

SERVICE MANUAL

BA-4D CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST</u>	<u>CHASSIS NO.</u>
KV-27S42	RM-Y165	US	SCC-S27H-A
KV-27S42	RM-Y165	CND	SCC-S28F-A
KV-27S46	RM-Y167	US	SCC-S27K-A
KV-27S66	RM-Y167	US	SCC-S27L-A
KV-27S66	RM-Y167	CND	SCC-S28G-A
KV-29AL42	RM-Y165	E	SCC-S25U-A
KV-29AL42C	RM-Y165	E	SCC-S25Y-A
KV-29AL66	RM-Y167	E	SCC-S25T-A
KV-29AL66C	RM-Y167	E	SCC-S25V-A
KV-29SL42	RM-Y165	E	SCC-S25W-A
KV-29SL42C	RM-Y165	E	SCC-S25S-A
KV-29SL46	RM-Y167	E	SCC-S25X-A
KV-29XL42M	RM-Y165	MX	SCC-S26C-A



KV-29AL66



RM-Y167



TRINITRON® COLOR TV
SONY®

SPECIFICATIONS

	KV-27S42	KV-27S46 KV-27S66	KV-29AL42 KV-29AL42C	KV-29AL66C KV-29AL66	KV-29SL46 KV-29XL42M KV-29SL42 KV-29SL42C
Power Requirements	120V,60Hz	120V,60Hz	120-220V 50/60Hz	120-220V 50/60Hz	120-220V 50/60Hz
Number of input/outputs					
Video ¹⁾	1	2	2	3	1, 2(KV-29SL46)
S Video ²⁾	1	1	1	1	1
Audio ³⁾	1	2	2	3	1, 2(KV-29SL46)
Audio Out ⁴⁾	1	1	1	1	1
Monitor Out	-	-	-	1	-
Speaker Output(W)	5WX2	5WX2	10WX2	10WX2	5WX2
Power Consumption(W)		150W (KV-27S66)			
In Use (Max)	140W	140W (KV-27S46)	170W	180W	140W
In Standby	2W	2W	3W	3W	3W
Dimensions(W/H/D)					
(mm)	660.4X598 X505.5mm	660.4X598 X505.5mm	767.4X579.7 X547.7mm	767.4X579.7 X547.7mm	660.4X598 X505.5mm
(in.)	26x23 ^{9/16} x20in	26x23 ^{9/16} x20in	30 ^{1/4} X22 ^{7/8} x21 ^{5/8} in	30 ^{1/4} X22 ^{7/8} x21 ^{5/8} in	26x23 ^{9/16} x20in
Mass (Kg)	39kg	39kg	42kg	42kg	39kg
(lbs)	86lbs	86lbs	93lbs	93lbs	86lbs

Television system

American TV standard/NTSC

Channel coverage

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

Picture tube

Trinitron® tube

Visible screen size

27-inch picture measured diagonally

29-inch picture measured diagonally

Antenna

75 ohm external antenna terminal for VHF/UHF

Supplied accessories

Remote Commander with 2 size AA (R6) batteries

RM-Y167 (KV-29AL66/29AL66C/29SL46/27S46/27S66)

RM-Y165 (KV-29AL42/29AL42C/27S42/29XL42M/29SL42/29SL42C)

Optional accessories

Connecting

Cables: VMC-810S/820S, VMC-720M.
YC-15V/20V, RK-74A

TV Stand: SU-27A4

U/V Mixer: EAC-66

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⁾ 500 mVrms (100% modulation), Impedance: 47 kilohms

⁴⁾ More than 408 mVrms at the maximum volume setting (variable)

More than 408 mVrms (fix); Impedance: 5 kilohms

(●) SRS (SOUND RETRIEVAL SYSTEM)

The (●) SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

BBE and BBE symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

Design and specifications are subject to change without notice.

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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 Δ 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

ATTENTION!!

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

ATTENTION!!

AFIN D'EVITER TOUT RESQUE 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 SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE Δ 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.

SELF-DIAGNOSTIC FUNCTION

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.

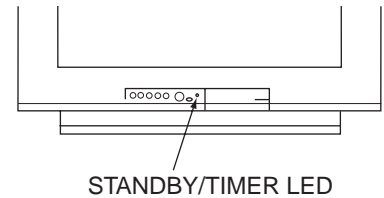
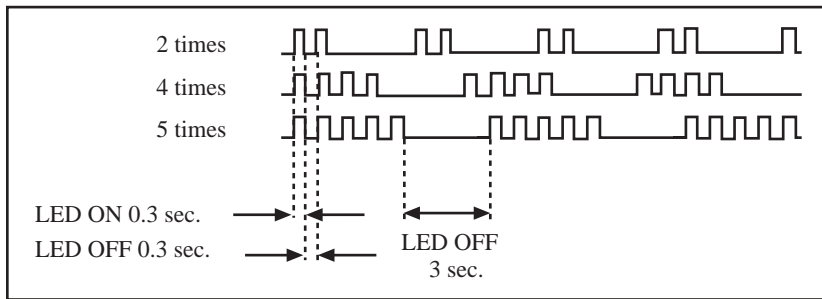
Results for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Display/ Diagnostic result	Probable Cause Location	Detected Symptoms
* Power does not turn on	Does not light		* Power cord is not plugged in. * Fuse is burned out (F5050) (E Board)	* Power does not come on. * No power is supplied to the TV. * AC power supply is faulty.
* +B overcurrent (OCP)	2 times	2:0 or 2:1	* H.OUT (Q502) is shorted. (A board) * IC1751 is shorted. (C board) * IC1701 is shorted. (CV board)	* Power does not come on. * Load on power line is shorted.
* Vertical deflection stopped*	4 times	4:0 or 4:1	* +13V is not supplied. (A board) * IC 541 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.
* White balance failure (not balanced)	5 times	5:0 or 5:1	* Video OUT (Q306 to 308) is faulty.(A bd) * IC301 is faulty. (A board) * G2 is improperly adjusted**.	* No raster is generated. * CRT cathode current detection reference pulse output is small.

* 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) Adjustment in Section 3-4 of this manual.

Display of Standby/Timer LED Flash Count



<u>Diagnostic Item</u>	<u>Flash Count*</u>
+B overcurrent	2 times
Vertical deflection stopped	4 times
White balance failure	5 times

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

Stopping the Standby/Timer LED Flash

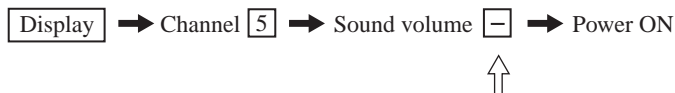
Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER LAMP from flashing.

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:



Note that this differs from entering the service mode (sound volume).

Self Diagnostic Screen Display

SELF DIAGNOSTIC			
2:		0	← Numeral “0” means that no fault was detected.
3:	N/A	0	
4:		0	
5:		1	← Numeral “1” means a fault was detected one time only.
101:	N/A	0	

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

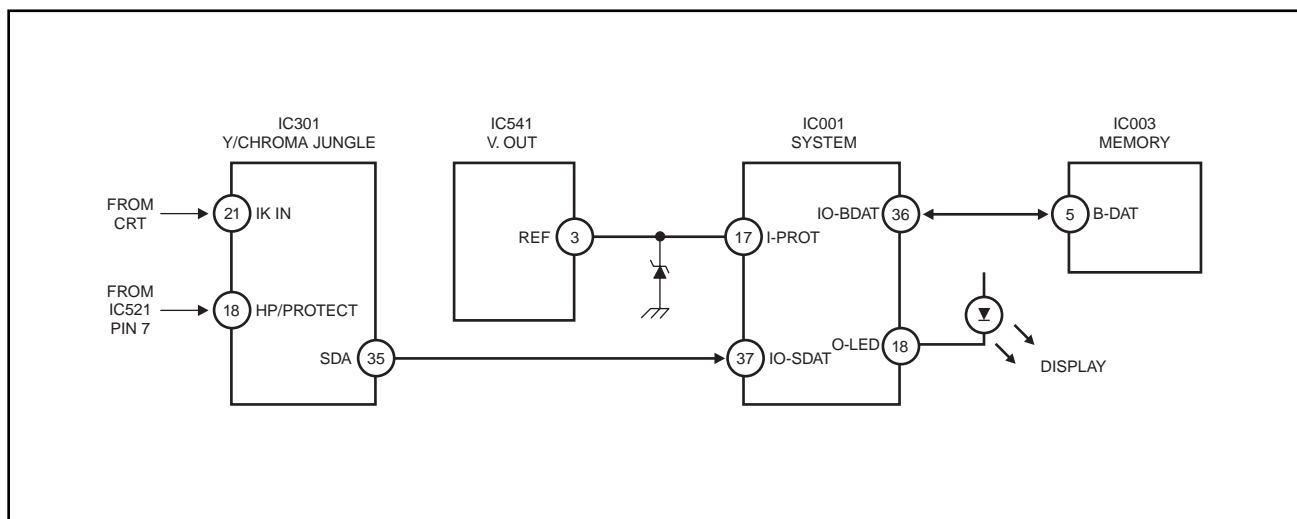
To clear the result display to “0”, press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

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 (115V) line is detected by pin 18 of IC301. If the voltage of pin 18 of IC 301 is less than 1V when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.

Vertical deflection stopped

Occurs when an absence of the vertical deflection pulse is detected by pin 17 of IC001. Power supply will shut down when waveform interval exceeds 2 seconds.

White balance failure

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

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

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 microampere). 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 milliammeter. 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 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).

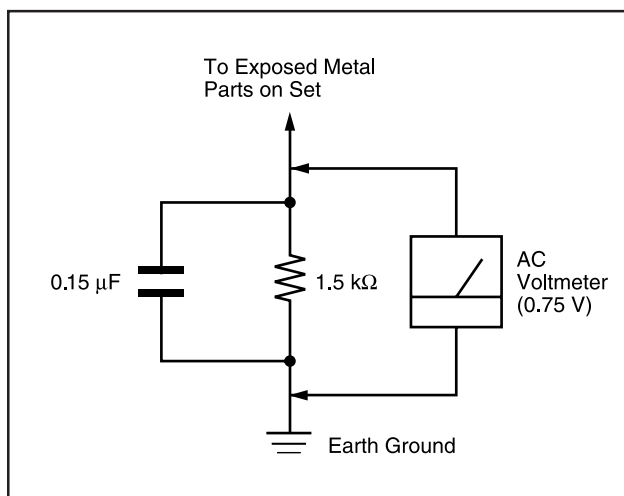


Figure A. Using an AC voltmeter to check AC leakage.

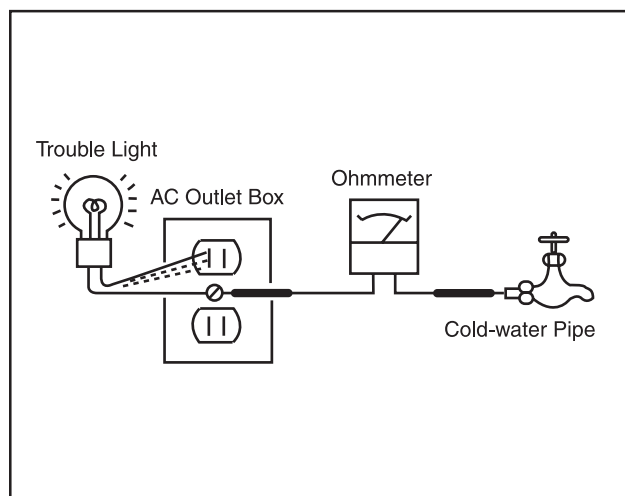


Figure B. Checking for earth ground.

SECTION 1
GENERAL

The following are partial abstracts from the Operating Instruction Manual. The page numbers shown reflect those of the Operating Instruction Manual.

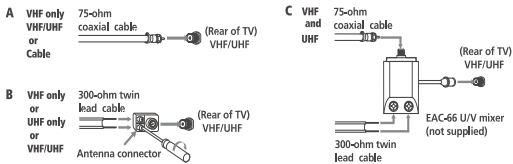
Connecting Your TV

This section covers basic connections in addition to any optional equipment you may be connecting.

Basic Connections

TV with indoor or outdoor antenna, or CATV cable

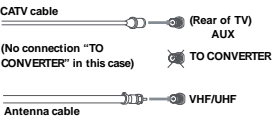
Depending on the cable available in your home, choose one of the connections below:



If you are connecting to an indoor or outdoor antenna, it will be necessary to adjust the orientation of the antenna for best reception.

Cable and antenna
KV-27S66, 27V66 only

If your cable provider does not feature local channels, you may find this set up convenient.



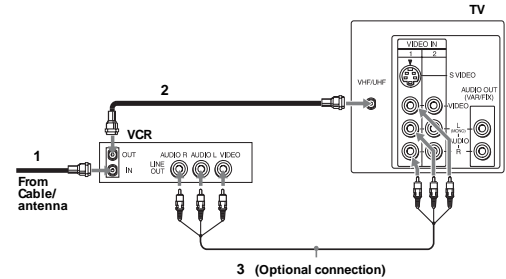
Select CABLE or ANT mode by pressing **ANT** on the remote control.

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User Guide

Connecting Additional Equipment

TV and VCR



! VCR must be connected and turned on to operate PIP (KV-27S46 only)

- 1 Connect the coaxial cable from your TV antenna or cable TV to the IN jack on your VCR.
- 2 Connect a coaxial cable (not supplied) from the OUT jack on your VCR to the VHF/UHF IN jack on the TV.

To watch video programs from your VCR, tune your TV to channel 3 or 4 (as set on the rear of your VCR).

(Optional connection)

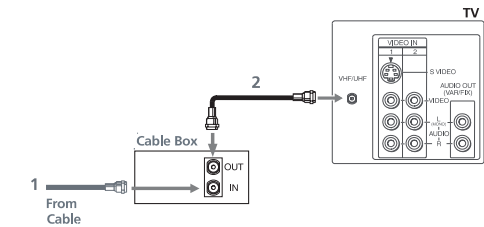
- 3 If your VCR is equipped with video inputs, for better picture quality you should connect A/V cables to AUDIO and VIDEO OUT on your VCR to AUDIO/VIDEO IN on your TV. You can use the **TV/VIDEO** button to switch between the TV and VCR inputs.

For optimum picture quality, use S-VIDEO instead of the yellow A/V cable. S-VIDEO does not provide sound, the audio cables must still be connected.

4

Connecting Your TV

TV and Cable Box



- 1 Connect the coaxial cable from the wall to the IN jack on your cable box.
- 2 Connect a coaxial cable (not supplied) from the OUT jack on your cable box to the VHF/UHF IN jack on the TV.

To view channels from your cable box, tune your TV to channel 3 or 4 (as set on the rear panel of your cable box).

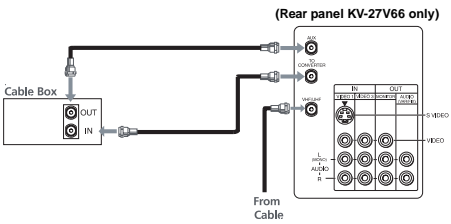
If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature on page 24.

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User Guide

TV, Cable box and Cable
KV-27S66, 27V66 only

For this set up, you can switch between scrambled channels (through your cable box), and normal (CATV) channels by pressing **ANT** on your remote control.

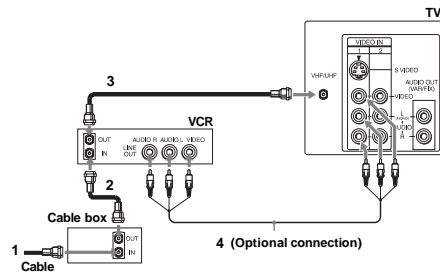


When using PIP the AUX input cannot be viewed in the window picture.

6

Connecting Your TV

TV, VCR, and Cable box



- 1 Connect the coaxial cable from the wall to the IN jack on your cable box.
- 2 Connect a coaxial cable (not supplied) from the OUT jack on your cable box to the IN jack on your VCR.
- 3 Connect a coaxial cable (not supplied) from the OUT jack on your VCR to the VHF/UHF IN jack on the TV.

If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature on page 24.

(Optional connection)

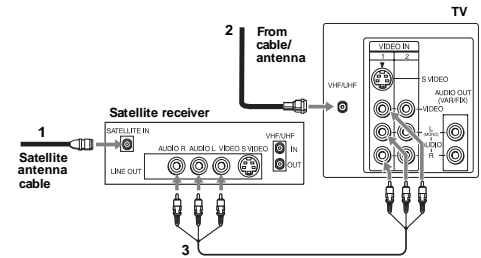
- 4 If your VCR is equipped with video inputs, for better picture quality you should connect A/V cables to AUDIO and VIDEO OUT on your VCR to AUDIO/VIDEO IN on your TV. You can use the **TV/VIDEO** button to switch between the TV and VCR inputs.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, the audio cables must still be connected.

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User Guide

TV and Digital Satellite Receiver



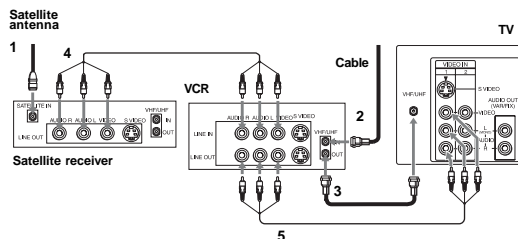
- 1 Connect the cable from your satellite antenna to SATELLITE IN on the satellite receiver.
- 2 Attach the coaxial connector from your cable or antenna to VHF/UHF IN on your TV.
- 3 Using A/V connectors, connect AUDIO and VIDEO OUT on your satellite receiver to AUDIO and VIDEO IN on your TV. You can use the **TV/VIDEO** button to switch between the satellite receiver and the TV.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, your audio connectors must still be connected.

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Connecting Your TV

TV, Digital Satellite Receiver and VCR



- 1 Connect the cable from your satellite antenna to SATELLITE IN on the satellite receiver.
- 2 Attach the coaxial connector from your cable or antenna to VHF/UHF IN on your VCR.
- 3 Using a coaxial cable, connect VHF/UHF OUT on your VCR to VHF/UHF IN on your TV.
- 4 Using A/V connectors, connect AUDIO and VIDEO OUT on your satellite receiver to AUDIO and VIDEO IN on your VCR.
- 5 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.

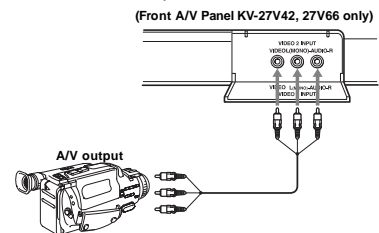
To view from the satellite or VCR, select the video input to which your satellite receiver or VCR is connected by pressing **TV/VIDEO** on the remote control.

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User Guide

Connecting a Camcorder

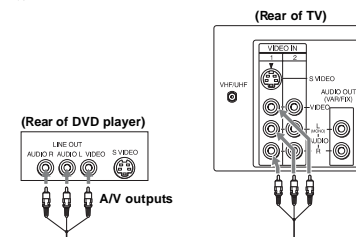
Using A/V cables, connect AUDIO and VIDEO OUT on your camcorder to AUDIO and VIDEO IN on your TV.



Connection can also be made to the rear A/V panel of your TV.

Connecting a DVD Player

Using A/V connectors, connect LINE OUT on your DVD to VIDEO IN on your TV.

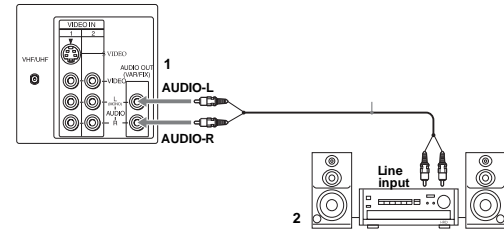


For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S VIDEO does not provide sound, your audio connectors must still be connected.

10

Connecting an audio system

Using audio connectors, connect AUDIO OUT on your TV to one of the unused line inputs (e.g. TV, AUX, TAPE 2) on your stereo.

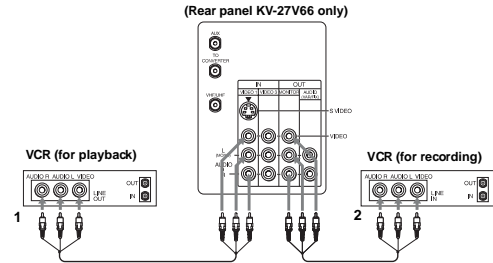


Set your stereo to the chosen line input. (See page 20 for additional audio setup instructions.)

Connecting two VCRs for Tape Editing

KV-27V42, 27V66 only

MONITOR OUT gives you the ability to use a second VCR to record a program being played by the primary VCR to perform tape editing.



- 1 Connect the VCR intended for playback using the setup instructions on page 4 of this manual.
- 2 Using A/V connectors, connect AUDIO and VIDEO IN on your VCR intended for recording to MONITOR AUDIO and VIDEO OUT on your TV.

To perform tape editing; set the TV to the video input intended for playback by pressing **TV/VIDEO** on the remote control.

Troubleshooting

If you are having a problem with your TV, try the suggestions below. If the problem persists, contact your nearest Sony dealer.

Cannot operate single tuner PIP (KV-27S46)	<ul style="list-style-type: none">Make sure the VCR is connected correctly (see page 4).Check to see if the VCR is on.Make sure your remote control is programmed to operate your VCR (see page 31).
No picture, no sound	<ul style="list-style-type: none">Make sure the power cord is plugged in.If a red light is flashing on the front of your TV for more than a few minutes, call your local service center.Check the TV/VIDEO settings: when watching TV, set to TV; when watching video equipment, set to VIDEO (page 19).Make sure the batteries have been inserted correctly into the remote control.Check your PARENTAL CONTROL settings (pages 28-29).Try another channel, it could be station trouble.
Poor or no picture, good sound	<ul style="list-style-type: none">Adjust PICTURE in the VIDEO menu (page 19).Adjust BRIGHTNESS in the VIDEO menu (page 19).Check the antenna and /or cable connections (page 3).
Good picture, no sound	<ul style="list-style-type: none">Press MUTING so that MUTING disappears from the screen (page 13).Check your AUDIO settings. Your TV may be set to SAP (page 21).
No color	<ul style="list-style-type: none">Adjust COLOR in the VIDEO menu (page 19).
Only snow appears on the screen	<ul style="list-style-type: none">Check the CABLE setting in the CHANNEL SET UP menu (page 24).Check the antenna and /or cable connections (page 3).Make sure the channel selected is currently broadcasting.Press the AVT button on the remote control.

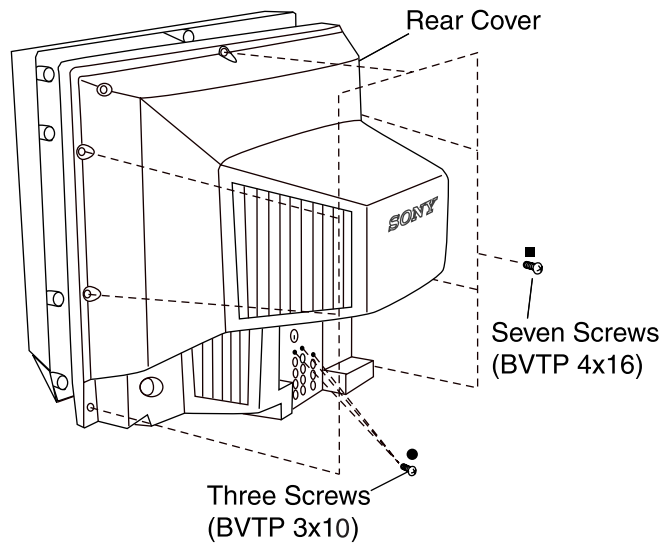
Dotted lines or stripes	<ul style="list-style-type: none">Adjust the antenna.Move the TV away from other electronic equipment. Some electronic equipment can create electrical noise, which can interfere with TV reception.
Double images or ghosts	<ul style="list-style-type: none">Check your outdoor antenna or call your cable service.
Cannot receive higher number channels (UHF) when using an antenna	<ul style="list-style-type: none">Make sure CABLE is set to OFF in the CHANNEL SET UP menu (page 24).Use AUTO PROGRAM to add channels that are not presently in the memory (page 24).
Cable stations don't seem to work	<ul style="list-style-type: none">Make sure CABLE is set to ON in the CHANNEL SET UP menu (page 24).Use AUTO PROGRAM to add channels that are not presently in the memory (page 24).
Remote Control does not operate	<ul style="list-style-type: none">Batteries could be weak. Replace them (page 2).Move the TV 3-4 feet away from fluorescent lights.
The TV needs to be cleaned	<ul style="list-style-type: none">Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.
Lost password for PARENTAL CONTROL	<ul style="list-style-type: none">In the password screen, enter the following master password: 4357. After using the master password, you must create a new password, it cannot be used to unlock currently blocked channels.

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Direct Response Center at 1-800-222-SONY (7669) (U.S. residents only) or (416) 499-SONY (7669) (Canadian residents only).

SECTION 2 DISASSEMBLY

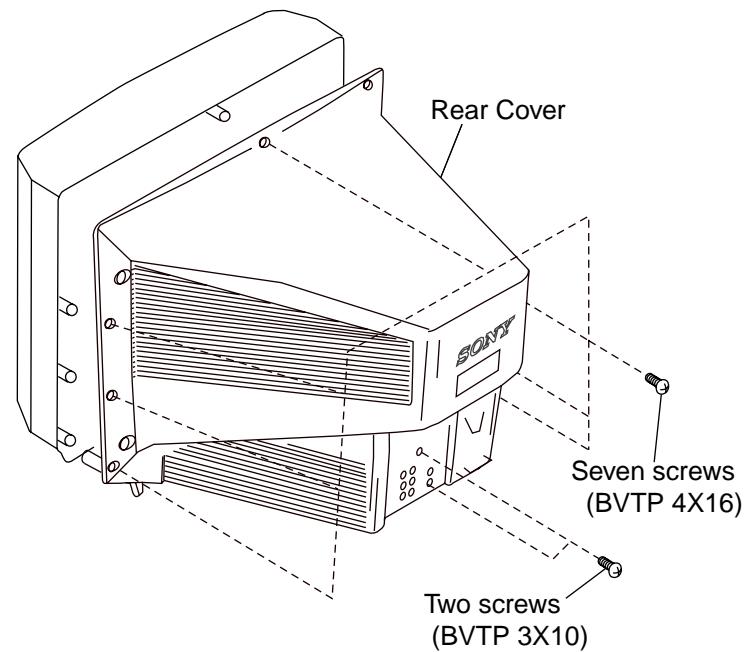
2-1. REAR COVER REMOVAL

(KV-27S46/27S66)



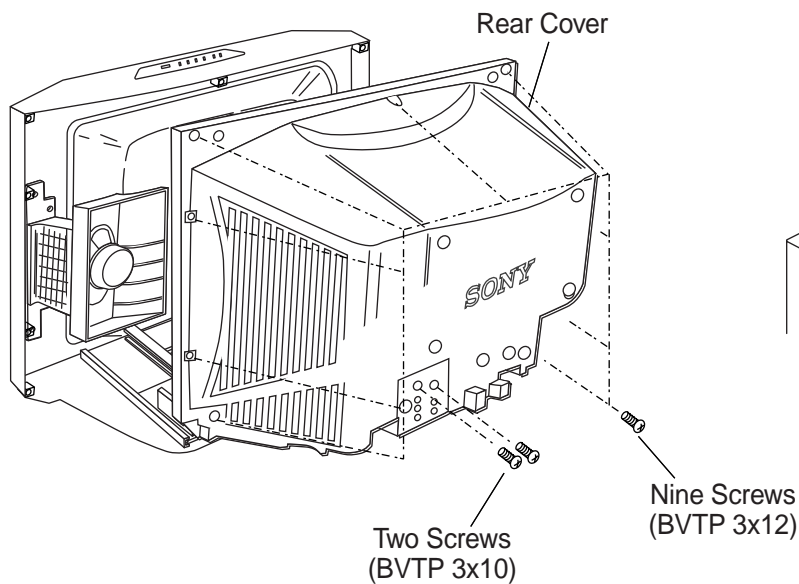
2-2. REAR COVER REMOVAL

(KV-29SL42/29SL42C/29SL46/29XL42M)



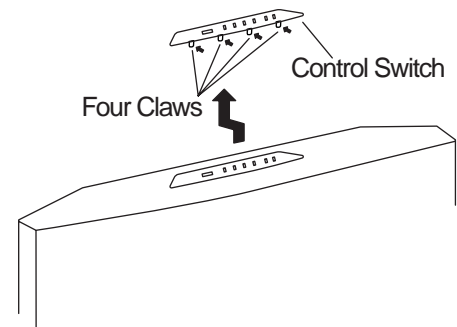
2-3. REAR COVER REMOVAL

(KV-29AL42/29AL42C/29AL66/29AL66C)



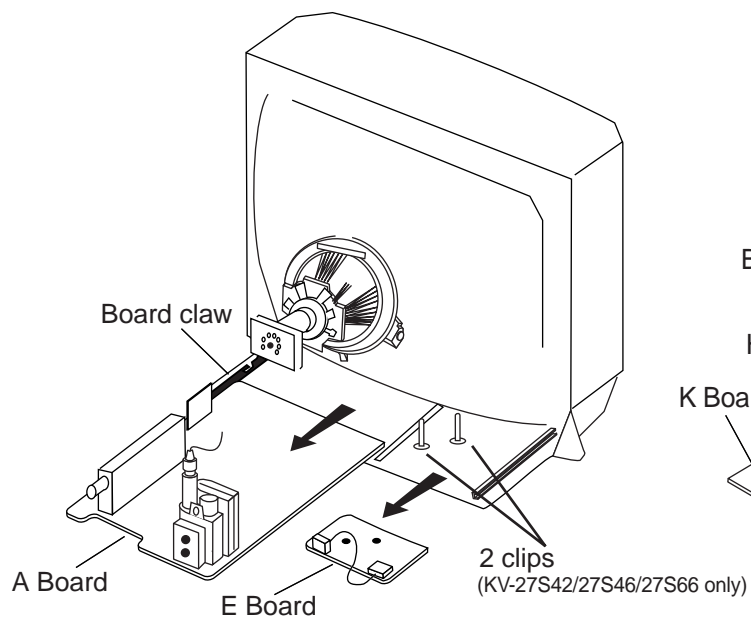
2-4. CONTROL SWITCH REMOVAL

(KV-29AL42/29AL42C/29AL66/29AL66C)



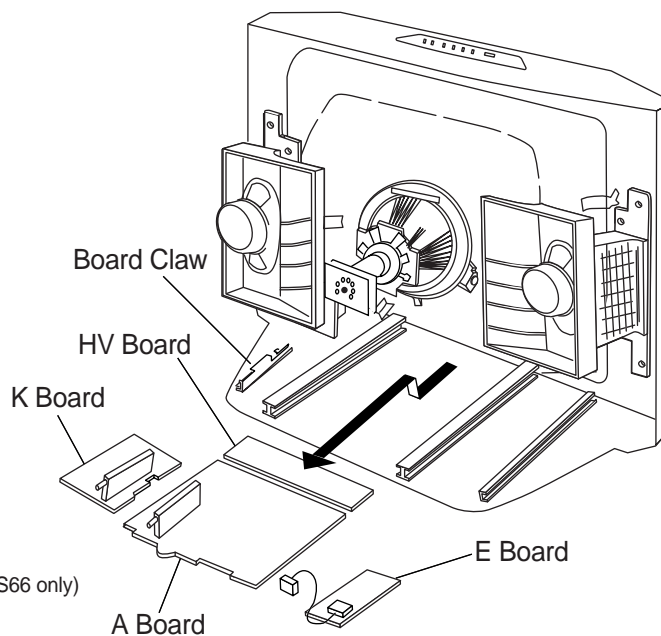
2-5. CHASSIS ASSEMBLY REMOVAL

(KV-27S46/27S66/29SL42/29SL42C/29SL46/29XL42M)

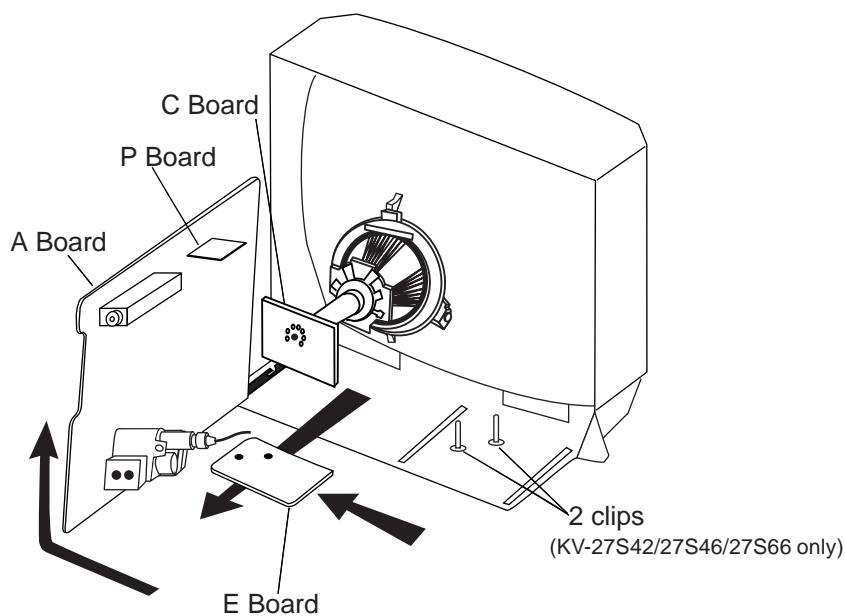


2-6. CHASSIS ASSEMBLY REMOVAL

(KV-29AL42/29AL42C/29AL66/29AL66C)



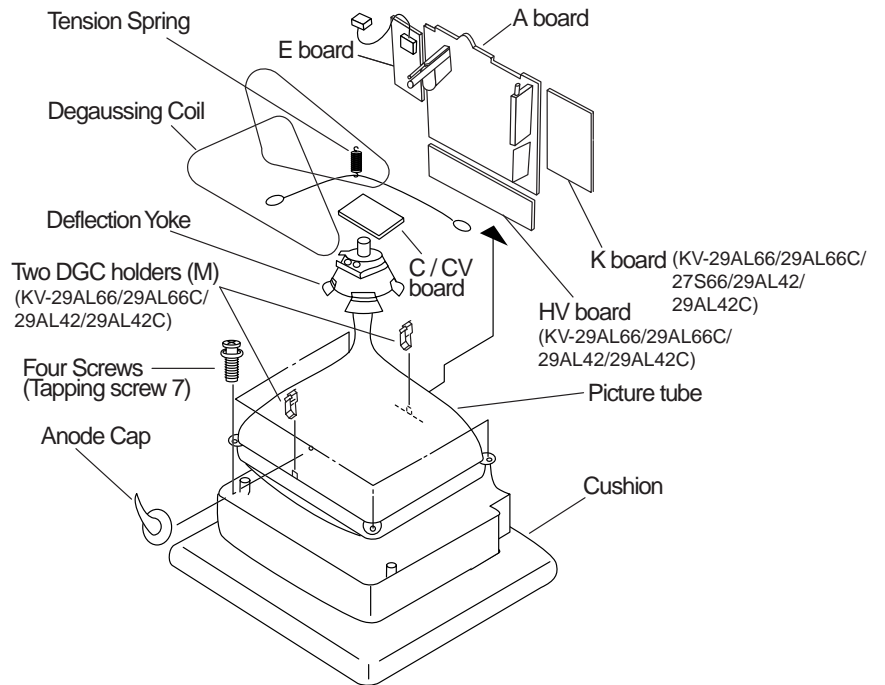
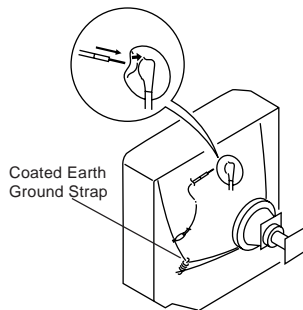
2-7. SERVICE POSITION



2-8. 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.



ANODE CAP REMOVAL

WARNING: High voltage remains in the CRT even after the power is disconnected. To avoid electrical shock, discharge the CRT **before** attempting to remove the anode cap. Short between anode and coated earth ground strap of CRT.

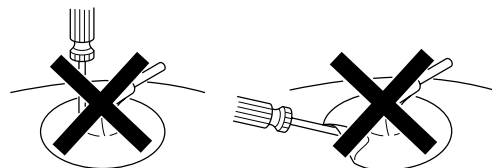
NOTE: After removing the anode, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield, or carbon painted on the CRT.

REMOVAL PROCEDURES

-
-
-
- ① Turn up one side of the rubber cap in the direction indicated by arrow (a).
 - ② Use your thumb to pull the rubber cap firmly in the direction indicated by arrow (b).
 - ③ 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 3 SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or when a new picture tube is installed.

These adjustments should be performed with rated power supply voltage unless otherwise noted.

Set the controls as follows unless otherwise noted.

VIDEO MODE: STANDARD

PICTURE control: Normal

BRIGHTNESS control Normal

Perform the adjustments in order as follows:

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

Note: Test equipment required:

- Color bar pattern generator
- Degausser
- DC power supply
- Digital multimeter

3-1. BEAM LANDING

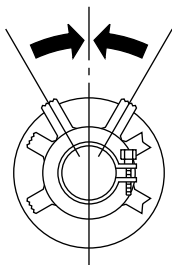
Before beginning adjustment procedure:

1. Degauss the entire screen.
2. Feed in the white pattern signal.

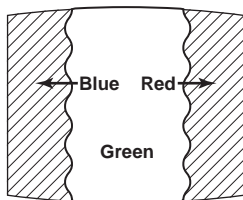
Adjustment Procedure

1. Input a raster signal with the pattern generator.
2. Loosen the deflection yoke mounting screw and set the purity control to the center as shown below.

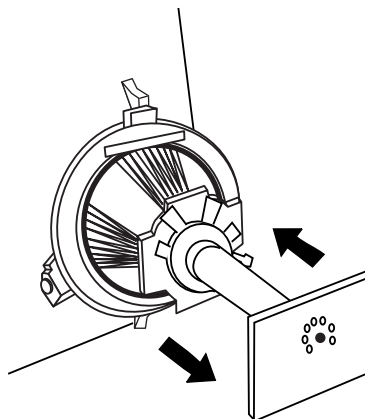
Purity Control



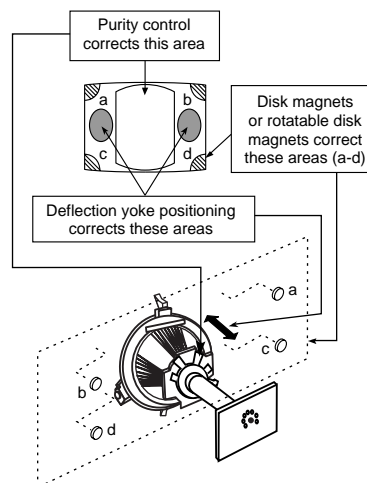
3. Turn the raster signal of the pattern generator to green.
4. Move the deflection yoke backward and adjust the purity control so that green is in the center and red and blue are at the sides evenly.



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. If landing at the corner is not right, adjust by using the disk magnets.



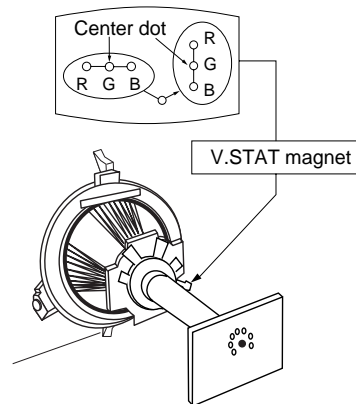
3-2. CONVERGENCE

Before starting convergence adjustments:

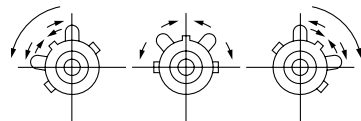
1. Perform FOCUS, V.LIN AND V.SIZE adjustments.
2. Set BRIGHTNESS control to minimum.
3. Feed in dot pattern.

Vertical Static Convergence

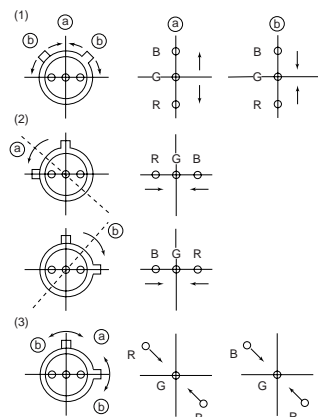
1. Adjust V.STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)



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



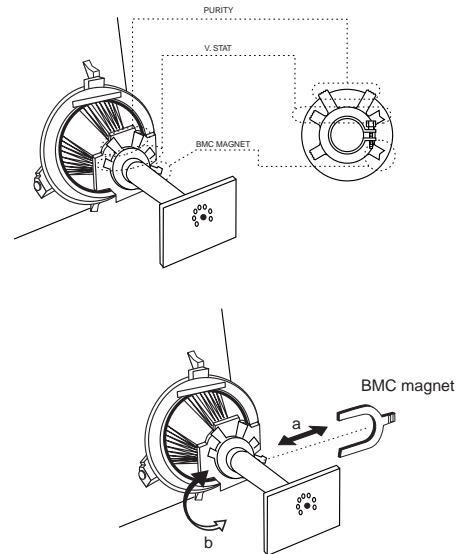
When the V.STAT magnet is moved in the direction of arrows (a) and (b), red, green, and blue dots move as shown below:



Horizontal Static Convergence

If the blue dot does not converge with the red and green dots, perform the following:

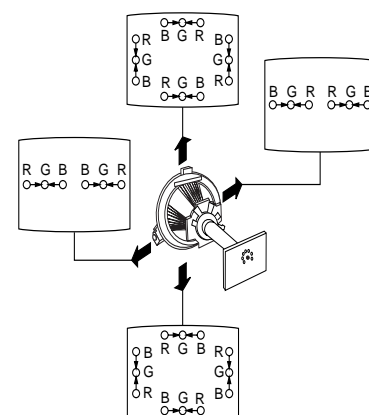
1. Move BMC magnet (a) to correct insufficient H. Static convergence.
2. Rotate BMC magnet (b) to correct insufficient V. Static convergence.
3. After adjusting the BMC magnet, repeat Beam Landing Adjustment.



Dynamic Convergence Adjustment

Before performing this adjustment, perform Horizontal and Vertical Static Convergence Adjustment.

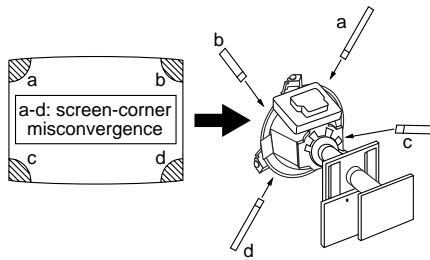
1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence, as shown below:



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

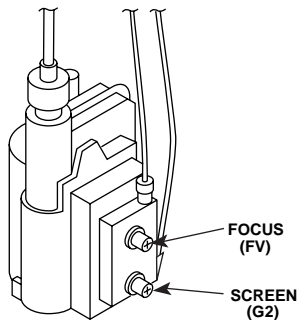
Screen-Corner Convergence

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



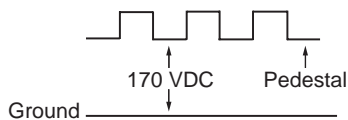
3-3. FOCUS

1. Adjust FOCUS control for best picture.



3-4. SCREEN (G2)

1. Input a dots pattern.
2. Set the PICTURE and BRIGHTNESS controls at minimum and COLOR control at normal.
3. Adjust SBRT, GCUT, BCUT in service mode with an oscilloscope as shown below so that voltages on the red, green, and blue cathodes are 170 VDC.



4. Observe the screen and adjust SCREEN (G2) VR in FBT to obtain the faintly visible background of dot signal.

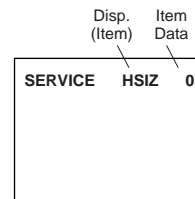
3-5. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

Service Mode Procedure

1. Standby mode (power off).
2. [Display] → Channel [5] → Sound volume [+] → Power on the Remote Commander (press each button within a second).

Service Adjustment Mode In

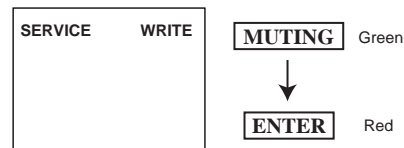
1. The CRT displays the item being adjusted.



2. Press [1] or [4] on the Remote Commander to select the item.
3. Press [3] or [6] on the Remote Commander to change the data.
4. Press [MUTING] then [ENTER] to save into the memory.

Service Adjustment Mode Memory

Turn set off then on to exit service adjustment mode.




3-6. WHITE BALANCE ADJUSTMENTS

1. Input an entire white signal with burst.
2. Set to Service Adjustment Mode.
3. Set DCOL to "0".
4. Set the PICTURE and BRIGHTNESS to minimum.
5. Adjust with SBRT if necessary.
6. Select GCUT and BCUT with [1] and [4] .
7. Adjust with [3] and [6] for the best white balance.
8. Set PICTURE and BRIGHTNESS to maximum.
9. Select GDRV and BDRV with [1] and [4] .
10. Adjust with [3] and [6] for the best white balance.
11. Reset DCOL to "1".
12. To write into memory, press [MUTING] then [ENTER] .

SECTION 4

SAFETY RELATED ADJUSTMENTS

4-1. R584 CONFIRMATION METHOD (HV HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components which are marked with  on the schematic diagram:

DY, C508, C505, C507, C509, C511, C515, C520, C573, C574, C575, D572, D573, D574, IC301, IC521, IC602, L591, L501, R582, R583, R585, R578, R586, R625, R626, T504


Preparation Before Confirmation

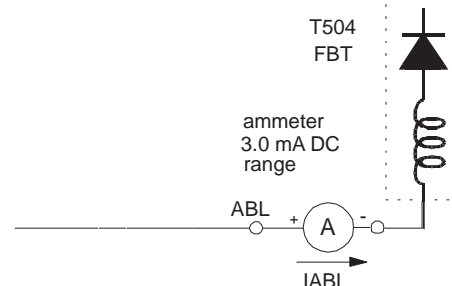
1. Using a Variac, apply AC input voltage: 120 ± 2 VAC (or $120-220 \pm 2$ VAC for KV-29AL42/29AL42C/29AL66/29AL66C/29SL42/29SL42C/29SL46/29XL42M only.)
2. Turn the POWER switch ON.
3. Input a white signal and set the PICTURE and BRIGHTNESS controls to maximum.
4. Confirm that the voltage between C574 (+) or TP503 and ground is more than 105 VDC.

Hold-down Operation Confirmation


1. Connect the current meter between Pin 11 of the FBT (T505) and the PWB land where Pin 11 would normally attach. (See Figure 1 on the next page.)
2. Input a dot signal and set PICTURE and BRIGHTNESS to minimum: $IABL = 100 + 100/-95 \mu A$.
3. Confirm the voltage of A Board TP-600 is 135 ± 3 VDC.
4. Connect the digital voltmeter and the DC power supply via diode 1SS119 to C574 (+) and ground. (See Figure 1 on the next page.)
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: less than or equal to 141.3 VDC).
8. Input a white signal and set PICTURE and BRIGHTNESS to maximum.
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 R584, components marked with .



4-2. B+ VOLTAGE CONFIRMATION AND ADJUSTMENT

Note: The following adjustments should always be performed when replacing the following components, which are marked with  on the schematic diagram on schematic diagram.

IC601, IC602

1. Using a Variac, apply AC input voltage: 130 ± 2 VAC (or $120-220 \pm 2$ for KV-29AL42/29AL42C/29AL66/29AL66C/29SL42/29SL42C/29SL46/29XL42M only.)
2. Input a dot signal.
3. Set the PICTURE and BRIGHTNESS controls to minimum.
4. Set to service adjustment mode.
5. Select PADJ with  and .
6. Adjust with  to the 0 level.
7. Confirm that the voltage of A Board TP-600 is less than 138 VDC.
8. If step 7 is not satisfied, replace the components listed above, then repeat the above steps.
9. Adjust with  and  for: 135 ± 3 VDC
10. Write into the memory by pressing  then .

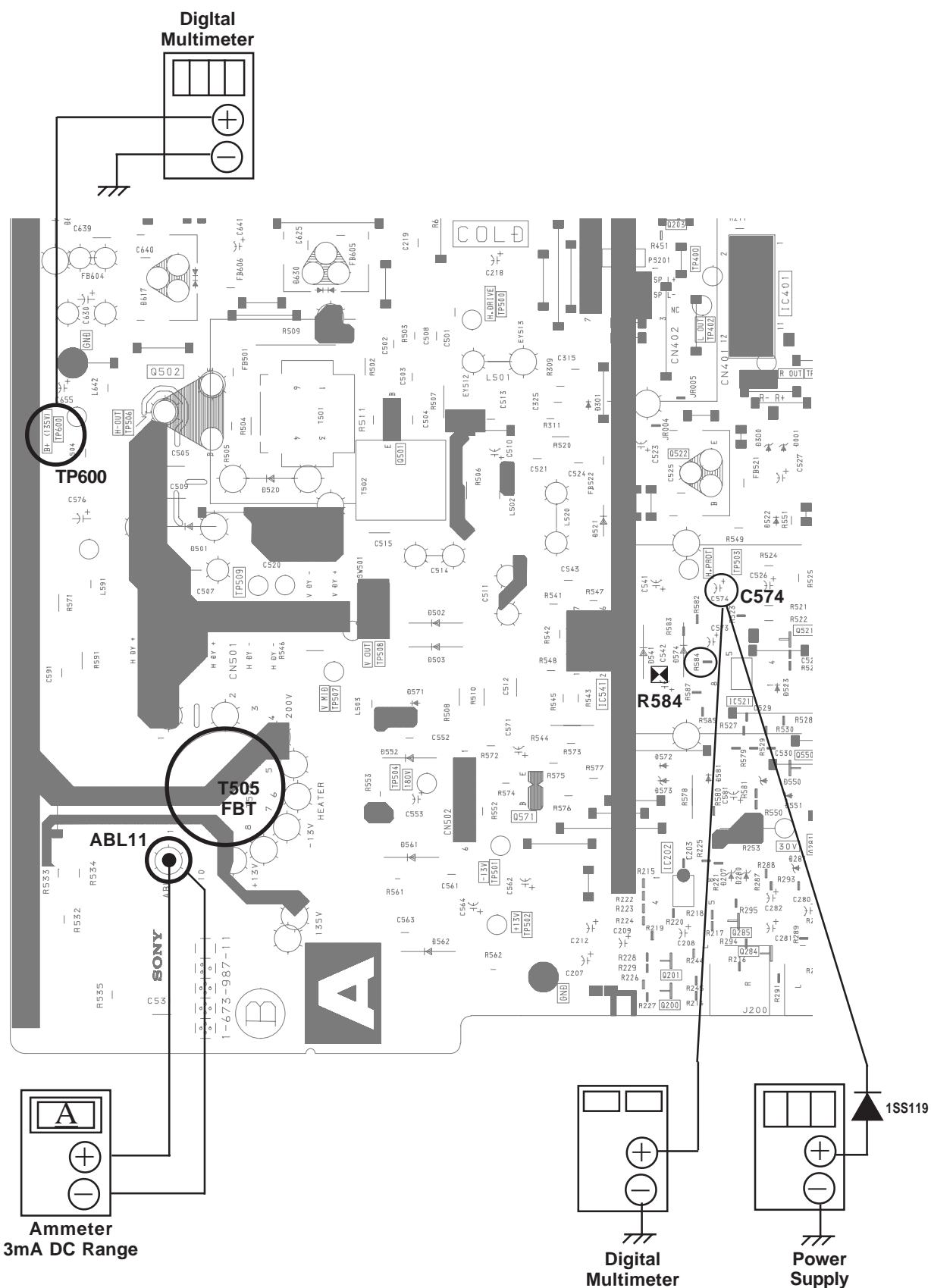


Figure 1

SECTION 5

CIRCUIT ADJUSTMENTS

Use the Remote Commander (RM-Y168) to perform the circuit adjustments in this section.

NOTE: Test Equipment Required:

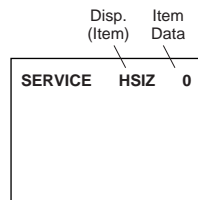
- Pattern generator
- Frequency counter
- Digital multimeter
- Audio oscillator

5-1. Setting the Service Adjustment Mode

- Standby mode (power off).
- Display** → Channel **5** → Sound volume **+** → Power ON
on the Remote Commander (press each button within a second).

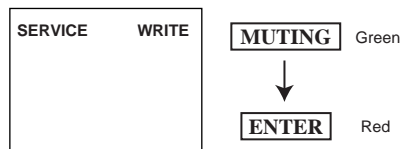
Service Adjustment Mode On

- The CRT displays the item being adjusted.

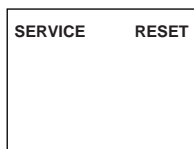


- Press **1** or **4** on the Remote Commander to select an item.
- Press **3** or **6** on the Remote Commander to change the data.
- Press **MUTING** then **ENTER** to save into the memory.

Service Adjustment Mode Memory



- Press **8** then **ENTER** on the Remote Commander to initialize.



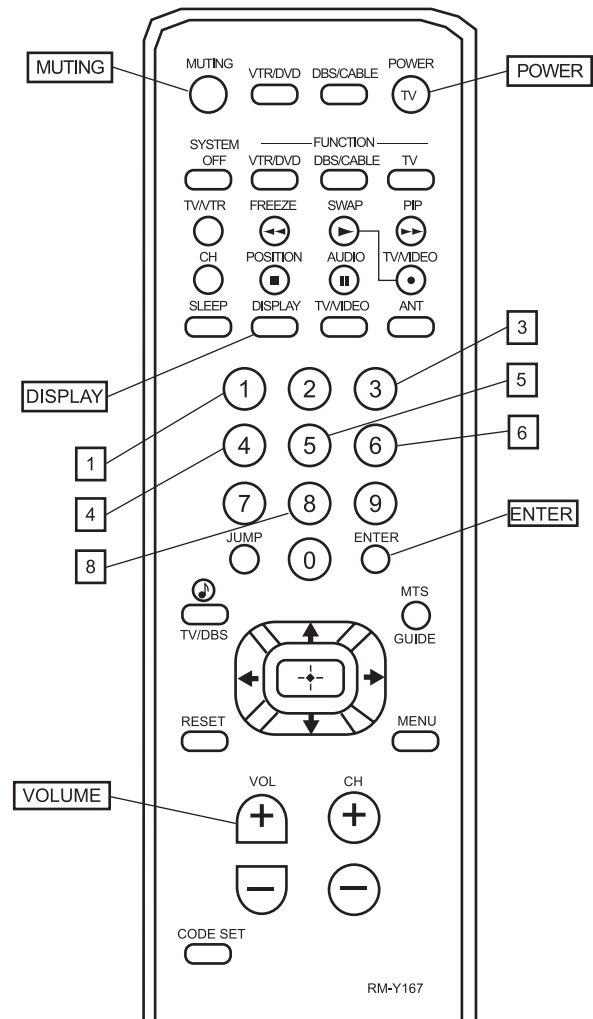
Carry out step 1 when adjusting IDs 0-4 and when replacing and adjusting IC003.

- Turn set off then on to exit service adjustment mode.

5-2. Memory Write Confirmation Method

- After adjustment, remove the power plug from the AC outlet, then plug it in again.
- Turn the power switch ON and set to service mode.
- Call the adjusted items again to confirm they were adjusted.

5-3. Adjust Buttons and Indicators



Adjustment Items

Item	Service Name	Name	Data Range	Initial Value	Average Data
1	HSIZ	A_HSIZE	0-63	31	42
2	HPOS	A_HPOS	0-63	31	22
3	VBOW	A_AFCB	0-15	7	6
4	VANG	A_AFCB	0-15	7	6
5	TRAP	A_TRAP	0-15	7	7
6	PAMP	A_PAMP	0-63	31	16
7	CPIN	A_CPIN	0-63	31	34
8	VSIZ	A_VSIZ	0-63	31	33
9	VPOS	A_VPOS	0-63	31	38
10	VLIN	A_SCOR	0-15	7	6
11	SCOR	A_SCOR	0-15	7	7
12	VZOM	A_SCROLL	0-1	0	0
13	EHT	A_TRAP	0-15	7	4
14	ASP	A_ASPECT	0-63	63	48
15	SCRL	A_SCROLL	0-63	31	31
16	HBLK	A_ASPECT	0-1	0	1
17	LBLK	A_HBLK	0-15	7	15
18	RBLK	A_HBLK	0-15	7	3
19	VUSN	A_ASPECT	0-1	0	0
20	HDW	A_PON	0-1	0	0
21	EWDC	A_HSIZE	0-1	0	0
22	LVLN	A_VLIN	0-15	0	0
23	UVLN	A_VLIN	0-15	0	0
24	RDRV	A_RDRIVE	0-63	31	14
25	GDRV	A_GDRIVE	0-63	31	10
26	BDRV	A_BDRIVE	0-63	31	8
27	RCUT	A_RCUT	0-15	7	8
28	GCUT	A_GCUT	0-15	7	4
29	BCUT	A_GCUT	0-15	7	5
30	DCOL	A_GDRIVE	0-1	0	1
31	SHUE	A1_SUBHUE	0-31	14	9
32	SCOL	A1_SUBCOL	0-31	14	23
33	SBRT	A1_SUBBRT	0-31	14	10
34	RON	A_VIDSEL	0-1	0	1
35	GON	A_VIDSEL	0-1	0	1
36	BON	A_VIDSEL	0-1	0	1
37	AXPL	A_PON	0-1	0	0
38	AXNT	A_SHPF0	0-1	0	0
39	CBPF	A_XTAL	0-1	0	1
40	CTRP	A_XTAL	0-1	0	1
41	COFF	A_COFF	0-1	0	0
42	KOFF	A_COFF	0-1	0	0
43	SSHP	A1_SUBSHP	0-15	8	6
44	SHPF	A_SHPF0	0-1	0 / 0 *2	1
45	PREL	A_DCTAN	0-1	0	1
46	Y-DC	A_DCTAN	0-1	0	1
47	GAMM	A_BDRIVE	0-3	0	0
48	ABLM	A_RDRIVE	0-1	1	1
49	VTH	A_RDRIVE	0-1	0	1
50	YDEL	A_HOSC	0-15	7	7
51	NCOL	A_PIC	0-1	0	1
52	FSC	A_PIC	0-1	0	1
53	K-ID	A_KID	0-1	0	0
54	HOSC	A_HOSC	0-15	7	7
55	VSS	A_FFREQ	0-1	0	0
56	HSS	A_FFREQ	0-1	0	0
57	HMSK	A_VSIZ	0-1	0	1
58	VTMS	A_TVOFF	0-3	0	0
59	CDMD	A_FFREQ	0-3	0 / 1 *2	0
60	AFC	A_VPOS	0-3	0 / 0 *2	0
61	FIFR	A_FFREQ	0-3	0	3

	Service Name	Name	Data Range	Initial Value	Average Data
62	SBAS		0-15	7	8
63	STRE		0-15	7	9
64	SBAL	A1_SUBBAL	0-31	14	13
65	DISP	A_OSDPOS	0-127	0	11
66	PADJ	A_PADJ	0-63	3	51
67	HCHM	A6_HCHM	0-255	69	69
68	HCLM	A6_HCLM	0-255	16	16
69	HCHS		0-255	69	69
70	HCLS		0-255	16	16
71	PFRN		0-1	0	0
72	PRVS		0-1	0	0
73	PCON		0-127	32	70
74	PUCO		0-127	75	63
75	PVCO		0-127	40	63
76	PHUE		0-31	15	15
77	PKIL		0-1	0	0
78	PSEP		0-3	2	2
79	PDCO		0-3	0	0
80	PEXP		0-3	2	2
81	PBGS		0-63	14	14
82	PYDL		0-15	3	7
83	PBRT		0-31	0	25
84	PVPE		0-16	0	0
85	PUPE		0-16	0	0
86	PACS		0-1	0	1
87	PSDL		0-3	0	0
88	PMVP		0-3	0	0
89	PCGA		0-1	0	1
90	PBIT		0-1	0	0
91	PAFC		0-1	0	0
92	PACC		0-63	21	20
93	PBUR		0-1	0	0
94	PEVE		0-1	0	0
95	PINW		0-1	0	0
96	PINR		0-1	0	0
97	PREF		0-1	0	0
98	PARE		0-1	1	1
99	PAVE		0-1	0	0
100	PFRA		0-15	0	0
101	PPAL		0-255	0	0
102	PHPO		0-31	31	2
103	PVPO		0-31	21	22
104	PHTI		0-15	10	10
105	PHAJ		0-15	2	2
106	PBGY		0-15	0	0
107	PCRO		0-1	0	0
108	PPAR		0-63	2	2
109	PHPF		0-1	0	1
110	PVCH		0-1	0	0
111	PVON		0-1	0	1
112	PVLN		0-31	17	17
113	PVSB		0-255	64	64
114	PVLV		0-255	130	130
115	ID0	A_NVMI0	0-255	23	See ID map
116	ID1	A_NVMI1	0-255	3	See ID map
117	ID2	A_NVMI2	0-255	11	See ID map
118	ID3	A_NVMI3	0-255	1	See ID map
119	ID4	A_NVMI4	0-255	23	See ID map
120	ID5	A_NVMI5	0-255	0	See ID map
121	ID6	A6_NVMI6	0-255	0	See ID map
122	ID7	A6_NVMI7	0-255	64	See ID map

*2: TV/VIDEO

SERVICE ID0 25

Notes:

Item numbers 1-122 show the sequence of adjustments that may be selected while in service mode.

Data Range indicates the range of possible settings for each adjustment mode.

Initial Data indicates the standard settings for each adjustment mode.

Feature ID Map

	KV-	Destination	ID-0	ID-1	ID-2	ID-3	ID-4	ID-5	ID-6	ID-7
1	27S42	US	25	145	15	235	11	3	0	64
2	27S42	CND	89	145	15	135	11	3	0	64
3	27S46	US	25	155	15	235	11	3	1	64
4	27S66	US	25	155	79	235	11	3	7	64
5	27S66	CND	89	155	79	155	11	3	7	64
6	29AL42	E	17	147	173	203	123	3	0	64
7	29AL42C	E	17	147	173	203	123	3	0	64
8	29AL66	E	17	151	237	203	123	3	7	64
9	29AL66C	E	17	151	237	203	123	3	7	64
10	29SL42	E	17	145	143	203	123	3	0	64
11	29SL42C	E	17	145	143	203	123	3	0	64
12	29SL46	E	17	155	143	203	123	3	1	64
13	29XL42M	MX	17	145	143	203	123	3	0	64

5-4. A BOARD ADJUSTMENTS

H. Frequency (Free Run) Check

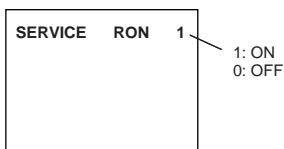
1. Input a TV mode (RF) with no signal.
2. Connect a frequency counter to base of Q501 (TP-500 H. DRIVE).
3. Check H. Frequency for 15735 ± 200 Hz.

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 on the A board to TP-508 (V OUT) or CN 501 pin ⑥ (V DY+) and ground.
4. Check that V. Frequency shows 60 ± 4 Hz.

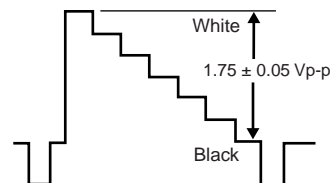
Sub Contrast Adjustment (RDRV)

1. Input a color-bar signal and set the level to 75%.
2. In Standard mode, set PICTURE to maximum, COLOR to minimum, and BRIGHTNESS to center.
3. Activate the Service Adjustment Mode.
4. Set both 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)

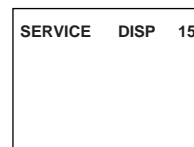
5. Select the item DCOL item and set it to 0.
6. Connect an oscilloscope probe to CN301 pin ⑤ (RED OUT).
7. Select RDRV with [1] and [4] .
8. Adjust the value of RDRV with [3] and [6] for 1.75 ± 0.05 Vp-p.



9. Reset the item DCOL to 1.
10. Reset GON and BON values to 1.
R ON: ON (1)
G ON: ON (1)
B ON: ON (1)
11. Reset Picture, Color, and Bright to normal values:
PICTURE: MAX
COLOR: CENTER
BRIGHT: CENTER
12. 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.

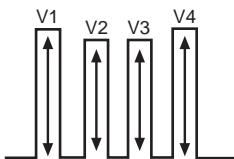


Sub Bright Adjustment (SBRT)

1. Input a crosshatch 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)

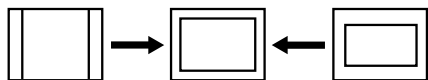
1. Input a color-bar signal.
2. Activate the Service Adjustment Mode.
3. Select the DCOL item and set the value to 0.
4. Connect an oscilloscope probe to CN301
Pin ⑦ (BLUE OUT).
5. Select the SHUE and SCOL item with [1] and [4] .
6. While showing the SHUE item, adjust the waveform with [3] and [6] until the second and third bars show the same level ($V2 = V3 \pm 0.15 V_{p-p}$).
7. While showing the SCOL item, adjust the waveform with [3] and [6] until the first and fourth bars show the same level ($V1 = V4 \pm 0.15 V_{p-p}$).



8. Select the DCOL item and reset to 1.
9. Press [MUTING] then [ENTER] to save into the memory.

V. Size Adjustment (VSIZ)

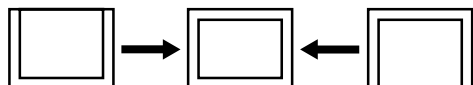
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VSIZ item with [1] and [4] .
4. Adjust value of VPOS with [3] and [6] for the best vertical center.
5. Press [MUTING] then [ENTER] to save into the memory.



V. Center Adjustment (VPOS)

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

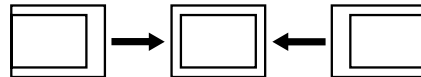
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VPOS item with [1] and [4] .
4. Adjust value of VPOS with [3] and [6] for the best vertical center.
5. Press [MUTING] then [ENTER] to save into the memory.



H. Center Adjustment (HPOS)

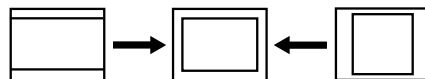
Perform this adjustment after performing H. Frequency (Free Run) check.

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.



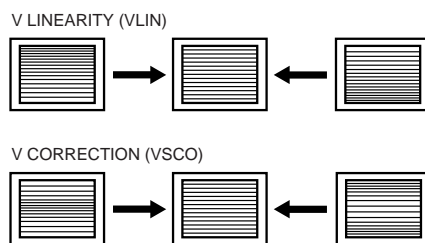
H.Size Adjustment (HSIZ)

1. Input a cross hatch 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 (VSCO)

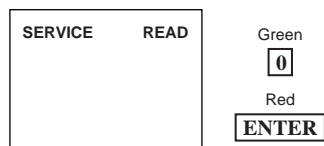
1. Input a crosshatch signal.
2. V. Correction is automatically adjusted from the circuit and should satisfy the conditions below:



Service Adjustment Mode Memory

1. Change the value of the DCOL item to 1.
2. After completing all adjustments, press [0] then [ENTER] .

Read From Memory

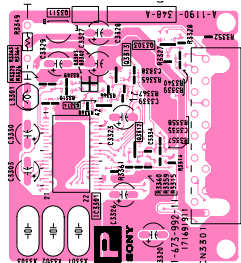


9

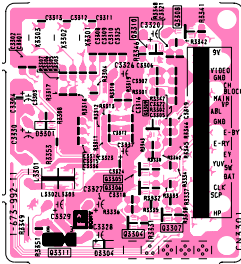
107

IKV-27 S4629AL4279AL42C/29AL66/29AL66C ONLY

COMPONENT SIDE



CONDUCTOR SIDE



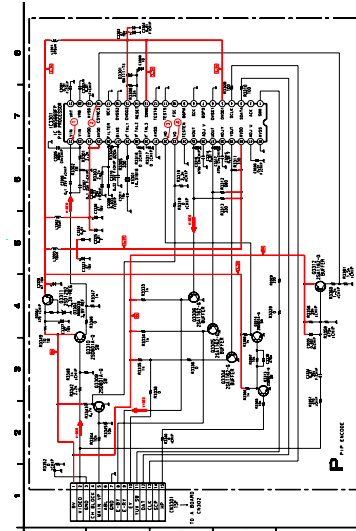
BOARD WAVEFORMS



P BOARD TRANSISTOR

	B	C	E
Q3304	2.3	GND	2.9
Q3305	3.0	GND	3.7
Q3306	3.0	GND	3.7
Q3307	0.7	0.0	GND
Q3310	0.3	8.9	1.8
Q3311	3.9	7.4	3.3
Q3312	6.2	0.1	8.9
Q3313	0.2	3.3	GND
Q3314	3.1	0.6	GND

BOARD SCHEMATIC DIAGRAM



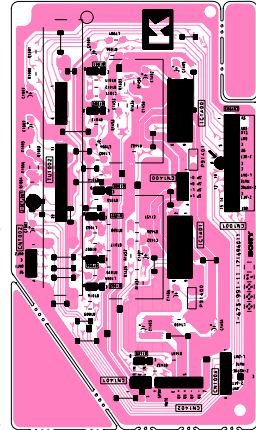
- 15 -

-36-

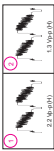
K

SECOND TIMER AUDIO AMPT

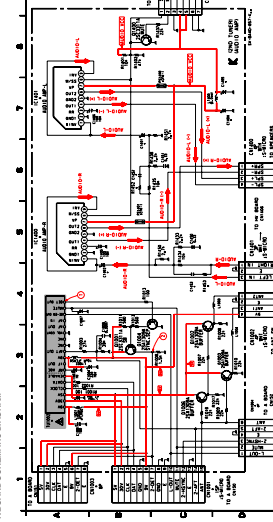
(KV-27S66/29AL4 2/29AL42C/29AL66/29AL66C ONLY)



KEYBOARD WAVEFORMS



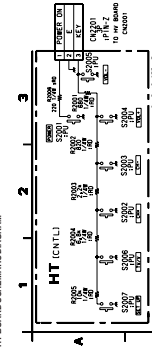
KEYBOARD SCHEMATIC DIAGRAM



K BOARD TRANSISTOR

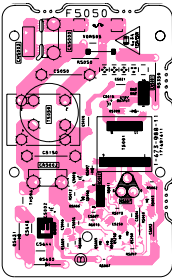
VOLTAGE LIST				
	B	C	E	
Q1001	7.0	8.9	6.4	
Q1002	5.1	0.0	5.1	
Q1003	4.4	5.0	5.1	
Q1004	4.5	QND	5.2	
Q1006	4.5	5.1	5.1	
Q1400	0.7	0.0	QND	

HT BOARD SCHEMATIC DIAGRAM



— 28 —

-37-

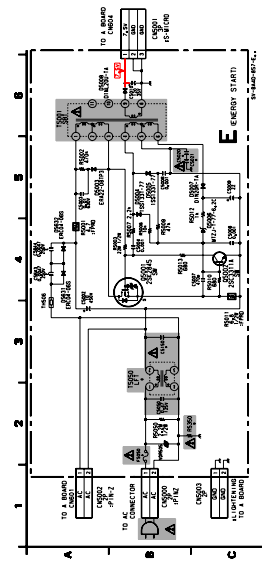


E BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q5002	0.4	1.5	0.0

	G	S	D
Q5001	1.5	0.1	157.6

All voltages are in V

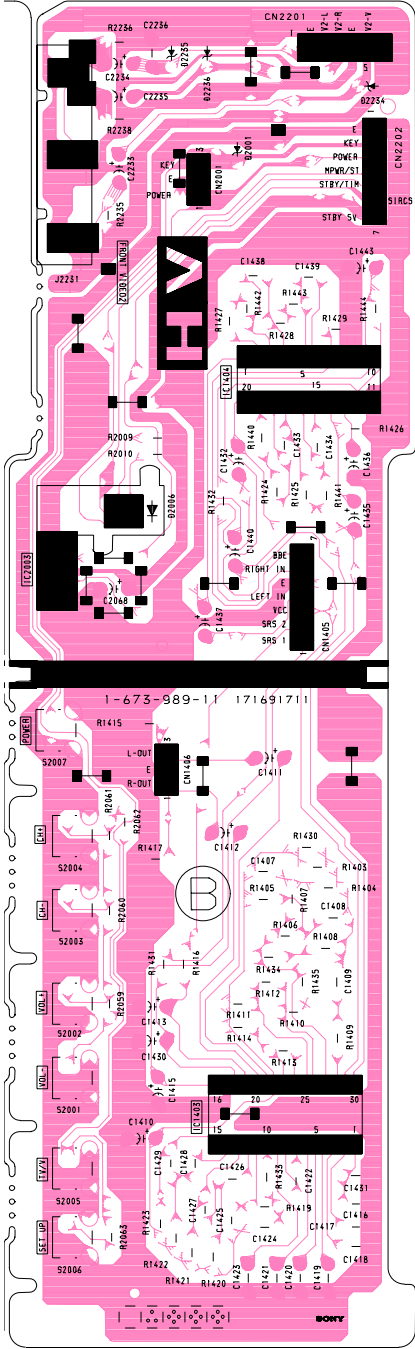


KV-27S42/27S46/27S66/29AL42/29AL42C/29AL66/29AL66C/
29SL42/29SL42C/29SL46/29XL42M

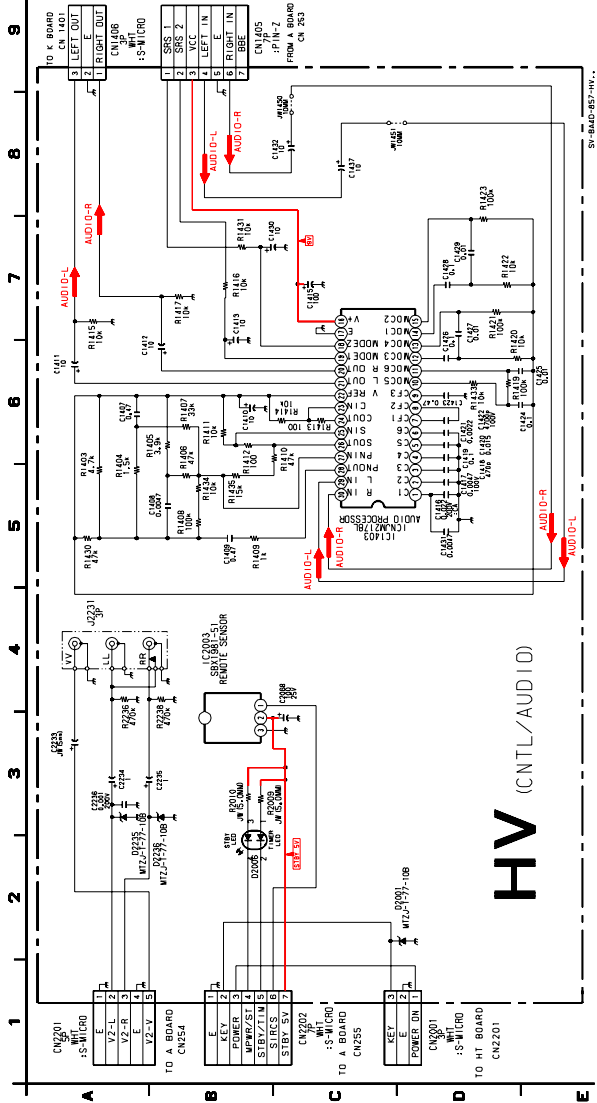
HV

[CNTL/AUDIO]

(KV-29AL42/29AL42C/29AL66/29AL66C ONLY)



HV BOARD SCHEMATIC DIAGRAM



C BOARD IC VOLTAGE LIST

IC1403	19	0.0
pin	volt	
1	4.5	21 4.5
2	4.5	22 4.5
3	4.5	23 4.5
4	4.5	24 4.5
5	4.5	25 4.5
6	4.5	26 4.5
7	4.5	27 4.5
8	4.5	28 4.5
9	4.5	29 4.5
10	4.5	30 4.5
11	4.5	IC2003
12	4.4	pin
13	4.4	1 3.9
14	4.4	2 5.0
15	4.5	3 GND
16	8.9	
17	GND	
18	0.0	

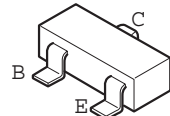
All voltages are in V

Schematic Diagrams

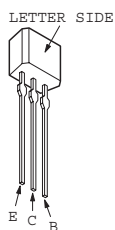
← CV C E boards → HV board →

6.4 SEMICONDUCTORS

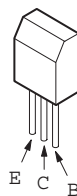
2SA1162-G
2SD601A-Q



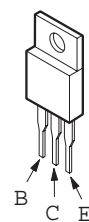
2SD2144S
2SA1175-HFE
2SC2785-HFE
2SA933AS-QT



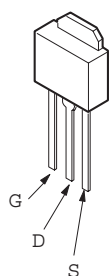
2SC3209LK
2SD1312-K



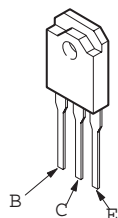
2SC4159-E



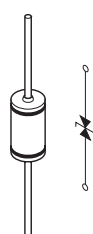
2SK2845-LB102



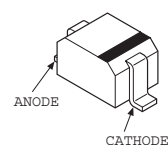
2SC5426-01



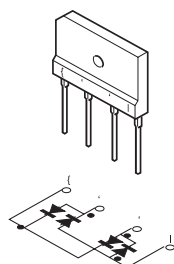
RD9.1EW



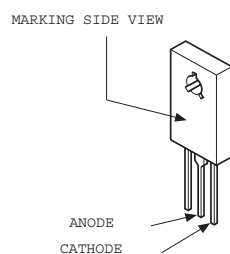
MA111-TX



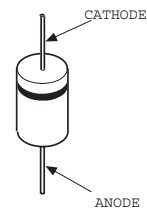
D4SB60L-F



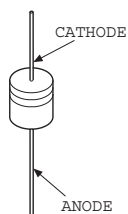
D5LC20U



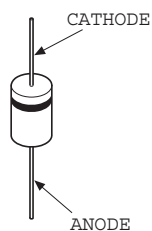
RU4AM-T3



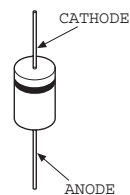
D1N20R
MTZJ-33
MTZJ-30D
MTZJ-5.1C
RD3.3ESB2
RD5.6ESB2
RD8.23SB2
RD10ESB2



U05G
MTZJ-T-77-2.2A
ERA22-08
LNK0120022G
1SS133T-77
ERC06-15S
MDV04-600
RU-1P



D1NL20-U
EGP20G
EL1Z
1SS83
RGP02-17EL
GP08D



SECTION 6 EXPLODED VIEWS

• Items with no part number and no 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 remarks column.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Note:

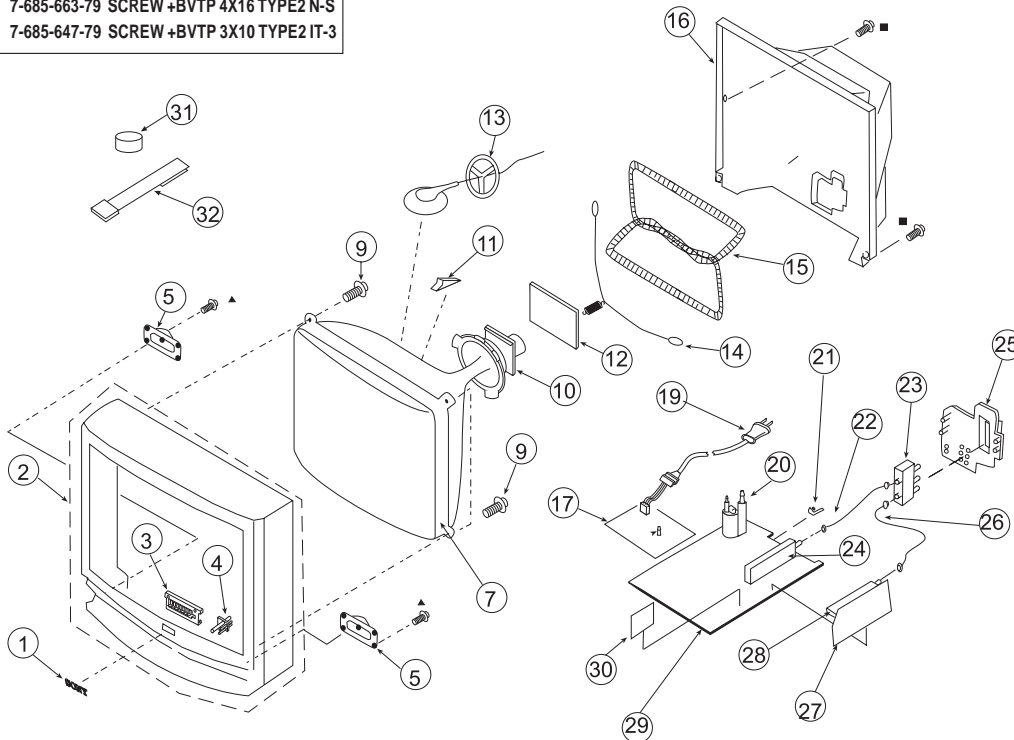
The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

Note:

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CHASSIS (KV-27S66)

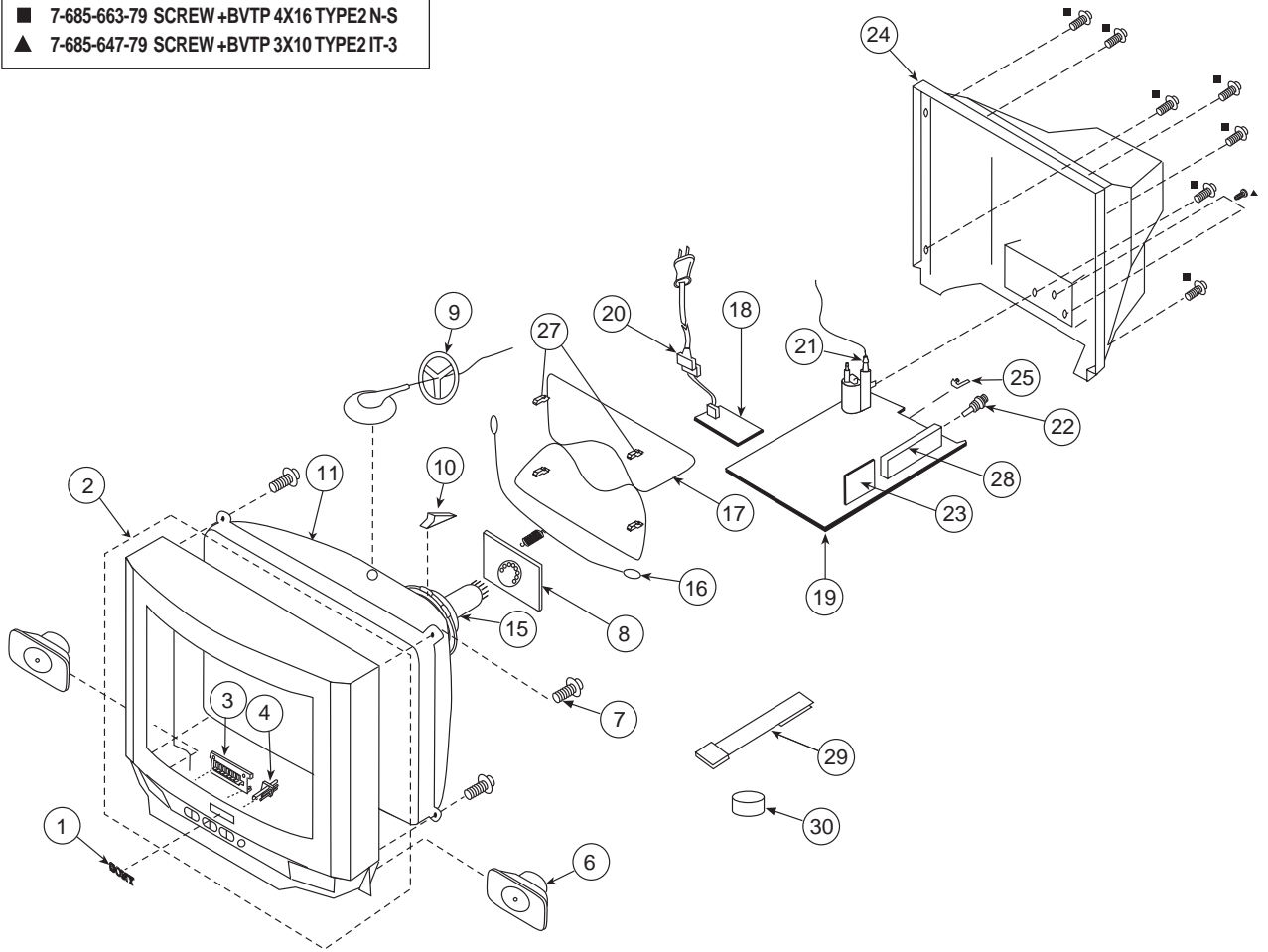
- 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
- ▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-046-160-11	EMBLEM (NO.9), SONY	3,4	19	1-790-130-21	CORD, AC	
2	X-4035-817-1	BEZNET ASSY		20	1-453-268-21	FBT ASSY, NX-4005//X4J4	
3	4-063-573-01	MULTI BUTTON		21	4-064-646-01	CHASSIS, CLIP	
4	4-063-570-01	GUIDE, LED		22	1-557-056-31	CABLE, P-P	
5	1-504-531-11	SPEAKER (13.1X6.2CM)		23	8-598-414-00	ANTENNA SWITCH	
7	\triangle 8-733-874-05	CRT 29NX		24	\triangle 8-598-431-00	TUNER, FSS BTF-WA411	
9	4-041-268-01	SCREW (7), TAPPING		25	4-064-176-01	BRACKET ANTENNA	
10	\triangle 8-451-846-21	DYY29NXA-V2		26	1-783-800-11	CABLE, PIN	
11	4-053-005-01	SPACER, DY		27	* A-1380-611-A	K (VAR) MOUNTED PC BOARD	
12	* A-1331-920-A	C MOUNTED PC BOARD		28	\triangle 8-598-430-00	TUNER, FSS BTF-FA401	
13	3-704-372-31	HOLDER, HV CABLE		29	* A-1298-902-A	A COMPLETE PC BOARD	
14	4-036-329-01	SPRING (B), TENSION		30	* A-1195-154-A	P COMPLETE PC BOARD	
15	\triangle 1-416-588-1	COIL, DEMAGNETIC		31	1-452-032-00	MAGNET, DISC	
16	4-063-572-21	COVER, REAR		32	4-062-047-01	PIECE A(110), CONV CORRECT	
17	* A-1343-654-A	E (VAR) MOUNTED PC BOARD					

7-2. CHASSIS (KV-27S46/27S42/29SL42/29SL42C/29SL46/29XL42M)

- 7-685-663-79 SCREW +BVTP 4X16 TYPE2N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2IT-3

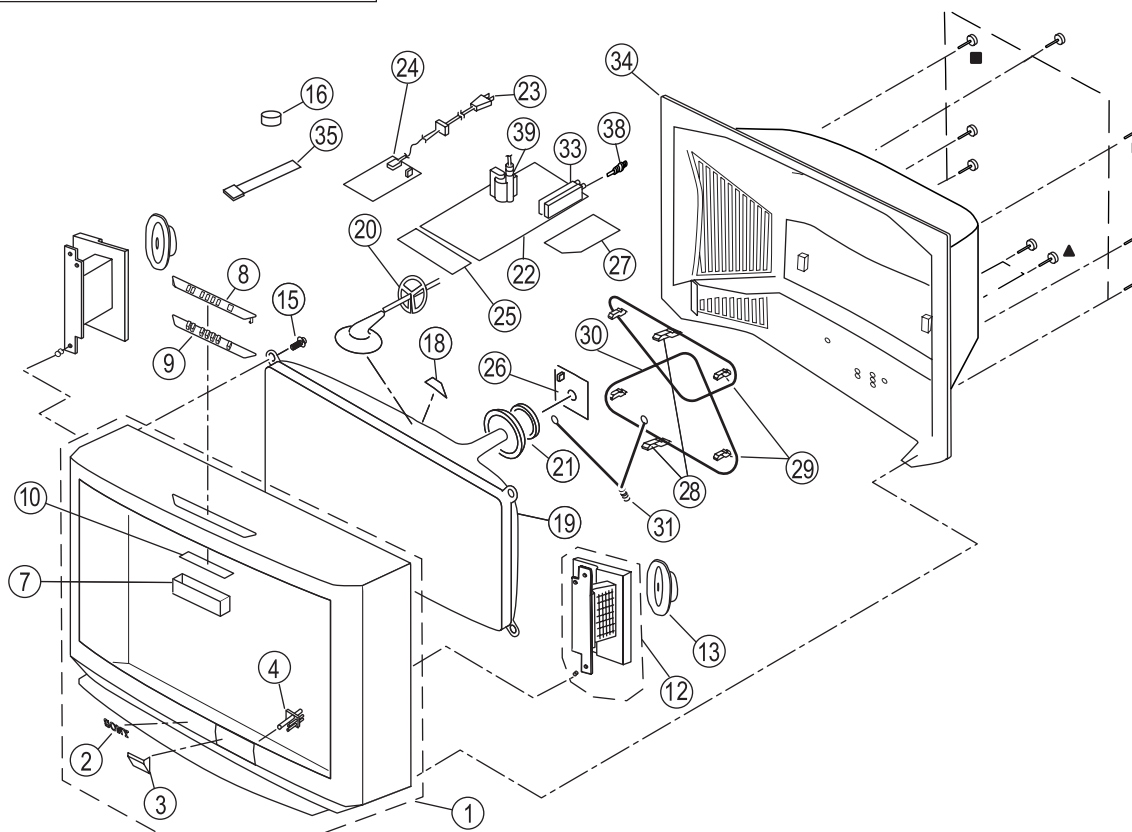


REF.NO.	PART.NO.	DESCRIPTION	REMARK
1	4-046-160-11	EMBLEM (NO.9), SONY	
2	X-4035-816-1	BEZNET ASSY (KV-27S46/29SL46)	3-4
2	X-4035-818-1	BEZNET ASSY (KV-29XL42M)	3-4
2	X-4035-815-1	BEZNET ASSY (KV-27S42/29SL42/42C)	3-4
3	4-063-573-01	MULTIBUTTON	
4	4-063-570-01	GUIDE, LED	
6	1-504-531011	SPEAKER (13.1 x 6.2CM)	
7	4-041-268-01	SCREW (7), TAPPING	
8 *	A-1331-920-A	C MOUNTED PC BOARD	
9	3-704-372-31	HOLDER, HV CABLE	
10	4-053-005-01	SPACER, DY	
11 ▲	8-733-873-05	CRT 29NX (EXCEPT KV-29SL42C)	
11 ▲	8-733-874-05	CRT 29NX (KV-29SL42C only)	
15 ▲	8-451-846-21	DYY29NXA-V2	
16	4-036-329-01	SPRING (B), TENSION	
17 ▲	1-416-952-11	COIL, DEGAUSSING (KV-29SL42/29XL42M/29SL42C/29SL46)	
17 ▲	1-416-588-11	COIL, DEMAGNETIC (KV-27S42/27S46)	
18 *	A-1343-656-A	E (VAR) MOUNTED PC BOARD (KV-29SL42/29XL42M/29SL46)	

REF.NO.	PART.NO.	DESCRIPTION	REMARK
18 *	A-1343-654-A	E (VAR) MOUNTED PC BOARD (KV-27S42/27S46)	
19 *	A-1298-900-A	A COMPLETE PC BOARD (KV-27S46)	
19 *	A-1298-904-A	A COMPLETE PC BOARD (KV-29XL42M/29SL42/29SL42C)	
19 *	A-1298-911-A	A COMPLETE PC BOARD (KV-29SL46)	
19 *	A-1298-840-A	A COMPLETE PC BOARD (KV-27S42)	
20 ▲	1-790-130-21	CORD, AC (KV-27S42/27S46)	
20 ▲	1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42/29XL42M/29SL46)	
20 ▲	1-769-796-31	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29SL42C)	
21 ▲	1-453-268-21	FBT ASSY NX-4005//X4J4	
22	1-766-374-11	PLUG, F-PIN	
23 *	A-1195-154-A	P COMPLETE PC BOARD (KV-27S46/29SL46)	
24	4-063-572-02	COVER, REAR	
25	4-064-646-01	CHASSIS, CLIP	
27	4-040-388-01	HOLDER (S), DGC (EXCEPT KV-29SL46)	
28 ▲	8-598-431-00	TUNER, FSS BTF-WA411	
29	4-062-047-01	PIECE A(110), CONV CORRECT	
30	1-452-032-00	MAGNET, DISC	

7-3. CHASSIS (KV-29AL42/29AL42C)

- 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3

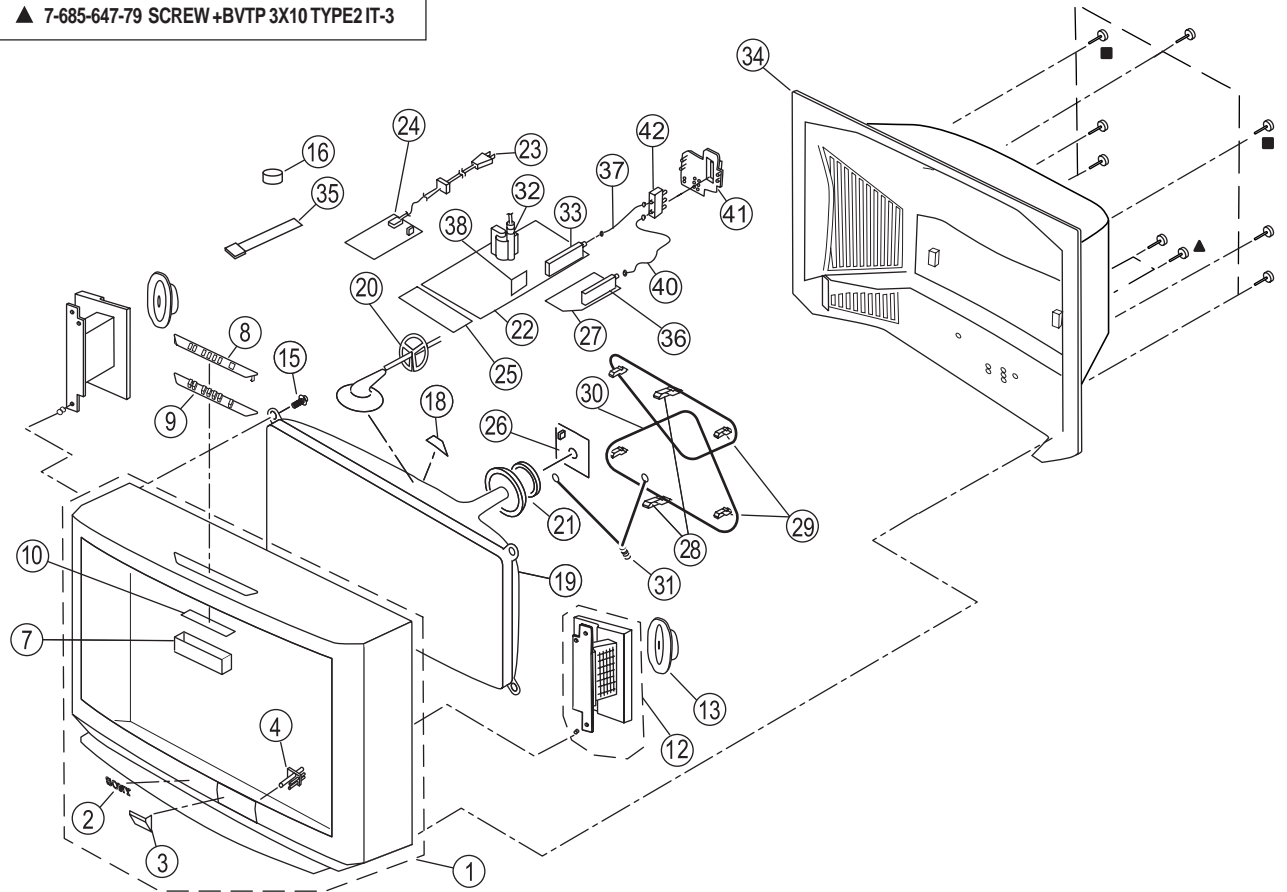


REF NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-965-1	BEZNET ASSY	2-4
2	4-046-160-01	EMBLEM (NO.9), SONY	
3	4-064-768-01	DOOR	
4	4-064-767-01	GUIDE, LED	
7	4-064-764-01	BRACKET, TOP CONTROL	
8	4-064-763-01	PANEL, TOP CONTROL	
9	4-064-765-01	BUTTON, TOP CONTROL	
10 *	1-1372-616-A	HT MOUNTED PC BOARD	
12	X-4035-964-1	BAFFLE ASSY, SPEAKER	
13	1-505-993-11	SPEAKER (8X13CM)	
15	4-041-268-01	SCREW (7), TAPPING	
16	1-452-032-00	MAGNET, DISC	
18	4-053-005-01	SPACER, DY	
19 ▲	8-733-873-05	CRT 29NX (KV-29AL42)	
19 ▲	8-733-874-05	CRT 29NX (KV-29AL42C)	
20	3-704-372-31	HOLDER, HV CABLE	

REF NO.	PART NO.	DESCRIPTION	REMARK
21 ▲	8-451-486-11	DY Y29NXA-V	
22 *	A-1298-903-A	A COMPLETE PC BOARD (KV-29AL42/42C)	
23 ▲	1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V	
24 *	A-1343-656-A	E (VAR) MOUNTED PC BOARD	
25 *	A-1372-617-A	HV (VAR) MOUNTED PC BOARD	
26 *	A-1331-921-A	CV MOUNTED PC BOARD	
27 *	A-1380-612-A	K (VAR) MOUNTED PC BOARD	
28	4-040-387-01	HOLDER (M), DGC	
29	4-040-388-01	HOLDER (S), DGC	
30 ▲	1-416-952-11	COIL, DEGAUSSING	
31	4-036-329-01	SPRING (B), TENSION	
33 ▲	8-598-431-00	TUNER, FSS BTF-A411	
34	4-064-762-11	COVER, REAR	
35	4-062-047-01	PIECE A (110), CONV CORRECT	
38	1-766-374-11	PLUG, F-PIN	
39 ▲	1-453-268-21	TRANSFORMER, FBT ASSY NX-4005//X4J4	

7-4. CHASSIS (KV-29AL66/29AL66C)

- 7-685-663-79 SCREW +BVTP 4X16 TYPE2 N-S
▲ 7-685-647-79 SCREW +BVTP 3X10 TYPE2 IT-3



REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
1	X-4036-607-1	BEZNET ASSY	2-4	23 ▲	1-769-796-31	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29AL66C)	
2	4-046-160-01	EMBLEM (NO.9), SONY		24 *	A-1343-656-A	E (VAR) MOUNTED PC BOARD	
3	4-064-768-01	DOOR		25	A-1372-617-A	HV (VAR) MOUNTED PC BOARD	
4	4-064-767-01	GUIDE, LED		26 *	A-1331-921-A	CV MOUNTED PC BOARD	
7	4-064-764-01	BRACKET, TOP CONTROL		27 *	A-1380-608-A	K (VAR) MOUNTED PC BOARD	
8	4-064-763-01	PANEL, TOP CONTROL		28	4-040-387-01	HOLDER (M), DGC	
9	4-064-765-01	BUTTON, TOP CONTROL		29	4-040-388-01	HOLDER (S), DGC	
10 *	1-1372-616-A	HT MOUNTED PC BOARD		30 ▲	1-416-952-11	COIL, DEGAUSSING	
12	X-4035-964-1	BAFFLE ASSY, SPEAKER		31	4-036-329-01	SPRING (B), TENSION	
13	1-505-993-11	SPEAKER (8X13CM)		32 ▲	1-453-268-21	TRANSFORMER, FBT ASSY NX-4005//X4J4	
15	4-041-268-01	SCREW (7), TAPPING		33 ▲	8-598-431-00	TUNER, FSS BTF-A411	
16	1-452-032-00	MAGNET, DISC		34	4-064-762-11	COVER, REAR	
18	4-053-005-01	SPACER, DY		35	4-062-047-01	PIECE A (110), CONV CORRECT	
19 ▲	8-733-874-05	CRT 29NX (KV-29AL66C)		36 ▲	8-598-430-00	TUNER, BTF-FA401	
19 ▲	8-733-873-05	CRT 29NX (KV-29AL66)		37	1-557-056-31	CABLE, P-P	
20	3-704-372-31	HOLDER, HV CABLE		38 *	A-1195-154-A	P COMPLETE PC BOARD	
21 ▲	8-451-486-11	DY Y29NXA-V		40	1-783-800-11	CABLE, PIN	
22 *	A-1298-842-A	A COMPLETE PC BOARD		41	4-064-176-11	BRACKET, ANTENNA	
23 ▲	1-751-057-11	CORD, POWER (WITH CONNECTOR) 10A/125V (KV-29AL66)		42	8-598-414-00	ANTENNA SWITCH AS-2F	

SECTION 8
ELECTRICAL PARTS LIST

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COMMON PARTS LISTING



Note:

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

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

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

RESISTORS

- All resistors are in ohms
- F : nonflammable

Note:

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked with an asterisk " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<div><div>A</div><div></div></div>				C062	1-164-161-11	CERAMIC	0.0022μF 10% 50V
				C065	1-163-009-11	CERAMIC	0.001μF 10% 50V
				C070	1-163-259-91	CERAMIC	220pF 5% 50V
				C080	1-164-005-11	CERAMIC	0.47μF 25V
				C081	1-164-005-11	CERAMIC	0.47μF 25V
				C091	1-163-231-11	CERAMIC	15pF 5% 50V
				C092	1-163-231-11	CERAMIC	15pF 5% 50V
				C101	1-126-963-11	ELECT	4.7μF 20% 50V
				C102	1-126-933-11	ELECT	100μF 20% 16V
				C150	1-126-941-11	ELECT	470μF 20% 25V
				C151	1-104-664-11	ELECT	47μF 20% 25V
				C200	1-126-959-11	ELECT	0.47μF 20% 50V
				C201	1-126-960-11	ELECT	1μF 20% 50V
				C202	1-126-960-11	ELECT	1μF 20% 50V
				C207	1-126-959-11	ELECT	0.47μF 20% 50V
				C208	1-126-959-11	ELECT	0.47μF 20% 50V
				C209	1-126-963-11	ELECT	4.7μF 20% 50V
				C211	1-126-964-11	ELECT	10μF 20% 50V
				C212	1-126-963-11	ELECT	4.7μF 20% 50V
				C213	1-126-964-11	ELECT	10μF 20% 50V
				C216	VARIANT (SEE VARIANT PARTS LIST)		
				C217	VARIANT (SEE VARIANT PARTS LIST)		
				C218	1-126-941-11	ELECT	470μF 20% 25V
				C219	1-130-495-00	FILM	0.1μF 5% 50V
				C222	1-126-964-11	ELECT	10μF 20% 50V
				C226	1-126-963-11	ELECT	4.7μF 20% 50V
				C243	1-163-017-00	CERAMIC	0.0047μF 10% 50V
				C250	VARIANT (SEE VARIANT PARTS LIST)		
				C251	VARIANT (SEE VARIANT PARTS LIST)		
				C252	VARIANT (SEE VARIANT PARTS LIST)		
				C255	1-104-760-11	CERAMIC	0.047μF 10% 50V
				C256	1-126-960-11	ELECT	1μF 20% 50V
				C257	1-126-960-11	ELECT	1μF 20% 50V
				C258	1-126-959-11	ELECT	0.47μF 20% 50V
				C259	1-163-021-91	CERAMIC	0.01μF 10% 50V
				C280	VARIANT (SEE VARIANT PARTS LIST)		
				C281	VARIANT (SEE VARIANT PARTS LIST)		
				C282	VARIANT (SEE VARIANT PARTS LIST)		
				C284	1-104-664-11	ELECT	47μF 20% 25V
				C285	1-126-933-11	ELECT	100μF 20% 16V
				C286	1-163-251-11	CERAMIC	100pF 5% 50V
* A-1298-840-A A BOARD, COMPLETE (KV-27S42)							
* A-1298-842-A A BOARD, COMPLETE (KV-29AL66/29AL66C)							
* A-1298-900-A A BOARD, COMPLETE (KV-27S46)							
* A-1298-902-A A BOARD, COMPLETE (KV-27S66)							
* A-1298-903-A A BOARD, COMPLETE (KV-29AL42/29AL42C)							
* A-1298-904-A A BOARD, COMPLETE (KV-29SL42/29SL42C/29XL42M/)							
* A-1298-911-A A BOARD, COMPLETE (KV-29SL46)							
4-382-854-11 SCREW (M3X10), P, SW (+)							
CAPACITOR							
C001	1-163-259-91	CERAMIC	220pF 5% 50V				
C004	1-104-664-11	ELECT	47μF 20% 25V				
C005	1-126-960-11	ELECT	1μF 20% 50V				
C006	1-163-035-00	CERAMIC	0.047μF 50V				
C007	1-163-259-91	CERAMIC	220pF 5% 50V				
C008	1-163-009-11	CERAMIC	0.001μF 10% 50V				
C010	1-163-009-11	CERAMIC	0.001μF 10% 50V				
C011	1-163-009-11	CERAMIC	0.001μF 10% 50V				
C012	1-163-009-11	CERAMIC	0.001μF 10% 50V				
C014	1-164-004-11	CERAMIC	0.1μF 10% 25V				
C017	1-126-960-11	ELECT	1μF 20% 50V				
C019	1-163-135-00	CERAMIC	560pF 5% 50V				
C020	1-130-495-00	FILM	0.1μF 5% 50V				
C021	1-163-259-91	CERAMIC	220pF 5% 50V				
C028	1-163-005-11	CERAMIC	470pF 10% 50V				
C030	1-163-259-91	CERAMIC	220pF 5% 50V				
C034	1-163-037-11	CERAMIC	0.022μF 10% 50V				
C037	1-164-161-11	CERAMIC	0.0022μF 10% 50V				
C038	1-126-941-11	ELECT	470μF 20% 25V				
C039	1-126-964-11	ELECT	10μF 20% 50V				
C046	1-104-664-11	ELECT	47μF 20% 25V				
C047	1-163-259-91	CERAMIC	220pF 5% 50V				
C048	1-163-009-11	CERAMIC	0.001μF 10% 50V				
C055	1-163-251-11	CERAMIC	100pF 5% 50V				
C060	1-163-005-11	CERAMIC	470pF 10% 50V				



COMMON PARTS LISTING

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

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C287	1-126-959-11	ELECT	0.47 μ F 20% 50V	C400	1-126-963-11	ELECT	4.7 μ F 20% 50V
C288	1-126-960-11	ELECT	1 μ F 20% 50V	C401	1-126-956-91	ELECT	0.1 μ F 20% 50V
C289	1-126-960-11	ELECT	1 μ F 20% 50V	C402	1-163-017-00	CERAMIC	0.0047 μ F 10% 50V
C290	1-164-005-11	CERAMIC	0.47 μ F 25V	C403	1-126-963-11	ELECT	4.7 μ F 20% 50V
C301	1-163-233-11	CERAMIC	18pF 5% 50V	C404	1-126-963-11	ELECT	4.7 μ F 20% 50V
C303	1-126-963-11	ELECT	4.7 μ F 20% 50V	C405	1-126-963-11	ELECT	4.7 μ F 20% 50V
C304	1-163-038-91	CERAMIC	0.1 μ F 25V	C406	1-126-963-11	ELECT	4.7 μ F 20% 50V
C305	1-164-004-11	CERAMIC	0.1 μ F 10% 25V	C407	1-126-964-11	ELECT	10 μ F 20% 50V
C306	1-164-004-11	CERAMIC	0.1 μ F 10% 25V	C410	1-126-963-11	ELECT	4.7 μ F 20% 50V
C307	1-126-964-11	ELECT	10 μ F 20% 50V	C411	1-126-956-91	ELECT	0.1 μ F 20% 50V
C308	1-126-964-11	ELECT	10 μ F 20% 50V	C412	1-130-495-00	FILM	0.1 μ F 5% 50V
C309	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C413	1-126-967-11	ELECT	47 μ F 20% 50V
C310	1-126-960-11	ELECT	1 μ F 20% 50V	C414	1-163-017-00	CERAMIC	0.0047 μ F 10% 50V
C311	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C415	1-126-956-91	ELECT	0.1 μ F 20% 50V
C312	1-126-942-61	ELECT	1000 μ F 20% 25V	C416	1-126-963-11	ELECT	4.7 μ F 20% 50V
C313	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C418		VARIANT (SEE VARIANT PARTS LIST)	
C314	1-163-003-11	CERAMIC	330pF 10% 50V	C501	1-102-112-00	CERAMIC	330pF 10% 50V
C316	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C502	1-106-383-00	MYLAR	0.047 μ F 10% 200V
C317	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C503	1-102-212-00	CERAMIC	820pF 10% 500V
C318	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C504	1-102-002-00	CERAMIC	680pF 10% 500V
C319	1-126-963-11	ELECT	4.7 μ F 20% 50V	C505 \triangle	1-162-134-11	CERAMIC	470pF 10% 2KV
C320	1-126-959-11	ELECT	0.47 μ F 20% 50V	C507 \triangle	1-119-969-11	MYLAR	14000pF 3% 1.5KV
C321	1-163-133-00	CERAMIC	470pF 5% 50V	C508 \triangle	1-107-364-11	MYLAR	0.01 μ F 10% 200V
C323	1-163-121-00	CERAMIC	150pF 5% 50V	C509 \triangle	1-162-116-00	CERAMIC	680pF 10% 2KV
C324	1-163-251-11	CERAMIC	100pF 5% 50V	C510	1-107-649-11	ELECT	2.2 μ F 20% 250V
C331	1-163-005-11	CERAMIC	470pF 10% 50V	C511 \triangle	1-117-673-11	FILM	1.5 μ F 5% 250V
C332	1-163-009-11	CERAMIC	0.001 μ F 10% 50V	C512	1-106-395-00	MYLAR	0.15 μ F 10% 200V
C350	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C513	1-106-343-00	MYLAR	0.001 μ F 10% 100V
C351	1-126-964-11	ELECT	10 μ F 20% 50V	C514	1-117-891-11	FILM	0.62 μ F 5% 250V
C352	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C515 \triangle	1-162-116-00	CERAMIC	680pF 10% 2KV
C353	1-163-038-91	CERAMIC	0.1 μ F 25V	C520 \triangle	1-129-722-00	FILM	0.047 μ F 5% 630V
C354	1-163-038-91	CERAMIC	0.1 μ F 25V	C521	1-164-646-11	CERAMIC	2200pF 10% 500V
C355	1-164-222-11	CERAMIC	0.22 μ F 25V	C523	1-107-652-11	ELECT	10 μ F 20% 250V
C356	1-163-038-91	CERAMIC	0.1 μ F 25V	C524	1-102-244-00	CERAMIC	220pF 10% 500V
C357	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C525	1-162-815-11	CERAMIC	47pF 5% 500V
C358	1-104-664-11	ELECT	47 μ F 20% 25V	C526	1-126-960-11	ELECT	1 μ F 20% 50V
C359	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C527	1-126-965-11	ELECT	22 μ F 20% 50V
C360	1-163-021-91	CERAMIC	0.01 μ F 10% 50V	C528	1-164-690-91	CERAMIC	0.0022 μ F 5% 50V
C361	1-163-037-11	CERAMIC	0.022 μ F 10% 50V	C529	1-164-161-11	CERAMIC	0.0022 μ F 10% 50V
C362	1-126-964-11	ELECT	10 μ F 20% 50V	C530	1-163-009-11	CERAMIC	0.001 μ F 10% 50V
C363	1-126-960-11	ELECT	1 μ F 20% 50V	C531	1-106-387-00	MYLAR	0.068 μ F 10% 200V
C370		VARIANT (SEE VARIANT PARTS LIST)		C541	1-126-969-11	ELECT	220 μ F 20% 50V
C371		VARIANT (SEE VARIANT PARTS LIST)		C542	1-126-967-11	ELECT	47 μ F 20% 50V
C372		VARIANT (SEE VARIANT PARTS LIST)		C543	1-137-194-81	FILM	0.47 μ F 5% 50V
C373	1-163-038-91	CERAMIC	0.1 μ F 25V	C553	1-107-662-11	ELECT	22 μ F 20% 250V
C374	1-126-935-11	ELECT	470 μ F 20% 16V	C555	1-164-161-11	CERAMIC	0.0022 μ F 10% 50V
C375	1-163-038-91	CERAMIC	0.1 μ F 25V	C562	1-126-941-11	ELECT	470 μ F 20% 25V
C376	1-104-664-11	ELECT	47 μ F 20% 25V	C564	1-126-941-11	ELECT	470 μ F 20% 25V
C377	1-126-964-11	ELECT	10 μ F 20% 50V	C571 \triangle	1-126-964-11	ELECT	10 μ F 20% 50V
C380		VARIANT (SEE VARIANT PARTS LIST)		C573	1-126-963-11	ELECT	4.7 μ F 20% 50V
C381		VARIANT (SEE VARIANT PARTS LIST)		C574	1-107-635-11	ELECT	4.7 μ F 20% 160V
C382		VARIANT (SEE VARIANT PARTS LIST)		C575 \triangle	1-163-021-91	CERAMIC	0.01 μ F 10% 50V
C390	1-126-959-11	ELECT	0.47 μ F 20% 50V	C576	1-123-024-21	ELECT	33 μ F 160V
C399	1-126-964-11	ELECT	10 μ F 20% 50V	C581	1-126-963-11	ELECT	4.7 μ F 20% 50V

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

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

COMMON PARTS LISTING



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C591	1-106-355-12	MYLAR	0.0033 μ F 10% 200V	DIODE			
C601	1-130-495-00	MYLAR	0.1 μ F 5% 50V	D001	8-719-921-44	DIODE MTZJ-5.1C	
C602	1-126-967-11	ELECT	47 μ F 20% 50V	D002		VARIANT (SEE VARIANT PARTS LIST)	
C609	1-126-968-11	ELECT	100 μ F 20% 50V	D003	8-719-991-33	DIODE 1SS133T-77	
C610	1-126-964-11	ELECT	10 μ F 20% 50V	D004	8-719-991-33	DIODE 1SS133T-77	
C613		VARIANT (SEE VARIANT PARTS LIST)		D005	8-719-109-89	DIODE RD5.6ESB2	
C614	1-126-964-11	ELECT	10 μ F 20% 50V	D201	8-719-110-17	DIODE RD10ESB2	
C615		VARIANT (SEE VARIANT PARTS LIST)		D202	8-719-110-17	DIODE RD10ESB2	
C616		VARIANT (SEE VARIANT PARTS LIST)		D204	8-719-110-17	DIODE RD10ESB2	
C617		VARIANT (SEE VARIANT PARTS LIST)		D205	8-719-982-22	DIODE MTZJ-30D	
C618	1-125-893-11	FILM	680pF 3% 1.5KV	D207	8-719-109-66	DIODE RD3.3ESB2	
C620	1-164-081-11	CERAMIC	470pF 10% 50V	D208		VARIANT (SEE VARIANT PARTS LIST)	
C621	1-136-356-11	FILM	470pF 5% 50V	D250	8-719-108-12	DIODE RD9.1EW	
C625	1-164-625-11	CERAMIC	680pF 10% 500V	D251	8-719-108-12	DIODE RD9.1EW	
C626	1-126-933-11	ELECT	100 μ F 20% 16V	D252	8-719-110-17	DIODE RD10ESB2	
C627		VARIANT (SEE VARIANT PARTS LIST)		D253	8-719-110-17	DIODE RD10ESB2	
C629	1-104-665-11	ELECT	100 μ F 20% 25V	D254	8-719-110-17	DIODE RD10ESB2	
C630	1-124-347-00	ELECT	100 μ F 20% 160V	D255	8-719-110-17	DIODE RD10ESB2	
C631	1-126-944-11	ELECT	3300 μ F 20% 25V	D280		VARIANT (SEE VARIANT PARTS LIST)	
C633	1-104-341-11	FILM	0.1 μ F 10% 250V	D281		VARIANT (SEE VARIANT PARTS LIST)	
C634	1-130-471-00	MYLAR	0.001 μ F 5% 50V	D302	8-719-921-44	DIODE MTZJ-5.1C	
C638	1-104-665-11	ELECT	100 μ F 20% 25V	D303	8-719-991-33	DIODE 1SS133T-77	
C639	1-125-772-91	CERAMIC	1500pF 10% 2KV	D304	8-719-991-33	DIODE 1SS133T-77	
C640	1-164-625-11	CERAMIC	680pF 10% 500V	D305	8-719-991-33	DIODE 1SS133T-77	
C641	1-126-943-11	ELECT	2200 μ F 20% 25V	D306	8-719-991-33	DIODE 1SS133T-77	
C653	1-104-664-11	ELECT	47 μ F 20% 25V	D388	8-719-921-44	DIODE MTZJ-5.1C	
C654	1-126-933-11	ELECT	100 μ F 20% 16V	D403		VARIANT (SEE VARIANT PARTS LIST)	
C655	1-107-636-11	ELECT	10 μ F 20% 160V	D501	8-719-945-80	DIODE ERC06-15S	
C690	1-126-959-11	ELECT	0.47 μ F 20% 50V	D502	8-719-908-03	DIODE GP08D	
C691	1-126-941-11	ELECT	470 μ F 20% 25V	D503	8-719-908-03	DIODE GP08D	
C692	1-104-664-11	ELECT	47 μ F 20% 25V	D520	8-719-067-63	DIODE MDV04-600RL	
C693	1-137-194-81	FILM	0.47 μ F 5% 50V	D521	8-719-302-43	DIODE EL1Z	
C699		VARIANT (SEE VARIANT PARTS LIST)		D522	8-719-991-33	DIODE 1SS133T-77	
CONNECTOR				D523	8-719-991-33	DIODE 1SS133T-77	
CN101	1-508-786-00	PIN, CONNECTOR (5MM PITCH)	2P	D541	8-719-908-03	DIODE GP08D	
CN150		VARIANT (SEE VARIANT PARTS LIST)		D550	8-719-110-08	DIODE RD8.2ESB2	
CN151		VARIANT (SEE VARIANT PARTS LIST)		D551	8-719-991-33	DIODE 1SS133T-77	
CN152		VARIANT (SEE VARIANT PARTS LIST)		D552	8-719-302-43	DIODE EL1Z	
CN203	1-560-124-00	PLUG, CONNECTOR (2.5MM)	4P	D561	8-719-979-85	DIODE EGP20G	
CN251		VARIANT (SEE VARIANT PARTS LIST)		D562	8-719-979-85	DIODE EGP20G	
CN253		VARIANT (SEE VARIANT PARTS LIST)		D571 \triangle	8-719-991-33	DIODE 1SS133T-77	
CN254	1-564-508-11	PLUG, CONNECTOR	5P	D572	8-719-991-33	DIODE 1SS133T-77	
CN255	1-564-510-11	PLUG, CONNECTOR	7P	D573	8-719-110-08	DIODE RD8.2ESB2	
CN301		VARIANT (SEE VARIANT PARTS LIST)		D574	8-719-302-43	DIODE EL1Z	
CN302		VARIANT (SEE VARIANT PARTS LIST)		D581 \triangle	8-719-991-33	DIODE 1SS133T-77	
CN401	1-564-505-11	PLUG, CONNECTOR	2P	D602	8-719-991-33	DIODE 1SS133T-77	
CN402	1-564-505-11	PLUG, CONNECTOR	2P	D603	8-719-982-26	DIODE MTZJ-33B	
CN501	1-580-798-11	CONNECTOR PIN (DY)	6P	D604	8-719-028-72	DIODE RGP02-17EL-6433	
CN502	1-564-509-11	PLUG, CONNECTOR	6P	D605	8-719-510-53	DIODE D4SB60L	
CN601	1-580-843-11	PIN, CONNECTOR (POWER)	2P	D606	8-719-108-18	THYRISTOR 5P6M	
CN602	1-508-786-00	PIN, CONNECTOR (5MM PITCH)	2P	D607	8-719-991-33	DIODE 1SS133T-77	
CN604	1-564-506-11	PLUG, CONNECTOR	3P	D608	8-719-110-53	DIODE RD20ESB2	
				D609		VARIANT (SEE VARIANT PARTS LIST)	



COMMON PARTS LISTING

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REF.NO.	PART NO.	DESCRIPTION	REMARK
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D610	8-719-510-02	DIODE D1NS4	
D611	8-719-063-70	DIODE D1NL20U	
D612	8-719-110-17	DIODE RD10ESB2	
D613	8-719-063-70	DIODE D1NL20U	
D614	8-719-063-70	DIODE D1NL20U	

D615	8-719-312-10	DIODE RU4AM-T3	
D617	8-719-510-37	DIODE D5LC20U	
D620	8-719-110-17	DIODE RD10ESB2	
D630	8-719-510-37	DIODE D5LC20U	
D640	8-719-991-33	DIODE 1SS133T-77	

D650	8-719-109-89	DIODE RD5.6ESB2	
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FERRITE BEAD

FB350	1-216-295-91	SHORT	
FB501	1-410-396-41	FERRITE	0.45μH
FB521	1-410-397-21	FERRITE	1.1μH
FB522	1-410-397-21	FERRITE	1.1μH
FB600	1-412-911-11	FERRITE	

FB601	1-412-911-11	FERRITE	
FB602	1-412-911-11	FERRITE	
FB603	1-412-911-11	FERRITE	
FB604	1-412-911-11	FERRITE	
FB605	1-412-911-11	FERRITE	

FB606	1-412-911-11	FERRITE	
FB609	1-412-911-11	FERRITE	

IC

IC001	8-759-562-90	IC M37273μF-251SP	
IC002	8-759-575-47	IC NJM78LR05BM-TE2	
IC003	8-759-527-75	IC M24C04-MN6T	
IC004		VARIANT (SEE VARIANT PARTS LIST)	
IC010	8-759-450-93	IC NJM2521M-TE1	

IC202	8-759-100-96	IC UPC4558G2	
IC203		VARIANT (SEE VARIANT PARTS LIST)	
IC301	8-752-090-39	IC CXA2133S	
IC302	8-752-385-80	IC CXD2073S	
IC401		VARIANT (SEE VARIANT PARTS LIST)	

IC402	8-752-072-39	IC CXA2021S	
IC521	8-759-700-07	IC NJM2903M	
IC541	8-759-980-58	IC TDA8172	
IC601		VARIANT (SEE VARIANT PARTS LIST)	
IC602 \triangle	8-749-920-61	IC SE-135N	

IC604	8-759-198-03	IC PQ09RF21	
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JACK

J200	1-774-750-21	JACK BLOCK, PIN 2P	
J201	1-774-751-11	TERMINAL BLOCK, S	
J202		VARIANT (SEE VARIANT PARTS LIST)	
J204		VARIANT (SEE VARIANT PARTS LIST)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
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CHIP CONDUCTOR

JR003	1-216-295-91	SHORT	
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COIL

L001	1-414-267-11	INDUCTOR	10μH
L002	1-414-273-11	INDUCTOR	100μH
L003	1-414-273-11	INDUCTOR	100μH
L101	1-414-267-11	INDUCTOR	10μH
L150	1-414-273-11	INDUCTOR	100μH

L151	1-414-267-11	INDUCTOR	10μH
L301	1-414-271-11	INDUCTOR	47μH
L302	1-414-267-11	INDUCTOR	10μH
L350	1-414-267-11	INDUCTOR	10μH
L351	1-414-271-11	INDUCTOR	47μH

L501 \triangle	1-411-976-11	COIL, HORIZONTAL LINEARITY	
L502	1-412-552-11	INDUCTOR	2.2mH
L503	1-406-677-11	INDUCTOR	10mH
L504	1-412-533-21	INDUCTOR	47μH
L520	1-409-955-11	INDUCTOR	8mH

L591 \triangle	1-412-528-61	INDUCTOR	18μH
L601	1-412-529-11	INDUCTOR	22μH
L642	1-412-529-11	INDUCTOR	22μH
L643	1-412-525-31	INDUCTOR	10μH

PHOTO COUPLER

PH600 \triangle	8-749-010-64	PHOTO COUPLER PC123F2	
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IC LINK

PS201		VARIANT (SEE VARIANT PARTS LIST)	
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TRANSISTOR

Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q080		VARIANT (SEE VARIANT PARTS LIST)	
Q082	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q083	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q101	8-729-422-27	TRANSISTOR 2SD601A-Q	

Q170	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q200	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q280		VARIANT (SEE VARIANT PARTS LIST)	

Q281		VARIANT (SEE VARIANT PARTS LIST)	
Q282		VARIANT (SEE VARIANT PARTS LIST)	
Q283		VARIANT (SEE VARIANT PARTS LIST)	
Q284		VARIANT (SEE VARIANT PARTS LIST)	
Q285		VARIANT (SEE VARIANT PARTS LIST)	

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COMMON PARTS LISTING



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q286	8-729-216-22	TRANSISTOR 2SA1162-G		R013	1-216-081-00	RES, CHIP 22K	5% 1/10W
Q287	8-729-216-22	TRANSISTOR 2SA1162-G		R016	1-216-041-00	RES, CHIP 470	5% 1/10W
Q288	8-729-422-27	TRANSISTOR 2SD601A-Q		R017	1-216-113-00	RES, CHIP 470K	5% 1/10W
Q300 \triangle	8-729-422-27	TRANSISTOR 2SD601A-Q		R018	1-216-049-91	RES, CHIP 1K	5% 1/10W
Q302	8-729-422-27	TRANSISTOR 2SD601A-Q		R019	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
Q305	8-729-216-22	TRANSISTOR 2SA1162-G		R020		VARIANT (SEE VARIANT PARTS LIST)	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G		R021		VARIANT (SEE VARIANT PARTS LIST)	
Q307	8-729-216-22	TRANSISTOR 2SA1162-G		R022		VARIANT (SEE VARIANT PARTS LIST)	
Q308	8-729-216-22	TRANSISTOR 2SA1162-G		R023		VARIANT (SEE VARIANT PARTS LIST)	
Q309	8-729-216-22	TRANSISTOR 2SA1162-G		R025	1-249-426-11	CARBON 5.6K	5% 1/4W
Q310	8-729-216-22	TRANSISTOR 2SA1162-G		R026	1-249-426-11	CARBON 5.6K	5% 1/4W
Q349	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R027	1-249-426-11	CARBON 5.6K	5% 1/4W
Q350	8-729-216-22	TRANSISTOR 2SA1162-G		R028	1-216-049-91	RES, CHIP 1K	5% 1/10W
Q351	8-729-422-27	TRANSISTOR 2SD601A-Q		R031	1-216-045-00	RES, CHIP 680	5% 1/10W
Q352	8-729-216-22	TRANSISTOR 2SA1162-G		R032	1-247-815-91	CARBON 220	5% 1/4W
Q353	8-729-216-22	TRANSISTOR 2SA1162-G		R033	1-247-815-91	CARBON 220	5% 1/4W
Q354	8-729-216-22	TRANSISTOR 2SA1162-G		R034	1-216-033-00	RES, CHIP 220	5% 1/10W
Q355	8-729-422-27	TRANSISTOR 2SD601A-Q		R035	1-216-033-00	RES, CHIP 220	5% 1/10W
Q356	8-729-216-22	TRANSISTOR 2SA1162-G		R038	1-216-049-91	RES, CHIP 1K	5% 1/10W
Q357	8-729-216-22	TRANSISTOR 2SA1162-G		R039	1-216-295-91	SHORT	
Q358	8-729-422-27	TRANSISTOR 2SD601A-Q		R040	1-249-413-11	CARBON 470	5% 1/4W
Q359	8-729-216-22	TRANSISTOR 2SA1162-G		R041	1-216-033-00	RES, CHIP 220	5% 1/10W
Q360	8-729-216-22	TRANSISTOR 2SA1162-G		R043	1-216-049-91	RES, CHIP 1K	5% 1/10W
Q361	8-729-422-27	TRANSISTOR 2SD601A-Q		R044	1-247-815-91	CARBON 220	5% 1/4W
Q390		VARIANT (SEE VARIANT PARTS LIST)		R045	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
Q391		VARIANT (SEE VARIANT PARTS LIST)		R046	1-247-815-91	CARBON 220	5% 1/4W
Q501	8-729-140-50	TRANSISTOR 2SC3209LK		R047	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
Q502	8-729-043-43	TRANSISTOR 2SC5426-01		R048	1-216-025-91	RES, CHIP 100	5% 1/10W
Q521	8-729-422-27	TRANSISTOR 2SD601A-Q		R049	1-216-089-91	RES, CHIP 47K	5% 1/10W
Q522	8-729-809-29	TRANSISTOR 2SC4159-E		R050	1-216-073-00	RES, CHIP 10K	5% 1/10W
Q550	8-729-119-78	TRANSISTOR 2SC2785-HFE		R051	1-216-033-00	RES, CHIP 220	5% 1/10W
Q555	8-729-422-27	TRANSISTOR 2SD601A-Q		R052	1-216-033-00	RES, CHIP 220	5% 1/10W
Q571 \triangle	8-729-200-17	TRANSISTOR 2SA1091-O		R054	1-216-073-00	RES, CHIP 10K	5% 1/10W
Q601	8-729-922-37	TRANSISTOR 2SD2144S-UVW		R056	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE		R057	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
Q603	8-729-119-76	TRANSISTOR 2SA1175-HFE		R058	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
Q604	8-729-119-78	TRANSISTOR 2SC2785-HFE		R060	1-216-295-91	SHORT	
Q607	8-729-922-37	TRANSISTOR 2SD2144S-UVW		R061	1-216-295-91	SHORT	
Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE		R065		VARIANT (SEE VARIANT PARTS LIST)	
Q630	8-729-119-78	TRANSISTOR 2SC2785-HFE		R066	1-216-033-00	RES, CHIP 220	5% 1/10W
Q650	8-729-111-55	TRANSISTOR 2SD1312-K		R069	1-247-815-91	CARBON 220	5% 1/4W
RESISTOR				R070	1-249-425-11	CARBON 4.7K	5% 1/4W
R001	1-216-033-00	RES, CHIP 220	5% 1/10W	R071	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R002	1-216-073-00	RES, CHIP 10K	5% 1/10W	R073	1-249-425-11	CARBON 4.7K	5% 1/4W
R003	1-216-033-00	RES, CHIP 220	5% 1/10W	R074	1-216-073-00	RES, CHIP 10K	5% 1/10W
R004	1-216-073-00	RES, CHIP 10K	5% 1/10W	R075	1-216-073-00	RES, CHIP 10K	5% 1/10W
R005	1-216-295-91	SHORT		R076	1-216-121-91	RES, CHIP 1M	5% 1/10W
R006	1-216-295-91	SHORT		R077	1-216-097-91	RES, CHIP 100K	5% 1/10W
R007	1-216-025-91	RES, CHIP 100	5% 1/10W	R080		VARIANT (SEE VARIANT PARTS LIST)	
R008	1-216-033-00	RES, CHIP 220	5% 1/10W	R082		VARIANT (SEE VARIANT PARTS LIST)	
R010	1-216-033-00	RES, CHIP 220	5% 1/10W	R083		VARIANT (SEE VARIANT PARTS LIST)	
R011	1-216-033-00	RES, CHIP 220	5% 1/10W	R084		VARIANT (SEE VARIANT PARTS LIST)	
				R085	1-216-049-91	RES, CHIP 1K	5% 1/10W
				R086	1-216-045-00	RES, CHIP 680	5% 1/10W



COMMON PARTS LISTING

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R087	1-216-045-00	RES, CHIP 680	5% 1/10W	R253	1-215-899-11	METAL 15K	5% 2W
R088	1-216-045-00	RES, CHIP 680	5% 1/10W	R254	1-216-033-00	RES, CHIP 220	5% 1/10W
R090		VARIANT (SEE VARIANT PARTS LIST)		R255		VARIANT (SEE VARIANT PARTS LIST)	
R091	1-216-073-00	RES, CHIP 10K	5% 1/10W	R256	1-216-033-00	RES, CHIP 220	5% 1/10W
R092	1-216-073-00	RES, CHIP 10K	5% 1/10W	R257	1-216-073-00	RES, CHIP 10K	5% 1/10W
R095	1-216-073-00	RES, CHIP 10K	5% 1/10W	R258	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R096	1-216-057-00	RES, CHIP 2.2K	5% 1/10W	R259	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R097	1-216-049-91	RES, CHIP 1K	5% 1/10W	R260	1-216-025-91	RES, CHIP 100	5% 1/10W
R101	1-216-073-00	RES, CHIP 10K	5% 1/10W	R261	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R120	1-216-057-00	RES, CHIP 2.2K	5% 1/10W	R262	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R121	1-216-073-00	RES, CHIP 10K	5% 1/10W	R263	1-216-033-00	RES, CHIP 220	5% 1/10W
R150	1-216-025-91	RES, CHIP 100	5% 1/10W	R264	1-216-033-00	RES, CHIP 220	5% 1/10W
R151	1-216-025-91	RES, CHIP 100	5% 1/10W	R265	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R170	1-216-025-91	RES, CHIP 100	5% 1/10W	R266	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R171	1-216-049-91	RES, CHIP 1K	5% 1/10W	R267	1-216-022-00	RES, CHIP 75	5% 1/10W
R172	1-216-295-91	SHORT		R269	1-216-049-91	RES, CHIP 1K	5% 1/10W
R173	1-216-295-91	SHORT		R270	1-216-022-00	RES, CHIP 75	5% 1/10W
R200	1-216-022-00	RES, CHIP 75	5% 1/10W	R271	1-216-113-00	RES, CHIP 470K	5% 1/10W
R201	1-216-113-00	RES, CHIP 470K	5% 1/10W	R272	1-216-113-00	RES, CHIP 470K	5% 1/10W
R202	1-216-113-00	RES, CHIP 470K	5% 1/10W	R273	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R203	1-216-025-91	RES, CHIP 100	5% 1/10W	R274	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R204	1-216-043-91	RES, CHIP 560	5% 1/10W	R275	1-216-295-91	SHORT	
R205	1-216-043-91	RES, CHIP 560	5% 1/10W	R276	1-216-295-91	SHORT	
R207	1-216-025-91	RES, CHIP 100	5% 1/10W	R277	1-216-295-91	SHORT	
R211		VARIANT (SEE VARIANT PARTS LIST)		R278		VARIANT (SEE VARIANT PARTS LIST)	
R212		VARIANT (SEE VARIANT PARTS LIST)		R279	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R213	1-216-057-00	RES, CHIP 2.2K	5% 1/10W	R280		VARIANT (SEE VARIANT PARTS LIST)	
R214	1-216-113-00	RES, CHIP 470K	5% 1/10W	R281		VARIANT (SEE VARIANT PARTS LIST)	
R215	1-216-033-00	RES, CHIP 220	5% 1/10W	R282		VARIANT (SEE VARIANT PARTS LIST)	
R216	1-216-113-00	RES, CHIP 470K	5% 1/10W	R283		VARIANT (SEE VARIANT PARTS LIST)	
R217	1-216-033-00	RES, CHIP 220	5% 1/10W	R284		VARIANT (SEE VARIANT PARTS LIST)	
R218	1-216-067-00	RES, CHIP 5.6K	5% 1/10W	R285		VARIANT (SEE VARIANT PARTS LIST)	
R219	1-216-073-00	RES, CHIP 10K	5% 1/10W	R286		VARIANT (SEE VARIANT PARTS LIST)	
R220	1-216-073-00	RES, CHIP 10K	5% 1/10W	R287		VARIANT (SEE VARIANT PARTS LIST)	
R221	1-216-073-00	RES, CHIP 10K	5% 1/10W	R288		VARIANT (SEE VARIANT PARTS LIST)	
R222	1-216-067-00	RES, CHIP 5.6K	5% 1/10W	R289		VARIANT (SEE VARIANT PARTS LIST)	
R223	1-216-073-00	RES, CHIP 10K	5% 1/10W	R290		VARIANT (SEE VARIANT PARTS LIST)	
R224	1-216-073-00	RES, CHIP 10K	5% 1/10W	R291		VARIANT (SEE VARIANT PARTS LIST)	
R225	1-216-073-00	RES, CHIP 10K	5% 1/10W	R292		VARIANT (SEE VARIANT PARTS LIST)	
R226	1-216-065-91	RES, CHIP 4.7K	5% 1/10W	R293		VARIANT (SEE VARIANT PARTS LIST)	
R227	1-216-097-91	RES, CHIP 100K	5% 1/10W	R294		VARIANT (SEE VARIANT PARTS LIST)	
R228	1-216-065-91	RES, CHIP 4.7K	5% 1/10W	R295		VARIANT (SEE VARIANT PARTS LIST)	
R229	1-216-097-91	RES, CHIP 100K	5% 1/10W	R296	1-249-437-11	CARBON 47K	5% 1/4W
R231		VARIANT (SEE VARIANT PARTS LIST)		R297	1-216-043-91	RES, CHIP 560	5% 1/10W
R232		VARIANT (SEE VARIANT PARTS LIST)		R298	1-216-041-00	RES, CHIP 470	5% 1/10W
R233		VARIANT (SEE VARIANT PARTS LIST)		R299	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R236		VARIANT (SEE VARIANT PARTS LIST)		R301	1-216-295-91	SHORT	
R241	1-216-065-91	RES, CHIP 4.7K	5% 1/10W	R304	1-216-073-00	RES, CHIP 10K	5% 1/10W
R242	1-216-083-00	RES, CHIP 27K	5% 1/10W	R305	1-216-033-00	RES, CHIP 220	5% 1/10W
R243	1-216-689-11	RES, CHIP 39K	5% 1/10W	R306	1-208-806-11	RES, CHIP 10K	0.50% 1/10W
R244	1-216-049-91	RES, CHIP 1K	5% 1/10W	R307	1-216-071-00	RES, CHIP 8.2K	5% 1/10W
R245	1-216-049-91	RES, CHIP 1K	5% 1/10W	R308	1-216-025-91	RES, CHIP 100	5% 1/10W
R248	1-216-049-91	RES, CHIP 1K	5% 1/10W	R310	1-216-049-91	RES, CHIP 1K	5% 1/10W
R250	1-216-033-00	RES, CHIP 220	5% 1/10W	R312	1-216-033-00	RES, CHIP 220	5% 1/10W
R252	1-216-033-00	RES, CHIP 220	5% 1/10W	R313	1-216-033-00	RES, CHIP 220	5% 1/10W

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

Les composants identifiés par un trame et une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

COMMON PARTS LISTING



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R314	1-216-033-00	RES, CHIP	220 5% 1/10W	R373	1-216-025-91	RES, CHIP	100 5% 1/10W
R315	1-216-033-00	RES, CHIP	220 5% 1/10W	R374	1-216-025-91	RES, CHIP	100 5% 1/10W
R316	1-247-807-31	CARBON	100 5% 1/4W	R375	1-216-053-00	RES, CHIP	1.5K 5% 1/10W
R317	1-216-025-91	RES, CHIP	100 5% 1/10W	R376	1-216-049-91	RES, CHIP	1K 5% 1/10W
R318	1-216-025-91	RES, CHIP	100 5% 1/10W	R377	1-216-049-91	RES, CHIP	1K 5% 1/10W
R319	1-216-073-00	RES, CHIP	10K 5% 1/10W	R378	1-216-033-00	RES, CHIP	220 5% 1/10W
R320	1-216-025-91	RES, CHIP	100 5% 1/10W	R379	1-216-049-91	RES, CHIP	1K 5% 1/10W
R321	1-216-025-91	RES, CHIP	100 5% 1/10W	R380	1-208-790-11	RES, CHIP	2.2K 0.50% 1/10W
R322	1-216-025-91	RES, CHIP	100 5% 1/10W	R381	1-216-053-00	RES, CHIP	1.5K 5% 1/10W
R323	1-216-037-00	RES, CHIP	330 5% 1/10W	R383	1-216-017-91	RES, CHIP	47 5% 1/10W
R324	1-216-065-91	RES, CHIP	4.7K 5% 1/10W	R384	1-216-097-91	RES, CHIP	100K 5% 1/10W
R325	1-216-022-00	RES, CHIP	75 5% 1/10W	R385	1-216-073-00	RES, CHIP	10K 5% 1/10W
R326	1-216-033-00	RES, CHIP	220 5% 1/10W	R386	1-216-061-00	RES, CHIP	3.3K 5% 1/10W
R328	1-216-025-91	RES, CHIP	100 5% 1/10W	R387	1-216-067-00	RES, CHIP	5.6K 5% 1/10W
R329	1-216-025-91	RES, CHIP	100 5% 1/10W	R390		VARIANT (SEE VARIANT PARTS LIST)	
R330	1-216-025-91	RES, CHIP	100 5% 1/10W	R391		VARIANT (SEE VARIANT PARTS LIST)	
R331	1-216-025-91	RES, CHIP	100 5% 1/10W	R392		VARIANT (SEE VARIANT PARTS LIST)	
R333	1-216-049-91	RES, CHIP	1K 5% 1/10W	R394		VARIANT (SEE VARIANT PARTS LIST)	
R334	1-216-025-91	RES, CHIP	100 5% 1/10W	R395		VARIANT (SEE VARIANT PARTS LIST)	
R335	1-216-057-00	RES, CHIP	2.2K 5% 1/10W	R399	1-216-295-91	SHORT	
R336	1-216-057-00	RES, CHIP	2.2K 5% 1/10W	R400		VARIANT (SEE VARIANT PARTS LIST)	
R337	1-216-057-00	RES, CHIP	2.2K 5% 1/10W	R402	1-216-121-91	RES, CHIP	1M 5% 1/10W
R339	1-216-295-91	SHORT		R403	1-216-033-00	RES, CHIP	220 5% 1/10W
R340	1-249-417-11	CARBON	1K 5% 1/4W	R404	1-216-033-00	RES, CHIP	220 5% 1/10W
R341	1-216-073-00	RES, CHIP	10K 5% 1/10W	R407		VARIANT (SEE VARIANT PARTS LIST)	
R342	1-216-069-00	RES, CHIP	6.8K 5% 1/10W	R432		VARIANT (SEE VARIANT PARTS LIST)	
R343	1-216-129-00	RES, CHIP	2.2M 5% 1/10W	R450		VARIANT (SEE VARIANT PARTS LIST)	
R344	1-216-295-91	SHORT		R451		VARIANT (SEE VARIANT PARTS LIST)	
R345	1-216-129-00	RES, CHIP	2.2M 5% 1/10W	R502 \triangle	1-215-892-11	METAL	1K 5% 2W
R346	1-216-129-00	RES, CHIP	2.2M 5% 1/10W	R503 \triangle	1-249-426-11	CARBON	5.6K 5% 1/4W
R347	1-216-049-91	RES, CHIP	1K 5% 1/10W	R504 \triangle	1-216-349-00	METAL	1 5% 1W
R348	1-216-043-91	RES, CHIP	560 5% 1/10W	R505	1-249-401-11	CARBON	47 5% 1/4W
R349	1-216-069-00	RES, CHIP	6.8K 5% 1/10W	R506	1-215-860-11	METAL	33 5% 1W
R350	1-208-766-11	RES, CHIP	220 0.50% 1/10W	R507 \triangle	1-260-097-11	CARBON	680 5% 1/2W
R351	1-208-766-11	RES, CHIP	220 0.50% 1/10W	R508 \triangle	1-216-449-11	METAL	56 5% 2W
R352	1-208-794-11	RES, CHIP	3.3K 0.50% 1/10W	R509 \triangle	1-216-481-11	METAL	1.2K 5% 3W
R353	1-216-295-91	SHORT		R510 \triangle	1-216-449-11	METAL	56 5% 2W
R354	1-208-794-11	RES, CHIP	3.3K 0.50% 1/10W	R511	1-247-843-11	CARBON	3.3K 5% 1/4W
R355	1-216-295-91	SHORT		R520 \triangle	1-215-861-00	METAL	47 5% 1W
R356	1-216-059-00	RES, CHIP	2.7K 5% 1/10W	R521	1-249-411-11	CARBON	330 5% 1/4W
R357	1-216-091-00	RES, CHIP	56K 5% 1/10W	R522	1-249-415-11	CARBON	680 5% 1/4W
R358	1-216-043-91	RES, CHIP	560 5% 1/10W	R523	1-216-073-00	RES, CHIP	10K 5% 1/10W
R359	1-216-057-00	RES, CHIP	2.2K 5% 1/10W	R524	1-249-429-11	CARBON	10K 5% 1/4W
R360	1-216-049-91	RES, CHIP	1K 5% 1/10W	R525	1-249-427-11	CARBON	6.8K 5% 1/4W
R361	1-216-049-91	RES, CHIP	1K 5% 1/10W	R526	1-216-081-00	RES, CHIP	22K 5% 1/10W
R362	1-216-043-91	RES, CHIP	560 5% 1/10W	R527	1-216-079-00	RES, CHIP	18K 5% 1/10W
R363	1-216-037-00	RES, CHIP	330 5% 1/10W	R528	1-216-057-00	RES, CHIP	2.2K 5% 1/10W
R364	1-216-025-91	RES, CHIP	100 5% 1/10W	R529	1-216-101-00	RES, CHIP	150K 5% 1/10W
R365	1-216-025-91	RES, CHIP	100 5% 1/10W	R530	1-216-089-91	RES, CHIP	47K 5% 1/10W
R366	1-216-053-00	RES, CHIP	1.5K 5% 1/10W	R532	1-215-437-00	METAL	4.7K 1% 1/4W
R367	1-216-057-00	RES, CHIP	2.2K 5% 1/10W	R533	1-215-461-00	METAL	47K 1% 1/4W
R368	1-216-033-00	RES, CHIP	220 5% 1/10W	R534	1-215-451-00	METAL	18K 1% 1/4W
R369	1-216-041-00	RES, CHIP	470 5% 1/10W	R535	1-249-441-11	CARBON	100K 5% 1/4W
R370	1-216-033-00	RES, CHIP	220 5% 1/10W	R541	1-249-430-11	CARBON	12K 5% 1/4W
R372	1-216-035-00	RES, CHIP	270 5% 1/10W				



COMMON PARTS LISTING

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK
R542	1-249-429-11	CARBON 10K	5% 1/4W
R543	1-249-429-11	CARBON 10K	5% 1/4W
R544	1-216-351-00	METAL 1.5	5% 1W
R546	1-215-890-11	METAL 470	5% 2W
R547	1-249-385-11	CARBON 2.2	5% 1/4W
R548	1-249-430-11	CARBON 12K	5% 1/4W
R549	1-249-429-11	CARBON 10K	5% 1/4W
R550	1-216-061-00	RES, CHIP 3.3K	5% 1/10W
R551	1-249-413-11	CARBON 470	5% 1/4W
R552	1-247-887-00	CARBON 220K	5% 1/4W
R553	1-260-312-11	CARBON 47	5% 1/2W
R554	1-216-101-00	RES, CHIP 150K	5% 1/10W
R555	1-216-093-91	RES, CHIP 68K	5% 1/10W
R556	1-216-081-00	RES, CHIP 22K	5% 1/10W
R557	1-249-431-11	CARBON 15K	5% 1/4W
R558	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R559	1-216-121-91	RES, CHIP 1M	5% 1/10W
R561	1-249-377-11	CARBON 0.47	5% 1/4W
R562	1-260-288-11	CARBON 0.47	5% 1/2W
R571	1-216-365-00	METAL 0.47	5% 2W
R572	1-249-429-11	CARBON 10K	5% 1/4W
R573	1-247-895-91	CARBON 470K	5% 1/4W
R574	1-249-416-11	CARBON 820	5% 1/4W
R575	1-247-895-91	CARBON 470K	5% 1/4W
R576	1-249-441-11	CARBON 100K	5% 1/4W
R578	1-215-902-11	METAL 47K	5% 1W
R579	1-208-777-11	RES, CHIP 620	0.50% 1/10W
R580	1-215-469-00	METAL 100K	1% 1/4W
R581	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R582	1-208-806-11	RES, CHIP 10K	0.50% 1/10W
R583	1-208-830-11	RES, CHIP 100K	0.50% 1/10W
R584	1-208-822-11	RES, CHIP 47K	0.50% 1/10W
R585	1-216-073-00	RES, CHIP 10K	5% 1/10W
R586	1-216-073-00	RES, CHIP 10K	5% 1/10W
R587	1-216-073-00	RES, CHIP 10K	5% 1/10W
R591	1-215-882-00	METAL 22	5% 2W
R607	1-215-859-00	METAL 22	5% 1W
R625	1-249-440-11	CARBON 82K	5% 1/4W
R626	1-249-417-11	CARBON 1K	5% 1/4W
R627	1-240-251-11	CMT,MELF 6.8	5% 10W
R628	1-249-441-11	CARBON 100K	5% 1/4W
R629	1-260-324-11	CARBON 470	5% 1/2W
R630	1-249-429-11	CARBON 10K	5% 1/4W
R631	1-249-437-11	CARBON 47K	5% 1/4W
R632	1-202-933-61	FUSIBLE 0.1	10% 1/2W
R633		VARIANT (SEE VARIANT PARTS LIST)	
R634	1-249-437-11	CARBON 47K	5% 1/4W
R636	1-249-421-11	CARBON 2.2K	5% 1/4W
R637		VARIANT (SEE VARIANT PARTS LIST)	
R638		VARIANT (SEE VARIANT PARTS LIST)	
R639	1-216-361-21	METAL 0.22	5% 2W
R640	1-249-415-11	CARBON 680	5% 1/4W
R641	1-216-387-11	METAL 0.68	5% 3W

REF.NO.	PART NO.	DESCRIPTION	REMARK
R642	1-249-437-11	CARBON 47K	5% 1/4W
R643	1-215-857-11	METAL 10	5% 1W
R645	1-249-429-11	CARBON 10K	5% 1/4W
R646	1-216-485-11	METAL 5.6K	5% 3W
R647	1-249-421-11	CARBON 2.2K	5% 1/4W
R649	1-249-417-11	CARBON 1K	5% 1/4W
R650	1-249-415-11	CARBON 680	5% 1/4W
R651	1-249-419-11	CARBON 1.5K	5% 1/4W
R652	1-247-843-11	CARBON 3.3K	5% 1/4W
R653	1-215-898-11	METAL 10K	5% 2W
R654	1-249-419-11	CARBON 1.5K	5% 1/4W
R656		VARIANT (SEE VARIANT PARTS LIST)	
R657	1-249-417-11	CARBON 1K	5% 1/4W
R658	1-249-421-11	CARBON 2.2K	5% 1/4W
R659	1-216-362-11	METAL 0.27	5% 2W
R660	1-249-429-11	CARBON 10K	5% 1/4W
R662	1-1249-417-11	CARBON 1K	5% 1/4W
R664	1-249-417-11	CARBON 1K	5% 1/4W
R665	1-249-429-11	CARBON 10K	5% 1/4W
R672	1-216-485-11	METAL 5.6K	5% 3W
R673	1-249-421-11	CARBON 2.2K	5% 1/4W
R674	1-247-863-91	CARBON 22K	5% 1/4W
R675	1-216-387-11	METAL 0.68	5% 3W
R676	1-216-485-11	METAL 5.6K	5% 3W

RELAY

RY602	1-755-266-11	RELAY, AC POWER
RY603	1-755-018-11	RELAY

SWITCH

S001	VARIANT (SEE VARIANT PARTS LIST)
S002	VARIANT (SEE VARIANT PARTS LIST)
S003	VARIANT (SEE VARIANT PARTS LIST)
S004	VARIANT (SEE VARIANT PARTS LIST)
S005	VARIANT (SEE VARIANT PARTS LIST)
S006	VARIANT (SEE VARIANT PARTS LIST)
S007	VARIANT (SEE VARIANT PARTS LIST)

SWITCH

SW501	1-572-707-11	SWITCH, LEVER
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TRANSFORMER

T501	1-437-210-11	TRANSFORMER, HORIZONTAL DRIVE
T502	1-431-731-11	TRANSFORMER, MODULATION
T504	1-453-268-21	TRANSFORMER, FBT ASSY, NX-4005//X4J4
T603		VARIANT (SEE VARIANT PARTS LIST)

COMMON PARTS LISTING



<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
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THERMISTOR

THP601		VARIANT (SEE VARIANT PARTS LIST)	
THP602		VARIANT (SEE VARIANT PARTS LIST)	

TUNER

TU101	8-598-431-00	TUNER, FSS BTF-WA411	
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CRYSTAL

X001	1-767-487-11	VIBRATOR, CRYSTAL	
X301	1-567-505-11	OSCILLATOR CRYSTAL	


<u>REF.NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
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BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:


KV-27S42

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

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

REF.NO.	PART NO.	DESCRIPTION	REMARK
A BOARD VARIANT LIST: KV-27S42			

CAPACITOR

C216	1-126-959-11	ELECT	0.47μF	50V	20%
C217	1-126-959-11	ELECT	0.47μF	50V	20%
C380	1-163-021-91	CERAMIC	0.01μF	50V	10%
C381	1-163-021-91	CERAMIC	0.01μF	50V	10%
C382	1-163-021-91	CERAMIC	0.01μF	50V	10%
C418	1-126-964-11	ELECT	10μF	50V	20%
C613 	1-128-717-11	ELECT	680μF	250V	20%
C615	1-113-920-11	CERAMIC	0.0022μF	250V	20%


CONNECTOR

CN301	1-564-508-11	PLUG, CONNECTOR	5P
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DIODE

D002	8-719-070-80	DIODE LNK0120022G
D208	8-719-110-17	DIODE RD10ESB2
D403	8-719-991-33	DIODE 1SS133T-77

IC

IC004	8-742-014-11	HYB IC SBX1981-51
IC203	8-759-366-77	IC MM1311AD
IC401	8-759-490-17	IC TDA7057AQ/N2
IC601 	8-749-015-61	IC STR-F6626

IC LINK

PS201 	1-532-984-11	LINK, IC	2A/90V
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RESISTOR

R020	1-216-069-00	RES,CHIP	6.8K	1/10W	5%
R021	1-249-415-11	CARBON	680	1/4W	5%
R022	1-249-416-11	CARBON	820	1/4W	5%
R023	1-216-057-00	RES,CHIP	2.2K	1/10W	5%
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	1/4W	5%
R211	1-247-807-31	CARBON	100	1/4W	5%
R212	1-216-065-91	RES,CHIP	4.7K	1/10W	5%
R231	1-249-421-11	CARBON	2.2K	1/4W	5%
R232	1-249-429-11	CARBON	10K	1/4W	5%
R233	1-249-429-11	CARBON	10K	1/4W	5%
R236	1-249-421-11	CARBON	2.2K	1/4W	5%
R400	1-216-081-00	RES,CHIP	22K	1/10W	5%
R407	1-216-295-91	SHORT			
R432	1-249-428-11	CARBON	8.2K	1/4W	5%

REF.NO.	PART NO.	DESCRIPTION	REMARK
R633	1-215-483-00	METAL	390K 1/4W 1%
R656	1-249-399-11	CARBON	33 1/4W 5%

SWITCH


S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE


TRANSFORMER

T603 	1-433-806-11	TRANSFORMER, REGULATOR
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THERMISTOR

THP602 	1-809-539-11	THERMISTOR, POSITIVE
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Les composants identifiés per un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29SL42/29SL42C/29XL42M


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
A BOARD VARIANT LIST: KV-29SL42/29SL42C/29XL42M							
<u>CAPACITOR</u>							
C216	1-126-959-11	ELECT	0.47μF 20% 50V	R233	1-249-429-11	CARBON 10K 5%	1/4W
C217	1-126-959-11	ELECT	0.47μF 20% 50V	R236	1-249-421-11	CARBON 2.2K 5%	1/4W
C380	1-163-021-91	CERAMIC	0.01μF 10% 50V	R400	1-216-081-00	RES,CHIP 22K 5%	1/10W
C381	1-163-021-91	CERAMIC	0.01μF 10% 50V	R407	1-216-295-91	SHORT	
C382	1-163-021-91	CERAMIC	0.01μF 10% 50V	R432	1-249-428-11	CARBON 8.2K 5%	1/4W
C418	1-126-964-11	ELECT	10μF 20% 50V	R633	1-215-479-00	METAL 270K 1%	1/4W
C613 	1-128-718-11	ELECT	560μF 20% 400V	R637	1-215-929-11	METAL 100K 5%	3W
C615	1-113-924-11	CERAMIC	0.0047μF 20% 250V	R638	1-215-479-00	METAL 270K 1%	1/4W
C616	1-130-202-00	FILM	0.022μF 10% 400V	R656	1-249-402-11	CARBON 56 5%	1/4W
C617	1-107-824-11	CERAMIC	220pF 5% 1KV	<u>SWITCH</u>			
C699	1-113-924-11	CERAMIC	0.0047μF 20% 250V	S001	1-692-431-21	SWITCH, TACTILE	
<u>CONNECTOR</u>				S002	1-692-431-21	SWITCH, TACTILE	
CN301	1-564-508-11	PLUG, CONNECTOR	5P	S003	1-692-431-21	SWITCH, TACTILE	
<u>DIODE</u>				S004	1-692-431-21	SWITCH, TACTILE	
D002	8-719-070-80	DIODE LNK0120022G		S005	1-692-431-21	SWITCH, TACTILE	
D208	8-719-110-17	DIODE RD10ESB2		S006	1-692-431-21	SWITCH, TACTILE	
D403	8-719-991-33	DIODE 1SS133T-77		S007	1-692-431-21	SWITCH, TACTILE	
D609	8-719-311-31	DIODE RU-1P		<u>TRANSFORMER</u>			
<u>IC</u>				T603 	1-433-807-11	TRANSFORMER, REGULATOR	
IC004	8-742-014-11	HYB IC SBX1981-51		<u>THERMISTOR</u>			
IC203	8-759-366-77	IC MM1311AD		THP601 	1-803-540-11	THERMISTOR	
IC401	8-759-490-17	IC TDA7057AQ/N2					
IC601 	8-749-014-48	IC STR-F6656					
<u>IC LINK</u>							
PS201 	1-532-984-11	LINK, IC	2A/90V				
<u>RESISTOR</u>							
R020	1-216-069-00	RES,CHIP	6.8K 5% 1/10W				
R021	1-249-415-11	CARBON	680 5% 1/4W				
R022	1-249-416-11	CARBON	820 5% 1/4W				
R023	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R065	1-216-295-91	SHORT					
R090	1-249-429-11	CARBON	10K 5% 1/4W				
R211	1-247-807-31	CARBON	100 5% 1/4W				
R212	1-216-065-91	RES,CHIP	4.7K 5% 1/10W				
R231	1-249-421-11	CARBON	2.2K 5% 1/4W				
R232	1-249-429-11	CARBON	10K 5% 1/4W				




BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-27S46

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

Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK		
A BOARD VARIANT LIST: KV-27S46					
CAPACITOR					
C216	1-126-959-11	ELECT	0.47µF	20%	50V
C217	1-126-959-11	ELECT	0.47µF	20%	50V
C370	1-163-021-91	CERAMIC	0.01µF	10%	50V
C371	1-163-021-91	CERAMIC	0.01µF	10%	50V
C372	1-163-021-91	CERAMIC	0.01µF	10%	50V
C418	1-126-964-11	ELECT	10µF	20%	50V
C613△	1-128-717-11	ELECT	680µF	20%	250V
C615	1-113-920-11	CERAMIC	0.0022µF	20%	250V
CONNECTOR					
CN301	1-564-508-11	PLUG, CONNECTOR	5P		
CN302	1-691-616-11	CONNECTOR, BOARD TO BOARD			
DIODE					
D002	8-719-070-80	DIODE LNK0120022G			
D208	8-719-110-17	DIODE RD10ESB2			
D403	8-719-991-33	DIODE 1SS133T-77			
IC					
IC004	8-742-014-11	HYB IC SBX1981-51			
IC203	8-759-534-81	IC MM1313AD/			
IC401	8-759-490-17	IC TDA7057AQ/N2			
IC601△	8-749-015-61	IC STR-F6626			
JACK					
J202	1-774-749-11	JACK BLOCK, PIN			
IC LINK					
PS201△	1-532-984-11	LINK, IC	2A/90V		
RESISTOR					
R020	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R021	1-249-415-11	CARBON	680	5%	1/4W
R022	1-249-416-11	CARBON	820	5%	1/4W
R023	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R065	1-216-295-91	SHORT			
R090	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-807-31	CARBON	100	5%	1/4W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-249-421-11	CARBON	2.2K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W


REF.NO.	PART NO.	DESCRIPTION	REMARK		
R233	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-421-11	CARBON	2.2K	5%	1/4W
R283	1-216-295-91	SHORT			
R400	1-216-081-00	RES,CHIP	22K	5%	1/10W
R432	1-249-428-11	CARBON	8.2K	5%	1/4W
R633	1-215-483-00	METAL	390K	1%	1/4W
R656	1-249-399-11	CARBON	33	5%	1/4W
<u>SWITCH</u>					
S001	1-692-431-21	SWITCH, TACTILE			
S002	1-692-431-21	SWITCH, TACTILE			
S003	1-692-431-21	SWITCH, TACTILE			
S004	1-692-431-21	SWITCH, TACTILE			
S005	1-692-431-21	SWITCH, TACTILE			
S006	1-692-431-21	SWITCH, TACTILE			
S007	1-692-431-21	SWITCH, TACTILE			


TRANSFORMER

T603 1-433-806-11 TRANSFORMER, REGULATOR

THERMISTOR

THP602 1-809-539-11 THERMISTOR, POSITIVE

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






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

A

BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29SL46


REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
A BOARD VARIANT LIST: KV-29SL46							
CAPACITOR							
C216	1-126-959-11	ELECT	0.47µF 20% 50V	R090	1-249-429-11	CARBON 10K 5% 1/4W	
C217	1-126-959-11	ELECT	0.47µF 20% 50V	R211	1-247-807-31	CARBON 100 5% 1/4W	
C370	1-163-021-91	CERAMIC	0.01µF 10% 50V	R212	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
C371	1-163-021-91	CERAMIC	0.01µF 10% 50V	R231	1-249-421-11	CARBON 2.2K 5% 1/4W	
C372	1-163-021-91	CERAMIC	0.01µF 10% 50V	R232	1-249-429-11	CARBON 10K 5% 1/4W	
C418	1-126-964-11	ELECT	10µF 20% 50V	R233	1-249-429-11	CARBON 10K 5% 1/4W	
C613 	1-128-718-11	ELECT	560µF 20% 400V	R236	1-249-421-11	CARBON 2.2K 5% 1/4W	
C615	1-113-924-11	CERAMIC	0.0047µF 20% 250V	R283	1-216-295-91	SHORT	
C616	1-130-202-00	FILM	0.022µF 10% 400V	R400	1-216-081-00	RES,CHIP 22K 5% 1/10W	
C617	1-107-824-11	CERAMIC	220pF 5% 1KV	R432	1-249-428-11	CARBON 8.2K 5% 1/4W	
C699	1-113-924-11	CERAMIC	0.0047µF 20% 250V	R633	1-215-479-00	METAL 270K 1% 1/4W	
CONNECTOR				R637	1-215-929-11	METAL 100K 5% 3W	
CN301	1-564-508-11	PLUG, CONNECTOR	5P	R638	1-215-479-00	METAL 270K 1% 1/4W	
DIODE				R656	1-249-402-11	CARBON 56 5% 1/4W	
D002	8-719-070-80	DIODE LNK0120022G		SWITCH			
D208	8-719-110-17	DIODE RD10ESB2		S001	1-692-431-21	SWITCH, TACTILE	
D403	8-719-991-33	DIODE 1SS133T-77		S002	1-692-431-21	SWITCH, TACTILE	
D609	8-719-311-31	DIODE RU-1P		S003	1-692-431-21	SWITCH, TACTILE	
IC				S004	1-692-431-21	SWITCH, TACTILE	
IC004	8-742-014-11	HYB IC SBX1981-51		S005	1-692-431-21	SWITCH, TACTILE	
IC203	8-759-534-81	IC MM1313AD/		S006	1-692-431-21	SWITCH, TACTILE	
IC401	8-759-490-17	IC TDA7057AQ/N2		S007	1-692-431-21	SWITCH, TACTILE	
IC601 	8-749-014-48	IC STR-F6656		TRANSFORMER			
JACK				T603 	1-433-807-11	TRANSFORMER, REGULATOR	
J202	1-774-749-11	JACK BLOCK, PIN		THERMISTOR			
IC LINK				THP601 	1-803-540-11	THERMISTOR	
PS201 	1-532-984-11	LINK, IC	2A/90V				
RESISTOR							
R020	1-216-069-00	RES,CHIP	6.8K 5% 1/10W				
R021	1-249-415-11	CARBON	680 5% 1/4W				
R022	1-249-416-11	CARBON	820 5% 1/4W				
R023	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R065	1-216-295-91	SHORT					




BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-27S66


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

Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
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A BOARD VARIANT LIST: KV-27S66

CAPACITOR

C216	1-126-959-11	ELECT	0.47μF	20%	50V
C217	1-126-959-11	ELECT	0.47μF	20%	50V
C250	1-126-960-11	ELECT	1μF	20%	50V
C251	1-126-960-11	ELECT	1μF	20%	50V
C252	1-126-959-11	ELECT	0.47μF	20%	50V
C370	1-163-021-91	CERAMIC	0.01μF	10%	50V
C371	1-163-021-91	CERAMIC	0.01μF	10%	50V
C372	1-163-021-91	CERAMIC	0.01μF	10%	50V
C418	1-126-964-11	ELECT	10μF	20%	50V
C613 	1-128-717-11	ELECT	680μF	20%	250V
C615	1-113-920-11	CERAMIC	0.0022μF	20%	250V
C627	1-164-004-11	CERAMIC	10%μF	10%	25V


CONNECTOR

CN150	1-691-616-21	CONNECTOR, BOARD TO BOARD 15P
CN301	1-564-508-11	PLUG, CONNECTOR 5P
CN302	1-691-616-11	CONNECTOR, BOARD TO BOARD

DIODE

D002	8-719-070-80	DIODE LNK0120022G
D208	8-719-110-17	DIODE RD10ESB2
D403	8-719-991-33	DIODE 1SS133T-77

IC

IC004	8-742-014-11	HYB IC SBX1981-51
IC203	8-759-534-81	IC MM1313AD/
IC401	8-759-490-17	IC TDA7057AQ/N2
IC601 	8-749-015-61	IC STR-F6626

JACK

J202	1-774-749-11	JACK BLOCK, PIN
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IC LINK

PS201 	1-532-984-11	LINK, IC 2A/90V
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RESISTOR

R020	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R021	1-249-415-11	CARBON	680	5%	1/4W
R022	1-249-416-11	CARBON	820	5%	1/4W
R023	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R065	1-216-295-91	SHORT			

REF.NO.	PART NO.	DESCRIPTION	REMARK
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R090	1-249-429-11	CARBON	10K	5%	1/4W
R211	1-247-807-31	CARBON	100	5%	1/4W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-249-421-11	CARBON	2.2K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-429-11	CARBON	10K	5%	1/4W
R236	1-249-421-11	CARBON	2.2K	5%	1/4W
R278	1-216-295-91	SHORT			
R283	1-216-295-91	SHORT			
R400	1-216-081-00	RES,CHIP	22K	5%	1/10W
R432	1-249-428-11	CARBON	8.2K	5%	1/4W
R633	1-215-483-00	METAL	390K	1%	1/4W
R656	1-249-399-11	CARBON	33	5%	1/4W

SWITCH


S001	1-692-431-21	SWITCH, TACTILE
S002	1-692-431-21	SWITCH, TACTILE
S003	1-692-431-21	SWITCH, TACTILE
S004	1-692-431-21	SWITCH, TACTILE
S005	1-692-431-21	SWITCH, TACTILE
S006	1-692-431-21	SWITCH, TACTILE
S007	1-692-431-21	SWITCH, TACTILE


TRANSFORMER

T603 	1-433-806-11	TRANSFORMER, REGULATOR
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THERMISTOR

THP602 	1-809-539-11	THERMISTOR, POSITIVE
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The components identified by shading and mark  are critical for safety. Replace only with part number specified.

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

A

BOARD VARIANT PARTS LIST


The parts on this page belong to the following model(s) only:

KV-29AL42/29AL42C

REF.NO. PART NO. DESCRIPTION REMARK

A BOARD VARIANT LIST: KV-29AL42/29AL42C

CAPACITOR

C380	1-163-021-91	CERAMIC	0.01μF	10%	50V
C381	1-163-021-91	CERAMIC	0.01μF	10%	50V
C382	1-163-021-91	CERAMIC	0.01μF	10%	50V
C613 	1-128-718-11	ELECT	560μF	20%	400V
C615	1-113-924-11	CERAMIC	0.0047μF	20%	250V
C616	1-130-202-00	FILM	0.022μF	10%	400V
C617	1-107-824-11	CERAMIC	220pF	5%	1KV
C699	1-113-924-11	CERAMIC	0.0047μF	20%	250V

CONNECTOR

CN251	1-564-510-11	PLUG, CONNECTOR	7P
CN253	1-564-510-11	PLUG, CONNECTOR	7P
CN301	1-564-511-11	PLUG, CONNECTOR	8P

DIODE

D208	8-719-982-96	DIODE MTZJ-T-77-2.2A
D609	8-719-311-31	DIODE RU-1P


IC

IC203	8-759-366-77	IC MM1311AD
IC601 	8-749-014-48	IC STR-F6656

TRANSISTOR

Q390	8-729-422-27	TRANSISTOR 2SD601A-Q
Q391	8-729-422-27	TRANSISTOR 2SD601A-Q

RESISTOR


R255	1-216-022-00	RES,CHIP	75	5%	1/10W
R390	1-249-417-11	CARBON	1K	5%	1/4W
R391 	1-216-073-00	RES,CHIP	10K	5%	1/10W
R392	1-216-049-91	RES,CHIP	1K	5%	1/10W
R394	1-216-033-00	RES,CHIP	220	5%	1/10W
R395	1-216-049-91	RES,CHIP	1K	5%	1/10W
R407	1-216-295-91	SHORT			
R450	1-216-295-91	SHORT			
R451	1-216-295-91	SHORT			
R633	1-215-479-00	METAL	270K	1%	1/4W
R637	1-215-929-11	METAL	100K	5%	3W
R638	1-215-479-00	METAL	270K	1%	1/4W
R656	1-249-402-11	CARBON	56	5%	1/4W

REF.NO. PART NO. DESCRIPTION REMARK

TRANSFORMER

T603 	1-433-807-11	TRANSFORMER, REGULATOR
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THERMISTOR


THP601 	1-803-540-11	THERMISTOR
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BOARD VARIANT PARTS LIST

The parts on this page belong to the following model(s) only:

KV-29AL66/29AL66C

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

Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK
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A BOARD VARIANT LIST: KV-29AL66/29AL66C

CAPACITOR

C250	1-126-960-11	ELECT	1µF	20%	50V
C251	1-126-960-11	ELECT	1µF	20%	50V
C252	1-126-959-11	ELECT	0.47µF	20%	50V
C280	1-126-935-11	ELECT	470µF	20%	16V
C281	1-126-959-11	ELECT	0.47µF	20%	50V

C282	1-126-959-11	ELECT	0.47µF	20%	50V
C370	1-163-021-91	CERAMIC	0.01µF	10%	50V
C371	1-163-021-91	CERAMIC	0.01µF	10%	50V
C372	1-163-021-91	CERAMIC	0.01µF	10%	50V
C613	1-128-718-11	ELECT	560µF	20%	400V

C615	1-113-924-11	CERAMIC	0.0047µF	20%	250V
C616	1-130-202-00	FILM	0.022µF	10%	400V
C617	1-107-824-11	CERAMIC	220pF	5%	1KV
C627	1-164-004-11	CERAMIC	0.1µF	10%	25V
C699	1-113-924-11	CERAMIC	0.0047µF	20%	250V

CONNECTOR

CN151	1-564-511-11	PLUG, CONNECTOR	8P
CN152	1-564-509-11	PLUG, CONNECTOR	6P
CN251	1-564-510-11	PLUG, CONNECTOR	7P
CN253	1-564-510-11	PLUG, CONNECTOR	7P
CN301	1-564-511-11	PLUG, CONNECTOR	8P
CN302	1-691-616-11	CONNECTOR, BOARD TO BOARD	

DIODE

D208	8-719-982-96	DIODE MTZJ-T-77-2.2A
D280	8-719-981-99	DIODE MTZJ-3.3
D281	8-719-981-99	DIODE MTZJ-3.3
D609	8-719-311-31	DIODE RU-1P

IC

IC203	8-759-534-81	IC MM1313AD/
IC601	8-749-014-48	IC STR-F6656

JACK

J202	1-774-749-11	JACK BLOCK, PIN
J204	1-774-749-11	JACK BLOCK, PIN

TRANSISTOR

Q080	8-729-422-27	TRANSISTOR 2SD601A-Q
Q280	8-729-216-22	TRANSISTOR 2SA1162-G
Q281	8-729-216-22	TRANSISTOR 2SA1162-G
Q282	8-729-216-22	TRANSISTOR 2SA1162-G

REF.NO.	PART NO.	DESCRIPTION	REMARK
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Q283	8-729-422-27	TRANSISTOR 2SD601A-Q
Q284	8-729-422-27	TRANSISTOR 2SD601A-Q
Q285	8-729-422-27	TRANSISTOR 2SD601A-Q
Q390	8-729-422-27	TRANSISTOR 2SD601A-Q
Q391	8-729-422-27	TRANSISTOR 2SD601A-Q

RESISTOR

R080	1-247-863-91	CARBON	22K	5%	1/4W
R082	1-216-073-00	RES,CHIP	10K	5%	1/10W
R083	1-216-041-00	RES,CHIP	470	5%	1/10W
R084	1-249-429-11	CARBON	10K	5%	1/4W
R255	1-216-022-00	RES,CHIP	75	5%	1/10W

R278	1-216-295-91	SHORT			
R280	1-247-807-31	CARBON	100	5%	1/4W
R281	1-247-807-31	CARBON	100	5%	1/4W
R282	1-247-807-31	CARBON	100	5%	1/4W
R283	1-216-295-91	SHORT			

R284	1-260-091-11	CARBON	220	5%	1/2W
R285	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R286	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R287	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R288	1-216-065-91	RES,CHIP	4.7K	5%	1/10W

R289	1-216-021-00	RES,CHIP	68	5%	1/10W
R290	1-216-113-00	RES,CHIP	470K	5%	1/10W
R291	1-216-113-00	RES,CHIP	470K	5%	1/10W
R292	1-216-113-00	RES,CHIP	470K	5%	1/10W
R293	1-216-069-00	RES,CHIP	6.8K	5%	1/10W

R294	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R295	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R390	1-249-417-11	CARBON	1K	5%	1/4W
R391	1-216-073-00	RES,CHIP	10K	5%	1/10W
R392	1-216-049-91	RES,CHIP	1K	5%	1/10W

R394	1-216-033-00	RES,CHIP	220	5%	1/10W
R395	1-216-049-91	RES,CHIP	1K	5%	1/10W
R450	1-216-295-91	SHORT			
R451	1-216-295-91	SHORT			
R633	1-215-479-00	METAL	270K	1%	1/4W

R637	1-215-929-11	METAL	100K	5%	3W
R638	1-215-479-00	METAL	270K	1%	1/4W
R656	1-249-402-11	CARBON	56	5%	1/4W

TRANSFORMER

T603	1-433-807-11	TRANSFORMER, REGULATOR
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THERMISTOR

THP601	1-803-540-11	THERMISTOR
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REF.NO.	PART NO.	DESCRIPTION	REMARK
C			
* A-1331-920-A C BOARD, COMPLETE (KV-27S42/27S46/27S66/29SL42/29SL42C/29SL46/29XL42M only)			
4-382-854-11 SCREW (M3X10), P, SW (+)			
CAPACITOR			
C1751	1-107-652-11	ELECT 10 μ F	20% 250V
C1752	1-162-114-00	CERAMIC 0.0047 μ F	2KV
C1755	1-107-667-11	ELECT 2.2 μ F	20% 160V
CONNECTOR			
CN1751*	1-564-509-11	PLUG, CONNECTOR 6P	
CN1752*	1-564-508-11	PLUG, CONNECTOR 5P	
CN1754	1-695-915-11	TAB (CONTACT)	
DIODE			
D1754	8-719-901-83	DIODE 1SS83	
D1755	8-719-901-83	DIODE 1SS83	
D1756	8-719-901-83	DIODE 1SS83	
D1758	8-719-302-43	DIODE EL1Z	
IC			
IC1751	8-759-562-43	IC TDA6108JF/N1B	
JACK			
J1751 \triangle	1-251-688-11	SOCKET, CRT	
COIL			
L1751	1-408-613-31	INDUCTOR 68 μ H	
RESISTOR			
R1756	1-260-099-11	CARBON 1K	5% 1/2W
R1757	1-260-099-11	CARBON 1K	5% 1/2W
R1758	1-260-099-11	CARBON 1K	5% 1/2W
R1759	1-260-087-11	CARBON 100	5% 1/2W
R1760	1-260-123-11	CARBON 100K	5% 1/2W
R1761	1-216-373-11	METAL OXIDE 2.2	5% 2W F
R1762	1-216-375-00	METAL OXIDE 3.3	5% 2W F
R1763	1-247-807-31	CARBON 100	5% 1/4W
R1764	1-247-807-31	CARBON 100	5% 1/4W
R1765	1-247-807-31	CARBON 100	5% 1/4W
R1770	1-260-132-11	CARBON 560K	5% 1/2W

REF.NO.	PART NO.	DESCRIPTION	REMARK
CV			
* A-1331-921-A CV BOARD, COMPLETE (KV-29AL42/29AL42C/29AL66/29AL66C only)			
4-382-854-11 SCREW (M3X10), P, SW (+)			
CAPACITOR			
C944	1-102-129-00	CERAMIC 0.01 μ F	10% 50V
C945	1-102-110-00	CERAMIC 220pF	10% 50V
C946	1-104-665-11	ELECT 100 μ F	20% 25V
C949	1-161-830-00	CERAMIC 0.0047 μ F	500V
C950	1-126-941-11	ELECT 470 μ F	20% 25V
C951	1-107-645-11	ELECT 22 μ F	20% 160V
C952	1-104-999-11	MYLAR 0.1 μ F	10% 200V
C953	1-106-383-00	MYLAR 0.047 μ F	10% 200V
C954	1-130-471-00	FILM 0.001 μ F	5% 50V
C955	1-107-667-11	ELECT 2.2 μ F	20% 160V
C956	1-130-471-00	FILM 0.001 μ F	5% 50V
C957	1-106-383-00	MYLAR 0.047 μ F	10% 200V
C958	1-126-941-11	ELECT 470 μ F	20% 25V
C1701	1-107-652-11	ELECT 10 μ F	20% 250V
C1702	1-162-114-00	CERAMIC 0.0047 μ F	2KV
C1705	1-107-667-11	ELECT 2.2 μ F	20% 160V
C1941	1-126-941-11	ELECT 470 μ F	20% 25V
C1948	1-102-121-00	CERAMIC 0.0022 μ F	10% 50V
CONNECTOR			
CN942 *	1-564-507-11	PLUG, CONNECTOR 4P	
CN1701*	1-564-509-11	PLUG, CONNECTOR 6P	
CN1702*	1-564-511-11	PLUG, CONNECTOR 8P	
CN1704	1-695-915-11	TAB (CONTACT)	
DIODE			
D941	8-719-991-33	DIODE 1SS133T-77	
D946	8-719-110-88	DIODE RD39ESB2	
D947	8-719-110-88	DIODE RD39ESB2	
D1704	8-719-901-83	DIODE 1SS83	
D1705	8-719-901-83	DIODE 1SS83	
D1706	8-719-901-83	DIODE 1SS83	
D1708	8-719-302-43	DIODE EL1Z	
IC			
IC1701	8-759-562-43	IC TDA6108JF/N1B	



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REF.NO.	PART NO.	DESCRIPTION	REMARK
JACK			
J1701 \triangle	1-251-688-11	SOCKET, CRT	
COIL			
L1701	1-408-613-31	INDUCTOR 68 μ H	
TRANSISTOR			
Q943	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q944	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q945	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q946	8-729-017-05	TRANSISTOR 2SA1837	
Q947	8-729-017-06	TRANSISTOR 2SC4793	
Q965	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q966	8-729-119-76	TRANSISTOR 2SA1175-HFE	
RESISTOR			
R943	1-247-807-31	CARBON 100 5% 1/4W	
R948	1-249-417-11	CARBON 1K 5% 1/4W	
R949	1-249-421-11	CARBON 2.2K 5% 1/4W	
R950	1-249-417-11	CARBON 1K 5% 1/4W	
R951	1-249-417-11	CARBON 1K 5% 1/4W	
R952	1-249-413-11	CARBON 470 5% 1/4W	
R953	1-249-403-11	CARBON 68 5% 1/4W	
R954	1-247-815-91	CARBON 220 5% 1/4W	
R955	1-249-416-11	CARBON 820 5% 1/4W	
R956	1-247-807-31	CARBON 100 5% 1/4W	
R957	1-249-429-11	CARBON 10K 5% 1/4W	
R958	1-247-807-31	CARBON 100 5% 1/4W	
R959	1-249-403-11	CARBON 68 5% 1/4W	
R977	1-249-397-11	CARBON 22 5% 1/4W F	
R979	1-249-401-11	CARBON 47 5% 1/4W	
R1706	1-260-099-11	CARBON 1K 5% 1/2W	
R1707	1-260-099-11	CARBON 1K 5% 1/2W	
R1708	1-260-099-11	CARBON 1K 5% 1/2W	
R1709	1-260-087-11	CARBON 100 5% 1/2W	
R1710	1-260-123-11	CARBON 100K 5% 1/2W	
R1711	1-216-373-11	METAL OXIDE 2.2 5% 2W F	
R1712	1-216-375-00	METAL OXIDE 3.3 5% 2W F	
R1713	1-247-807-31	CARBON 100 5% 1/4W	
R1714	1-247-807-31	CARBON 100 5% 1/4W	
R1715	1-247-807-31	CARBON 100 5% 1/4W	
R1720	1-260-132-11	CARBON 560K 5% 1/2W	
R1941	1-260-312-11	CARBON 47 5% 1/2W	
R1942	1-249-387-11	CARBON 3.3 5% 1/4W F	
R1943	1-249-414-11	CARBON 560 5% 1/4W F	
R1944	1-249-432-11	CARBON 18K 5% 1/4W	
R1945	1-215-912-11	METAL OXIDE 150 5% 3W F	
R1946	1-249-417-11	CARBON 1K 5% 1/4W F	

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1947	1-249-432-11	CARBON 18K 5% 1/4W	
R1948	1-249-414-11	CARBON 560 5% 1/4W	
R1949	1-249-387-11	CARBON 3.3 5% 1/4W F	
R1950	1-249-401-11	CARBON 47 5% 1/4W F	
E			
*A-1343-654-A E BOARD, COMPLETE (KV-27S42, 27S46, 27S66 only)			
*A-1343-656-A E BOARD, COMPLETE (KV-29AL42, 29AL42C, 29AL66, 29AL66C, 29SL42, 29SL42C, 29SL46, 29XL42M, only)			
1-533-223-11 HOLDER, FUSE			
* 4-374-846-01 COVER, CAPACITOR, CAP TYPE			
CAPACITOR			
C5002	1-107-679-91	ELECT 10 μ F 20% 450V	
C5003	1-136-601-11	FILM 0.01 μ F 10% 630V	
C5004	1-130-471-00	MYLAR 0.001 μ F 5% 50V	
C5006	1-130-471-00	MYLAR 0.001 μ F 5% 50V	
C5007	1-130-467-00	MYLAR 470pF 5% 50V	
C5008	1-130-471-00	MYLAR 0.001 μ F 5% 50V	
C5009	1-126-965-11	ELECT 22 μ F 20% 50V	
C5010	1-115-804-91	ELECT 120 μ F 20% 35V	
C5020 \triangle	1-113-920-11	CERAMIC 0.0022 μ F 20% 125V	
(KV-27S42/27S46/27S66 only)			
C5020 \triangle	1-113-924-11	CERAMIC 0.0047 μ F 20% 250V	
(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)			
C5021 \triangle	1-113-924-11	CERAMIC 0.0047 μ F 20% 250V	
(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)			
C5050 \triangle	1-136-311-11	FILM 0.47 μ F 20% 125V	
C5150 \triangle	1-136-311-11	FILM 0.47 μ F 20% 125V	
(KV-27S42/27S46/27S66 only)			
C5643	1-113-924-11	CERAMIC 0.0047 μ F 20% 250V	
C5644	1-113-924-11	CERAMIC 0.0047 μ F 20% 250V	
CONNECTOR			
CN5000*	1-580-843-11	PIN, CONNECTOR (POWER) 2P	
CN5001*	1-564-506-11	PLUG, CONNECTOR 3P	
CN5002*	1-580-843-11	PIN, CONNECTOR (POWER) 2P	
CN5003*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
DIODE			
D5003	8-719-948-45	DIODE ERA22-08	
D5004	8-719-991-33	DIODE 1SS133T-77	
D5005	8-719-991-33	DIODE 1SS133T-77	
D5006	8-719-109-93	DIODE RD6.2ESB2	
D5007	8-719-510-48	DIODE D1N20R	
D5008	8-719-063-70	DIODE D1NL20U	
D5631	8-719-911-55	DIODE U05G	
D5632	8-719-911-55	DIODE U05G	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
<u>FUSE</u>			
F5050 \triangle	1-576-193-11	FUSE 6.3A/125V (KV-27S42/27S46/27S66 only)	
F5050 \triangle	1-532-506-51	FUSE 6.3A/250V	
		(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)	
<u>TRANSISTOR</u>			
Q5001	8-729-044-30	TRANSISTOR 2SK2845-LB102	
Q5002	8-729-119-78	TRANSISTOR 2SC2785-HFE	
<u>RESISTOR</u>			
R5001	1-249-389-11	CARBON 4.7 5% 1/4W F	
R5002	1-215-485-00	METAL 470K 1% 1/4W	
R5003	1-240-205-91	CARBON 22M 5% 1/2W	
R5007	1-249-421-11	CARBON 2.2K 5% 1/4W	
R5008	1-249-429-11	CARBON 10K 5% 1/4W	
R5009	1-249-437-11	CARBON 47K 5% 1/4W	
R5010	1-249-415-11	CARBON 680 5% 1/4W	
R5011	1-260-302-51	CARBON 6.8 5% 1/2W	
R5012	1-249-417-11	CARBON 1K 5% 1/4W	
R5013	1-249-415-11	CARBON 680 5% 1/4W	
R5050	1-219-512-11	CARBON 2.2M 5% 1/2W	
R5350 \triangle	1-219-513-11	CARBON 4.7M 5% 1/2W	
		(KV-27S42/27S46/27S66 only)	
R5350 \triangle	1-247-289-00	CARBON 8.2M 5% 1W	
		(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)	
<u>TRANSFORMER</u>			
T5001 \triangle	1-431-852-11	TRANSFORMER, CONVERTER (SRT)	
T5050 \triangle	1-431-838-11	TRANSFORMER, LINE FILTER	
		(KV-27S42/27S46/27S66 only)	
T5050 \triangle	1-426-717-11	TRANSFORMER, LINE FILTER	
		(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)	
<u>THERMISTOR</u>			
TH506	1-803-586-11	THERMISTOR	
<u>VARISTOR</u>			
VDR505	1-803-585-11	VARISTOR (KV-27S42/27S46/27S66 only)	
VDR505	1-803-587-11	VARISTOR	
		(KV-29AL66/29AL66C/29AL42/29AL42C/29SL42/29SL42C/29XL42M/29SL46 only)	

REF.NO.	PART NO.	DESCRIPTION	REMARK
<u>HT</u>			
		* A-1372-616-A HT BOARD, COMPLETE	
		(KV-29AL42/29AL42C/29AL66/29AL66C only)	
<u>CONNECTOR</u>			
CN2201*	1-564-518-11	PLUG, CONNECTOR 3P	
<u>RESISTOR</u>			
R2001	1-249-415-11	CARBON 680 5% 1/4W	
R2002	1-249-416-11	CARBON 820 5% 1/4W	
R2003	1-249-421-11	CARBON 2.2K 5% 1/4W	
R2004	1-249-427-11	CARBON 6.8K 5% 1/4W	
R2005	1-249-429-11	CARBON 10K 5% 1/4W	
R2006	1-247-815-91	CARBON 220 5% 1/4W	
<u>SWITCH</u>			
S2001	1-572-198-11	SWITCH, KEYBOARD	
S2002	1-572-198-11	SWITCH, KEYBOARD	
S2003	1-572-198-11	SWITCH, KEYBOARD	
S2004	1-572-198-11	SWITCH, KEYBOARD	
S2005	1-572-198-11	SWITCH, KEYBOARD	
S2006	1-572-198-11	SWITCH, KEYBOARD	
S2007	1-572-198-11	SWITCH, KEYBOARD	



REF.NO. PART NO. DESCRIPTION REMARK



* A-1372-617-A HV BOARD, COMPLETE
(KV-29AL42/29AL42C/29AL66/29AL66C only)

CAPACITOR

C1407	1-137-194-91	FILM	0.47μF	5%	50V
C1408	1-136-287-11	FILM	0.0047μF	5%	50V
C1409	1-137-194-81	FILM	0.47μF	5%	50V
C1410	1-126-964-11	ELECT	10μF	20%	50V
C1411	1-126-964-11	ELECT	10μF	20%	50V
C1412	1-126-964-11	ELECT	10μF	20%	50V
C1413	1-126-964-11	ELECT	10μF	20%	50V
C1415	1-126-968-11	ELECT	100μF	20%	50V
C1416	1-106-375-12	MYLAR	0.022μF	20%	200V
C1417	1-137-414-11	FILM	0.0047μF	10%	100V
C1418	1-102-114-00	CERAMIC	470pF	10%	50V
C1419	1-130-495-00	FILM	0.1μF	5%	50V
C1420	1-137-371-11	FILM	0.015μF	5%	50V
C1421	1-102-121-00	CERAMIC	0.0022μF	10%	50V
C1422	1-137-414-11	FILM	0.0047μF	10%	100V
C1423	1-137-194-91	FILM	0.47μF	5%	50V
C1424	1-130-495-00	FILM	0.1μF	5%	50V
C1425	1-137-370-11	FILM	0.01μF	5%	50V
C1426	1-130-495-00	FILM	0.1μF	5%	50V
C1427	1-137-370-11	FILM	0.01μF	5%	50V
C1428	1-130-495-00	FILM	0.1μF	5%	50V
C1429	1-137-370-11	FILM	0.01μF	5%	50V
C1430	1-126-964-11	ELECT	10μF	20%	50V
C1431	1-136-287-11	FILM	0.0047μF	5%	50V
C1432	1-126-964-11	ELECT	10μF	20%	50V
C1437	1-126-964-11	ELECT	10μF	20%	50V
C2068	1-104-665-11	ELECT	100μF	20%	25V
C2234	1-126-960-11	ELECT	1μF	20%	50V
C2235	1-126-960-11	ELECT	1μF	20%	50V
C2236	1-106-343-00	MYLAR	0.001μF	10%	200V

CONNECTOR

CN1405*1-564-510-11	PLUG, CONNECTOR	7P
CN1406*1-564-506-11	PLUG, CONNECTOR	3P
CN2001*1-564-506-11	PLUG, CONNECTOR	3P
CN2201*1-564-508-11	PLUG, CONNECTOR	5P
CN2202*1-564-510-11	PLUG, CONNECTOR	7P

DIODE

D2001	8-719-110-17	DIODE RD10ESB2
D2006	1-810-039-21	LED UNIT
D2235	8-719-110-17	DIODE RD10ESB2
D2236	8-719-110-17	DIODE RD10ESB2

REF.NO. PART NO. DESCRIPTION REMARK

IC

IC1403	8-759-496-03	IC NJM2178L
IC2003	8-742-014-11	HYB IC SBX1981-51

JACK

J2231	1-691-110-11	JACK, PIN 3P
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RESISTOR

R1403	1-215-437-00	METAL	4.7K	1%	1/4W
R1404	1-249-419-11	CARBON	1.5K	5%	1/4W
R1405	1-249-424-11	CARBON	3.9K	5%	1/4W
R1406	1-249-437-11	CARBON	47K	5%	1/4W
R1407	1-249-435-11	CARBON	33K	5%	1/4W
R1408	1-215-469-00	METAL	100K	1%	1/4W
R1409	1-249-417-11	CARBON	1K	5%	1/4W
R1410	1-215-461-00	METAL	47K	1%	1/4W
R1411	1-249-429-11	CARBON	10K	5%	1/4W
R1412	1-247-807-31	CARBON	100	5%	1/4W
R1413	1-247-807-31	CARBON	100	5%	1/4W
R1414	1-249-429-11	CARBON	10K	5%	1/4W
R1415	1-249-429-11	CARBON	10K	5%	1/4W
R1416	1-249-429-11	CARBON	10K	5%	1/4W
R1417	1-249-429-11	CARBON	10K	5%	1/4W
R1419	1-249-441-11	CARBON	100K	5%	1/4W
R1420	1-249-429-11	CARBON	10K	5%	1/4W
R1421	1-249-441-11	CARBON	100K	5%	1/4W
R1422	1-249-429-11	CARBON	10K	5%	1/4W
R1423	1-249-441-11	CARBON	100K	5%	1/4W
R1430	1-215-461-00	METAL	47K	1%	1/4W
R1431	1-249-429-11	CARBON	10K	5%	1/4W
R1433	1-249-429-11	CARBON	10K	5%	1/4W
R1434	1-215-445-00	METAL	10K	1%	1/4W
R1435	1-249-431-11	CARBON	15K	5%	1/4W
R2236	1-247-895-91	CARBON	470K	5%	1/4W
R2238	1-247-895-91	CARBON	470K	5%	1/4W



* A-1380-608-A K BOARD, COMPLETE
(KV-27S66/29AL42/29AL42C/29AL66/29AL66C only)
* A-1380-611-A K BOARD, COMPLETE
(KV-27S66 only)
* A-1380-612-A K BOARD, COMPLETE
(KV-29AL42/29AL42C only)

4-382-854-11	SCREW (M3X10), P, SW (+)
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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
CAPACITOR				IC LINK			
C1001	1-126-968-11	ELECT	100μF 20% 50V	PS1400	1-532-984-11	LINK, IC 2A/90V	
C1002	1-104-664-11	ELECT	47μF 20% 25V	PS1401	1-532-984-11	LINK, IC 2A/90V	
C1003	1-126-964-11	ELECT	10μF 20% 50V				
C1004	1-126-934-11	ELECT	220μF 20% 16V	TRANSISTOR			
C1006	1-137-368-11	FILM	0.0047μF 5% 50V	Q1001	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1007	1-126-960-11	ELECT	1μF 20% 50V	Q1002	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1401	1-126-957-11	ELECT	0.22μF 20% 50V	Q1003	8-729-119-76	TRANSISTOR 2SA1175-HFE	
	(KV-29AL66/29AL66C only)			Q1004	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1401	1-126-959-11	ELECT	0.47μF 20% 50V	Q1006	8-729-119-76	TRANSISTOR 2SA1175-HFE	
	(KV-29AL42/29AL42C only)			Q1400	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1402	1-126-957-11	ELECT	0.22μF 20% 50V				
	(KV-29AL66/29AL66C only)			RESISTOR			
C1402	1-126-959-11	ELECT	0.47μF 20% 50V	R1001	1-247-807-31	CARBON 100 5% 1/4W	
	(KV-29AL42/29AL42C only)			R1002	1-247-807-31	CARBON 100 5% 1/4W	
C1403	1-126-943-11	ELECT	2200μF 20% 25V	R1003	1-249-434-11	CARBON 27K 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)			R1004	1-249-436-11	CARBON 39K 5% 1/4W	
C1404	1-126-943-11	ELECT	2200μF 20% 25V	R1006	1-249-419-11	CARBON 1.5K 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)			R1007	1-247-863-91	CARBON 22K 5% 1/4W	
C1405	1-126-382-11	ELECT	100μF 20% 16V	R1008	1-247-863-91	CARBON 22K 5% 1/4W	
C1406	1-126-382-11	ELECT	100μF 20% 16V	R1009	1-247-863-91	CARBON 22K 5% 1/4W	
C1450	1-136-171-00	FILM	0.33μF 5% 50V	R1010	1-247-863-91	CARBON 22K 5% 1/4W	
C1451	1-136-171-00	FILM	0.33μF 5% 50V	R1011	1-249-414-11	CARBON 560 5% 1/4W	
C1452	1-137-367-11	FILM	0.0033μF 5% 50V	R1012	1-249-414-11	CARBON 560 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)			R1013	1-247-807-31	CARBON 100 5% 1/4W	
C1453	1-137-367-11	FILM	0.0033μF 5% 50V	R1016	1-247-863-91	CARBON 22K 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)			R1017	1-247-863-91	CARBON 22K 5% 1/4W	
CONNECTOR				R1401	1-249-429-11	CARBON 10K 5% 1/4W	
CN1001*1-691-632-21	CONNECTOR, BOARD TO BOARD 15P			R1402	1-249-437-11	CARBON 47K 5% 1/4W	
	(KV-27S66 only)			R1433	1-249-421-11	CARBON 2.2K 5% 1/4W	
CN1002*1-564-507-11	PLUG, CONNECTOR 4P			R1434	1-249-429-11	CARBON 10K 5% 1/4W	
CN1003*1-564-511-11	PLUG, CONNECTOR 8P			R1435	1-249-429-11	CARBON 10K 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)			R1436	1-249-421-11	CARBON 2.2K 5% 1/4W	
CN1004*1-564-509-11	PLUG, CONNECTOR 6P			R1437	1-247-863-91	CARBON 22K 5% 1/4W	
	(KV-29AL66/29AL66C only)			R1450	1-249-422-11	CARBON 2.7K 5% 1/4W	
CN1400*1-564-507-11	PLUG, CONNECTOR 4P			R1451	1-249-422-11	CARBON 2.7K 5% 1/4W	
CN1401*1-564-506-11	PLUG, CONNECTOR 3P			R1452	1-249-428-11	CARBON 8.2K 5% 1/4W	
CN1402*1-564-510-11	PLUG, CONNECTOR 7P				(KV-29AL66/29AL66C only)		
	(KV-29AL42/29AL42C/29AL66/29AL66C only)			R1452	1-249-429-11	CARBON 10K 5% 1/4W	
IC					(KV-29AL42/29AL42C only)		
IC1400	8-759-498-09	IC TDA1519AQU		R1453	1-249-428-11	CARBON 8.2K 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)				(KV-29AL66/29AL66C only)		
IC1401	8-759-498-09	IC TDA1519AQU		R1453	1-249-429-11	CARBON 10K 5% 1/4W	
	(KV-29AL42/29AL42C/29AL66/29AL66C only)				(KV-29AL42/29AL42C only)		
COIL				TUNER			
L1001	1-408-421-00	INDUCTOR 100μH		TU1002△8-598-430-00 TUNER, FSS BTF-FA401			
L1002	1-410-470-11	INDUCTOR 10μH		(KV-27S66/29AL66/29AL66C only)			

P

REF.NO. PART NO. DESCRIPTION REMARK

P* A-1195-154-A P BOARD, COMPLETE
(KV-29AL66/29AL66C/27S46/27S66/29SL46 only)**CAPACITOR**

C3301	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3302	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3303	1-104-664-11	ELECT	47μF	20%	16V
C3304	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3305	1-163-135-00	CERAMIC CHIP	560pF	5%	50V
C3306	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C3307	1-163-038-91	CERAMIC CHIP	0.1μF		25V
C3308	1-164-222-11	CERAMIC CHIP	0.22μF		25V
C3309	1-163-034-00	CERAMIC CHIP	0.033μF		50V
C3310	1-164-222-11	CERAMIC CHIP	0.22μF		25V
C3311	1-163-233-11	CERAMIC CHIP	18pF	5%	50V
C3314	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3315	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3316	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C3317	1-163-133-00	CERAMIC CHIP	470pF	5%	50V
C3323	1-104-664-11	ELECT	47μF	20%	16V
C3324	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3325	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3326	1-104-664-11	ELECT	47μF	20%	16V
C3327	1-104-664-11	ELECT	47μF	20%	16V
C3328	1-104-664-11	ELECT	47μF	20%	16V
C3330	1-126-964-11	ELECT	10μF	20%	50V
C3334	1-164-005-11	CERAMIC CHIP	0.47μF		25V
C3335	1-163-009-11	CERAMIC CHIP	0.001μF	10%	50V
C3336	1-163-031-11	CERAMIC CHIP	0.01μF		50V
C3339	1-163-005-11	CERAMIC CHIP	470pF	10%	50V

CONNECTOR

CN3301* 1-691-632-21 CONNECTOR, BOARD TO BOARD 15P

DIODED3301 8-719-404-50 DIODE MA111-TX
D3304 8-719-422-12 DIODE MA8039**IC**

IC3301 8-759-575-99 IC M65669FP

COILL3301 1-410-682-31 INDUCTOR 470μH
L3302 1-414-267-11 INDUCTOR 10μH
L3303 1-414-267-11 INDUCTOR 10μH

REF.NO. PART NO. DESCRIPTION REMARK

TRANSISTORQ3304 8-729-216-22 TRANSISTOR 2SA1162-G
Q3305 8-729-216-22 TRANSISTOR 2SA1162-G
Q3306 8-729-216-22 TRANSISTOR 2SA1162-G
Q3309 8-729-422-27 TRANSISTOR 2SD601A-Q
Q3310 8-729-422-27 TRANSISTOR 2SD601A-QQ3311 8-729-111-55 TRANSISTOR 2SD1312-K
Q3312 8-729-216-22 TRANSISTOR 2SA1162-G
Q3313 8-729-422-27 TRANSISTOR 2SD601A-Q
Q3314 8-729-422-27 TRANSISTOR 2SD601A-Q**RESISTOR**

R3301	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3302	1-216-121-91	RES,CHIP	1M	5%	1/10W
R3303	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3304	1-216-119-00	RES,CHIP	820K	5%	1/10W
R3305	1-216-037-00	RES,CHIP	330	5%	1/10W
R3308	1-216-085-00	RES,CHIP	33K	5%	1/10W
R3309	1-216-025-91	RES,CHIP	100	5%	1/10W
R3310	1-216-025-91	RES,CHIP	100	5%	1/10W
R3311	1-216-037-00	RES,CHIP	330	5%	1/10W
R3312	1-216-045-00	RES,CHIP	680	5%	1/10W
R3313	1-216-037-00	RES,CHIP	330	5%	1/10W
R3316	1-216-295-91	SHORT			
R3317	1-216-295-91	SHORT			
R3318	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R3319	1-216-295-91	SHORT			
R3328	1-216-295-91	SHORT			
R3329	1-216-033-00	RES,CHIP	220	5%	1/10W
R3333	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3334	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3335	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3336	1-216-295-91	SHORT			
R3338	1-216-295-91	SHORT			
R3340	1-216-295-91	SHORT			
R3342	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3343	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R3344	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3345	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3346	1-216-295-91	SHORT			
R3347	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3348	1-216-049-91	RES,CHIP	1K	5%	1/10W
R3349	1-215-857-11	METAL OXIDE	10	5%	1W F
R3351	1-216-041-00	RES,CHIP	470	5%	1/10W
R3352	1-216-295-91	SHORT			
R3357	1-216-041-00	RES,CHIP	470	5%	1/10W
R3358	1-216-689-11	RES,CHIP	39K	5%	1/10W
R3359	1-216-113-00	RES,CHIP	470K	5%	1/10W
R3360	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R3361	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R3365	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3366	1-216-049-91	RES,CHIP	1K	5%	1/10W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3367	1-216-073-00	RES,CHIP	10K	5%	1/10W		
R3368	1-216-049-91	RES,CHIP	1K	5%	1/10W		
<u>CRYSTAL</u>							
X3301	1-781-377-11	OSCILLATOR, CRYSTAL					
<u>ACCESSORIES AND PACKING MATERIAL</u>							
	3-866-074-21	MANUAL, INSTRUCTION (KV-27S42/27S46/27S66 only)					
	3-866-074-31	MANUAL, INSTRUCTION (KV-27S42 (CND)/27S66 (CND) only)					
	3-866-074-41	MANUAL, INSTRUCTION (KV-29SL42/29XL42M/29SL42C/29SL46/29AL42/29AL42C/29AL66/ 29AL66C only)					
	* 4-041-255-01	PROTECTION BAG (all models)					
	* 4-064-062-11	CARTON, INDIVIDUAL (KV-29SL42/29XL42M/29SL42C/29SL46 only)					
	* 4-064-065-01	CARTON, INDIVIDUAL (KV-27S42/27S46/27S66 only)					
	* 4-064-241-11	CARTON, INDIVIDUAL (KV-29AL42/29AL42C/29AL66/29AL66C only)					
	* 4-064-029-01	CUSHION ASSY, UPPER (KV-29AL42/29AL42C/29AL66/29AL66C only)					
	* 4-064-069-01	CUSHION ASSY, UPPER (KV-27S42/29SL42/29XL42M/29SL42C/27S46/29SL46/27S66 only)					
	* 4-064-032-01	CUSHION ASSY, LOWER (KV-29AL42/29AL42C/29AL66/29AL66C only)					
	* 4-064-071-01	CUSHION ASSY, LOWER (KV-27S42/29SL42/29XL42M/29SL42C/27S46/29SL46/27S66 only)					
<u>REMOTE COMMANDER</u>							
	1-475-801-11	REMOTE COMMANDER (RM-Y165) (KV-29SL42/29XL42M/29SL42C/29AL42/29AL42C only)					
	1-475-801-21	REMOTE COMMANDER (RM-Y165) (KV-27S42 only)					
	1-475-802-11	REMOTE COMMANDER (RM-Y167) (KV-29SL46/29AL66/29AL66C only)					
	1-475-802-21	REMOTE COMMANDER (RM-Y167) (KV-27S46/27S66 only)					
	4-978-977-01	BATTERY COVER (for remote RM-Y165/RM-Y167)					

