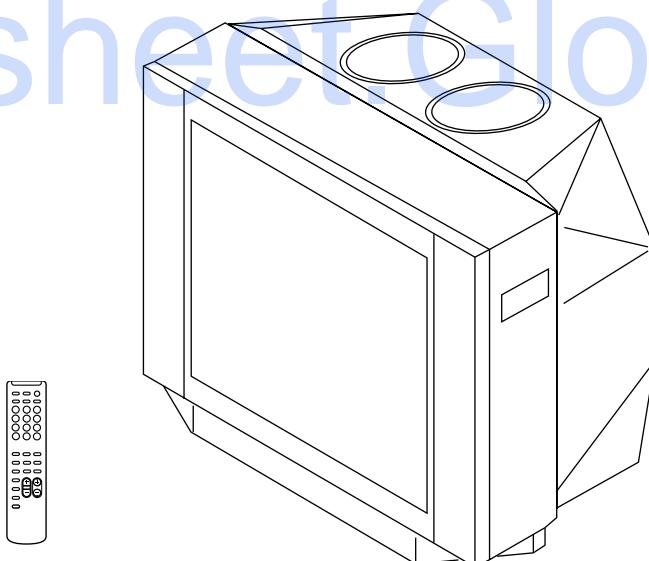


SERVICE MANUAL

BG-3S CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
<i>KV-XS29N90</i>		<i>RM-914 TAIWAN</i>	<i>SCC-P13J-A</i>				
<i>KV-XS29N93</i>		<i>RM-914 TAIWAN</i>	<i>SCC-P13H-A</i>				

Datasheet Global



TRINITRON® COLOR TV
SONY®

SPECIFICATIONS

		Note
Power requirements	110 V AC, 60 Hz	
Power consumption (W)	Indicated on the rear of the TV	
Television system	M	
Color system	PAL*, PAL 60*, SECAM*, NTSC4.43*, NTSC3.58	* AV IN ONLY
Channel coverage		
M	VHF: 2 to 13 / UHF: 14 to 69 / CATV: 1 to 125	
¶ (Antenna)	75-ohm external terminal	
Audio output	8W + 8W	KV-XS29N90
	6W + 6W+ 15W	KV-XS29N93
Number of terminal		
(Video)	Input: 3 Output: 1 Input: 4 Output: 1	Phono jacks; 1 Vp-p, 75 ohms Phono jacks; 1 Vp-p, 75 ohms
(Audio)	Input: 3 Output: 1 Input: 4 Output: 1	Phono jacks; 500 mVrms Phono jacks; 500 mVrms
(S Video)	Input: 2	Y : 1 Vp-p, 75 ohms, unbalanced, sync negative C : 0.286 Vp-p, 75 ohms
(Component Video)	Input: 1	Phono jacks; Y : 1 Vp-p, 75 ohms, sync negative Cb : 0.7 Vp-p, 75 ohms Cr : 0.7 Vp-p, 75 ohms Audio: 500 mVrms
○ (Headphone)	Output: 1	Minijack
Picture tube	29 inch	
Tube size (mm)	724	Measured diagonally
Screen size (mm)	679	Measured diagonally
Dimensions (w/h/d, mm)	794 × 573 × 517 794 × 589 × 517	KV-XS29N90 KV-XS29N93
Mass (kg)	51 54	KV-XS29N90 KV-XS29N93

Design and specifications are subject to change without notice.

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.

SAFETY-RELATED COMPONENT WARNING!!

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

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>	
SELF DIAGNOSIS FUNCTION 4						
1. GENERAL		8	5. DIAGRAMS			
2. DISASSEMBLY						
2-1.	3D Speaker Box Removal	24	5-1.	Block Diagram	45	
2-2.	Rear Cover Removal	24	5-2.	Frame Schematic Diagram	49	
2-3.	Speaker Removal	24	5-3.	Circuit Boards Location	53	
2-4.	Chassis Assy Removal	24	5-4.	Schematic Diagrams and Printed Wiring Boards ...	54	
2-5.	F Bracket Removal	25	(1)	Schematic Diagram of A (1/2) Board.....	55	
2-6.	Service Position	25	(2)	Schematic Diagram of A (2/2) Board.....	59	
2-7.	Replacement of Parts	25	(3)	Schematic Diagram of B3 Board	67	
2-7-1.	Replacement of Control Button	25	(4)	Schematic Diagram of C Board	71	
2-7-2.	Replacement of Light Guide	25	(5)	Schematic Diagrams of F, H5 and J4 Boards	75	
2-8.	D3 Board Removal	26	(6)	Schematic Diagrams of B5 and VM Boards	81	
2-9.	Terminal Bracket Removal	26	(7)	Schematic Diagrams of B7 and D3 Boards	87	
2-10.	B5 and B7 Boards Removal	26	5-5.	Semiconductors	90	
2-11.	H5 Board Removal	26	6. EXPLODED VIEWS			
2-12.	A and B3 Boards Removal	27	6-1.	Speaker Bracket	93	
2-13.	Picture Tube Removal	27	6-2.	Chassis	94	
3. SET-UP ADJUSTMENTS						
3-1.	Beam Landing	29	6-3.	Picture Tube	95	
3-2.	Convergence	30	6-4.	3D Speaker	96	
3-3.	Focus Adjustment	32	7. ELECTRICAL PARTS LIST 97			
3-4.	G2 (Screen) and White Balance Adjustments	33				
4. CIRCUIT ADJUSTMENT						
4-1.	Adjustments with Commander	34				
4-2.	Adjustment Method	35				
4-3.	Picture Quality Adjustments	40				
4-4.	A Board Adjustment After IC003 (Memory) Replacement	40				
4-5.	Picture Distortion Adjustment	41				

SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.

The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp 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.

1. DIAGNOSTIC TEST INDICATORS

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

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

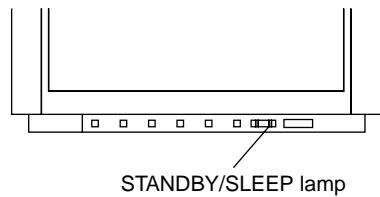
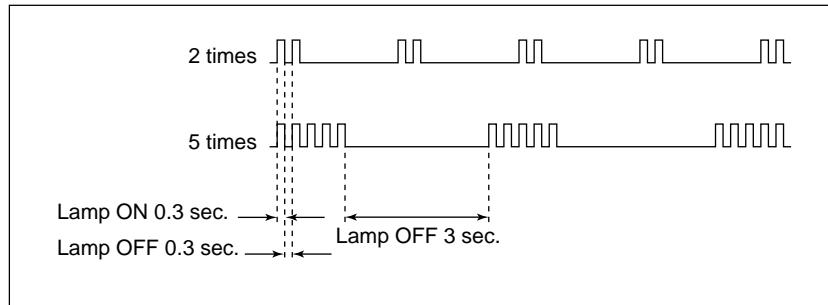
Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	<ul style="list-style-type: none"> • Power cord is not plugged in. • Fuse is burned out F4601 (F) 	<ul style="list-style-type: none"> • Power does not come on. • No power is supplied to the TV. • AC power supply is faulty.
<ul style="list-style-type: none"> • +B overcurrent (OCP) or overvoltage (OVP) • Vertical deflection stopped • Horizontal deflection overdrive 	2 times	002:000 or 002:001~255 003:001~255 004:001~255 at the same time	<ul style="list-style-type: none"> • H.OUT Q511 is shorted. (A board) • IC701 is shorted. (C board) • -13V is not supplied. (A board) • IC 503 faulty (A board) 	<ul style="list-style-type: none"> • Power does not come on. • Load on power line is shorted. • Has entered standby state after horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~225	<ul style="list-style-type: none"> • G2 is improperly adjusted. (Note 2) • CRT problem. • Video OUT IC701 is faulty. (C board) • IC301 is faulty. (A board) • No connection A board to C board. 	<ul style="list-style-type: none"> • No raster is generated. • CRT cathode current detection reference pulse output is small.
• Micro reset	—	101:00 or 101:001~225	<ul style="list-style-type: none"> • Discharge CRT (C Board) • Static discharge • External noise 	<ul style="list-style-type: none"> • Power is shut down shortly, after this return back to normal. • Detect Micro latch up.

Note 1: 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.

Note 2: Refer to screen (G2) Adjustment in section 3-4 of this manual.

2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



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

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

3. STOPPING THE STANDBY/TIMER 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.

4. 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 for confirmation on the screen:

[To Bring Up Screen Test]

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

Screen display → channel 5 → Sound volume [-] → Power ON



Note that this differs from entering the service mode (mode volume [+]).

Self-Diagnosis screen display

SELF DIAGNOSTIC	
002 : 000	← Numeral "0" means that no fault has been detected.
003 : 000	
004 : 000	
005 : 001	← Numeral "1" means a fault has been detected.
101 : 000	

5. 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]

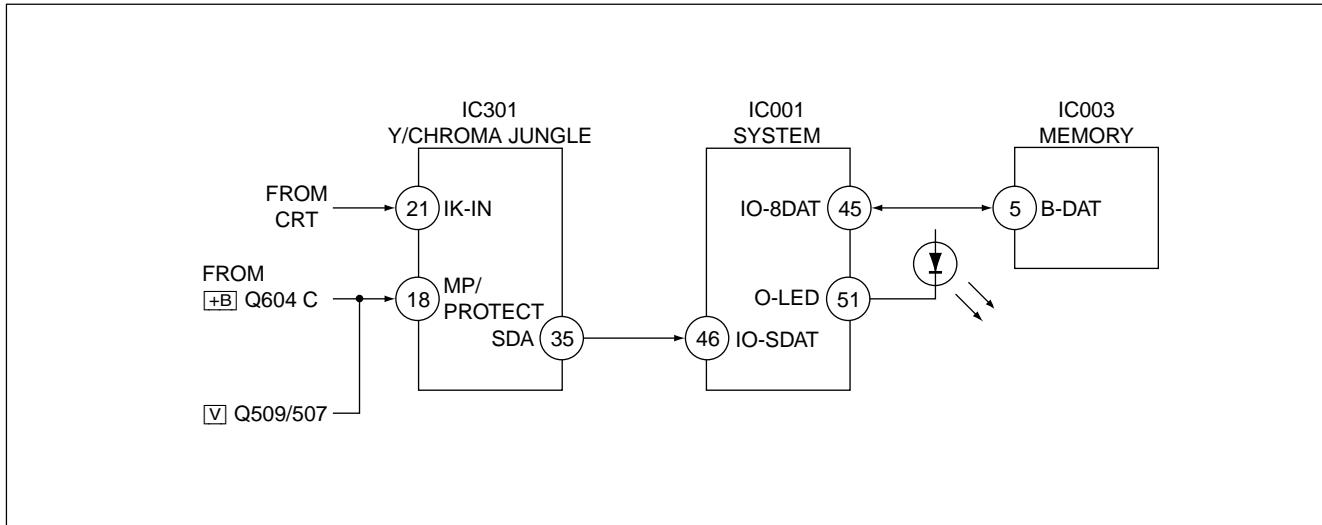
To clear the result display to "0", press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel 8 → 0

[Quitting Self-diagnostic screen]

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

6. SELF-DIAGNOSTIC CIRCUIT



+B overcurrent (OCP)

Occurs when an overcurrent on the +B(135) line is detected by Q604. If Q604 go to ON and the voltage to pin 18 of IC301 should go down 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 Q509 and IC001 shut down the power supply.

Vertical deflection overcurrent

Occurs when an overcurrent on V drive line is detected by Q507. Power supply will be shut down when detect this by IC001.

White balance failure

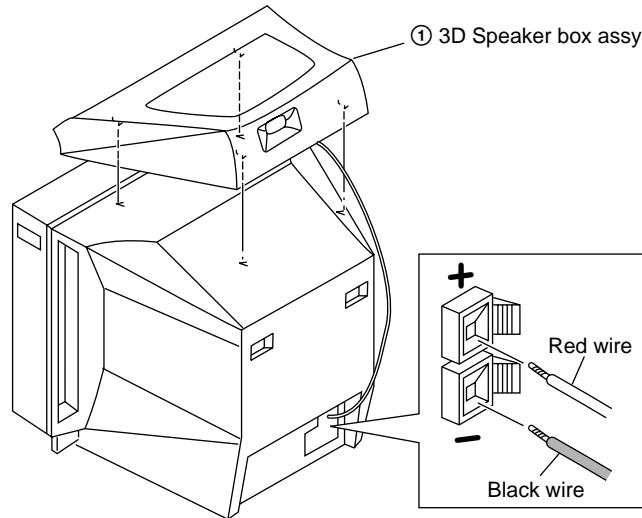
If the RGB levels* do not balance or become low level within 5 seconds, this error will be detected by IC301. TV will stay on, but there will be no picture.

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

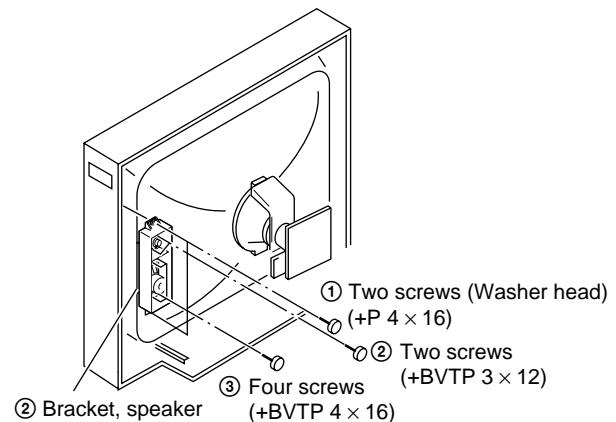
SECTION 2

DISASSEMBLY

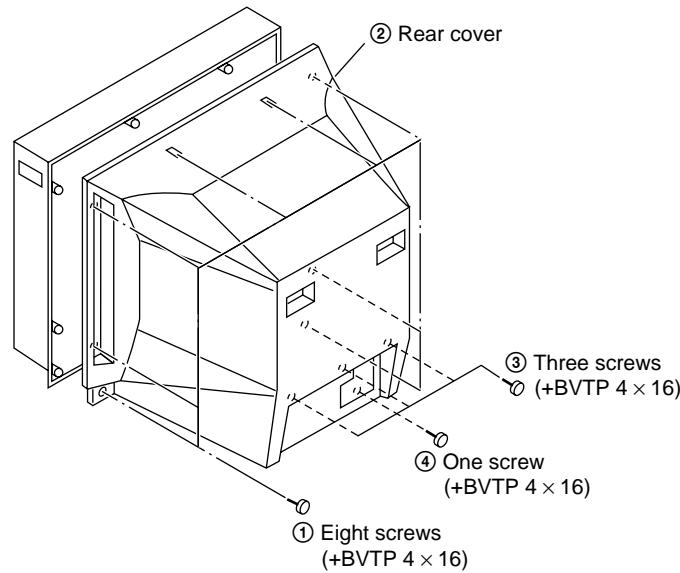
2-1. 3D SPEAKER BOX REMOVAL



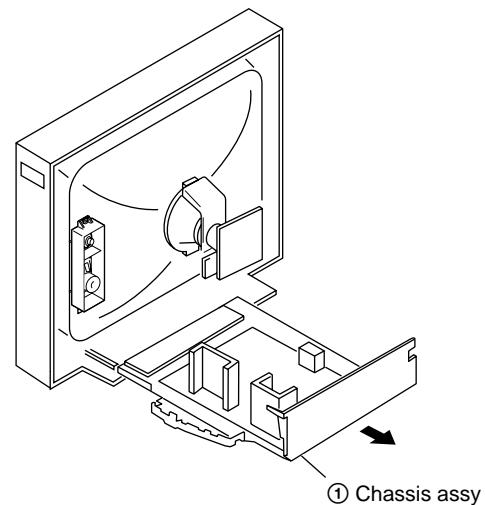
2-3. SPEAKER REMOVAL



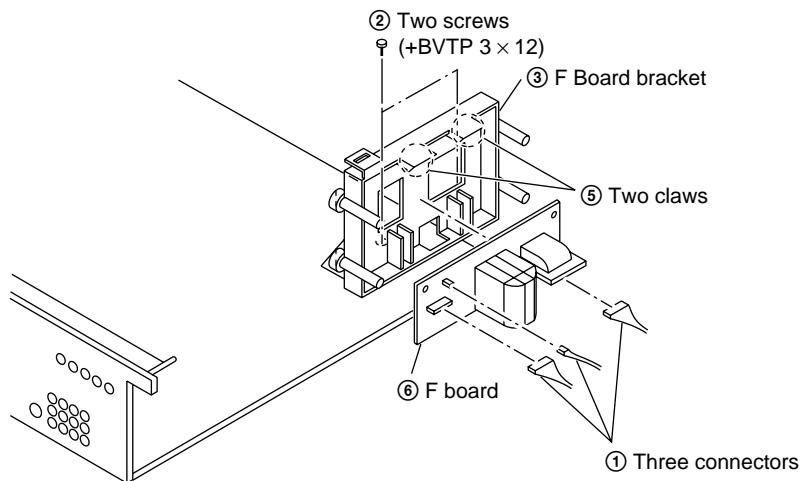
2-2. REAR COVER REMOVAL



2-4. CHASSIS ASSY REMOVAL

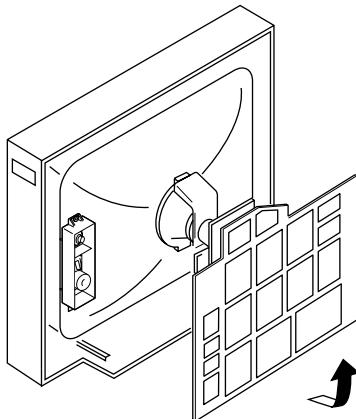


2-5. F BRACKET REMOVAL



2-6. SERVICE POSITION

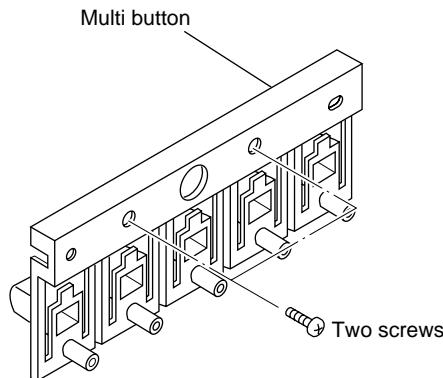
(Note: Remove F Bracket first.)



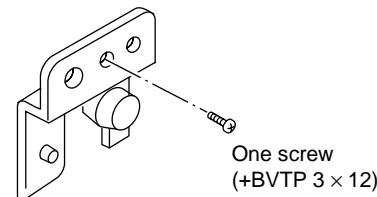
2-7. REPLACEMENT OF PARTS

For replacement of the Control Button and Light Guide, unscrew them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

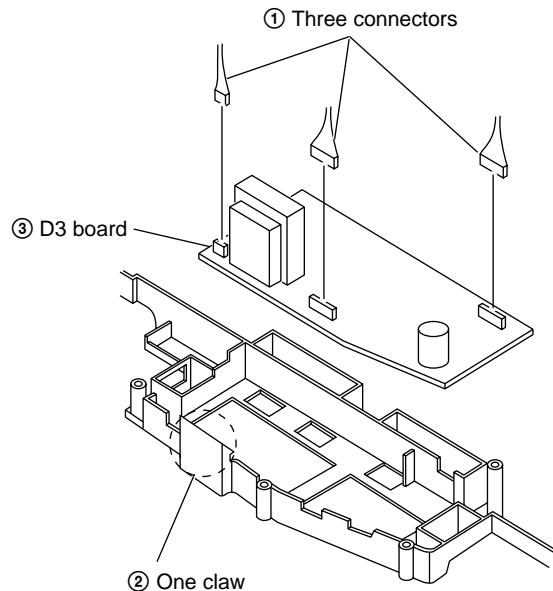
2-7-1. REPLACEMENT OF CONTROL BUTTON



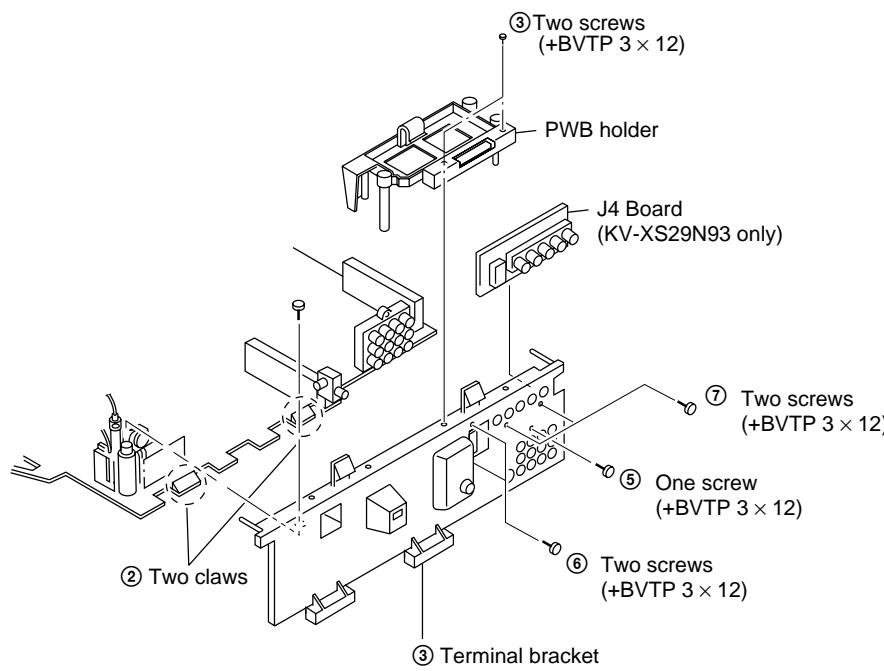
2-7-2. REPLACEMENT OF LIGHT GUIDE



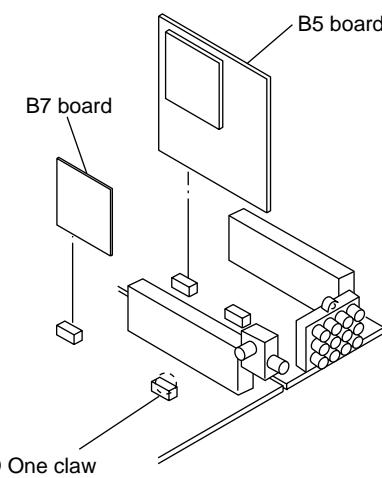
2-8. D3 BOARD REMOVAL



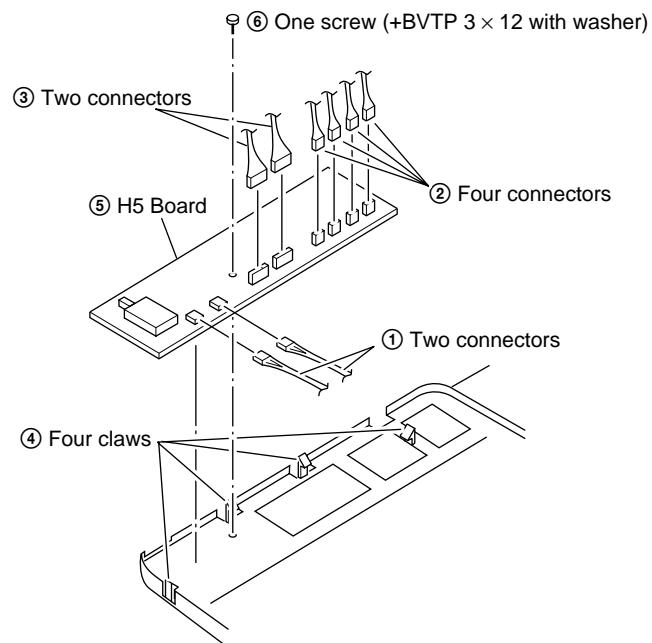
2-9. TERMINAL BRACKET REMOVAL



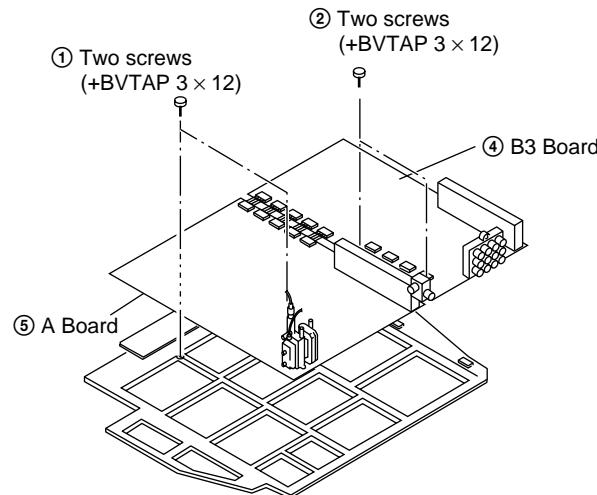
2-10. B5 and B7 BOARDS REMOVAL



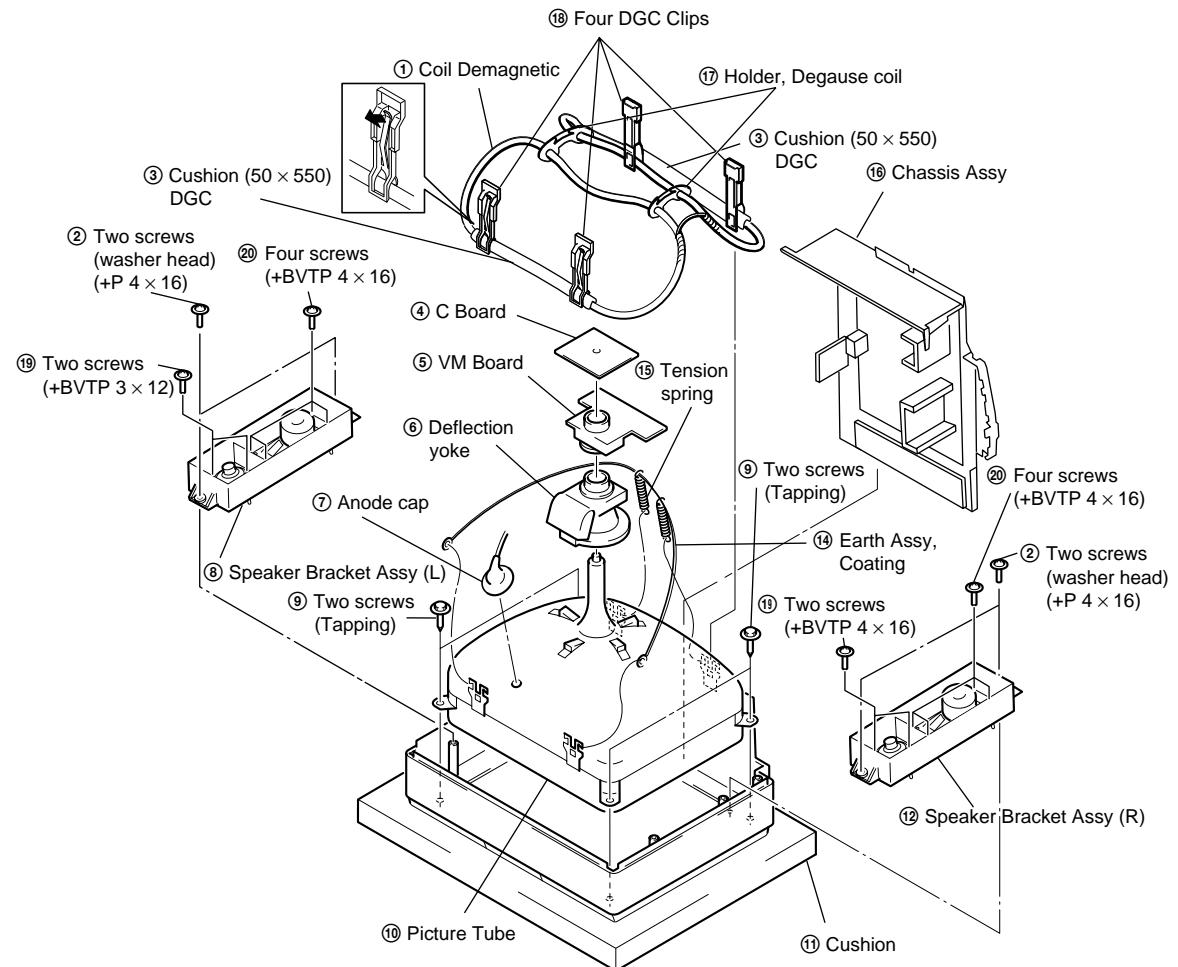
2-11. H5 BOARD REMOVAL



2-12. A AND B3 BOARDS REMOVAL



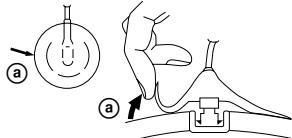
2-13. PICTURE TUBE REMOVAL



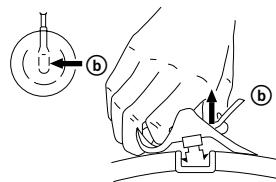
• REMOVAL OF ANODE-CAP

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

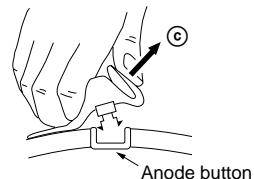
• REMOVING PROCEDURES



- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①.



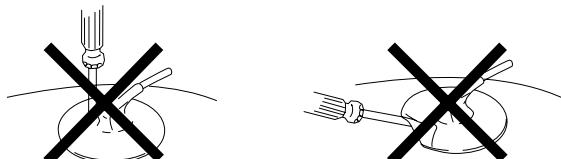
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.



- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Do not damage the surface of anode-caps with sharp shaped objects.
- ② Do not press the rubber too hard so as not to damage the inside of anode-cap.
A metal fitting called the shatter-hook terminal is built into the rubber.
- ③ Do not turn the foot of rubber over too hard.
The shatter-hook terminal will stick out or damage the rubber.



SECTION 3

SET-UP ADJUSTMENTS

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

Controls and switches should be set as follows unless otherwise noted:

PICTURE control normal
BRIGHTNESS control normal

Perform the adjustments in the following order :

- Beam Landing
- Convergence
- Focus
- White Balance

Note : Test Equipment Required.

- Color-bar/Pattern Generator
- Degausser
- Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

- Input a white signal with the pattern generator.
Contrast } normal
Brightness }
- Position neck assy as shown in Fig3-2.
- Set the pattern generator raster signal to a green raster.
- Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
(See Figures 3-1 through 3-4.)
- Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-2.)
- Switch the raster signal to blue, then to red and verify the condition.
- When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
- If the beam does not land correctly in all the corners, use a magnet to adjust it.
(See Figure 3-5.)

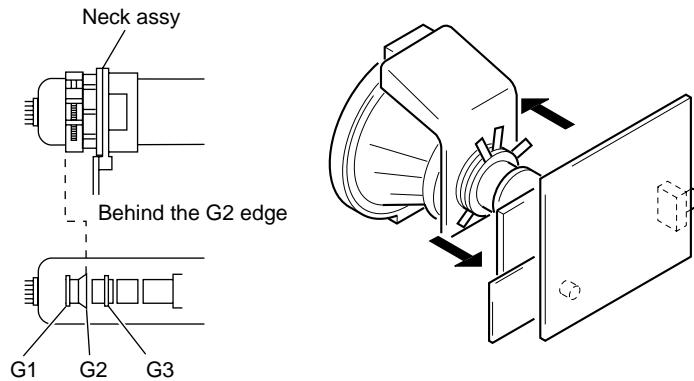


Fig. 3-1

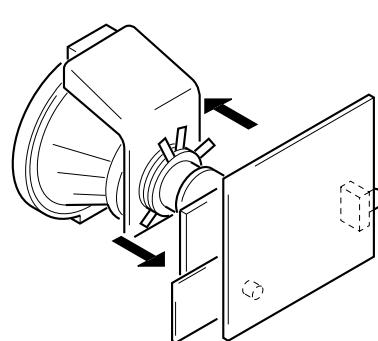


Fig. 3-2

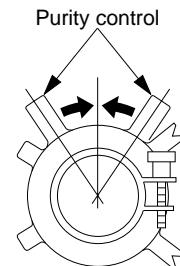


Fig. 3-3

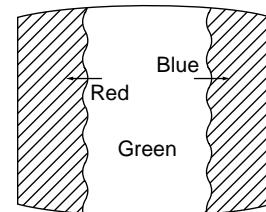


Fig. 3-4

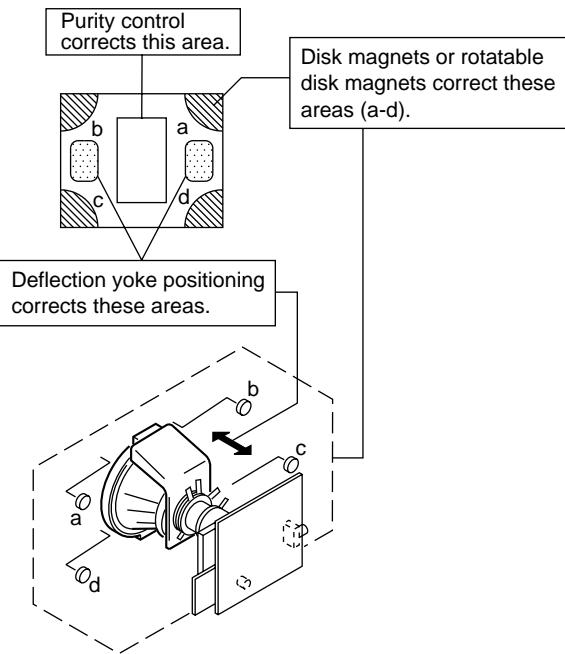


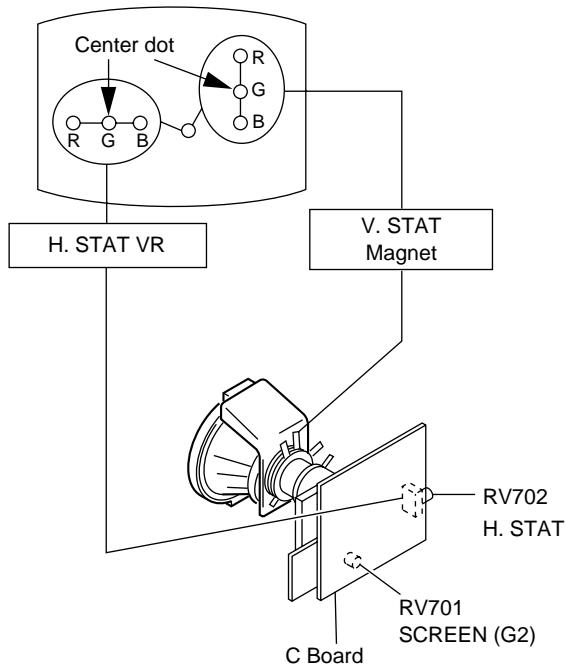
Fig. 3-5

3-2. CONVERGENCE

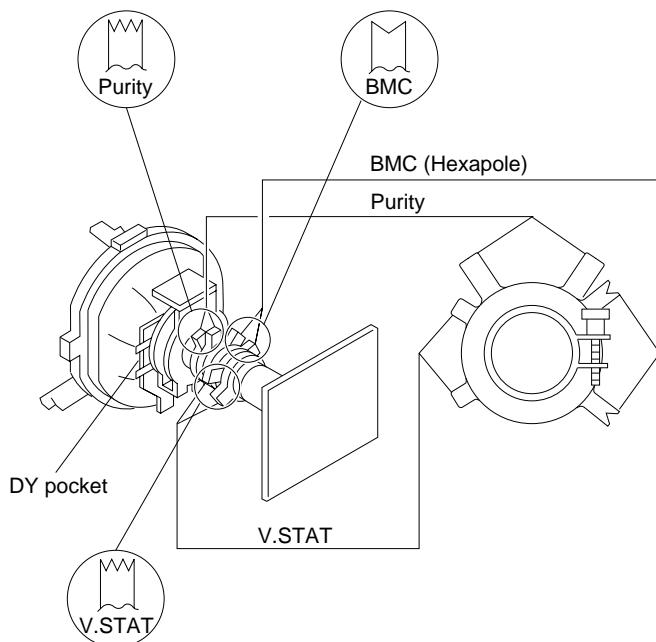
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

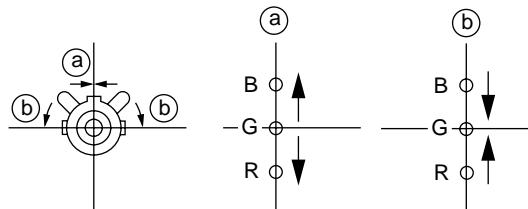
(1) Horizontal and Vertical Static Convergence



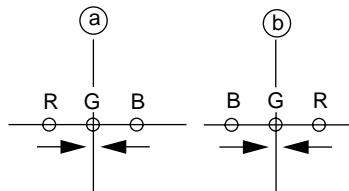
1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)



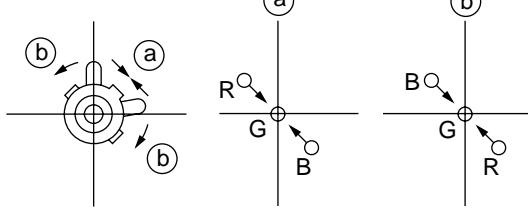
① V. STAT



② H. STAT VR

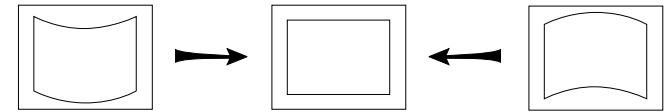
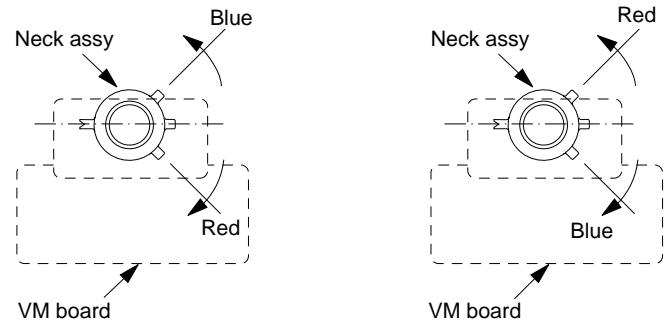
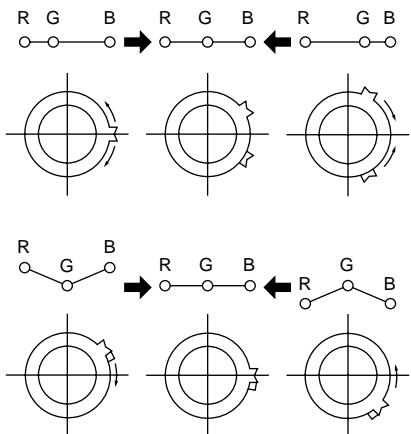


③



④ BMC (Hexapole) Magnet.

If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



Note

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

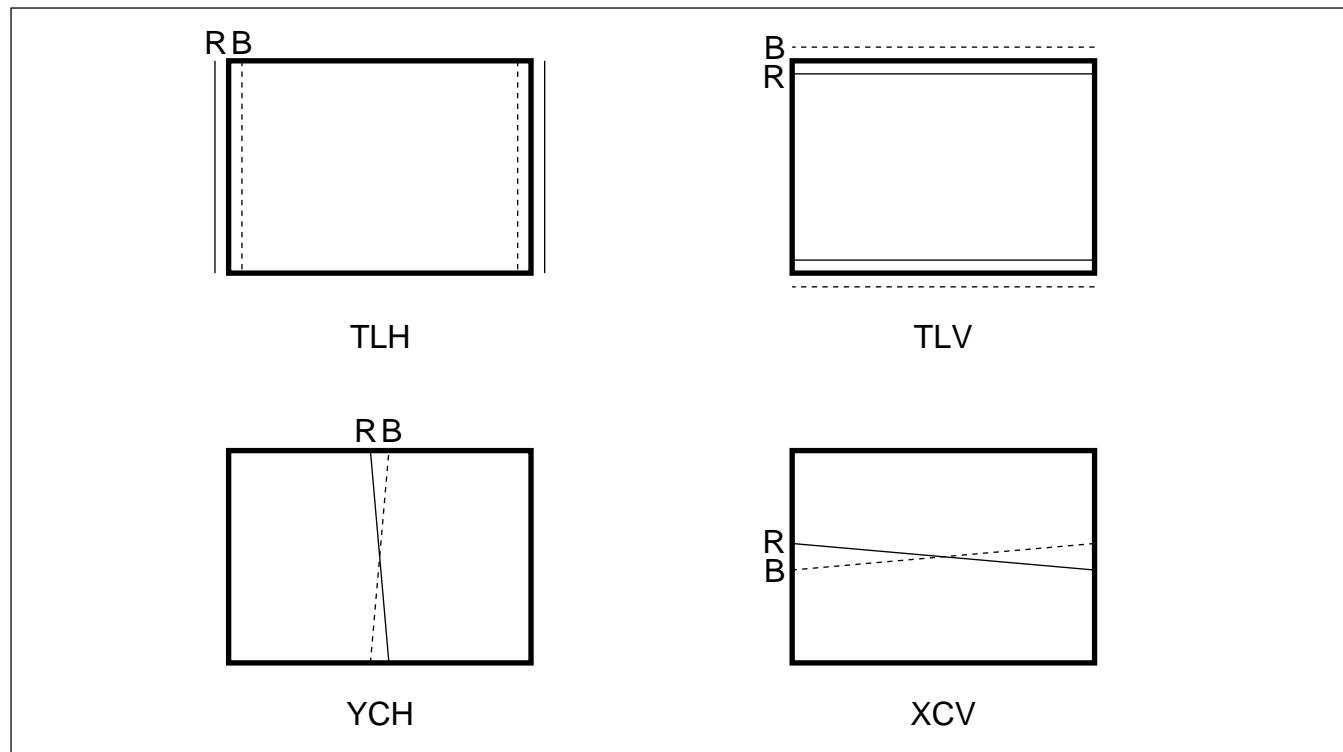
⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD].
2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.

(2) Dynamic Convergence Adjustment

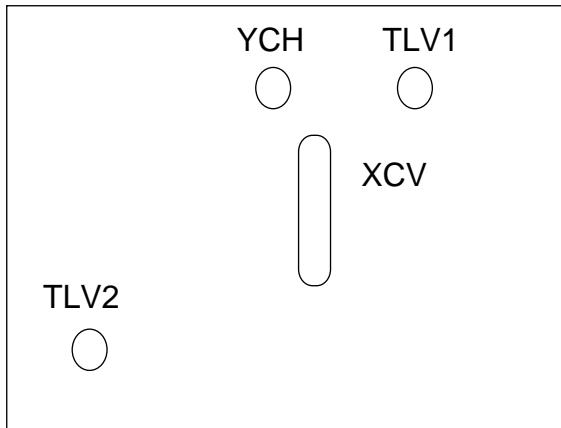
Preparation:

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence



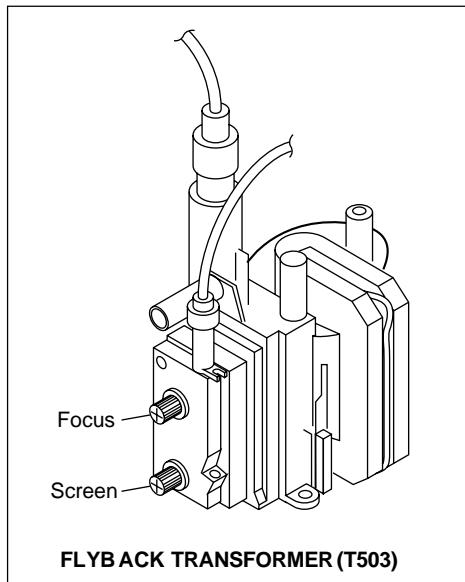
TLV	Rotate	TLV-2	VOL (29", 34") on DY
	Rotate	TLV	VOL (25") on DY
XCV	Rotate	XCV	Adj core on DY
YCH	Rotate	YCH	VOL on DY
TLH	Insert	TLH	Correction Plate to DY Pocket (Left or Right)

ON DY:

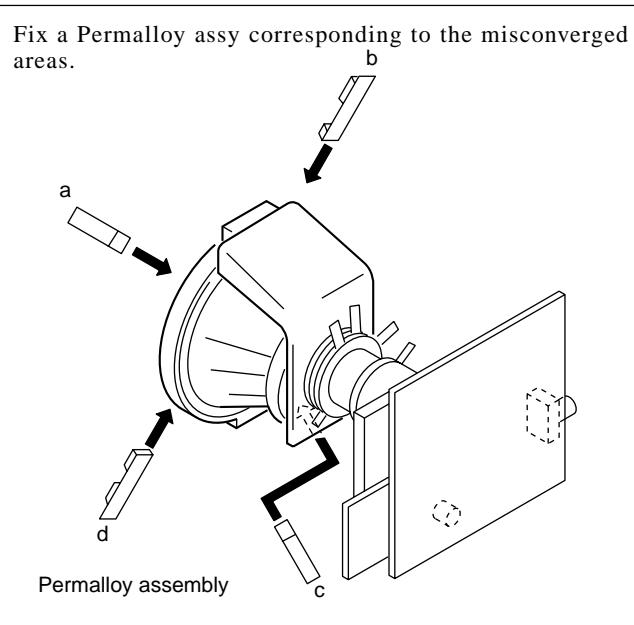
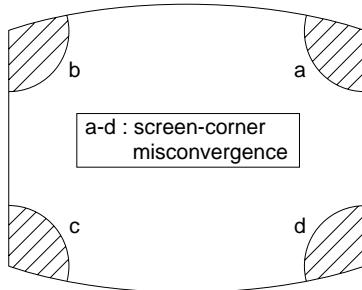


3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



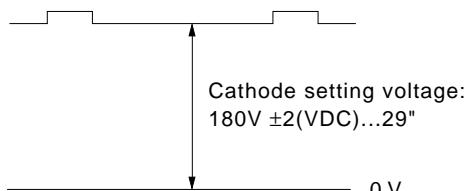
(3) Screen-corner Convergence



3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT

- 1) Set the PICTURE to normal.
- 2) Put to VIDEO input mode without signals.
- 3) Connect R, G and B of the C board cathode to the oscilloscope.
- 4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
- 5) Adjust G2 (screen) on the FBT until picture shows the point before cut off.

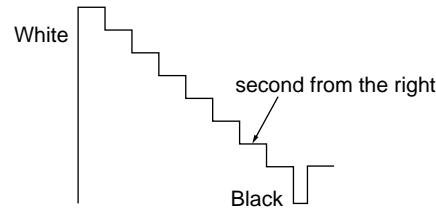


2. WHITE BALANCE ADJUSTMENT

- 1) Set to Service Mode (Refer Section 4-1: ADJUSTMENTS WITH COMMANDER).
- 2) Input white raster signal.
- 3) Set the PICTURE to minimum.
- 4) Select GCT (WHB 4) and BCT (WHB 5) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
- 5) Set the PICTURE to maximum.
- 6) Select GDR (WHB 1) and BDR (WHB 2) with [1] and [4], and adjust the level with [3] and [6] for the best white balance.
- 7) Write into the memory by pressing [MUTING] then [0].

3. SUB BRIGHT ADJUSTMENT

- 1) Set to service mode.
- 2) Input a staircase signal of black to white from the pattern generator.
- 3) BRIGHTNESS50%.
PICTURE MINIMUM
- 4) Select SBR (WHB7) with [1] and [4], and adjust SBR (WHB7) level with [3] and [6] so that the second stripe from the right is dimly lit.



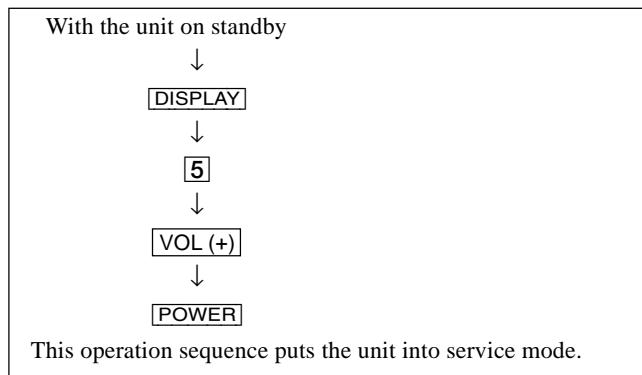
SECTION 4

CIRCUIT ADJUSTMENTS

4-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-914 that come with this unit.

a. ENTERING SERVICE MODE



b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press **POWER** button on the commander), then press **POWER** button again, hereupon it becomes TV mode.

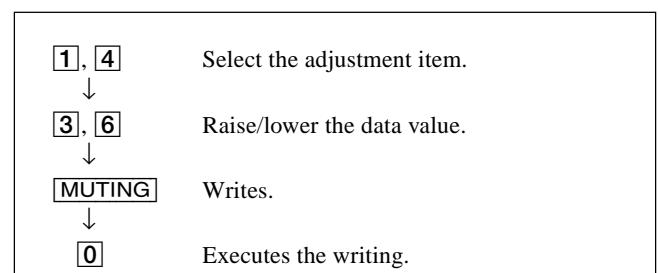
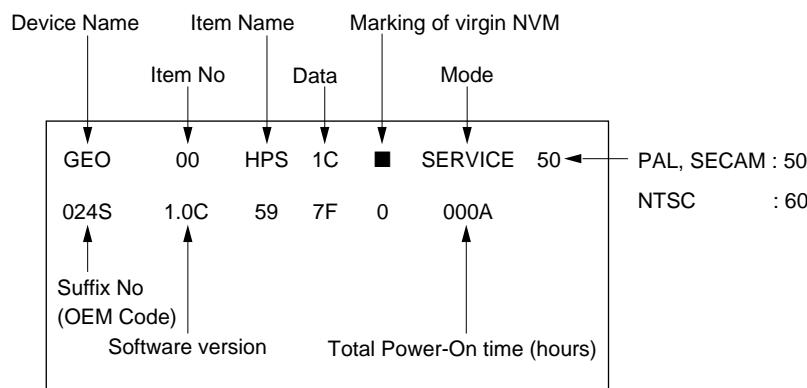
c. METHOD OF WRITE INTO MEMORY

- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustment.
- 3) Press **MUTING** button and it will indicate WRITE on the screen.
- 4) Press **0** button to write into memory.

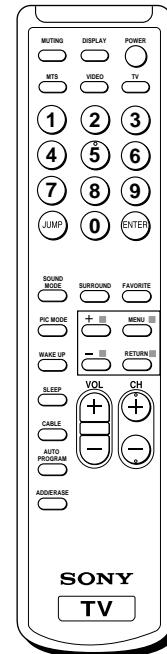
d. MEMORY WRITE CONFIRMATION METHOD

- 1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again to confirm adjustments were made.

The screen display is :



- | | |
|---------------|---|
| [7, 0] | All the data becomes the values in memory. |
| [8, 0] | All user control goes to the standard state. |
| [5, 0] | Service data initialization (Be sure not to use usually.) |
| [2, 0] | Write 50Hz adjustment data to 60Hz, or vice versa. |



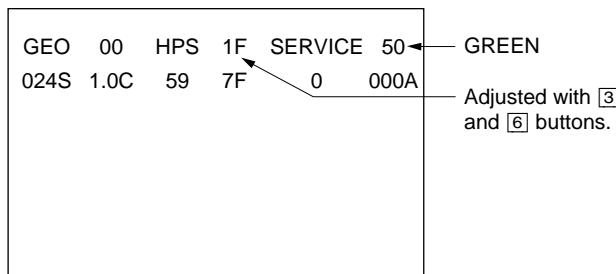
RM-914

4-2. ADJUSTMENT METHOD

Item Number 00 of device GEO

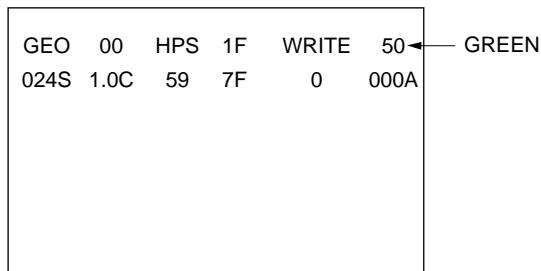
This explanation uses H-Position as an example.

1. Select “GEO 00 HPS” with the **[1]** and **[4]** buttons.
2. Raise/lower the data with the **[3]** and **[6]** buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the **[MUTING]** button. (The display changes to WRITE.)
5. Execute the writing with the **[0]** button. (The WRITE display will be changed to red color while executing, and back to SERVICE.)

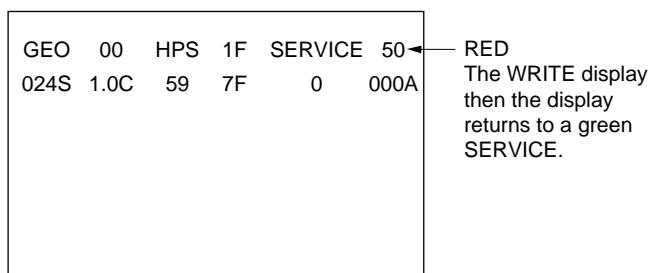


Use the same method for all Items. Use **[1]** and **[4]** to select the adjustment item, use **[3]** and **[6]** to adjust, write with **[MUTING]**, then execute the write with **[0]**.

- Note :**
1. In **[WRITE]**, the data for all items are written into memory together.
 2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.



Written with **[MUTING]**



Write executed with **[0]**

Adjustment Item Table

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
GEO	0	HPS	7	3F	H Position	50/60Hz	12 (7-2)	CXA2130S(88H)	9A (7-2)
	1	HSZ	1F	3F	H Size	50/60Hz	11 (7-2)		99 (7-2)
	2	PAP	1F	3F	Pin Amp	50/60Hz	13 (7-2)		9B (7-2)
	3	TLT	7	0F	Trapezium	50/60Hz	15 (7-4)		9D (7-4)
	4	VPS	1F	3F	V Position	50/60Hz	0F (7-2)		97 (7-2)
	5	VSZ	1F	3F	V Size	50/60Hz	0E (7-2)		96 (7-2)
	6	SCO	7	0F	S Correction	50/60Hz	10 (7-4)		98 (7-4)
	7	VLN	7	0F	V Linearity	50/60Hz	10 (3-0)		98 (3-0)
	8	BOW	7	0F	AFC Bow	50/60Hz	16 (7-4)		9E (7-4)
	9	AGL	7	0F	AFC Angle	50/60Hz	16 (3-0)		9E (3-0)
	10	UPN	1F	3F	Upper Pin	50/60Hz	14 (7-2)		9C (7-2)
	11	LPN	2F	3F	Lower Pin	50/60Hz	18 (7-2)		A0 (7-2)
	12	HBL	1	1	H Blanking on/off		18 (1)		ID (1)
	13	LBL	0F	0F	Left H Blanking	50/60Hz	17 (7-4)		9F (7-4)
	14	RBL	2	0F	Right H Blanking	50/60Hz	17 (3-0)		9F (3-0)
WHB	0	RDR	1F	3F	R Drive	DYNAMIC/others	09 (7-2)	CXA2130S(88H)	A7 (7-2)
	1	GDR	1F	3F	G Drive	DYNAMIC/others	0A (7-2)		A8 (7-2)
	2	BDR	1F	3F	B Drive	DYNAMIC/others	0B (7-2)		A9 (7-2)
	3	RCT	7	0F	R Cutoff	SECAM/others	07 (3-0)		AB (3-0)
	4	GCT	7	0F	G Cutoff	SECAM/others	08 (7-4)		AC (7-4)
	5	BCT	7	0F	B Cutoff	SECAM/others	08 (3-0)		AC (3-0)
	6	BMN	15	1F	Brightness Minimum Data		06 (7-2)		106
	7	SBR	1F	3F	Sub Brightness Control		06 (7-2)		107
SAJ	0	PMX	36	3F	Picture Maximum Data		03 (7-2)	CXA2130S(88H)	105
	1	SHU	8	0F	Sub Hue Control	TV/Video	05 (7-2)		108
	2	SSH	8	0F	Sub Sharpness Control	TV/Video	07 (7-4)		109
	3	SCL	1F	3F	Sub Color Control	NTSC/others	04 (7-2)		10A
VP	0	EHT	5	0F	EHT Comp	50/60HLC	15 (3-0)	CXA2130S(88H)	9D (3-0)
	1	GMA	2	03	Gamma Correction (separated in STANDARD mode)	NTSC/others	0B (1-0)		359 (1-0)
	2	YDL	0D	0F	Y Delay	PAL/SECAM/NTSC/DVD	0C (3-0)		35C (3-0)
	3	SST	1	03	SECAM ID Start Position		1B (1-0)		73 (1-0)
	4	SSP	1	03	SECAM ID Stop Position		1B (3-2)		73 (3-2)
	5	SLV	2	03	SECAM ID Level		1C (1-0)		74 (1-0)
	6	SBF	22	3F	SECAM BELL fO		1C (7-2)		74 (7-2)
	7	DYC	1	1	Dynamic Color on/off		0A (1)		62 (1)
	8	ABL	1	1	ABL Mode Switching (except STANDARD mode)		09 (1)		61 (1)
	9	VTH	1	1	ABL Detection Vth Switching		09 (0)		61 (0)
	10	SFO	1	1	FO Switching for Sharpness	NTSC/others	05 (1)		34A (1)
	11	DCX	1	1	DC Trans. Ratio Switching		06 (1)		5E (1)
	12	SHT	1	1	Pre-/Overshoot ratio Switch	NTSC/others	06 (0)		34B (0)

Adjustment Item Table

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
VP	13	HDW	0	1	H Drive Pulse Width Switch	TV/Video/Text	00 (6)		58 (6)
	14	AFC	1	03	AFC Gain Control		0F (1-0)		A5 (1-0)
	15	HOS	7	0F	H Oscillation		0C (7-4)		64 (7-4)
	16	HSS	0	1	Slice Level of H Sync Sep.		0D (1)		65 (1)
	17	VSS	0	1	Slice Level of V Sync Sep.		0D (0)		65 (0)
	18	HMS	1	1	Macro Vision C/m off/on	50/60Hz	0E (0)		96 (0)
	19	YUV	0	1	YUV Switch Control		01 (0)		59 (0)
	20	CDV	1	3	CD mode for Video and RF under no signal		0D (5-4)		357 (5-4)
	21	RON	1	1	R ON	Video only not memorized	01 (3)		59 (3)
	22	GON	1	1	G ON		01 (2)		59 (2)
	23	BON	1	1	B ON		01 (1)		59 (1)
	24	PON	1	1	P ON		00 (7)		58 (7)
	25	BLK	0	1	BLK Off		12 (0)		6A (0)
	26	VMC	0	1	VM Off		13 (0)		6B (0)
AP	0	BCS	2	3	Bass Center Shift	#4 (3-0) #5 (3-0) #5 (3-0)	TDA7315(80H)		34C (1-0)
	1	TCS	1	3	Treble Center Shift				34D (1-0)
	2	TRF	2	3	RF Treble Offset				356 (1-0)
MSP	0	WST	15	FF	W/G Stereo Threshold		MSP3415D(84H)		165
	1	WBT	EC	FF	W/G Bilingual Threshold				166
	2	WLL	5	FF	W/G Monaural Threshold				167
	3	WAC	1	0F	W/G Agreement Count				168
	4	WDL	30	FF	W/G Search Delay				169
	5	NDL	20	FF	NICAM Search Delay				16A
	6	SDL	10	FF	Stereo status Read Delay				16B
	7	AGC	1	1	AGC Switch Auto/Constant	00BB (7)			116 (7)
	8	REL	28	3F	AGC Gain at Constant Mode				116 (6-1)
	9	CRM	0	1	Carrier muting on/off	00BB (9)			115 (9)
	10	ACO	1	1	Audio Clock out on/off				11A (5)
	11	FP	1B	7F	FM Prescale for non-M system	0083 (5)			321
	12	FPM	32	7F	FM Prescale for M system				322
	13	FH	36	7F	FM Prescale for HDEV	000E (14-8)			323
	14	FHM	65	7F	FM Prescale for HDEV and M				324
	15	WGP	1C	7F	W/G Prescale	000E (14-8)			325
	16	NIP	7F	7F	NICAM Prescale				14F
	17	ERR	50	FF	Auto FM switch Threshold	0010 (14-8) 0021 (10-3)			174
	18	VOL	6D	FF	Loud Speaker gain 7000h to 7ff0h				352

Adjustment Item Table

Device Name	Functionality		Note	Data Range	Function	Note for Different Data	Register No. (bit)	Slava Address	RAM Address (bit)
	No	Name							
SVP	0	SBF	22	3F	SECAM BELL f0	TV Video NTSC/others	1C (7-2)	CXA2060AS(8AH)	89 (7-2)
	1	HOS	7	0F	H Oscillation		0C (7-4)		84 (7-4)
	2	SHU	8	0F	Sub Hue Control		05 (7-2)		310
	3	SCL	1F	3F	Sub Color Control		04 (7-2)		311
PIP	0	SDL	2	0F	Delay of output SELECT		01 (6-3)	SDA9288X(D6H)	190 (6-3)
	1	PPH	15	FF	H Position of TOP-LEFT Pin P		01/02		19F
	2	PPV	2E	FF	V Position of TOP-LEFT Pin P		03 (7-0)		1A0
	3	YDL	0	07	Delay of Luminance Input		04 (2-0)		193 (2-0)
	4	HDI	0	0F	H Sync Delay for Inset		06 (3-0)		195 (3-0)
	5	ISC	1	1	Inset Clock Selection		06 (4)		195 (4)
	6	CLP	1	1	Clamp Pulse Selection		06 (5)		195 (5)
	7	CLC	0	1	Clamp Cycle Selection		06 (6)		195 (6)
	8	CON	0	0F	Contrast Adjustment for inset		09 (7-4)		198 (7-4)
	9	PLL	2	03	H Position For A-ch		0D (6-5)		19C (6-5)
	10	PDV	0	0F	PIP V Pedestal Level		0E (7-4)		19D (7-4)
	11	PDU	0	0F	PIP U Pedestal Level		0E (3-0)		19D (3-0)
TXT	0	TXH	1	3	Teletext Horizontal Position		10(1-0)	SAA5261(58H)	348 (1-0)
	1	TXV	0	3	Teletext Vertical Position		10(5-4)		348 (5-4)
OPM	0	OSH	11	3F	OSD H Position	Option-Misc Comb Selection(00-No Comb, 01-Glass Comb, 02-Digital Comb, 03-Multi Standard Comb)	1F1	CXP86461(60H)	17B (7-2)
	1	COM	3	03	Comb Selection(00-No Comb, 01-Glass Comb, 02-Digital Comb, 03-Multi Standard Comb)		33F (7-6)		33F (7-6)
	2	APC	1	1	APC Switch		33E (5)		33E (5)
	3	TSY	0	03	TV Sys at Auto TV Sys		33E (4-3)		33E (4-3)
	4	MUT	1	1	No Signal Mute		33E (0)		33E (0)
	5	AFM	1	1	Auto FM switch		33E (1)		33E (1)
	6	RFB	0	3	C-BPF Control		33F (5-4)		33F (5-4)
	7	TVO	2	7	Tilt to V-Angle offset		33F (2-0)		33F (2-0)
	8	DBL	0	1	Disable Blueback function		33F (2)		33F (2)
	9	SSO	1	1	Speed Search Option				
	10	SCH	1	7F	CH Selection for Shipping Condition	NTSC only		CXP86461(60H)	367 (6-0)
	11	SCA	1	1	Cable/Air Selection for Shipping Condition				367 (7)
OPB	0	OP1	F1	FF	Optional Bits 1 (see below)	Option-Bits		CXP86461(60H)	4C
	1	OP2	7	FF	Optional Bits 2 (see below)				4D
	2	OP3	A8	FF	Optional Bits 3 (see below)				4E
	3	OP4	4	FF	Optional Bits 4 (see below)				4F

NOTE

- shaded items are fixed data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory.
In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

ITEM INFORMATION.

No. OPB0 OP1

Item	XTAL 4.43	XTAL 3.58	SECAM	2nd. Lang	B/G	I	D/K	M
KV-XS29N90	1	1	1	1	0	0	0	1
KV-XS29N93	1	1	1	1	0	0	0	1

No. OPB1 OP2

Item	TOP	NICAM	HDEV	Thai Bil	Dis. Fav	DVD Input	AV Input	
KV-XS29N90	0	0	0	0	0	0	1	1
KV-XS29N93	0	0	0	0	0	1	1	1

AV Input 00 = no AV Input 01 = 1 AV Input
 10 = 2 AV Input 11 = 3 AV Input

DVD Input Effective only when "AV Input" is set to 3 AV Input.

Dis Fav. Disable Favorite Channel (Effective For XF-L (21" & 14") Models Only)

No. OPB2 OP3

Item	PIC Rotate	2199 Curve	Auto PIC	Auto TV sys	US ST	AV Mono	11 KEY	Color SW
KV-XS29N90	0	0	1	0	1	0	0	0
KV-XS29N93	0	0	1	0	1	0	0	0

PIC Rotate*1 PIC Rotation Switch 0 = disabled, 1 = enabled.
 2199 Curve*1 2199 Volume Curve Selection 0 = Others, 1 = 2199 Volume Curve
 Auto PIC Auto Picture Improvement 0 = inactive, 1 = active
 A-TVsys Auto TV System in Auto Program 0 = disabled, 1 = enabled
 US ST USA Stereo 0 = disabled, 1 = enabled
 AV Mono*1 AV Mono model 0 = Stereo, 1 = Mono (No Balance & Surround selection)
 11 Key Front Key Selection 0 = 7 key model, 1 = 11 key model
 Color SW*2 Color Data Selection in Dynamic Mode 0 = 65 (No PIP), 1 = 57 (PIP)

Note *1 – For XF-L (21" & 14") Models Only

*2 – For XF-H (34", 29" & 25") Models Only

No. OPB2 OP4

Item	XS/LF	Korean ST Vid	Vid NTSC 3.58	Forced 50/60	-	Chinese	Korean	-
KV-XS29N90	0	0	0	0	1	0	0	0
KV-XS29N93	0	0	0	0	1	0	0	0

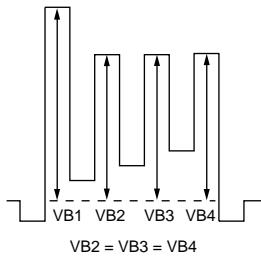
APPLICABLE TO XS ONLY - Sub Language Selection (Bit 0-Bit 2)

XS/LF Select Different Picture and Sound Mode for XS Series (0) and LF Series (1). LF series will be using XF-H Picture and Sound mode setting.
 Korean ST Korean Stereo 0 = disabled, 1 = enabled
 Vid NTSC 3.58 Video Colour 0 = Multi System 1 = Single System (NTSC 3.58)
 Forced 50/60 Forced to 50/60Hz during no signal
 0 = 60Hz 1 = 50Hz

4-3. PICTURE QUALITY ADJUSTMENTS

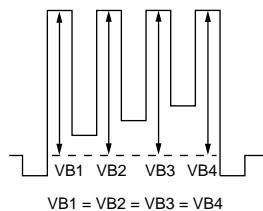
SUB COLOR ADJUSTMENT

1. Input a PAL color-bar.
2. Set to the following condition:
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
4. Set to Service Mode and select SAJ 3 ‘SCL’ with ① and ④ of the commander then adjust to VB2=VB3=VB4 with ③ and ⑥.
5. Press **MUTING** → ① of the commander to write the data.
6. Adjust SAJ 3 ‘SCL’ as step 2 to 5 when receiving NTSC color-bar.



SUB HUE ADJUSTMENT

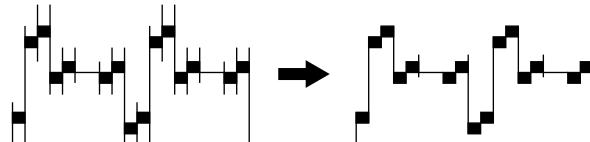
1. Select Video 1.
2. Input a NTSC color-bar, video into Video 1.
3. Set the following condition:
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
4. Connect an oscilloscope to pin ① (B OUT) of CN305, A board.
5. Select SAJ 1 ‘SHU’ with ① and ④ of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with ③ and ⑥.



6. Press **MUTING** → ① of the commander to write the data.

BELL FILTER ADJUSTMENT

1. Input SECAM color-bar signal.
2. Connect the dual-trace oscilloscope to CN303 pin ⑨ (not mounted).
3. Adjust SERVICE MODE, ITEMS ‘SBF’ as shown below.



4-4. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

When replacing IC003 (MEMORY), be sure to change IC001 (μ -COM) to the following new IC at the same time.

IC001(μ -CON):

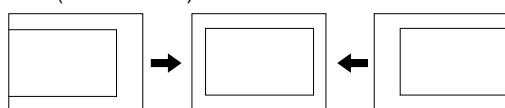
CXP750097-024S

1. Enter to Service Mode.
2. Press commander buttons ⑤ and ① (Data Initialize), and ② and ① (Data Copy) to initialize the data.
3. Call each item number and check if the respective screen shows the normal picture.
In cases where items are not well adjusted, rectify the items with fine adjustment.
Write the data per each item number (**MUTING** + ①).
4. Select item numbers “OPB0” (OP1), “OPB1” (OP2) and “OPB2” (OP3) and respectively set the bit per model with command buttons ③ and ⑥.
5. Press commander buttons ⑧ and ① (Test Normal) to return to the data that was set on the shipment from the factory.
(This will also cancel Service Mode.)

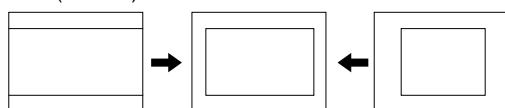
4-5. PICTURE DISTORTION ADJUSTMENT (1)

Item Number 00 – 0B

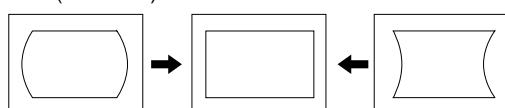
GEO 0 HPS (H POSITION)



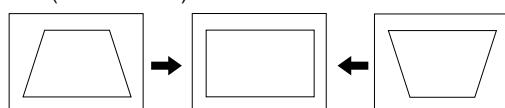
GEO 1 HSZ (H SIZE)



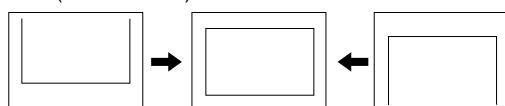
GEO 2 PAP (PIN AMP)



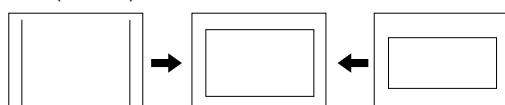
GEO 3 TLT (TRAPEZIUM)



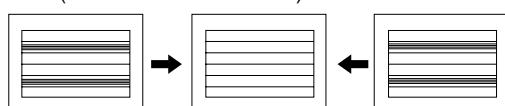
GEO 4 VPS (V POSITION)



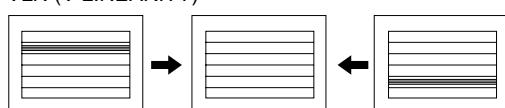
GEO 5 VSZ (V SIZE)



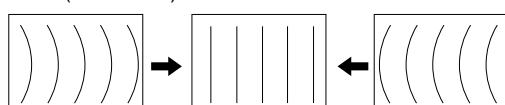
GEO 6 SCO (VERTICAL S-Correction)



GEO 7 VLN (V LINEARITY)



GEO 8 BOW (AFC.BOW)

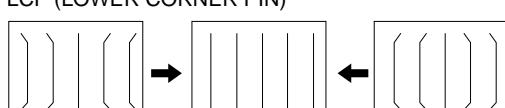


GEO 9 AGL (AFC.ANGLE)



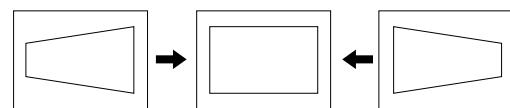
GEO 0A UCP (UPPER CORNER PIN)

GEO 0B LCP (LOWER CORNER PIN)



PICTURE DISTORTION ADJUSTMENT (2)

H-TRAPEZOID (Rotate RV1801)



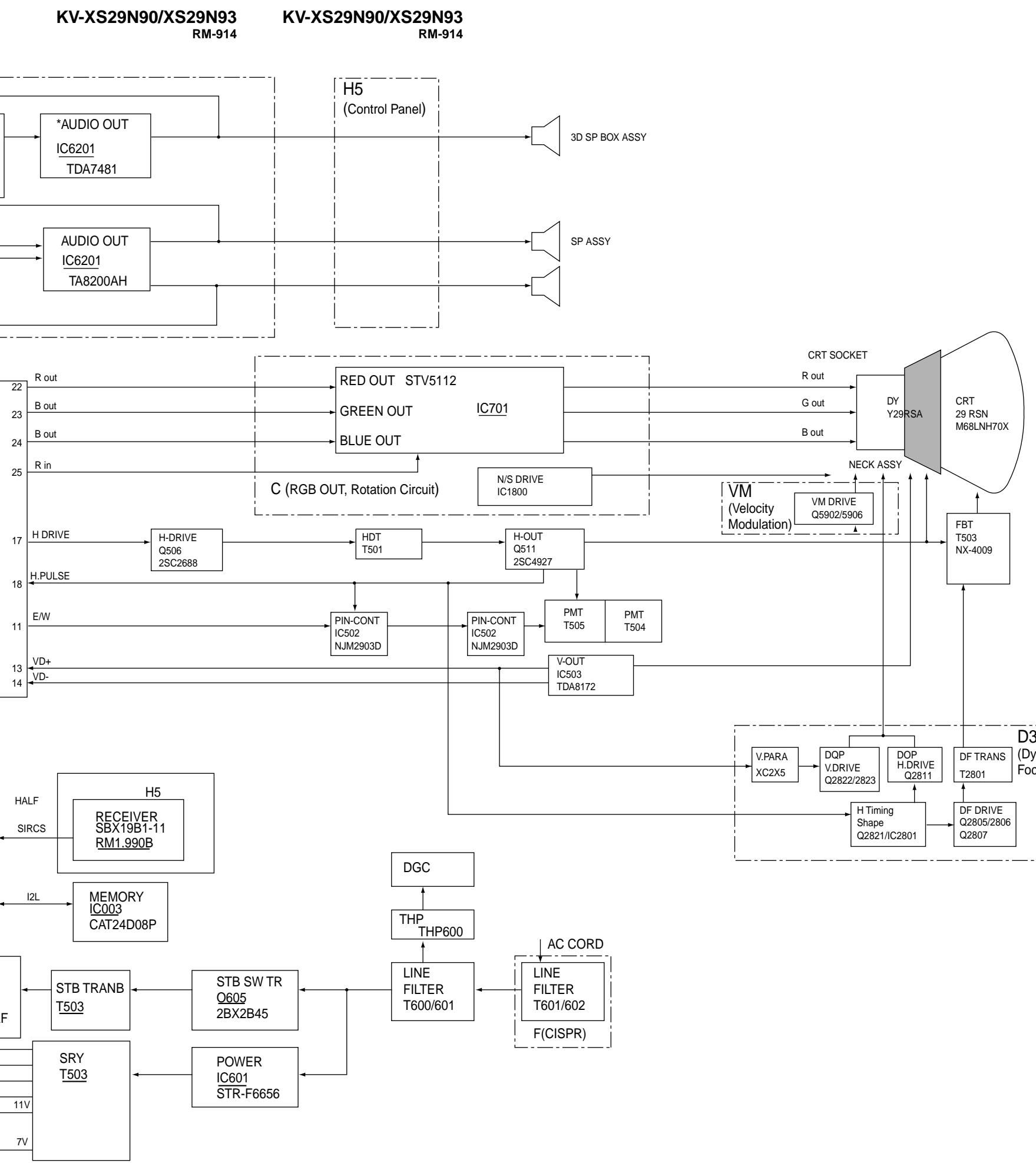
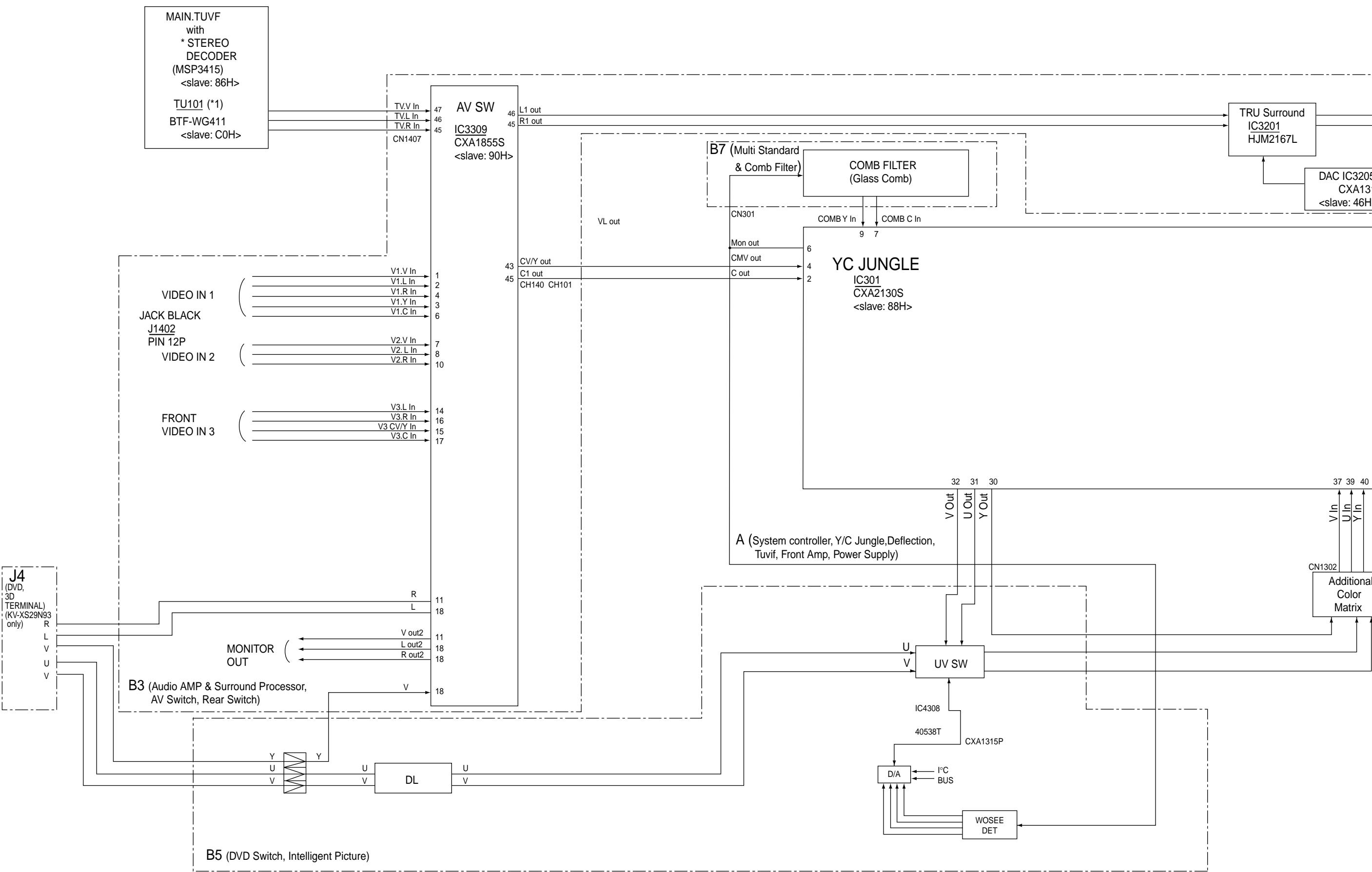
MEMO

MEMO

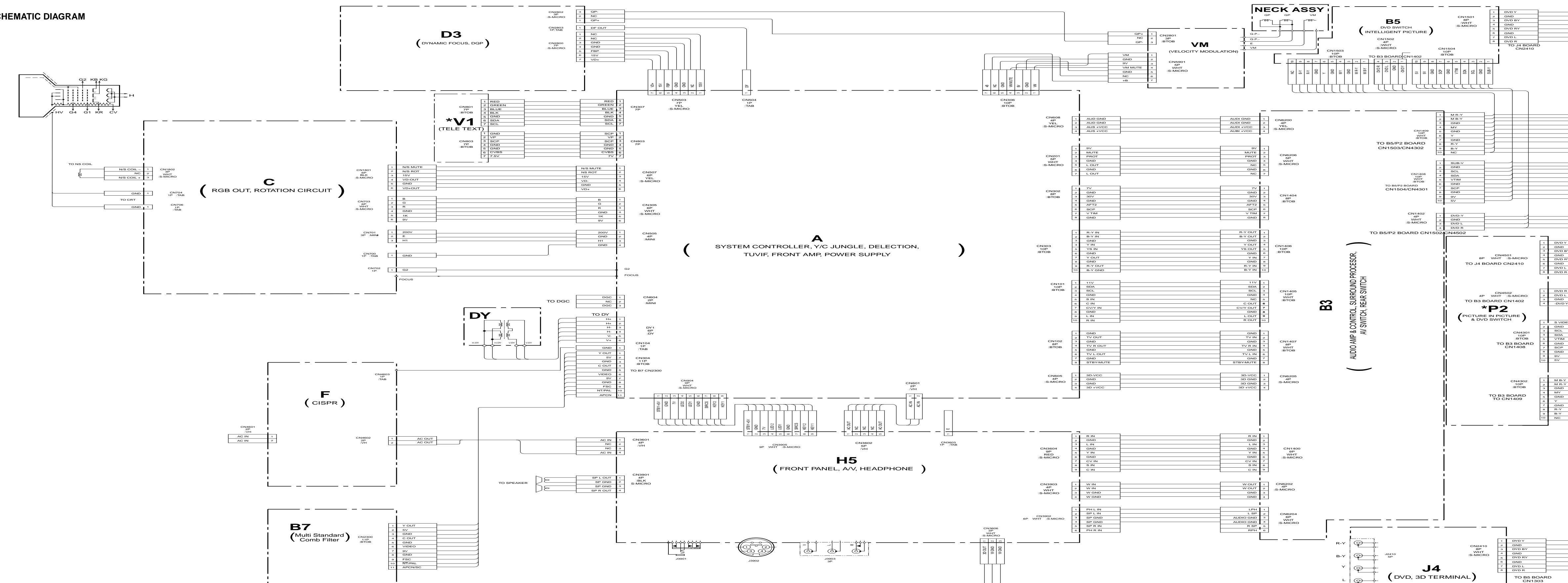
MEMO

**SECTION 5
DIAGRAMS**

5-1. BLOCK DIAGRAM

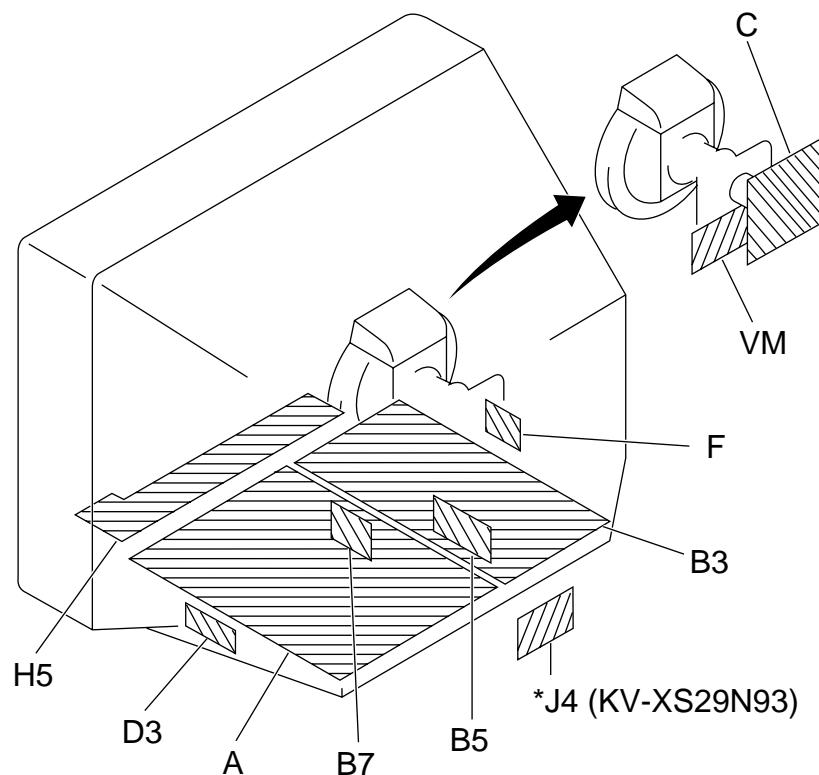


5-2. FRAME SCHEMATIC DIAGRAM



or this model

5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted.
- All electrolytic capacitors are rated at 50V unless otherwise noted.
- All resistors are in ohms.
 $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- Indication of resistance which does not have rating electrical power is as follows.

Pitch: 5 mm
Rating electrical power 1/4W (CHIP: 1/10W)

- : nonflammable resistor.
- : internal component.
- : panel designation or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B unless otherwise noted.

• Readings are taken with a color-bar signal input.

no mark : PAL

() : SECAM

[] : NTSC 3.58

« » : NTSC 4.43

• Readings are taken with a 10 $\text{M}\Omega$ digital multimeter.

• Voltage are dc with respect to ground unless otherwise noted.

• Voltage variations may be noted due to normal production tolerances.

• All voltages are in V.

• * : Cannot be measured.

• Circled numbers are waveform references.

• — : B + bus.

• - - - - : B - bus.

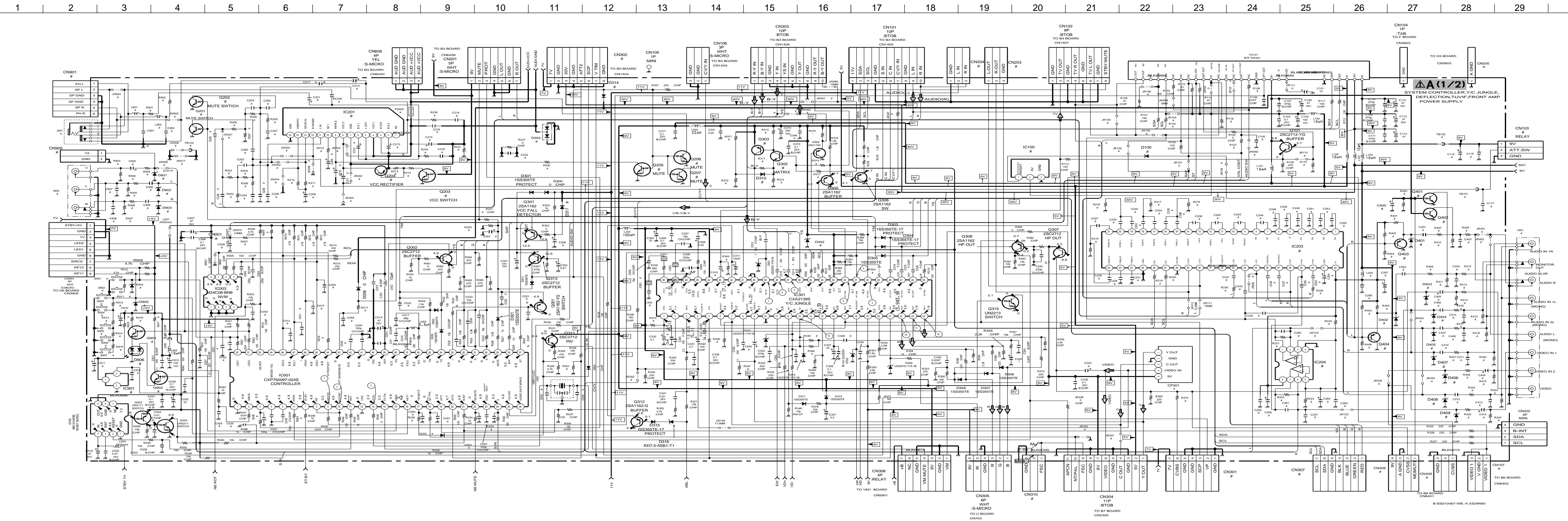
• → : signal path.

Reference information

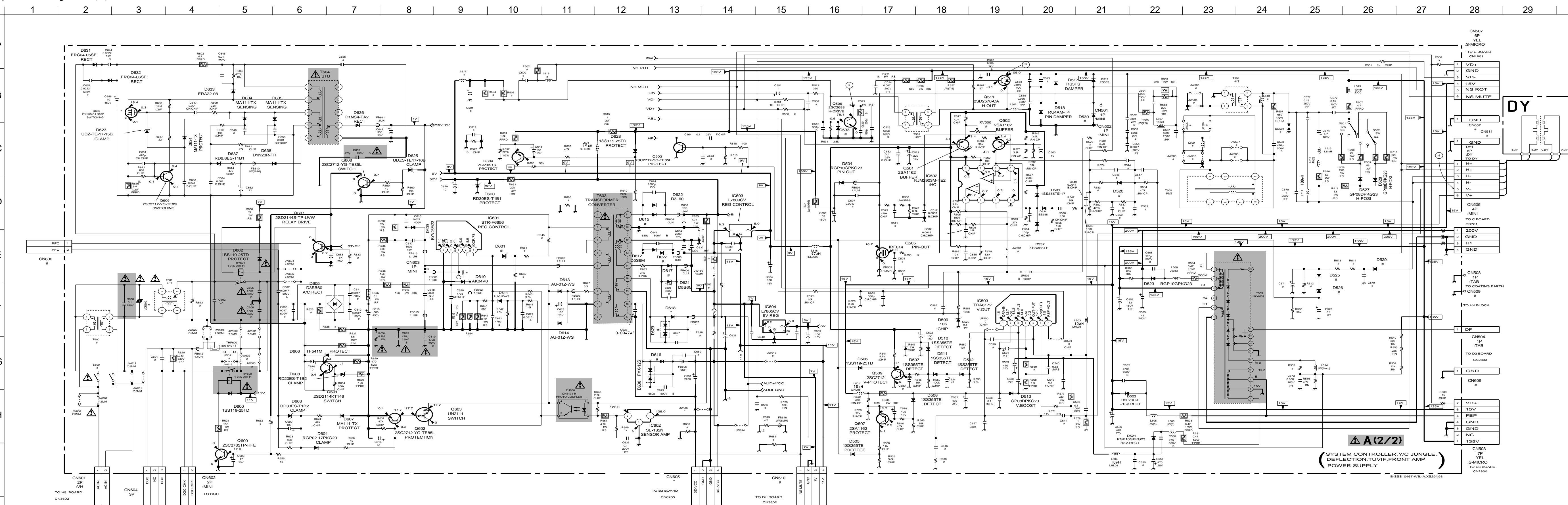
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR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

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

Schematic Diagram of A(1/2) Board



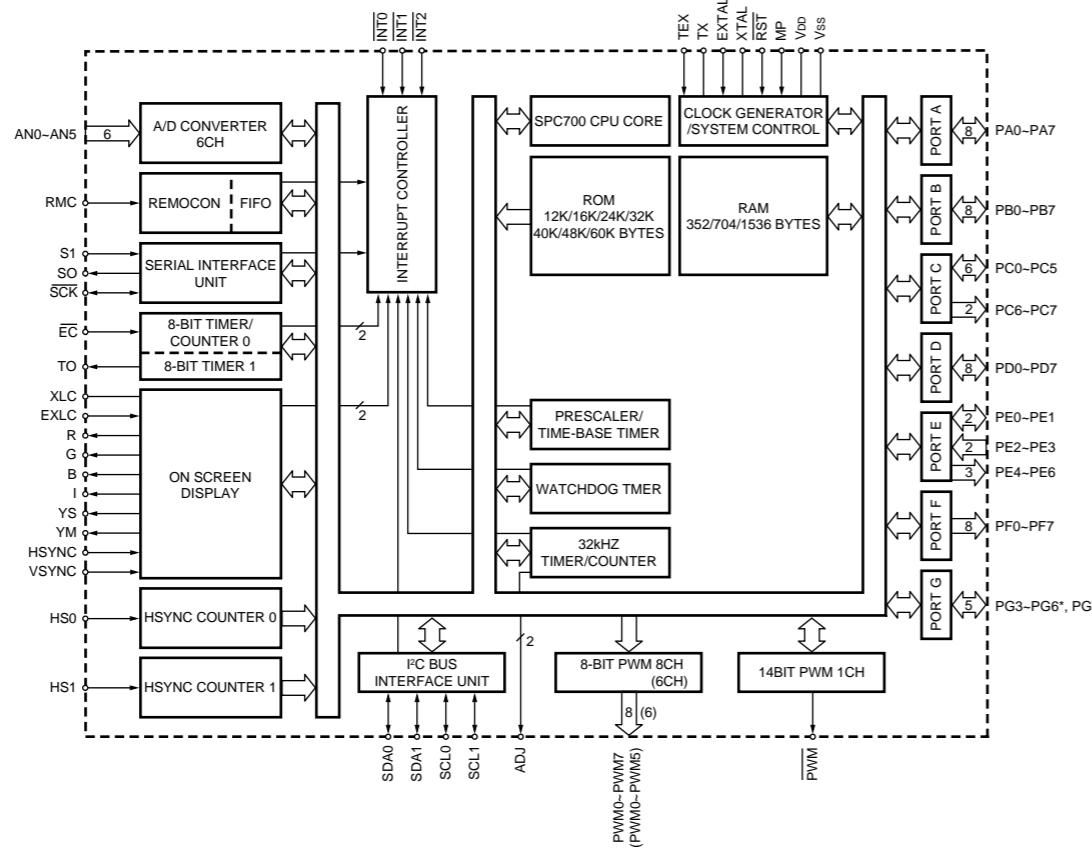
(2) Schematic Diagram of A(2/2) Board



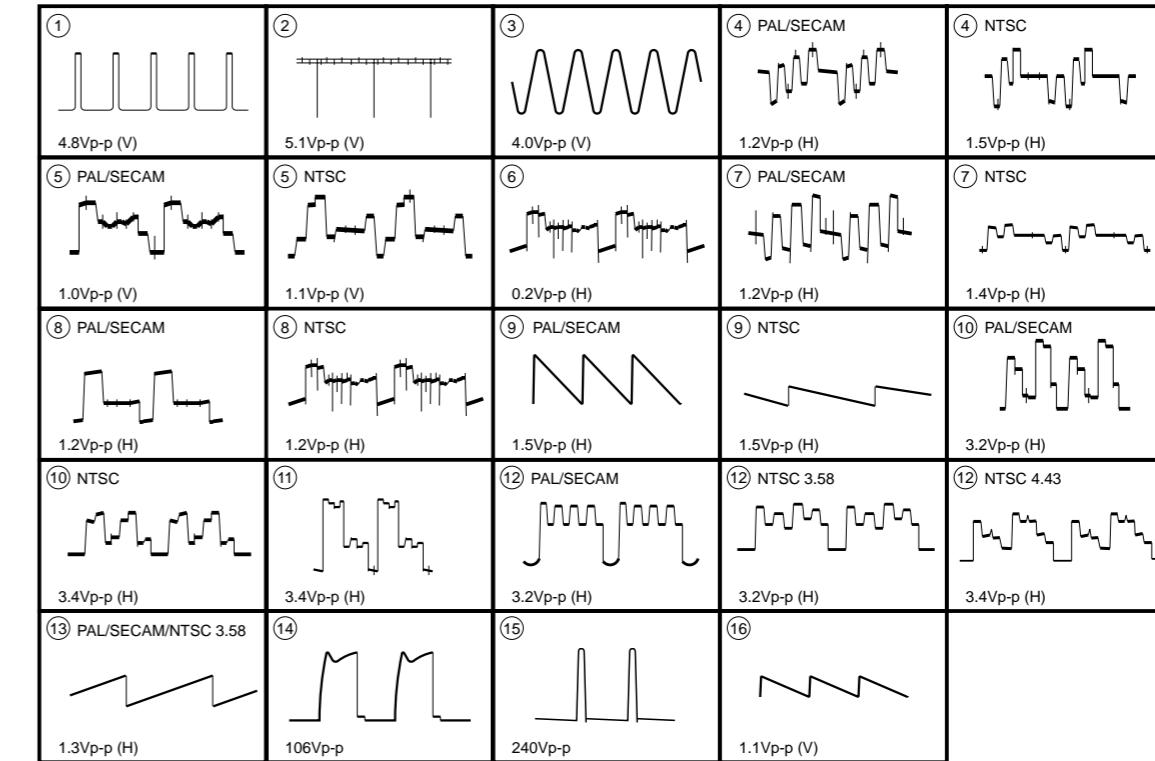
Schematic diagram
◀ A(1/2) board

Schematic diagram
A (2/2) board ➡

A BOARD IC001 CXP750097-024S



A BOARD WAVEFORMS



A BOARD * MARK LIST

	KV-XS29N93	KV-XS29N90
C627	680P 500V	#
C628	1000 35V	#
CN605	4P	#
D618	RN4Z	#
FB607	1.1μH	#
JW608	#	JW(5)
JW614	#	JW(5)
R654	12W :RS	#

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

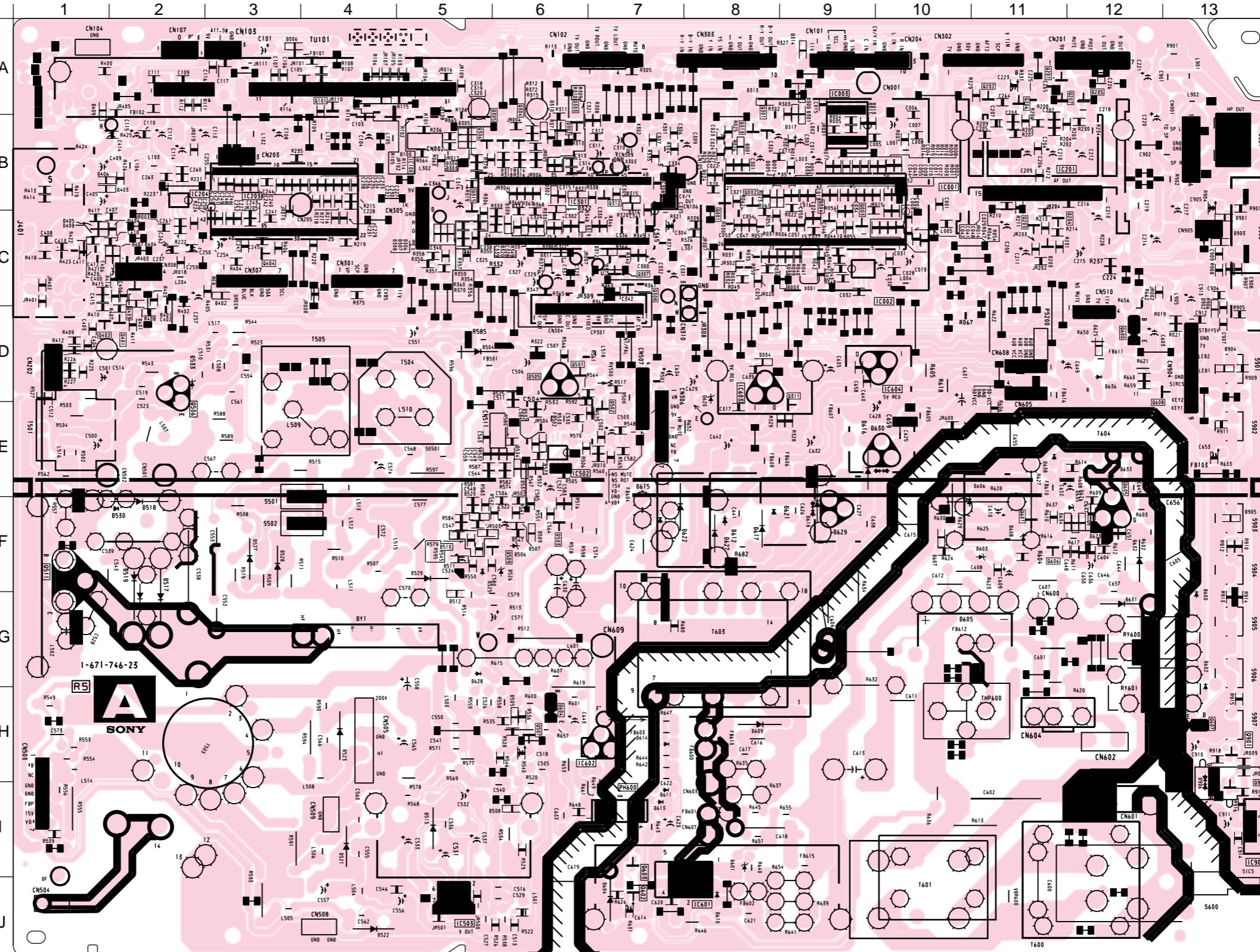
A BOARD

IC	DIODE	D602	G-13
IC001	B-10	D001	B-8
IC002	C-10	D002	B-8
IC003	A-9	D003	C-9
IC100	B-5	D004	D-8
IC201	B-11	D005	B-8
IC203	B-3	D006	A-3
IC204	B-2	D100	B-5
IC301	B-6	D610	J-8
IC502	E-6	D203	C-11
IC503	J-5	D300	A-9
IC601	I-8	D301	B-9
IC602	H-7	D302	B-6
IC603	D-8	D303	B-5
IC604	D-10	D304	B-5
IC901	I-13	D305	B-5
PH600	H-7	D308	B-4
		D309	B-6
		D310	A-6
		D311	C-6
		TRANSISTOR	
Q001	B-8	D312	C-7
Q002	B-8	D623	F-12
Q003	C-9	D313	A-8
Q004	C-9	D315	B-7
Q101	A-4	D316	C-7
Q201	A-11	D317	B-9
Q202	A-11	D319	C-7
Q203	C-11	D320	C-6
Q204	C-12	D321	B-6
Q205	A-12	D322	B-6
Q206	A-11	D401	D-2
Q207	A-12	D402	C-3
Q301	B-8	D403	B-2
Q302	B-6	D405	C-1
Q303	A-6	D406	B-1
Q304	B-6	D407	C-2
Q305	B-5	D408	C-1
Q306	B-5	D409	A-1
Q307	C-7	D504	D-5
Q308	C-7	D505	H-6
Q311	D-9	D506	F-6
Q312	B-7	D507	F-6
Q313	B-8	D508	I-5
Q315	B-5	D509	F-6
Q401	D-2	D510	F-5
Q402	D-1	D511	F-5
Q403	D-2	D512	G-5
Q404	C-3	D513	I-5
Q501	D-6	D517	F-2
Q502	E-7	D518	F-2
Q503	F-6	D519	F-2
Q505	D-6	D520	E-5
Q506	D-2	D521	I-4
Q507	H-6	D522	J-4
Q509	F-6	D523	H-4
Q511	F-1	D525	F-5
Q600	D-12	D526	F-6
Q601	F-11	D527	F-3
Q602	J-7	D528	F-3
Q603	I-7	D529	F-5
Q604	H-6	D530	F-2
Q605	E-12	D531	E-6
Q606	F-11	D532	E-6
Q607	H-13	D533	D-2
Q608	D-12	D534	E-6
Q901	H-13	D600	G-13
Q902	H-13	D601	I-8

A [SYSTEM CONTROLLER, Y/C JUNGLE, DEFLECTION,
TUVIF, FRONT AMP, POWER SUPPLY]

PRINTED WIRING BOARD

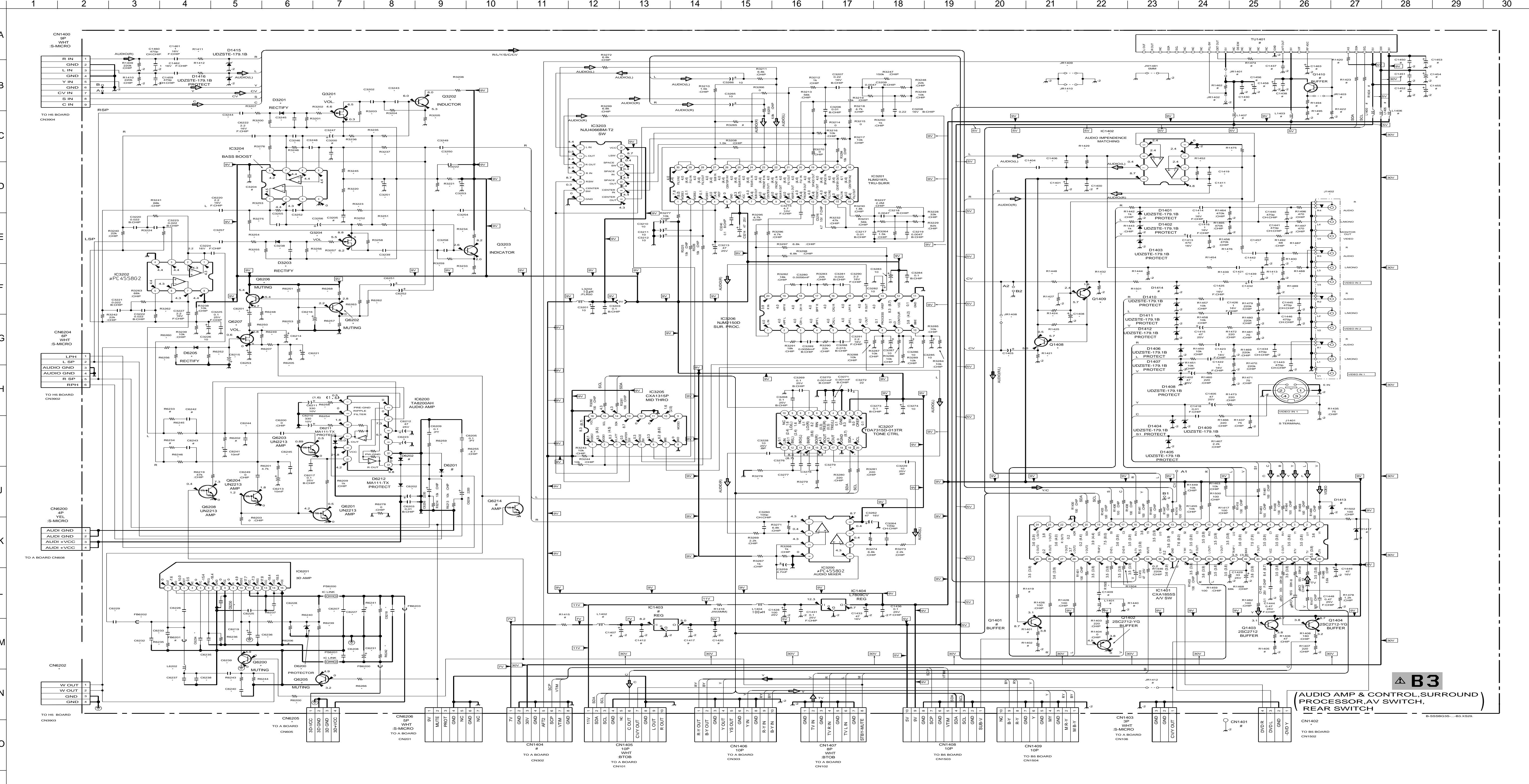
- A Board -



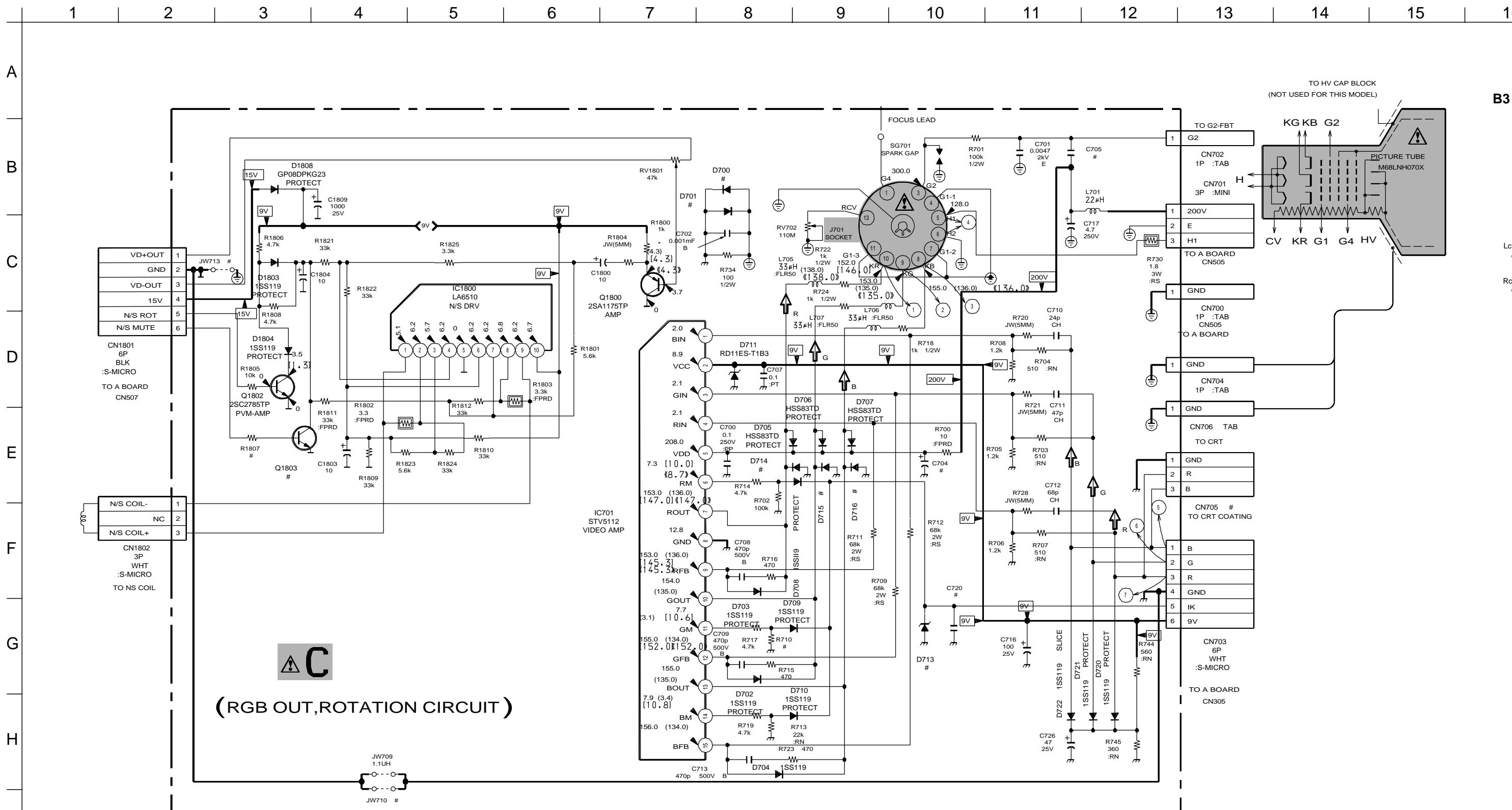
NOTE:

The circuit indicated at left contains high voltage of over 600 Vp-p. Please pay attention when inspecting or repairing it to prevent an electric shock.

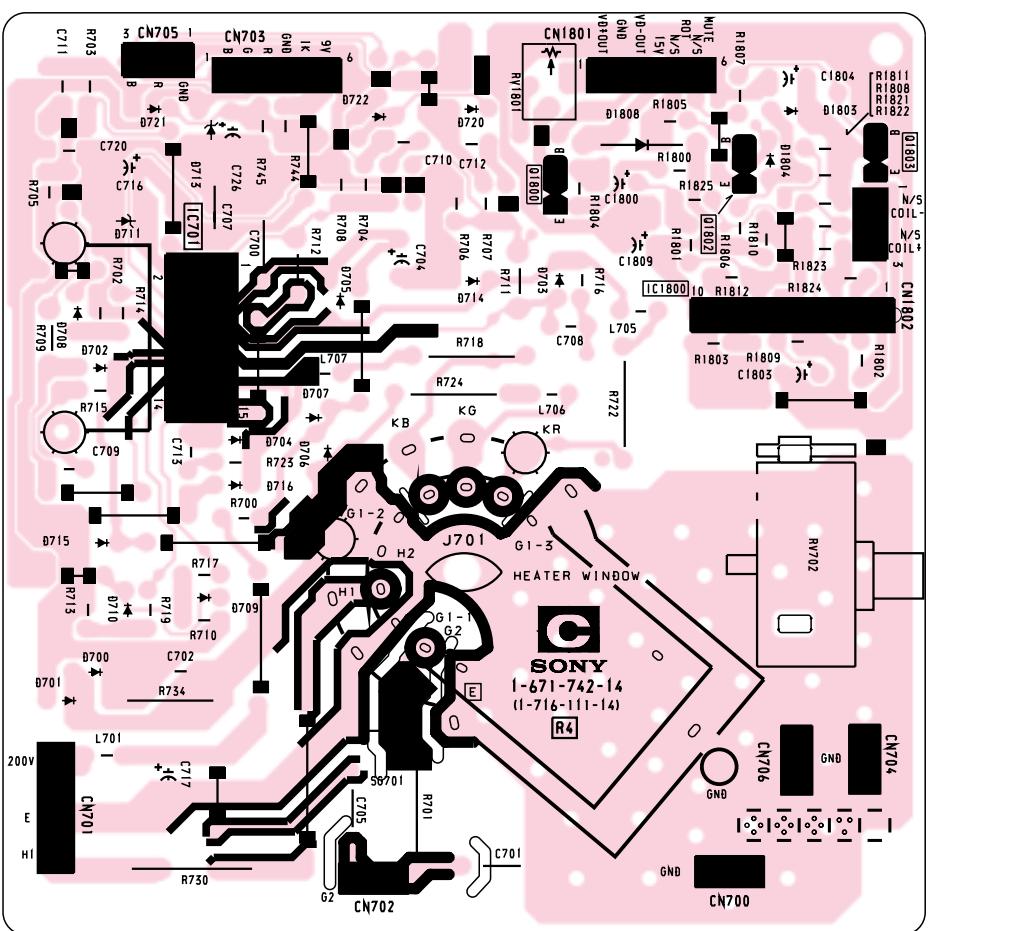
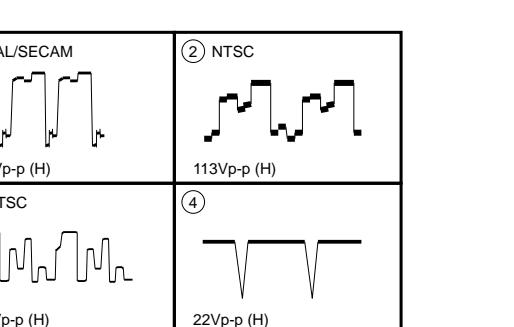
(3) Schematic Diagram of B3 Board



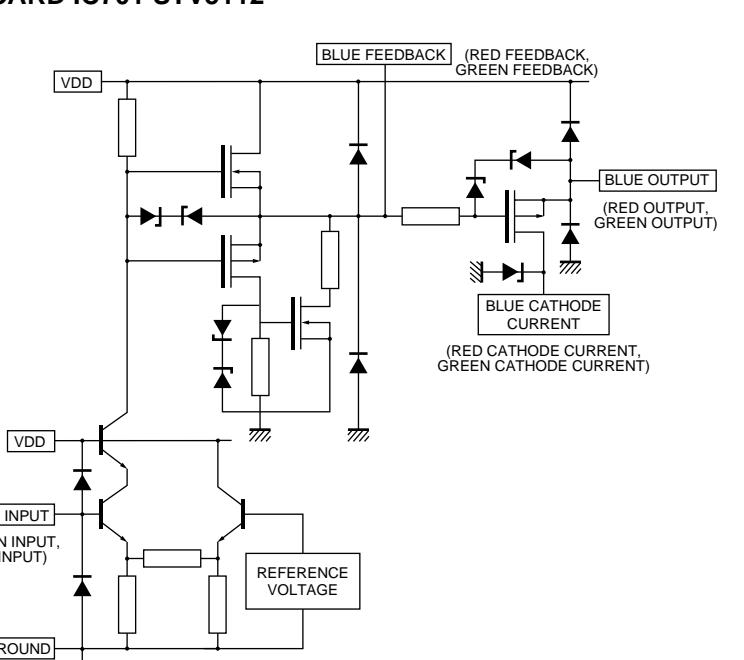
(4) Schematic Diagram of C Board



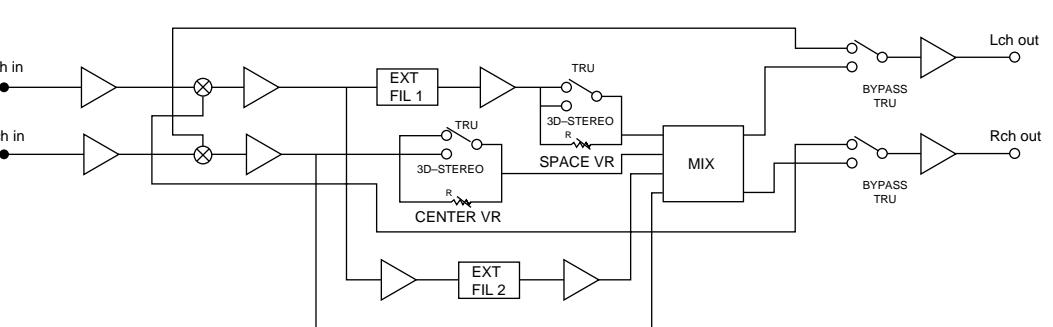
- C Board -

Schematic diagram
B3 boardSchematic diagram
C board

C BOARD IC701 STV5112



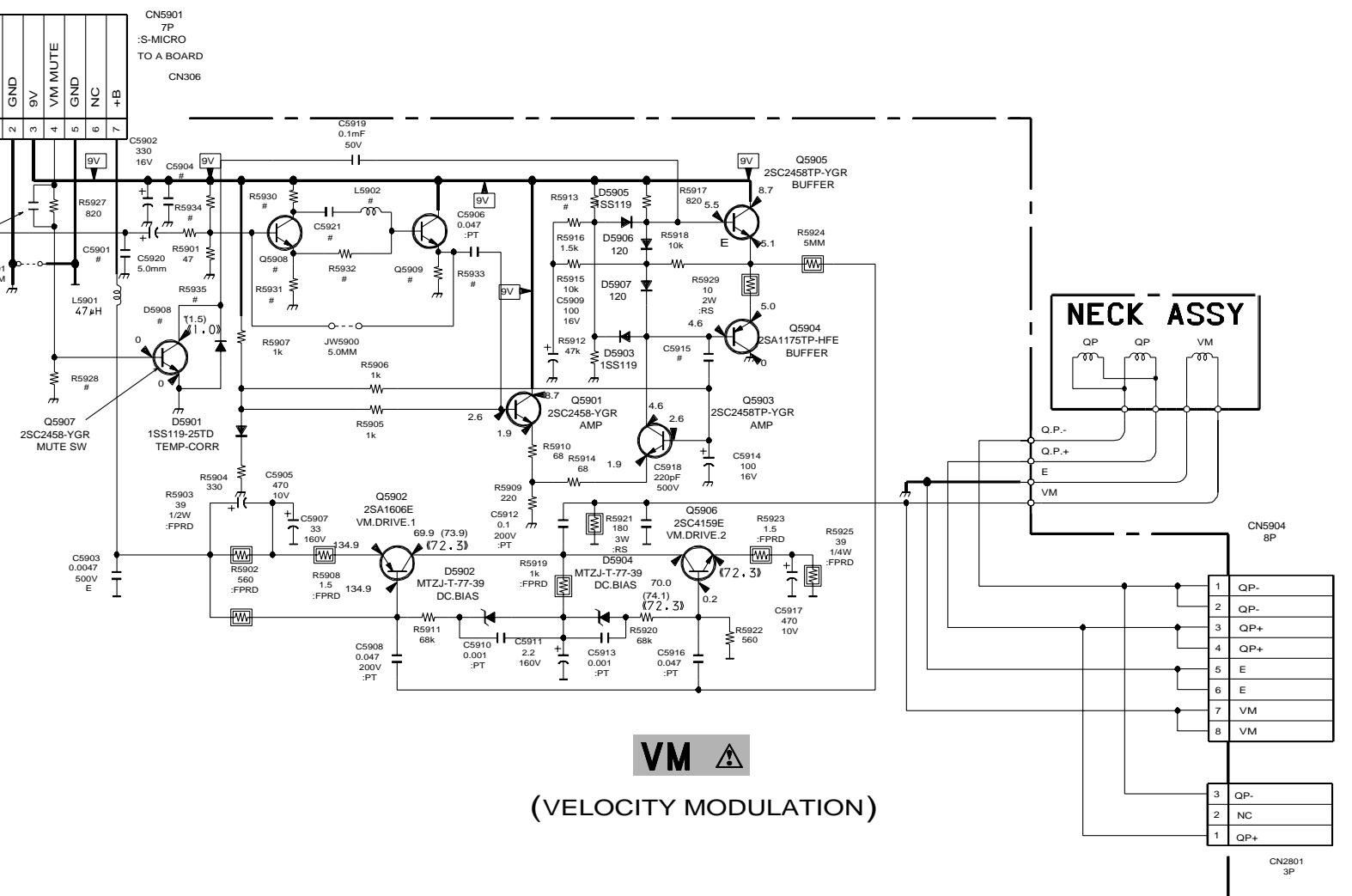
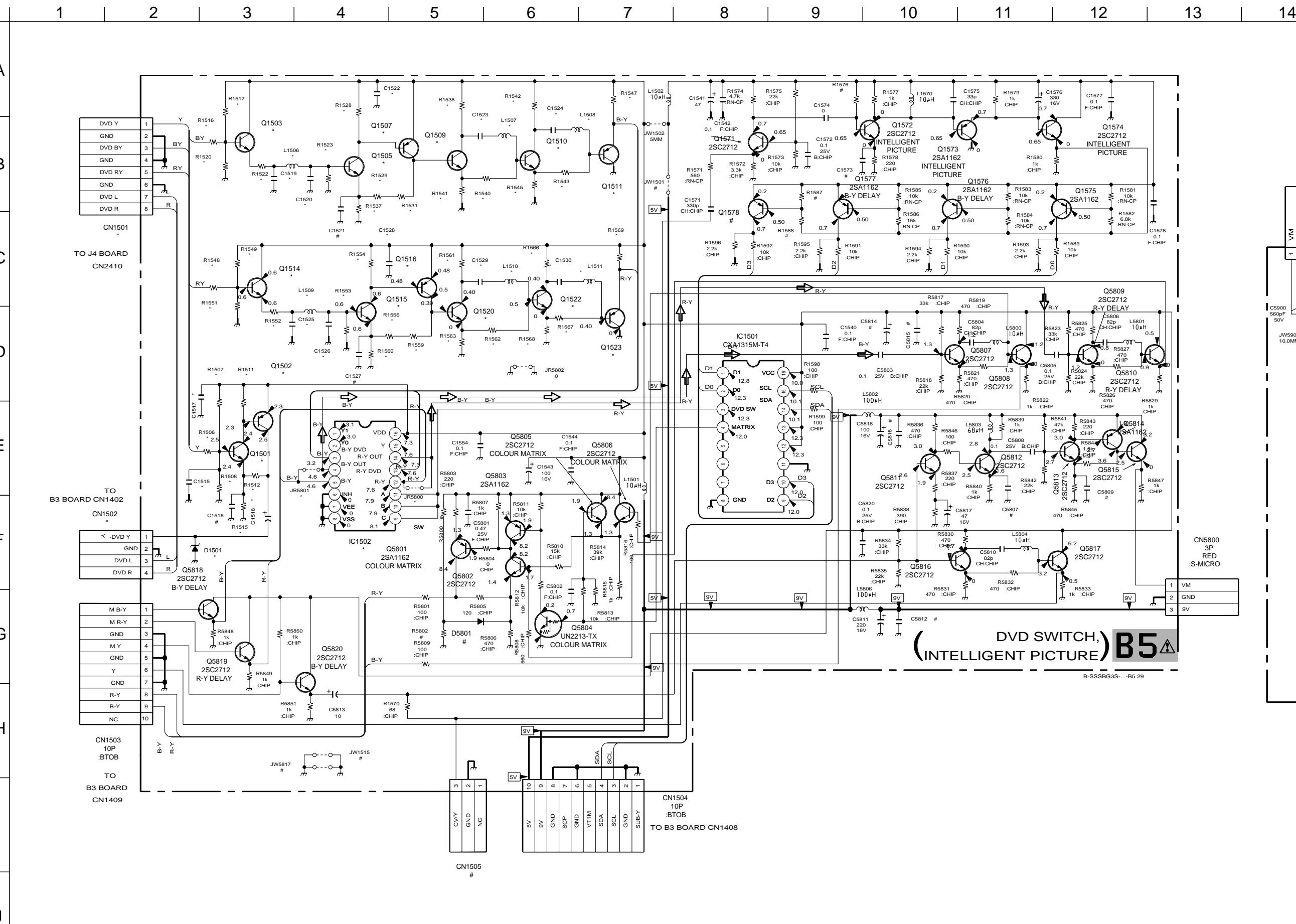
B3 BOARD IC3201 NJM2187L



B3 BOARD * MARK LIST

	KV-XS29N93	KV-XS29N90	KV-XS29N93	KV-XS29N90
C1401	330.16	#	1	:CHIP
C1403	47.25	#	4P	
C1404	0 :CHIP	0.1 05 :CHIP		
C1406	100 :CHIP	#		
C1408	10	#		
C1411	0.1 25 :CHIP	0 :CHIP		
C1419	100 :CHIP	#		
C1421	1.16 :CHIP	#		
C1432	100 16	#		
C1439	470 :CHIP	#		
C1442	470 :CHIP	#		
IC3204	#		UPC4558G2	
C3202	0.33	#		
C3238	#	0.47 25 :CHIP		
C3239	#	0.33 :PT		
C3243	#	0.033 25 :CHIP		
C3244	#	1.16 :CHIP		
C3245	#	0.47 25 :CHIP		
C3246	#	47 :CHIP		
C3247	#	4.7		
C3248	#	100 :CHIP		
C3249	0 :CHIP	16 :CHIP		
C3250	#	1.16 :CHIP		
C3251	#	10		
C3252	#	100 :CHIP		
C3254	0 :CHIP	16 :CHIP		
C3255	#	47 :CHIP		
C3257	#	1.16 :CHIP		
C3258	#	0.033 25 :CHIP		
C3276	0.47 16 :CHIP	0.15 16 :CHIP		
C3277	0.1 25 :CHIP	0.15 16 :CHIP		
C3278	0.47 16 :CHIP	0.15 16 :CHIP		
C3279	0.1 25 :CHIP	0.15 16 :CHIP		
C3281	10	#		
C3282	12P	#		
JR1408	0 :CHIP	#		
JR1410	0 :CHIP	#		
JR6201	0 :CHIP	#		
L6202	65μH	#		
PS6201	LINK,IC	#		
C1408	2SD601A-QRS-TX	#		
C1409	2SD601A-QRS-TX	#		
C3201	#	2SK246GR-TPE2		
C3202	#	2SD601A-QRS-TX		
R3275	0 :CHIP	#		
R3276	22 :CHIP	#		
R3278	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		
R3257	#	1 :CHIP		
R3258	#	3.3 :CHIP		
R3262	150 :CHIP	#		
R3263	0 :CHIP	#		
R3275	0 :CHIP	#		
R3276	0 :CHIP	#		
R3278	22 :CHIP	#		
R3279	22 :CHIP	#		
R6200	47 :CHIP	#		

6) Schematic Diagrams of B5 and VM Boards

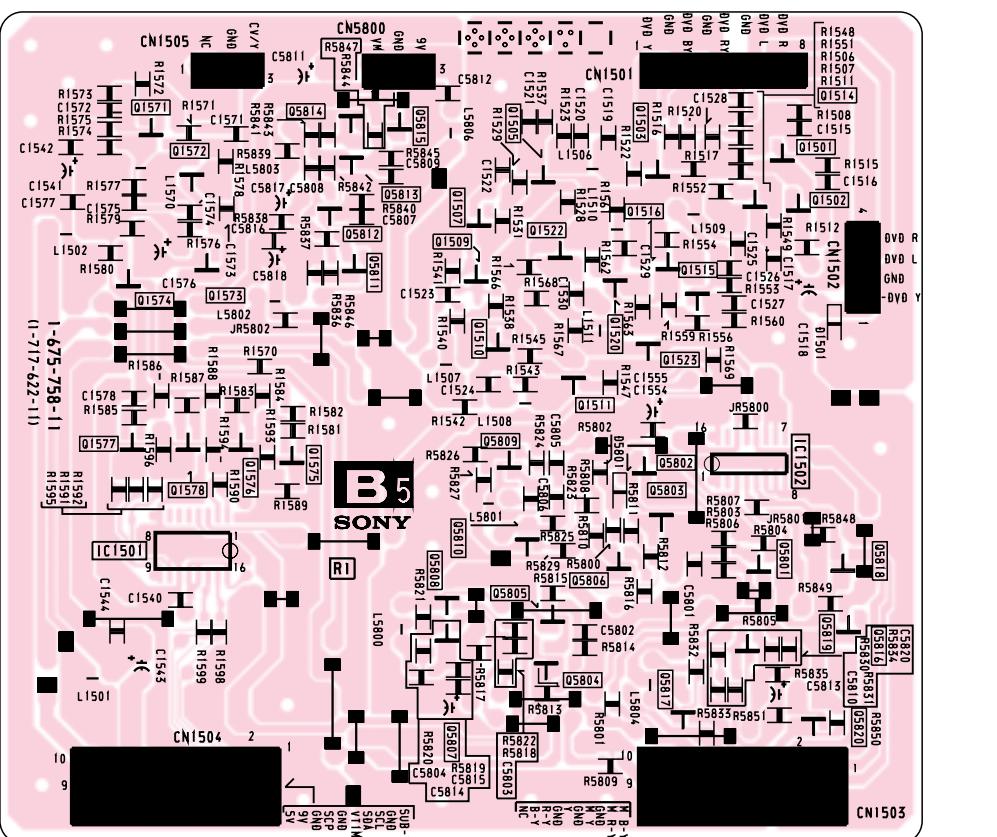


diagrams M boards

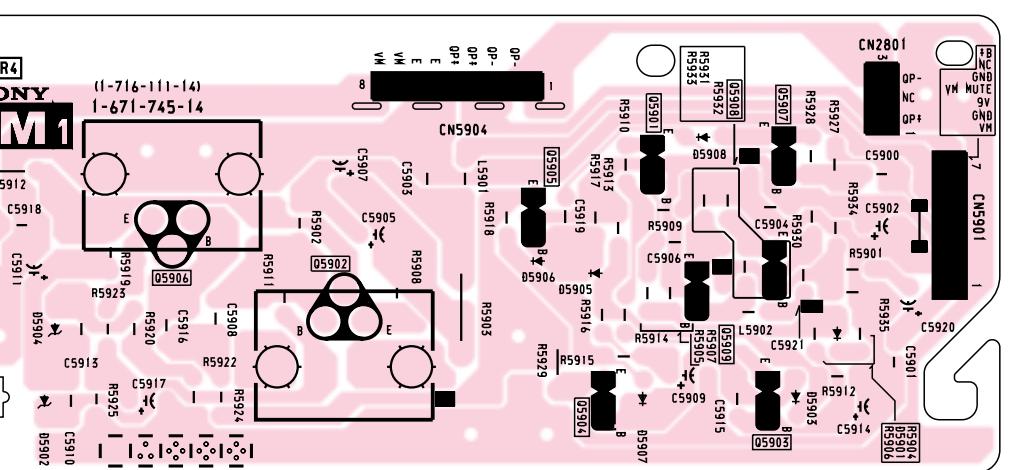
B5 [DVD SWITCH,
INTELLIGENT PICTURE]**VM** [VELOCITY MODULATION]

PRINTED WIRING BOARDS

- B5 Board -



- VM Board -



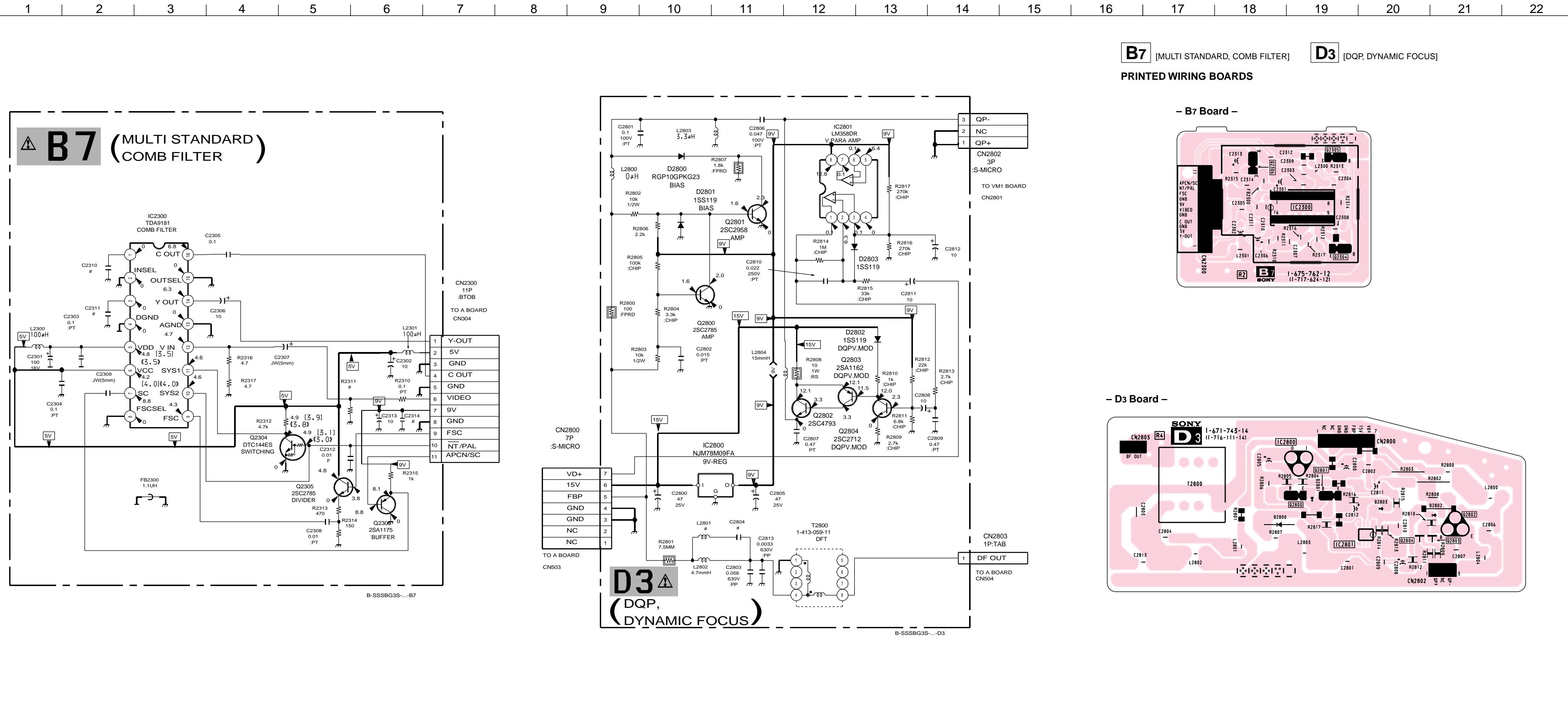
B5 BOARD * MARK LIST

	KV-XS29N93	KV-XS29N90
C1515	47 :CHIP	#
C1517	0.47 25 :CHIP	#
C1518	47	#
C1520	82 :CHIP	#
C1522	0.47 25 :CHIP	#
C1523	150 :CHIP	#
C1524	38 :CHIP	#
C1525	82 :CHIP	#
C1526	82 :CHIP	#
C1528	0.47 25 :CHIP	#
C1529	150 :CHIP	#
C1530	68 :CHIP	#
CN1501	8P	#
CN1502	4P	#
D1501	UDZS-TE17-91B	#
IC1502	HEF4053BT	#
JR5800	#	0 :CHIP
JR5801	#	0 :CHIP
JW508	JW (5)	#
L1506	100	#
L1507	47	#
L1508	47	#
L1509	100	#
L1510	47	#
L1511	47	#
Q1501	2SC2712-YG-TE85L	#
Q1502	2SC2712-YG-TE85L	#
Q1503	2SC2712-YG-TE85L	#
Q1505	2SC2712-YG-TE85L	#
Q1507	2SC2712-YG-TE85L	#
Q1509	2SC2712-YG-TE85L	#
Q1510	2SC2712-YG-TE85L	#
Q1511	2SC2712-YG-TE85L	#
Q1514	2SC2712-YG-TE85L	#
Q1515	2SC2712-YG-TE85L	#
Q1516	2SC2712-YG-TE85L	#
Q1520	2SC2712-YG-TE85L	#
Q1522	2SC2712-YG-TE85L	#
Q1523	2SC2712-YG-TE85L	#

	KV-XS29N93	KV-XS29N90
R1506	100 :CHIP	#
R1507	22 :CHIP	#
R1508	10 :CHIP	#
R1511	220 :CHIP	#
R1512	15 :CHIP	#
R1515	470 :CHIP	#
R1516	100 :CHIP	#
R1517	12 :CHIP	#
R1520	18 :CHIP	#
R1522	1 :CHIP	#
R1523	1 :CHIP	#
R1528	220 :CHIP	#
R1529	15 :CHIP	#
R1531	380 :CHIP	#
R1537	470 :CHIP	#
R1538	470 :CHIP	#
R1540	1 :CHIP	#
R1541	470 :CHIP	#
R1542	470 :CHIP	#
R1543	1 :CHIP	#
R1545	470 :CHIP	#
R1547	1 :CHIP	#
R1548	100 :CHIP	#
R1549	12 :CHIP	#
R1551	22 :CHIP	#
R1552	1 :CHIP	#
R1553	1 :CHIP	#
R1556	220 :CHIP	#
R1559	470 :CHIP	#
R1560	470 :CHIP	#
R1561	470 :CHIP	#
R1562	1 :CHIP	#
R1563	470 :CHIP	#
R1566	470 :CHIP	#
R1567	1 :CHIP	#
R1568	470 :CHIP	#
R1569	1 :CHIP	#

Note) The parts indicated as "#" in this circuit diagram are not listed here, as they are not used for these models.

(7) Schematic Diagrams of B7 and D3 Boards

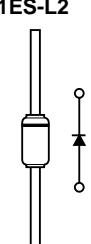


5-5. SEMICONDUCTORS

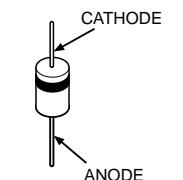
DIODE

AK04V0
AU-01Z-V1
D2L20U
EL1Z
ERA22-08
GP08D
HSS83TD
NNCD9.1A-T1
RD33EB3T
RGP02-17EL-6433

RD9.1ES-L2

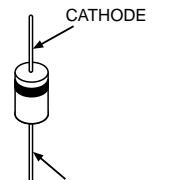


D3SB60



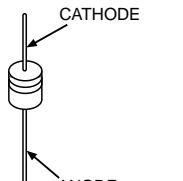
ERC04-06S
RN4Z
RS3FS
RU4AM-T4

ON3171-R

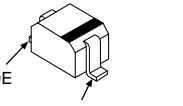


D1NS4
D1N20R
RD5.1ES-B3
RD6.8ES-B1
RD11ES-B3
RD20ES-B2
RD30ESB2
RD39ES-B2
1SS119-25

DTZ10B
DTZ-TT11-15B
UDZS-TE17-5.1B
UDZS-TE17-9.1B
MA111-(K8).S0
RD7.5SB1-T1
1SS355TE-17

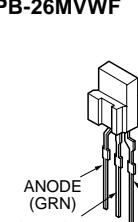


5P6M



LED

SPB-26MVWF



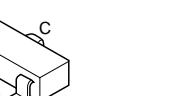
CATHODE
ANODE



TRANSISTOR

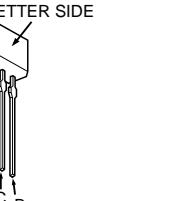
UN2111
UN2211
UN2213
2SA1162-G
2SC2712-YG
2SD2114K

IRF614

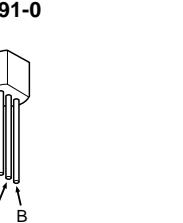


DTC144ESA
2SA1175-HFE
2SC2785-HFE

LETTER SIDE



2SA1091-0



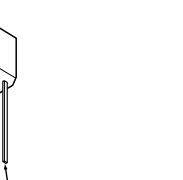
2SA1606-E
2SC4159-E
2SC4793

B C E



2SC2458-YGR
2SD2144S-UVW

E C B

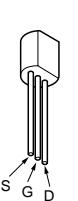


IC

CXA1315M (16PIN)
CXA1315P (16PIN)
CXA1855S (48PIN)
CXA2139S (48PIN)
CXP750097-024S (64PIN)
NJM2150D (20PIN)
NJM2187L (30PIN)
M24C08-BN6 (8PIN)
STV5112 (15PIN)
TDA7481 (15PIN)
TDA9181 (32PIN)

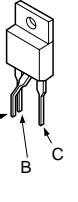
2SK246-GR

S G D



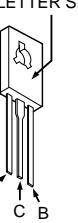
2SK2845-LB102

E B C



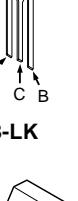
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LETTER SIDE



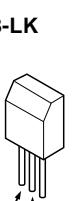
2SC2688-LK

E C B



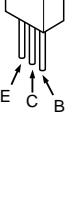
NJM78M09FA
TA7805S

10



STR-F6656

MARKING SIDE VIEW



Zig-zag In-line Package

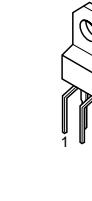
Pin 6~99

SE-135N



TA8200AH

13



TDA8172



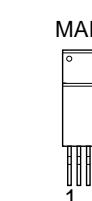
LA6510



SBX3081-01(30)



10



STR-F6656

MARKING SIDE VIEW



Zig-zag In-line Package

Pin 6~99

SECTION 6

EXPLODED VIEWS

NOTE:

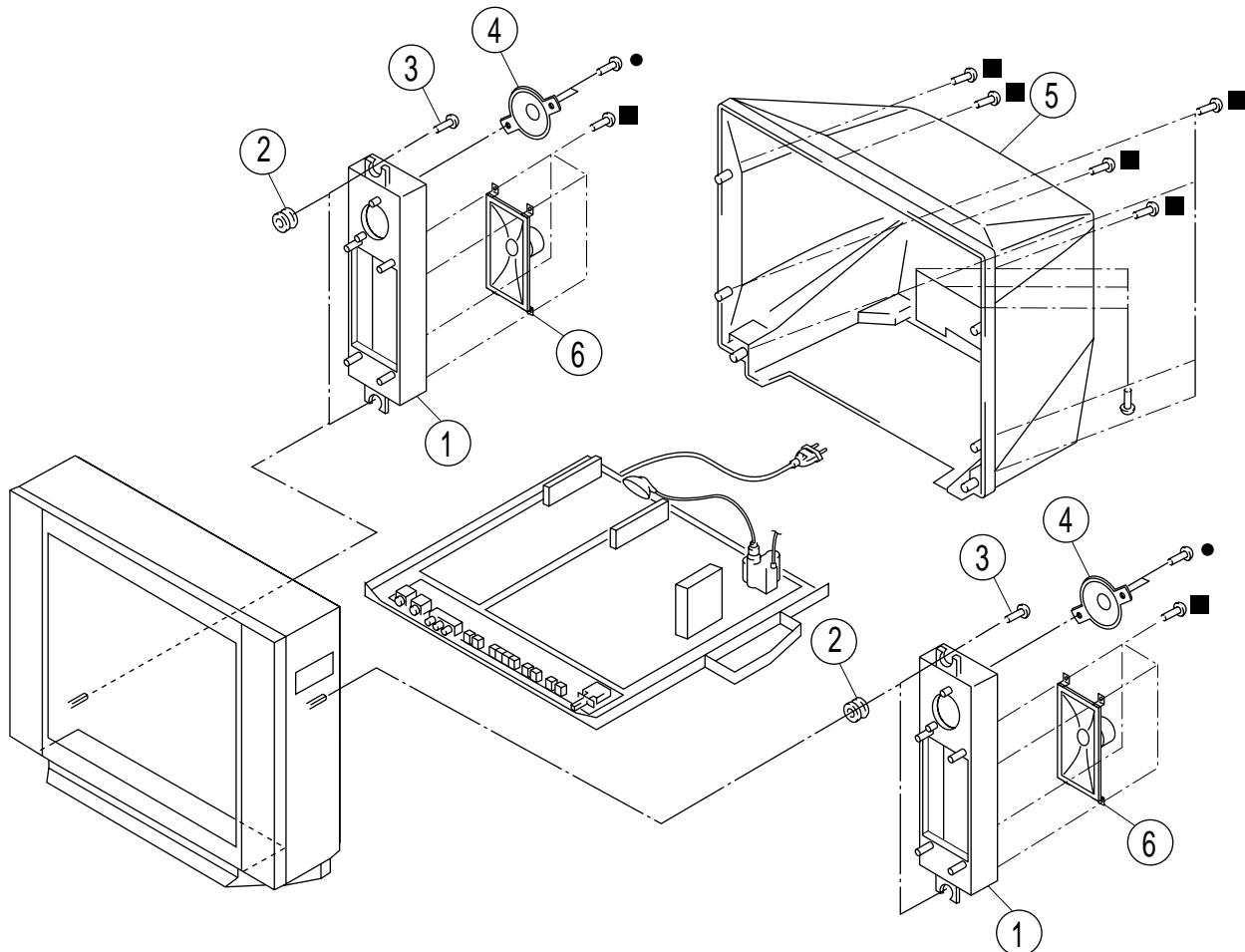
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

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

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

6-1. SPEAKER BRACKET

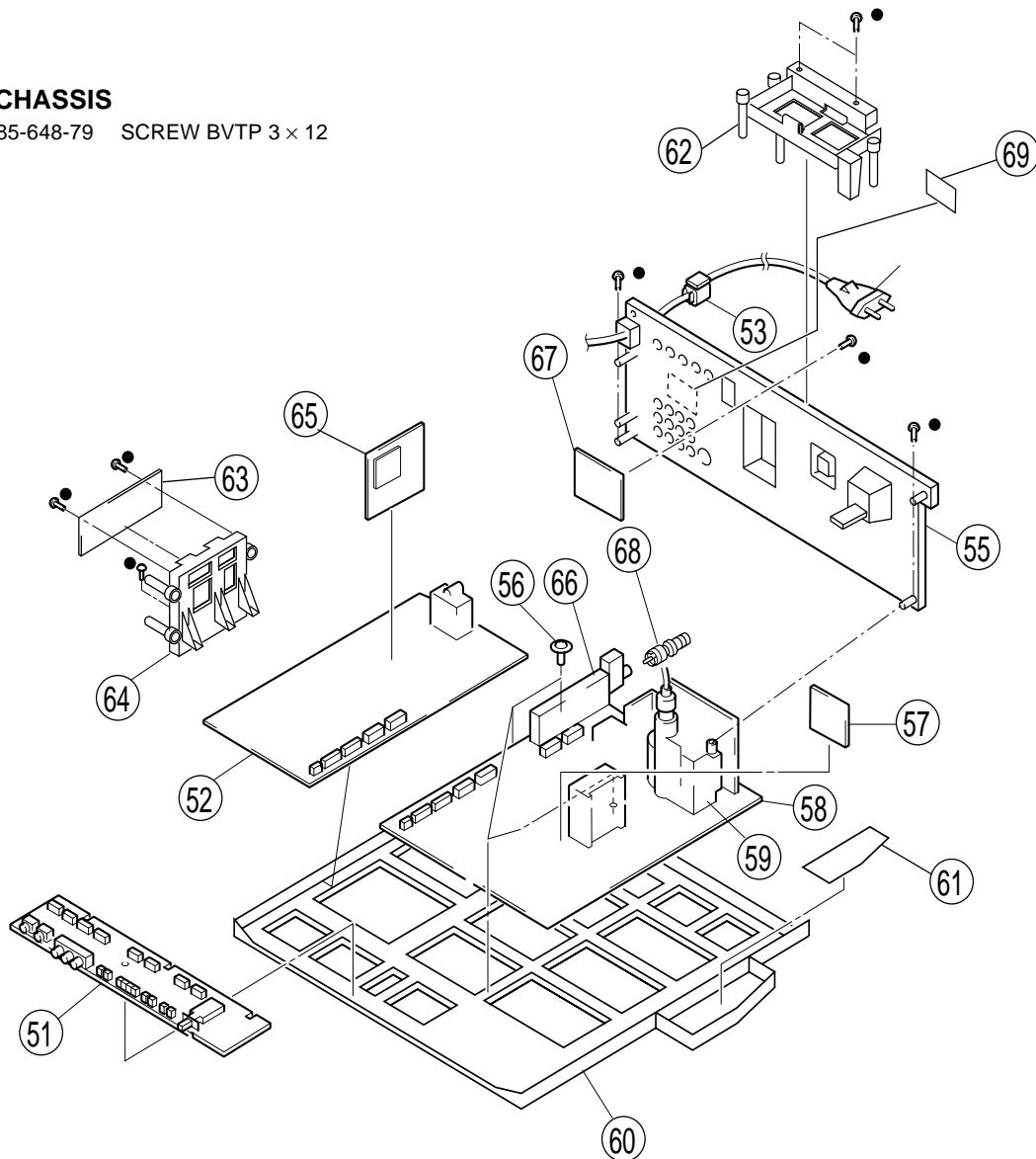
- : 7-685-663-71 SCREW +BVTP 4 × 16
 ●: 7-685-648-79 SCREW BVTP 3 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	* 4-070-757-01	BRACKET, SP	
2	4-374-745-21	CUSHION (A)	
3	4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)	
4	1-529-190-11	SPEAKER (5CM)	
5	\triangle 4-065-506-02	COVER, REAR	
6	1-529-563-11	SPEAKER (15X6.5CM)	

6-2. CHASSIS

●: 7-685-648-79 SCREW BVTP 3 × 12

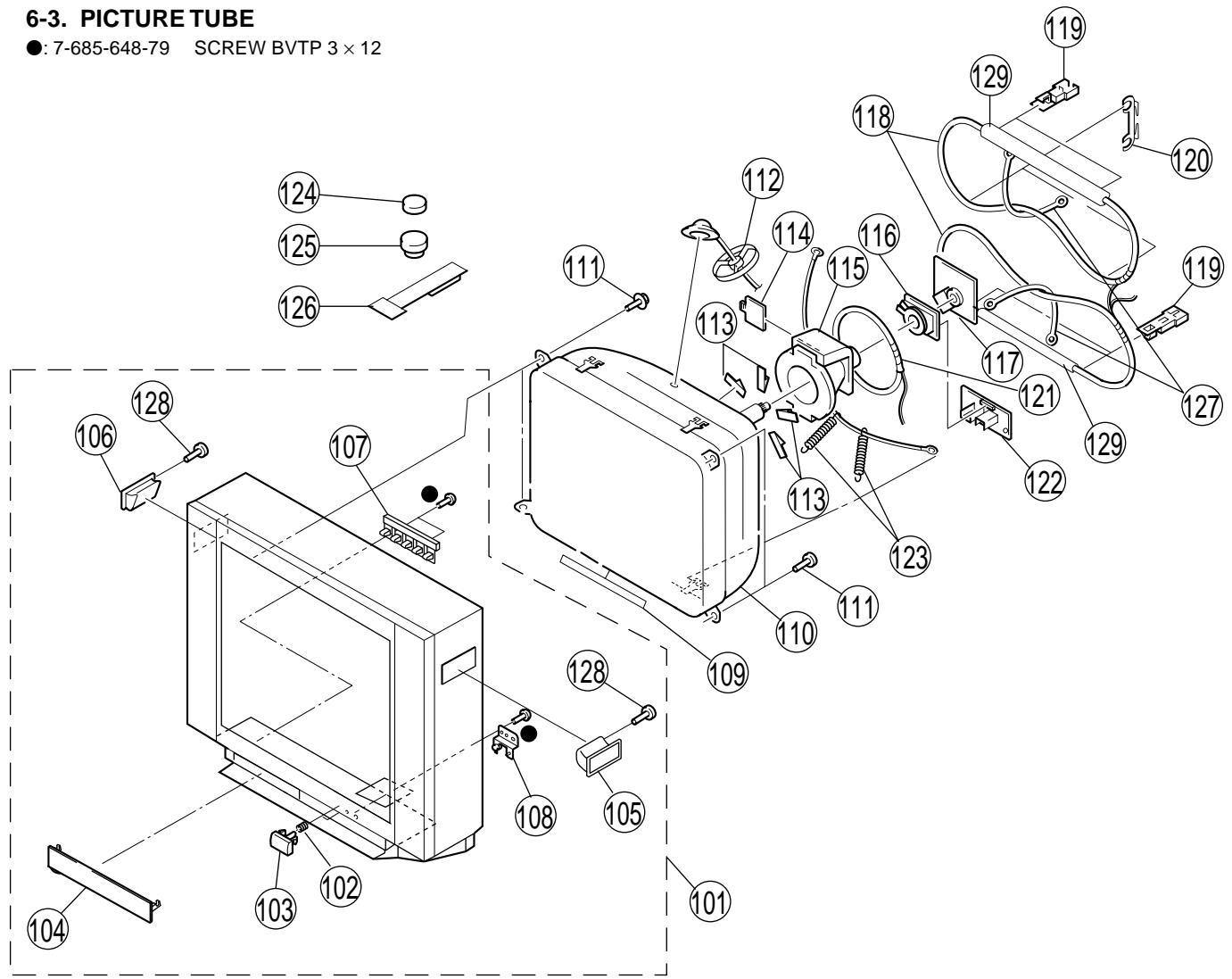


REF. NO.	PART NO.	DESCRIPTION	REMARK
51	* A-1372-755-A	H5 BOARD MOUNTED (KV-XS29N90)	
	* A-1372-756-A	H5 BOARD MOUNTED (KV-XS29N93)	
52	* A-1136-055-A	B3 BOARD COMPLETE (KV-XS29N90)	
	* A-1136-101-A	B3 BOARD COMPLETE (KV-XS29N93)	
53	4-022-115-00	HOLDER, AC CORD	
54	▲ 1-575-023-11	CORD, POWER (WITH CONNECTOR) 6A/250V	
55	* 4-066-684-22	BRACKET, TERMINAL (KV-XS29N90)	
	* 4-066-684-81	BRACKET, TERMINAL (KV-XS29N93)	
56	4-046-797-01	SCREW (3X12), (+)BVTP	
57	* A-1131-500-A	B7 BOARD MOUNTED	
58	* A-1299-226-A	A BOARD COMPLETE (KV-XS29N90)	
	* A-1299-227-A	A BOARD COMPLETE (KV-XS29N93)	
59	▲ 1-453-284-11	TRANSFORMER ASSY, FLYBACK (NX-4009/M3I4)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
60	* 4-066-681-04	BRACKET, MAIN	
61	* A-1343-745-A	D3 BOARD MOUNTED	
62	* 4-066-683-11	HOLDER, PWB	
63	* A-1241-384-A	F BOARD MOUNTED	
64	* 4-066-682-01	BRACKET, F PWB	
65	* A-1131-532-A	B5 BOARD MOUNTED (KV-XS29N93)	
	* A-1131-506-A	B5 BOARD MOUNTED (KV-XS29N90)	
66	8-598-477-20	TUNER, FSS BTF-WG411	
67	A-1388-266-A	J4 BOARD COMPLETE (KV-XS29N93)	
68	1-573-657-21	PLUG, F PIN	
69	4-069-820-02	LABEL, TERMINAL (KV-XS29N90)	

6-3. PICTURE TUBE

●: 7-685-648-79 SCREW BVTP 3 × 12

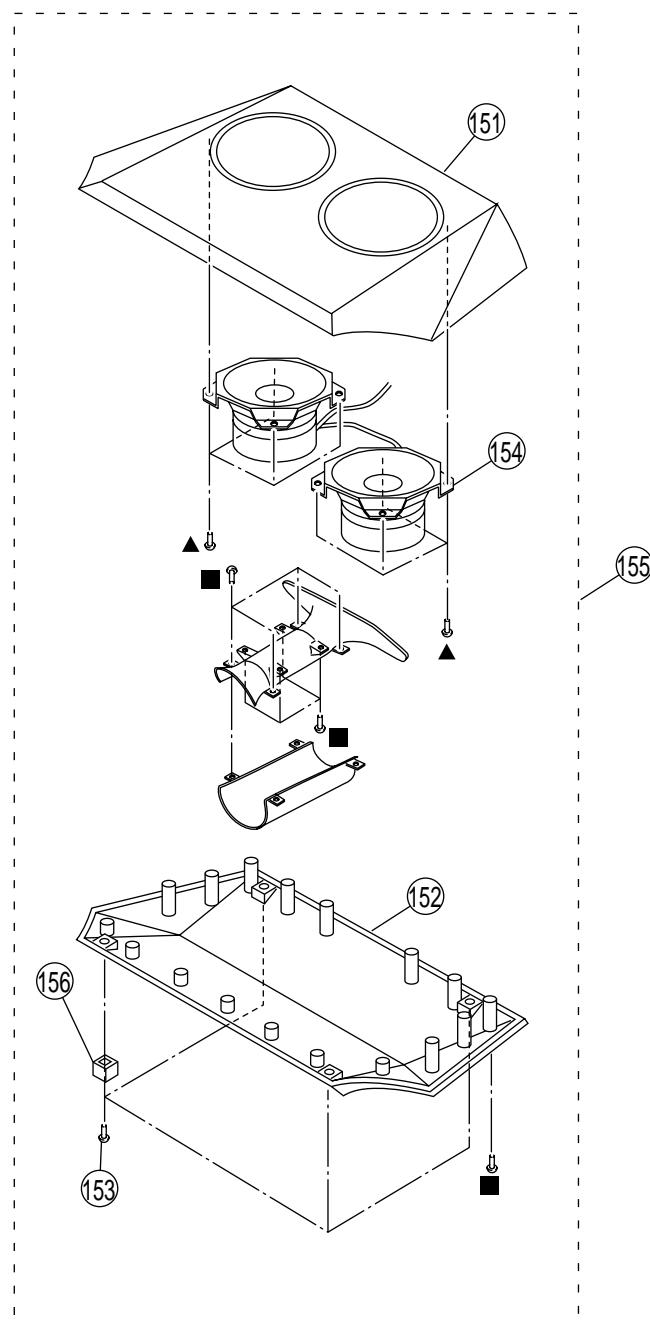


REF. NO.	PART NO.	DESCRIPTION	REMARK
101	X-4037-744-2	BEZNET, ASSY (KV-XS29N90)	102-108, 128
	X-4037-745-2	BEZNET, ASSY (KV-XS29N93)	102-108, 128
102	4-036-405-11	SPRING, COMPRESSION	
103	4-070-752-01	BUTTON, POWER	
104	4-076-352-01	CONTROL, DOOR	
105	X-4035-862-4	HANDLE ASSY (R)	
106	X-4035-861-4	HANDLE ASSY (L)	
107	4-070-753-01	BUTTON, MULTI	
108	* 4-070-755-01	BAR, OPTICAL	
109	4-072-569-11	SHEET, BLOTTING	
110	△ 8-735-057-05	PICTURE TUBE (M68LNH070X)	
111	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
112	* 3-704-372-11	HOLDER, HV CABLE	
113	4-046-600-11	SPACER, DY	
114	2-163-920-01	PLATE, TLH CORRECTION	
115	△ 8-451-494-31	DEFLECTION YOKE (Y29RSA-S)	
116	8-453-011-11	NA299-M	

REF. NO.	PART NO.	DESCRIPTION	REMARK
117	* A-1331-999-A	C BOARD MOUNTED	
118	△ 1-419-519-11	COIL, DEMAGNETIC	
119	* 4-062-970-11	CLIP (29RSN), DGC	
120	4-064-883-03	HOLDER, DGC	
121	1-452-896-11	COIL, NA ROTATION (RT200)	
122	* A-1342-530-A	VM BOARD MOUNTED	
123	4-369-318-61	SPRING, TENSION	
124	1-452-032-00	MAGNET,DISC	
125	1-452-014-11	CIRCULAR DISC MAGNET B	
126	X-4387-214-3	PERMALOY ASSY, CORRECTION	
127	4-068-028-32	BAND, DGC	
128	4-058-870-01	SCREW, (4X16) W (+) P TAPPING	
129	4-063-935-11	CUSHION (50X550) DGC	

6-4. 3D SPEAKER (KV-XS29N93)

■: 7-685-663-71 SCREW BVTP 4 × 16
 ▲: 7-685-661-14 SCREW BVTP 4 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK
151	4-068-694-01	TOP COVER, 3D BOX	
152	4-068-695-01	BOTTOM, 3D BOX	
153	4-302-428-03	SCREW (WASHER HEAD), (+P 3X12)	
154	1-529-172-11	SPEAKER, (10CM)	
155	A-1501-377-C	BOX ASSY, SPEAKER (3D)	
156	4-037-244-01	FOOT	

SECTION 7

ELECTRICAL PARTS LIST

A

NOTE:

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

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

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

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

- All resistors are in ohms
- F : nonflammable

CAPACITORS

- MF : μF , PF : $\mu\mu\text{F}$

COILS

- MMH : mH, UH : μH

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1299-226-A		A BOARD COMPLETE (KV-XS29N90)		C302	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V
* A-1299-227-A		A BOARD COMPLETE (KV-XS29N93)	*****	C303	1-126-959-11	ELECT	0.47UF 20.00% 50V
4-382-854-11		SCREW (M3X10), P, SW (+)		C304	1-126-967-11	ELECT	47UF 20.00% 50V
4-382-854-21		SCREW (M3X14), P, SW (+)		C305	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
				C306	1-163-233-11	CERAMIC CHIP	18PF 5.00% 50V
				C307	1-163-233-11	CERAMIC CHIP	18PF 5.00% 50V
				C308	1-163-259-91	CERAMIC CHIP	220PF 5.00% 50V
				C309	1-126-957-11	ELECT	0.22UF 20.00% 50V
				C311	1-126-964-11	ELECT	10UF 20.00% 50V
C004	1-163-001-11	CERAMIC CHIP	220PF 10.00% 50V	C312	1-164-346-11	CERAMIC CHIP	1UF 16V
C005	1-163-001-11	CERAMIC CHIP	220PF 10.00% 50V	C313	1-164-346-11	CERAMIC CHIP	1UF 16V
C006	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C314	1-164-346-11	CERAMIC CHIP	1UF 16V
C007	1-104-664-11	ELECT	47UF 20.00% 16V	C315	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C013	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C316	1-126-934-11	ELECT	220UF 20.00% 16V
C014	1-104-664-11	ELECT	47UF 20.00% 25V	C317	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C015	1-163-009-11	CERAMIC CHIP	0.001UF 10.00% 50V	C318	1-163-031-11	CERAMIC CHIP	0.01UF 50V
C016	1-163-243-11	CERAMIC CHIP	47PF 5.00% 50V	C319	1-163-031-11	CERAMIC CHIP	0.01UF 50V
C017	1-163-113-00	CERAMIC CHIP	68PF 5.00% 50V	C320	1-163-031-11	CERAMIC CHIP	0.01UF 50V
C019	1-104-664-11	ELECT	47UF 20.00% 25V	C321	1-164-489-11	CERAMIC CHIP	0.22UF 10.00% 16V
C022	1-163-227-11	CERAMIC CHIP	10PF 0.50PF 50V	C322	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V
C023	1-163-227-11	CERAMIC CHIP	10PF 0.50PF 50V	C324	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V
C024	1-163-227-11	CERAMIC CHIP	10PF 0.50PF 50V	C325	1-126-960-11	ELECT	1UF 20.00% 50V
C026	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C327	1-126-965-11	ELECT	22UF 20.00% 50V
C027	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C328	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C028	1-163-037-11	CERAMIC CHIP	0.022UF 10.00% 50V	C330	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C030	1-126-965-11	ELECT	22UF 20.00% 50V	C331	1-126-963-11	ELECT	4.7UF 20.00% 50V
C031	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C332	1-126-963-11	ELECT	4.7UF 20.00% 50V
C032	1-107-823-11	CERAMIC CHIP	0.47UF 10.00% 16V	C335	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C034	1-163-031-11	CERAMIC CHIP	0.01UF 50V	C336	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C041	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	C337	1-126-961-11	ELECT	2.2UF 20.00% 50V
C042	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	C338	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V
C044	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	C341	1-115-340-11	CERAMIC CHIP	0.22UF 10.00% 25V
C047	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	C342	1-163-259-91	CERAMIC CHIP	220PF 5.00% 50V
C101	1-126-964-11	ELECT	10UF 20.00% 50V	C502	1-163-145-00	CERAMIC CHIP	0.0015UF 5.00% 50V
C103	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C503	1-126-964-11	ELECT	10UF 20.00% 50V
C104	1-104-665-11	ELECT	100UF 20.00% 10V	C506	1-107-638-11	ELECT	33UF 20.00% 160V
C106	1-163-035-00	CERAMIC CHIP	0.047UF 50V	C507	1-161-830-00	CERAMIC	0.0047UF 500V
C107	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C510	1-102-112-00	CERAMIC	330PF 10.00% 50V
C108	1-104-664-11	ELECT	47UF 20.00% 16V	C513	1-163-263-11	CERAMIC CHIP	330PF 5.00% 50V
C109	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C514	1-106-383-00	MYLAR	0.047UF 10.00% 200V
C110	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C517	1-164-182-11	CERAMIC CHIP	0.0033UF 10.00% 50V
C111	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C518	1-104-665-11	ELECT	100UF 20.00% 10V
C112	1-104-664-11	ELECT	47UF 20.00% 16V	C519	1-102-212-00	CERAMIC	820PF 10.00% 500V
C113	1-104-664-11	ELECT	47UF 20.00% 25V	C521	1-126-934-11	ELECT	220UF 20.00% 16V
C114	1-126-967-11	ELECT	47UF 20.00% 50V	C522	1-126-933-11	ELECT	100UF 20.00% 16V
C300	1-164-505-11	CERAMIC CHIP	2.2UF 16V	C523	1-102-002-00	CERAMIC	680PF 10.00% 500V
C301	1-126-935-11	ELECT	470UF 20.00% 16V	C524	1-126-967-11	ELECT	47UF 20.00% 50V

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

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C526	1-130-495-00	MYLAR	0.1UF 5.00% 50V	C620	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C527	1-102-820-00	CERAMIC	330PF 5.00% 50V	C621	1-102-114-00	CERAMIC	470PF 10.00% 50V
C528	1-162-116-00	CERAMIC	680PF 10.00% 2KV	C622	1-102-119-00	CERAMIC	0.0015UF 10.00% 50V
C530	1-137-372-11	MYLAR	0.022UF 5.00% 50V	C623	1-104-665-11	ELECT	100UF 20.00% 25V
C531	1-107-903-11	ELECT	2.2UF 20.00% 50V	C624	1-125-772-91	CERAMIC	1500PF 10.00% 2KV
C532	1-126-941-11	ELECT	470UF 20.00% 25V	C625	1-102-002-00	CERAMIC	680PF 10.00% 500V
C533	1-126-941-11	ELECT	470UF 20.00% 25V	C626	1-102-002-00	CERAMIC	680PF 10.00% 500V
C536	1-136-165-00	MYLAR	0.1UF 5.00% 50V	C627	1-102-002-00	CERAMIC	680PF 10.00% 500V
C537	1-126-969-11	ELECT	220UF 20.00% 50V				(KV-XS29N93)
C538	1-127-717-11	CAP, METALIZED PP FILM	19000PF	C628	1-126-952-11	ELECT	1000UF 20.00% 35V
C539	1-129-723-00	FILM	0.056UF 5.00% 630V	C629	1-126-964-11	ELECT	10UF 20.00% 50V
C540	1-136-171-00	MYLAR	0.33UF 5.00% 50V	C630	1-124-347-51	ELECT	100UF 20.00% 160V
C546	1-165-319-11	CERAMIC CHIP	0.1UF 50V	C631	1-128-550-11	ELECT	2200UF 20.00% 50V
C549	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V	C632	1-128-339-11	ELECT	2200UF 20.00% 16V
C550	1-106-220-00	MYLAR	0.1UF 10.00% 100V	C633	1-104-999-11	MYLAR	0.1UF 10.00% 200V
C551	1-126-960-11	ELECT	1UF 20.00% 50V	C634	1-126-933-11	ELECT	100UF 20.00% 16V
C552	1-162-116-00	CERAMIC	680PF 10.00% 2KV	C635	1-104-665-11	ELECT	100UF 20.00% 10V
C553	1-162-116-00	CERAMIC	680PF 10.00% 2KV	C636	1-104-760-11	CERAMIC CHIP	0.047UF 10.00% 50V
C554	1-137-417-11	MYLAR	0.0047UF 10.00% 200V	C638	1-161-830-00	CERAMIC	0.0047UF 500V
C556	1-126-941-11	ELECT	470UF 20.00% 25V	C641	1-102-002-00	CERAMIC	680PF 10.00% 500V
C557	1-126-941-11	ELECT	470UF 20.00% 25V	C642	1-126-943-11	ELECT	2200UF 20.00% 25V
C558	1-123-024-21	ELECT	33UF 160V	C643	1-104-665-11	ELECT	100UF 20.00% 10V
C560	1-102-228-00	CERAMIC	470PF 10.00% 500V	C644	1-104-331-11	CERAMIC	0.0022UF 10.00% 1KV
C561	1-129-898-00	FILM	0.0022UF 5.00% 630V	C645	1-137-605-11	MYLAR	0.01UF 10.00% 250V
C562	1-102-228-00	CERAMIC	470PF 10.00% 500V	C646	1-107-679-91	ELECT	10UF 20.00% 450V
C564	1-163-038-91	CERAMIC CHIP	0.1UF 25V	C647	1-163-275-11	CERAMIC CHIP	0.001UF 5.00% 50V
C565	1-107-655-11	ELECT	47UF 20.00% 250V	C649	1-126-940-11	ELECT	330UF 20.00% 25V
C566	1-102-244-00	CERAMIC	220PF 10.00% 500V	C650	1-163-275-11	CERAMIC CHIP	0.001UF 5.00% 50V
C567	1-115-520-11	FILM	0.68UF 5.00% 250V	C651	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C568	1-102-228-00	CERAMIC	470PF 10.00% 500V	C652	1-126-965-11	ELECT	22UF 20.00% 50V
C570	1-115-522-11	FILM	1UF 5.00% 250V	C653	1-104-664-11	ELECT	47UF 20.00% 25V
C572	1-117-661-21	FILM	0.15UF 5.00% 250V	C655	\triangle 1-119-886-51	CERAMIC	470PF 10.00% 250V
C573	1-106-387-00	MYLAR	0.068UF 10.00% 200V	C657	1-101-821-00	CERAMIC	0.0022UF 500V
C574	1-104-709-11	ELECT	4.7UF 160V	C912	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C576	1-130-495-00	MYLAR	0.1UF 5.00% 50V	C913	1-104-665-11	ELECT	100UF 20.00% 10V
C577	1-106-395-00	MYLAR	0.15UF 10.00% 200V				<CONNECTOR>
C582	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	CN101	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C584	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	CN102	* 1-779-889-11	CONNECTOR, BOARD TO BOARD 8P	
C586	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	CN104	1-695-915-11	TAB (CONTACT)	
C600	\triangle 1-104-705-11	MYLAR	0.1UF 20.00% 250V	CN105	* 1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
C601	1-130-202-00	FILM	0.022UF 5.00% 400V	CN106	* 1-564-506-11	PLUG, CONNECTOR 3P	
C602	\triangle 1-104-705-11	MYLAR	0.1UF 20.00% 250V	CN201	* 1-564-508-11	PLUG, CONNECTOR 5P	
C603	1-104-664-11	ELECT	47UF 20.00% 25V	CN202	* 1-508-847-00	PIN, CONNECTOR 4P	
C604	1-163-009-11	CERAMIC CHIP	0.001UF 10.00% 50V	CN303	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C605	\triangle 1-119-886-51	CERAMIC	470PF 10.00% 250V	CN304	* 1-766-955-11	CONNECTOR, BOARD TO BOARD 11P	
C606	\triangle 1-119-886-51	CERAMIC	470PF 10.00% 250V	CN305	* 1-564-509-11	PLUG, CONNECTOR 6P	
C607	1-161-830-00	CERAMIC	0.0047UF 99% 500V	CN501	* 1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
C608	1-161-830-00	CERAMIC	0.0047UF 99% 500V	CN502	* 1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P	
C609	1-126-968-11	ELECT	100UF 20.00% 50V	CN503	* 1-564-510-11	PLUG, CONNECTOR 7P	
C610	1-126-964-11	ELECT	10UF 20.00% 50V	CN504	1-695-915-11	TAB (CONTACT)	
C611	1-161-830-00	CERAMIC	0.0047UF 99% 500V	CN505	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
C612	1-161-830-00	CERAMIC	0.0047UF 99% 500V	CN507	* 1-564-509-11	PLUG, CONNECTOR 6P	
C613	1-113-611-11	ELECT(BLOCK)	820UF 20.00% 250V	CN508	1-695-915-11	TAB (CONTACT)	
C614	1-126-964-11	ELECT	10UF 20.00% 50V	CN601	* 1-580-843-11	PIN, CONNECTOR (POWER)	
C615	\triangle 1-119-886-51	CERAMIC	470PF 10.00% 250V				
C618	1-125-893-11	FILM	680PF 3.00% 1.5KV				
C619	\triangle 1-119-886-51	CERAMIC	470PF 10.00% 250V				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
CN602	* 1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D604	8-719-028-72	DIODE RGP02-17PKG23	
CN603	* 1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		D605	8-719-510-22	DIODE D3SB60	
CN604	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P		D606	8-719-108-18	DIODE TF541M	
CN605	* 1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)		D607	8-719-073-01	DIODE MA111-TX	
CN608	* 1-564-507-11	PLUG, CONNECTOR 4P		D608	8-719-110-53	DIODE RD20ES-T1B2	
CN904	* 1-564-512-11	PLUG, CONNECTOR 9P		D610	8-719-043-76	DIODE AK04V0	
				D611	8-719-046-74	DIODE AU-01Z-V1	
		<DIODE>		D613	8-719-046-74	DIODE AU-01Z-V1	
D001	8-719-988-61	DIODE ISS355TE-17		D614	8-719-046-74	DIODE AU-01Z-V1	
D002	8-719-988-61	DIODE ISS355TE-17		D615	8-719-074-35	DIODE RU4AM-T4	
D004	1-216-295-91	SHORT	0	D616	8-719-067-18	DIODE RN4Z	
D005	8-719-988-61	DIODE ISS355TE-17		D617	8-719-067-18	DIODE RN4Z	
D006	1-216-295-91	SHORT	0	D618	8-719-067-18	DIODE RN4Z (KV-XS29N93)	
D300	1-216-295-91	SHORT	0	D620	8-719-110-72	DIODE RD30ES-T1B1	
D301	8-719-988-61	DIODE ISS355TE-17		D623	8-719-978-65	DIODE UDZ-TE-17-15B	
D303	8-719-988-61	DIODE ISS355TE-17		D624	8-719-073-01	DIODE MA111-TX	
D304	8-719-988-61	DIODE ISS355TE-17		D625	8-719-977-28	DIODE UDZS-TE17-10B	
D305	8-719-988-61	DIODE ISS355TE-17		D627	8-719-067-18	DIODE RN4Z	
D306	8-719-988-61	DIODE ISS355TE-17		D628	8-719-911-19	DIODE ISS119-25TD	
D307	8-719-988-61	DIODE ISS355TE-17		D631	8-719-068-00	DIODE ERC04-06SE	
D308	8-719-988-61	DIODE ISS355TE-17		D632	8-719-068-00	DIODE ERC04-06SE	
D309	8-719-159-10	DIODE RD5.1SB-T1		D633	8-719-948-45	DIODE ERA22-08TP3	
D309	8-719-069-54	DIODE UDZS-TE17-5.1B		D634	8-719-073-01	DIODE MA111-TX	
D311	8-719-988-61	DIODE ISS355TE-17		D635	8-719-073-01	DIODE MA111-TX	
D312	8-719-988-61	DIODE ISS355TE-17		D636	8-719-510-02	DIODE D1NS4-TA2	
D313	8-719-988-61	DIODE ISS355TE-17		D637	8-719-109-96	DIODE RD6.8ES-T1B1	
D315	8-719-988-61	DIODE ISS355TE-17		D638	8-719-510-48	DIODE D1N20R-TR	
D316	8-719-037-06	DIODE RD7.5SB1-T1					
D319	8-719-069-60	DIODE UDZS-TE17-9.1B					
D320	8-719-069-60	DIODE UDZS-TE17-9.1B					
D321	8-719-069-60	DIODE UDZS-TE17-9.1B					
D322	8-719-069-60	DIODE UDZS-TE17-9.1B					
D504	8-719-302-43	DIODE RGP10GPKG23					
D505	8-719-988-61	DIODE ISS355TE-17		FB501	1-410-397-21	FERRITE	1.1UH
D506	8-719-911-19	DIODE ISS119-25TD		FB502	1-410-397-21	FERRITE	1.1UH
D507	8-719-988-61	DIODE ISS355TE-17		FB600	1-410-397-21	FERRITE	1.1UH
D508	8-719-988-61	DIODE ISS355TE-17		FB601	1-410-397-21	FERRITE	1.1UH
D509	1-216-073-00	RES-CHIP	10K	5%	1/10W		
FB602	1-410-397-21	FERRITE	1.1UH				
D510	8-719-988-61	DIODE ISS355TE-17		FB603	1-410-397-21	FERRITE	1.1UH
D511	8-719-988-61	DIODE ISS355TE-17		FB604	1-412-911-31	FERRITE	0UH
D512	8-719-988-61	DIODE ISS355TE-17		FB605	1-412-911-31	FERRITE	0UH
D513	8-719-908-03	DIODE GP08DPKG23		FB606	1-412-911-31	FERRITE	0UH
D517	8-719-312-71	DIODE RS3FS		FB607	1-410-397-21	FERRITE	1.1UH (KV-XS29N93)
D518	8-719-074-35	DIODE RU4AM-T4		FB608	1-412-911-31	FERRITE	0UH
D519	8-719-312-71	DIODE RS3FS		FB611	1-410-397-21	FERRITE	1.1UH
D521	8-719-302-43	DIODE RGP10GPKG23		FB612	1-410-397-21	FERRITE	1.1UH
D522	8-719-028-45	DIODE D2L20U-F		FB615	1-410-397-21	FERRITE	1.1UH
D523	8-719-302-43	DIODE RGP10GPKG23					
D527	8-719-908-03	DIODE GP08DPKG23					
D528	8-719-908-03	DIODE GP08DPKG23					
D531	8-719-988-61	DIODE ISS355TE-17		IC001	8-752-914-80	IC CXP750097-024S	
D532	8-719-988-61	DIODE ISS355TE-17		IC002	8-759-371-21	IC MM1319AFBE	
D534	8-719-988-61	DIODE ISS355TE-17		IC003	8-759-527-71	IC M24C08-BN6	
D600	8-719-911-19	DIODE ISS119-25TD		IC301	8-752-090-41	IC CXA2139S	
D602	8-719-911-19	DIODE ISS119-25TD		IC502	8-759-700-07	IC NJM2903M-TE2	
D603	8-719-150-92	DIODE RD33ES-T1B2		IC503	8-759-980-58	IC TDA8172	
				IC601	8-749-014-48	IC STR-F6656	

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

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
IC602	8-749-920-61	IC SE-135N				<TRANSISTOR>					
IC603	8-759-701-59	IC L7809CV		Q001	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
IC604	8-759-231-53	IC L7805CV		Q002	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
<CHIP CONDUCTOR>											
JR001	1-216-295-91	SHORT	0	Q003	8-729-424-08	TRANSISTOR UN2111-TX					
JR002	1-216-295-91	SHORT	0	Q004	8-729-421-22	TRANSISTOR UN2211-TX					
JR004	1-216-295-91	SHORT	0	Q101	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
JR005	1-216-295-91	SHORT	0	Q301	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR006	1-216-295-91	SHORT	0	Q304	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR008	1-216-295-91	SHORT	0	Q305	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR010	1-216-295-91	SHORT	0	Q306	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR012	1-216-295-91	SHORT	0	Q307	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
JR014	1-216-295-91	SHORT	0	Q308	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR015	1-216-295-91	SHORT	0	Q311	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
JR016	1-216-295-91	SHORT	0	Q312	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR107	1-216-295-91	SHORT	0	Q313	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
JR108	1-216-295-91	SHORT	0	Q315	8-729-421-19	TRANSISTOR UN2213-TX					
JR111	1-216-295-91	SHORT	0	Q501	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR204	1-216-295-91	SHORT	0	Q502	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR308	1-216-295-91	SHORT	0	Q503	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
JR309	1-216-295-91	SHORT	0	Q505	8-729-931-45	TRANSISTOR IRF614					
JR500	1-216-295-91	SHORT	0	Q506	8-729-119-80	TRANSISTOR 2SC2688-LK					
JR501	1-216-295-91	SHORT	0	Q507	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
JR502	1-216-295-91	SHORT	0	Q509	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
JR503	1-216-295-91	SHORT	0	Q511	8-729-048-07	TRANSISTOR 2SD2578-CA					
JR600	1-216-295-91	SHORT	0	Q600	8-729-119-78	TRANSISTOR 2SC2785TP-HFE					
<COIL>											
L002	1-414-856-11	INDUCTOR	10UH	Q601	8-729-023-22	TRANSISTOR 2SD2114KT146					
L003	1-414-180-11	INDUCTOR	3.3UH	Q602	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
L005	1-414-233-22	INDUCTOR CHIP	0UH	Q603	8-729-424-08	TRANSISTOR UN2111-TX					
L101	1-414-856-11	INDUCTOR	10UH	Q604	8-729-200-17	TRANSISTOR 2SA1091R-TPE2					
L102	1-414-856-11	INDUCTOR	10UH	Q605	8-729-044-30	TRANSISTOR 2SK2845-LB102					
L103	1-414-856-11	INDUCTOR	10UH	Q606	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
L104	1-414-856-11	INDUCTOR	10UH	<RESISTOR>							
L105	1-414-856-11	INDUCTOR	10UH	R001	1-414-233-22	INDUCTOR CHIP	0UH				
L301	1-414-189-31	INDUCTOR	100UH	R002	1-216-025-91	RES-CHIP	100	5%	1/10W		
L302	1-414-185-41	INDUCTOR	22UH	R003	1-216-073-00	RES-CHIP	10K	5%	1/10W		
L501	1-412-525-31	INDUCTOR	10UH	R004	1-216-025-91	RES-CHIP	100	5%	1/10W		
L502	1-422-613-11	COIL, AIR CORE		R005	1-216-025-91	RES-CHIP	100	5%	1/10W		
L503	1-412-525-31	INDUCTOR	10UH	R006	1-216-689-11	RES-CHIP	39K	5%	1/10W		
L504	1-412-525-31	INDUCTOR	10UH	R007	1-216-033-00	RES-CHIP	220	5%	1/10W		
L507	1-459-111-00	INDUCTOR	10MH	R008	1-216-065-91	RES-CHIP	4.7K	5%	1/10W		
L511	1-406-977-71	INDUCTOR	0UH	R009	1-216-065-91	RES-CHIP	4.7K	5%	1/10W		
L513	1-412-551-31	INDUCTOR	1.5MH	R010	1-216-065-91	RES-CHIP	4.7K	5%	1/10W		
L515	1-459-104-00	COIL, WITH CORE		R011	1-216-065-91	RES-CHIP	4.7K	5%	1/10W		
L518	1-414-187-11	INDUCTOR	47UH	R012	1-216-065-91	RES-CHIP	4.7K	5%	1/10W		
L601	1-412-527-11	INDUCTOR	15UH	R013	1-216-065-91	RES-CHIP	4.7K	5%	1/10W		
L905	1-414-856-11	INDUCTOR	10UH	R014	1-216-025-91	RES-CHIP	100	5%	1/10W		
<PHOTO COUPLER>											
PH600  8-749-924-35		PHOTO COUPLER ON3171-R		R015	1-216-025-91	RES-CHIP	100	5%	1/10W		
				R018	1-216-033-00	RES-CHIP	220	5%	1/10W		
				R019	1-216-073-00	RES-CHIP	10K	5%	1/10W		
				R021	1-216-073-00	RES-CHIP	10K	5%	1/10W		
				R022	1-216-025-91	RES-CHIP	100	5%	1/10W		
				R023	1-216-049-91	RES-CHIP	1K	5%	1/10W		

REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK		
R024	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	R316	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R025	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	R318	1-216-051-00	RES-CHIP	1.2K	5%	1/10W
R026	1-216-063-91	RES-CHIP	3.9K	5%	1/10W	R319	1-216-025-91	RES-CHIP	100	5%	1/10W
R027	1-216-049-91	RES-CHIP	1K	5%	1/10W	R320	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R028	1-216-049-91	RES-CHIP	1K	5%	1/10W	R321	1-216-073-00	RES-CHIP	10K	5%	1/10W
R029	1-216-049-91	RES-CHIP	1K	5%	1/10W	R322	1-216-033-00	RES-CHIP	220	5%	1/10W
R030	1-216-025-91	RES-CHIP	100	5%	1/10W	R326	1-216-029-00	RES-CHIP	150	5%	1/10W
R031	1-216-049-91	RES-CHIP	1K	5%	1/10W	R327	1-216-033-00	RES-CHIP	220	5%	1/10W
R032	1-216-025-91	RES-CHIP	100	5%	1/10W	R328	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R034	1-216-049-91	RES-CHIP	1K	5%	1/10W	R329	1-216-041-00	RES-CHIP	470	5%	1/10W
R035	1-216-025-91	RES-CHIP	100	5%	1/10W	R331	1-216-295-91	SHORT	0		
R036	1-216-025-91	RES-CHIP	100	5%	1/10W	R332	1-216-033-00	RES-CHIP	220	5%	1/10W
R037	1-216-083-00	RES-CHIP	27K	5%	1/10W	R333	1-216-083-00	RES-CHIP	27K	5%	1/10W
R038	1-216-049-91	RES-CHIP	1K	5%	1/10W	R334	1-216-129-00	RES-CHIP	2.2M	5%	1/10W
R040	1-216-025-91	RES-CHIP	100	5%	1/10W	R335	1-216-045-00	RES-CHIP	680	5%	1/10W
R041	1-216-025-91	RES-CHIP	100	5%	1/10W	R338	1-216-037-00	RES-CHIP	330	5%	1/10W
R042	1-216-295-91	SHORT	0			R339	1-216-033-00	RES-CHIP	220	5%	1/10W
R043	1-216-049-91	RES-CHIP	1K	5%	1/10W	R340	1-216-025-91	RES-CHIP	100	5%	1/10W
R044	1-216-025-91	RES-CHIP	100	5%	1/10W	R345	1-216-081-00	RES-CHIP	22K	5%	1/10W
R045	1-414-233-22	INDUCTOR CHIP	0UH			R348	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R046	1-216-049-91	RES-CHIP	1K	5%	1/10W	R349	1-216-073-00	RES-CHIP	10K	5%	1/10W
R047	1-414-233-22	INDUCTOR CHIP	0UH			R350	1-216-061-00	RES-CHIP	3.3K	5%	1/10W
R048	1-216-073-00	RES-CHIP	10K	5%	1/10W	R351	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R049	1-216-073-00	RES-CHIP	10K	5%	1/10W	R354	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R050	1-216-073-00	RES-CHIP	10K	5%	1/10W	R355	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R052	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R356	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R053	1-216-049-91	RES-CHIP	1K	5%	1/10W	R357	1-216-079-00	RES-CHIP	18K	5%	1/10W
R055	1-216-073-00	RES-CHIP	10K	5%	1/10W	R358	1-216-049-91	RES-CHIP	1K	5%	1/10W
R056	1-216-073-00	RES-CHIP	10K	5%	1/10W	R359	1-216-033-00	RES-CHIP	220	5%	1/10W
R061	1-216-295-91	SHORT	0			R360	1-216-033-00	RES-CHIP	220	5%	1/10W
R062	1-216-041-00	RES-CHIP	470	5%	1/10W	R361	1-216-073-00	RES-CHIP	10K	5%	1/10W
R063	1-216-041-00	RES-CHIP	470	5%	1/10W	R362	1-216-075-00	RES-CHIP	12K	5%	1/10W
R064	1-216-041-00	RES-CHIP	470	5%	1/10W	R363	1-216-079-00	RES-CHIP	18K	5%	1/10W
R065	1-216-041-00	RES-CHIP	470	5%	1/10W	R364	1-216-295-91	SHORT	0		
R066	1-216-049-91	RES-CHIP	1K	5%	1/10W	R365	1-216-033-00	RES-CHIP	220	5%	1/10W
R067	1-216-049-91	RES-CHIP	1K	5%	1/10W	R366	1-216-073-00	RES-CHIP	10K	5%	1/10W
R103	1-216-025-91	RES-CHIP	100	5%	1/10W	R367	1-216-073-00	RES-CHIP	10K	5%	1/10W
R104	1-216-025-91	RES-CHIP	100	5%	1/10W	R368	1-216-073-00	RES-CHIP	10K	5%	1/10W
R105	1-216-295-91	SHORT	0			R370	1-216-033-00	RES-CHIP	220	5%	1/10W
R106	1-216-049-91	RES-CHIP	1K	5%	1/10W	R376	1-216-081-00	RES-CHIP	22K	5%	1/10W
R109	1-216-041-00	RES-CHIP	470	5%	1/10W	R377	1-216-121-91	RES-CHIP	1M	5%	1/10W
R111	1-216-025-91	RES-CHIP	100	5%	1/10W	R378	1-216-295-91	SHORT	0		
R112	1-216-025-91	RES-CHIP	100	5%	1/10W	R500	1-249-417-11	CARBON	1K	5%	1/4W
R113	1-216-025-91	RES-CHIP	100	5%	1/10W	R501	1-216-049-91	RES-CHIP	1K	5%	1/10W
R114	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R505	1-216-699-91	METAL CHIP	100K	0.5%	1/10W
R115	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R506	1-216-081-00	RES-CHIP	22K	5%	1/10W
R225	1-216-033-00	RES-CHIP	220	5%	1/10W	R507	1-249-389-11	CARBON	4.7	5%	1/4W
R226	1-216-033-00	RES-CHIP	220	5%	1/10W	R508	1-216-471-11	METAL OXIDE	27	5%	3W
R227	1-216-033-00	RES-CHIP	220	5%	1/10W	R509	1-216-473-11	METAL OXIDE	56	5%	3W
R237	1-216-295-91	SHORT	0			R510	1-216-473-11	METAL OXIDE	56	5%	3W
R301	1-216-113-00	RES-CHIP	470K	5%	1/10W	R511	1-215-908-00	METAL OXIDE	33	5%	3W
R302	1-216-295-91	SHORT	0			R515	1-215-911-11	METAL OXIDE	100	5%	3W
R303	1-216-049-91	RES-CHIP	1K	5%	1/10W	R517	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R304	1-216-073-00	RES-CHIP	10K	5%	1/10W	R518	1-247-807-31	CARBON	100	5%	1/4W
R306	1-216-085-00	RES-CHIP	33K	5%	1/10W	R519	1-215-913-11	METAL OXIDE	220	5%	3W
R308	1-216-025-91	RES-CHIP	100	5%	1/10W	R520	1-215-445-00	METAL	10K	1%	1/4W
R309	1-216-025-91	RES-CHIP	100	5%	1/10W	R522	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R310	1-216-025-91	RES-CHIP	100	5%	1/10W						

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R523	1-249-411-11	CARBON	330 5% 1/4W	R595	1-216-073-00	RES-CHIP	10K 5% 1/10W
R525	1-208-846-11	METAL CHIP	470K 0.5% 1/10W	R596	1-215-916-00	METAL OXIDE	680 5% 3W
R526	1-208-804-11	METAL CHIP	8.2K 0.5% 1/10W	R597	1-247-750-11	CARBON	680 5% 1/2W
R527	1-216-001-00	RES-CHIP	10 5% 1/10W	R598	1-249-438-11	CARBON	56K 5% 1/4W
R528	1-208-814-91	METAL CHIP	22K 0.5% 1/10W	R599	1-249-389-11	CARBON	4.7 5% 1/4W
R529	1-208-766-11	METAL CHIP	220 0.5% 1/10W	R600	1-249-438-11	CARBON	56K 5% 1/4W
R531	1-247-843-11	CARBON	3.3K 5% 1/4W	R601	1-249-420-11	CARBON	1.8K 5% 1/4W
R533	1-249-417-11	CARBON	1K 5% 1/4W	R602	1-249-389-11	CARBON	4.7 5% 1/4W
R534	1-216-364-11	METAL OXIDE	0.39 5% 2W	R603	1-215-485-00	METAL	470K 1% 1/4W
R535	1-216-067-00	RES-CHIP	5.6K 5% 1/10W	R604	1-216-097-91	RES-CHIP	100K 5% 1/10W
R536	1-216-067-00	RES-CHIP	5.6K 5% 1/10W	R607	1-249-425-11	CARBON	4.7K 5% 1/4W
R537	1-208-804-11	METAL CHIP	8.2K 0.5% 1/10W	R608	1-240-205-91	CARBON	22M 5% 1/2W
R539	1-216-049-91	RES-CHIP	1K 5% 1/10W	R609	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R540	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R610	1-216-073-00	RES-CHIP	10K 5% 1/10W
R541	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R611	1-216-089-91	RES-CHIP	47K 5% 1/10W
R542	1-216-073-00	RES-CHIP	10K 5% 1/10W	R612	1-216-045-00	RES-CHIP	680 5% 1/10W
R543	1-216-437-00	METAL OXIDE	5.6K 5% 1W	R614	1-216-041-00	RES-CHIP	470 5% 1/10W
R544	1-215-917-11	METAL OXIDE	1K 5% 3W	R615	1-216-369-00	METAL OXIDE	1 5% 2W
R545	1-216-077-91	RES-CHIP	15K 5% 1/10W	R616	1-260-302-51	CARBON	6.8 5% 1/2W
R546	1-216-077-91	RES-CHIP	15K 5% 1/10W	R617	1-247-791-91	CARBON	22 5% 1/4W
R547	1-216-085-00	RES-CHIP	33K 5% 1/10W	R619	1-260-128-11	CARBON	270K 5% 1/2W
R548	1-208-796-11	METAL CHIP	3.9K 0.5% 1/10W	R621	1-215-864-00	METAL OXIDE	150 5% 1W
R549	1-215-452-00	METAL	20K 1% 1/4W	R623	1-216-095-00	RES-CHIP	82K 5% 1/10W
R550	1-216-097-91	RES-CHIP	100K 5% 1/10W	R624	1-216-089-91	RES-CHIP	47K 5% 1/10W
R551	1-249-441-11	CARBON	100K 5% 1/4W	R626	1-216-049-91	RES-CHIP	1K 5% 1/10W
R552	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R627	1-240-251-11	CEMENTED	6.8 5% 10W
R553	1-215-453-00	METAL	22K 1% 1/4W	R629	1-247-747-11	CARBON	470 5% 1/2W
R554	1-215-453-00	METAL	22K 1% 1/4W	R630	1-249-429-11	CARBON	10K 5% 1/4W
R556	1-215-437-00	METAL	4.7K 1% 1/4W	R631	1-216-089-91	RES-CHIP	47K 5% 1/10W
R558	1-247-843-11	CARBON	3.3K 5% 1/4W	R632	1-220-886-11	FUSIBLE	0.1 10% 1W
R559	1-249-429-11	CARBON	10K 5% 1/4W	R634 \triangle	1-218-265-11	METAL	8.2M 5% 1W
R560	1-216-073-00	RES-CHIP	10K 5% 1/10W	R636	1-215-924-00	METAL OXIDE	15K 5% 3W
R561	1-216-049-91	RES-CHIP	1K 5% 1/10W	R639	1-216-361-21	METAL OXIDE	0.22 5% 2W
R562	1-249-401-11	CARBON	47 5% 1/4W	R640	1-249-415-11	CARBON	680 5% 1/4W
R564	1-208-820-11	METAL CHIP	39K 0.5% 1/10W	R641	1-216-361-21	METAL OXIDE	0.22 5% 2W
R565	1-216-073-00	RES-CHIP	10K 5% 1/10W	R642	1-249-419-11	CARBON	1.5K 5% 1/4W
R567	1-216-105-91	RES-CHIP	220K 5% 1/10W	R643	1-247-843-11	CARBON	3.3K 5% 1/4W
R568	1-249-383-11	CARBON	1.5 5% 1/4W	R644	1-249-419-11	CARBON	1.5K 5% 1/4W
R570	1-216-069-00	RES-CHIP	6.8K 5% 1/10W	R646	1-215-924-00	METAL OXIDE	15K 5% 3W
R571	1-215-443-00	METAL	8.2K 1% 1/4W	R647	1-249-387-11	CARBON	3.3 5% 1/4W
R573	1-216-083-00	RES-CHIP	27K 5% 1/10W	R648	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R575	1-208-796-11	METAL CHIP	3.9K 0.5% 1/10W	R649	1-249-417-11	CARBON	1K 5% 1/4W
R577	1-215-913-11	METAL OXIDE	220 5% 3W	R650	1-215-882-00	METAL OXIDE	22 5% 2W
R578	1-216-369-00	METAL OXIDE	1 5% 2W	R652	1-215-900-11	METAL OXIDE	22K 5% 2W
R579	1-216-295-91	SHORT	0	R653	1-215-873-00	METAL OXIDE	4.7K 5% 1W
R580	1-208-830-11	METAL CHIP	100K 0.5% 1/10W	R654	1-216-369-00	METAL OXIDE	(KV-XS29N93) 1/10W
R581	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W	R656	1-249-417-11	CARBON	1K 5% 1/4W
R582	1-208-846-11	METAL CHIP	470K 0.5% 1/10W	R657	1-260-127-11	CARBON	220K 5% 1/2W
R584	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R659	1-216-049-91	RES-CHIP	1K 5% 1/10W
R587	1-216-295-91	SHORT	0	R660	1-216-073-00	RES-CHIP	10K 5% 1/10W
R588	1-215-888-00	METAL OXIDE	220 5% 2W	R661	1-215-873-00	METAL OXIDE	4.7K 5% 1W
R589	1-215-888-00	METAL OXIDE	220 5% 2W	R682	1-249-377-11	CARBON	0.47 5% 1/4W
R590	1-215-465-00	METAL	68K 1% 1/4W	R909	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R591	1-260-288-11	CARBON	0.47 5% 1/2W	R910	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R592	1-208-820-11	METAL CHIP	39K 0.5% 1/10W				
R593	1-260-288-11	CARBON	0.47 5% 1/2W				
R594	1-260-288-11	CARBON	0.47 5% 1/2W				

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A **B3**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<RELAY>							
RY600 \triangle	1-755-214-11	RELAY, AC POWER		C1411	1-216-295-91	SHORT	0 (KV0XS29N90)
RY601 \triangle	1-755-214-11	RELAY, AC POWER		C1411	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V (KV-XS29N93)
<SWITCH>							
S501	1-572-707-11	SWITCH, LEVER		C1413	1-126-935-11	ELECT	470UF 20.00% 16V
S502	1-572-707-11	SWITCH, LEVER		C1414	1-164-346-11	CERAMIC CHIP	1UF 16V
<TRANSFORMER>							
T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE		C1415	1-104-664-11	ELECT	47UF 20.00% 25V
T503 \triangle	1-453-284-11	TRANSFORMER ASSY, FLYBACK (NX-4009//M314)		C1416	1-164-346-11	CERAMIC CHIP	1UF 16V
T504	1-431-693-11	TRANSFORMER, HORIZONTAL LINEAR		C1418	1-163-031-11	CERAMIC CHIP	0.01UF 50V
T505	1-426-981-11	TRANSFORMER, FERRITE (PMT)		C1419	1-163-251-11	CERAMIC CHIP (KV-XS29N93)	100PF 5.00% 50V
T601	1-424-505-11	TRANSFORMER, LINE FILTER		C1421	1-164-346-11	CERAMIC CHIP (KV-XS29N93)	1UF 16V
T603 \triangle	1-431-976-11	TRANSFORMER, CONVERTER (SRT)		C1422	1-164-346-11	CERAMIC CHIP	1UF 16V
T604 \triangle	1-431-852-11	TRANSFORMER, CONVERTER (SRT)		C1423	1-164-346-11	CERAMIC CHIP	1UF 16V
<THERMISTOR>							
THP600	1-803-629-11	THERMISTOR, POSITIVE		C1425	1-164-346-11	CERAMIC CHIP	1UF 16V
<TUNER>							
TU101	8-598-477-20	TUNER, FSS BTF-WG411		C1426	1-164-346-11	CERAMIC CHIP	1UF 16V
<CRYSTAL>							
X001	1-781-174-21	VIBRATOR, CERAMIC		C1428	1-104-665-11	ELECT	100UF 20.00% 25V
X301	1-781-134-21	VIBRATOR, CRYSTAL		C1429	1-104-663-11	ELECT	33UF 20.00% 25V
X302	1-781-132-21	VIBRATOR, CRYSTAL		C1431	1-163-038-91	CERAMIC CHIP	0.1UF 25V

* A-1136-055-A	B3 BOARD COMPLETE (KV-XS29N90)			C1432	1-126-933-11	ELECT (KV-XS29N93)	100UF 20.00% 16V
* A-1136-101-A	B3 BOARD COMPLETE (KV-XS29N93)			C1433	1-104-664-11	ELECT	47UF 20.00% 16V

4-382-854-11	SCREW (M3X10), P, SW (+)			C1434	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
<CAPACITOR>				C1435	1-163-133-00	CERAMIC CHIP	0.1UF 25V
C1401	1-104-661-91	ELECT (KV-XS29N93)	330UF	C1436	1-163-133-00	CERAMIC CHIP	0.1UF 25V
C1402	1-104-664-11	ELECT	47UF	C1437	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C1403	1-104-664-11	ELECT (KV-XS29N93)	47UF	C1438	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C1404	1-164-004-11	CERAMIC CHIP (KV-XS29N93)	0.1UF	C1439	1-163-133-00	CERAMIC CHIP (KV-XS29N93)	470PF 5.00% 50V
C1404	1-216-295-91	SHORT	0 (KV-XS29N90)	C1440	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C1405	1-104-664-11	ELECT	47UF	C1441	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C1408	1-126-964-11	ELECT (KV-XS29N93)	10UF	C1442	1-163-133-00	CERAMIC CHIP (KV-XS29N93)	470PF 5.00% 50V
C1410	1-104-664-11	ELECT	47UF	C1443	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
<CAPACITOR>				C1444	1-164-005-11	CERAMIC CHIP	0.47UF 25V
C3201	1-126-964-11	ELECT	10UF	C1445	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C3202	1-136-171-00	MYLAR	0.33UF	C1446	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C3203	1-115-339-11	CERAMIC CHIP	0.1UF	C1447	1-126-964-11	ELECT	10UF 20.00% 50V
C3206	1-163-021-91	CERAMIC CHIP	0.01UF	C1448	1-164-005-11	CERAMIC CHIP	0.47UF 25V
C3207	1-164-489-11	CERAMIC CHIP	0.22UF	C1449	1-126-933-11	ELECT	100UF 20.00% 16V
C3208	1-164-489-11	CERAMIC CHIP	0.22UF	C1450	1-164-346-11	CERAMIC CHIP (KV-XS29N93)	1UF 16V
C3209	1-163-017-00	CERAMIC CHIP	0.0047UF	C1451	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C3210	1-126-964-11	ELECT	10UF	C1452	1-163-133-00	CERAMIC CHIP	470PF 5.00% 50V
C3211	1-126-964-11	ELECT	10UF	C1453	1-164-346-11	CERAMIC CHIP	1UF 16V
C3212	1-126-964-11	ELECT	10UF	C1454	1-164-346-11	CERAMIC CHIP	1UF 16V
C3213	1-104-664-11	ELECT	47UF	C1455	1-104-664-11	ELECT	47UF 20.00% 25V
C3214	1-104-664-11	ELECT	47UF	C1456	1-104-664-11	ELECT	47UF 20.00% 25V
C3215	1-117-720-11	CERAMIC CHIP	4.7UF	C1457	1-117-720-11	CERAMIC CHIP	4.7UF 10V

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C3216	1-117-720-11	CERAMIC CHIP	4.7UF 10V	C3269	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
C3217	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C3270	1-163-275-11	CERAMIC CHIP	0.001UF 5.00% 50V
C3218	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V	C3271	1-163-275-11	CERAMIC CHIP	0.001UF 5.00% 50V
C3219	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V	C3272	1-126-965-11	ELECT	22UF 20.00% 50V
C3220	1-163-037-11	CERAMIC CHIP	0.022UF 10.00% 50V	C3273	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C3221	1-163-037-11	CERAMIC CHIP	0.022UF 10.00% 50V	C3274	1-126-964-11	ELECT	10UF 20.00% 50V
C3222	1-163-037-11	CERAMIC CHIP	0.022UF 10.00% 50V	C3276	1-164-492-11 (KV-XS29N90)	CERAMIC CHIP	0.15UF 10.00% 16V
C3223	1-163-037-11	CERAMIC CHIP	0.022UF 10.00% 50V	C3276	1-107-823-11 (KV-XS29N93)	CERAMIC CHIP	0.47UF 10.00% 16V
C3224	1-164-505-11	CERAMIC CHIP	2.2UF 16V	C3277	1-164-492-11 (KV-XS29N90)	CERAMIC CHIP	0.15UF 10.00% 16V
C3225	1-163-038-91	CERAMIC CHIP	0.1UF 25V	C3277	1-164-004-11 (KV-XS29N93)	CERAMIC CHIP	0.1UF 10.00% 25V
C3226	1-126-964-11	ELECT	10UF 20.00% 50V	C3278	1-164-492-11 (KV-XS29N90)	CERAMIC CHIP	0.15UF 10.00% 16V
C3227	1-164-505-11	CERAMIC CHIP	2.2UF 16V	C3278	1-107-823-11 (KV-XS29N93)	CERAMIC CHIP	0.47UF 10.00% 16V
C3228	1-107-698-11	ELECT	10UF 20.00% 25V	C3279	1-164-492-11 (KV-XS29N90)	CERAMIC CHIP	0.15UF 10.00% 16V
C3229	1-107-698-11	ELECT	10UF 20.00% 25V	C3279	1-164-004-11 (KV-XS29N93)	CERAMIC CHIP	0.1UF 10.00% 25V
C3238	1-164-005-11 (KV-XS29N90)	CERAMIC CHIP	0.47UF 25V	C3280	1-163-018-00	CERAMIC CHIP	0.0056UF 10.00% 50V
C3239	1-136-171-00 (KV-XS29N90)	MYLAR	0.33UF 5.00% 50V	C3281	1-163-023-00	CERAMIC CHIP	0.015UF 10.00% 50V
C3240	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V	C3282	1-126-964-11	ELECT	10UF 20.00% 50V
C3243	1-163-989-11 (KV-XS29N90)	CERAMIC CHIP	0.033UF 10.00% 25V	C3283	1-126-964-11	ELECT	10UF 20.00% 50V
C3244	1-164-346-11 (KV-XS29N90)	CERAMIC CHIP	1UF 16V	C3284	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C3245	1-164-005-11 (KV-XS29N90)	CERAMIC CHIP	0.47UF 25V	C3285	1-126-964-11	ELECT	10UF 20.00% 50V
C3246	1-163-243-11 (KV-XS29N90)	CERAMIC CHIP	47PF 5.00% 50V	C3286	1-126-964-11	ELECT	10UF 20.00% 50V
C3247	1-126-963-11 (KV-XS29N90)	ELECT	4.7UF 20.00% 50V	C3287	1-126-964-11	ELECT	10UF 20.00% 50V
C3248	1-163-251-11 (KV-XS29N90)	CERAMIC CHIP	100PF 5.00% 50V	C3288	1-163-023-00	CERAMIC CHIP	0.015UF 10.00% 50V
C3249	1-164-505-11 (KV-XS29N90)	CERAMIC CHIP	2.2UF 16V	C3289	1-163-018-00	CERAMIC CHIP	0.0056UF 10.00% 50V
C3249	1-216-295-91	SHORT	0 (KV-XS29N93)	C3290	1-164-505-11	CERAMIC CHIP	2.2UF 16V
C3250	1-164-346-11 (KV-XS29N90)	CERAMIC CHIP	1UF 16V	C3291	1-164-505-11	CERAMIC CHIP	2.2UF 16V
C3251	1-126-964-11 (KV-XS29N90)	ELECT	10UF 20.00% 50V	C6200	1-216-295-91	SHORT	0
C3252	1-163-251-11 (KV-XS29N90)	CERAMIC CHIP	100PF 5.00% 50V	C6201	1-126-964-11 (KV-XS29N93)	ELECT	10UF 20.00% 50V
C3253	1-126-933-11 (KV-XS29N90)	ELECT	100UF 20.00% 16V	C6202	1-128-550-11	ELECT	2200UF 20.00% 50V
C3254	1-164-505-11 (KV-XS29N90)	CERAMIC CHIP	2.2UF 16V	C6203	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V
C3254	1-216-295-91 (KV-XS29N90)	SHORT	0 (KV-XS29N93)	C6204	1-128-550-11	ELECT	2200UF 20.00% 50V
C3255	1-163-243-11 (KV-XS29N90)	CERAMIC CHIP	47PF 5.00% 50V	C6205	1-130-495-00	MYLAR	0.1UF 5.00% 50V
C3256	1-126-963-11 (KV-XS29N90)	ELECT	4.7UF 20.00% 50V	C6206	1-128-550-11	ELECT	2200UF 20.00% 50V
C3257	1-164-346-11 (KV-XS29N90)	CERAMIC CHIP	1UF 16V	C6207	1-115-339-11 (KV-XS29N93)	CERAMIC CHIP	0.1UF 10.00% 50V
C3258	1-163-989-11 (KV-XS29N90)	CERAMIC CHIP	0.033UF 10.00% 25V	C6208	1-115-339-11 (KV-XS29N93)	CERAMIC CHIP	0.1UF 10.00% 50V
C3259	1-126-963-11	ELECT	4.7UF 20.00% 50V	C6209	1-130-495-00	MYLAR	0.1UF 5.00% 50V
C3260	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	C6210	1-126-924-11	ELECT	330UF 20.00% 10V
C3262	1-104-664-11	ELECT	47UF 20.00% 16V	C6211	1-126-924-11	ELECT	330UF 20.00% 10V
C3264	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	C6212	1-104-664-11	ELECT	47UF 20.00% 25V
C3265	1-126-964-11	ELECT	10UF 20.00% 50V	C6213	1-126-964-11	ELECT	10UF 20.00% 50V
C3266	1-126-964-11	ELECT	10UF 20.00% 50V	C6215	1-126-933-11 (KV-XS29N93)	ELECT	100UF 20.00% 16V
C3268	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C6216	1-126-960-11 (KV-XS29N93)	ELECT	1UF 20.00% 50V
				C6217	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V
				C6218	1-115-339-11 (KV-XS29N93)	CERAMIC CHIP	0.1UF 10.00% 50V
				C6219	1-126-961-11 (KV-XS29N93)	ELECT	2.2UF 20.00% 50V

B3

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C6220	1-164-505-11	CERAMIC CHIP	2.2UF 16V	CN1407*	1-779-891-11	CONNECTOR, BOARD TO BOARD 8P	
C6221	1-126-960-11	ELECT (KV-XS29N93)	1UF 20.00% 50V	CN1408	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
C6222	1-164-505-11	CERAMIC CHIP	2.2UF 16V	CN1409	1-764-818-11	CONNECTOR, BOARD TO BOARD 10P	
C6223	1-126-960-11	ELECT	1UF 20.00% 50V	CN1410	1-695-915-11	TAB (CONTACT)	
C6225	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF 10.00% 50V	CN6200*	1-564-507-11	PLUG, CONNECTOR 4P	
				CN6202*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)	
C6226	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF 10.00% 50V	CN6204*	1-564-509-11	PLUG, CONNECTOR 6P	
C6227	1-128-550-11	ELECT (KV-XS29N93)	2200UF 20.00% 50V	CN6205*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)	
C6228	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF 10.00% 50V	CN6206*	1-564-508-11	PLUG, CONNECTOR 5P	
						<DIODE>	
C6229	1-164-505-11	CERAMIC CHIP (KV-XS29N93)	2.2UF 16V	D1401	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6230	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF 10.00% 50V	D1402	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6231	1-128-550-11	ELECT (KV-XS29N93)	2200UF 20.00% 50V	D1403	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6232	1-163-275-11	CERAMIC CHIP (KV-XS29N93)	0.001UF 5.00% 50V	D1404	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6233	1-163-007-11	CERAMIC CHIP (KV-XS29N93)	680PF 10.00% 50V	D1405	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6234	1-163-017-00	CERAMIC CHIP (KV-XS29N93)	0.0047UF 10.00% 50V	D1406	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6235	1-163-251-11	CERAMIC CHIP (KV-XS29N93)	100PF 5.00% 50V	D1407	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6236	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF 10.00% 50V	D1408	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6237	1-136-177-00	MYLAR (KV-XS29N93)	1UF 5.00% 50V	D1409	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6238	1-163-009-11	CERAMIC CHIP (KV-XS29N93)	0.001UF 10.00% 50V	D1410	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6239	1-127-682-51	ELECT MELF (KV-XS29N93)	2200UF 20% 25V	D1411	8-719-069-60	DIODE UDZS-TE17-9.1B	
C6240	1-130-495-00	MYLAR (KV-XS29N93)	0.1UF 5.00% 50V	D1412	8-719-069-60	DIODE UDZS-TE17-9.1B	
				D1415	8-719-069-60	DIODE UDZS-TE17-9.1B	
				D1416	8-719-069-60	DIODE UDZS-TE17-9.1B	
				D3201	8-719-988-61	DIODE 1SS355TE-17 (KV-XS29N90)	
C6236	1-115-339-11	CERAMIC CHIP (KV-XS29N93)	0.1UF 10.00% 50V	D3203	8-719-988-61	DIODE 1SS355TE-17 (KV-XS29N90)	
C6237	1-136-177-00	MYLAR (KV-XS29N93)	1UF 5.00% 50V	D6200	8-719-109-86	DIODE RD5.1ES-T1B3 (KV-XS29N93)	
C6238	1-163-009-11	CERAMIC CHIP (KV-XS29N93)	0.001UF 10.00% 50V	D6205	8-719-988-61	DIODE 1SS355TE-17 (KV-XS29N93)	
C6239	1-127-682-51	ELECT MELF (KV-XS29N93)	2200UF 20% 25V	D6211	8-719-073-01	DIODE MA111-TX	
C6240	1-130-495-00	MYLAR (KV-XS29N93)	0.1UF 5.00% 50V	D6212	8-719-073-01	DIODE MA111-TX	
						<FERRITE BEAD>	
C6241	1-126-964-11	ELECT	10UF 20.00% 50V	FB6201	1-410-397-21	FERRITE	1.1UH (KV-XS29N93)
C6244	1-164-161-11	CERAMIC CHIP (KV-XS29N90)	0.0022UF 10.00% 50V	FB6202	1-410-397-21	FERRITE	1.1UH (KV-XS29N93)
C6244	1-164-182-11	CERAMIC CHIP (KV-XS29N93)	0.0033UF 10.00% 50V			<IC>	
C6245	1-164-161-11	CERAMIC CHIP (KV-XS29N90)	0.0022UF 10.00% 50V	IC1401	8-752-068-46	IC CXA1855S	
C6245	1-164-182-11	CERAMIC CHIP (KV-XS29N93)	0.0033UF 10.00% 50V	IC1402	8-759-100-96	IC NJM4558M-TE2 (KV-XS29N93)	
C6245	1-164-182-11	CERAMIC CHIP (KV-XS29N93)	0.0033UF 10.00% 50V	IC1404	8-759-701-59	IC L7809CV	
C6249	1-216-295-91	SHORT	0	IC3200	8-759-100-96	IC NJM4558M-T2	
C6251	1-126-965-11	ELECT (KV-XS29N93)	22UF 20.00% 50V	IC3201	8-759-553-44	IC NJM2187L	
C6252	1-126-965-11	ELECT (KV-XS29N93)	22UF 20.00% 50V	IC3202	8-759-100-96	IC NJM4558M-T2	
C6253	1-126-960-11	ELECT (KV-XS29N93)	1UF 20.00% 50V	IC3203	8-759-711-10	IC NJU4066BM-T2	
				IC3204	8-759-100-96	IC NJM4558M-TE2 (KV-XS29N90)	
				IC3205	8-752-057-18	IC CXA1315P	
				IC3206	8-759-496-02	IC NJM2150D	
				IC3207	8-759-273-12	IC TDA7315D013TR	
				IC6200	8-759-168-24	IC TA8200AH	
				IC6201	8-759-553-45	IC TDA7481 (KV-XS29N93)	
						<CONNECTOR>	
CN1400*	1-564-512-11	PLUG, CONNECTOR 9P					
CN1402*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N90)					
CN1403*	1-564-506-11	PLUG, CONNECTOR 3P					
CN1405*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P					
CN1406*	1-779-892-11	CONNECTOR, BOARD TO BOARD 10P					
						<JACK>	
				J1401	1-784-646-11	TERMINAL, S	
				J1402	1-778-388-11	JACK BLOCK, PIN 9P (KV-XS29N90)	
				J1402	1-778-387-11	JACK BLOCK, PIN 12P (KV-XS29N93)	

B3

REF. NO.	PART NO.	DESCRIPTION		REMARK		REF. NO.	PART NO.	DESCRIPTION		REMARK		
<CHIP CONDUCTOR>												
JR1405	1-216-295-91	SHORT	0	R1408	1-216-031-00	RES-CHIP	180	5%	1/10W			
JR1406	1-216-295-91	SHORT	0	R1409	1-216-105-91	RES-CHIP	220K	5%	1/10W			
JR1407	1-216-295-91	SHORT	0	R1410	1-216-105-91	RES-CHIP	220K	5%	1/10W			
JR1408	1-216-295-91	SHORT	0 (KV-XS29N90)	R1411	1-216-295-91	SHORT	0 (KV-XS29N90)	R1411	1-216-089-91	RES-CHIP	47K	5%
JR1409	1-216-295-91	SHORT	0 (KV-XS29N93)			(KV-XS29N93)					1/10W	
JR1410	1-216-295-91	SHORT	0 (KV-XS29N93)	R1412	1-216-295-91	SHORT	0 (KV-XS29N90)	R1412	1-216-089-91	RES-CHIP	47K	5%
JR1411	1-216-295-91	SHORT	0		(KV-XS29N93)						1/10W	
JR3200	1-216-295-91	SHORT	0	R1413	1-216-105-91	RES-CHIP	220K	5%	1/10W			
JR3201	1-216-295-91	SHORT	0	R1414	1-216-025-91	RES-CHIP	100	5%	1/10W			
JR3202	1-216-295-91	SHORT	0	R1417	1-216-025-91	RES-CHIP	100	5%	1/10W			
JR3203	1-216-295-91	SHORT	0	R1418	1-216-025-91	RES-CHIP	100	5%	1/10W			
JR3204	1-216-295-91	SHORT	0	R1421	1-216-057-00	RES-CHIP	2.2K	5%	1/10W			
JR3207	1-216-295-91	SHORT	0	R1424	1-216-073-00	RES-CHIP	10K	5%	1/10W			
JR3208	1-216-295-91	SHORT	0	R1425	1-216-047-91	RES-CHIP	820	5%	1/10W			
JR3209	1-216-295-91	SHORT	0	R1426	1-216-025-91	RES-CHIP	100	5%	1/10W			
JR6200	1-216-295-91	SHORT	0	R1427	1-216-063-91	RES-CHIP	3.9K	5%	1/10W			
JR6201	1-216-295-91	SHORT	0 (KV-XS29N93)	R1428	1-216-025-91	RES-CHIP	100	5%	1/10W			
JR6202	1-216-295-91	SHORT	0	R1429	1-216-295-91	SHORT	0 (KV-XS29N90)	R1429	1-216-089-91	RES-CHIP	47K	5%
JR6203	1-216-295-91	SHORT	0		(KV-XS29N93)						1/10W	
JR6204	1-216-295-91	SHORT	0	R1430	1-216-025-91	RES-CHIP	100	5%	1/10W			
<COIL>												
L1404	1-412-537-31	INDUCTOR	100UH	R1431	1-216-025-91	RES-CHIP	100	5%	1/10W			
L3202	1-414-856-11	INDUCTOR	10UH	R1432	1-216-041-00	RES-CHIP	470	5%	1/10W			
L6202	1-416-857-11	INDUCTOR	65UH (KV-XS29N93)	R1433	1-216-025-91	RES-CHIP	100	5%	1/10W			
<IC LINK>												
PS6200	1-532-686-21	LINK, IC 2.7A/150V (KV-XS29N93)		R1435	1-216-022-00	RES-CHIP	75	5%	1/10W			
PS6201	1-532-686-21	LINK, IC 2.7A/150V (KV-XS29N93)		R1436	1-216-025-91	RES-CHIP	100	5%	1/10W			
<TRANSISTOR>												
Q1402	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L		R1437	1-216-022-00	RES-CHIP	75	5%	1/10W			
Q1403	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R1438	1-216-025-91	RES-CHIP	100	5%	1/10W			
Q1404	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R1439	1-216-295-91	SHORT	0 (KV-XS29N93)	R1441	1-216-025-91	RES-CHIP	100	5%
Q1408	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)		R1442	1-216-049-91	RES-CHIP	1K	5%	1/10W			
Q1409	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)		R1443	1-216-049-91	RES-CHIP	1K	5%	1/10W			
Q3201	8-729-224-62	TRANSISTOR 2SK246GR-TPE2		R1444	1-216-089-91	RES-CHIP	47K	5%	1/10W			
Q3202	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N90)		R1445	1-216-025-91	RES-CHIP	100	5%	1/10W			
Q3203	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N90)		R1446	1-216-105-91	RES-CHIP	220K	5%	1/10W			
Q3204	8-729-224-62	TRANSISTOR 2SK246GR-TPE2		R1447	1-216-025-91	RES-CHIP	100	5%	1/10W			
Q6200	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L (KV-XS29N93)		R1448	1-216-043-91	RES-CHIP	560	5%	1/10W			
Q6201	8-729-421-19	TRANSISTOR UN2213-TX		R1449	1-249-429-11	CARBON	10K	5%	1/4W			
Q6203	8-729-421-19	TRANSISTOR UN2213-TX		R1450	1-216-073-00	RES-CHIP	10K	5%	1/10W			
Q6204	8-729-421-19	TRANSISTOR UN2213-TX		R1451	1-216-073-00	RES-CHIP	10K	5%	1/10W			
Q6208	8-729-421-19	TRANSISTOR UN2213-TX		R1452	1-216-295-91	SHORT	0 (KV-XS29N90)	R1452	1-216-089-91	RES-CHIP	47K	5%
<RESISTOR>												
R1400	1-216-105-91	RES-CHIP (KV-XS29N93)	220K	5%	1/10W	R1453	1-216-025-91	RES-CHIP	100	5%	1/10W	
R1403	1-216-033-00	RES-CHIP	220	5%	1/10W	R1454	1-216-091-00	RES-CHIP	56K	5%	1/10W	
R1404	1-216-295-91	SHORT	0	R1455	1-216-073-00	RES-CHIP	10K	5%	1/10W			
R1406	1-216-013-00	RES-CHIP	33	5%	1/10W	R1456	1-216-113-00	RES-CHIP	470K	5%	1/10W	
R1407	1-216-033-00	RES-CHIP	220	5%	1/10W	R1457	1-216-073-00	RES-CHIP	10K	5%	1/10W	
						R1458	1-216-073-00	RES-CHIP	10K	5%	1/10W	

B3

REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK		
R1459	1-216-025-91	RES-CHIP	100	5%	1/10W	R3202	1-216-097-91	RES-CHIP (KV-XS29N90)	100K	5%	1/10W \
R1460	1-216-033-00	RES-CHIP	220	5%	1/10W	R3203	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W
R1461	1-216-025-91	RES-CHIP	100	5%	1/10W	R3204	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K	5%	1/10W
R1463	1-249-429-11	CARBON	10K	5%	1/4W	R3205	1-216-069-00	RES-CHIP (KV-XS29N90)	6.8K	5%	1/10W
R1464	1-216-113-00	RES-CHIP	470K	5%	1/10W	R3206	1-216-039-00	RES-CHIP (KV-XS29N90)	390	5%	1/10W
R1465	1-216-113-00	RES-CHIP	470K	5%	1/10W	R3207	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R1466	1-216-033-00	RES-CHIP	220	5%	1/10W	R3208	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1467	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R3209	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1468	1-216-093-91	RES-CHIP	68K	5%	1/10W	R3210	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R1469	1-216-105-91	RES-CHIP	220K	5%	1/10W	R3211	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R1470	1-216-105-91	RES-CHIP	220K	5%	1/10W	R3212	1-216-049-91	RES-CHIP	1K	5%	1/10W
R1471	1-216-022-00	RES-CHIP	75	5%	1/10W	R3213	1-216-091-00	RES-CHIP	56K	5%	1/10W
R1472	1-216-033-00	RES-CHIP	220	5%	1/10W	R3214	1-216-295-91	SHORT	0		
R1473	1-216-033-00	RES-CHIP	220	5%	1/10W	R3215	1-216-295-91	SHORT	0		
R1475	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W	R3216	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1476	1-216-091-00	RES-CHIP (KV-XS29N93)	56K	5%	1/10W	R3217	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1477	1-216-047-91	RES-CHIP	820	5%	1/10W	R3218	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1478	1-216-051-00	RES-CHIP	1.2K	5%	1/10W	R3219	1-216-077-91	RES-CHIP	15K	5%	1/10W
R1479	1-216-105-91	RES-CHIP	220K	5%	1/10W	R3220	1-216-097-91	RES-CHIP (KV-XS29N90)	100K	5%	1/10W
R1480	1-216-105-91	RES-CHIP	220K	5%	1/10W	R3221	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R1481	1-216-022-00	RES-CHIP	75	5%	1/10W	R3222	1-216-073-00	RES-CHIP (KV-XS29N90)	10K	5%	1/10W
R1482	1-216-025-91	RES-CHIP	100	5%	1/10W	R3223	1-216-045-00	RES-CHIP (KV-XS29N90)	680	5%	1/10W
R1483	1-216-025-91	RES-CHIP	100	5%	1/10W	R3224	1-216-115-00	RES-CHIP (KV-XS29N90)	560K	5%	1/10W
R1484	1-216-025-91	RES-CHIP	100	5%	1/10W	R3224	1-216-101-00	RES-CHIP (KV-XS29N93)	150K	5%	1/10W
R1485	1-216-025-91	RES-CHIP	100	5%	1/10W	R3225	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1486	1-216-067-00	RES-CHIP	5.6K	5%	1/10W	R3226	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1487	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K	5%	1/10W	R3227	1-216-129-00	RES-CHIP	2.2M	5%	1/10W
R1488	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K	5%	1/10W	R3228	1-216-085-00	RES-CHIP	33K	5%	1/10W
R1489	1-216-022-00	RES-CHIP (KV-XS29N93)	75	5%	1/10W	R3229	1-216-095-00	RES-CHIP	82K	5%	1/10W
R1490	1-216-025-91	RES-CHIP	100	5%	1/10W	R3230	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R1491	1-216-025-91	RES-CHIP	100	5%	1/10W	R3231	1-216-091-00	RES-CHIP	56K	5%	1/10W
R1492	1-216-021-00	RES-CHIP	68	5%	1/10W	R3232	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1493	1-216-067-00	RES-CHIP	5.6K	5%	1/10W	R3233	1-216-069-00	RES-CHIP (KV-XS29N90)	6.8K	5%	1/10W
R1496	1-216-041-00	RES-CHIP	470	5%	1/10W	R3234	1-216-039-00	RES-CHIP (KV-XS29N90)	390	5%	1/10W
R1497	1-216-041-00	RES-CHIP	470	5%	1/10W	R3235	1-216-101-00	RES-CHIP (KV-XS29N90)	150K	5%	1/10W
R1498	1-216-025-91	RES-CHIP	100	5%	1/10W	R3236	1-216-113-00	RES-CHIP (KV-XS29N90)	470K	5%	1/10W
R1499	1-216-025-91	RES-CHIP	100	5%	1/10W	R3237	1-216-045-00	RES-CHIP (KV-XS29N90)	680	5%	1/10W
R1500	1-216-025-91	RES-CHIP	100	5%	1/10W	R3238	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1501	1-216-045-00	RES-CHIP (KV-XS29N93)	680	5%	1/10W	R3239	1-216-073-00	RES-CHIP	10K	5%	1/10W
R1502	1-216-025-91	RES-CHIP	100	5%	1/10W	R3240	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1503	1-216-025-91	RES-CHIP (KV-XS29N90)	100	5%	1/10W	R3241	1-216-093-91	RES-CHIP	68K	5%	1/10W
R1503	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W	R3242	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1504	1-216-025-91	RES-CHIP (KV-XS29N90)	100	5%	1/10W						
R1504	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W						
R3200	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W						
R3201	1-216-121-91	RES-CHIP (KV-XS29N90)	1M	5%	1/10W						

B3

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R3243	1-216-073-00	RES-CHIP	10K 5% 1/10W	R3285	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3244	1-216-073-00	RES-CHIP	10K 5% 1/10W	R3286	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3245	1-216-097-91	RES-CHIP (KV-XS29N90)	100K 5% 1/10W	R3287	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3246	1-216-045-00	RES-CHIP (KV-XS29N90)	680 5% 1/10W	R3288	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3247	1-216-101-00	RES-CHIP	150K 5% 1/10W	R3289	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3248	1-216-081-00	RES-CHIP	22K 5% 1/10W	R3290	1-216-081-00	RES-CHIP	22K 5% 1/10W
R3249	1-216-073-00	RES-CHIP	10K 5% 1/10W	R3291	1-216-079-00	RES-CHIP	18K 5% 1/10W
R3250	1-216-049-91	RES-CHIP	1K 5% 1/10W	R3294	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3251	1-216-101-00	RES-CHIP (KV-XS29N90)	150K 5% 1/10W	R3295	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R3252	1-216-113-00	RES-CHIP (KV-XS29N90)	470K 5% 1/10W	R3296	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R3253	1-216-045-00	RES-CHIP (KV-XS29N90)	680 5% 1/10W	R3297	1-216-069-00	RES-CHIP	6.8K 5% 1/10W
R3254	1-216-073-00	RES-CHIP (KV-XS29N90)	10K 5% 1/10W	R3298	1-216-069-00	RES-CHIP	6.8K 5% 1/10W
R3255	1-216-121-91	RES-CHIP (KV-XS29N90)	1M 5% 1/10W	R3299	1-216-069-00	RES-CHIP	6.8K 5% 1/10W
R3256	1-216-121-91	RES-CHIP (KV-XS29N90)	1M 5% 1/10W	R6200	1-216-089-91	RES-CHIP (KV-XS29N93)	47K 5% 1/10W
R3257	1-216-097-91	RES-CHIP (KV-XS29N90)	100K 5% 1/10W	R6201	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R3258	1-216-121-91	RES-CHIP (KV-XS29N90)	1M 5% 1/10W	R6202	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R3259	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K 5% 1/10W	R6203	1-216-295-91	SHORT 0	0 5% 1/10W
R3260	1-216-025-91	RES-CHIP	100 5% 1/10W	R6205	1-216-073-00	RES-CHIP (KV-XS29N93)	10K 5% 1/10W
R3261	1-216-025-91	RES-CHIP	100 5% 1/10W	R6207	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
R3262	1-216-115-00	RES-CHIP (KV-XS29N90)	560K 5% 1/10W	R6209	1-216-049-91	RES-CHIP	1K 5% 1/10W
R3262	1-216-101-00	RES-CHIP (KV-XS29N93)	150K 5% 1/10W	R6213	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3263	1-216-093-91	RES-CHIP	68K 5% 1/10W	R6214	1-216-073-00	RES-CHIP	10K 5% 1/10W
R3264	1-216-053-00	RES-CHIP	1.5K 5% 1/10W	R6219	1-216-089-91	RES-CHIP	47K 5% 1/10W
R3266	1-216-295-91	SHORT 0	0 5% 1/10W	R6235	1-216-029-00	RES-CHIP (KV-XS29N93)	150 5% 1/10W
R3267	1-216-049-91	RES-CHIP	1K 5% 1/10W	R6236	1-216-075-00	RES-CHIP (KV-XS29N93)	12K 5% 1/10W
R3268	1-216-049-91	RES-CHIP	1K 5% 1/10W	R6237	1-216-089-91	RES-CHIP (KV-XS29N93)	47K 5% 1/10W
R3269	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R6239	1-216-053-00	RES-CHIP (KV-XS29N93)	1.5K 5% 1/10W
R3270	1-216-295-91	SHORT 0	0 5% 1/10W	R6240	1-249-429-11	CARBON (KV-XS29N93)	10K 5% 1/4W
R3271	1-216-069-00	RES-CHIP	6.8K 5% 1/10W	R6241	1-215-890-11	METAL OXIDE (KV-XS29N93)	470 5% 2W
R3272	1-216-069-00	RES-CHIP	6.8K 5% 1/10W	R6242	1-215-890-11	METAL OXIDE (KV-XS29N93)	470 5% 2W
R3273	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R6243	1-249-392-11	CARBON (KV-XS29N93)	8.2 5% 1/4W
R3274	1-216-069-00	RES-CHIP	6.8K 5% 1/10W	R6244	1-216-073-00	RES-CHIP (KV-XS29N93)	10K 5% 1/10W
R3275	1-216-295-91	SHORT 0	0 (KV-XS29N93) 5% 1/10W	R6245	1-216-053-00	RES-CHIP (KV-XS29N90)	1.5K 5% 1/10W
R3276	1-216-295-91	SHORT 0	0 (KV-XS29N93) 5% 1/10W	R6245	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
R3277	1-216-073-00	RES-CHIP	10K 5% 1/10W	R6246	1-216-053-00	RES-CHIP (KV-XS29N90)	1.5K 5% 1/10W
R3278	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K 5% 1/10W	R6246	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
R3278	1-216-081-00	RES-CHIP (KV-XS29N93)	22K 5% 1/10W	R6248	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
R3279	1-216-061-00	RES-CHIP (KV-XS29N90)	3.3K 5% 1/10W	R6249	1-216-057-00	RES-CHIP (KV-XS29N93)	2.2K 5% 1/10W
R3279	1-216-081-00	RES-CHIP (KV-XS29N93)	22K 5% 1/10W	R6250	1-216-295-91	SHORT 0	0 (KV-XS29N93) 5% 1/10W
R3280	1-216-033-00	RES-CHIP	220 5% 1/10W	R6251	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
R3281	1-216-033-00	RES-CHIP	220 5% 1/10W				
R3282	1-216-079-00	RES-CHIP	18K 5% 1/10W				
R3283	1-216-081-00	RES-CHIP	22K 5% 1/10W				
R3284	1-216-073-00	RES-CHIP	10K 5% 1/10W				

B3

B5

REF. NO.	PART NO.	DESCRIPTION	REMARK		REF. NO.	PART NO.	DESCRIPTION	REMARK		
R6252	1-216-097-91	RES-CHIP (KV-XS29N93)	100K	5%	1/10W	C1540	1-165-319-11	CERAMIC CHIP	0.1UF	50V
R6253	1-216-041-00	RES-CHIP (KV-XS29N93)	470	5%	1/10W	C1541	1-126-967-11	ELECT	47UF	20.00% 50V
R6254	1-216-295-91	SHORT	0	(KV-XS29N93)		C1542	1-165-319-11	CERAMIC CHIP	0.1UF	50V
R6255	1-216-308-00	RES-CHIP (KV-XS29N93)	4.7	5%	1/10W	C1543	1-126-933-11	ELECT	100UF	20.00% 16V
R6256	1-216-065-91	RES-CHIP (KV-XS29N93)	4.7K	5%	1/10W	C1544	1-165-319-11	CERAMIC CHIP	0.1UF	50V
						C1554	1-165-319-11	CERAMIC CHIP	0.1UF	50V
						C1571	1-163-263-11	CERAMIC CHIP	330PF	5.00% 50V
R6257	1-216-061-00	RES-CHIP (KV-XS29N93)	3.3K	5%	1/10W	C1572	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
R6254	1-216-001-00	RES-CHIP	10	5%	1/10W	C1574	1-216-295-91	SHORT	0	
R6255	1-216-308-00	RES-CHIP	4.7	5%	1/10W	C1575	1-163-239-11	CERAMIC CHIP	33PF	5.00% 50V
R6258	1-216-001-00	RES-CHIP	10	5%	1/10W	C1576	1-104-661-91	ELECT	330UF	20.00% 16V
R6259	1-216-308-00	RES-CHIP	4.7	5%	1/10W	C1577	1-165-319-11	CERAMIC CHIP	0.1UF	50V
R6260	1-216-073-00	RES-CHIP (KV-XS29N93)	10K	5%	1/10W	C1578	1-165-319-11	CERAMIC CHIP	0.1UF	50V
R6262	1-216-055-00	RES-CHIP (KV-XS29N93)	1.8K	5%	1/10W	C5801	1-164-005-11	CERAMIC CHIP	0.47UF	25V
R6263	1-216-055-00	RES-CHIP (KV-XS29N93)	1.8K	5%	1/10W	C5802	1-165-319-11	CERAMIC CHIP	0.1UF	50V
R6266	1-216-089-91	RES-CHIP (KV-XS29N93)	47K	5%	1/10W	C5803	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
R6268	1-216-065-91	RES-CHIP (KV-XS29N93)	4.7K	5%	1 / 1 0 W	C5804	1-163-249-11	CERAMIC CHIP	82PF	5.00% 50V
R6278	1-216-295-91	SHORT	0		C5805	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
					C5806	1-163-249-11	CERAMIC CHIP	82PF	5.00% 50V	
					C5808	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	
					C5810	1-163-249-11	CERAMIC CHIP	82PF	5.00% 50V	
					C5811	1-126-934-11	ELECT	220UF	20.00% 16V	
					C5813	1-126-964-11	ELECT	10UF	20.00% 50V	
					C5817	1-104-664-11	ELECT	47UF	20.00% 16V	
					C5818	1-126-933-11	ELECT	100UF	20.00% 16V	
					C5820	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	

* A-1131-506-A B5 BOARD MOUNTED (KV-XS29N90)
* A-1131-532-A B5 BOARD MOUNTED (KV-XS29N93)

<CONNECTOR>

CN1501*	1-564-511-11	PLUG, CONNECTOR 8P (KV-XS29N93)
CN1502*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)
CN1503	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P
CN1504	1-764-811-11	CONNECTOR, BOARD TO BOARD 10P
CN5800*	1-564-506-11	PLUG, CONNECTOR 3P

<CAPACITOR>

C1515	1-163-243-11	CERAMIC CHIP (KV-XS29N93)	47PF	5.00%	50V
C1517	1-164-005-11	CERAMIC CHIP (KV-XS29N93)	0.47UF		25V
C1518	1-126-967-11	ELECT (KV-XS29N93)	47UF	20.00%	50V
C1519	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1520	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1522	1-164-005-11	CERAMIC CHIP (KV-XS29N93)	0.47UF		25V
C1523	1-163-255-11	CERAMIC CHIP (KV-XS29N93)	150PF	5.00%	50V
C1524	1-163-113-00	CERAMIC CHIP (KV-XS29N93)	68PF	5.00%	50V
C1525	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1526	1-163-249-11	CERAMIC CHIP (KV-XS29N93)	82PF	5.00%	50V
C1528	1-164-005-11	CERAMIC CHIP (KV-XS29N93)	0.47UF		25V
C1529	1-163-255-11	CERAMIC CHIP (KV-XS29N93)	150PF	5.00%	50V
C1530	1-163-113-00	CERAMIC CHIP (KV-XS29N93)	68PF	5.00%	50V

<DIODE>

D1501 8-719-069-60 DIODE UDZS-TE17-9.1B (KV-XS29N93)

<IC>

IC1501	8-752-058-68	IC CXA1315M-T4
IC1502	8-759-439-64	IC HEF4053BT (KV-XS29N93)

<CHIP CONDUCTOR>

JR5800	1-216-295-91	SHORT	0 (KV-XS29N90)
JR5801	1-216-295-91	SHORT	0 (KV-XS29N90)
JR5802	1-216-295-91	SHORT	0

<COIL>

L1501	1-414-856-11	INDUCTOR	10UH
L1502	1-414-856-11	INDUCTOR	10UH
L1506	1-414-857-11	INDUCTOR	100UH (KV-XS29N93)
L1507	1-414-187-11	INDUCTOR	47UH (KV-XS29N93)
L1508	1-414-187-11	INDUCTOR	47UH (KV-XS29N93)

B5

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L1509	1-414-857-11	INDUCTOR	100UH (KV-XS29N93)			<RESISTOR>	
L1510	1-414-187-11	INDUCTOR	47UH (KV-XS29N93)	R1506	1-216-025-91	RES-CHIP (KV-XS29N93)	100 5% 1/10W
L1511	1-414-187-11	INDUCTOR	47UH (KV-XS29N93)	R1507	1-216-081-00	RES-CHIP (KV-XS29N93)	22K 5% 1/10W
L1570	1-410-470-11	INDUCTOR	10UH	R1508	1-216-073-00	RES-CHIP (KV-XS29N93)	10K 5% 1/10W
L5800	1-414-856-11	INDUCTOR	10UH	R1511	1-216-033-00	RES-CHIP (KV-XS29N93)	220 5% 1/10W
L5801	1-414-856-11	INDUCTOR	10UH	R1512	1-216-005-00	RES-CHIP (KV-XS29N93)	15 5% 1/10W
L5802	1-414-189-31	INDUCTOR	100UH			<TRANSISTOR>	
L5803	1-414-188-41	INDUCTOR	68UH	R1515	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
L5804	1-414-856-11	INDUCTOR	10UH	R1516	1-216-025-91	RES-CHIP (KV-XS29N93)	100 5% 1/10W
L5806	1-414-189-31	INDUCTOR	100UH	R1517	1-216-075-00	RES-CHIP (KV-XS29N93)	12K 5% 1/10W
				R1520	1-216-079-00	RES-CHIP (KV-XS29N93)	18K 5% 1/10W
Q1501	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1522	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1502	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	(KV-XS29N93)	R1523	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1503	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1528	1-216-033-00	RES-CHIP (KV-XS29N93)	220 5% 1/10W
Q1505	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1529	1-216-053-00	RES-CHIP (KV-XS29N93)	1.5K 5% 1/10W
Q1507	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	(KV-XS29N93)	R1531	1-216-045-00	RES-CHIP (KV-XS29N93)	680 5% 1/10W
Q1509	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1537	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
Q1510	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1538	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
Q1511	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	(KV-XS29N93)	R1540	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1514	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1541	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
Q1515	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1542	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
Q1516	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	(KV-XS29N93)	R1543	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1520	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1545	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
Q1522	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	(KV-XS29N93)	R1547	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1523	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L	(KV-XS29N93)	R1548	1-216-025-91	RES-CHIP (KV-XS29N93)	100 5% 1/10W
Q1571	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R1549	1-216-075-00	RES-CHIP (KV-XS29N93)	12K 5% 1/10W
Q1572	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R1551	1-216-081-00	RES-CHIP (KV-XS29N93)	22K 5% 1/10W
Q1573	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L		R1552	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1574	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R1553	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1575	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L		R1554	1-216-033-00	RES-CHIP (KV-XS29N93)	220 5% 1/10W
Q1576	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L		R1556	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W
Q1577	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L		R1559	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W
Q5801	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
Q5802	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5803	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
Q5804	8-729-421-19	TRANSISTOR UN2213-TX					
Q5805	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5806	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5807	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5808	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5809	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5810	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5811	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5812	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5813	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5814	8-729-216-22	TRANSISTOR 2SA1162-YG-TE85L					
Q5815	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5816	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5817	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5818	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5819	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					
Q5820	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L					

B5**B7**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R1560	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W	R5818	1-216-081-00	RES-CHIP	22K 5% 1/10W				
R1561	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W	R5819	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1562	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W	R5820	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1563	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W	R5821	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1566	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W	R5822	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1567	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W	R5823	1-216-085-00	RES-CHIP	33K 5% 1/10W				
R1568	1-216-041-00	RES-CHIP (KV-XS29N93)	470 5% 1/10W	R5824	1-216-081-00	RES-CHIP	22K 5% 1/10W				
R1569	1-216-049-91	RES-CHIP (KV-XS29N93)	1K 5% 1/10W	R5825	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1570	1-216-021-00	RES-CHIP	68 5% 1/10W	R5826	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1571	1-216-645-11	METAL CHIP	560 0.5% 1/10W	R5827	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1572	1-216-061-00	RES-CHIP	3.3K 5% 1/10W	R5829	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1573	1-216-073-00	RES-CHIP	10K 5% 1/10W	R5830	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1574	1-216-667-11	METAL CHIP	4.7K 0.5% 1/10W	R5831	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1575	1-216-081-00	RES-CHIP	22K 5% 1/10W	R5832	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1577	1-216-049-91	RES-CHIP	1K 5% 1/10W	R5833	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1578	1-216-033-00	RES-CHIP	220 5% 1/10W	R5834	1-216-085-00	RES-CHIP	33K 5% 1/10W				
R1579	1-216-049-91	RES-CHIP	1K 5% 1/10W	R5835	1-216-081-00	RES-CHIP	22K 5% 1/10W				
R1580	1-216-049-91	RES-CHIP	1K 5% 1/10W	R5836	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1581	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R5837	1-216-033-00	RES-CHIP	220 5% 1/10W				
R1582	1-216-671-11	METAL CHIP	6.8K 0.5% 1/10W	R5838	1-216-039-00	RES-CHIP	390 5% 1/10W				
R1583	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R5839	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1584	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R5840	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1585	1-216-675-91	METAL CHIP	10K 0.5% 1/10W	R5841	1-216-089-91	RES-CHIP	47K 5% 1/10W				
R1586	1-216-679-11	METAL CHIP	15K 0.5% 1/10W	R5842	1-216-081-00	RES-CHIP	22K 5% 1/10W				
R1589	1-216-073-00	RES-CHIP	10K 5% 1/10W	R5843	1-216-033-00	RES-CHIP	220 5% 1/10W				
R1590	1-216-073-00	RES-CHIP	10K 5% 1/10W	R5844	1-216-055-00	RES-CHIP	1.8K 5% 1/10W				
R1591	1-216-073-00	RES-CHIP	10K 5% 1/10W	R5845	1-216-041-00	RES-CHIP	470 5% 1/10W				
R1592	1-216-073-00	RES-CHIP	10K 5% 1/10W	R5846	1-216-025-91	RES-CHIP	100 5% 1/10W				
R1593	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R5847	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1594	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R5848	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1595	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R5849	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1596	1-216-057-00	RES-CHIP	2.2K 5% 1/10W	R5850	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1598	1-216-025-91	RES-CHIP	100 5% 1/10W	R5851	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R1599	1-216-025-91	RES-CHIP	100 5% 1/10W	*****							
R5801	1-216-025-91	RES-CHIP	100 5% 1/10W	* A-1131-500-A B7 BOARD MOUNTED							
R5803	1-216-033-00	RES-CHIP	220 5% 1/10W	*****							
R5804	1-216-295-91	SHORT	0	<CAPACITOR>							
R5805	1-216-027-00	RES-CHIP	120 5% 1/10W	C2301	1-126-933-11	ELECT	100UF	20.00%	16V		
R5806	1-216-041-00	RES-CHIP	470 5% 1/10W	C2302	1-126-964-11	ELECT	10UF	20.00%	50V		
R5807	1-216-049-91	RES-CHIP	1K 5% 1/10W	C2303	1-130-495-00	MYLAR	0.1UF	5.00%	50V		
R5808	1-216-043-91	RES-CHIP	560 5% 1/10W	C2304	1-130-495-00	MYLAR	0.1UF	5.00%	50V		
R5809	1-216-025-91	RES-CHIP	100 5% 1/10W	C2305	1-136-165-00	MYLAR	0.1UF	5.00%	50V		
R5810	1-216-077-91	RES-CHIP	15K 5% 1/10W	C2306	1-126-964-11	ELECT	10UF	20.00%	50V		
R5811	1-216-073-00	RES-CHIP	10K 5% 1/10W	C2308	1-130-483-00	MYLAR	0.01UF	5.00%	50V		
R5812	1-216-073-00	RES-CHIP	10K 5% 1/10W	C2312	1-101-004-00	CERAMIC	0.01UF		50V		
R5813	1-216-073-00	RES-CHIP	10K 5% 1/10W	C2313	1-126-964-11	ELECT	10UF	20.00%	50V		
R5814	1-216-689-11	RES-CHIP	39K 5% 1/10W	<CONNECTOR>							
R5815	1-216-049-91	RES-CHIP	1K 5% 1/10W	CN2300* 1-766-952-11 CONNECTOR, BOARD TO BOARD 11P							
R5816	1-216-025-91	RES-CHIP	100 5% 1/10W								
R5817	1-216-085-00	RES-CHIP	33K 5% 1/10W								

B7

C

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

REF. NO.	PART NO.	DESCRIPTION			REMARK		REF. NO.	PART NO.	DESCRIPTION			REMARK	
<FERRITE BEAD>													
FB2300	1-410-397-21	FERRITE	1.1UH				CN700	1-695-915-11	TAB (CONTACT)				
<IC>													
IC2300	8-759-639-32	IC TDA9181					CN701	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
<COIL>							CN702	1-695-915-11	TAB (CONTACT)				
L2300	1-414-189-31	INDUCTOR	100UH				CN703	* 1-564-509-11	PLUG, CONNECTOR 6P				
L2301	1-414-189-31	INDUCTOR	100UH				CN704	1-695-915-11	TAB (CONTACT)				
<TRANSISTOR>							CN706	1-695-915-11	TAB (CONTACT)				
Q2304	8-729-030-02	TRANSISTOR DTC144ES-TP					CN1801*	1-564-509-11	PLUG, CONNECTOR 6P				
Q2305	8-729-119-78	TRANSISTOR 2SC2785TP-HFE					CN1802*	1-564-506-11	PLUG, CONNECTOR 3P				
Q2306	8-729-119-76	TRANSISTOR 2SA1175TP-HFE					<DIODE>						
<RESISTOR>													
R2310	1-136-165-00	MYLAR	0.1UF	5.00%	50V		D702	8-719-911-19	DIODE 1SS119-25TD				
R2312	1-249-425-11	CARBON	4.7K	5%	1/4W		D703	8-719-911-19	DIODE 1SS119-25TD				
R2313	1-249-413-11	CARBON	470	5%	1/4W		D704	8-719-911-19	DIODE 1SS119-25TD				
R2314	1-249-407-11	CARBON	150	5%	1/4W		D705	8-719-051-85	DIODE HSS83TD				
R2315	1-249-417-11	CARBON	1K	5%	1/4W		D706	8-719-051-85	DIODE HSS83TD				
R2316	1-259-884-11	CARBON	4.7M	5%	1/4W		D707	8-719-051-85	DIODE HSS83TD				
R2317	1-259-884-11	CARBON	4.7M	5%	1/4W		D708	8-719-911-19	DIODE 1SS119-25TD				
<CAPACITOR>													
C700	1-110-389-11	FILM MELF	0.1UF	5%	250V		D709	8-719-911-19	DIODE 1SS119-25TD				
C701	1-162-114-00	CERAMIC	0.0047UF		2KV		D710	8-719-911-19	DIODE 1SS119-25TD				
C702	1-102-074-00	CERAMIC	0.001UF	10.00%	50V		D711	8-719-110-23	DIODE RD11ES-T1B3				
C707	1-137-399-11	MYLAR	0.1UF	5.00%	50V		D720	8-719-911-19	DIODE 1SS119-25TD				
C708	1-102-228-00	CERAMIC	470PF	10.00%	500V		D721	8-719-911-19	DIODE 1SS119-25TD				
C709	1-102-228-00	CERAMIC	470PF	10.00%	500V		D722	8-719-911-19	DIODE 1SS119-25TD				
C710	1-102-960-00	CERAMIC	24PF	5.00%	50V		D1803	8-719-911-19	DIODE 1SS119-25TD				
C711	1-102-852-91	CERAMIC	47PF	5.00%	50V		D1804	8-719-911-19	DIODE 1SS119-25TD				
C712	1-102-525-11	CERAMIC	68PF	5.00%	50V		D1808	8-719-908-03	DIODE GP08DPKG23				
C713	1-102-228-00	CERAMIC	470PF	10.00%	500V	<IC>							
C716	1-104-665-11	ELECT	100UF	20.00%	25V	<JACK>							
C717	1-107-651-11	ELECT	4.7UF	20.00%	250V	J701 \triangle 1-540-071-22 SOCKET, CRT							
C726	1-104-664-11	ELECT	47UF	20.00%	25V	<COIL>							
C1800	1-126-964-11	ELECT	10UF	20.00%	50V	L701	1-410-667-31	INDUCTOR	22UH				
C1803	1-126-964-11	ELECT	10UF	20.00%	50V	L705	1-414-186-31	INDUCTOR	33UH				
C1804	1-126-964-11	ELECT	10UF	20.00%	50V	L706	1-414-186-31	INDUCTOR	33UH				
C1809	1-126-942-61	ELECT	1000UF	20.00%	25V	L707	1-414-186-31	INDUCTOR	33UH				
<TRANSISTOR>													
<RESISTOR>													
R700	1-249-393-11	CARBON	10	5%	1/4W	<CAPACITOR>							
R701	1-249-496-11	CARBON	100K	5%	1/2W	<COIL>							
R702	1-215-469-00	METAL	100K	1%	1/4W	<TRANSISTOR>							
R703	1-215-414-00	METAL	510	1%	1/4W	<RESISTOR>							
R704	1-215-414-00	METAL	510	1%	1/4W	<IC>							

C D3

D3 F H5

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

REF. NO.	PART NO.	DESCRIPTION	REMARK		
R2813	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R2814	1-216-121-91	RES-CHIP	1M	5%	1/10W
R2815	1-216-085-00	RES-CHIP	33K	5%	1/10W
R2816	1-216-107-00	RES-CHIP	270K	5%	1/10W
R2817	1-216-107-00	RES-CHIP	270K	5%	1/10W

<TRANSFORMER>

T2800	1-413-059-00	TRANSFORMER, FERRITE (DFT)
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* A-1241-384-A F BOARD MOUNTED

1-533-223-11	CLIP, FUSE
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<CAPACITOR>

C654	1-117-703-11	CERAMIC	0.0047UF	99%	250V
C4601	\triangle 1-104-708-11	MYLAR	0.47UF	20.00%	250V
C4602	\triangle 1-109-835-11	MYLAR	0.68UF	20.00%	250V

<CONNECTOR>

CN4601*	1-580-843-11	PIN, CONNECTOR (POWER)
CN4602*	1-580-843-11	PIN, CONNECTOR (POWER)
CN4603	1-695-915-11	TAB (CONTACT)

<FUSE>

F4601	\triangle 1-532-299-00	FUSE, TIME-LAG 5A/250V
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<RESISTOR>

R4601	\triangle 1-202-719-00	SOLID	1M	10%	1/2W
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<TRANSFORMER>

T4601	1-431-536-11	TRANSFORMER, LINE FILTER
T4602	1-431-182-11	TRANSFORMER, LINE FILTER

<VARISTOR>

VDR461	1-801-451-11	VARISTOR TNR14V271K600
VDR461*	4-374-846-01	COVER, CAPACITOR, CAP TYPE

REF. NO.	PART NO.	DESCRIPTION	REMARK	
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* A-1372-755-A H5 BOARD MOUNTED (KV-XS29N90)

* A-1372-756-A H5 BOARD MOUNTED (KV-XS29N93)

* 4-055-304-01 HOLDER, LED

<CAPACITOR>

C3900	1-136-153-00	MYLAR	0.01UF	5.00% 50V
C3902	1-136-153-00	MYLAR	0.01UF	5.00% 50V
C3904	1-104-664-11	ELECT	47UF	20.00% 25V
C3905	1-126-963-11	ELECT	4.7UF	20.00% 50V
C3906	1-126-963-11	ELECT	4.7UF	20.00% 50V
C3907	1-136-177-00	MYLAR (KV-XS29N93)	1UF	5.00% 50V
C3910	1-104-664-11	ELECT	47UF	20.00% 16V
C3911	1-104-664-11	ELECT	47UF	20.00% 16V
C3912	1-102-114-00	CERAMIC	470PF	10.00% 50V
C3913	1-126-960-11	ELECT	1UF	20.00% 50V
C3914	1-126-965-11	ELECT (KV-XS29N90)	22UF	20.00% 50V
C3914	1-126-933-11	ELECT (KV-XS29N93)	100UF	20.00% 16V

<CONNECTOR>

CN3601*	1-580-844-11	PIN, CONNECTOR (POWER)
CN3602*	1-580-844-11	PIN, CONNECTOR (POWER)
CN3901*	1-564-507-11	PLUG, CONNECTOR 4P
CN3902*	1-564-509-11	PLUG, CONNECTOR 6P
CN3903*	1-564-507-11	PLUG, CONNECTOR 4P (KV-XS29N93)

CN3904* 1-564-512-11 PLUG, CONNECTOR 9P

CN3905* 1-564-512-11 PLUG, CONNECTOR 9P

CN3906* 1-564-506-11 PLUG, CONNECTOR 3P (KV-XS29N93)

<DIODE>

D3900	8-719-069-60	DIODE UDZS-TE17-9.1B
D3901	8-719-069-60	DIODE UDZS-TE17-9.1B
D3902	8-719-069-60	DIODE UDZS-TE17-9.1B
D3905	8-719-069-60	DIODE UDZS-TE17-9.1B
D3906	8-719-045-19	DIODE SPB-26MVWF
D3907	8-719-069-60	DIODE UDZS-TE17-9.1B
D3908	8-719-069-60	DIODE UDZS-TE17-9.1B

<IC>

IC3901 8-759-180-30 HYB IC SBX3081-51(30)

<JACK>

J3901	1-750-264-11	JACK
J3902	1-784-646-11	TERMINAL, S
J3903	1-770-329-11	JACK, PIN 3P

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

H5**J4 (KV-XS29N93)****VM**

REF. NO.	PART NO.	DESCRIPTION	REMARK
<COIL>			
L3901	1-414-183-41	INDUCTOR	10UH
L3902	1-414-183-41	INDUCTOR	10UH
L3903	1-416-966-11	INDUCTOR	30UH (KV-XS29N93)

REF. NO.	PART NO.	DESCRIPTION	REMARK
<TRANSISTOR>			
Q3901	8-729-030-02	TRANSISTOR DTC144ESA-TP	
Q3902	8-729-030-02	TRANSISTOR DTC144ESA-TP	

REF. NO.	PART NO.	DESCRIPTION	Value	Tolerance	Power	REMARK
<RESISTOR>						
R3900	1-249-411-11	CARBON	330	5%	1/4W	
R3901	1-249-411-11	CARBON	330	5%	1/4W	
R3902	1-247-804-11	CARBON	75	5%	1/4W	
R3904	1-249-429-11	CARBON	10K	5%	1/4W	
R3905	1-249-429-11	CARBON	10K	5%	1/4W	
R3907	1-249-426-11	CARBON	5.6K	5%	1/4W	
R3908	1-249-413-11	CARBON	470	5%	1/4W	
R3909	1-249-417-11	CARBON	1K	5%	1/4W	
R3910	1-249-420-11	CARBON	1.8K	5%	1/4W	
R3911	1-249-411-11	CARBON	330	5%	1/4W	
R3912	1-247-843-11	CARBON	3.3K	5%	1/4W	
R3913	1-249-429-11	CARBON	10K	5%	1/4W	
R3914	1-249-411-11	CARBON	330	5%	1/4W	
R3915	1-249-429-11	CARBON	10K	5%	1/4W	
R3916	1-249-401-11	CARBON	47	5%	1/4W	
R3917	1-247-804-11	CARBON	75	5%	1/4W	
R3918	1-247-815-91	CARBON	220	5%	1/4W	
R3919	1-247-815-91	CARBON	220	5%	1/4W	
R3920	1-247-807-31	CARBON	100	5%	1/4W	
R3921	1-247-807-31	CARBON	100	5%	1/4W	
R3922	1-249-421-11	CARBON	2.2K	5%	1/4W	
R3923	1-247-815-91	CARBON	220	5%	1/4W	
R3924	1-247-804-11	CARBON	75	5%	1/4W	

<SWITCH>

S3601 \triangle 1-571-433-21 SWITCH, PUSH (AC POWER)

S3902 1-692-431-21 SWITCH, TACTILE
 S3903 1-692-431-21 SWITCH, TACTILE
 S3904 1-692-431-21 SWITCH, TACTILE
 S3905 1-692-431-21 SWITCH, TACTILE

S3906 1-692-431-21 SWITCH, TACTILE
 S3907 1-692-431-21 SWITCH, TACTILE
 S3908 1-692-431-21 SWITCH, TACTILE

* A-1388-266-A J4 BOARD MOUNTED (KV-XS29N93 ONLY)

<CAPACITOR>

C2410	1-126-967-11	ELECT	47UF	20.00% 50V
C2411	1-126-967-11	ELECT	47UF	20.00% 50V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C2412	1-126-967-11	ELECT	47UF 20.00% 50V
C2413	1-102-112-00	CERAMIC	330PF 10.00% 50V
C2414	1-102-112-00	CERAMIC	330PF 10.00% 50V
C2418	1-126-960-11	ELECT	1UF 20.00% 50V
C2419	1-126-960-11	ELECT	1UF 20.00% 50V

REF. NO.	PART NO.	DESCRIPTION
CN2410*	1-564-523-11	PLUG, CONNECTOR 8P
CN3451*	1-564-518-11	PLUG, CONNECTOR 3P

REF. NO.	PART NO.	DESCRIPTION
D2410	8-719-121-26	DIODE RD9.1ES-T1B
D2411	8-719-121-26	DIODE RD9.1ES-T1B
D2412	8-719-121-26	DIODE RD9.1ES-T1B
D2414	8-719-121-26	DIODE RD9.1ES-T1B
D2415	8-719-121-26	DIODE RD9.1ES-T1B
D3453	8-719-110-72	DIODE RD30ES-T1B2
D3454	8-719-110-72	DIODE RD30ES-T1B2

REF. NO.	PART NO.	DESCRIPTION	Value	Tolerance	Power	REMARK
R2410	1-247-804-11	CARBON	75	5%	1/4W	
R2411	1-247-804-11	CARBON	75	5%	1/4W	
R2412	1-247-804-11	CARBON	75	5%	1/4W	
R2414	1-247-887-00	CARBON	220K	5%	1/4W	
R2415	1-247-807-31	CARBON	100	5%	1/4W	
R2417	1-247-887-00	CARBON	220K	5%	1/4W	
R2418	1-247-807-31	CARBON	100	5%	1/4W	
R2419	1-247-815-91	CARBON	220	5%	1/4W	
R2420	1-247-815-91	CARBON	220	5%	1/4W	
R2421	1-247-815-91	CARBON	220	5%	1/4W	

<CAPACITOR>

REF. NO.	PART NO.	DESCRIPTION	Value	Tolerance	Power	REMARK
C5900	1-102-115-00	CERAMIC	560PF	10.00% 50V		
C5902	1-104-661-91	ELECT	330UF	20.00% 16V		
C5903	1-161-830-00	CERAMIC	0.0047UF	500V		
C5905	1-126-925-11	ELECT	470UF	20.00% 10V		
C5906	1-130-491-00	MYLAR	0.047UF	5.00% 50V		
C5907	1-107-638-11	ELECT	33UF	20.00% 160V		
C5908	1-106-383-00	MYLAR	0.047UF	10.00% 200V		
C5909	1-126-933-11	ELECT	100UF	20.00% 16V		
C5910	1-130-471-00	MYLAR	0.001UF	5.00% 50V		
C5911	1-107-949-11	ELECT	2.2UF	20.00% 160V		

VM

REF. NO.	PART NO.	DESCRIPTION	REMARK		REF. NO.	PART NO.	DESCRIPTION	REMARK			
C5912	1-104-999-11	MYLAR	0.1UF	10.00%	200V	R5917	1-249-416-11	CARBON	820	5%	1/4W
C5913	1-130-471-00	MYLAR	0.001UF	5.00%	50V	R5918	1-249-429-11	CARBON	10K	5%	1/4W
C5914	1-126-933-11	ELECT	100UF	20.00%	16V	R5919	1-249-417-11	CARBON	1K	5%	1/4W
C5916	1-130-491-00	MYLAR	0.047UF	5.00%	50V	R5920	1-249-439-11	CARBON	68K	5%	1/4W
C5917	1-126-925-11	ELECT	470UF	20.00%	10V	R5921	1-216-476-11	METAL OXIDE	180	5%	3W
C5918	1-102-244-00	CERAMIC	220PF	10.00%	500V	R5922	1-249-414-11	CARBON	560	5%	1/4W
C5919	1-136-165-00	MYLAR	0.1UF	5.00%	50V	R5923	1-249-383-11	CARBON	1.5	5%	1/4W
<CONNECTOR>											
CN2801*	1-564-506-11	PLUG, CONNECTOR 3P			R5925	1-249-400-11	CARBON	39	5%	1/4W	
CN5901*	1-564-510-11	PLUG, CONNECTOR 7P			R5927	1-249-416-11	CARBON	820	5%	1/4W	
CN5904*	1-770-723-11	CONNECTOR, BOARD TO BOARD 8P			R5929	1-215-880-00	METAL OXIDE	10	5%	2W	

<DIODE>											
D5901	8-719-911-19	DIODE 1SS119-25TD									
D5902	8-719-110-88	DIODE MTZJ-T-77-39									
D5903	8-719-911-19	DIODE 1SS119-25TD									
D5904	8-719-110-88	DIODE MTZJ-T-77-39									
D5905	8-719-911-19	DIODE 1SS119-25TD									
D5906	1-249-406-11	CARBON	120	5%	1/4W	1-419-519-11	COIL, DEMAGNETIC				
D5907	1-249-406-11	CARBON	120	5%	1/4W	1-452-094-00	CIRCULAR DISC MAGNET B				
<COIL>											
L5901	1-414-187-11	INDUCTOR	47UH			1-452-032-00	MAGNET,DISC				
<TRANSISTOR>											
Q5901	8-729-230-45	TRANSISTOR 2SC2458TP-YGR				1-452-896-11	COIL, NA ROTATION (RT200)				
Q5902	8-729-809-26	TRANSISTOR 2SA1606-E				1-529-172-11	SPEAKER, LOUD (10CM)				
Q5903	8-729-230-45	TRANSISTOR 2SC2458TP-YGR									
Q5904	8-729-119-76	TRANSISTOR 2SA1175TP-HFE									
Q5905	8-729-230-45	TRANSISTOR 2SC2458TP-YGR									
Q5906	8-729-809-29	TRANSISTOR 2SC4159-E				1-529-190-11	SPEAKER (5CM)				
Q5907	8-729-119-78	TRANSISTOR 2SC2785TP-HFE				1-529-563-11	SPEAKER (15X6.5CM)				
<RESISTOR>											
R5901	1-249-401-11	CARBON	47	5%	1/4W	1-573-657-21	PLUG, F-PIN				
R5902	1-249-414-11	CARBON	560	5%	1/4W	1-575-023-11	CORD, POWER (WITH CONNECTOR) 6A/250V				
R5903	1-247-734-11	CARBON	39	5%	1/2W	8-453-011-11	NA299-M				
R5904	1-249-411-11	CARBON	330	5%	1/4W						
R5905	1-249-417-11	CARBON	1K	5%	1/4W	8-451-494-31	DEFELECTION YOKE (Y29RSA-S)				
R5906	1-249-417-11	CARBON	1K	5%	1/4W	8-735-057-05	PICTURE TUBE (M68LNH070X)				
R5907	1-249-417-11	CARBON	1K	5%	1/4W						
R5908	1-249-383-11	CARBON	1.5	5%	1/4W						
R5909	1-247-815-91	CARBON	220	5%	1/4W						
R5910	1-249-403-11	CARBON	68	5%	1/4W						
R5911	1-249-439-11	CARBON	68K	5%	1/4W						
R5912	1-249-437-11	CARBON	47K	5%	1/4W						
R5914	1-249-403-11	CARBON	68	5%	1/4W						
R5915	1-249-429-11	CARBON	10K	5%	1/4W	1-418-460-11	REMOTE COMMANDER (RM-914)				
R5916	1-249-419-11	CARBON	1.5K	5%	1/4W	9-933-895-01	BATTERY COVER, REMOTE COMMANDER				

<ACCESORIES AND PACKING MATERIALS>											

<SCREW, SPECIAL (DIA. 3.8X20)>											
*> 4-029-168-01											
*> 4-054-319-01											
*> 4-065-210-01											
*> 4-071-224-01											
*> CUSHION (UPPER)(ASSY)											
*> INDIVIDUAL CARTON											
*> MANUAL, INSTRUCTION											
*> BAND, HOLD											
*> CLIP											

<REMOTE COMMANDER>											

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