Q309	C-5
D210	C-11	D521	F-2	Q314	D-3
D211	D-11	D522	F-3	Q315	E-11
D212	D-11	D523	H-2	Q316	E-10
D213	D-11	D524	G-2	Q317	G-2
D217	E-11	D530	F-8	Q319	G-2
D218	F-12	D531	F-10	Q325	E-10
D219	F-12	D534	G-9	Q326	E-10
D302	D-3	D535	G-3	Q400	E-11
D303	B-11	D536	G-3	Q401	E-11
D304	C-5	D561	G-7	Q402	E-12
D305	C-9	D580	E-3	Q403	E-11
D306	C-11	D590	F-2	Q404	A-3
D307	C-9	IC		Q405	A-3
D308	E-11	IC001	C-3	Q406	B-3
D309	B-10	IC002	C-2	Q407	E-5
D310	B-11	IC003	B-4	Q501	H-2
D311	B-10	IC301	C-6	Q502	H-9
D312	A-2	IC400	D-10	Q507	F-8
D313	A-1	IC402	D-9	Q511	G-3
D320	A-7	IC403	E-10	Q512	F-3
D410	C-2	IC404	D-11	Q530	D-3
D412	E-5	IC501	G-2	Q531	D-3
D413	E-4	IC561	G-6	Q532	F-3
D415	D-4	IC6008	D-1	Q561	F-6
				Q562	F-5
				Q590	F-2
				Q6000	C-1

A BOARD WAVEFORM

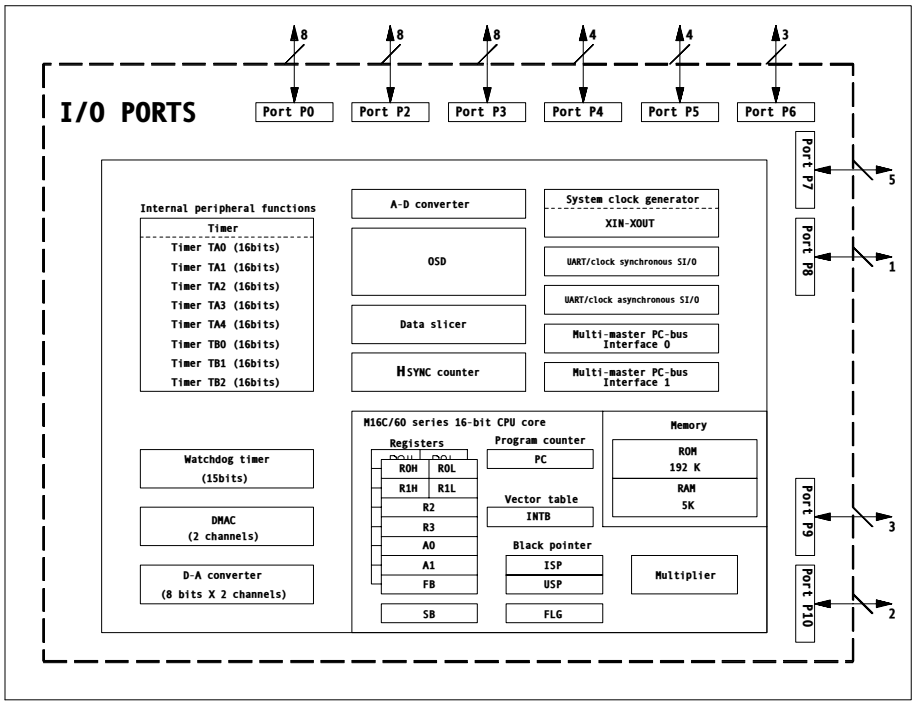
1  2.14V p-p (H)	2  4.5V p-p (H)	3  1.2V p-p (H)	4  0.7V p-p (H)
5  0.9V p-p (H)	6  4.7V p-p (V)	7  2.2V p-p (H)	8  1.2V p-p (H)
9  1.8V p-p (H)	10  1.2V p-p (V)	11  1.2V p-p (V)	12  6.6V p-p (H)
13  5.9V p-p (H)	14  3.9V p-p (H)	15  3.0V p-p (H)	16  3.3V p-p (H)
17  2.6V p-p (H)	18  212.5V p-p (H)	19  48.1V p-p (H)	20  1169mV p-p (H)
21  28.2V p-p (V)	22  52.8V p-p (V)	23  0.5V p-p (V)	24  52.8V p-p (V)
25  281.5V p-p (H)			

A BOARD MARK(*) LIST

REF. NO.	LOCATION	KV-27FV300 KV-29FV300	KV-32FV300	KV-36FV300
C442	K-3	#	0.22UF	0.22UF
C443	L-4	#	0.22UF	0.22UF
C511	I-13	17000PF	22000PF	22000PF
C512	I-19	0.0039UF	0.0027UF	0.0027UF
C513	J-13	0.047UF	0.051UF	0.051UF
C514	I-14	0.68UF	0.82UF	0.82UF
C516	J-15	1UF	0.82UF	0.82UF
C546	K-17	#	0.001UF	0.001UF
C547	K-17	#	0.001UF	0.001UF
C550	H-19	0.0015UF	680PF	680PF
C553	J-15	0.1UF	0.47UF	0.47UF
C554	I-13	2700PF	4700PF	4700PF
C1501	I-14	#	0.1UF	0.1UF
CN401	D-23	#	5P	5P
IC403	K-4	#	BU4051BCF-E2	BU4051BCF-E2
IC404	J-4	#	BU4051BCF-E2	BU4051BCF-E2
IC561	J-14	TDA8172	STV9379	STV9379
L505	J-15	150UH	68UH	68UH
Q404	C-5	#	2SD601A-QRS-TX	2SD601A-QRS-TX
Q405	E-4	#	2SD601A-QRS-TX	2SD601A-QRS-TX
Q406	H-5	#	2SD601A-QRS-TX	2SD601A-QRS-TX
R123	E-7	#	2.2K	2.2K
R124	E-4	#	220	220
R125	E-7	#	2.2K	2.2K
R126	C-5	#	220	220
R127	F-7	#	2.2K	2.2K
R128	G-5	#	220	220
R339	C-13	330K	39K	39K
R340	C-13	2.2M	3.3M	3.3M
R341	C-13	56K	330K	330K
R402	L-3	#	4.7K	4.7K
R404	L-4	#	4.7K	4.7K
R501	I-11	330	470	470
R504	I-12	68	560	560
R516	K-11	8.2K	5.6K	6.8K
R523	K-13	22K	12K	12K
R526	J-12	4.7	10	10
R554	I-19	15K	2.2K	#
R576	H-15	22	10	10
T503	I-18	8-598-834-20	8-598-824-10	8-598-824-10
T505	H-15	1-431-693-11	1-435-098-11	1-435-098-11

#: Not Mounted

IC BLOCK DIAGRAM



A BOARD IC VOLTAGE LIST

IC001	
PIN	VOLT
1	4.9
2	0.6
3	GND
4	5.0
5	0.2
6	1.7
7	1.4
8	0.5
9	0.0
10	5.0
11	GND
12	5.0
13	2.3
14	GND
15	2.1
16	5.0
17	2.6
18	2.6
19	0.3
20	0.0
21	2.1
22	5.0
23	5.0
24	5.0
25	5.0
26	5.0
27	5.0
28	0.0
29	0.0
30	0.0
31	N/C
32	N/C
33	4.8
34	0.0
35	0.0
36	0.0
37	0.0
38	4.2
39	1.7
40	2.6
41	5.0
42	5.0
43	0.2
44	0.6
45	1.2
46	4.8
47	4.8
48	0.0
49	0.1
50	4.4
51	5.0
52	0.1
53	0.0
54	4.8
55	0.1
56	0.0
57	4.8
58	N/C
59	N/C
60	0.0
61	0.1
62	4.6
63	0.1
64	N/C

IC002	
PIN	VOLT
1	N/C
2	GND
3	GND
4	5.0
5	5.0

IC003	
PIN	VOLT
1	GND
2	GND
3	GND
4	GND
5	5.0
6	5.0
7	0.0
8	5.0

IC301	
PIN	VOLT
1	5.0
2	GND
3	5.0
4	5.0
5	4.8
6	5.0
7	4.8
8	3.4
9	5.2
10	1.9
11	0.0
12	4.8
13	9.0
14	0.0
15	4.8
16	4.9
17	4.4
18	0.0
19	3.8
20	5.5
21	3.6
22	5.8
23	9.0
24	4.4
25	0.0
26	4.1
27	2.4
28	3.5
29	3.5
30	5.9
31	5.5
32	7.6
33	3.6
34	2.8
35	2.5
36	3.9
37	1.5
38	1.6
39	1.5
40	0.0
41	4.6
42	4.6
43	4.6
44	9.0
45	0.1
46	4.3
47	5.2
48	5.2
49	GND
50	4.8
51	5.2
52	5.2
53	9.1
54	5.3
55	N/C
56	1.7
57	N/C
58	6.9
59	N/C
60	4.7
61	4.7
62	4.7
63	1.1
64	5.1

IC400	
PIN	VOLT
1	4.5
2	4.5
3	4.5
4	4.5
5	4.5
6	4.5
7	4.5
8	4.5
9	4.5
10	4.5
11	4.5
12	4.5
13	4.5
14	4.5
15	4.5
16	4.5

IC402	
PIN	VOLT
1	GND
2	0.3
3	9.0
4	4.5
5	4.5
6	4.5
7	4.5
8	GND
9	4.5
10	4.5
11	4.5
12	4.5
13	4.5
14	4.5
15	4.5
16	4.5
17	1.7
18	4.7
19	4.7
20	GND
21	9.0
22	4.4
23	3.8
24	3.8
25	4.0
26	0.6
27	4.6
28	4.6
29	4.6
30	4.6
31	4.6
32	4.6
33	4.6
34	4.6
35	4.5
36	4.5
37	4.5
38	4.5
39	4.5
40	4.5

IC403	
PIN	VOLT
1	4.5
2	GND
3	4.5
4	0.0
5	4.5
6	GND
7	GND
8	GND
9	9.0
10	9.0
11	9.0
12	4.5
13	4.5
14	4.5
15	4.5
16	9.0

IC404	
PIN	VOLT
1	4.5
2	GND
3	0.4
4	0.4
5	4.5
6	GND
7	0.0
8	GND
9	9.0
10	9.0
11	9.0
12	4.5
13	4.5
14	4.5
15	4.5
16	9.0

IC501	
PIN	VOLT
1	-13.3
2	8.2
3	7.2
4	-15.0
5	2.3
6	2.5
7	-13.5
8	12.0

IC561	
PIN	VOLT
1	1.5
2	12.0
3	-12.0
4	-15.0
5	0.3
6	14.2
7	1.4

IC6008	
PIN	VOLT
I	7.5
O	5.0
G	GND

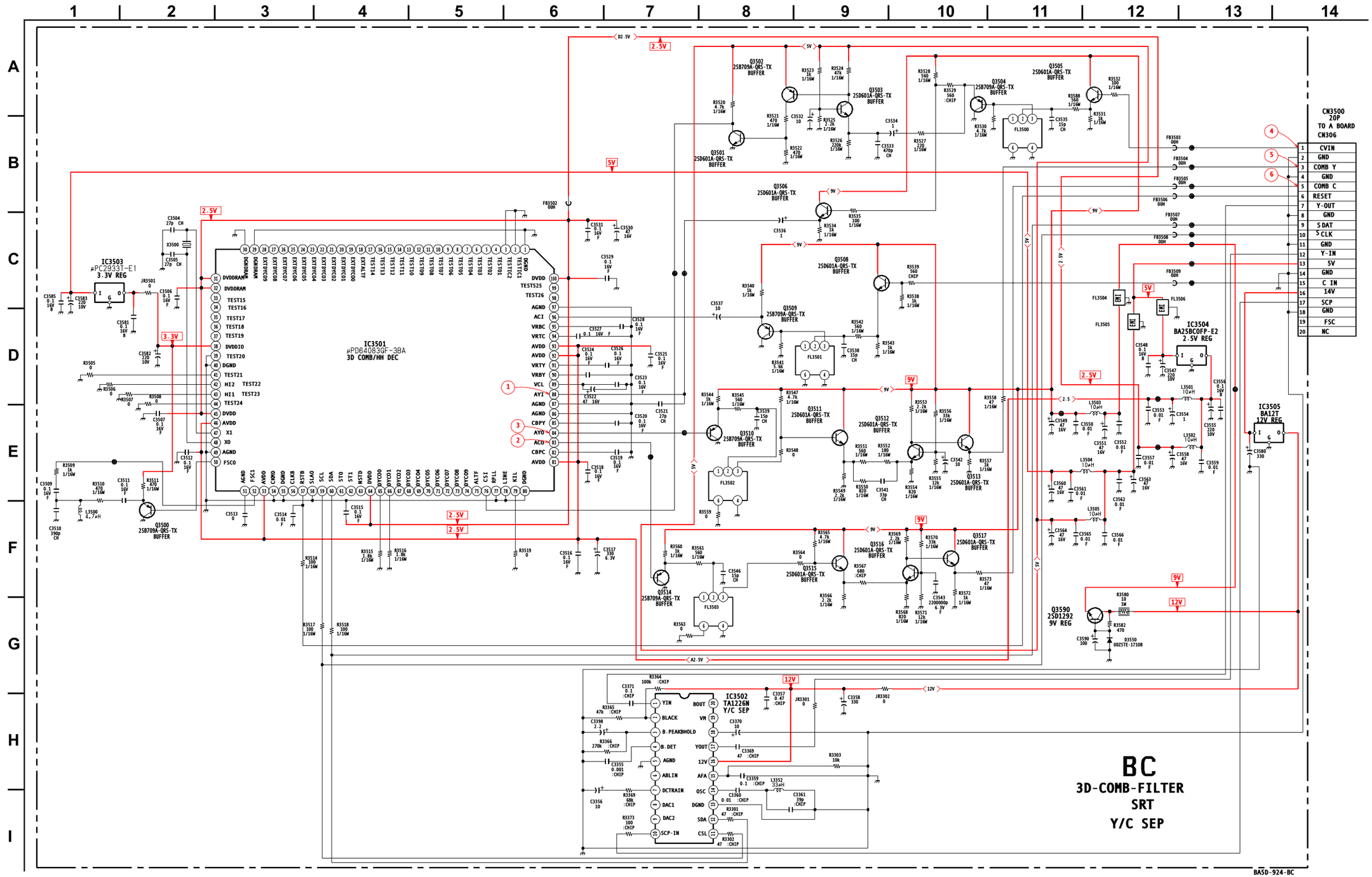
All voltages are in V.

A BOARD TRANSISTOR VOLTAGE LIST

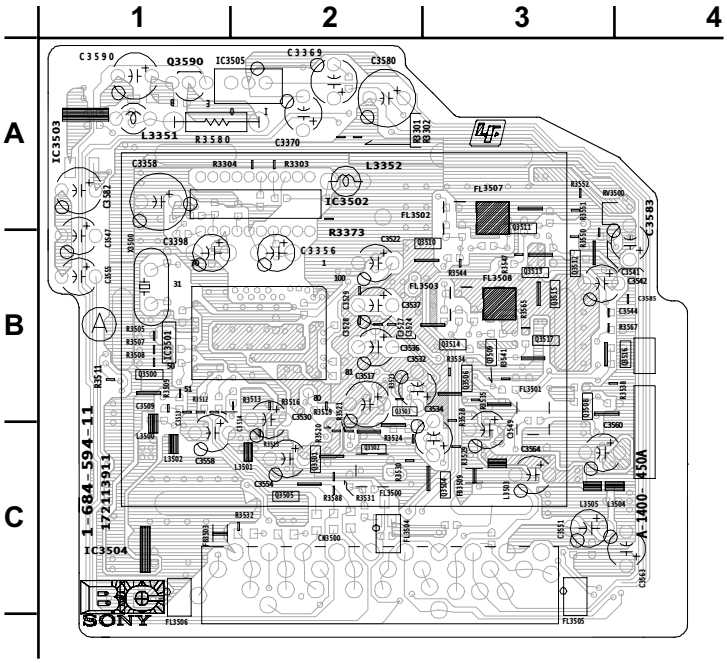
	B	C	E		B	C	E
Q001	0.0	0.4	5.0	**Q400**	0.0	0.0	GND
Q002	4.4	9.0	3.8	**Q401**	0.0	0.0	GND
Q003	0.7	0.0	GND	**Q402**	0.0	0.0	GND
Q004	0.0	4.3	GND	**Q403**	0.0	0.0	GND
Q005	0.1	4.9	GND	**Q404**	0.0	9.1	GND
Q010	4.3	GND	4.9	**Q405**	0.0	9.1	GND
Q110	4.8	0.0	5.0	**Q406**	0.0	9.1	GND
Q300	4.6	GND	5.2	**Q407**	0.7	0.0	GND
Q304	5.0	9.0	4.4	**Q501**	0.0	123.6	GND
Q305	5.0	0.0	3.4	**Q502**	0.0	131.8	0.0
Q306	2.0	9.0	2.3	**Q507**	0.3	110.7	GND
Q307	1.5	GND	2.2	**Q511**	-13.5	-8.4	-15.0
Q308	1.5	GND	2.2	**Q512**	-14.9	-2.0	-15.0
Q309	1.5	GND	2.2	**Q530**	0.0	4.4	GND
Q314	0.0	3.4	GND	**Q531**	4.4	0.0	4.4
Q315	3.4	GND	4.1	**Q532**	133.6	0.0	133.8
Q316	6.4	2.7	7.1	**Q561**	0.0	4.4	GND
Q317	0.0	3.9	GND	**Q562**	0.0	0.0	GND
Q319	0.6	0.6	GND	**Q590**	0.0	3.6	GND
Q325	2.6	6.4	1.9	**Q6000**	0.6	1.2	GND
Q326	2.7	GND	3.4				

All voltages are in V.

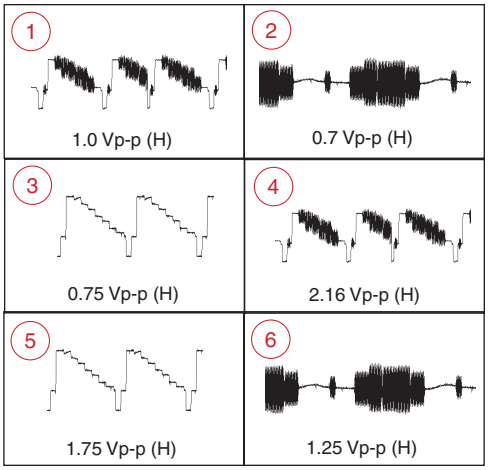
BC BOARD SCHEMATIC DIAGRAM



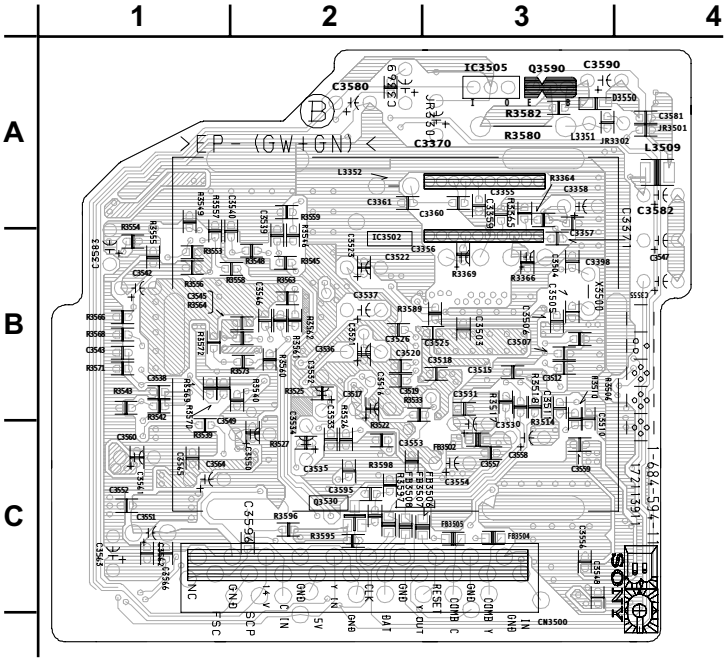
BC [3D COMB FILTER, SRT, Y/C SEP] COMPONENT SIDE



BC BOARD WAVEFORM



BC [3D COMB FILTER, SRT, Y/C SEP] CONDUCTOR SIDE



BC BOARD IC VOLTAGE LIST

IC3501		27	N/C	55	GND	83	1.4	9	N/C
PIN	**VOLT**	28	N/C	56	N/C	84	1.4	10	1.2
1	GND	29	GND	57	4.8	85	1.1	11	4.7
2	GND	30	GND	58	GND	86	GND	12	4.7
3	GND	31	2.5	59	4.7	87	0.0	13	0.0
4	N/C	32	2.5	60	4.7	88	1.1	14	11.5
5	N/C	33	N/C	61	N/C	89	0.7	15	4.8
6	N/C	34	N/C	62	N/C	90	0.7	16	12.0
7	N/C	35	N/C	63	N/C	91	1.3	17	0.0
8	N/C	36	N/C	64	2.5	92	2.5	18	0.5
9	N/C	37	N/C	65	0.0	93	2.5	19	N/C
10	N/C	38	3.3	66	0.0	94	0.0	20	N/C
11	N/C	39	GND	67	N/C	95	0.0	**IC3503**	
12	N/C	40	GND	68	N/C	96	1.1	**PIN**	**VOLT**
13	N/C	41	GND	69	N/C	97	GND	I	5.0
14	N/C	42	GND	70	N/C	98	N/C	O	3.3
15	N/C	43	GND	71	N/C	99	N/C	G	GND
16	N/C	44	GND	72	N/C	100	2.5	**IC3504**	
17	N/C	45	2.5	73	N/C	**IC3502**		**PIN**	**VOLT**
18	N/C	46	2.5	74	N/C	**PIN**	**VOLT**	I	5.0
19	N/C	47	1.3	75	N/C	1	4.7	O	2.5
20	N/C	48	1.0	76	4.2	2	3.8	G	GND
21	N/C	49	GND	77	GND	3	3.9	**IC3505**	
22	N/C	50	1.4	78	GND	4	4.7	**PIN**	**VOLT**
23	N/C	51	GND	79	GND	5	GND	I	14.0
24	N/C	52	1.3	80	GND	6	N/C	O	12.0
25	N/C	53	2.5	81	2.5	7	4.8	G	GND
26	N/C	54	GND	82	1.1	8	N/C		

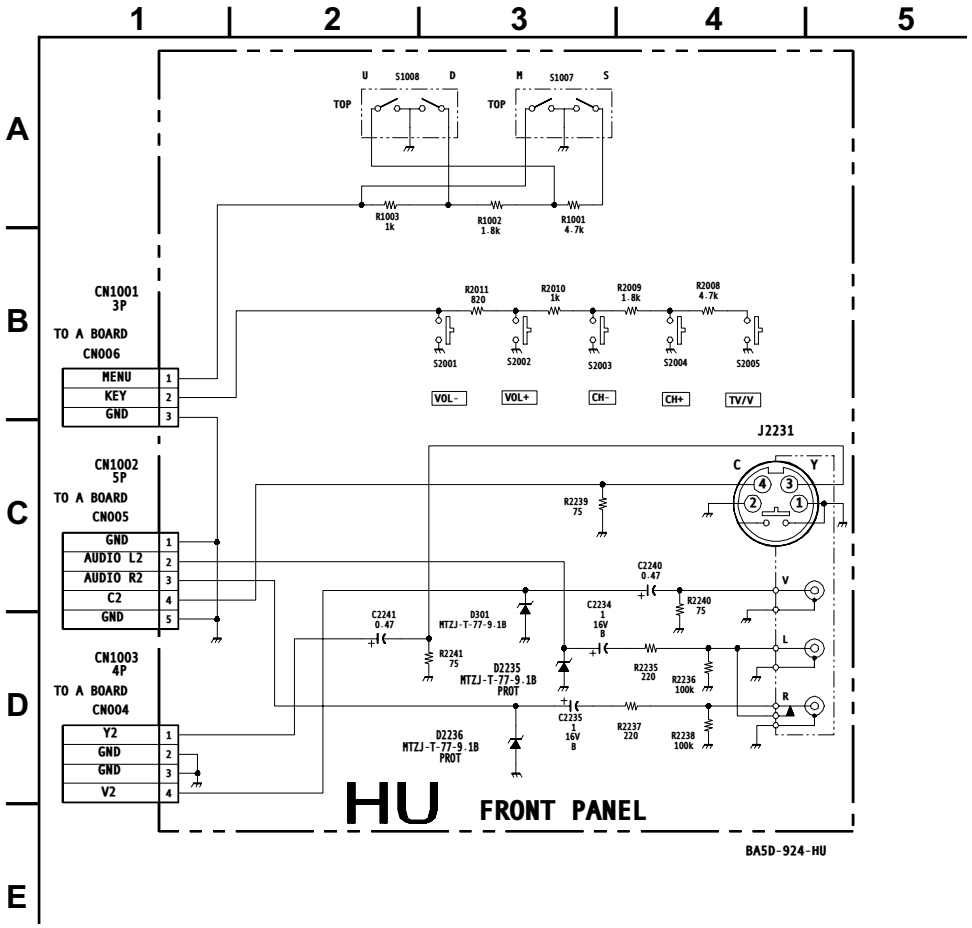
All voltages are in V.

BC BOARD TRANSISTOR TABLE

	B	C	E		B	C	E
Q3500	1.4	GND	2.1	**Q3510**	2.1	GND	1.4
Q3501	4.7	4.2	GND	**Q3511**	2.3	9.0	2.9
Q3502	4.7	0.5	5.0	**Q3512**	2.5	5.7	1.9
Q3503	3.3	4.7	3.5	**Q3513**	5.7	9.0	5.0
Q3504	3.3	GND	4.0	**Q3514**	1.4	GND	2.1
Q3505	4.3	9.0	3.7	**Q3515**	2.9	9.0	2.3
Q3506	6.2	9.0	5.6	**Q3516**	2.5	6.0	1.9
Q3508	2.4	9.0	1.8	**Q3517**	6.0	9.0	5.4
Q3509	1.7	GND	2.3	**Q3590**	10.2	11.3	9.0

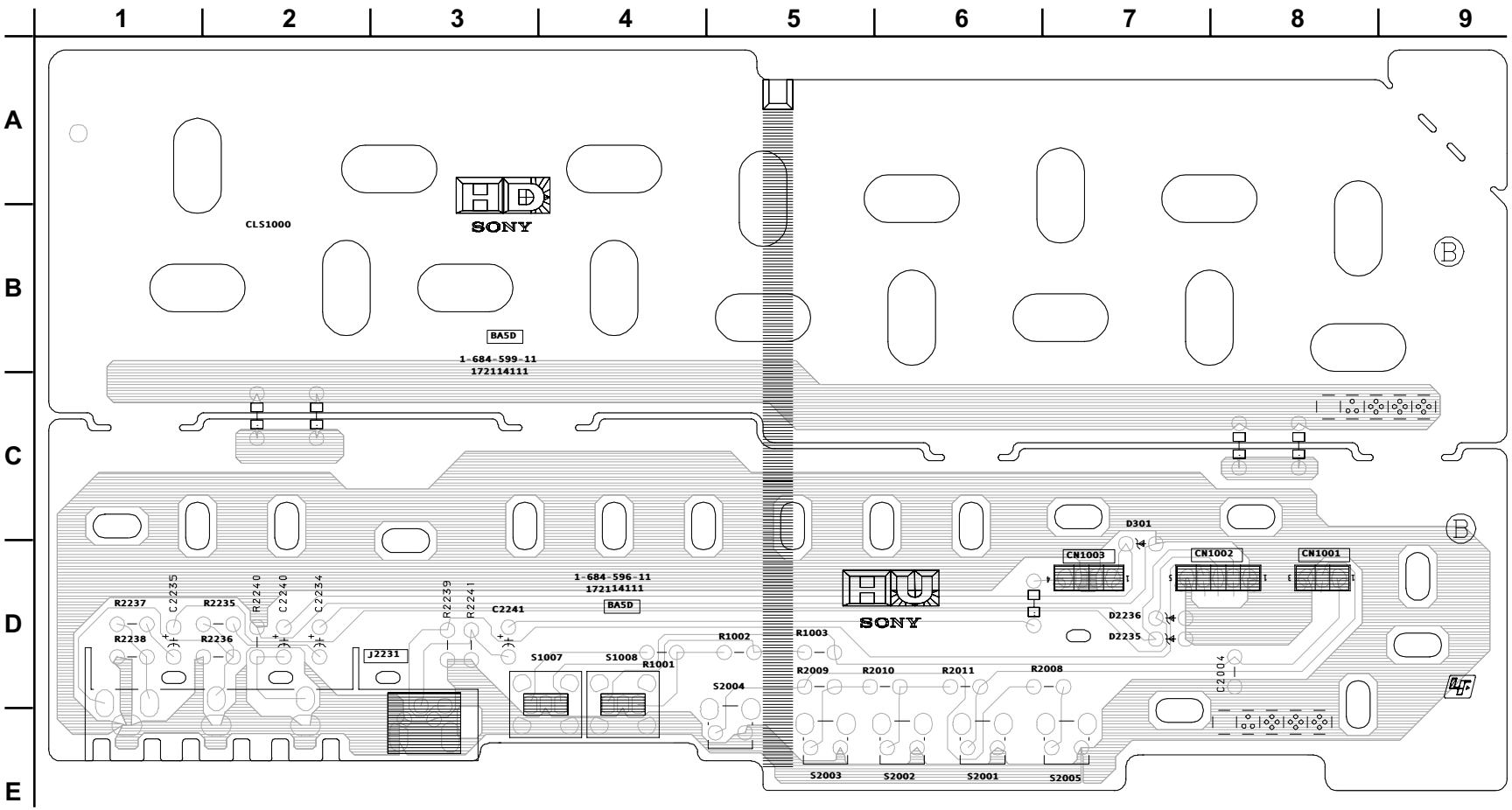
All voltages are in V.

HU BOARD SCHEMATIC DIAGRAM

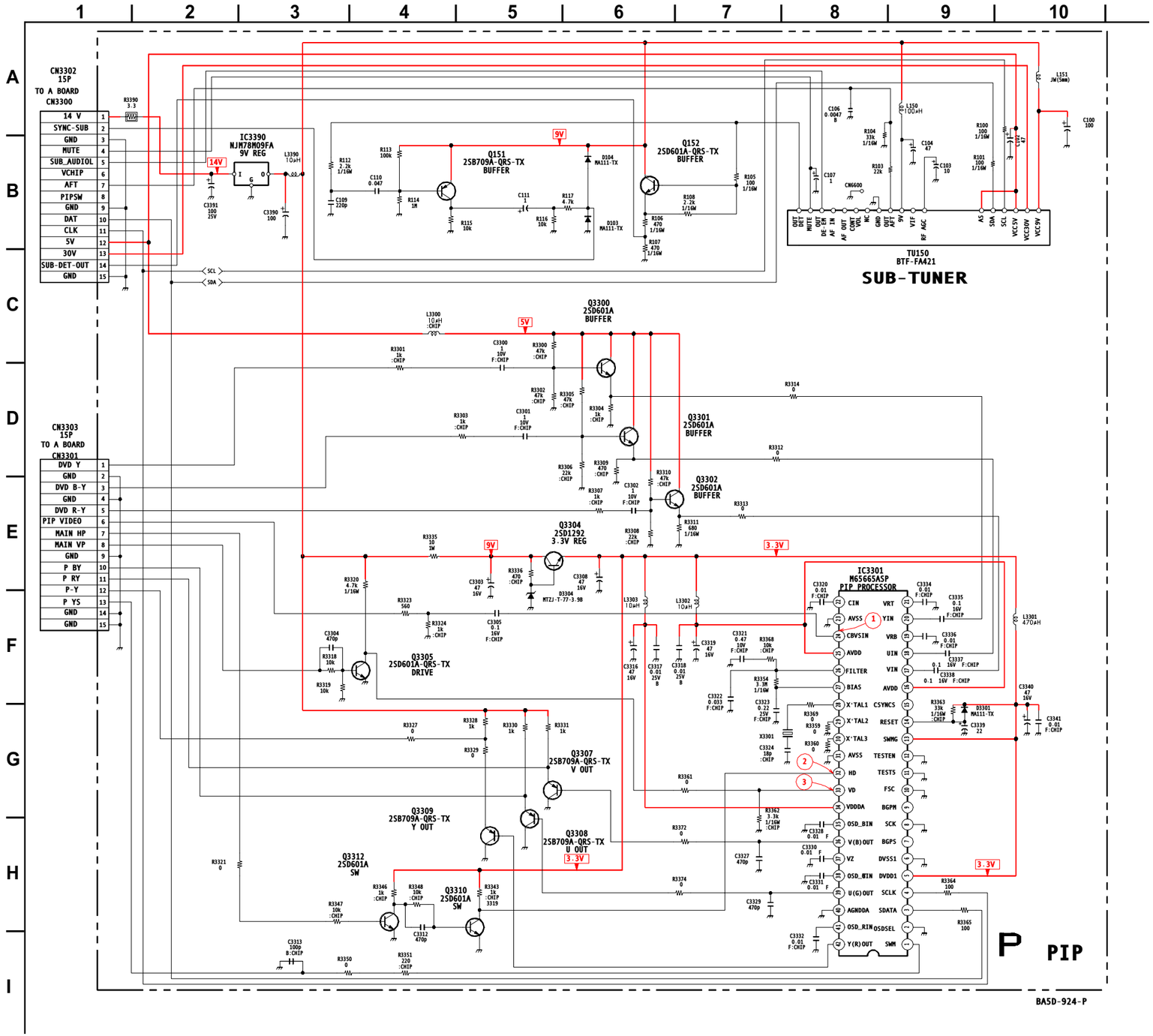


HD [SPACER] (KV-32FV300/36FV300 0NLY)

HU [FRONT PANEL]



P BOARD SCHEMATIC DIAGRAM



P BOARD IC VOLTAGE LIST

IC3301		11	GND	23	GND	35	0.8
PIN	VOLT	12	GND	24	0.9	36	0.8
1	0.2	13	3.3	25	3.3	37	2.3
2	GND	14	3.2	26	3.5	38	0.8
3	4.5	15	N/C	27	2.0	39	0.8
4	4.5	16	3.3	28	1.7	40	GND
5	3.3	17	1.0	29	GND	41	0.8
6	GND	18	1.0	30	GND	42	0.6
7	N/C	19	0.5	31	GND	IC3390	
8	GND	20	0.5	32	0.6	PIN	VOLT
9	N/C	21	1.6	33	0.0	I	14.0
10	GND	22	1.0	34	3.3	O	9.0
						G	GND

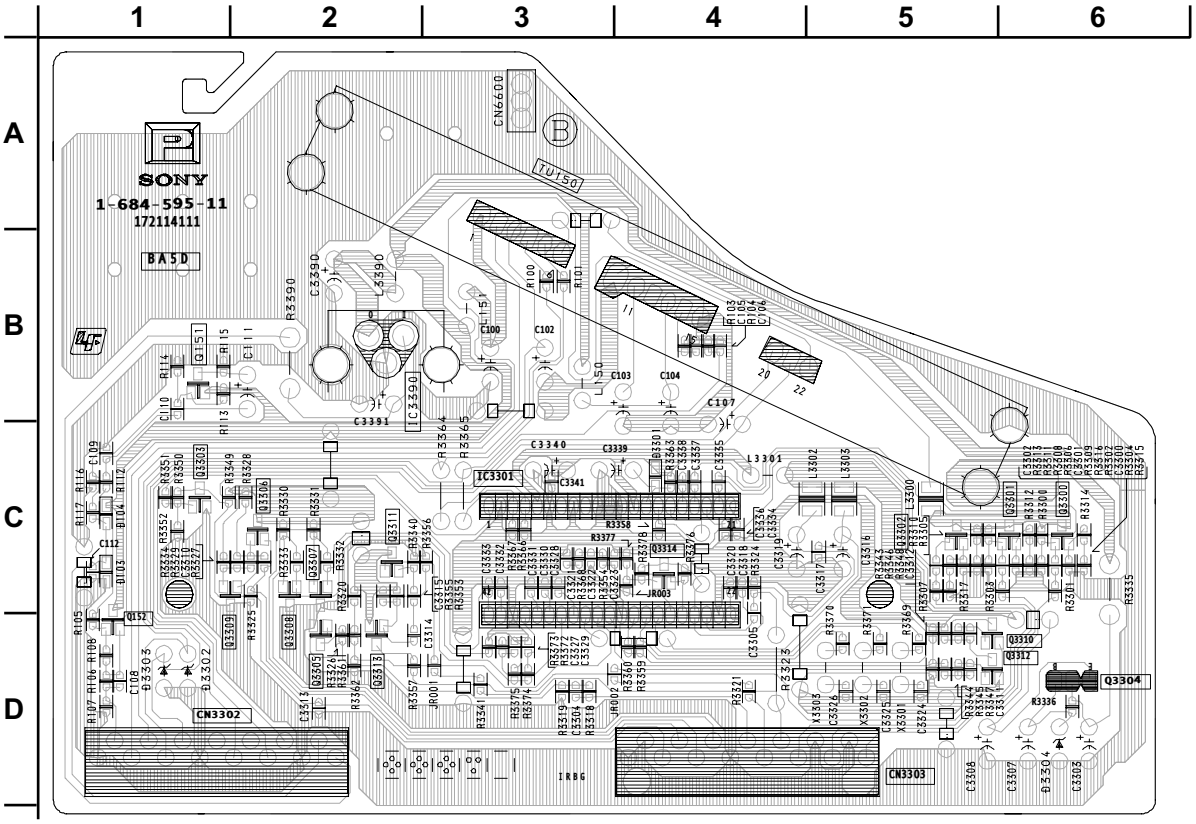
All voltages are in V.

P BOARD TRANSISTOR TABLE

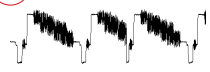
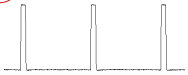
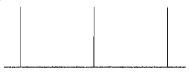
	B	C	E
Q151	8.4	4.5	9.0
Q152	3.9	9.0	3.2
Q3300	2.3	5.0	1.7
Q3301	1.4	5.0	0.8
Q3302	1.4	5.0	0.8
Q3304	3.9	9.0	3.3
Q3305	0.7	0.1	GND
Q3307	0.8	GND	1.5
Q3308	0.7	GND	1.4
Q3309	0.6	GND	1.3
Q3310	0.5	0.6	GND
Q3312	0.2	2.7	GND

All voltages are in V.

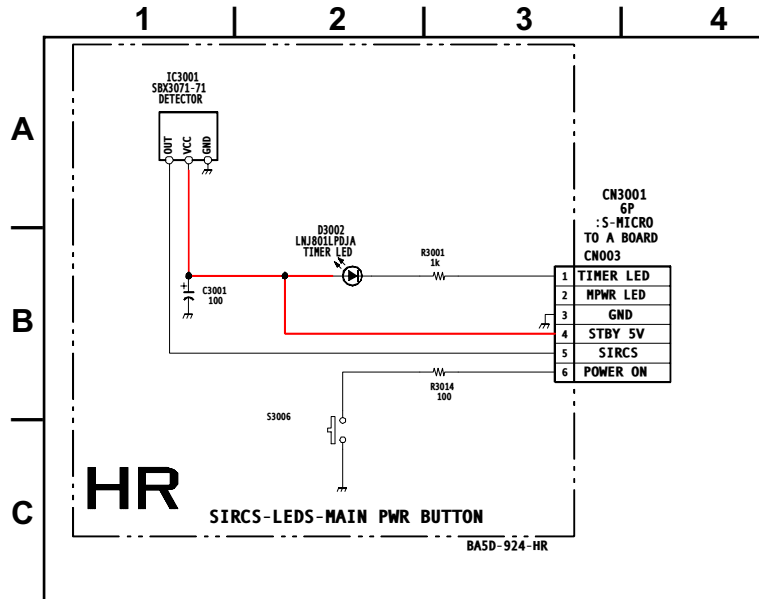
P [PIP]



P BOARD WAVEFORM

1	2	3
		
1.0 Vp-p (H)	3.5 Vp-p (H)	3.75 Vp-p (H)

HR BOARD SCHEMATIC DIAGRAM

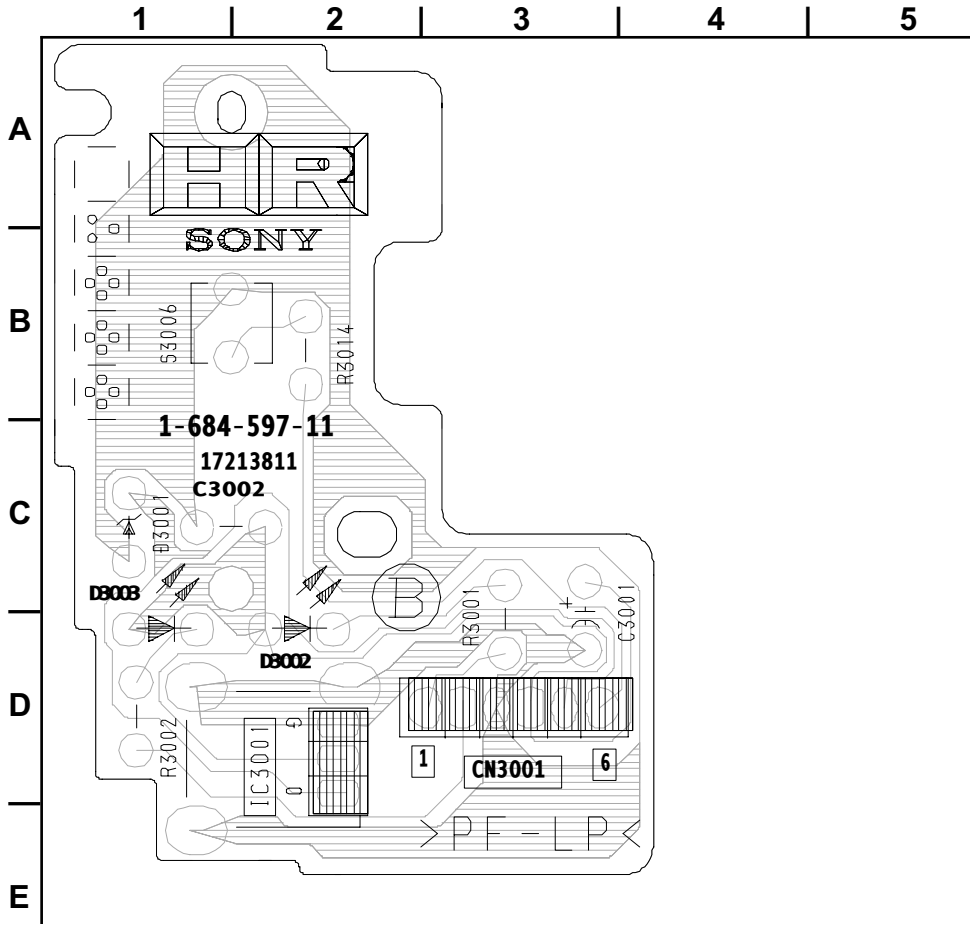


HR BOARD IC VOLTAGE TABLE

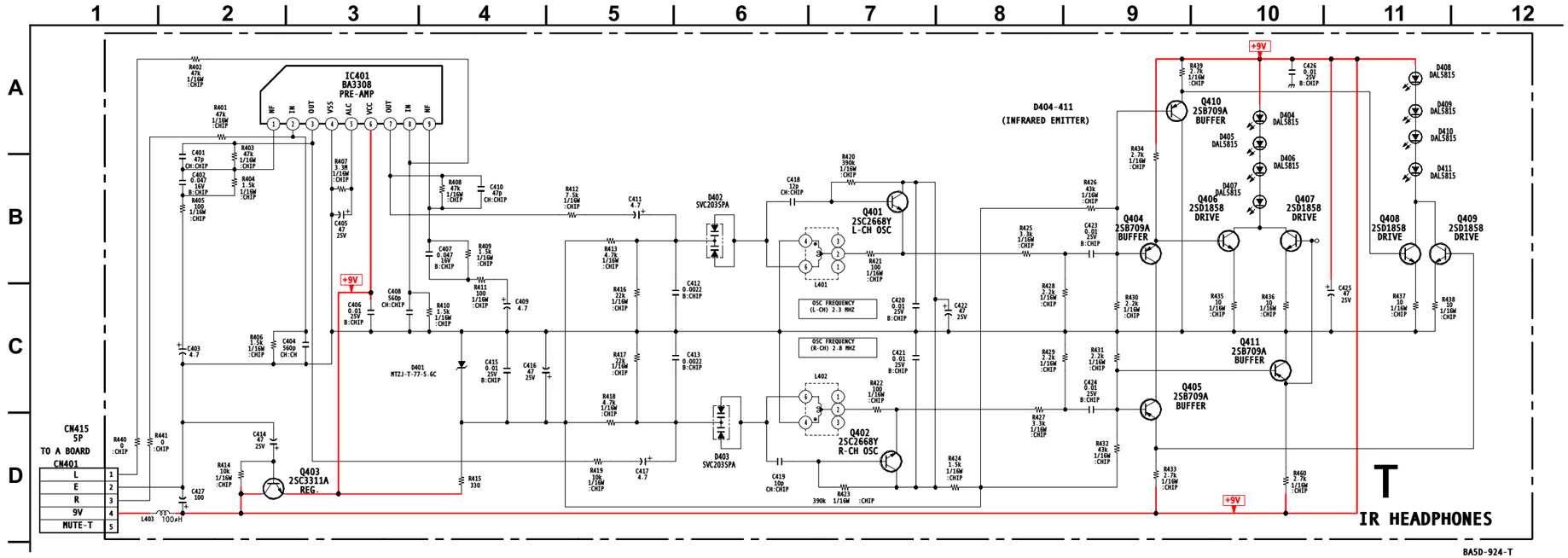
IC3001	
PIN	VOLT
I	5.0
O	5.0
G	GND

All voltages are in V.

HR [SIRCS, LEDS, MAIN POWER BUTTON]



T BOARD SCHEMATIC DIAGRAM (KV-32FV300/36FV300 ONLY)



T BOARD IC VOLTAGE TABLE

IC401	
PIN	VOLT
1	1.9
2	0.0
3	1.9
4	0.0
5	1.2
6	9.0
7	1.9
8	0.0
9	1.9

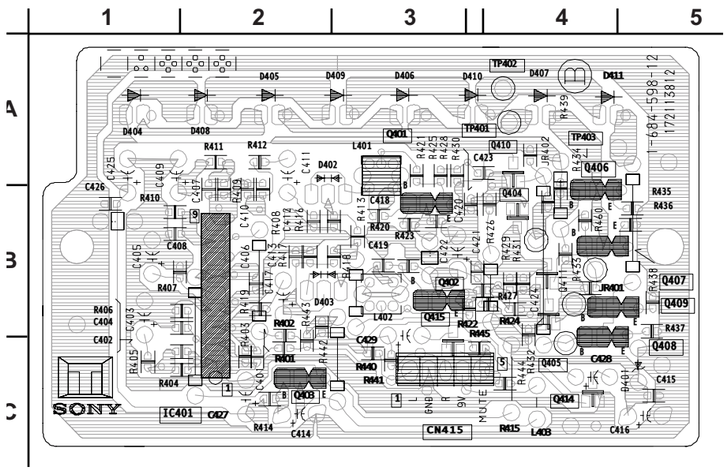
All voltages are in V.

T BOARD TRANSISTOR TABLE

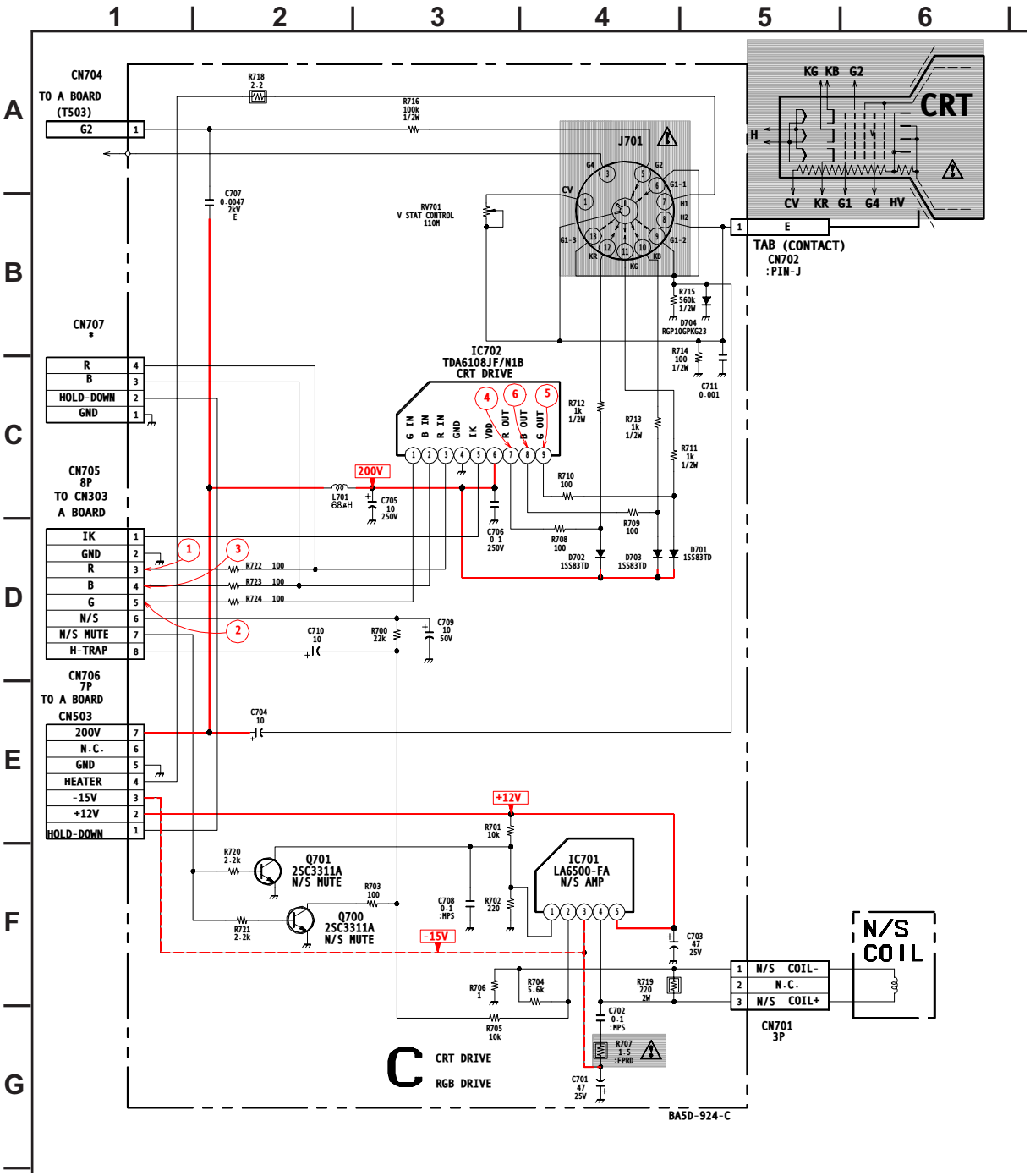
	B	C	E
Q401	0.1	3.4	0.8
Q402	0.1	3.4	0.8
Q403	8.3	9.0	9.0
Q404	1.0	0.0	0.4
Q405	1.0	0.0	0.4
Q406	1.0	2.9	0.5
Q407	1.0	2.9	0.5
Q408	1.0	2.9	0.5
Q409	1.0	2.9	0.5
Q410	1.0	0.0	0.5
Q411	1.0	0.0	0.5

All voltages are in V.

T [IR HEADPHONES] (KV-32FV300/36FV300 ONLY)

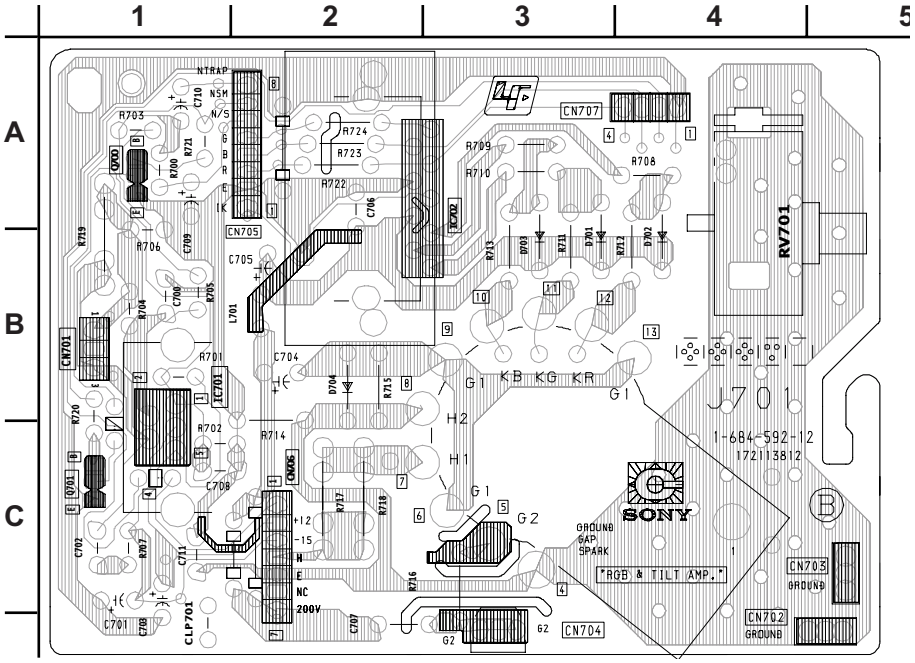


C BOARD SCHEMATIC DIAGRAM



C

[RGB DRIVE, CRT DRIVE]

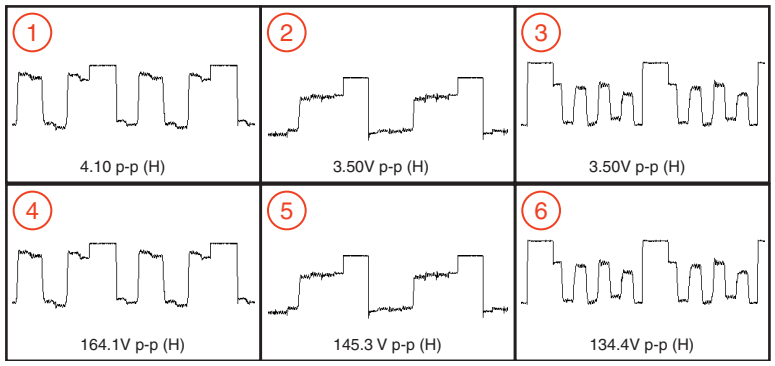


C BOARD IC VOLTAGE TABLE

IC701	
PIN	VOLT
1	0.3
2	0.3
3	-13.0
4	0.5
5	12.0
IC702	
PIN	VOLT
1	2.2
2	2.2
3	2.2
4	GND
5	5.0
6	200.0
7	139.7
8	142.0
9	138.6

All voltages are in V.

C BOARD WAVEFORM



C BOARD MARK(*) LIST

REF. NO.	LOCATION	KV-27FV300 KV-29FV300 KV-32FV300	KV-36FV300
CN707	B-1	#	4P

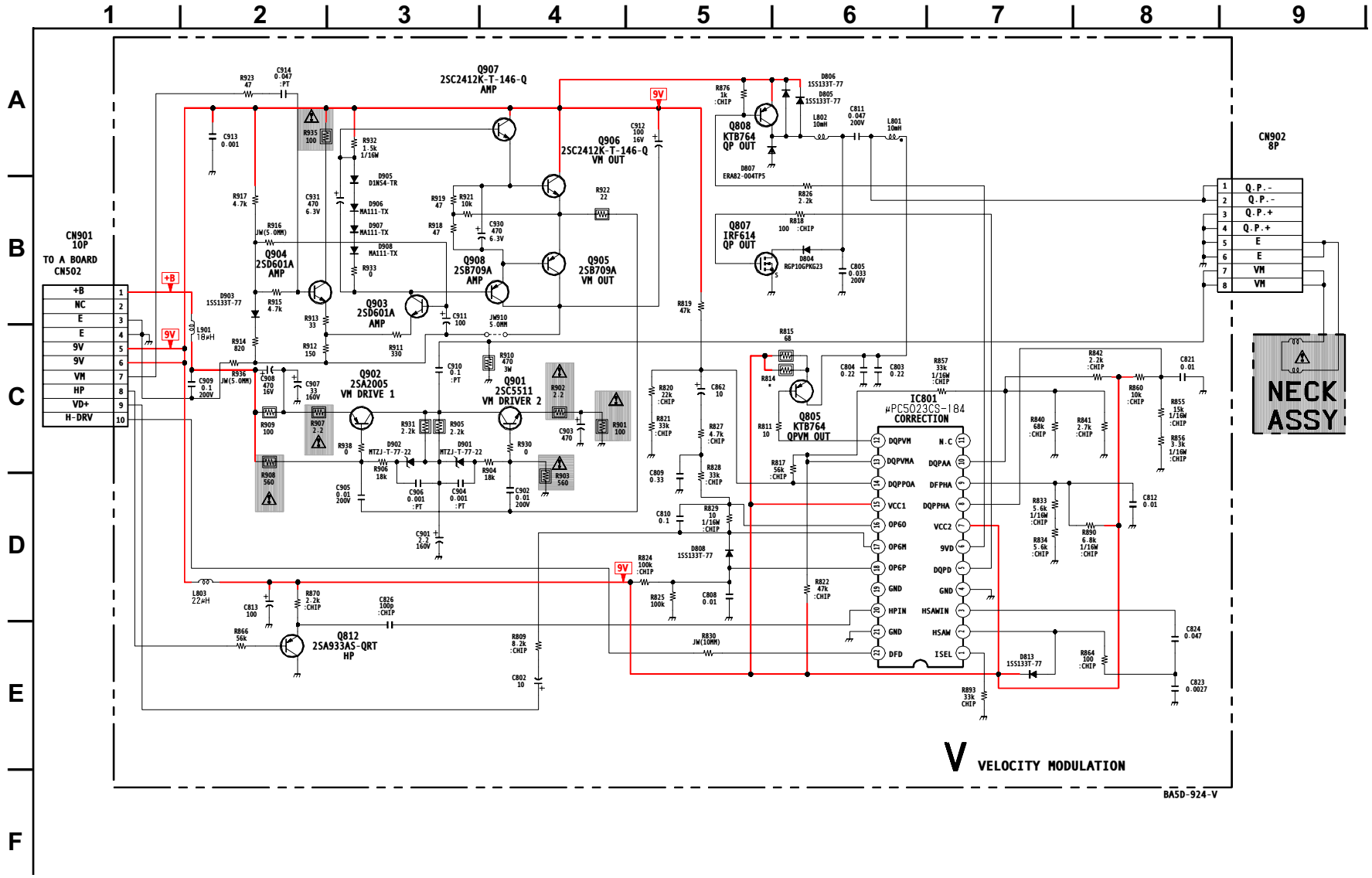
#: Not Mounted

C BOARD TRANSISTOR TABLE

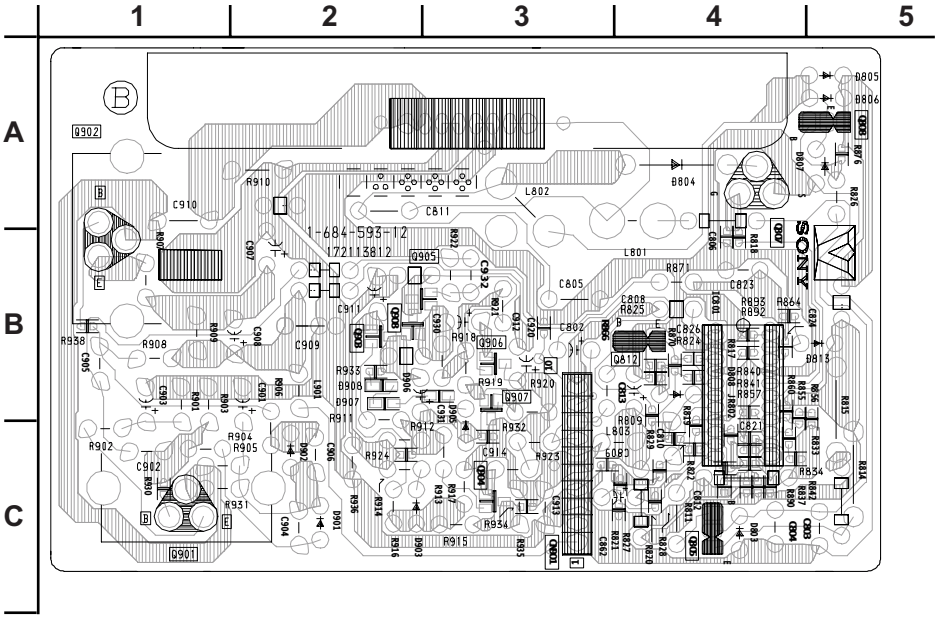
	B	C	E
Q700	0.3	0.8	GND
Q701	0.3	0.3	GND

All voltages are in V.

V BOARD SCHEMATIC DIAGRAM



V [VELOCITY MODULATION]



V BOARD MARK(*) LIST

REF. NO.	LOCATION	KV-27FV300 KV-29FV300	KV-32FV300 KV-36FV300
R814	C-6	#	68 1W

V BOARD IC VOLTAGE LIST

IC801		11	N/C
PIN	VOLT	12	3..5
1	7.4	13	3.8
2	2.3	14	4.5
3	4.8	15	9.0
4	GND	16	4.6
5	6.3	17	4.6
6	4.5	18	4.5
7	9.0	19	N/C
8	5.8	20	4.8
9	4.6	21	GND
10	4.8	22	0.3

All voltages are in V.

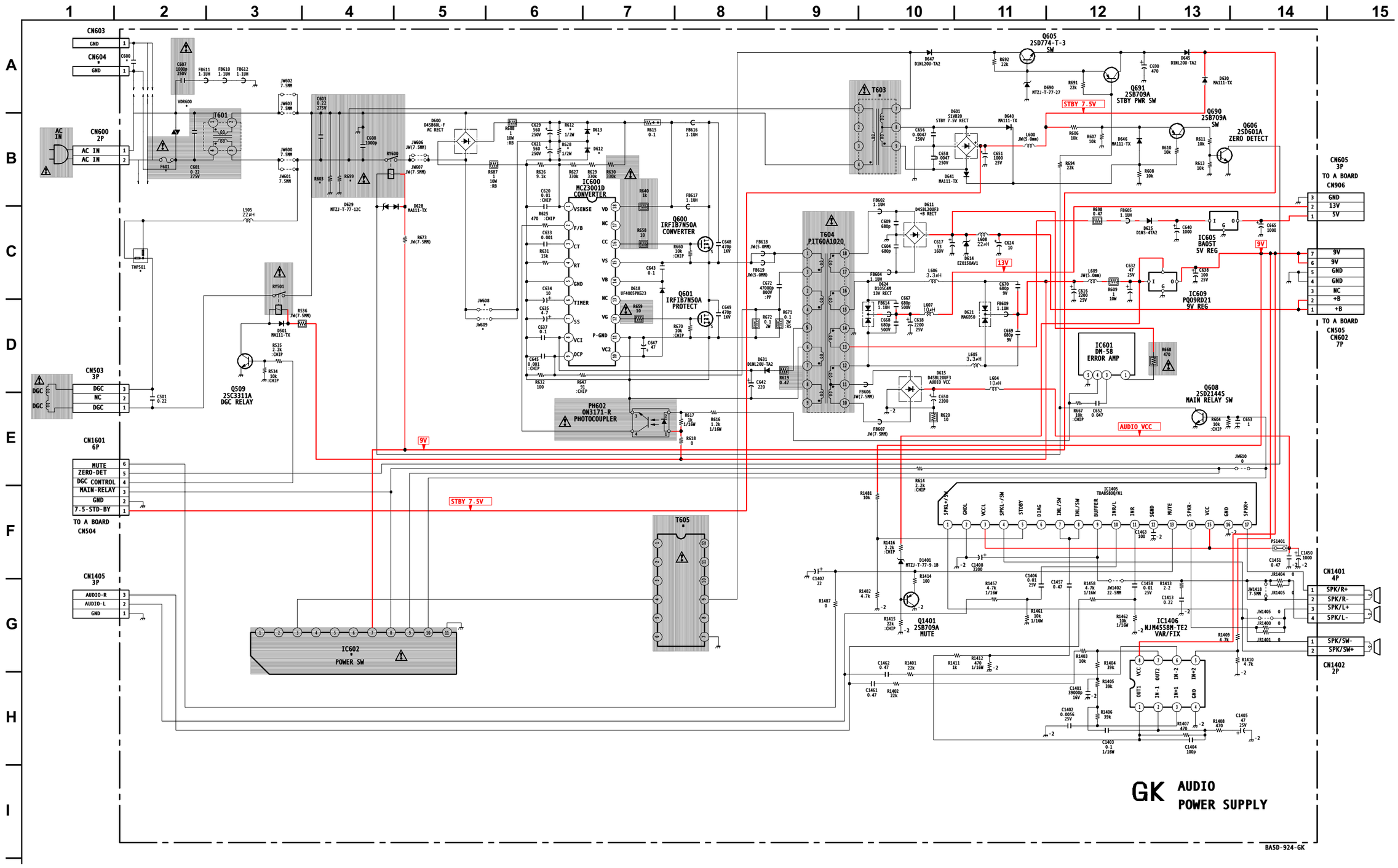
V BOARD TRANSISTOR TABLE

	B	C	E
Q805	3.5	1.8	4.2
Q808	8.6	4.3	9.0
Q812	1.3	GND	2.0
Q901	1.4	67.0	0.8
Q902	132.9	67.0	133.4
Q903	1.2	6.2	1.8
Q904	1.2	8.8	1.8
Q905	7.1	0.0	6.7
Q906	7.4	9.0	7.1
Q907	7.4	9.0	8.1
Q908	6.9	0.0	6.2

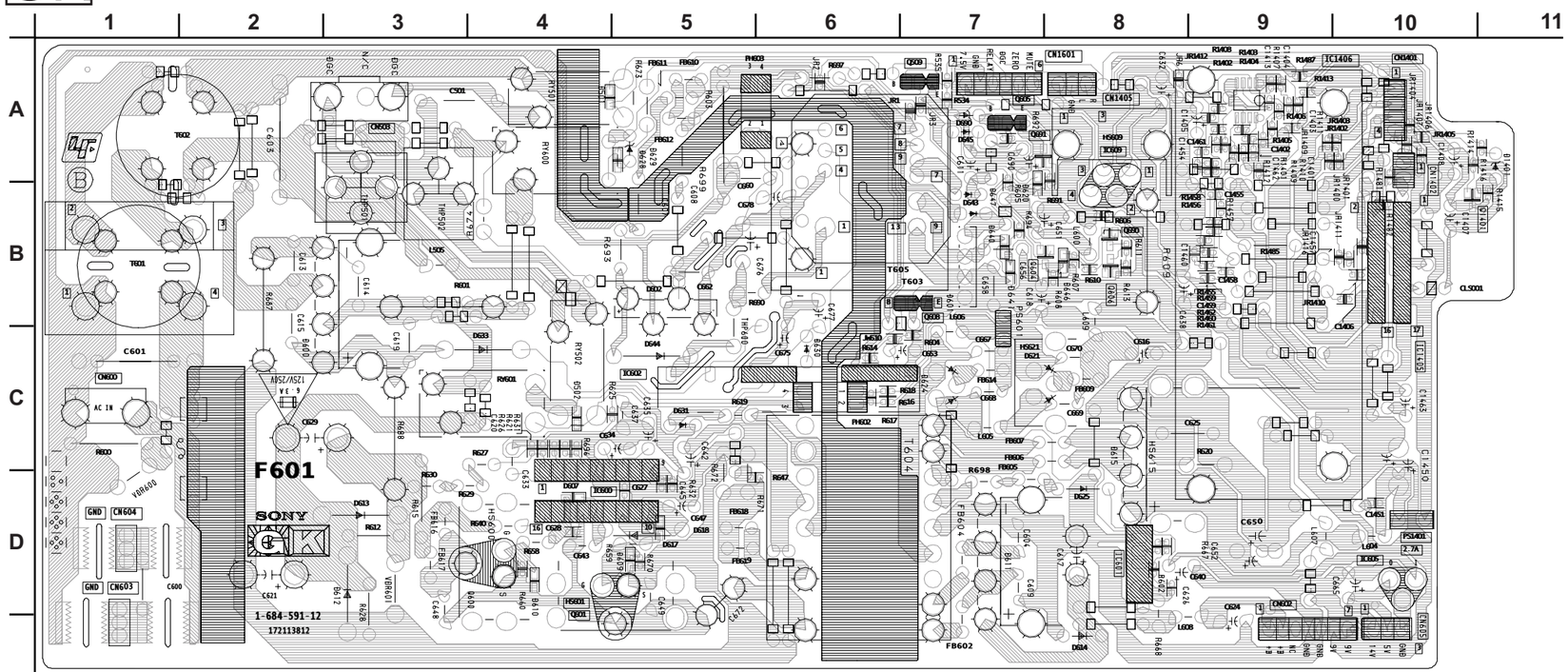
	D	G	S
Q807	9.5	6.3	GND

All voltages are in V.

GK BOARD SCHEMATIC DIAGRAM



GK [POWER SUPPLY, AUDIO]



GK BOARD LOCATOR LIST

DIODE		IC	
D1401	A-11	IC1405	C-10
D501	A-5	IC1406	A-10
D600	C-2	IC600	D-5
D601	C-7	IC601	D-8
D611	D-7	IC602	C-5
D612	D-3	IC605	D-10
D613	D-3	IC609	A-8
D614	E-8	**TRANSISTOR**	
D615	C-8	Q1401	B-11
D618	D-5	Q509	A-7
D620	B-7	Q600	D-4
D621	C-8	Q601	E-4
D624	C-7	Q605	A-7
D625	D-8	Q606	B-8
D628	A-5	Q608	C-7
D629	A-5	Q690	B-8
D631	C-5	Q691	A-8
D640	B-7		
D641	C-7		
D645	A-7		
D646	C-8		
D647	B-7		
D690	A-7		

GK BOARD MARK(*) LIST

REF. NO.	LOCATION	KV-27FV300 KV-29FV300(N) KV-32FV300	KV-29FV300(S)	KV-36FV300
C600	A-1	#	0.0047UF 250V	#
CN604	A-1	1P	#	1P
D612	B-6	8-719-068-00	#	8-719-068-00
D613	B-6	8-719-068-00	#	8-719-068-00
F601	B-2	6.3A/125V	6.3A/250V	6.3A/125V
IC602	G-4	#	#	1-761-541-11
JW608	D-5	7.5MM	#	7.5MM
JW609	D-5	7.5MM	#	7.5MM
R603	B-3	4.7M 1/2W	#	4.7M 1/2W
R612	B-6	#	470K 1/2W	#
R628	B-6	#	470K 1/2W	#
R699	B-3	#	8.2M 1W	#
T603	A-9	1-437-783-11	1-437-784-11	1-437-783-11
T605	F-7	#	#	1-437-785-11
THP501	C-1	1-804-313-11	1-803-540-11	1-803-629-11
VDR600	A-2	1-803-585-11	1-803-967-11	1-803-585-11

#: Not Mounted

GK BOARD IC VOLTAGE LIST

IC600		IC602		IC605		9	11.0
PIN	**VOLT**	**PIN**	**VOLT**	**PIN**	**VOLT**	10	4.0
1	-154.0	1	N/C	I	6.1	11	3.9
2	-155.0	2	N/C	O	5.0	12	GND
3	-154.8	3	18.5	G	GND	13	0.4
4	-154.4	4	N/C	**IC609**		14	9.9
5	-157.1	5	N/C	**PIN**	**VOLT**	15	14.0
6	-156.9	6	N/C	I	10.5	16	GND
7	-150.2	7	9.0	O	9.0	17	9.9
8	-138.8	8	0.0	G	GND	**IC1406**	
9	-157.1	9	0.6	**IC1405**		**PIN**	**VOLT**
10	-146.9	10	0.6	**PIN**	**VOLT**	1	4.6
11	-157.1	11	GND	1	10.1	2	4.6
12	-152.3	**IC601**		2	GND	3	4.6
13	N/C	**PIN**	**VOLT**	3	14.0	4	GND
14	7.0	1	134.6	4	10.1	5	4.6
15	-2.6	2	N/C	5	2.9	6	4.6
16	1.9	3	2.4	6	N/C	7	4.6
17	N/C	4	8.4	7	4.0	8	9.0
18	156.8	5	GND	8	4.0	All voltages are in V.	

GK BOARD TRANSISTOR TABLE

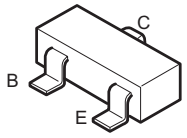
	B	C	E
Q509	0.3	10.5	GND
Q605	7.6	18.8	7.6
Q606	0.0	0.5	GND
Q608	0.6	0.0	GND
Q690	6.1	0.5	5.9
Q691	6.9	7.6	7.6
Q1401	0.0	GND	0.6

	D	G	S
Q600	156.9	2.5	-2.5
Q601	-2.6	-152.8	-157.4

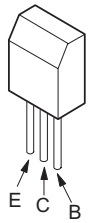
All voltages are in V.

5-4. SEMICONDUCTORS

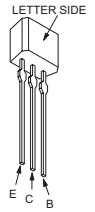
2SB709A-QRS-TX
2SD601A-QRS-TX
2SC2412K-T-146-QR



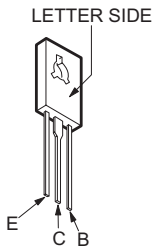
2SC3209LK-TP
2SD774-T-34



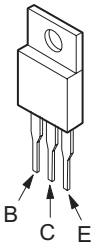
2SD1858-Q-TV2
2SC3311A-QRSTA
2SD2144S-TP-UVW



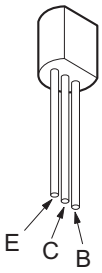
2SC3840K



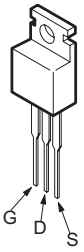
2SC4159-E



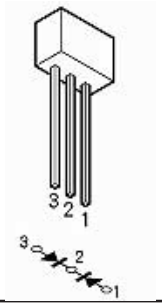
2SA1091O-TPE2



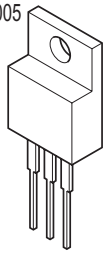
IRF614



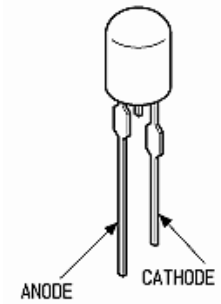
SVC203SPA-AL



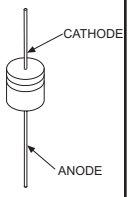
IRFIB7N50A-LF31
2SC5511
2SA2005



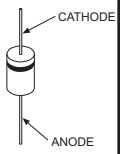
DAL5815



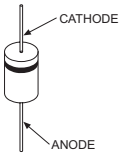
D1NS4-TA2
D1NS4-TR
ERA38-06TP1
ERA82-004TP5
1SS133T-77
MTZJ-T-77-3.3B
MTZJ-T-77-3.6B
MTZJ-T-77-3.9B
MTZJ-T-77-6.2B
MTZJ-T-77-6.8B
MTZJ-T-77-12C
MTZJ-T-77-15B
MTZJ-T-77-22



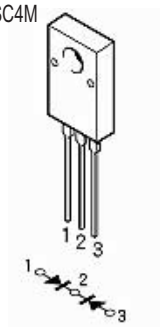
ERC06-15S
MTZJ-T-77-5.1C
MTZJ-T-77-5.6C
MTZJ-T-77-7.5A
MTZJ-T-77-9.1B
MTZJ-T-77-10B
MTZJ-T-77-30D
RGP10-GPKG3
RGP02-17PKG23
RGP15GPKG23



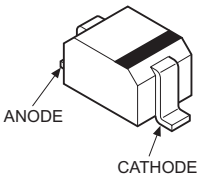
EL1Z-V1
ERB44-06TP1
ERC04-06SE
1SS83TD
1N4003GA
1N4937/23
GP08DPKG23
PR1004GT
RGP10GPKG23
RU4AM-T3



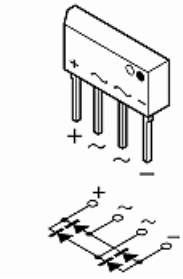
D10SC4M



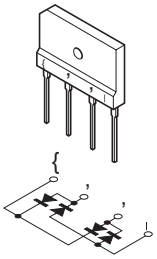
MA111-TX
UDZSTE-1710B



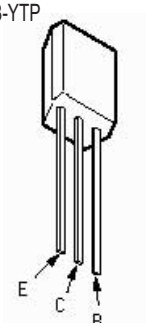
S1VB20



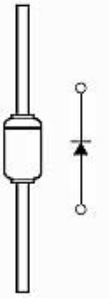
D4SB60L-F



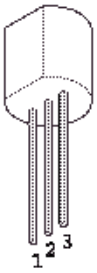
2SC2668-YTP



MTZJ-T-77-27



2SA933AS-QRT



SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

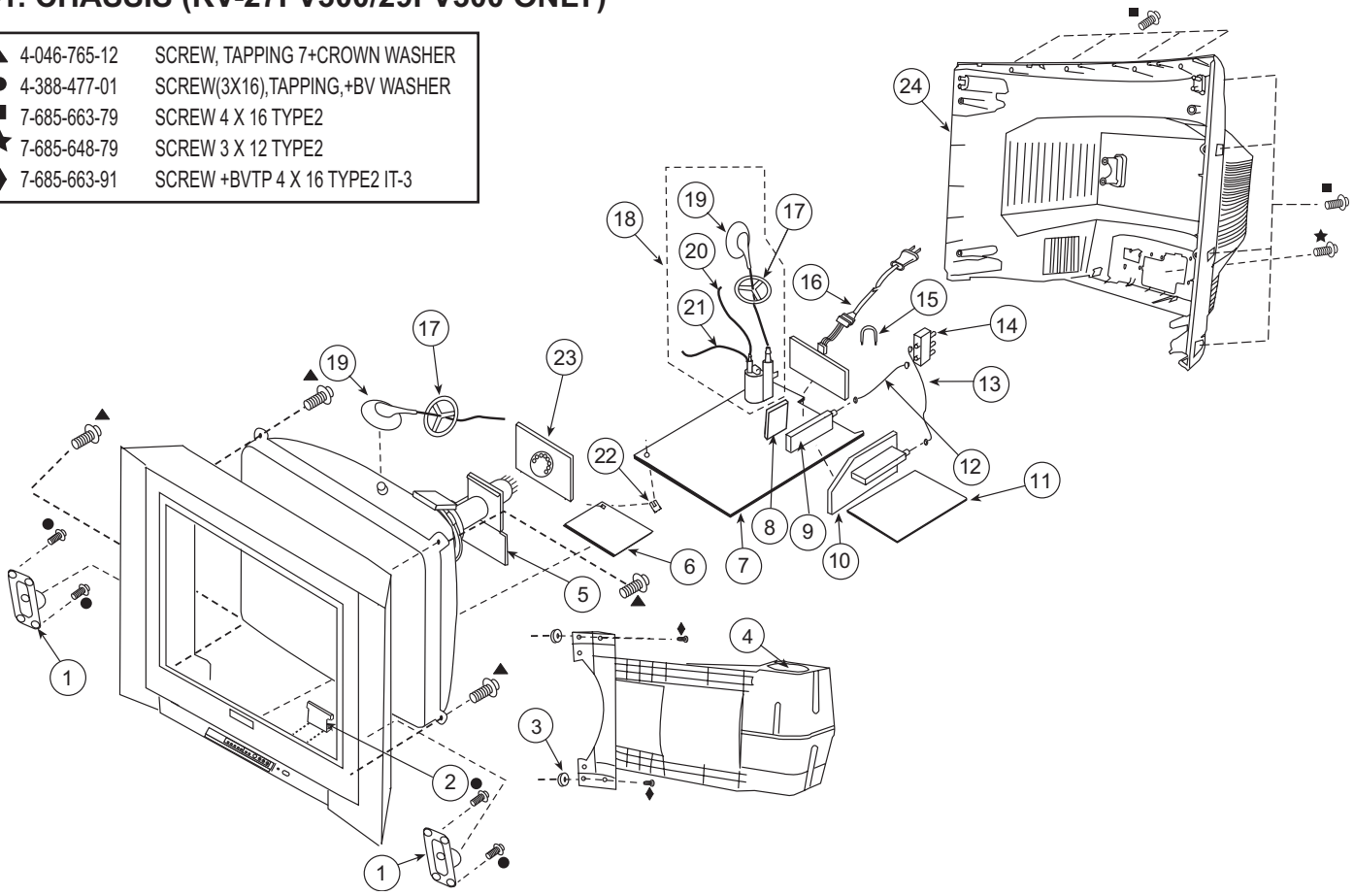
*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS (KV-27FV300/29FV300 ONLY)

▲	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER
●	4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER
■	7-685-663-79	SCREW 4 X 16 TYPE2
★	7-685-648-79	SCREW 3 X 12 TYPE2
♦	7-685-663-91	SCREW +BVTP 4 X 16 TYPE2 IT-3



	REF. NO.	PART NO.	DESCRIPTION [Assembly Includes]
	1	1-825-129-11	SPEAKER (6X12CM)
*	2	A-1400-459-A	HR (COM) MOUNTED PC BOARD
	3	4-374-745-31	CUSHION (A)
	4	1-825-128-11	SPEAKER (10CM)
*	5	A-1400-565-A	V (VAR) MOUNTED PC BOARD
*	6	A-1400-451-A	HU MOUNTED PC BOARD
*	7	A-1300-328-A	A COMPLETE PC BOARD The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (SEE 19-21).
*	8	A-1400-450-A	BC MOUNTED PC BOARD
☛	9	8-598-593-00	TUNER, FSS BTF-WA421
*	10	A-1400-456-A	P (VAR) MOUNTED PC BOARD
*	11	A-1400-452-A	GK (VAR) MOUNTED PC BOARD KV-27FV300/29FV300 (N)
*	11	A-1400-608-A	GK (VAR) MOUNTED PC BOARD KV-29FV300 (S)

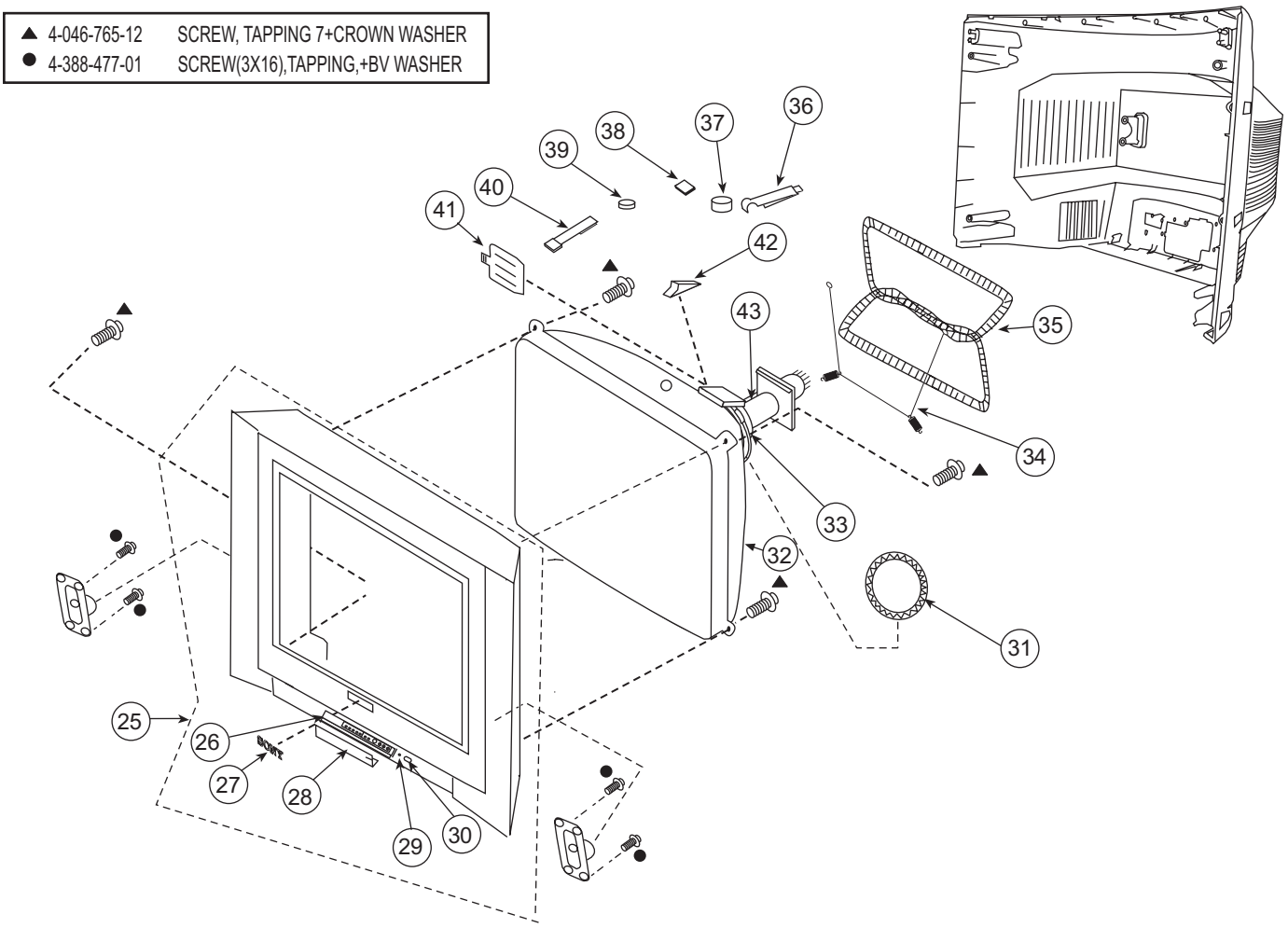
	REF. NO.	PART NO.	DESCRIPTION [Assembly Includes]
*	12	1-555-110-00	CABLE, P-P
*	13	1-558-539-21	CABLE, P-P
☛ ⚠	14	1-771-787-12	SWITCH, RF ANTENNA
*	15	4-076-951-01	HINGE, PWB
⚠	16	1-791-935-12	CORD, AC POWER(WITH CONNECTOR) KV-27FV300/29FV300 (N)
⚠	16	1-769-796-31	CORD, POWER (WITH CONNECTOR) KV-29FV300 (S)
	17	4-084-918-01	HOLDER, HV CABLE
⚠	18	1-453-310-11	FBT ASSY NX-4521//X4J4 (19-21)
⚠	19	1-251-374-13	CAP ASSY, HIGH-VOLTAGE
⚠	20	1-900-800-82	WIRE ASSY, FOCUS
⚠	21	1-900-803-22	WIRE ASSY, G2 LEAD
*	22	3-696-606-02	HINGE, VI
*	23	A-1400-455-A	C (COM) MOUNTED PC BOARD
	24	4-087-777-01	COVER, REAR

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-2. PICTURE TUBE (KV-27FV300/29FV300 ONLY)

▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER
● 4-388-477-01 SCREW(3X16),TAPPING,+BV WASHER



REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
25	X-4040-177-1	BEZNET ASSY	(26-30)
26	4-087-374-01	SPRING, DOOR	
27	4-046-160-21	EMBLEM, SONY (NO.9)	
☛ 28	4-087-375-11	DOOR, CONTROL	
29	4-087-156-01	GUIDE, LIGHT	
30	4-087-150-01	BUTTON, POWER	
⚠ 31	1-452-896-11	COIL, NA ROTATION (RT200)	
⚠ 32	8-735-082-05	CRT 29RSN(SDP)	
		KV-27FV300/29FV300 (N)	
⚠ 32	8-735-083-05	CRT 29RSN(SDP)(SOUTH)	
		KV-29FV300 (S)	
⚠ 33	8-451-494-41	DY Y29RSA-V	
34	4-036-329-01	SPRING (B), TENSION	

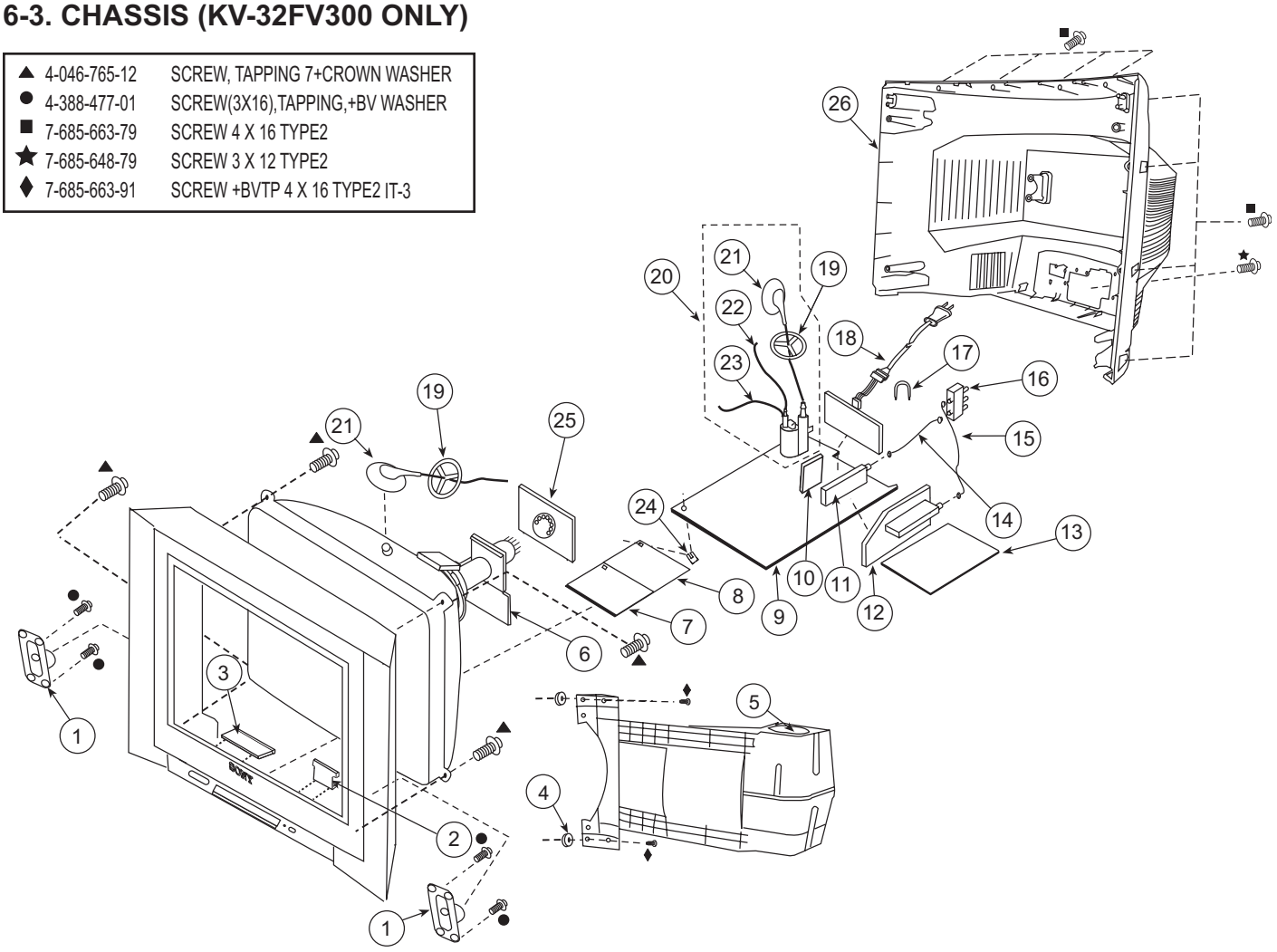
REF. NO.	PART NO.	DESCRIPTION	([Assembly Includes]
⚠ 35	1-419-156-21	COIL, DEGAUSSING	
		KV-27FV300/29FV300 (N)	
⚠ 35	1-419-523-21	COIL, DEGAUSSING	
		KV-29FV300 (S)	
* 36	4-062-970-12	CLIP (29RSN), DGC	
37	1-452-094-00	CIRCULAR DISC MAGNET B	
38	1-452-885-11	MAGNET, LANDING	
39	1-452-032-00	MAGNET, DISC	
40	4-083-414-01	PIECE A(110), CONV CORRECT	
41	4-081-170-01	PLATE, TLH CORRECTION	
42	4-053-005-01	SPACER, DY	
⚠ 43	8-453-011-11	NECK ASSEMBLY NA299-M	

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-3. CHASSIS (KV-32FV300 ONLY)

▲	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER
●	4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER
■	7-685-663-79	SCREW 4 X 16 TYPE2
★	7-685-648-79	SCREW 3 X 12 TYPE2
♦	7-685-663-91	SCREW +BVTP 4 X 16 TYPE2 IT-3



	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
	1	1-825-129-11	SPEAKER (6X12CM)	
*	2	A-1400-459-A	HR (COM) MOUNTED PC BOARD	
*	3	A-1400-460-A	T MOUNTED PC BOARD	
	4	4-374-745-31	CUSHION (A)	
	5	1-825-128-11	SPEAKER (10CM)	
*	6	A-1400-461-A	V (VAR) MOUNTED PC BOARD	
*	7	A-1400-451-A	HU MOUNTED PC BOARD	
*	8	A-1400-607-A	HD MOUNTED PC BOARD	
*	9	A-1300-278-A	A COMPLETE PC BOARD	
			The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (SEE 21-23).	
*	10	A-1400-450-A	BC MOUNTED PC BOARD	
☛	11	8-598-593-00	TUNER, FSS BTF-WA421	
*	12	A-1400-456-A	P (VAR) MOUNTED PC BOARD	

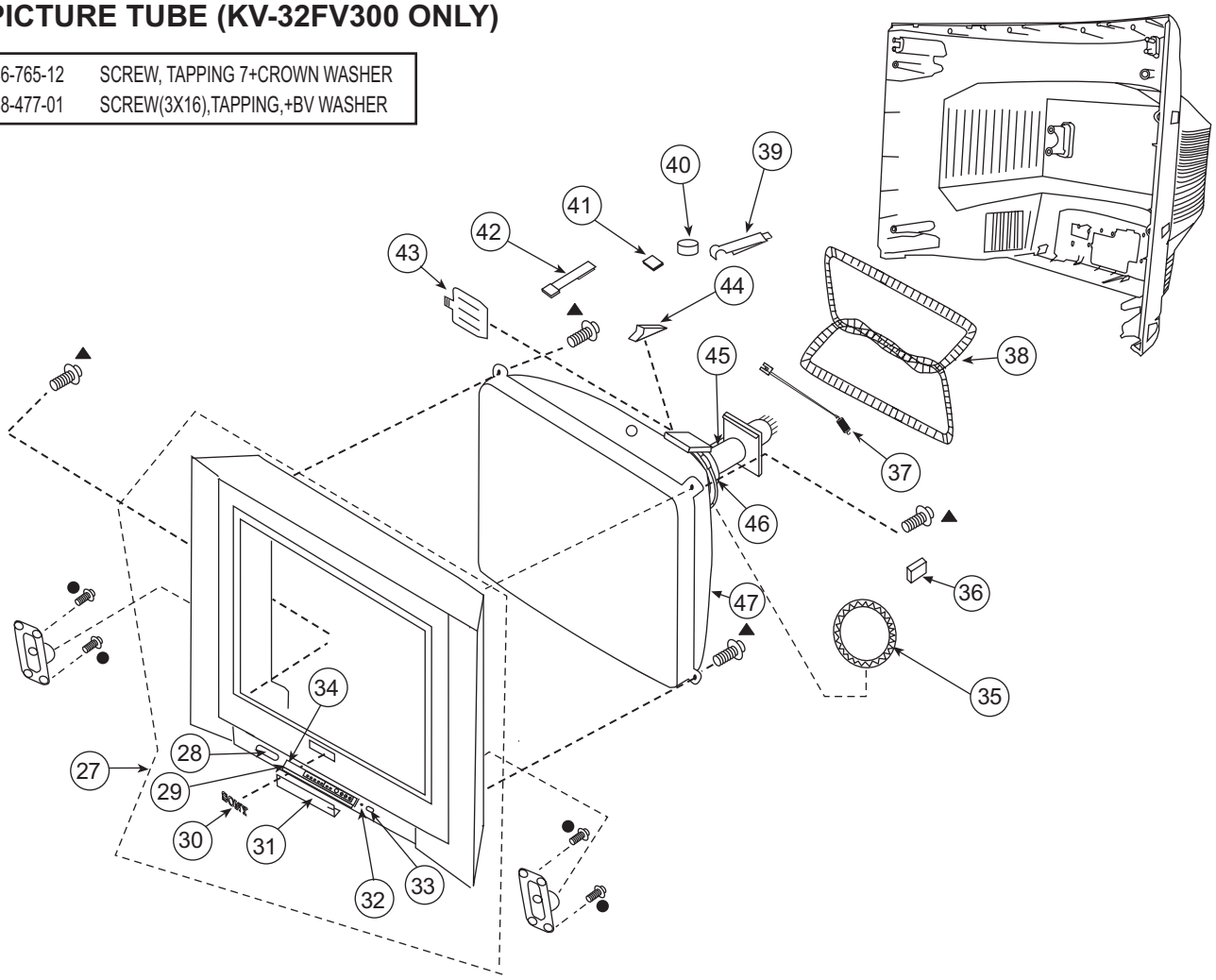
	REF. NO.	PART NO.	DESCRIPTION	([Assembly Includes]
*	13	A-1400-452-A	GK (VAR) MOUNTED PC BOARD	
*	14	1-555-110-00	CABLE, P-P	
*	15	1-558-539-21	CABLE, P-P	
☛ ⚠	16	1-771-787-12	SWITCH, RF ANTENNA	
*	17	4-076-951-01	HINGE, PWB	
⚠	18	1-791-935-12	CORD, AC POWER(WITH CONNECTOR)	
	19	4-084-918-01	HOLDER, HV CABLE	
⚠	20	1-453-338-31	FBT ASSY NX-4600//X4C4	(21-23)
⚠	21	1-251-715-22	CAP ASSY, HIGH-VOLTAGE	
⚠	22	1-900-805-19	WIRE ASSY, FOCUS HV	
⚠	23	1-900-805-22	CONNECTOR ASSY, G2 HV	
*	24	3-696-606-02	HINGE, VI	
*	25	A-1400-455-A	C (COM) MOUNTED PC BOARD	
	26	4-087-878-01	COVER, REAR	

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-4. PICTURE TUBE (KV-32FV300 ONLY)

▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER
● 4-388-477-01 SCREW(3X16),TAPPING,+BV WASHER



	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
	27	X-4040-115-1	BEZNET ASSY	(28-34)
	28	4-086-887-01	PANEL, IR	
	29	4-087-374-01	SPRING, DOOR	
	30	4-046-160-21	EMBLEM, SONY (NO.9)	
☛	31	4-087-375-11	DOOR, CONTROL	
	32	4-087-156-01	GUIDE, LIGHT	
	33	4-087-150-01	BUTTON, POWER	
	34	4-036-880-11	DAMPER	
⚠	35	1-452-896-11	COIL, NA ROTATION (RT200)	
*	36	4-078-952-01	CUSHION, 20MM X 20MM	
	37	4-082-641-01	SPRING 45MM	

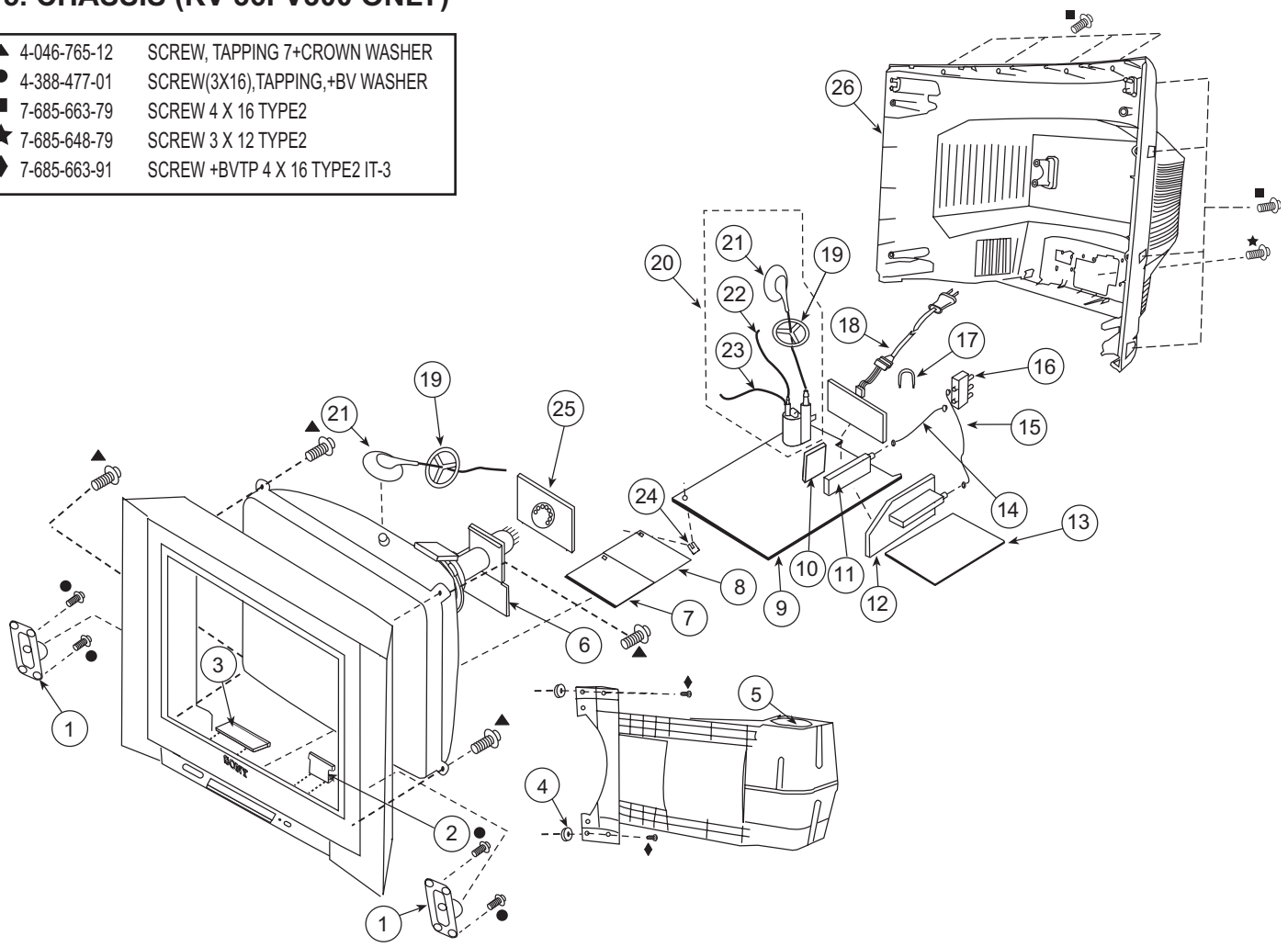
	REF. NO.	PART NO.	DESCRIPTION	([Assembly Includes]
⚠	38	1-428-988-11	DEGAUSSING COIL (32" 120V)	
	39	4-065-895-11	HOLDER, DGC	
	40	1-452-032-00	MAGNET,DISC	
	41	1-452-885-11	MAGNET, LANDING	
	42	4-083-414-01	PIECE A(110), CONV CORRECT	
	43	4-081-170-01	PLATE, TLH CORRECTION	
	44	4-053-005-01	SPACER, DY	
⚠	45	8-453-007-41	NECK ASSEMBLY NA324-M4	
⚠	46	8-451-499-41	DY Y34RSA-V	
⚠	47	8-735-066-05	CRT 34RSN(SDP)	

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-5. CHASSIS (KV-36FV300 ONLY)

▲	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER
●	4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER
■	7-685-663-79	SCREW 4 X 16 TYPE2
★	7-685-648-79	SCREW 3 X 12 TYPE2
♦	7-685-663-91	SCREW +BVTP 4 X 16 TYPE2 IT-3



	REF. NO.	PART NO.	DESCRIPTION [Assembly Includes]
	1	1-825-129-11	SPEAKER (6X12CM)
*	2	A-1400-459-A	HR (COM) MOUNTED PC BOARD
*	3	A-1400-460-A	T MOUNTED PC BOARD
	4	4-374-745-31	CUSHION (A)
	5	1-825-128-11	SPEAKER (10CM)
*	6	A-1400-581-A	V (VAR) MOUNTED PC BOARD
*	7	A-1400-451-A	HU MOUNTED PC BOARD
*	8	A-1400-607-A	HD MOUNTED PC BOARD
*	9	A-1300-336-A	A COMPLETE PC BOARD The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (SEE 21-23).
*	10	A-1400-450-A	BC MOUNTED PC BOARD
☛	11	8-598-593-00	TUNER, FSS BTF-WA421
*	12	A-1400-456-A	P (VAR) MOUNTED PC BOARD

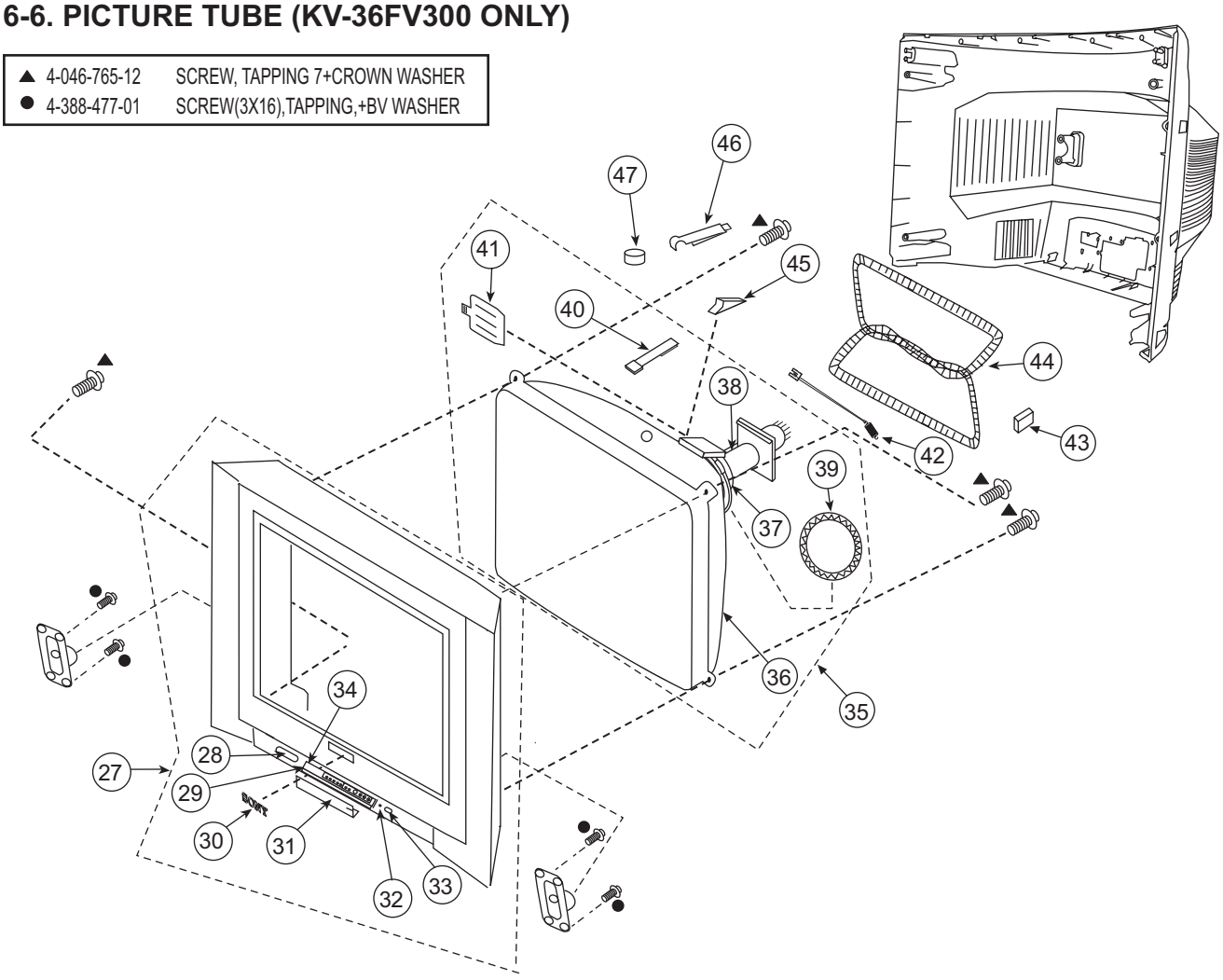
	REF. NO.	PART NO.	DESCRIPTION ([Assembly Includes]
*	13	A-1400-583-A	GK (VAR) MOUNTED PC BOARD
*	14	1-555-110-00	CABLE, P-P
*	15	1-558-539-21	CABLE, P-P
☛ ⚠	16	1-771-787-12	SWITCH, RF ANTENNA
*	17	4-076-951-01	HINGE, PWB
⚠	18	1-791-935-12	CORD, AC POWER(WITH CONNECTOR)
	19	3-704-372-71	HOLDER, HV CABLE
⚠	20	1-453-338-21	FBT ASSY NX-4600//X4C4 (21-23)
⚠	21	1-251-715-32	CAP ASSY, HIGH-VOLTAGE
⚠	22	1-900-805-19	WIRE ASSY, FOCUS HV
⚠	23	1-900-805-22	CONNECTOR ASSY, G2 HV
*	24	3-696-606-02	HINGE, VI
*	25	A-1400-580-A	C (VAR) MOUNTED PC BOARD
	26	4-086-697-01	COVER, REAR

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-6. PICTURE TUBE (KV-36FV300 ONLY)

▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER
● 4-388-477-01 SCREW(3X16),TAPPING,+BV WASHER



REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
27	X-4039-673-1	BEZNET ASSY	(27-34)
28	4-086-887-01	PANEL, IR	
29	4-087-374-01	SPRING, DOOR	
30	4-046-160-21	EMBLEM, SONY (NO.9)	
31	4-087-375-11	DOOR, CONTROL	
32	4-087-156-01	GUIDE, LIGHT	
33	4-087-150-01	BUTTON, POWER	
34	4-036-880-11	DAMPER	
⚠ 35	8-735-048-61	ITC 38RSN-A1 KV-36FV300 (U) (CND)	(36-41)
⚠ 35	8-735-081-61	ITC 38RSN-A1M KV-36FV300 (HAWAII)	(36-41)
⚠ 36	8-735-045-05	CRT 38RSN/F73504801 KV-36FV300 (U) (CND)	
⚠ 36	8-735-081-05	CRT 38RSN KV-36FV300 (HAWAII)	

REF. NO.	PART NO.	DESCRIPTION	([Assembly Includes]
⚠ 37	1-451-531-11	DY KV-36FV300 (U) (CND)	
⚠ 37	8-451-506-11	DY Y38RSA-X KV-36FV300 (HAWAII)	
⚠ 38	8-453-007-41	NECK ASSEMBLY, NA324-M4	
⚠ 39	1-452-896-11	COIL, NA ROTATION (RT200)	
40	4-062-047-02	PIECE A(110), CONV CORRECT	
41	4-081-170-01	PLATE, TLH CORRECTION	
42	4-082-641-01	SPRING, 45MM	
* 43	4-078-952-01	CUSHION, 20MM X 20MM	
⚠ 44	1-428-987-11	DEGAUSSING COIL (36" 120V)	
45	4-053-005-01	SPACER, DY	
46	4-065-895-11	HOLDER, DGC	
47	1-452-032-11	MAGNET,DISC	

SECTION 7: ELECTRICAL PARTS LIST

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components in this manual identified by the following symbol: ⋈ indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation For each set.

Should replacement be required for one of these components, replace only with the value originally used.

*** Items marked with an asterisk are not stocked since they are seldom required For routine service. Expect some delay when ordering these components.**

RESISTORS
- **All resistors are in ohms**
- **F : nonflammable**
- **All variable and adjustable resistors have characteristic curve B, unless otherwise noted.**

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

REF. NO.	PART NO.	DESCRIPTION	VALUES

A

* **A-1300-278-A A BOARD, COMPLETE (KV-32FV300 ONLY)**

* **A-1300-328-A A BOARD, COMPLETE (KV-27FV300/29FV300 ONLY)**

* **A-1300-336-A A BOARD, COMPLETE (KV-36FV300 ONLY)**

4-382-854-11 SCREW (M3X10), P, SW (+)

The high-voltage leads associated with the FBT on the A board are not included and must be ordered separately. Order the following leads when requesting this A board:

⚠ 1-251-374-13 HV CAP ASSY
⚠ 1-900-800-82 FOCUS LEAD
⚠ 1-900-803-22 G2 LEAD
(KV-27FV300/29FV300 ONLY)

⚠ 1-251-715-22 HV CAP ASSY
⚠ 1-900-805-19 FOCUS LEAD
⚠ 1-900-805-22 G2 LEAD
(KV-32FV300 ONLY)

⚠ 1-251-715-32 HV CAP ASSY
⚠ 1-900-805-19 FOCUS LEAD
⚠ 1-900-805-22 G2 LEAD
(KV-36FV300 ONLY)

CAPACITOR

C001	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C002	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C003	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C004	1-126-947-11	ELECT	47µF	20%	25V
C005	1-164-739-11	CERAMIC CHIP	560pF	5%	50V
C006	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C007	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C008	1-126-960-11	ELECT	1µF	20%	50V
C009	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C014	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C015	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C016	1-126-941-11	ELECT	470µF	20%	25V
C017	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C018	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C020	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C026	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C027	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C028	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C029	1-126-960-11	ELECT	1µF	20%	50V
C030	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C031	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C032	1-126-964-11	ELECT	10µF	20%	50V
C033	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C034	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C035	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C036	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C037	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C038	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C039	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C041	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C043	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C044	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C045	1-126-964-11	ELECT	10µF	20%	50V
C046	1-126-964-11	ELECT	10µF	20%	50V
C047	1-126-941-11	ELECT	470µF	20%	25V
C048	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C049	1-126-964-11	ELECT	10µF	20%	50V
C050	1-126-941-11	ELECT	470µF	20%	25V
C051	1-126-947-11	ELECT	47µF	20%	25V
C052	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V

A

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C054	1-126-963-11	ELECT	4.7µF	20%	50V
C055	1-126-933-11	ELECT	100µF	20%	16V
C060	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C062	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C065	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C101	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C102	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C111	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C120	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C121	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C122	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C133	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C200	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C201	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C202	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C203	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C206	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C207	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C208	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C209	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C210	1-126-963-11	ELECT	4.7µF	20%	50V
C211	1-126-963-11	ELECT	4.7µF	20%	50V
C212	1-126-963-11	ELECT	4.7µF	20%	50V
C213	1-126-963-11	ELECT	4.7µF	20%	50V
C300	1-126-959-11	ELECT	0.47µF	20%	50V
C302	1-126-963-11	ELECT	4.7µF	20%	50V
C303	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C305	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C309	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C311	1-126-947-11	ELECT	47µF	20%	25V
C313	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C319	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C320	1-126-959-11	ELECT	0.47µF	20%	50V
C321	1-126-947-11	ELECT	47µF	20%	25V
C322	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C325	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C326	1-164-373-11	CERAMIC CHIP	0.033µF		25V
C327	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C330	1-126-964-11	ELECT	10µF	20%	50V
C333	1-126-963-11	ELECT	4.7µF	20%	50V
C335	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C337	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C338	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C339	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C340	1-126-767-11	ELECT	1000µF	20%	16V
C341	1-126-947-11	ELECT	47µF	20%	25V
C343	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C344	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C345	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C346	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C347	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C351	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C352	1-126-947-11	ELECT	47µF	20%	25V
C353	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C354	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C355	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C356	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C357	1-126-960-11	ELECT	1µF	20%	50V
C358	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C359	1-162-961-11	CERAMIC CHIP	330pF	10%	50V
C360	1-126-960-11	ELECT	1µF	20%	50V
C364	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C365	1-162-117-00	CERAMIC	100pF	10%	500V
C366	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C367	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C368	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C371	1-115-156-11	CERAMIC CHIP	1µF		10V
C372	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C393	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C397	1-126-933-11	ELECT	100µF	20%	16V
C400	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V
C401	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C402	1-164-174-11	CERAMIC CHIP	0.0082µF	10%	25V
C403	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C404	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C405	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C406	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C407	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C408	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C409	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C410	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C411	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V
C412	1-126-961-11	ELECT	2.2µF	20%	50V
C413	1-126-960-11	ELECT	1µF	20%	50V
C414	1-126-960-11	ELECT	1µF	20%	50V
C415	1-126-960-11	ELECT	1µF	20%	50V
C416	1-126-960-11	ELECT	1µF	20%	50V
C417	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

A

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C418	1-126-963-11	ELECT	4.7µF	20%	50V
C420	1-126-960-11	ELECT	1µF	20%	50V
C422	1-126-935-11	ELECT	470µF	20%	16V
C426	1-126-964-11	ELECT	10µF	20%	50V
C427	1-126-964-11	ELECT	10µF	20%	50V
C428	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C429	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C430	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C431	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C432	1-104-665-11	ELECT	100µF	20%	25V
C433	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C434	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C435	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C442	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
	(KV-32FV300/36FV300 ONLY)				
C443	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
	(KV-32FV300/36FV300 ONLY)				
C452	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C453	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C501	1-102-110-00	CERAMIC	220pF	10%	50V
C502	1-126-959-11	ELECT	0.47µF	20%	50V
C503	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C504	1-102-228-00	CERAMIC	470pF	10%	500V
C505	1-102-228-00	CERAMIC	470pF	10%	500V
C506	1-106-383-00	MYLAR	0.047µF	10%	200V
⚠ C507	1-162-116-00	CERAMIC	680pF	10%	2KV
C508	1-102-228-00	CERAMIC	470pF	10%	500V
⚠ C509	1-162-116-00	CERAMIC	680pF	10%	2KV
C510	1-137-150-11	MYLAR	0.01µF	10%	100V
⚠ C511	1-117-652-11	FILM	22000pF	3%	1.2KV
	(KV-32FV300/36FV300 ONLY)				
⚠ C511	1-117-717-11	FILM	17000pF	3%	1.2KV
	(KV-27FV300/29FV300 ONLY)				
C512	1-129-709-91	FILM	0.0039µF	5%	630V
	(KV-27FV300/29FV300 ONLY)				
C512	1-129-928-00	FILM	0.0027µF	10%	630V
	(KV-32FV300/36FV300 ONLY)				
⚠ C513	1-129-722-00	FILM	0.047µF	5%	630V
	(KV-27FV300/29FV300 ONLY)				
⚠ C513	1-130-118-91	FILM	0.051µF	5%	400V
	(KV-32FV300/36FV300 ONLY)				
⚠ C514	1-109-844-11	FILM	0.68µF	5%	250V
	(KV-27FV300/29FV300 ONLY)				
⚠ C514	1-115-521-11	FILM	0.82µF	5%	250V
	(KV-32FV300/36FV300 ONLY)				

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C515	1-104-987-11	MYLAR	0.001µF	10%	100V
⚠ C516	1-115-521-11	FILM	0.82µF	5%	250V
	(KV-32FV300/36FV300 ONLY)				
⚠ C516	1-115-522-11	FILM	1µF	5%	250V
	(KV-27FV300/29FV300 ONLY)				
C517	1-107-649-11	ELECT	2.2µF	20%	250V
C518	1-106-387-00	MYLAR	0.068µF	10%	200V
C519	1-107-612-11	CERAMIC	100pF	5%	500V
C520	1-164-646-11	CERAMIC	2200pF	10%	500V
C521	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C522	1-126-960-11	ELECT	1µF	20%	50V
C525	1-102-244-00	CERAMIC	220pF	10%	500V
C526	1-107-662-11	ELECT	22µF	20%	250V
⚠ C527	1-162-116-00	CERAMIC	680pF	10%	2KV
C528	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C529	1-128-551-11	ELECT	22µF	20%	25V
C530	1-130-475-00	MYLAR	0.0022µF	5%	50V
⚠ C531	1-126-965-91	ELECT	22µF	20%	50V
⚠ C532	1-126-965-91	ELECT	22µF	20%	50V
C534	1-126-967-11	ELECT	47µF	20%	50V
⚠ C535	1-136-165-00	FILM	0.1µF	5%	50V
C537	1-126-941-11	ELECT	470µF	20%	25V
C539	1-126-941-11	ELECT	470µF	20%	25V
C540	1-107-995-11	ELECT	100µF		160V
C541	1-128-560-11	ELECT	22µF	20%	100V
C544	1-129-718-00	FILM	0.022µF	5%	630V
C545	1-106-387-00	MYLAR	0.068µF	10%	200V
C546	1-104-987-11	MYLAR	0.001µF	10%	100V
	(KV-32FV300/36FV300 ONLY)				
C547	1-104-987-11	MYLAR	0.001µF	10%	100V
	(KV-32FV300/36FV300 ONLY)				
C550	1-102-002-00	CERAMIC	680pF	10%	500V
	(KV-32FV300/36FV300 ONLY)				
C550	1-164-735-11	CERAMIC	0.0015µF	10%	500V
	(KV-27FV300/29FV300 ONLY)				
C551	1-109-954-11	ELECT	0.47µF	20%	160V
C552	1-102-244-00	CERAMIC	220pF	10%	500V
⚠ C553	1-107-846-11	FILM	0.1µF	5%	250V
	(KV-27FV300/29FV300 ONLY)				
⚠ C553	1-117-667-11	FILM	0.47µF	5%	250V
	(KV-32FV300/36FV300 ONLY)				
⚠ C554	1-117-629-11	FILM	2700pF	3%	1.2KV
	(KV-27FV300/29FV300 ONLY)				

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
⚠	C554	1-117-635-11	FILM	4700pF	3%	1.2KV
		(KV-32FV300/36FV300 ONLY)				
	C561	1-126-967-11	ELECT	47µF	20%	50V
	C563	1-104-666-11	ELECT	220µF	20%	25V
	C564	1-126-960-11	ELECT	1µF	20%	50V
	C565	1-126-969-11	ELECT	220µF	20%	50V
	C568	1-136-169-00	FILM	0.22µF	5%	50V
	C571	1-126-942-61	ELECT	1000µF	20%	25V
	C572	1-126-942-61	ELECT	1000µF	20%	25V
⚠	C590	1-126-964-11	ELECT	10µF	20%	50V
	C1501	1-107-846-11	FILM	0.1µF	5%	250V
		(KV-32FV300/36FV300 ONLY)				
	C6001	1-126-940-11	ELECT	330µF	20%	25V
	C6002	1-126-947-11	ELECT	47µF	20%	25V
	C6003	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
	C6005	1-126-768-11	ELECT	2200µF	20%	16V
		CONNECTOR				
*	CN001	1-560-124-00	PLUG,CONNECTOR	(2.5MM)	4P	
*	CN002	1-564-507-11	PLUG,CONNECTOR		4P	
*	CN003	1-564-509-11	PLUG,CONNECTOR		6P	
*	CN004	1-564-507-11	PLUG,CONNECTOR		4P	
*	CN005	1-564-508-11	PLUG,CONNECTOR		5P	
*	CN006	1-564-506-11	PLUG,CONNECTOR		3P	
*	CN303	1-564-511-11	PLUG,CONNECTOR		8P	
	CN306	1-573-298-21	CONNECTOR, BOARD TO BOARD		20P	
*	CN401	1-564-508-11	PLUG,CONNECTOR		5P	
		(KV-32FV300/36FV300 ONLY)				
*	CN410	1-564-506-11	PLUG,CONNECTOR		3P	
*	CN501	1-580-798-11	CONNECTOR PIN (DY)		6P	
*	CN502	1-764-333-11	PLUG,CONNECTOR		10P	
*	CN503	1-564-510-11	PLUG,CONNECTOR		7P	
*	CN504	1-564-509-11	PLUG,CONNECTOR		6P	
*	CN505	1-564-510-11	PLUG,CONNECTOR		7P	
	CN600	1-695-915-11	TAB (CONTACT)			
*	CN906	1-564-506-11	PLUG,CONNECTOR		3P	
*	CN3300	1-691-616-21	CONNECTOR, BOARD TO BOARD		15P	
*	CN3301	1-691-616-21	CONNECTOR, BOARD TO BOARD		15P	
		DIODE				
	D002	8-719-921-44	DIODE MTZJ-T-77-5.1C			
	D004	8-719-921-44	DIODE MTZJ-T-77-5.1C			
	D005	8-719-110-17	DIODE MTZJ-T-77-10B			
	D006	8-719-110-17	DIODE MTZJ-T-77-10B			
	D007	8-719-404-50	DIODE MA111-TX			
	D008	8-719-404-50	DIODE MA111-TX			
	D009	8-719-982-22	DIODE MTZJ-T-77-30D			
	D010	8-719-921-44	DIODE MTZJ-T-77-5.1C			
	D110	8-719-991-33	DIODE 1SS133T-77			
	D111	8-719-109-93	DIODE MTZJ-T-77-6.2B			
	D112	8-719-109-93	DIODE MTZJ-T-77-6.2B			
	D113	8-719-921-44	DIODE MTZJ-T-77-5.1C			
	D200	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D201	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D209	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D210	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D211	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D212	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D213	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D217	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D218	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D219	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D302	8-719-981-99	DIODE MTZJ-T-77-3.3			
	D303	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D304	8-719-921-44	DIODE MTZJ-T-77-5.1C			
	D305	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D306	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D307	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D308	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D309	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D310	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D311	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D312	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D313	8-719-929-15	DIODE MTZJ-T-77-9.1B			
	D320	8-719-991-33	DIODE 1SS133T-77			
	D410	8-719-404-50	DIODE MA111-TX			
	D412	8-719-404-50	DIODE MA111-TX			
	D413	8-719-921-63	DIODE MTZJ-T-77-7.5B			
	D415	8-719-991-33	DIODE 1SS133T-77			
	D501	8-719-109-89	DIODE MTZJ-T-77-5.6C			
	D502	8-719-945-80	DIODE ERC06-15S			
⚠	D503	8-719-945-80	DIODE ERC06-15S			
	D504	8-719-312-10	DIODE RU4AM-T3			
	D505	8-719-908-03	DIODE GP08DPKG23			
	D506	8-719-908-03	DIODE GP08DPKG23			
	D507	8-719-991-33	DIODE 1SS133T-77			
⚠	D508	8-719-991-33	DIODE 1SS133T-77			
	D510	8-719-081-93	DIODE 1N4937/23			
	D511	8-719-970-87	DIODE ERA38-06TP1			

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REF. NO.	PART NO.	DESCRIPTION	VALUES
D512	8-719-970-87	DIODE ERA38-06TP1	
D513	8-719-110-41	DIODE MTZJ-T-77-15B	
⚠ D515	8-719-075-41	DIODE PR1004GT	
D516	8-719-991-33	DIODE 1SS133T-77	
D518	8-719-991-33	DIODE 1SS133T-77	
⚠ D519	8-719-302-43	DIODE EL1Z-V1	
⚠ D520	8-719-991-33	DIODE 1SS133T-77	
D521	8-719-921-63	DIODE MTZJ-T-77-7.5X	
⚠ D522	8-719-991-33	DIODE 1SS133T-77	
D523	8-719-109-69	DIODE MTZJ-T-77-3.6B	
D524	8-719-109-97	DIODE MTZJ-T-77-6.8B	
⚠ D530	8-719-979-85	DIODE RGP15GPKG23	
D531	8-719-979-85	DIODE RGP15GPKG23	
D534	8-719-302-43	DIODE RGP10GPKG23	
D535	8-719-404-50	DIODE MA111-TX	
D536	8-719-404-50	DIODE MA111-TX	
D561	8-719-075-33	DIODE 1N4003GA	
⚠ D580	8-719-991-33	DIODE 1SS133T-77	
D590	8-719-991-33	DIODE 1SS133T-77	
	FERRITE BEAD		
FB501	1-410-397-21	FERRITE	1.1µH
FB502	1-410-397-21	FERRITE	1.1µH
FB503	1-410-397-21	FERRITE	1.1µH
	IC		
IC001	6-801-165-01	IC M306V5ME-109SP	
IC002	6-701-929-01	IC BD4743G-TR	
IC003	8-759-641-86	IC BR24C16F-E2	
IC301	8-752-100-49	IC CXA2154AS	
IC400	6-701-106-01	IC NJW1134GK1-TE2	
IC402	8-759-689-71	IC NJM2188M-TE2	
IC403	6-702-114-01	IC BU4051BCF-E2	
	(KV-32FV300/36FV300 ONLY)		
IC404	6-702-114-01	IC BU4051BCF-E2	
	(KV-32FV300/36FV300 ONLY)		
IC501	8-759-700-07	IC NJM2903M-TE2	
⚠ IC561	8-759-696-71	IC STV9379	
	(KV-32FV300/36FV300 ONLY)		
⚠ IC561	8-759-980-58	IC TDA8172	
	(KV-27FV300/29FV300 ONLY)		
IC6008	6-701-752-01	IC NJM2930F05	

REF. NO.	PART NO.	DESCRIPTION	VALUES
	JACK		
J201	1-794-119-11	TERMINAL BLOCK, S	4P
J203	1-794-118-11	JACK BLOCK, PIN	3P
J204	1-794-118-11	JACK BLOCK, PIN	3P
J205	1-794-116-11	JACK BLOCK, PIN	2P
J206	1-794-117-11	JACK BLOCK, PIN	3P
J207	1-794-116-11	JACK BLOCK, PIN	2P
	CHIP CONDUCTOR		
JR1	1-216-864-11	SHORT	
JR2	1-216-864-11	SHORT	
JR4	1-216-864-11	SHORT	
JR5	1-216-864-11	SHORT	
JR8	1-216-864-11	SHORT	
JR9	1-216-864-11	SHORT	
JR10	1-216-864-11	SHORT	
	(KV-32FV300/36FV300 ONLY)		
JR12	1-216-864-11	SHORT	
JR13	1-216-864-11	SHORT	
JR14	1-216-864-11	SHORT	
JR15	1-216-864-11	SHORT	
JR202	1-216-864-11	SHORT	
JR301	1-216-864-11	SHORT	
JR302	1-216-864-11	SHORT	
JR303	1-216-864-11	SHORT	
JR304	1-216-864-11	SHORT	
JR305	1-216-864-11	SHORT	
JR306	1-216-864-11	SHORT	
JR401	1-216-864-11	SHORT	
JR402	1-216-864-11	SHORT	
JR403	1-216-864-11	SHORT	
	COIL		
L001	1-410-482-31	INDUCTOR	100µH
L002	1-410-482-31	INDUCTOR	100µH
L003	1-412-029-11	INDUCTOR	10µH
L004	1-410-482-31	INDUCTOR	100µH
L009	1-410-482-31	INDUCTOR	100µH
L010	1-414-182-11	INDUCTOR	6.8µH
L300	1-410-482-31	INDUCTOR	100µH
L301	1-410-482-31	INDUCTOR	100µH
L302	1-412-029-11	INDUCTOR	10µH
L303	1-410-478-11	INDUCTOR	47µH

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REF. NO.	PART NO.	DESCRIPTION	VALUES
L304	1-410-470-11	INDUCTOR	10µH
L501	1-406-677-11	INDUCTOR	10MH
L502	1-412-552-11	INDUCTOR	2.2MH
L503	1-406-677-11	INDUCTOR	10MH
L504	1-406-677-11	INDUCTOR	10MH
⚠ L505	1-406-976-11	INDUCTOR	68µH
	(KV-32FV300/36FV300 ONLY)		
⚠ L505	1-406-978-11	INDUCTOR	150µH
	(KV-27FV300/29FV300 ONLY)		
L511	1-409-955-11	INDUCTOR	8MH
L517	1-412-552-11	INDUCTOR	2.2MH

TRANSISTOR

Q001	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
⚠ Q003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q110	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q300	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q305	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q307	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q308	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q309	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q314	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q315	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q316	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q317	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q319	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q325	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q326	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
Q400	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q401	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q402	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q403	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q404	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
	(KV-32FV300/36FV300 ONLY)	
Q405	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
	(KV-32FV300/36FV300 ONLY)	
Q406	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
	(KV-32FV300/36FV300 ONLY)	
Q407	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q501	8-729-140-50	TRANSISTOR 2SC3209LK-TP
⚠ Q502	6-550-107-01	TRANSISTOR 2SD2645-YB
Q507	8-729-043-95	TRANSISTOR 2SC3840K
⚠ Q511	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
⚠ Q512	8-729-809-29	TRANSISTOR 2SC4159-E
⚠ Q530	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
⚠ Q531	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX
⚠ Q532	8-729-200-17	TRANSISTOR 2SA1091O-TPE2
Q561	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q562	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
⚠ Q590	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX
Q6000	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX

RESISTOR

R001	1-249-429-11	CARBON	10K	5%	1/4W
R002	1-249-409-11	CARBON	220	5%	1/4W
R003	1-216-817-11	RES-CHIP	470	5%	1/10W
R004	1-216-857-11	RES-CHIP	1M	5%	1/10W
R005	1-216-821-11	RES-CHIP	1K	5%	1/10W
R006	1-249-417-11	CARBON	1K	5%	1/4W
R007	1-216-833-11	RES-CHIP	10K	5%	1/10W
R009	1-216-864-11	SHORT			
R010	1-249-409-11	CARBON	220	5%	1/4W
R011	1-216-821-11	RES-CHIP	1K	5%	1/10W
R012	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R013	1-216-833-11	RES-CHIP	10K	5%	1/10W
R015	1-216-813-11	RES-CHIP	220	5%	1/10W
R016	1-216-813-11	RES-CHIP	220	5%	1/10W
R017	1-216-813-11	RES-CHIP	220	5%	1/10W
R018	1-216-813-11	RES-CHIP	220	5%	1/10W
R019	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R020	1-218-688-11	METAL CHIP	680	0.50%	1/16W
R021	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R022	1-218-688-11	METAL CHIP	680	0.50%	1/16W
R023	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R024	1-218-688-11	METAL CHIP	680	0.50%	1/16W
R025	1-216-813-11	RES-CHIP	220	5%	1/10W
R027	1-216-813-11	RES-CHIP	220	5%	1/10W
R029	1-249-409-11	CARBON	220	5%	1/4W
R030	1-216-841-11	RES-CHIP	47K	5%	1/10W
R031	1-216-809-11	RES-CHIP	100	5%	1/10W
R032	1-216-813-11	RES-CHIP	220	5%	1/10W
R033	1-249-417-11	CARBON	1K	5%	1/4W

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R034	1-216-813-11	RES-CHIP	220	5%	1/10W
	R035	1-216-813-11	RES-CHIP	220	5%	1/10W
	R037	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R038	1-249-417-11	CARBON	1K	5%	1/4W
	R039	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R048	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R050	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R051	1-216-857-11	RES-CHIP	1M	5%	1/10W
	R052	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R053	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R054	1-249-417-11	CARBON	1K	5%	1/4W
	R055	1-216-841-11	RES-CHIP	47K	5%	1/10W
	R056	1-216-813-11	RES-CHIP	220	5%	1/10W
	R057	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R058	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R060	1-249-409-11	CARBON	220	5%	1/4W
	R061	1-249-437-11	CARBON	47K	5%	1/4W
⚠	R063	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R064	1-216-813-11	RES-CHIP	220	5%	1/10W
	R065	1-216-841-11	RES-CHIP	47K	5%	1/10W
	R066	1-249-429-11	CARBON	10K	5%	1/4W
	R068	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R070	1-216-813-11	RES-CHIP	220	5%	1/10W
	R071	1-216-841-11	RES-CHIP	47K	5%	1/10W
	R073	1-249-425-11	CARBON	4.7K	5%	1/4W
	R074	1-249-417-11	CARBON	1K	5%	1/4W
	R075	1-216-813-11	RES-CHIP	220	5%	1/10W
	R076	1-216-841-11	RES-CHIP	47K	5%	1/10W
	R077	1-216-809-11	RES-CHIP	100	5%	1/10W
	R078	1-216-841-11	RES-CHIP	47K	5%	1/10W
⚠	R080	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R085	1-215-924-00	METAL OXIDE	15K	5%	3W
	R086	1-216-839-11	RES-CHIP	33K	5%	1/10W
	R087	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R089	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R098	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R099	1-216-809-11	RES-CHIP	100	5%	1/10W
	R101	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R102	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R103	1-249-425-11	CARBON	4.7K	5%	1/4W
	R104	1-216-813-11	RES-CHIP	220	5%	1/10W
	R107	1-216-809-11	RES-CHIP	100	5%	1/10W
	R108	1-216-809-11	RES-CHIP	100	5%	1/10W
	R110	1-247-807-31	CARBON	100	5%	1/4W
	R111	1-216-809-11	RES-CHIP	100	5%	1/10W
	R113	1-247-807-31	CARBON	100	5%	1/4W
	R114	1-249-409-11	CARBON	220	5%	1/4W
	R117	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R118	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R120	1-249-413-11	CARBON	470	5%	1/4W
	R123	1-249-421-11	CARBON	2.2K	5%	1/4W
		(KV-32FV300/36FV300 ONLY)				
	R124	1-216-813-11	RES-CHIP	220	5%	1/10W
		(KV-32FV300/36FV300 ONLY)				
	R125	1-249-421-11	CARBON	2.2K	5%	1/4W
		(KV-32FV300/36FV300 ONLY)				
	R126	1-216-813-11	RES-CHIP	220	5%	1/10W
		(KV-32FV300/36FV300 ONLY)				
	R127	1-249-421-11	CARBON	2.2K	5%	1/4W
		(KV-32FV300/36FV300 ONLY)				
	R128	1-216-813-11	RES-CHIP	220	5%	1/10W
		(KV-32FV300/36FV300 ONLY)				
	R129	1-249-409-11	CARBON	220	5%	1/4W
	R130	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R131	1-216-813-11	RES-CHIP	220	5%	1/10W
	R132	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R133	1-216-841-11	RES-CHIP	47K	5%	1/10W
	R134	1-216-813-11	RES-CHIP	220	5%	1/10W
	R135	1-216-813-11	RES-CHIP	220	5%	1/10W
	R136	1-249-425-11	CARBON	4.7K	5%	1/4W
	R137	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R139	1-216-813-11	RES-CHIP	220	5%	1/10W
	R140	1-249-409-11	CARBON	220	5%	1/4W
	R145	1-249-401-11	CARBON	47	5%	1/4W
	R201	1-216-864-11	SHORT			
	R202	1-249-409-11	CARBON	220	5%	1/4W
	R203	1-216-864-11	SHORT			
	R206	1-249-409-11	CARBON	220	5%	1/4W
	R207	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R208	1-249-409-11	CARBON	220	5%	1/4W
	R209	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R210	1-216-813-11	RES-CHIP	220	5%	1/10W
	R217	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R218	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R219	1-216-813-11	RES-CHIP	220	5%	1/10W
	R220	1-216-813-11	RES-CHIP	220	5%	1/10W
	R222	1-216-845-11	RES-CHIP	100K	5%	1/10W
	R223	1-216-813-11	RES-CHIP	220	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R224	1-249-409-11	CARBON	220	5%	1/4W
R225	1-216-845-11	RES-CHIP	100K	5%	1/10W
R228	1-216-845-11	RES-CHIP	100K	5%	1/10W
R229	1-216-845-11	RES-CHIP	100K	5%	1/10W
R230	1-249-409-11	CARBON	220	5%	1/4W
R231	1-216-813-11	RES-CHIP	220	5%	1/10W
R232	1-216-853-11	RES-CHIP	470K	5%	1/10W
R233	1-216-853-11	RES-CHIP	470K	5%	1/10W
R234	1-216-813-11	RES-CHIP	220	5%	1/10W
R235	1-216-813-11	RES-CHIP	220	5%	1/10W
R300	1-216-864-11	SHORT			
R301	1-216-809-11	RES-CHIP	100	5%	1/10W
R302	1-216-817-11	RES-CHIP	470	5%	1/10W
R303	1-249-414-11	CARBON	560	5%	1/4W
R306	1-216-843-11	RES-CHIP	68K	5%	1/10W
R307	1-216-843-11	RES-CHIP	68K	5%	1/10W
R308	1-249-429-11	CARBON	10K	5%	1/4W
R309	1-216-864-11	SHORT			
R320	1-216-864-11	SHORT			
R322	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R325	1-247-807-31	CARBON	100	5%	1/4W
R328	1-216-833-11	RES-CHIP	10K	5%	1/10W
R329	1-247-807-31	CARBON	100	5%	1/4W
R331	1-218-716-11	METAL CHIP	10K	0.50%	1/16W
R332	1-216-809-11	RES-CHIP	100	5%	1/10W
R333	1-216-809-11	RES-CHIP	100	5%	1/10W
R334	1-216-821-11	RES-CHIP	1K	5%	1/10W
R335	1-216-821-11	RES-CHIP	1K	5%	1/10W
R336	1-216-809-11	RES-CHIP	100	5%	1/10W
R337	1-249-417-11	CARBON	1K	5%	1/4W
R338	1-216-864-11	SHORT			
R339	1-216-840-11	RES-CHIP	39K	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				
R339	1-216-851-11	RES-CHIP	330K	5%	1/10W
	(KV-27FV300/29FV300 ONLY)				
R340	1-216-861-11	RES-CHIP	2.2M	5%	1/10W
	(KV-27FV300/29FV300 ONLY)				
R340	1-216-863-11	RES-CHIP	3.3M	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				
R341	1-216-842-11	RES-CHIP	56K	5%	1/10W
	(KV-27FV300/29FV300 ONLY)				
R341	1-216-851-11	RES-CHIP	330K	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				
R342	1-216-839-11	RES-CHIP	33K	5%	1/10W
R343	1-216-833-11	RES-CHIP	10K	5%	1/10W
R344	1-216-853-11	RES-CHIP	470K	5%	1/10W
R345	1-216-845-11	RES-CHIP	100K	5%	1/10W
R346	1-216-845-11	RES-CHIP	100K	5%	1/10W
R347	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R348	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R349	1-216-864-11	SHORT			
R350	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R351	1-216-864-11	SHORT			
R352	1-216-864-11	SHORT			
R353	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R354	1-249-425-11	CARBON	4.7K	5%	1/4W
R359	1-216-833-11	RES-CHIP	10K	5%	1/10W
R368	1-216-864-11	SHORT			
R369	1-216-809-11	RES-CHIP	100	5%	1/10W
R370	1-216-809-11	RES-CHIP	100	5%	1/10W
R372	1-216-864-11	SHORT			
R374	1-216-833-11	RES-CHIP	10K	5%	1/10W
R376	1-216-809-11	RES-CHIP	100	5%	1/10W
R378	1-216-809-11	RES-CHIP	100	5%	1/10W
R379	1-216-809-11	RES-CHIP	100	5%	1/10W
R380	1-216-809-11	RES-CHIP	100	5%	1/10W
R381	1-216-821-11	RES-CHIP	1K	5%	1/10W
R382	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R383	1-249-421-11	CARBON	2.2K	5%	1/4W
R384	1-216-840-11	RES-CHIP	39K	5%	1/10W
R385	1-216-813-11	RES-CHIP	220	5%	1/10W
R386	1-216-845-11	RES-CHIP	100K	5%	1/10W
R387	1-216-864-11	SHORT			
R388	1-216-821-11	RES-CHIP	1K	5%	1/10W
R389	1-216-864-11	SHORT			
R390	1-218-285-11	RES-CHIP	75	5%	1/10W
R391	1-218-285-11	RES-CHIP	75	5%	1/10W
R393	1-218-285-11	RES-CHIP	75	5%	1/10W
R394	1-218-285-11	RES-CHIP	75	5%	1/10W
R395	1-218-285-11	RES-CHIP	75	5%	1/10W
R396	1-216-853-11	RES-CHIP	470K	5%	1/10W
R397	1-249-417-11	CARBON	1K	5%	1/4W
R398	1-216-841-11	RES-CHIP	47K	5%	1/10W
R399	1-216-845-11	RES-CHIP	100K	5%	1/10W
R400	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R401	1-216-809-11	RES-CHIP	100	5%	1/10W
R402	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				

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

A component identified by this ⋈ symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R403	1-216-809-11	RES-CHIP	100	5%	1/10W
R404	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				
R405	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R406	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R407	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R408	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R409	1-249-407-11	CARBON	150	5%	1/4W
R411	1-216-817-11	RES-CHIP	470	5%	1/10W
R412	1-216-821-11	RES-CHIP	1K	5%	1/10W
R413	1-216-833-11	RES-CHIP	10K	5%	1/10W
R416	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R420	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R421	1-216-846-11	RES-CHIP	120K	5%	1/10W
R422	1-216-861-11	RES-CHIP	2.2M	5%	1/10W
R423	1-216-839-11	RES-CHIP	33K	5%	1/10W
R424	1-216-843-11	RES-CHIP	68K	5%	1/10W
R425	1-216-842-11	RES-CHIP	56K	5%	1/10W
R426	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R452	1-249-409-11	CARBON	220	5%	1/4W
R453	1-216-813-11	RES-CHIP	220	5%	1/10W
R501	1-216-815-11	RES-CHIP	330	5%	1/10W
	(KV-27FV300/29FV300 ONLY)				
R501	1-216-817-11	RES-CHIP	470	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				
R502	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
⚠ R503	1-249-425-11	CARBON	4.7K	5%	1/4W
R504	1-215-885-00	METAL OXIDE	68	5%	2W
	(KV-27FV300/29FV300 ONLY)				
R504	1-216-455-21	METAL OXIDE	560	5%	2W
	(KV-32FV300/36FV300 ONLY)				
R505	1-249-433-11	CARBON	22K	5%	1/4W
R506	1-215-861-00	METAL OXIDE	47	5%	1W
R507	1-249-401-11	CARBON	47	5%	1/4W
R508	1-249-425-11	CARBON	4.7K	5%	1/4W
⚠ R509	1-260-328-11	CARBON	1K	5%	1/2W
⚠ R510	1-215-883-11	METAL OXIDE	33	5%	2W
R512	1-215-910-00	METAL OXIDE	68	5%	3W
R515	1-216-836-11	RES-CHIP	18K	5%	1/10W
⚠ R516	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
	(KV-32FV300 ONLY)				
⚠ R516	1-216-832-11	RES-CHIP	8.2K	5%	1/10W
	(KV-27FV300/29FV300 ONLY)				

REF. NO.	PART NO.	DESCRIPTION	VALUES		
⚠ R516	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
	(KV-36FV300 ONLY)				
R517	1-249-417-11	CARBON	1K	5%	1/4W
R518	1-216-833-11	RES-CHIP	10K	5%	1/10W
R519	1-249-413-11	CARBON	470	5%	1/4W
R520	1-215-907-11	METAL OXIDE	22	5%	3W
⚠ R523	1-216-834-11	RES-CHIP	12K	5%	1/10W
	(KV-32FV300/36FV300 ONLY)				
⚠ R523	1-216-837-11	RES-CHIP	22K	5%	1/10W
	(KV-27FV300/29FV300 ONLY)				
⚠ R524	1-249-429-11	CARBON	10K	5%	1/4W
⚠ R525	1-249-428-11	CARBON	8.2K	5%	1/4W
R526	1-215-905-11	METAL OXIDE	10	5%	3W
	(KV-32FV300/36FV300 ONLY)				
R526	1-216-377-11	METAL OXIDE	4.7	5%	2W
	(KV-27FV300/29FV300 ONLY)				
⚠ R528	1-216-837-11	RES-CHIP	22K	5%	1/10W
⚠ R529	1-216-837-11	RES-CHIP	22K	5%	1/10W
⚠ ⋈R530	1-216-834-11	RES-CHIP	12K	5%	1/10W
⚠ ⋈R531	1-216-842-11	RES-CHIP	56K	5%	1/10W
⚠ R532	1-216-810-11	RES-CHIP	120	5%	1/10W
R533	1-215-879-11	METAL OXIDE	47K	5%	1W
⚠ R536	1-260-288-11	CARBON	0.47	5%	1/2W
⚠ R537	1-260-288-11	CARBON	0.47	5%	1/2W
R538	1-247-887-00	CARBON	220K	5%	1/4W
R540	1-216-857-11	RES-CHIP	1M	5%	1/10W
R541	1-215-894-11	METAL OXIDE	2.2K	5%	2W
R542	1-216-485-11	METAL OXIDE	5.6K	5%	3W
⚠ R543	1-249-377-11	CARBON	0.47	5%	1/4W
⚠ R545	1-249-387-11	CARBON	3.3	5%	1/4W
R546	1-215-453-00	METAL	22K	1%	1/4W
R547	1-215-457-00	METAL	33K	1%	1/4W
R548	1-216-485-11	METAL OXIDE	5.6K	5%	3W
R549	1-215-437-00	METAL	4.7K	1%	1/4W
⚠ R550	1-249-377-11	CARBON	0.47	5%	1/4W
R551	1-215-873-00	METAL OXIDE	4.7K	5%	1W
⚠ R553	1-249-377-11	CARBON	0.47	5%	1/4W
R554	1-215-876-00	METAL OXIDE	15K	5%	1W
	(KV-27FV300/29FV300 ONLY)				
R554	1-215-894-11	METAL OXIDE	2.2K	5%	2W
	(KV-32FV300 ONLY)				
R555	1-249-441-11	CARBON	100K	5%	1/4W
R556	1-249-441-11	CARBON	100K	5%	1/4W
R557	1-249-441-11	CARBON	100K	5%	1/4W

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

NOTE: Les composants identifies per un trame et une marque sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R559	1-216-805-11	RES-CHIP	47	5%	1/10W
R561	1-249-429-11	CARBON	10K	5%	1/4W
⚠ R563	1-214-798-21	METAL	1.8	1%	1/2W
⚠ R564	1-247-895-91	CARBON	470K	5%	1/4W
R565	1-215-889-00	METAL OXIDE	330	5%	2W
R566	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
⚠ R567	1-249-385-11	CARBON	2.2	5%	1/4W
R568	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R569	1-249-429-11	CARBON	10K	5%	1/4W
R570	1-216-845-11	RES-CHIP	100K	5%	1/10W
R571	1-216-837-11	RES-CHIP	22K	5%	1/10W
R572	1-216-837-11	RES-CHIP	22K	5%	1/10W
R573	1-216-845-11	RES-CHIP	100K	5%	1/10W
⚠ R574	1-214-798-21	METAL	1.8	1%	1/2W
R576	1-215-905-11 (KV-32FV300/36FV300 ONLY)	METAL OXIDE	10	5%	3W
R576	1-215-907-11 (KV-27FV300/29FV300 ONLY)	METAL OXIDE	22	5%	3W
R577	1-216-821-11	RES-CHIP	1K	5%	1/10W
R578	1-214-798-21	METAL	1.8	1%	1/2W
R580	1-249-441-11	CARBON	100K	5%	1/4W
R581	1-247-887-00	CARBON	220K	5%	1/4W
⚠ R590	1-216-809-11	RES-CHIP	100	5%	1/10W
⚠ R591	1-249-417-11	CARBON	1K	5%	1/4W
⚠ R592	1-216-363-00	METAL OXIDE	0.33	5%	2W
⚠ R593	1-249-420-11	CARBON	1.8K	5%	1/4W
⚠ R594	1-249-429-11	CARBON	10K	5%	1/4W
⚠ R595	1-247-891-00	CARBON	330K	5%	1/4W
⚠ R596	1-249-441-11	CARBON	100K	5%	1/4W
⚠ R597	1-216-864-11	SHORT			
⚠ R598	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
⚠ R599	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R900	1-216-821-11	RES-CHIP	1K	5%	1/10W
R901	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R902	1-216-809-11	RES-CHIP	100	5%	1/10W
R903	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R904	1-216-818-11	RES-CHIP	560	5%	1/10W
R905	1-216-817-11	RES-CHIP	470	5%	1/10W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R907	1-216-833-11	RES-CHIP	10K	5%	1/10W
R908	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R909	1-249-417-11	CARBON	1K	5%	1/4W
R910	1-216-833-11	RES-CHIP	10K	5%	1/10W
R912	1-249-417-11	CARBON	1K	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R932	1-218-285-11	RES-CHIP	75	5%	1/10W
R933	1-218-285-11	RES-CHIP	75	5%	1/10W
R934	1-218-285-11	RES-CHIP	75	5%	1/10W
R940	1-247-807-31	CARBON	100	5%	1/4W
R941	1-247-807-31	CARBON	100	5%	1/4W
R942	1-216-841-11	RES-CHIP	47K	5%	1/10W
R947	1-216-864-11	SHORT			
R950	1-216-809-11	RES-CHIP	100	5%	1/10W
R951	1-216-813-11	RES-CHIP	220	5%	1/10W
R6001	1-216-833-11	RES-CHIP	10K	5%	1/10W
R6002	1-216-833-11	RES-CHIP	10K	5%	1/10W
R6003	1-216-833-11	RES-CHIP	10K	5%	1/10W
R6004	1-216-821-11	RES-CHIP	1K	5%	1/10W

SWITCH

S501	1-572-707-11	SWITCH LEVER
S502	1-572-707-11	SWITCH LEVER

TRANSFORMER

T501	1-433-836-11	TRANSFORMER, HORIZONTAL DRIVE
⚠ T502	1-426-981-11	TRANSFORMER, FERRITE (PMT)
⚠ T503	1-453-310-11 (KV-27FV300/29FV300 ONLY)	FBT ASSY, NX-4521//X4J4
⚠ T503	1-453-338-21 (KV-36FV300 ONLY)	FBT ASSY, NX-4600//X4C4
⚠ T503	1-453-338-31 (KV-32FV300 ONLY)	FBT ASSY, NX-4600//X4J4
⚠ T504	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS
⚠ T505	1-431-693-11 (KV-27FV300/29FV300 ONLY)	TRANSFORMER, HORIZONTAL LINEAR
⚠ T505	1-435-098-11 (KV-32FV300/36FV300 ONLY)	TRANSFORMER, HORIZONTAL LINEAR

THERMISTOR

TH501	1-800-193-00	THERMISTOR

TUNER

☛ TU001	8-598-593-00	TUNER, FSS BTF-WA421

CRYSTAL

X001	1-781-931-21	VIBRATOR, CRYSTAL
X301	1-567-505-11	OSCILLATOR, CRYSTAL

BC

BC

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	A-1400-450-A	BC BOARD, MOUNTED			
	CAPACITOR				
C3355	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3356	1-126-964-11	ELECT	10µF	20%	50V
C3357	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C3358	1-126-940-11	ELECT	330µF	20%	25V
C3359	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3360	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3361	1-162-922-11	CERAMIC CHIP	39pF	5%	50V
C3369	1-126-967-11	ELECT	47µF	20%	50V
C3370	1-126-964-11	ELECT	10µF	20%	50V
C3371	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3398	1-126-961-11	ELECT	2.2µF	20%	50V
C3504	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C3505	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C3506	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3507	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3509	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3510	1-164-392-11	CERAMIC CHIP	390pF	5%	50V
C3511	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3512	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3513	1-216-864-11	SHORT			
C3514	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3515	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3516	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3517	1-126-924-11	ELECT	330µF	20%	6.3V
C3518	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3519	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3520	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3521	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C3522	1-126-947-11	ELECT	47µF	20%	16V
C3523	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3524	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3525	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3526	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3527	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3528	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3529	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3530	1-126-947-11	ELECT	47µF	20%	16V
C3531	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3532	1-126-964-11	ELECT	10µF	20%	50V
C3533	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C3534	1-126-960-11	ELECT	1µF	20%	50V
C3535	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3536	1-126-960-11	ELECT	1µF	20%	50V
C3537	1-126-964-11	ELECT	10µF	20%	50V
C3538	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3539	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3541	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
C3542	1-126-964-11	ELECT	10µF	20%	50V
C3543	1-135-834-91	CERAMIC CHIP	2.2µF		6.3V
C3546	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3547	1-126-934-11	ELECT	220µF	20%	10V
C3548	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3549	1-126-947-11	ELECT	47µF	20%	16V
C3550	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3551	1-126-947-11	ELECT	47µF	20%	16V
C3552	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3553	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3554	1-126-960-11	ELECT	1µF	20%	50V
C3555	1-126-934-11	ELECT	220µF	20%	10V
C3556	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3557	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3558	1-126-947-11	ELECT	47µF	20%	16V
C3559	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3560	1-126-947-11	ELECT	47µF	20%	16V
C3561	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3562	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3563	1-126-947-11	ELECT	47µF	20%	16V
C3564	1-126-947-11	ELECT	47µF	20%	16V
C3565	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3566	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3580	1-126-940-11	ELECT	330µF	20%	25V
C3581	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3582	1-126-934-11	ELECT	220µF	20%	10V
C3583	1-126-934-11	ELECT	220µF	20%	10V
C3585	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3590	1-104-665-11	ELECT	100µF	20%	25V
	CONNECTOR				
CN3500	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P			

BC

REF. NO.	PART NO.	DESCRIPTION	VALUES
	DIODE		
D3550	8-719-977-28	DIODE UDZSTE-1710B	
	FERRITE BEAD		
FB3502	1-414-234-22	FERRITE	0µH
FB3503	1-414-234-22	FERRITE	0µH
FB3504	1-414-234-22	FERRITE	0µH
FB3505	1-414-234-22	FERRITE	0µH
FB3506	1-414-234-22	FERRITE	0µH
FB3507	1-414-234-22	FERRITE	0µH
FB3508	1-414-234-22	FERRITE	0µH
FB3509	1-414-234-22	FERRITE	0µH
	FILTER		
FL3500	1-239-848-21	FILTER, LOW PASS	
FL3501	1-239-848-21	FILTER, LOW PASS	
FL3502	1-239-848-21	FILTER, LOW PASS	
FL3503	1-239-848-21	FILTER, LOW PASS	
FL3504	1-233-736-21	FILTER, EMI	
FL3505	1-233-736-21	FILTER, EMI	
FL3506	1-233-736-21	FILTER, EMI	
	IC		
IC3501	6-700-960-01	IC UPD64083GF-3BA	
IC3502	8-759-462-91	IC TA1226N	
IC3503	8-759-583-47	IC UPC2933T-E1	
IC3504	6-700-394-01	IC BA25BC0FP-E2	
IC3505	8-759-394-35	IC BA12T	
	CHIP CONDUCTOR		
JR3301	1-216-864-11	SHORT	
JR3302	1-216-864-11	SHORT	
JR3501	1-216-864-11	SHORT	
	COIL		
L3352	1-414-186-31	INDUCTOR	33µH
L3500	1-414-265-21	INDUCTOR	4.7µH
L3501	1-412-058-11	INDUCTOR	10µH
L3502	1-412-058-11	INDUCTOR	10µH
L3503	1-412-058-11	INDUCTOR	10µH
L3504	1-412-058-11	INDUCTOR	10µH
L3505	1-412-058-11	INDUCTOR	10µH

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	TRANSISTOR				
Q3500	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3501	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3502	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3503	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3504	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3509	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3510	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3511	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3512	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3514	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3515	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3516	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3517	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3590	8-729-926-14	TRANSISTOR 2SD1292			
	RESISTOR				
R3301	1-216-805-11	RES-CHIP	47	5%	1/10W
R3302	1-216-805-11	RES-CHIP	47	5%	1/10W
R3303	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3364	1-216-845-11	RES-CHIP	100K	5%	1/10W
R3365	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3366	1-216-850-11	RES-CHIP	270K	5%	1/10W
R3369	1-216-843-11	RES-CHIP	68K	5%	1/10W
R3373	1-216-809-11	RES-CHIP	100	5%	1/10W
R3505	1-216-864-11	SHORT			
R3506	1-216-864-11	SHORT			
R3507	1-216-864-11	SHORT			
R3508	1-216-864-11	SHORT			
R3509	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3510	1-216-817-11	RES-CHIP	470	5%	1/10W
R3511	1-216-817-11	RES-CHIP	470	5%	1/10W
R3514	1-216-809-11	RES-CHIP	100	5%	1/10W
R3515	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R3516	1-216-824-11	RES-CHIP	1.8K	5%	1/10W
R3517	1-216-809-11	RES-CHIP	100	5%	1/10W
R3518	1-216-809-11	RES-CHIP	100	5%	1/10W
R3519	1-216-864-11	SHORT			
R3520	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W

BC HU

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3521	1-216-817-11	RES-CHIP	470	5%	1/10W
R3522	1-216-817-11	RES-CHIP	470	5%	1/10W
R3523	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3524	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3525	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3526	1-216-849-11	RES-CHIP	220K	5%	1/10W
R3527	1-218-676-11	METAL CHIP	220	0.50%	1/16W
R3528	1-216-818-11	RES-CHIP	560	5%	1/10W
R3529	1-216-818-11	RES-CHIP	560	5%	1/10W
R3530	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3531	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3532	1-216-809-11	RES-CHIP	100	5%	1/10W
R3534	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3535	1-216-809-11	RES-CHIP	100	5%	1/10W
R3538	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3539	1-216-818-11	RES-CHIP	560	5%	1/10W
R3540	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3541	1-216-830-11	RES-CHIP	5.6K	5%	1/10W
R3542	1-216-818-11	RES-CHIP	560	5%	1/10W
R3543	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3544	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3545	1-216-818-11	RES-CHIP	560	5%	1/10W
R3547	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3548	1-216-864-11	SHORT			
R3549	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3550	1-216-820-11	RES-CHIP	820	5%	1/10W
R3551	1-218-686-11	METAL CHIP	560	0.50%	1/16W
R3552	1-216-812-11	RES-CHIP	180	5%	1/10W
R3553	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3554	1-216-820-11	RES-CHIP	820	5%	1/10W
R3555	1-216-834-11	RES-CHIP	12K	5%	1/10W
R3556	1-216-839-11	RES-CHIP	33K	5%	1/10W
R3557	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3558	1-216-805-11	RES-CHIP	47	5%	1/10W
R3559	1-216-864-11	SHORT			
R3560	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3561	1-216-818-11	RES-CHIP	560	5%	1/10W
R3563	1-216-864-11	SHORT			
R3564	1-216-864-11	SHORT			
R3565	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3566	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3567	1-216-819-11	RES-CHIP	680	5%	1/10W
R3568	1-216-820-11	RES-CHIP	820	5%	1/10W
R3569	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R3570	1-216-839-11	RES-CHIP	33K	5%	1/10W
R3571	1-216-834-11	RES-CHIP	12K	5%	1/10W
R3572	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3573	1-216-805-11	RES-CHIP	47	5%	1/10W
R3580	1-215-857-71	METAL OXIDE	10	5%	1W
R3582	1-216-817-11	RES-CHIP	470	5%	1/10W
R3588	1-216-818-11	RES-CHIP	560	5%	1/10W

CRYSTAL

X3500	1-767-606-11	VIBRATOR, CRYSTAL			

HU

*	**A-1400-451-A**	**HU BOARD, MOUNTED**			

CAPACITOR

C2234	1-126-960-11	ELECT	1µF	20%	50V
C2235	1-126-960-11	ELECT	1µF	20%	50V
C2240	1-126-959-11	ELECT	0.47µF	20%	50V
C2241	1-126-959-11	ELECT	0.47µF	20%	50V

CONNECTOR

*	CN1001	1-564-506-11	PLUG,CONNECTOR	3P	
*	CN1002	1-564-508-11	PLUG,CONNECTOR	5P	
*	CN1003	1-564-507-11	PLUG,CONNECTOR	4P	

DIODE

D301	8-719-929-15	DIODE MTZJ-T-77-9.1B			
D2235	8-719-929-15	DIODE MTZJ-T-77-9.1B			
D2236	8-719-929-15	DIODE MTZJ-T-77-9.1B			

JACK

J2231	1-770-053-12	TERMINAL BLOCK, S (LIGHT ANGLE)			

RESISTOR

R1001	1-249-425-11	CARBON	4.7K	5%	1/4W
R1002	1-249-420-11	CARBON	1.8K	5%	1/4W
R1003	1-249-417-11	CARBON	1K	5%	1/4W
R2008	1-249-425-11	CARBON	4.7K	5%	1/4W
R2009	1-249-420-11	CARBON	1.8K	5%	1/4W
R2010	1-249-417-11	CARBON	1K	5%	1/4W
R2011	1-249-416-11	CARBON	820	5%	1/4W
R2235	1-249-409-11	CARBON	220	5%	1/4W
R2236	1-249-441-11	CARBON	100K	5%	1/4W
R2237	1-249-409-11	CARBON	220	5%	1/4W

HU P

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2238	1-249-441-11	CARBON	100K	5%	1/4W
R2239	1-247-804-11	CARBON	75	5%	1/4W
R2240	1-247-804-11	CARBON	75	5%	1/4W
R2241	1-247-804-11	CARBON	75	5%	1/4W
	SWITCH				
S1007	1-762-816-11	SWITCH TACTILE			
S1008	1-762-816-11	SWITCH TACTILE			
S2001	1-692-431-21	SWITCH TACTILE			
S2002	1-692-431-21	SWITCH TACTILE			
S2003	1-692-431-21	SWITCH TACTILE			
S2004	1-692-431-21	SWITCH TACTILE			
S2005	1-692-431-21	SWITCH TACTILE			

P

*	**A-1400-456-A**	**P (VAR) BOARD, MOUNTED**	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
	CAPACITOR		
C100	1-126-968-11	ELECT	100µF 20% 50V
C102	1-126-947-11	ELECT	47µF 20% 25V
C103	1-126-964-11	ELECT	10µF 20% 50V
C104	1-126-967-11	ELECT	47µF 20% 50V
C106	1-162-968-11	CERAMIC CHIP	0.0047µF 10% 50V
C107	1-126-960-11	ELECT	1µF 20% 50V
C109	1-164-230-11	CERAMIC CHIP	220pF 5% 50V
C110	1-165-176-11	CERAMIC CHIP	0.047µF 10% 16V
C111	1-126-960-11	ELECT	1µF 20% 50V
C3300	1-115-156-11	CERAMIC CHIP	1µF 10V
C3301	1-115-156-11	CERAMIC CHIP	1µF 10V
C3302	1-115-156-11	CERAMIC CHIP	1µF 10V
C3303	1-126-947-11	ELECT	47µF 20% 16V
C3304	1-164-315-11	CERAMIC CHIP	470pF 5% 50V
C3305	1-164-360-11	CERAMIC CHIP	0.1µF 16V
C3308	1-126-947-11	ELECT	47µF 20% 16V
C3312	1-164-315-11	CERAMIC CHIP	470pF 5% 50V
C3313	1-162-927-11	CERAMIC CHIP	100pF 5% 50V
C3316	1-126-947-11	ELECT	47µF 20% 16V
C3317	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C3318	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C3319	1-126-947-11	ELECT	47µF 20% 16V
C3320	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3321	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C3322	1-164-373-11	CERAMIC CHIP	0.033µF		25V
C3323	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C3324	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C3327	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C3328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3329	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C3330	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3331	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3332	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3334	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3335	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3336	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3337	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3338	1-164-360-11	CERAMIC CHIP	0.1µF		16V
C3339	1-126-965-91	ELECT	22µF	20%	50V
C3340	1-126-947-11	ELECT	47µF	20%	16V
C3341	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3390	1-104-665-11	ELECT	100µF	20%	25V
C3391	1-104-665-11	ELECT	100µF	20%	25V
	CONNECTOR				
* CN3302	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P			
* CN3303	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P			
CN6600	1-695-915-11	TAB (CONTACT)			
	DIODE				
D103	8-719-404-50	DIODE MA111-TX			
D104	8-719-404-50	DIODE MA111-TX			
D3301	8-719-404-50	DIODE MA111-TX			
D3304	8-719-109-72	DIODE MTZJ-T-77-3.9B			
	IC				
IC3301	6-701-754-01	IC M65665ASP			
IC3390	8-759-701-59	IC NJM78M09FA			
	CHIP CONDUCTOR				
JR001	1-216-864-11	SHORT			
JR002	1-216-864-11	SHORT			
	COIL				
L150	1-414-857-11	INDUCTOR	100µH		
L3300	1-412-058-11	INDUCTOR	10µH		
L3301	1-410-682-31	INDUCTOR	470µH		
L3302	1-412-058-11	INDUCTOR	10µH		

P

REF. NO.	PART NO.	DESCRIPTION	VALUES		
L3303	1-412-058-11	INDUCTOR	10µH		
L3390	1-412-525-31	INDUCTOR	10µH		
	TRANSISTOR				
Q151	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q152	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3300	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3304	8-729-926-14	TRANSISTOR 2SD1292			
Q3305	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3307	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3308	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3309	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q3310	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
Q3312	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	RESISTOR				
R100	1-216-809-11	RES-CHIP	100	5%	1/10W
R101	1-216-809-11	RES-CHIP	100	5%	1/10W
R103	1-216-837-11	RES-CHIP	22K	5%	1/10W
R104	1-216-839-11	RES-CHIP	33K	5%	1/10W
R105	1-216-809-11	RES-CHIP	100	5%	1/10W
R106	1-216-817-11	RES-CHIP	470	5%	1/10W
R107	1-216-817-11	RES-CHIP	470	5%	1/10W
R108	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R112	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R113	1-216-845-11	RES-CHIP	100K	5%	1/10W
R114	1-216-857-11	RES-CHIP	1M	5%	1/10W
R115	1-216-833-11	RES-CHIP	10K	5%	1/10W
R116	1-216-833-11	RES-CHIP	10K	5%	1/10W
R117	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3300	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3301	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3302	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3303	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3304	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3305	1-216-841-11	RES-CHIP	47K	5%	1/10W
R3306	1-216-837-11	RES-CHIP	22K	5%	1/10W
R3307	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3308	1-216-837-11	RES-CHIP	22K	5%	1/10W
R3309	1-216-817-11	RES-CHIP	470	5%	1/10W
R3310	1-216-841-11	RES-CHIP	47K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3311	1-216-819-11	RES-CHIP	680	5%	1/10W
R3312	1-216-864-11	SHORT			
R3313	1-216-864-11	SHORT			
R3314	1-216-864-11	SHORT			
R3318	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3319	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3320	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R3321	1-216-864-11	SHORT			
R3323	1-249-414-11	CARBON	560	5%	1/4W
R3324	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3327	1-216-864-11	SHORT			
R3328	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3329	1-216-864-11	SHORT			
R3330	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3331	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3335	1-215-857-71	METAL OXIDE	10	5%	1W
R3336	1-216-817-11	RES-CHIP	470	5%	1/10W
R3343	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3346	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3347	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3348	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3350	1-216-864-11	SHORT			
R3351	1-216-813-11	RES-CHIP	220	5%	1/10W
R3354	1-216-863-11	RES-CHIP	3.3M	5%	1/10W
R3359	1-216-864-11	SHORT			
R3360	1-216-864-11	SHORT			
R3361	1-216-864-11	SHORT			
R3362	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R3363	1-216-839-11	RES-CHIP	33K	5%	1/10W
R3364	1-247-807-31	CARBON	100	5%	1/4W
R3365	1-247-807-31	CARBON	100	5%	1/4W
R3368	1-216-833-11	RES-CHIP	10K	5%	1/10W
R3369	1-216-864-11	SHORT			
R3372	1-216-864-11	SHORT			
R3374	1-216-864-11	SHORT			
R3390	1-216-395-00	METAL OXIDE	3.3	5%	3W
	TUNER				
TU150	8-598-594-00	TUNER, FSS BTF-FA421			
	CRYSTAL				
X3301	1-781-377-41	VIBRATOR, CRYSTAL			

HR T

REF. NO.	PART NO.	DESCRIPTION	VALUES		
HR					
*	A-1400-459-A	HR (COM) BOARD, MOUNTED			
	CAPACITOR				
C3001	1-104-665-11	ELECT	100µF	20%	25V
	CONNECTOR				
CN3001	1-564-521-11	PLUG,CONNECTOR	6P		
	DIODE				
D3002	8-719-057-09	DIODE LNJ801LPDJA			
	IC				
IC3001	8-742-211-20	HYB IC SBX3071-71			
	RESISTOR				
R3001	1-249-417-11	CARBON	1K	5%	1/4W
R3014	1-247-807-31	CARBON	100	5%	1/4W
	SWITCH				
S3006	1-572-198-11	SWITCH KEYBOARD			
T					
*	A-1400-460-A	T BOARD, MOUNTED (KV-32FV300/36FV300 ONLY)			
	CAPACITOR				
C401	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C402	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C403	1-126-963-11	ELECT	4.7µF	20%	50V
C404	1-164-739-11	CERAMIC CHIP	560pF	5%	50V
C405	1-126-947-11	ELECT	47µF	20%	25V
C406	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C407	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C408	1-164-739-11	CERAMIC CHIP	560pF	5%	50V
C409	1-126-963-11	ELECT	4.7µF	20%	50V
C410	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C411	1-126-963-11	ELECT	4.7µF	20%	50V
C412	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C413	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C414	1-126-947-11	ELECT	47µF	20%	25V
C415	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C416	1-126-947-11	ELECT	47µF	20%	25V
C417	1-126-963-11	ELECT	4.7µF	20%	50V
C418	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C419	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C420	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C421	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C422	1-126-947-11	ELECT	47µF	20%	25V
C423	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C424	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C425	1-126-947-11	ELECT	47µF	20%	25V
C426	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C427	1-126-933-11	ELECT	100µF	20%	16V
	CONNECTOR				
* CN415	1-564-520-11	PLUG,CONNECTOR	5P		
	DIODE				
D401	8-719-109-89	DIODE MTZJ-T-77-5.6C			
D402	8-719-057-93	DIODE SVC203SPA-AL			
D403	8-719-057-93	DIODE SVC203SPA-AL			
D404	8-719-992-13	DIODE DAL5815			
D405	8-719-992-13	DIODE DAL5815			
D406	8-719-992-13	DIODE DAL5815			
D407	8-719-992-13	DIODE DAL5815			
D408	8-719-992-13	DIODE DAL5815			
D409	8-719-992-13	DIODE DAL5815			
D410	8-719-992-13	DIODE DAL5815			
D411	8-719-992-13	DIODE DAL5815			
	IC				
IC401	8-759-939-73	IC BA3308			
	COIL				
L401	1-411-987-11	COIL (OSC)			
L402	1-411-988-11	COIL (OSC)			
L403	1-410-482-31	INDUCTOR	100µH		
	TRANSISTOR				
Q401	8-729-266-83	TRANSISTOR 2SC2668-YTP			
Q402	8-729-266-83	TRANSISTOR 2SC2668-YTP			
Q403	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q404	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q405	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			

T C

REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q406	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2			
Q407	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2			
Q408	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2			
Q409	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2			
Q410	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q411	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	RESISTOR				
R401	1-216-841-11	RES-CHIP	47K	5%	1/10W
R402	1-216-841-11	RES-CHIP	47K	5%	1/10W
R403	1-216-841-11	RES-CHIP	47K	5%	1/10W
R404	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R405	1-216-809-11	RES-CHIP	100	5%	1/10W
R406	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R407	1-216-863-11	RES-CHIP	3.3M	5%	1/10W
R408	1-216-841-11	RES-CHIP	47K	5%	1/10W
R409	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R410	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R411	1-216-809-11	RES-CHIP	100	5%	1/10W
R412	1-218-713-11	METAL CHIP	7.5K	0.50%	1/16W
R413	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R414	1-216-833-11	RES-CHIP	10K	5%	1/10W
R415	1-249-411-11	CARBON	330	5%	1/4W
R416	1-216-837-11	RES-CHIP	22K	5%	1/10W
R417	1-216-837-11	RES-CHIP	22K	5%	1/10W
R418	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R419	1-216-833-11	RES-CHIP	10K	5%	1/10W
R420	1-216-852-11	RES-CHIP	390K	5%	1/10W
R421	1-216-809-11	RES-CHIP	100	5%	1/10W
R422	1-216-809-11	RES-CHIP	100	5%	1/10W
R423	1-216-852-11	RES-CHIP	390K	5%	1/10W
R424	1-216-823-11	RES-CHIP	1.5K	5%	1/10W
R425	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R426	1-218-731-11	METAL CHIP	43K	0.50%	1/16W
R427	1-216-827-11	RES-CHIP	3.3K	5%	1/10W
R428	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R429	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R430	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R431	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W
R432	1-218-731-11	METAL CHIP	43K	0.50%	1/16W
R433	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R434	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R435	1-216-797-11	RES-CHIP	10	5%	1/10W
R436	1-216-797-11	RES-CHIP	10	5%	1/10W
R437	1-216-797-11	RES-CHIP	10	5%	1/10W
R438	1-216-797-11	RES-CHIP	10	5%	1/10W
R439	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R440	1-216-864-11	SHORT			
R441	1-216-864-11	SHORT			
R460	1-216-826-11	RES-CHIP	2.7K	5%	1/10W

C

* **A-1400-455-A C (COM) BOARD, MOUNTED (KV-27FV300/29FV300/32FV300 ONLY)**

* **A-1400-580-A C (VAR) BOARD, MOUNTED (KV-36FV300 ONLY)**

4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

C701	1-126-947-11	ELECT	47µF	20%	25V
C702	1-136-165-00	FILM	0.1µF	5%	50V
C703	1-126-947-11	ELECT	47µF	20%	25V
C704	1-107-652-11	ELECT	10µF	20%	250V
C705	1-107-652-11	ELECT	10µF	20%	250V
C706	1-137-528-11	MYLAR	0.1µF	10%	250V
C707	1-162-114-00	CERAMIC	0.0047µF		2KV
C708	1-136-165-00	FILM	0.1µF	5%	50V
C709	1-126-964-11	ELECT	10µF	20%	50V
C710	1-126-964-11	ELECT	10µF	20%	50V
C711	1-102-074-00	CERAMIC	0.001µF	10%	50V

CONNECTOR

*	CN701	1-564-506-11	PLUG,CONNECTOR	3P
	CN702	1-695-915-11	TAB (CONTACT)	
	CN704	1-785-879-11	CONNECTOR, ONE TOUCH	
*	CN705	1-564-511-11	PLUG,CONNECTOR	8P
*	CN706	1-564-510-11	PLUG,CONNECTOR	7P
*	CN707	1-560-124-00	PLUG,CONNECTOR (2.5MM) (KV-36FV300 ONLY)	4P

DIODE

D701	8-719-901-83	DIODE 1SS83TD
D702	8-719-901-83	DIODE 1SS83TD
D703	8-719-901-83	DIODE 1SS83TD
D704	8-719-302-43	DIODE RGP10GPKG23

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

C V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	IC				
IC701	8-759-803-42	IC LA6500-FA			
IC702	8-759-562-43	IC TDA6108JF/N1B			
	COIL				
L701	1-408-613-31	INDUCTOR	68µH		
	TRANSISTOR				
Q700	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
Q701	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
	RESISTOR				
R700	1-249-433-11	CARBON	22K	5%	1/4W
R701	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-249-409-11	CARBON	220	5%	1/4W
R703	1-247-807-31	CARBON	100	5%	1/4W
R704	1-249-426-11	CARBON	5.6K	5%	1/4W
R705	1-249-429-11	CARBON	10K	5%	1/4W
R706	1-249-381-11	CARBON	1	5%	1/4W
⚠ R707	1-249-383-11	CARBON	1.5	5%	1/4W
R708	1-247-807-31	CARBON	100	5%	1/4W
R709	1-247-807-31	CARBON	100	5%	1/4W
R710	1-247-807-31	CARBON	100	5%	1/4W
R711	1-260-328-11	CARBON	1K	5%	1/2W
R712	1-260-328-11	CARBON	1K	5%	1/2W
R713	1-260-328-11	CARBON	1K	5%	1/2W
R714	1-260-087-11	CARBON	100	5%	1/2W
R715	1-260-132-11	CARBON	560K	5%	1/2W
R716	1-260-123-11	CARBON	100K	5%	1/2W
R718	1-216-373-11	METAL OXIDE	2.2	5%	2W
R719	1-215-888-00	METAL OXIDE	220	5%	2W
R720	1-249-421-11	CARBON	2.2K	5%	1/4W
R721	1-249-421-11	CARBON	2.2K	5%	1/4W
R722	1-247-807-31	CARBON	100	5%	1/4W
R723	1-247-807-31	CARBON	100	5%	1/4W
R724	1-247-807-31	CARBON	100	5%	1/4W
	VARIABLE RESISTOR				
RV701	1-241-656-11	RES,ADJ, METAL,FILM	110M		

V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1400-461-A**	**V (VAR) BOARD, MOUNTED (KV-32FV300 ONLY)**			
*	**A-1400-565-A**	**V (VAR) BOARD, MOUNTED (KV-27FV300/29FV300 ONLY)**			
*	**A-1400-581-A**	**V (VAR) BOARD, MOUNTED (KV-36FV300 ONLY)**			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	CAPACITOR				
C802	1-126-964-11	ELECT	10µF	20%	50V
C803	1-137-378-11	MYLAR	0.22µF	5%	50V
C804	1-137-378-11	MYLAR	0.22µF	5%	50V
C805	1-129-763-61	FILM	0.033µF	5%	200V
C808	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C809	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V
C810	1-130-495-00	MYLAR	0.1µF	5%	50V
C811	1-129-765-00	FILM	0.047µF	5%	200V
C812	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C813	1-126-933-11	ELECT	100µF	20%	16V
C821	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C823	1-130-967-00	FILM	0.0027µF	5%	50V
C824	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C826	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C862	1-126-964-11	ELECT	10µF	20%	50V
C901	1-107-667-11	ELECT	2.2µF	20%	160V
C902	1-107-364-11	MYLAR	0.01µF	10%	200V
C903	1-126-935-11	ELECT	470µF	20%	16V
C904	1-130-471-00	MYLAR	0.001µF	5%	50V
C905	1-107-364-11	MYLAR	0.01µF	10%	200V
C906	1-130-471-00	MYLAR	0.001µF	5%	50V
C907	1-107-963-11	ELECT	33µF	20%	160V
C908	1-126-935-11	ELECT	470µF	20%	16V
C909	1-104-999-11	MYLAR	0.1µF	10%	200V
C910	1-104-999-11	MYLAR	0.1µF	10%	200V
C911	1-126-933-11	ELECT	100µF	20%	16V
C912	1-126-933-11	ELECT	100µF	20%	16V
C913	1-102-074-00	CERAMIC	0.001µF	10%	50V
C914	1-130-491-00	MYLAR	0.047µF	5%	50V
C930	1-126-935-11	ELECT	470µF	20%	6.3V
C931	1-126-935-11	ELECT	470µF	20%	6.3V

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V

	REF. NO.	PART NO.	DESCRIPTION	VALUES
		CONNECTOR		
*	CN901	1-764-333-11	PLUG,CONNECTOR	10P
*	CN902	1-770-723-11	CONNECTOR, BOARD TO BOARD	8P
		DIODE		
	D804	8-719-302-43	DIODE RGP10GPKG23	
	D805	8-719-991-33	DIODE 1SS133T-77	
	D806	8-719-991-33	DIODE 1SS133T-77	
	D807	8-719-210-21	DIODE ERA82-004TP5	
	D808	8-719-991-33	DIODE 1SS133T-77	
	D813	8-719-991-33	DIODE 1SS133T-77	
	D901	8-719-924-11	DIODE MTZJ-T-77-22	
	D902	8-719-924-11	DIODE MTZJ-T-77-22	
	D903	8-719-991-33	DIODE 1SS133T-77	
	D905	8-719-510-02	DIODE D1NS4-TR	
	D906	8-719-404-50	DIODE MA111-TX	
	D907	8-719-404-50	DIODE MA111-TX	
	D908	8-719-404-50	DIODE MA111-TX	
		IC		
	IC801	6-701-598-01	IC UPC5023CS-184	
		CHIP CONDUCTOR		
	JR802	1-216-864-11	SHORT	
		COIL		
	L801	1-406-989-21	INDUCTOR	10MH
	L802	1-459-111-00	INDUCTOR	10MH
	L803	1-412-529-81	INDUCTOR	22µH
	L901	1-412-528-11	INDUCTOR	18µH
		TRANSISTOR		
	Q805	6-550-106-01	TRANSISTOR KTB764	
	Q807	8-729-931-45	TRANSISTOR IRF614	
	Q808	6-550-106-01	TRANSISTOR KTB764	
	Q812	8-729-026-39	TRANSISTOR 2SA933AS-QRT	
	Q901	8-729-045-04	TRANSISTOR 2SC5511	
	Q902	8-729-045-05	TRANSISTOR 2SA2005	
	Q903	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
	Q904	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
	Q905	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
	Q906	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
	Q907	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
	Q908	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
		RESISTOR		
	R809	1-216-832-11	RES-CHIP	8.2K 5% 1/10W
	R811	1-249-393-11	CARBON	10 5% 1/4W
	R814	1-215-862-11	METAL OXIDE (KV-32FV300/36FV300 ONLY)	68 5% 1W
	R815	1-215-862-11	METAL OXIDE	68 5% 1W
	R817	1-218-734-11	METAL CHIP	56K 0.50% 1/16W
	R818	1-216-809-11	RES-CHIP	100 5% 1/10W
	R819	1-216-841-11	RES-CHIP	47K 5% 1/10W
	R820	1-216-837-11	RES-CHIP	22K 5% 1/10W
	R821	1-218-728-11	METAL CHIP	33K 0.50% 1/16W
	R822	1-216-841-11	RES-CHIP	47K 5% 1/10W
	R824	1-218-740-11	METAL CHIP	100K 0.50% 1/16W
	R825	1-216-845-11	RES-CHIP	100K 5% 1/10W
	R826	1-249-421-11	CARBON	2.2K 5% 1/4W
	R827	1-218-708-11	METAL CHIP	4.7K 0.50% 1/16W
	R828	1-218-728-11	METAL CHIP	33K 0.50% 1/16W
	R829	1-216-797-11	RES-CHIP	10 5% 1/10W
	R833	1-216-830-11	RES-CHIP	5.6K 5% 1/10W
	R834	1-216-830-11	RES-CHIP	5.6K 5% 1/10W
	R840	1-218-736-11	METAL CHIP	68K 0.50% 1/16W
	R841	1-216-826-11	RES-CHIP	2.7K 5% 1/10W
	R842	1-216-825-11	RES-CHIP	2.2K 5% 1/10W
	R855	1-216-835-11	RES-CHIP	15K 5% 1/10W
	R856	1-216-827-11	RES-CHIP	3.3K 5% 1/10W
	R857	1-218-728-11	METAL CHIP	33K 0.50% 1/16W
	R860	1-216-833-11	RES-CHIP	10K 5% 1/10W
	R864	1-218-668-11	METAL CHIP	100 0.50% 1/16W
	R866	1-249-438-11	CARBON	56K 5% 1/4W
	R870	1-216-825-11	RES-CHIP	2.2K 5% 1/10W
	R876	1-216-821-11	RES-CHIP	1K 5% 1/10W
	R890	1-218-867-11	RES-CHIP	6.8K 5% 1/10W
	R893	1-216-839-11	RES-CHIP	33K 5% 1/10W
⚠	R901	1-249-405-11	CARBON	100 5% 1/4W
⚠	R902	1-249-385-11	CARBON	2.2 5% 1/4W
⚠	R903	1-249-414-11	CARBON	560 5% 1/4W
	R904	1-249-432-11	CARBON	18K 5% 1/4W
	R905	1-249-421-11	CARBON	2.2K 5% 1/4W
	R906	1-249-432-11	CARBON	18K 5% 1/4W
⚠	R907	1-249-385-11	CARBON	2.2 5% 1/4W
⚠	R908	1-249-414-11	CARBON	560 5% 1/4W
	R909	1-260-316-51	CARBON	100 5% 1/2W

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V GK

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R910	1-215-915-11	METAL OXIDE	470	5%	3W
R911	1-249-411-11	CARBON	330	5%	1/4W
R912	1-249-407-11	CARBON	150	5%	1/4W
R913	1-249-399-11	CARBON	33	5%	1/4W
R914	1-249-416-11	CARBON	820	5%	1/4W
R915	1-249-425-11	CARBON	4.7K	5%	1/4W
R917	1-249-425-11	CARBON	4.7K	5%	1/4W
R918	1-249-401-11	CARBON	47	5%	1/4W
R919	1-249-401-11	CARBON	47	5%	1/4W
R921	1-249-429-11	CARBON	10K	5%	1/4W
R922	1-249-397-11	CARBON	22	5%	1/4W
R923	1-249-401-11	CARBON	47	5%	1/4W
R930	1-216-864-11	SHORT			
R931	1-249-421-11	CARBON	2.2K	5%	1/4W
R932	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W
R933	1-216-864-11	SHORT			
⚠ R935	1-249-405-11	CARBON	100	5%	1/4W
R938	1-216-864-11	SHORT			

GK

* **A-1400-452-A GK (VAR) BOARD, MOUNTED (KV-27FV300/29FV300(N)/32FV300 ONLY)**

* **A-1400-583-A GK (VAR) BOARD, MOUNTED (KV-36FV300 ONLY)**

* **A-1400-608-A GK (VAR) BOARD, MOUNTED (KV-29FV300(S) ONLY)**

	1-533-223-11	HOLDER, FUSE
*	4-374-846-11	COVER,CAPACITOR, CAP TYPE
	4-382-854-11	SCREW (M3X10), P, SW (+)
	4-382-854-11	SCREW (M3X10), P, SW (+)

CAPACITOR

C501	1-165-529-11	MYLAR	0.22µF	10%	275V
C600	1-117-703-11	CERAMIC	0.0047µF	20%	250V
	(KV-29FV300(S) ONLY)				
⚠ C601	1-165-529-11	MYLAR	0.22µF	10%	275V
⚠ C603	1-165-529-11	MYLAR	0.22µF	10%	275V
C604	1-164-625-11	CERAMIC	680pF	10%	500V
⚠ C607	1-119-912-51	CERAMIC	1000pF	20%	250V
⚠ C608	1-119-912-51	CERAMIC	1000pF	20%	250V
C609	1-164-625-11	CERAMIC	680pF	10%	500V
C616	1-126-943-11	ELECT	2200µF	20%	25V
C617	1-123-024-21	ELECT	33µF		160V
C618	1-126-943-11	ELECT	2200µF	20%	25V
C620	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C621	1-117-894-11	ELECT	560µF	20%	250V
C624	1-107-636-11	ELECT	10µF	20%	160V
C629	1-117-894-11	ELECT	560µF	20%	250V
C632	1-126-947-11	ELECT	47µF	20%	25V
C633	1-136-479-11	FILM	0.001µF	2%	50V
C634	1-126-964-11	ELECT	10µF	20%	50V
C635	1-126-963-11	ELECT	4.7µF	20%	50V
C637	1-136-165-00	FILM	0.1µF	5%	50V
C638	1-104-665-11	ELECT	100µF	20%	25V
C640	1-126-942-61	ELECT	1000µF	20%	25V
C642	1-126-969-11	ELECT	220µF	20%	50V
C643	1-136-165-00	FILM	0.1µF	5%	50V
C645	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C647	1-126-947-11	ELECT	47µF	20%	25V
C648	1-104-330-91	CERAMIC	470pF	10%	1KV
C649	1-104-330-91	CERAMIC	470pF	10%	1KV
C650	1-128-550-11	ELECT	2200µF	20%	50V
C651	1-126-942-61	ELECT	1000µF	20%	25V
C652	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C653	1-126-960-11	ELECT	1µF	20%	50V
C656	1-161-964-91	CERAMIC	0.0047µF		250V
C658	1-161-964-91	CERAMIC	0.0047µF		250V
C665	1-126-942-61	ELECT	1000µF	20%	25V
C667	1-164-625-11	CERAMIC	680pF	10%	500V
C668	1-164-625-11	CERAMIC	680pF	10%	500V
C669	1-164-625-11	CERAMIC	680pF	10%	500V
C670	1-164-625-11	CERAMIC	680pF	10%	500V
C672	1-135-946-21	FILM	47000pF	3%	800V
C690	1-126-971-11	ELECT	470µF	20%	50V
C1401	1-137-652-91	CERAMIC CHIP	39000pF	10%	16V
C1402	1-164-172-11	CERAMIC CHIP	0.0056µF	10%	25V
C1403	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C1404	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C1405	1-126-947-11	ELECT	47µF	20%	25V
C1406	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C1407	1-126-965-91	ELECT	22µF	20%	50V
C1408	1-126-768-11	ELECT	2200µF	20%	16V
C1413	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C1450	1-135-572-51	ELECT	1000µF	20%	50V
C1451	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C1457	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V

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GK

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C1458	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C1461	1-113-619-11	CERAMIC CHIP	0.47µF		10V
	C1462	1-113-619-11	CERAMIC CHIP	0.47µF		10V
	C1463	1-126-968-11	ELECT	100µF	20%	50V
		CONNECTOR				
*	CN503	1-573-963-11	PIN,CONNECTOR (PC BOARD)	3P		
	CN600	1-580-843-11	PIN,CONNECTOR (POWER)			
*	CN602	1-564-510-11	PLUG,CONNECTOR	7P		
	CN603	1-695-915-11	TAB (CONTACT)			
	CN604	1-695-915-11	TAB (CONTACT)			
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)				
*	CN605	1-564-506-11	PLUG,CONNECTOR	3P		
*	CN1401	1-564-507-11	PLUG,CONNECTOR	4P		
	CN1402	1-564-505-11	PLUG,CONNECTOR	2P		
*	CN1405	1-564-506-11	PLUG,CONNECTOR	3P		
*	CN1601	1-564-509-11	PLUG,CONNECTOR	6P		
		DIODE				
	D501	8-719-404-50	DIODE MA111-TX			
	D600	8-719-510-53	DIODE D4SB60L-F			
	D601	8-719-511-40	DIODE S1VB20			
	D611	8-719-062-40	DIODE D4SBL20µF3			
	D612	8-719-068-00	DIODE ERC04-06SE			
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)				
	D613	8-719-068-00	DIODE ERC04-06SE			
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)				
	D614	8-719-057-52	DIODE EZ0150AV1			
	D615	8-719-062-40	DIODE D4SBL20µF3			
	D618	8-719-979-64	DIODE µF4005PKG23			
	D620	8-719-404-50	DIODE MA111-TX			
	D621	6-500-181-01	DIODE MA6D50			
	D624	8-719-510-12	DIODE D10SC4M			
	D625	8-719-510-02	DIODE D1NS4-TA2			
	D628	8-719-404-50	DIODE MA111-TX			
	D629	8-719-110-31	DIODE MTZJ-T-77-12C			
	D631	8-719-063-70	DIODE D1NL20U-TA2			
	D640	8-719-404-50	DIODE MA111-TX			
	D641	8-719-404-50	DIODE MA111-TX			
	D645	8-719-063-70	DIODE D1NL20U-TA2			
	D646	8-719-404-50	DIODE MA111-TX			
	D647	8-719-063-70	DIODE D1NL20U-TA2			
	D690	8-719-982-13	DIODE MTZJ-T-77-27			
	D1401	8-719-929-15	DIODE MTZJ-T-77-9.1B			

	REF. NO.	PART NO.	DESCRIPTION	VALUES
		FUSE		
⚠	F601	1-576-193-11	FUSE	6.3A/125V
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)		
⚠	F601	1-532-506-51	FUSE	6.3A/250V
		(KV-29FV300(S) ONLY)		
		FERRITE BEAD		
	FB602	1-410-397-21	FERRITE	1.1µH
	FB604	1-410-397-21	FERRITE	1.1µH
	FB605	1-410-397-21	FERRITE	1.1µH
	FB609	1-410-397-21	FERRITE	1.1µH
	FB610	1-410-397-21	FERRITE	1.1µH
	FB611	1-410-397-21	FERRITE	1.1µH
	FB612	1-410-397-21	FERRITE	1.1µH
	FB614	1-410-397-21	FERRITE	1.1µH
	FB616	1-410-397-21	FERRITE	1.1µH
	FB617	1-410-397-21	FERRITE	1.1µH
		IC		
	IC600	8-759-670-30	IC MCZ3001D	
	IC601	8-749-012-13	IC DM-58	
⚠	IC602	1-761-541-11	SELECTION UNIT, RECTIFICATION	
		(KV-36FV300 ONLY)		
	IC605	8-759-450-47	IC BA05T	
	IC609	8-759-653-07	IC PQ09RD21	
	IC1405	8-759-573-40	IC TDA8580Q/N1	
	IC1406	8-759-100-96	IC NJM4558M-TE2	
		CHIP CONDUCTOR		
	JR1	1-216-864-11	SHORT	
	JR2	1-216-864-11	SHORT	
	JR3	1-216-864-11	SHORT	
	JR6	1-216-864-11	SHORT	
	JR1400	1-216-864-11	SHORT	
	JR1401	1-216-864-11	SHORT	
	JR1404	1-216-864-11	SHORT	
	JR1405	1-216-864-11	SHORT	
	JR1409	1-216-864-11	SHORT	
	JR1411	1-216-864-11	SHORT	
	JR1412	1-216-864-11	SHORT	
		COIL		
	L505	1-412-529-11	INDUCTOR	22µH
	L604	1-412-525-31	INDUCTOR	10µH
	L605	1-412-519-11	INDUCTOR	3.3µH
	L606	1-412-519-11	INDUCTOR	3.3µH

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GK

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	L607	1-412-525-31	INDUCTOR	10µH		
	L608	1-412-529-11	INDUCTOR	22µH		
		PHOTO COUPLER				
⚠	PH602	8-749-924-35	PHOTO COUPLER	ON3171-R		
		IC LINK				
	PS601	1-576-337-21	LINK, IC			
	PS1401	1-576-337-21	LINK, IC			
		TRANSISTOR				
	Q509	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA			
	Q600	8-729-052-32	TRANSISTOR IRFIB7N50A-LF31			
	Q601	8-729-052-32	TRANSISTOR IRFIB7N50A-LF31			
	Q605	8-729-140-96	TRANSISTOR 2SD774-T-34			
	Q606	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX			
	Q608	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW			
	Q690	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q691	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
	Q1401	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
		RESISTOR				
	R534	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R535	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
⚠	R603	1-219-513-11	CARBON	4.7M	5%	1/2W
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)				
	R604	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R606	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R607	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R608	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R609	1-205-998-11	CEMENTED	1	5%	10W
	R610	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R611	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R612	1-260-131-11	CARBON	470K	5%	1/2W
		(KV-29FV300(S) ONLY)				
	R613	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R614	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R615	1-202-933-61	FUSIBLE	0.1	10%	1/2W
	R616	1-216-822-11	RES-CHIP	1.2K	5%	1/10W
	R617	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R618	1-216-864-11	SHORT			
⚠	R619	1-249-377-11	CARBON	0.47	5%	1/4W
	R620	1-215-857-71	METAL OXIDE	10	5%	1W
	R625	1-216-817-11	RES-CHIP	470	5%	1/10W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R626	1-218-715-11	METAL CHIP	9.1K	0.50%	1/16W
	R627	1-215-481-00	METAL	330K	1%	1/4W
	R628	1-260-131-11	CARBON	470K	5%	1/2W
		(KV-29FV300(S) ONLY)				
	R629	1-215-481-00	METAL	330K	1%	1/4W
⚠	R630	1-215-481-00	METAL	330K	1%	1/4W
	R631	1-218-720-11	METAL CHIP	15K	0.50%	1/16W
	R632	1-218-668-11	METAL CHIP	100	0.50%	1/16W
⚠	R640	1-249-417-11	CARBON	1K	5%	1/4W
	R647	1-218-667-11	METAL CHIP	91	0.50%	1/16W
⚠	R658	1-249-393-11	CARBON	10	5%	1/4W
⚠	R659	1-249-393-11	CARBON	10	5%	1/4W
	R660	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R667	1-216-833-11	RES-CHIP	10K	5%	1/10W
⚠	R668	1-249-413-11	CARBON	470	5%	1/4W
	R670	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R671	1-243-979-71	METAL OXIDE	0.1	5%	2W
	R672	1-243-979-71	METAL OXIDE	0.1	5%	2W
	R687	1-205-998-11	CEMENTED	1	5%	10W
	R688	1-205-998-11	CEMENTED	1	5%	10W
	R691	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R692	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R694	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R698	1-249-377-11	CARBON	0.47	5%	1/4W
⚠	R699	1-218-265-11	METAL	8.2M	5%	1W
		(KV-29FV300(S) ONLY)				
	R1401	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R1402	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R1403	1-216-833-11	RES-CHIP	10K	5%	1/10W
	R1404	1-216-840-11	RES-CHIP	39K	5%	1/10W
	R1405	1-216-840-11	RES-CHIP	39K	5%	1/10W
	R1406	1-216-840-11	RES-CHIP	39K	5%	1/10W
	R1407	1-216-817-11	RES-CHIP	470	5%	1/10W
	R1408	1-216-817-11	RES-CHIP	470	5%	1/10W
	R1409	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R1410	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
	R1411	1-216-821-11	RES-CHIP	1K	5%	1/10W
	R1412	1-218-684-11	METAL CHIP	470	0.50%	1/16W
	R1413	1-216-789-11	RES-CHIP	2.2	5%	1/10W
	R1414	1-216-809-11	RES-CHIP	100	5%	1/10W
	R1415	1-216-837-11	RES-CHIP	22K	5%	1/10W
	R1416	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
	R1457	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
	R1458	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W

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

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

GK HD

REF. NO.	PART NO.	DESCRIPTION	VALUES
R1461	1-218-716-11	METAL CHIP	10K 0.50% 1/16W
R1462	1-218-716-11	METAL CHIP	10K 0.50% 1/16W
R1481	1-216-833-11	RES-CHIP	10K 5% 1/10W
R1482	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
R1487	1-216-864-11	SHORT	
		RELAY	
⚠ RY501	1-755-198-11	RELAY	
⚠ RY600	1-755-395-11	RELAY (AC POWER)	
		TRANSFORMER	
⚠ T601	1-435-617-11	TRANSFORMER, LINE FILTER	
⚠ T603	1-437-783-11	TRANSFORMER, STAND BY (KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)	
⚠ T603	1-437-784-11	TRANSFORMER, STAND BY (KV-29FV300(S) ONLY)	
⚠ T604	1-437-607-11	POWER ISOLATION TRANSFORMER	
⚠ T605	1-437-785-11	TRANSFORMER ASSY POWER (HST) (KV-36FV300 ONLY)	
		THERMISTOR	
THP501	1-803-540-11	THERMISTOR, POSITIVE (KV-29FV300(S) ONLY)	
THP501	1-803-629-11	THERMISTOR, POSITIVE (KV-36FV300 ONLY)	
THP501	1-804-313-11	THERMISTOR, POSITIVE (KV-27FV300/29FV300(N)/32FV300 ONLY)	
		VARISTOR	
VDR600	1-803-585-11	VARISTOR ENE271D-10A (KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)	
VDR600	1-803-967-11	VARISTOR ENE621D-14A (KV-29FV300(S) ONLY)	

HD

*	**A-1400-607-A**	**HD BOARD, MOUNTED** (KV-32FV300/36FV300 ONLY)
		ACCESSORIES AND PACKING
*	4-041-423-01	SHEET, PROTECTION (KV-36FV300 ONLY)
	4-085-910-01	CARTON, INDIVIDUAL (KV-32FV300 ONLY)
*	4-086-349-01	CARTON, HSC (KV-36FV300 ONLY)
	4-087-224-01	CARTON, INDIVIDUAL (KV-27FV300/29FV300 ONLY)
*	4-085-911-01	CUSHION, FRONT (UPPER) (KV-32FV300 ONLY)
*	4-805-912-01	CUSHION, REAR (UPPER) (KV-32FV300 ONLY)
*	4-805-913-01	CUSHION, LOWER (KV-32FV300 ONLY)
*	4-086-352-01	CUSHION, FRONT (UPPER) (KV-36FV300 ONLY)
*	4-086-353-01	CUSHION, REAR (UPPER) (KV-36FV300 ONLY)
*	4-086-354-01	CUSHION, LOWER (KV-36FV300 ONLY)
*	4-087-222-01	CUSHION, UPPER (KV-27FV300/29FV300 ONLY)
*	4-087-223-01	CUSHION, LOWER (KV-27FV300/29FV300 ONLY)
	4-086-346-21	MANUAL, INSTRUCTION (KV-27FV300/32FV300/36FV300 ONLY)
	4-086-346-31	MANUAL, INSTRUCTION (KV-27FV300(CND)/32FV300(CND)/36FV300(CND) ONLY)
	4-086-346-41	MANUAL, INSTRUCTION (KV-29FV300 ONLY)
	4-041-255-01	BAG, PROTECTION (KV-27FV300/29FV300 ONLY)
	4-066-845-02	BAG, PROTECTION (KV-32FV300 ONLY)
*	4-087-598-01	BAG, PROTECTION (KV-36FV300 ONLY)
	8-953-742-90	HEADPHONE MDR-IF0230//K SET (KV-32FV300/36FV300 ONLY)
		REMOTE COMMANDER
	1-476-668-11	REMOTE COMMANDER (RM-Y182) (KV-32FV300/36FV300 ONLY)
	1-476-681-11	REMOTE COMMANDER (RM-Y181) (KV-27FV300/29FV300)
	4-978-977-11	BATTERY COVER (KV-RM-Y181/RM-Y182)

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Sony Technology Center
Technical Services
Service Promotion Department

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PRINTING THE SERVICE MANUAL

The PDF of this service manual is not designed to be printed from cover to cover. The pages vary in size, and must therefore be printed in sections based on page dimensions.

NON-SCHEMATIC PAGES

Data that does NOT INCLUDE schematic diagrams are formatted to 8.5 x 11 inches and can be printed on standard letter-size and/or A4-sized paper.

SCHEMATIC DIAGRAMS

The schematic diagram pages are provided in two ways, full size and tiled. The full-sized schematic diagrams are formatted on paper sizes between 8.5" x 11" and 18" x 30" depending upon each individual diagram size. Those diagrams that are LARGER than 11" x 17" in full-size mode have been tiled for your convience and can be printed on standard 11" x 17" (tabloid-size) paper, and reassembled.

TO PRINT FULL SIZE SCHEMATIC DIAGRAMS

If you have access to a large paper plotter or printer capable of outputting the full-sized diagrams, output as follows:

1) Note the page size(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.

2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your large format printer. Confirm that the printer settings are set to output the indicated page size or larger.

3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

TO PRINT TILED VERSION OF SCHEMATICS

Schematic pages that are larger than 11" x 17" full-size are provided in a 11" x 17" printable tiled format near the end of the document. These can be printed to tabloid-sized paper and assembled to full-size for easy viewing.

If you have access to a printer capable of outputting the tabloid size (11" x 17") paper, then output the tiled version of the diagram as follows:

1) Note the page number(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.

2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your printer. Confirm that the plotter settings are set to output 11" x 17", or tabloid size paper in landscape () mode.

3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

TO PRINT SPECIFIC SECTIONS OF A SCHEMATIC

To print just a particular section of a PDF, rather than a full page, access the Graphics Select tool in the Acrobat Reader tool bar.

1) To view the Graphics Select Tool, press and HOLD the mouse button over the Text Select Tool which looks like: 
This tool will expand to reveal to additional tools.
Choose the Graphics Select tool by placing the cursor over the button on of the far right that looks like: 

2) After selecting the Graphics Select Tool, place your cursor in the document window and the cursor will change to a plus (+) symbol. Click and drag the cursor over the area you want to print. When you release the mouse button, a marquee (or dotted lined box) will be displayed outlining the area you selected.

3) With the marquee in place, go to the file menu and select the "Print..." option. When the print window appears, choose the option under the section called "Print Range" which says "Selected Graphic".

Select OK and the output will print only the area that you outlined with the marquee. 

(continued >)

ON-SCREEN SEARCH OPTION

All of the text within the service manual PDF is content searchable. This means that you can enter any text, word, phrase or reference number that appears in the manual, and the PDF software will search, find and move the cursor to the location where you requested text first appears. This feature can be particularly useful in locating components on a specific schematic or printed wire circuit board (PWB) diagrams.

Follow these steps to effectively locate a component on a schematic diagram:

1) Locate the schematic you want to search by clicking on the corresponding bookmark on the left side of the screen. The view on the right of the screen will then jump to the desired schematic page.

2) Magnify the diagram to at least 400% before conducting a component search. This will enable you to easily view the reference number when it is highlighted on screen. To do this, click on the magnifying glass button on the tool bar at the top of the screen. Move the cursor over the diagram and RIGHT click you mouse. Select the 400% magnification option on the pop-up menu. Click on the button with the icon of the open hand to deactivate the magnification tool

3) Search the diagram (or the entire manual) by clicking on the binocular button tool at the top of the screen. The “Find” window will appear and allow you to type in your desired text. Type in a reference designator, such as R502, and click on the “Find” button. If the component is not on the diagram, but is listed anywhere else in the manual, the cursor will jump to the first location the text is found in the file. To find another instance of that same text, click on the binocular button again and select “Find Again.”