

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

AX-1X CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
KP-46WT520	RM-Y916	US/CND/MX	SCC-M37B-A
KP-51WS520	RM-Y916	US/CND/MX	SCC-M37C-A
KP-57WS520	RM-Y916	US/CND/MX	SCC-M37A-A

ORIGINAL MANUAL ISSUE DATE: 7/2004

 :UPDATED ITEM

<u>REVISION DATE</u>	<u>SUBJECT</u>
7/2004	No revisions or updates are applicable at this time.
10/2004	Corrected 1-9. Speaker Grille, HA1 Board, and HB2 Board Removal (KP-46WT520 Only) to show correct location of HB2 Board. Replaced Page 14 with Page 14 Removed Note from section 2-12-1. Setup For Adjustment. Note is intended for use by the factory during production, and should not be performed by service technicians. Replaced Page 50 with Page 50
12/2004	Corrected PN for AC Power Cord for KP-51WS520/57WS520 Models. Replaced Page 104 with Page 104
12/2004	Corrected PN for Resistor Bridge on A Board Replaced Page 127 with Page 127
2/2005	Updated Table of Contents (Replaced Page 3 with Page 3) Added Caution statement (Replaced Page 5 with Page 5) BH Board introduced due to design change. Added BH Board Removal to Disassembly section (Replaced Page 12 with Page 12) Added BH Board Schematics, PWBs, Exploded View, and Electrical Parts List (Added Pages 93-A through 93-C, Replaced Pages 148-150 with Pages 148-157) Corrected PN for Bottom Cabinet (46) Assy, Corrected/removed items included in Speaker Grill Assemblies (Replaced Page 102 & 103 with Page 102 & 103) Added BH Board and A Board (Replaced Page 104 with Page 104) New CRT Coupler Assemblies & Shades introduced for KP-46WT520/51WS520 Affects SNs 8,500,001 and up (Replaced Page 105 with Page 105)
8/2005	Added A Board differences to Electrical Parts List (Replaced Page 111 and 118 with 111 and 118) Corrected position of CRT Couplers and Shades (Replaced Page 105 with 105)

COLOR REAR VIDEO PROJECTION

SONY®

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KP-57WS520	RM-Y916	US/CND/MX	SCC-M37A-A



KP-51WS520



RM-Y916

COLOR REAR VIDEO PROJECTION

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SPECIFICATIONS

Power Requirements 120V AC, 60Hz

Power Consumption (W)

In Use (Max) 235W
In Standby Under 1 W

Inputs/Outputs HDMI IN

Video
 1080i, 720p, 480p, 480i
Audio
 Two channel linear PCM 32, 44.1, and 48 kHz, 16, 20, and 24 bit

Video (IN)
 4 total (1 on front panel)
 1Vp-p, 75ohms unbalanced, sync negative

S Video (IN)
 3 total (1 on front panel)
 Y: 1Vp-p, 75ohms unbalanced, sync negative
 C: 0.286Vp-p (Burst signal), 75ohms

Audio (IN)

7 total (1 on front panel)
 500 mVrms (100% modulation)
 Impedance:47 kilohm

Component Video Input

2 (Y,P_B,P_R)
 Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative;
 P_B: 0.7 Vp-p, 75 ohms;
 P_R: 0.7 Vp-p, 75 ohms

Control S (IN/OUT)

1 total

Variable/Fixed Audio (OUT)

More than 408 m Vrms at the maximum volume setting
 (Variable)
 More than 408 m Vrms (Fixed) Impedance (output):2 kilohms

	KP-46WT520	KP-51WS520	KP-57WS520
Speaker Output (W)	20W x 2		
Dimensions (W x H x D)			
mm	1086 x 1017 x 609 mm	1194 x 1280 x 666 mm	1326 x 1377 x 692 mm
in	42 ^{3/4} x 40 x 24 in	47 x 50 ^{1/2} x 26 ^{1/4} in	52 ^{1/4} x 54 ^{1/4} x 27 ^{1/4} in
Mass			
kg	61.3 kg	77.2 kg	88 kg
lbs	135 lbs	170 lbs	194 lbs

Projection System

3 picture tubes, 3 lenses, horizontal in-line system

Picture Tube

7-inch high-brightness monochrome tubes (6.3 raster size),
 with optical coupling and liquid cooling system.

Projection Lenses

High performance, large diameter hybrid lens F1.1

Antenna

75 ohm external terminal for VHF/UHF

Television System

NTSC, American TV Standard

Channel Coverage

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

Screen Size (measured diagonally)

46 inches (KP-46WT520)
 51 inches (KP-51WS520)
 57 inches (KP-57WS520)

Supplied Accessories


Remote Control RM-Y916
 Batteries (2) size AA (R6)

Optional Accessories

A/V Cable (VMC-810/820/830 HG)
 Audio Cable (RKC-515HG)
 Component Video Cable (VMC-10/30 HG)
 Control S Cable (RK-G69HG)
 TV Stand SU-46WT11 (For KP-46WT520 Only)

WARNINGS AND CAUTIONS


CAUTION

 These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.


WARNING!!

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

SAFETY-RELATED COMPONENT WARNING!!


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

ATTENTION!!

 Ces instructions de service sont à l'usage du personnel de service qualifié seulement. Pour prévenir le risque de choc électrique, ne pas faire l'entretien autre que celui contenu dans le Mode d'emploi à moins que vous soyez qualifié faire ainsi.

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

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque  sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

SAFETY CHECK-OUT

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

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

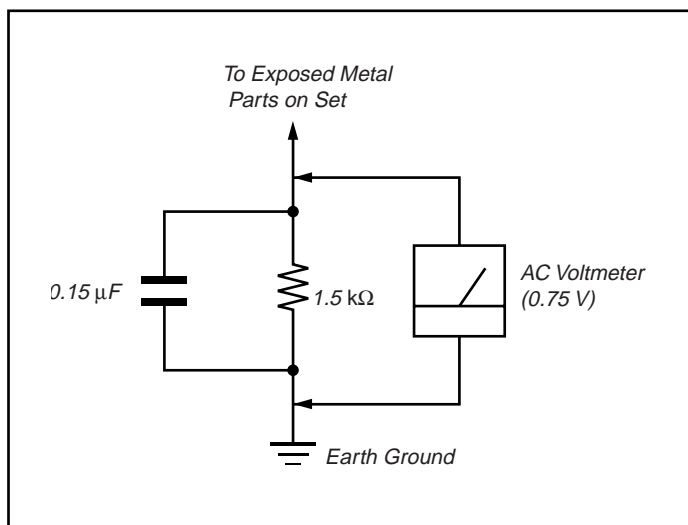


Figure A. Using an AC voltmeter to check AC leakage.

Leakage Test

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

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

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

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

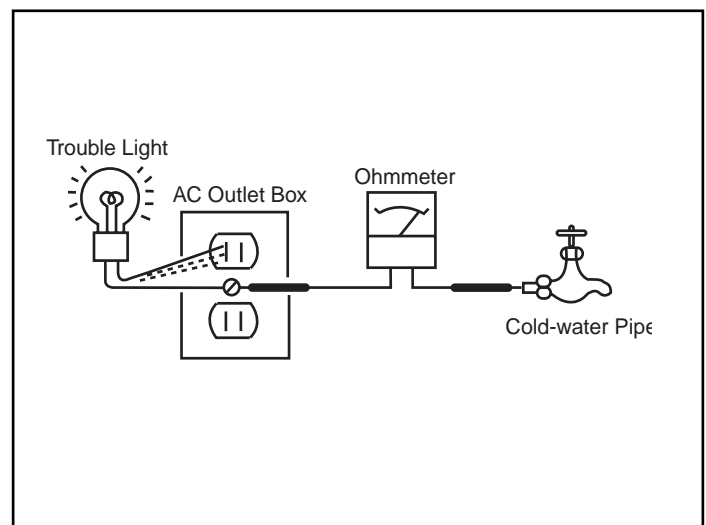


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION



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

Diagnostic Test Indicators

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

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

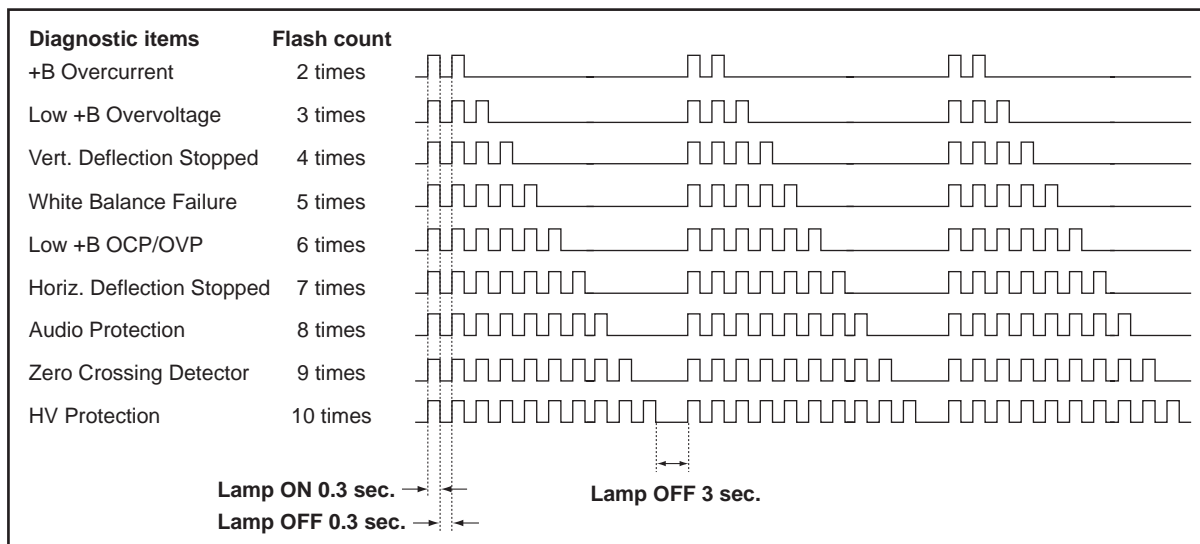
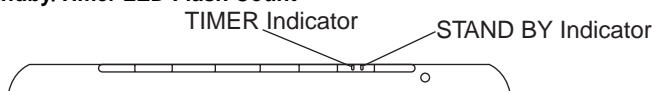
Diagnostic Item	No. of times STANDBY / TIMER lamp flashes	Display Result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	_____	<ul style="list-style-type: none"> Power cord is not plugged in. Fuse is burned out (F6000). (G Board) 	<ul style="list-style-type: none"> Power does not come on. No power is supplied to the TV. AC Power supply is faulty.
+B Overcurrent (OCP)*	2 times	2:0 or 2:1	<ul style="list-style-type: none"> H.OUT (Q5001) is shorted. (D Board) +B PWM (Q5201) is shorted. (D Board) 	<ul style="list-style-type: none"> Power does not come on. Load on power line shorted.
+B Overvoltage (OVP)	3 times	3:0 or 3:1	<ul style="list-style-type: none"> IC6503 is faulty. (D Board) 	<ul style="list-style-type: none"> Has entered standby mode.
Vertical Deflection Stopped	4 times	4:0 or 4:1	<ul style="list-style-type: none"> 15V is not supplied. (D Board) IC5101 is faulty. (D Board) 	<ul style="list-style-type: none"> Has entered standby mode after Horizontal raster. Vertical deflection pulse is stopped. Power line is shorted or power supply is stopped.
White Balance Failure (not balanced)	5 times	5:0 or 5:1	<ul style="list-style-type: none"> Video OUT (IC9101, IC9201, IC9301) is faulty. (CR, CG, CB Board) CRT drive (IC452) is faulty. (A Board) G2 is improperly adjusted.** 	<ul style="list-style-type: none"> No raster is generated. CRT cathode current detection reference pulse output is small.
LOW +B OCP/OVP (overcurrent/overvoltage)***	6 times	6:0 or 6:1	<ul style="list-style-type: none"> +5 line is overloaded. (A and BM Boards) +5 line is shorted. (A and BM Boards) IC303 is faulty. (A Board) 	<ul style="list-style-type: none"> No picture
Horizontal Deflection Stopped	7 times	7:0 or 7:1	<ul style="list-style-type: none"> Q5006 is broken (D Board) IC452 is faulty (A Board) 	<ul style="list-style-type: none"> No picture
Audio Protection	8 times	8:0 or 8:1	<ul style="list-style-type: none"> + or - 22V audio supply is not present—Check PS600 & PS601 Audio AMP is damaged IC601 on A Board 	<ul style="list-style-type: none"> No picture
Zero Crossing Detector	9 times	9:0 or 9:1	<ul style="list-style-type: none"> D6116 or D6301 is open (G Board) 	<ul style="list-style-type: none"> No picture
HV Protection	10 times	10:0 or 10:1	<ul style="list-style-type: none"> Q8014 or Q8013 have shorted replace along with R8051 on D Board IC8005 is damaged (D Board) 	<ul style="list-style-type: none"> No picture

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

** Refer to Screen (G2) Adjustment (Fine Adjustments) in Section 2 of this manual.

*** If STANDBY/STEREO LED flashes six (6) times, unplug the unit and wait 10 seconds before performing the adjustment.

Display of Standby/Timer LED Flash Count



Release of TIMER STAND BY indicator blinking

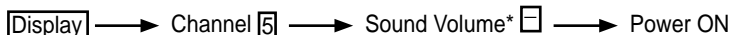
The TIMER/STANDBY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

Self-Diagnosis Screen Displays

In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

Screen Display Method

Quickly press the remote command button in the following order from the standby state.



SELF DIAGNOSIS	
2: +B OCP	0
3: +B OVP	0
4: VSTOP	0
5: AKB	1
6: LOWB	0
7: H-STOP	0
8: AUDIO	0
9: ZCD	0
10: HV PROT	0
101: WDT	24

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

Numeral "0"
means that no fault was detected.

Numeral "1"
means a fault was detected one time only.

Self-Diagnosis Screen Display

The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to " 0 " .

If the results display is not returned to " 0 " it will not be possible to judge a new malfunction after completing repairs.

Method of Clearing Results Display

1. Power off (Set to the stand by mode.)
2. [Display] → Channel [5] → Sound Volume [+] → Power ON (Service Mode)
3. Channel [8] → [ENTER] (Test reset = Factory preset condition)

Method of Ending Self Diagnosis Screen

When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

Self-Diagnosis Function Operation

+B overcurrent (OCP)

Occurs when excessive current flows through R6812. The increase in voltage across Q6803 causes it to turn on which sends a high signal to the micro.

+B overvoltage (OVP)

IC6801 detects +B OVP condition and turns on Q6802. This sends a high signal to the micro and also shuts down the AC relay.

V-STOP

Occurs when an absence of the vertical deflection pulse is detected by pin 56 of IC452 (A Board). Power supply will shut down when waveform interval exceeds 2 seconds.

White Balance Failure

If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC452 (A Board). TV will stay on, but there will be no picture.

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

Low B OCP/OVP

Occurs when set 5V is out.

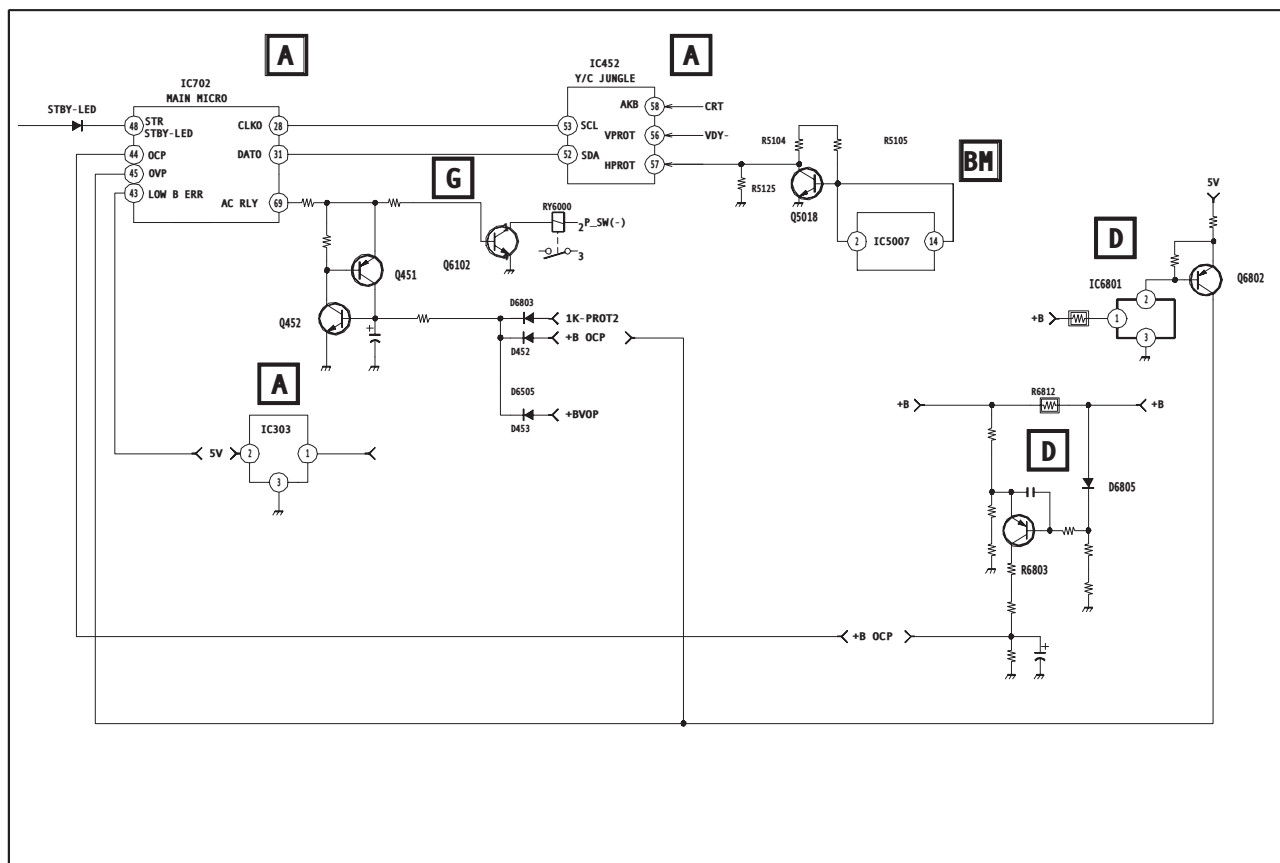
- Also check for : + 135V line shorted
- + 135V line is going over 145V

Horizontal Deflection Stopped

Occurs when either:

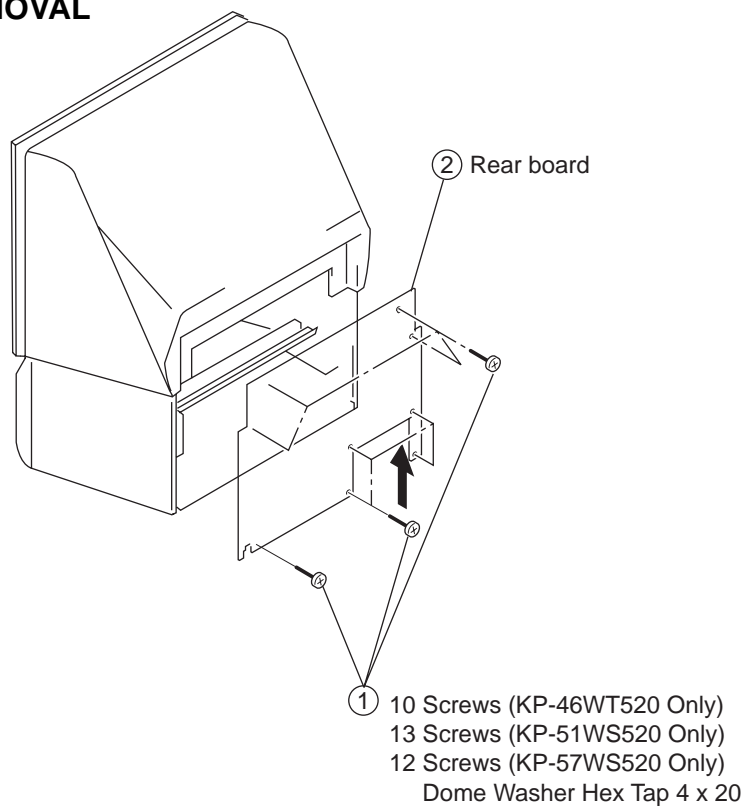
- 1) a +B overcurrent is detected (Q6803), or
- 2) IC452 (A Board) is damaged.

Self-Diagnosis Block Diagram

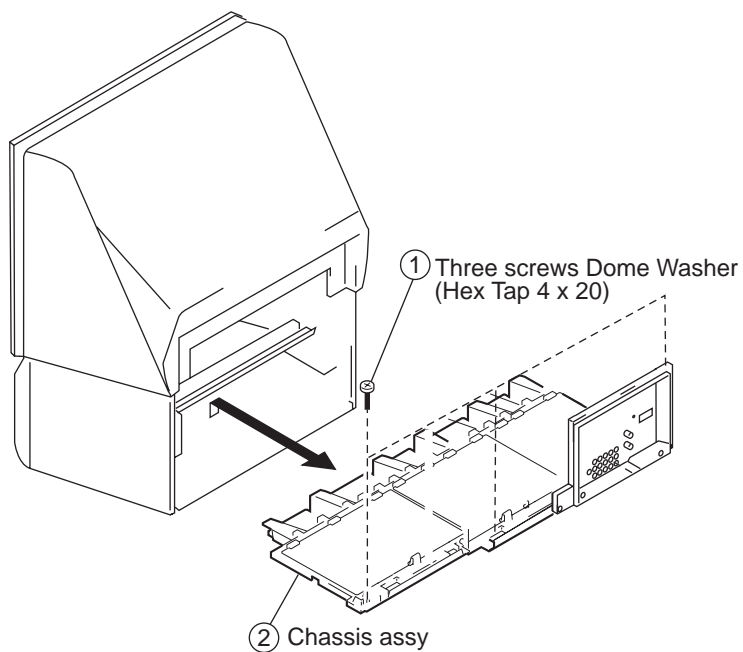


SECTION 1: DISASSEMBLY

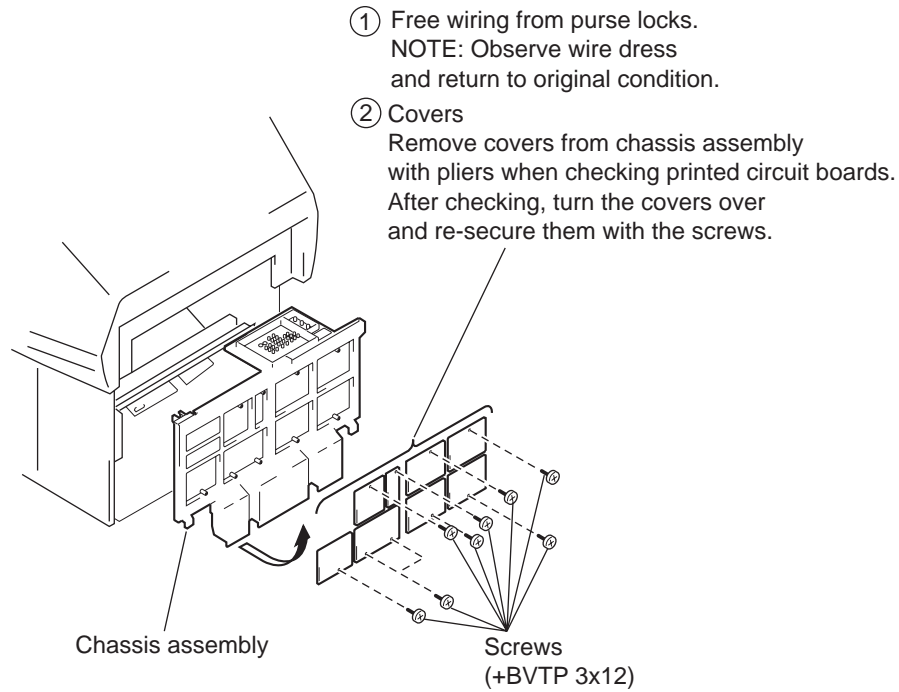
1-1. REAR BOARD REMOVAL



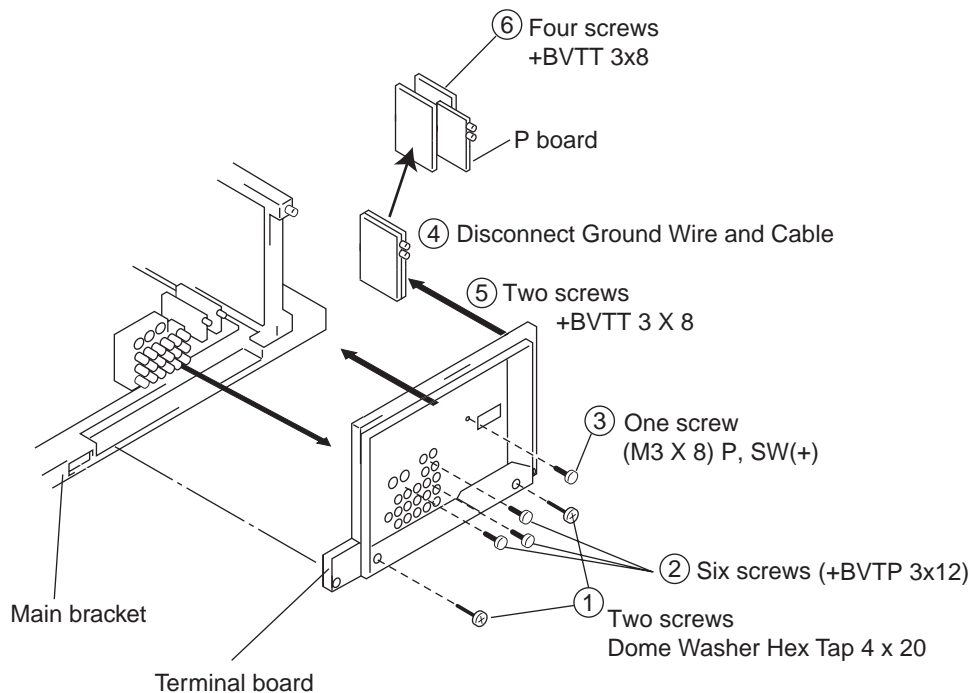
1-2. CHASSIS ASSEMBLY REMOVAL



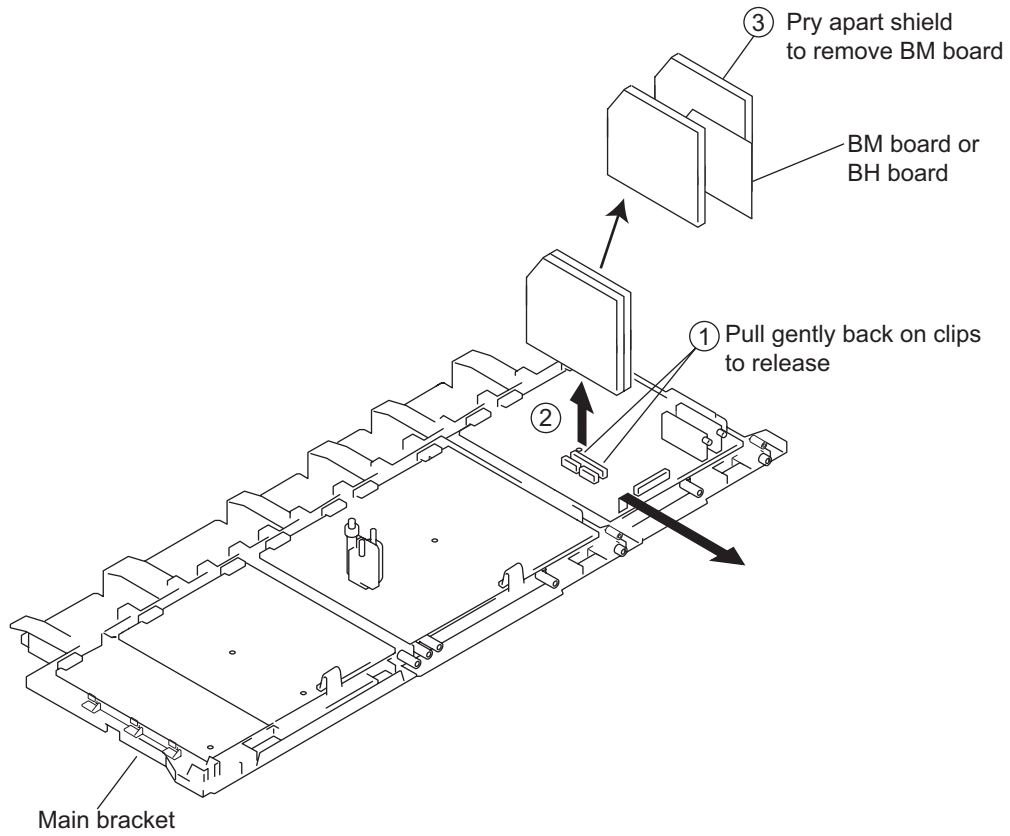
1-3. SERVICE POSITION



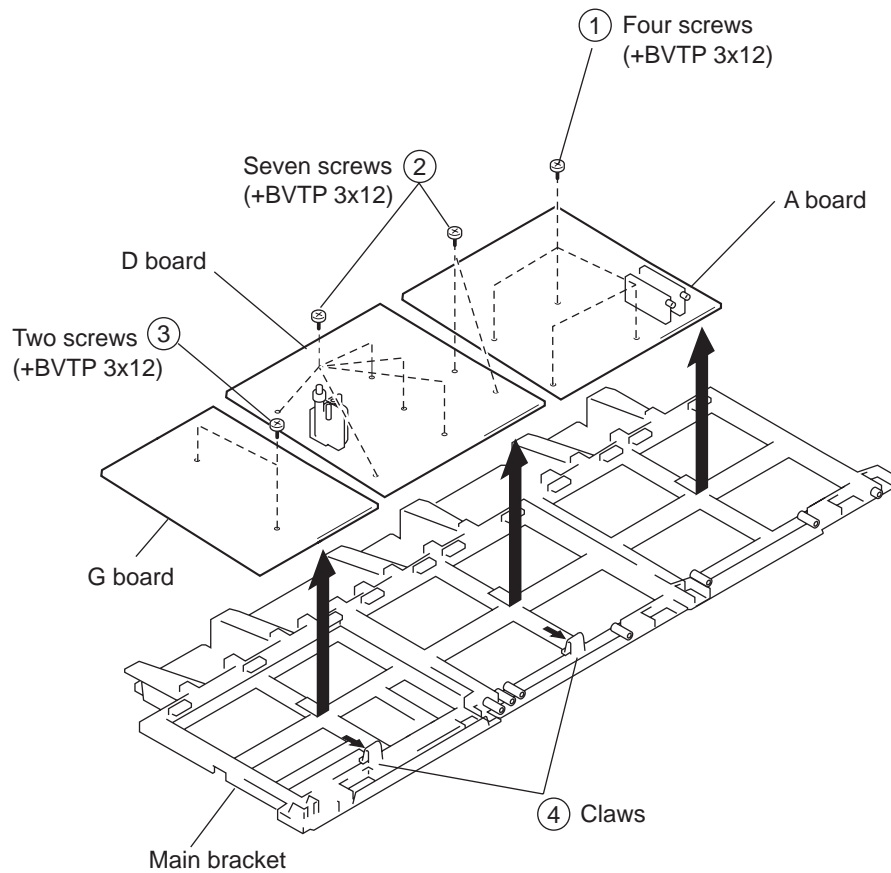
1-4. TERMINAL BOARD AND P BOARD REMOVAL



1-5. BM BOARD OR BH BOARD REMOVAL

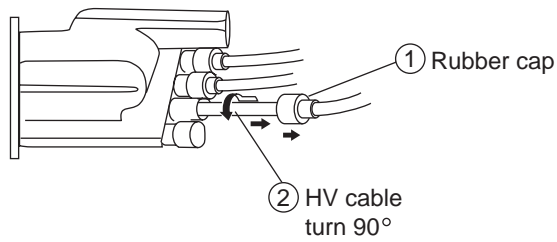


1-6. A BOARD, D BOARD, AND G BOARD REMOVAL

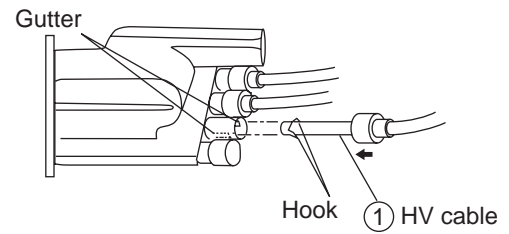


1-7. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

(1) Removal

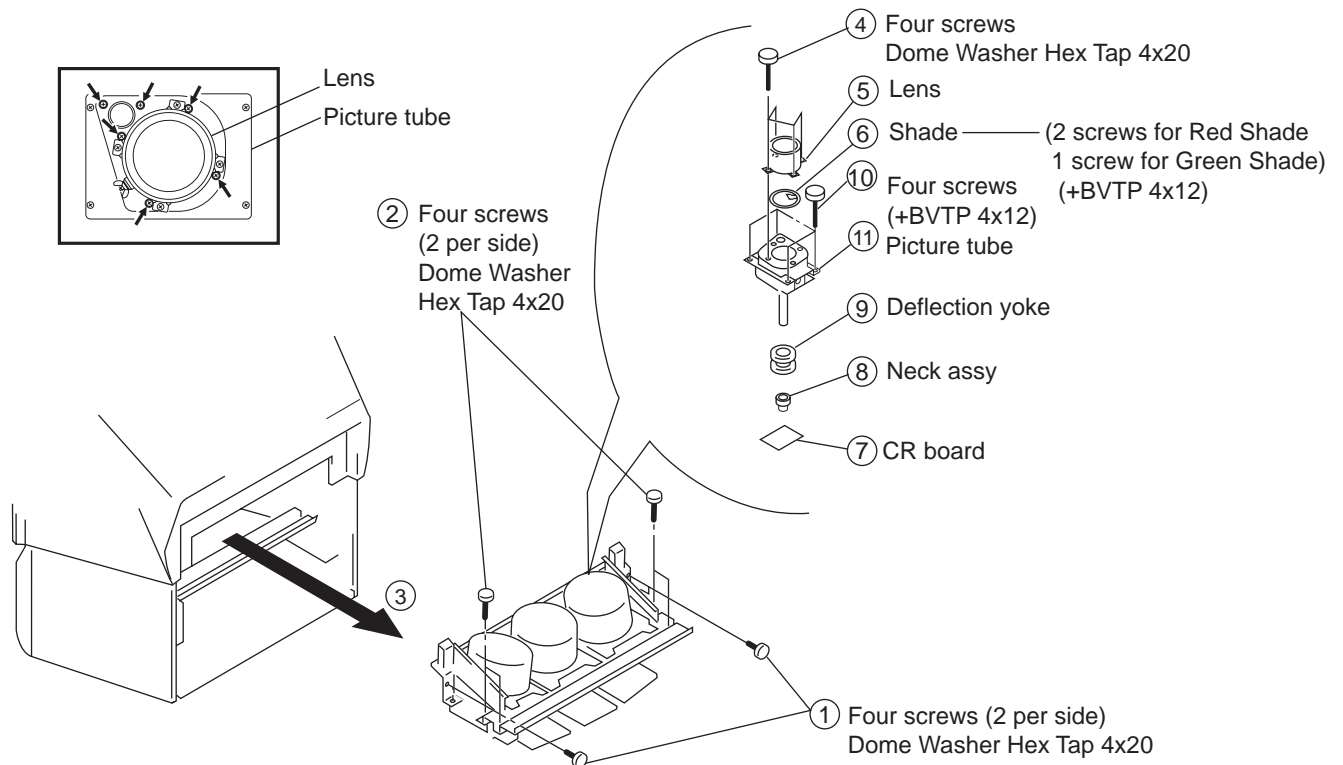


(2) Installation

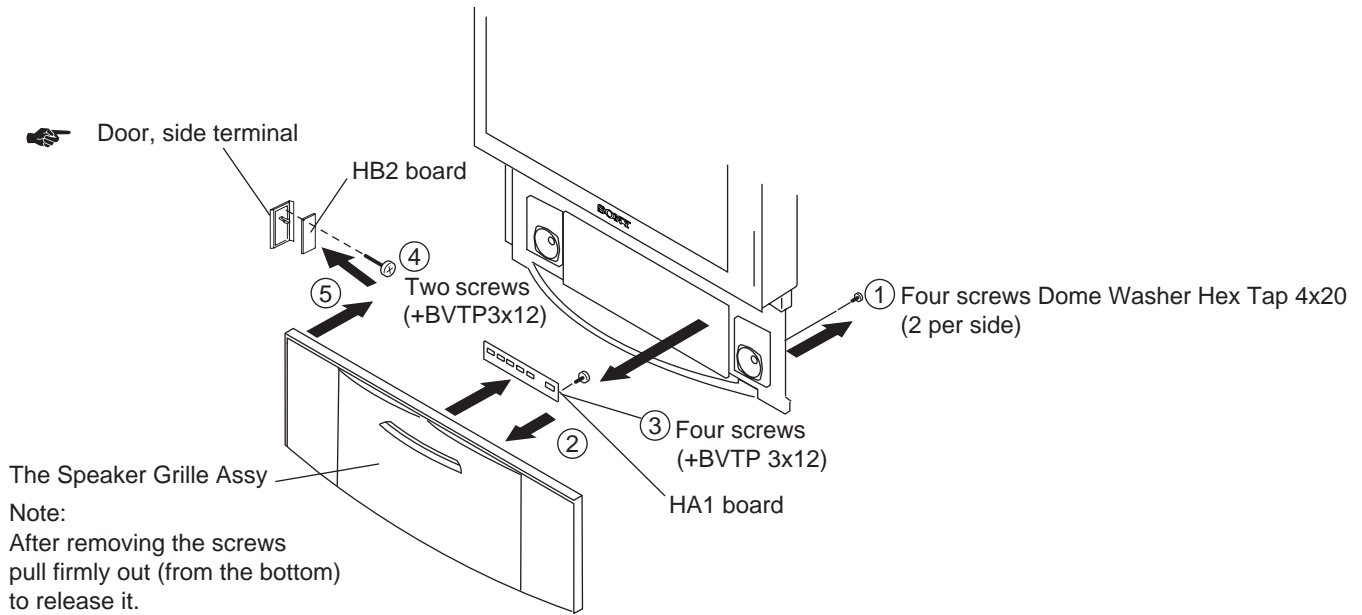


1-8. PICTURE TUBE REMOVAL

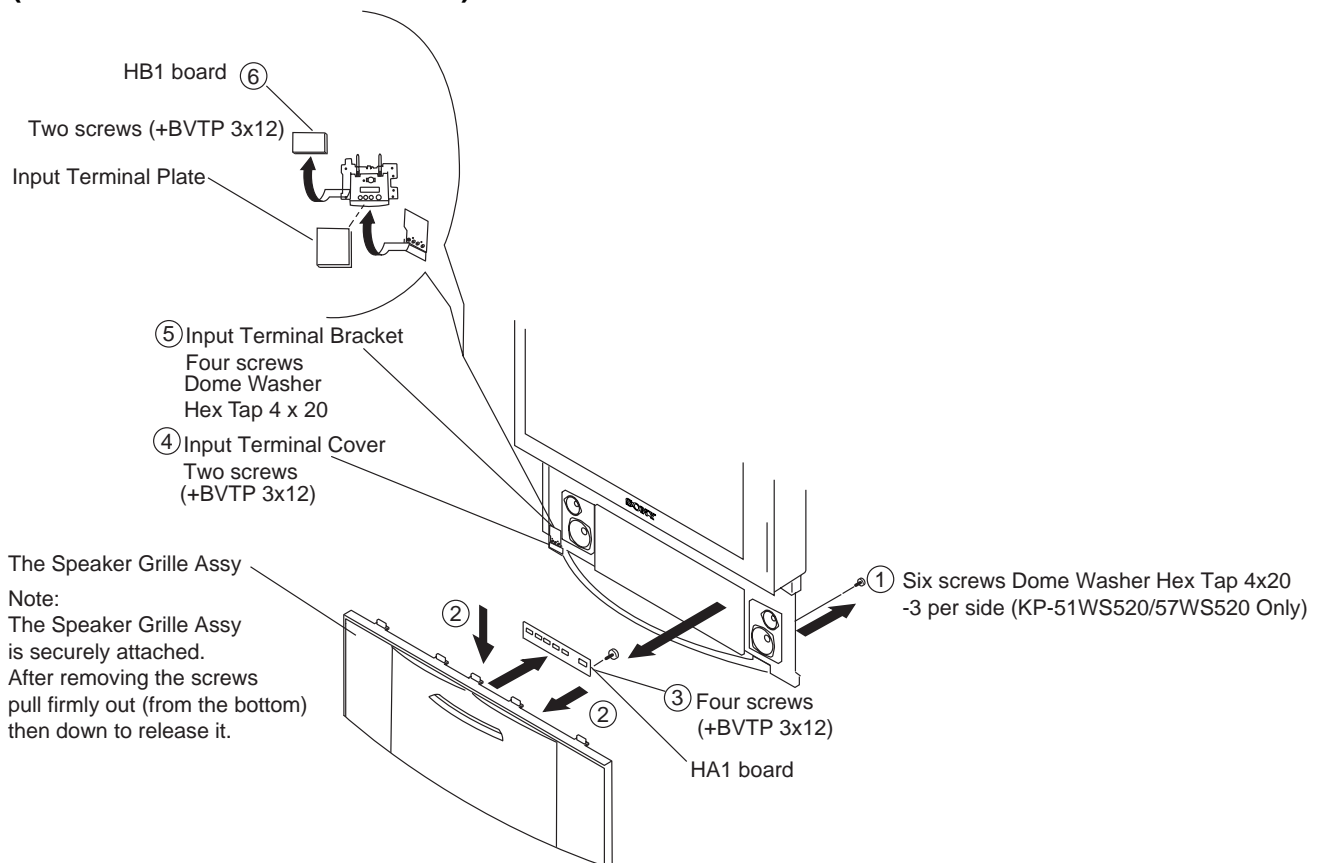
CAUTION: Removing the arrow-marked screws is strictly prohibited. If removed, it may cause liquid to spill.



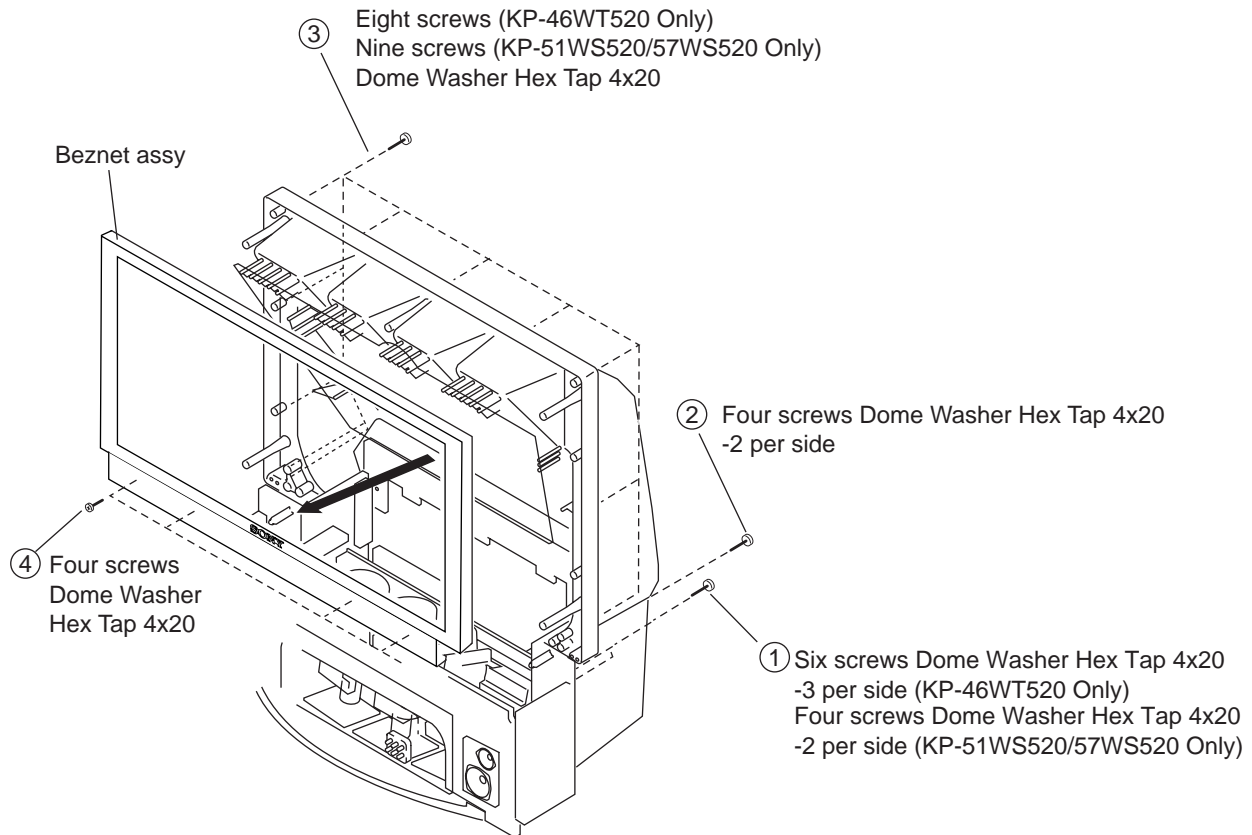
1-9. SPEAKER GRILLE, HA1 BOARD, AND HB2 BOARD REMOVAL (KP-46WT520 ONLY)



1-10. SPEAKER GRILLE, HA1 BOARD, AND HB1 BOARD REMOVAL (KP-51WS520/57WS520 ONLY)

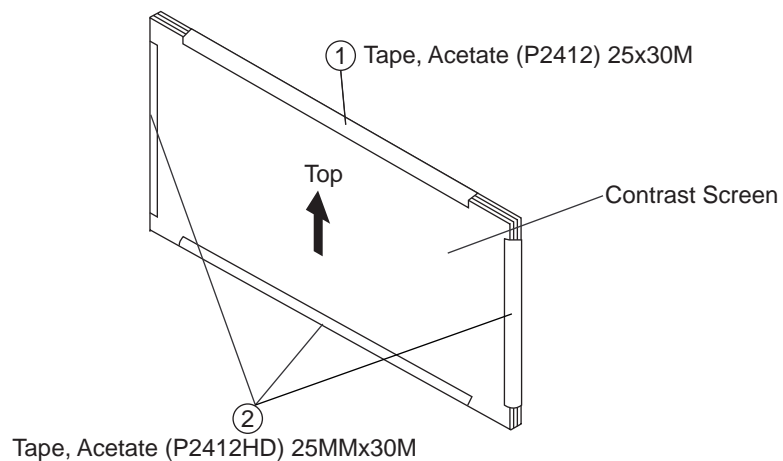


1-11.BEZNET ASSEMBLY REMOVAL



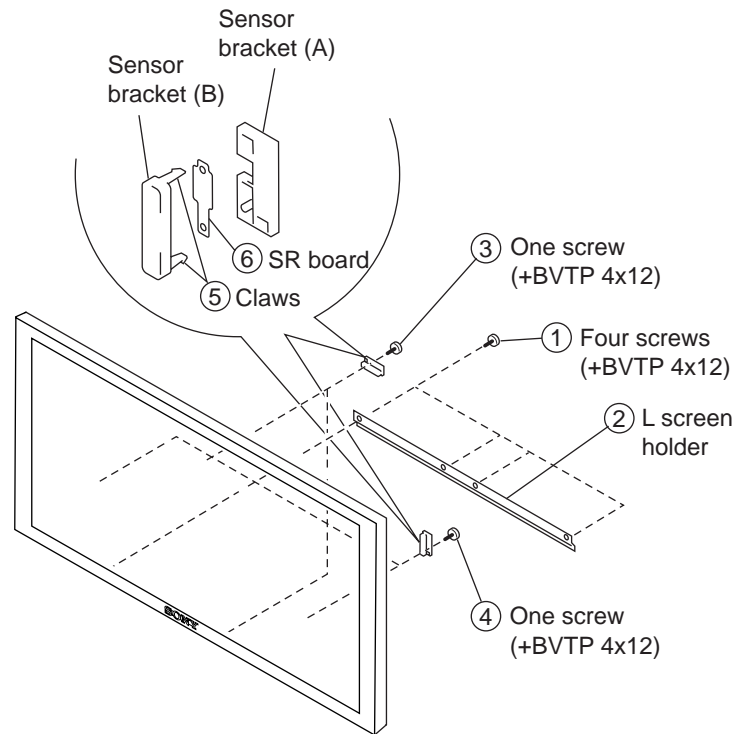
1-11-1.SCREEN TAPE METHOD

The following demonstrates the taping method when replacing the Contrast Screen or Diffusion Plates.
For Part Numbers refer to the Miscellaneous section in the back of the manual.



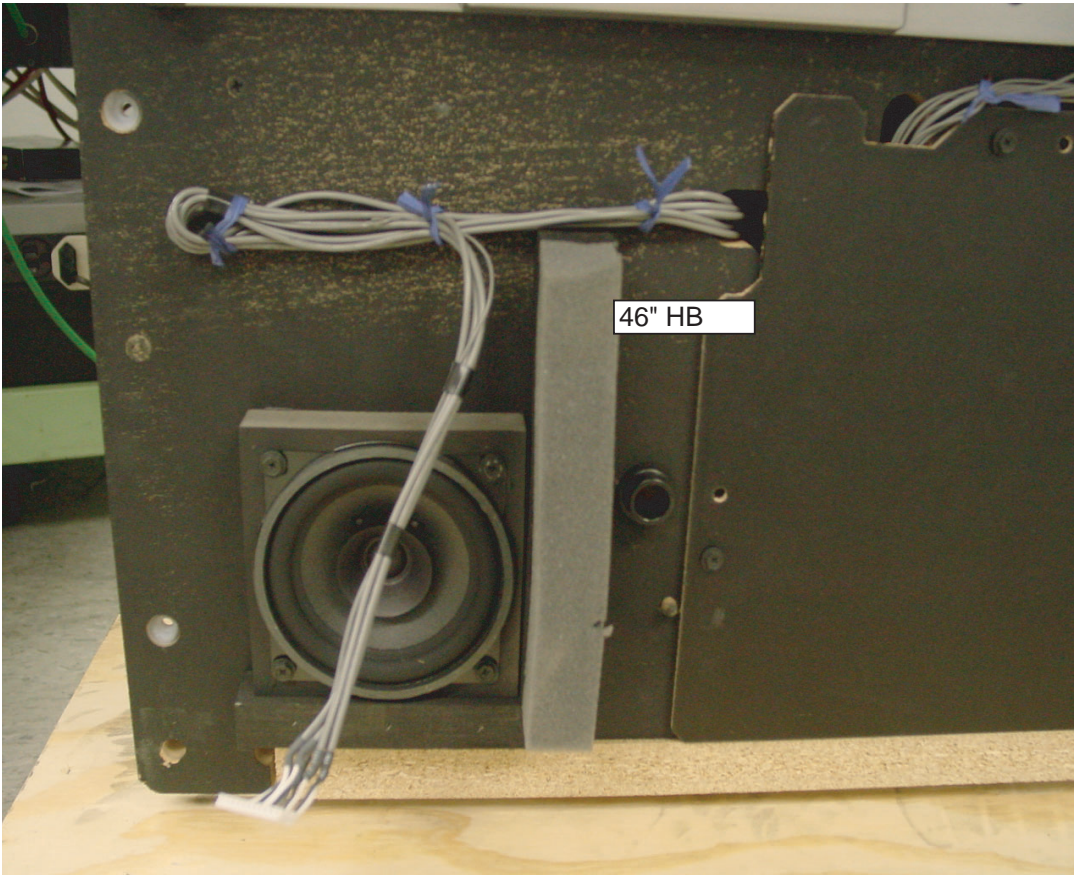
1-12.SR BOARD REMOVAL

The Screen Holder does not need to be removed in order to remove the SR boards.

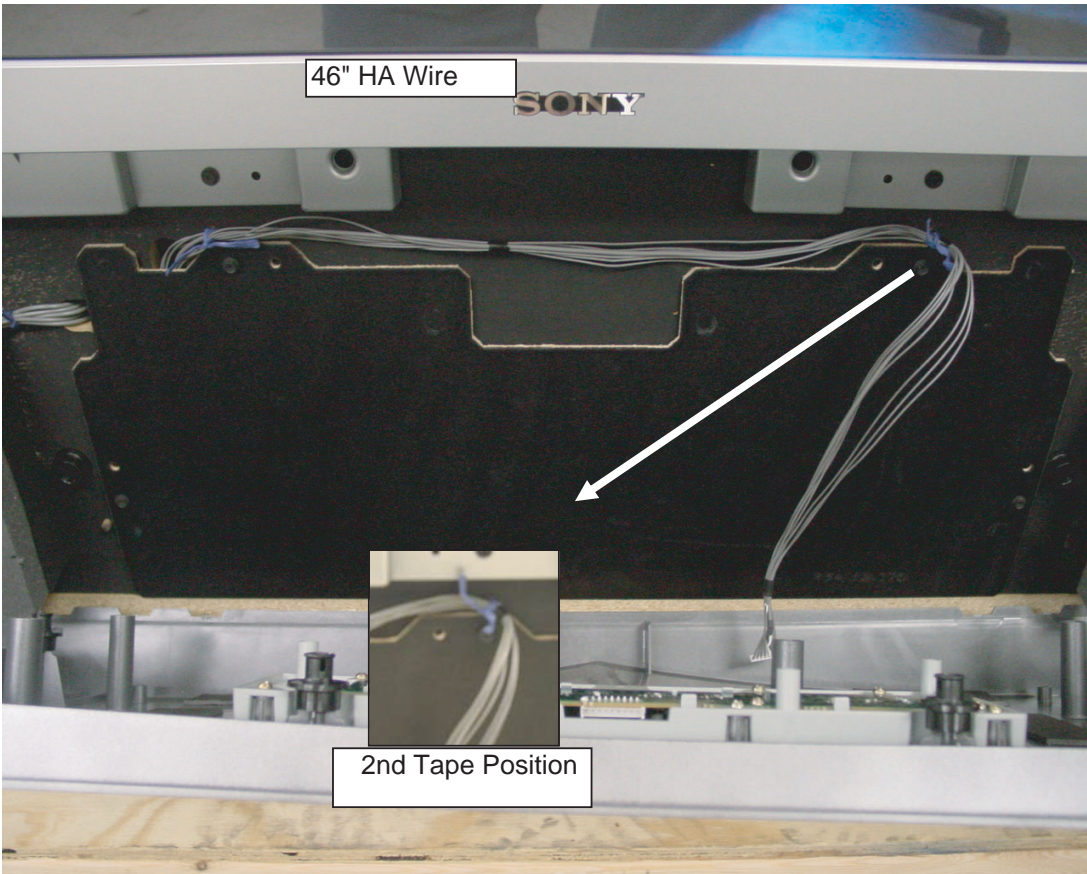


WIRE DRESSING

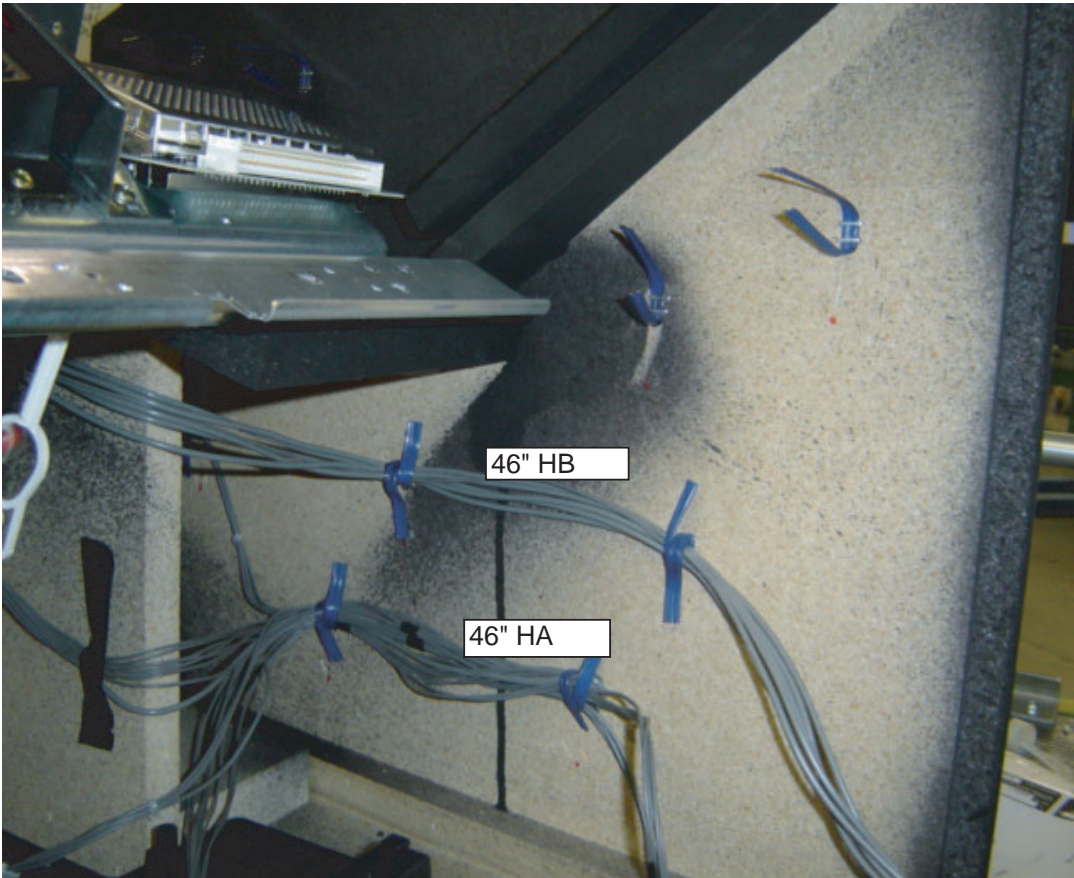
46 Cabinet



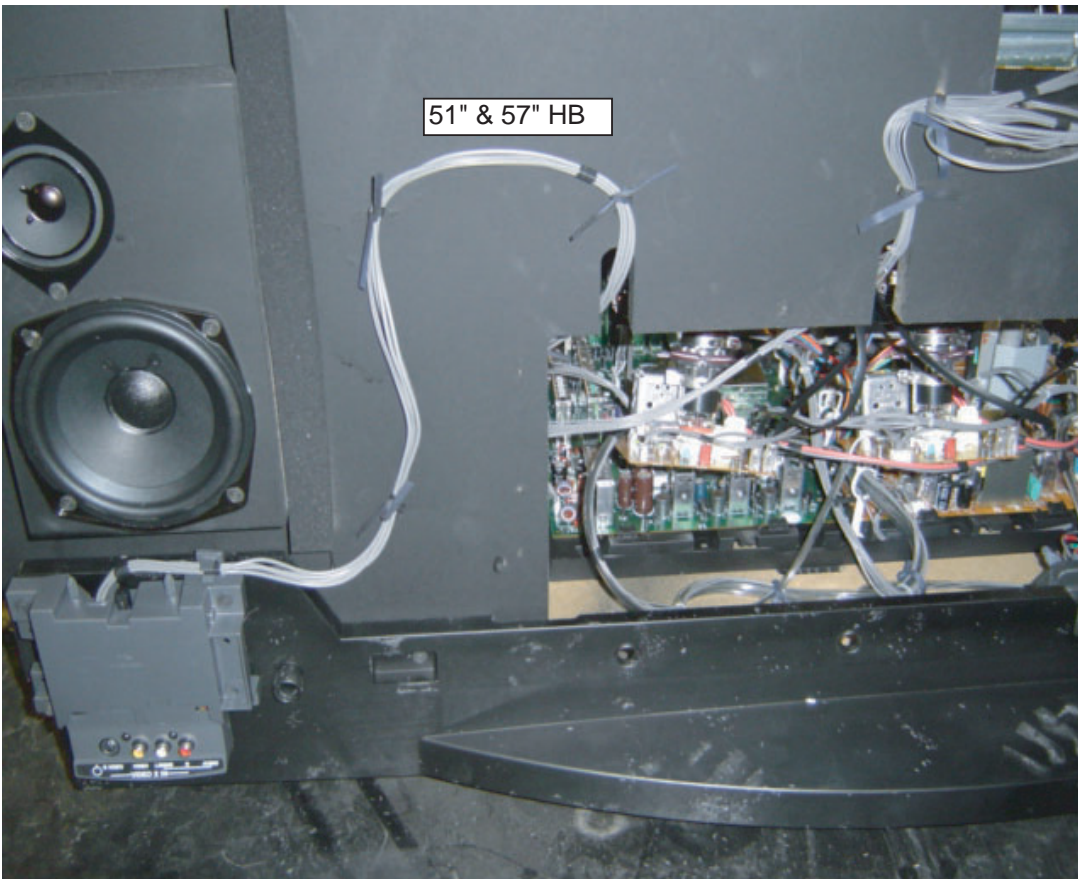
46 Cabinet



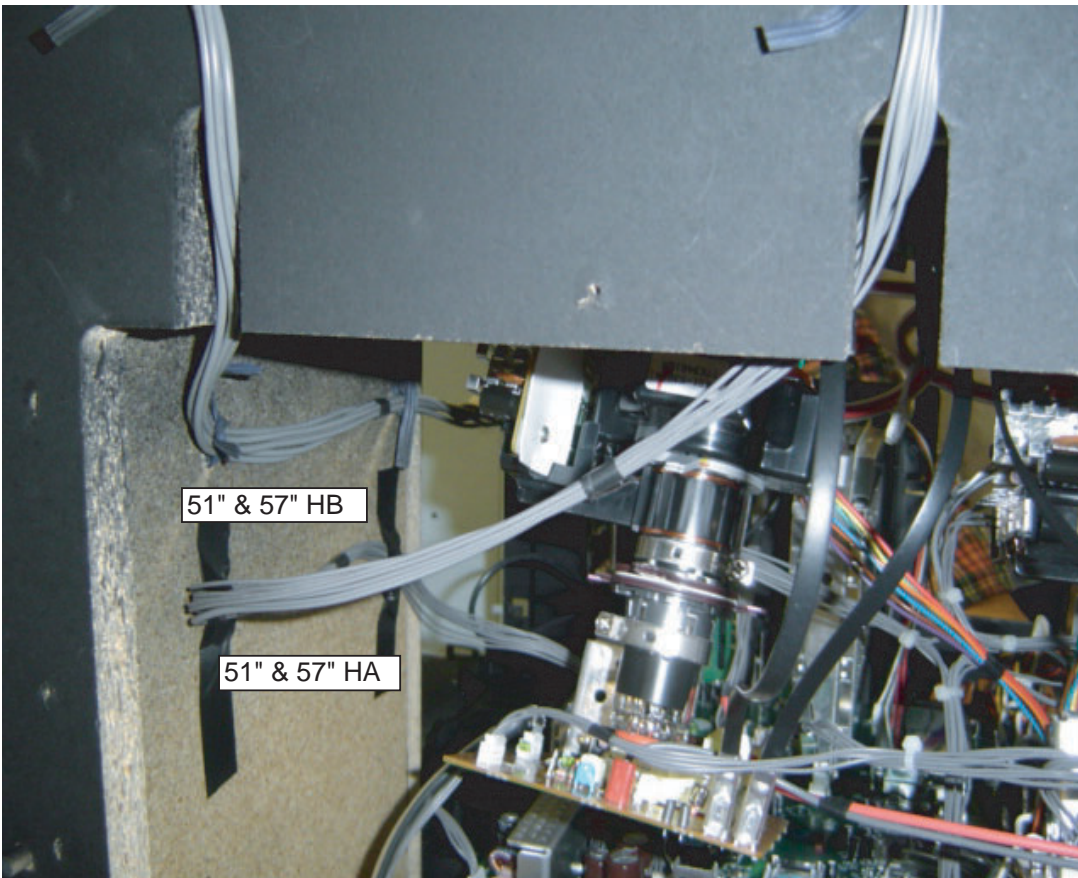
46 Cabinet



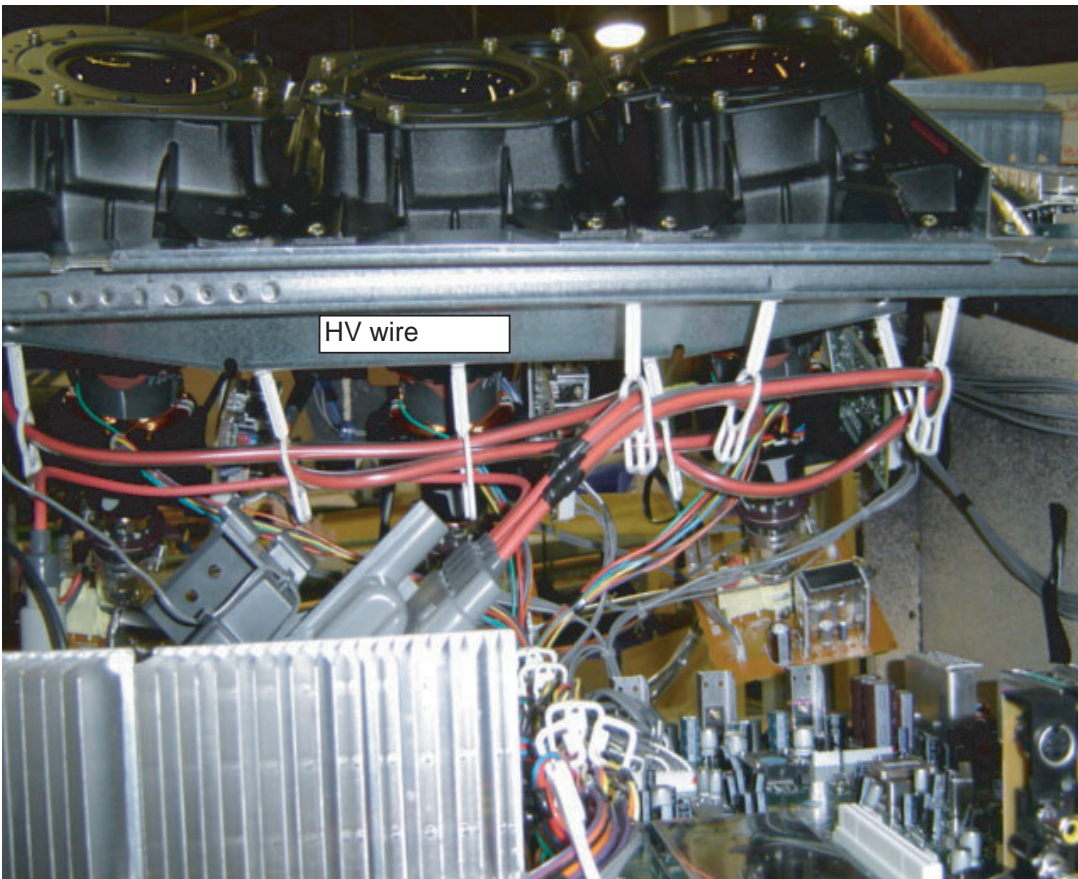
51 & 57 Cabinet



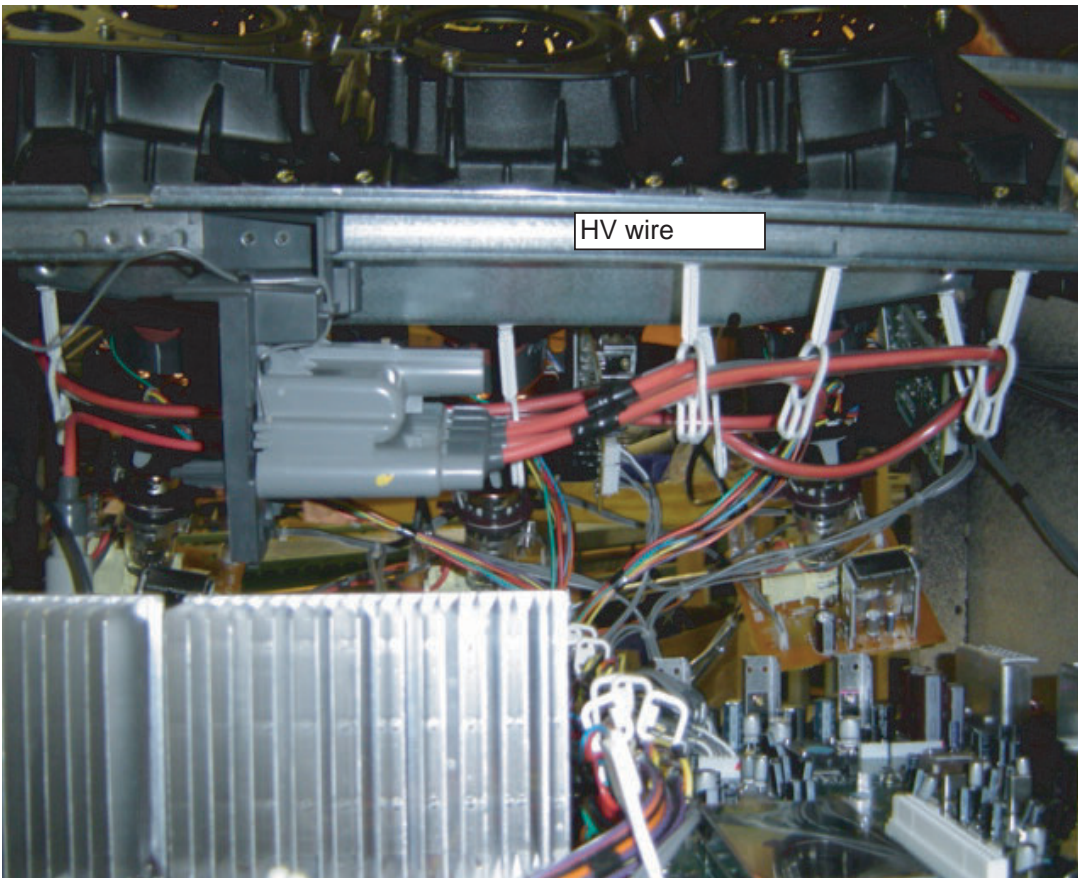
51 & 57 Cabinet



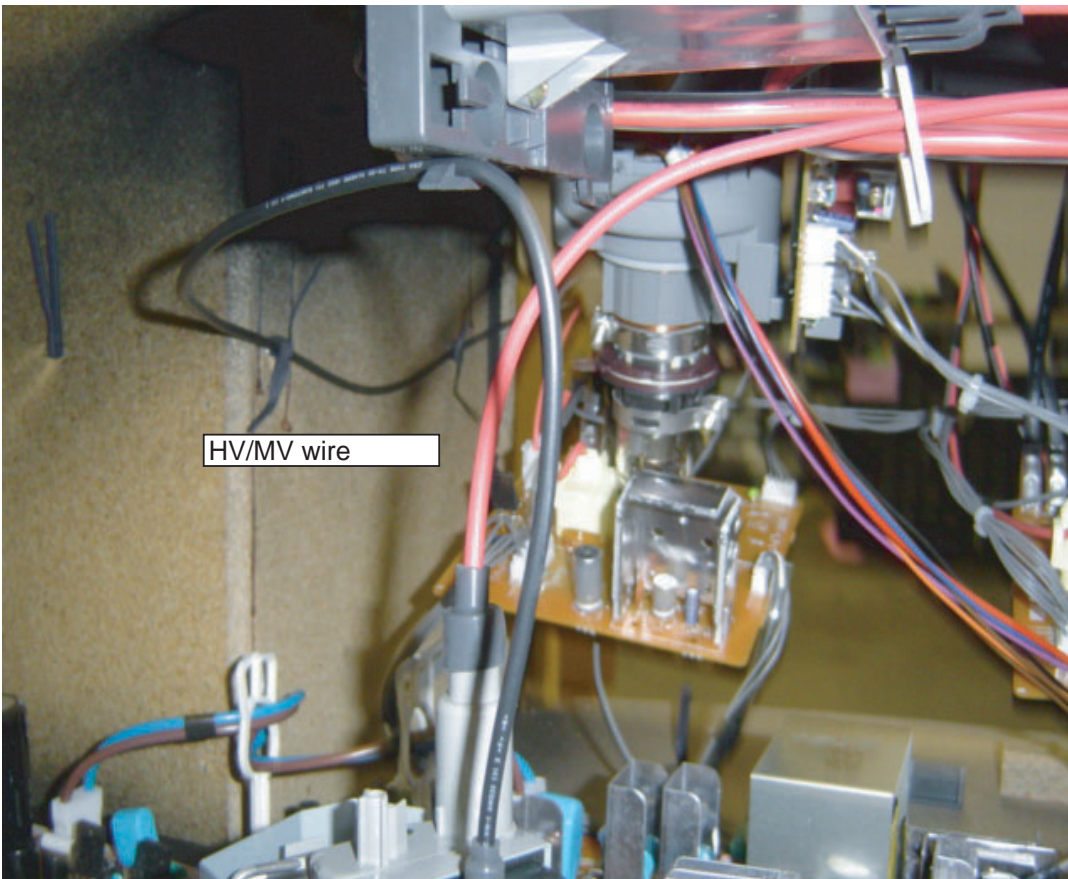
HV Wire



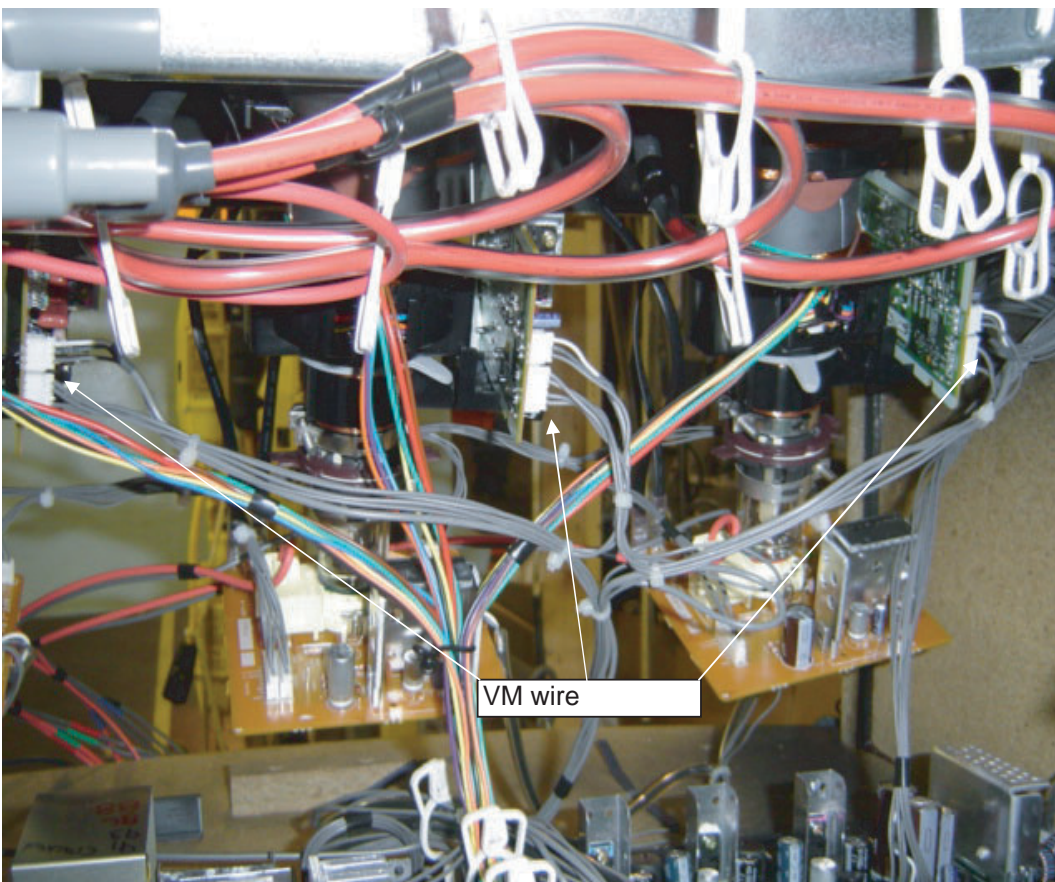
HV Wire



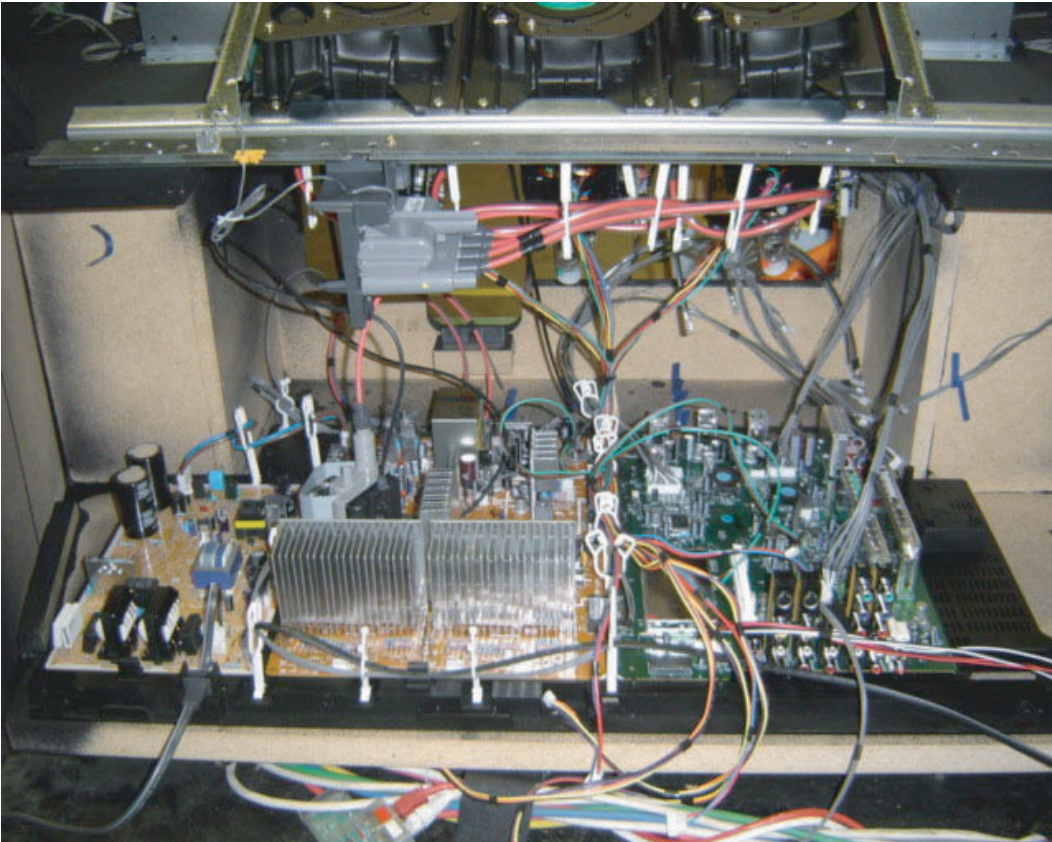
HV/MV Wire



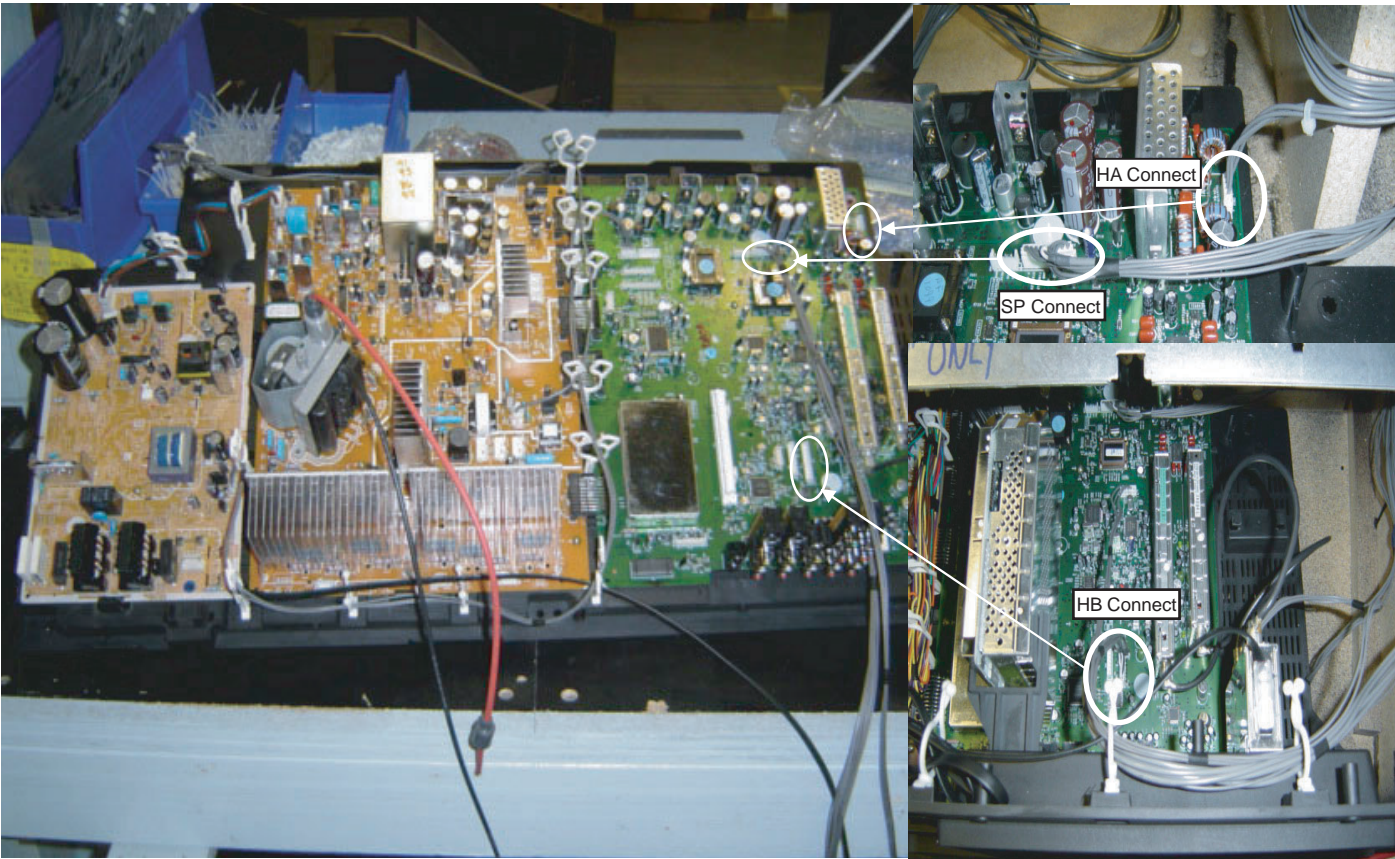
VM Connect



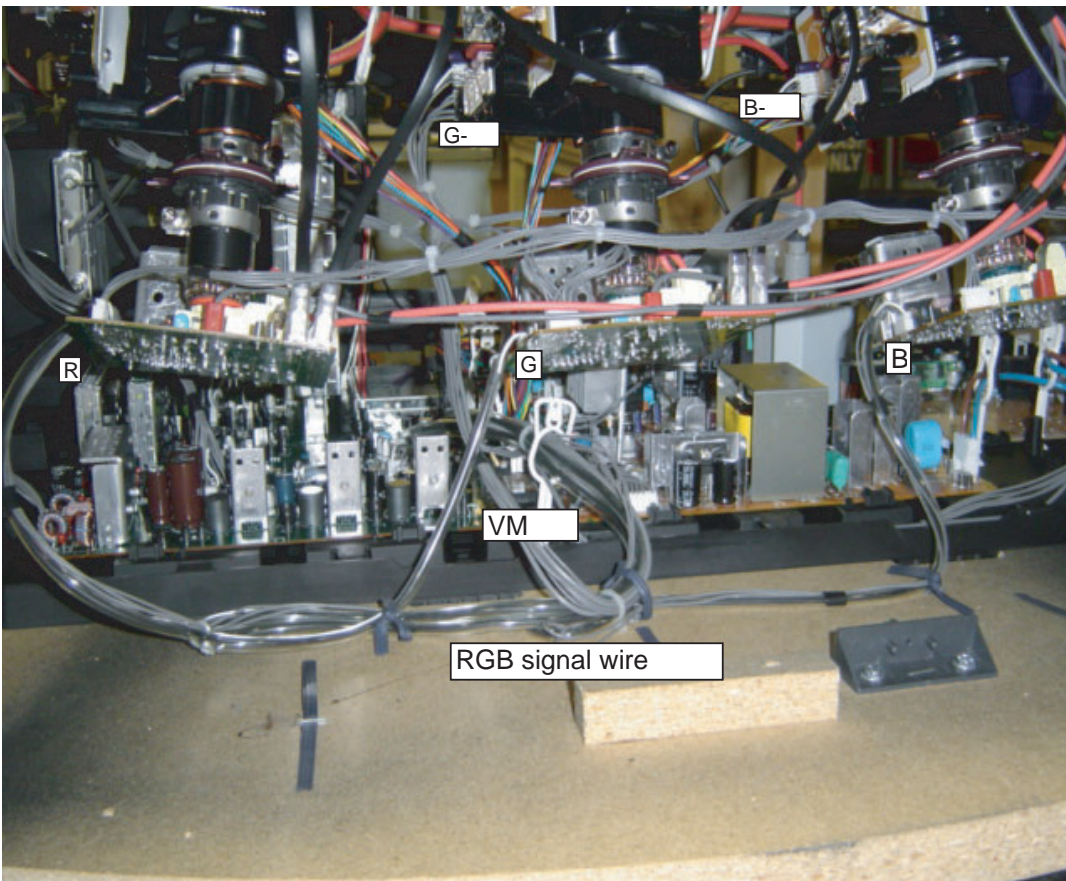
PWB Block Docking



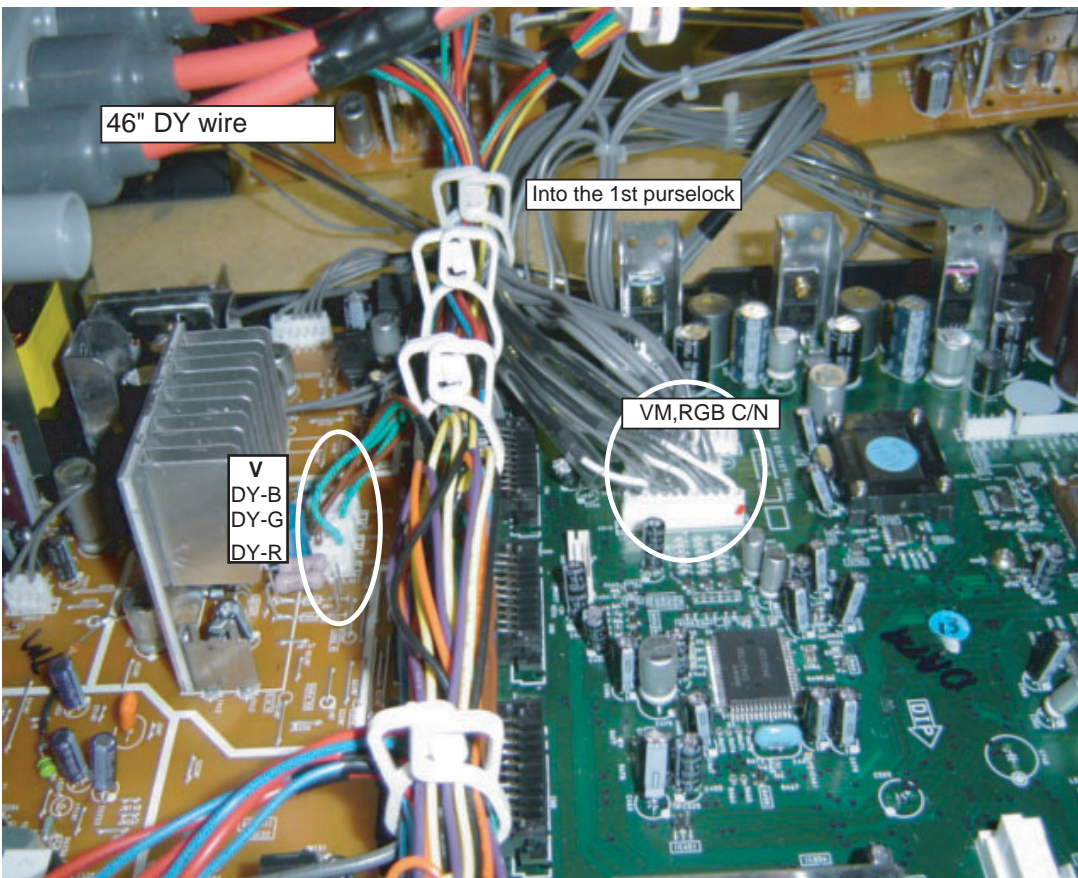
PWB Block Docking



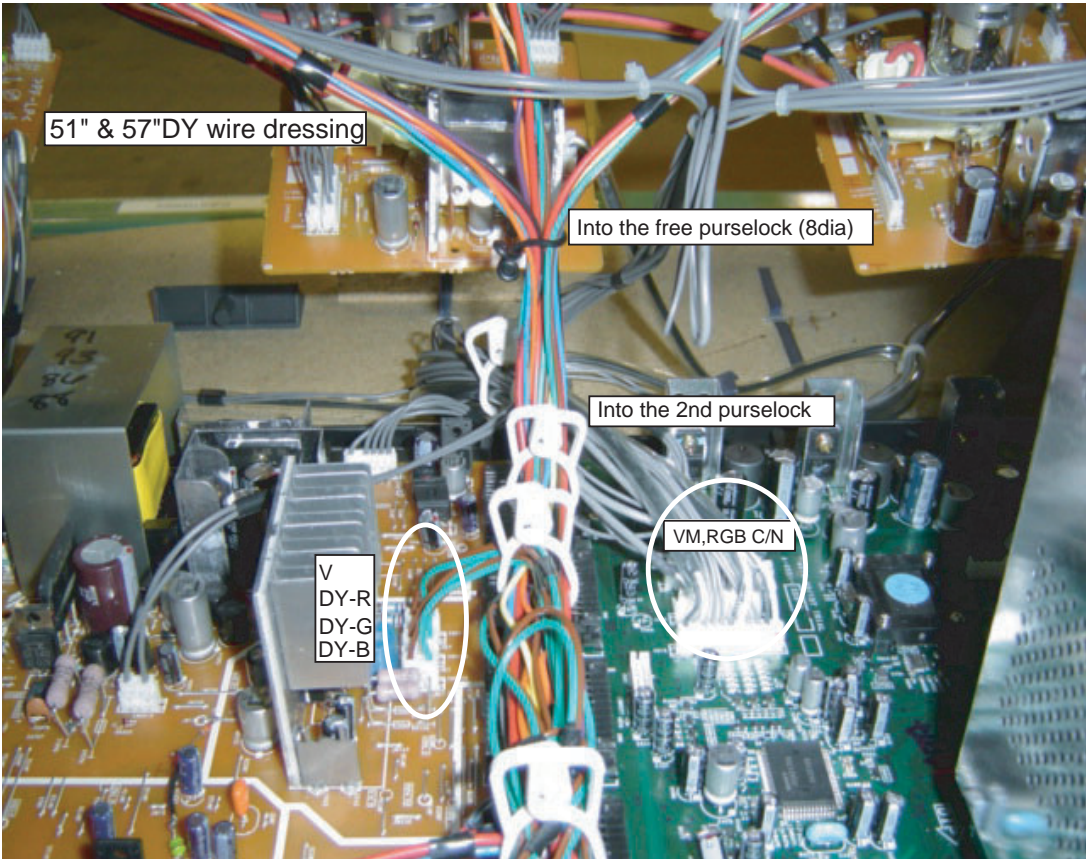
C, FP Connect



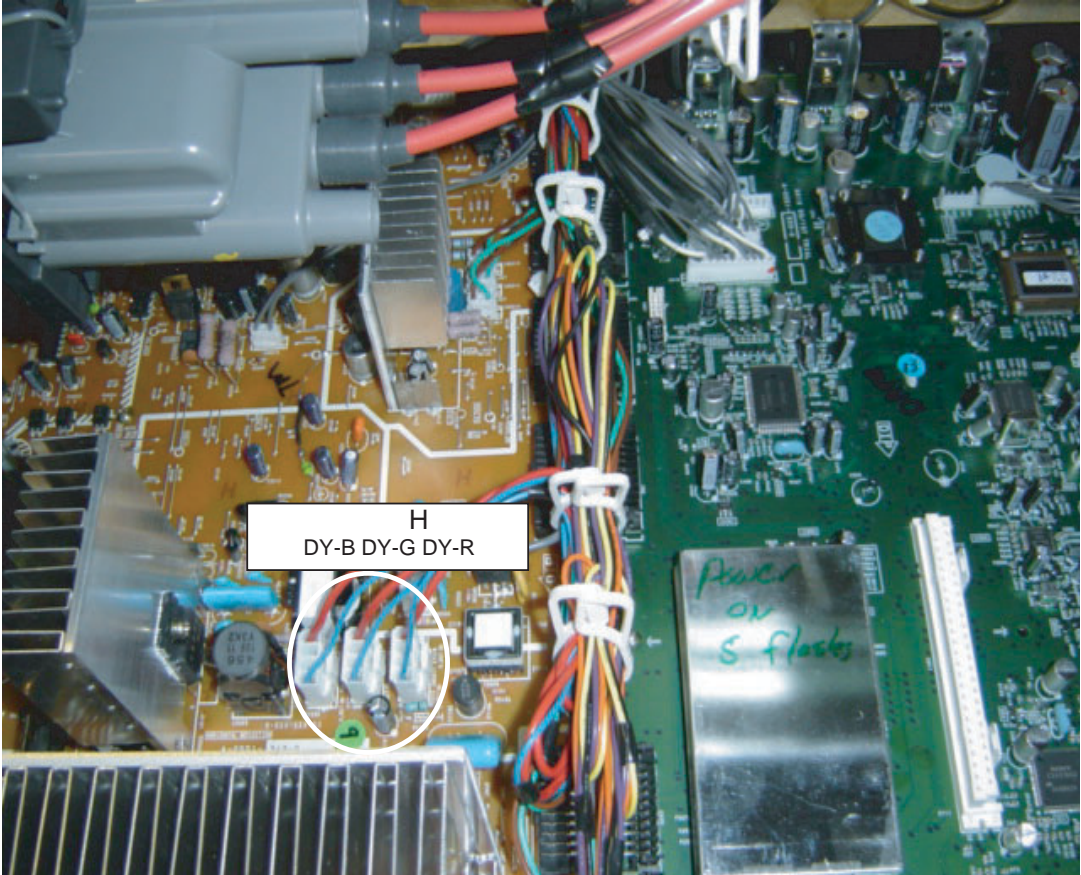
46 DY



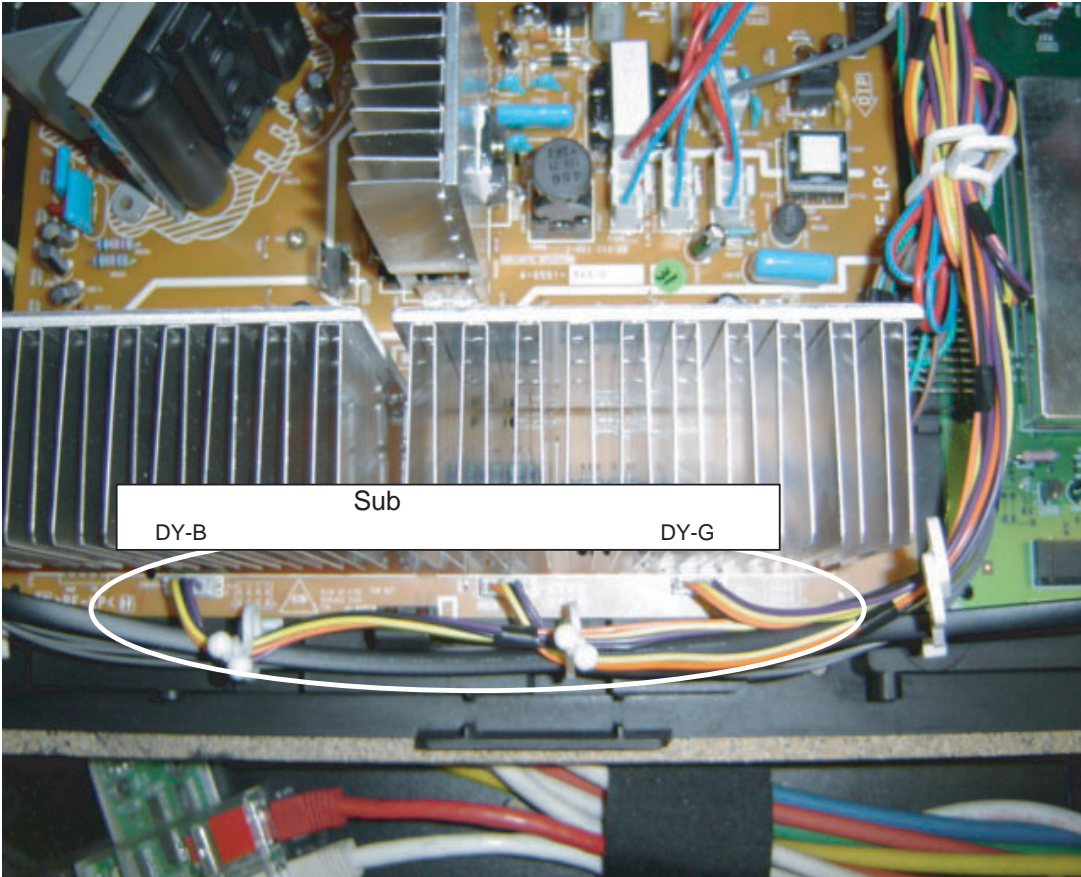
51 & 57 DY



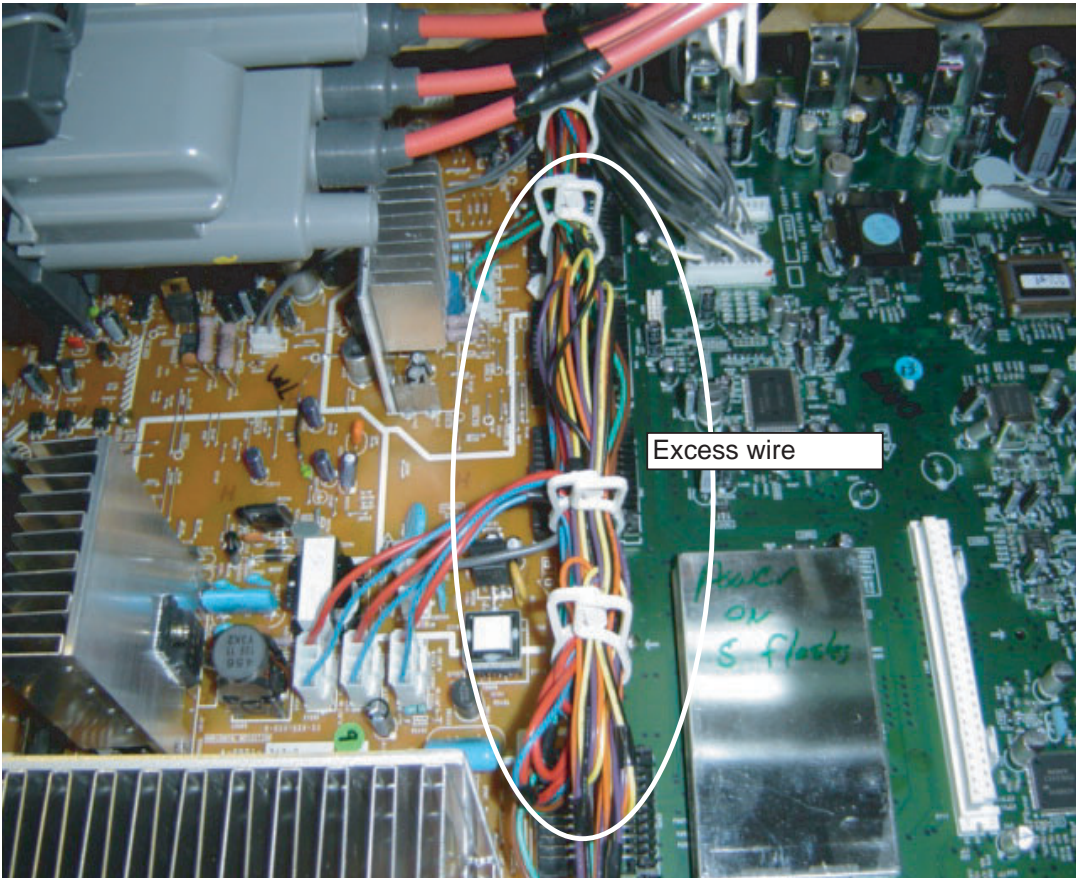
DY



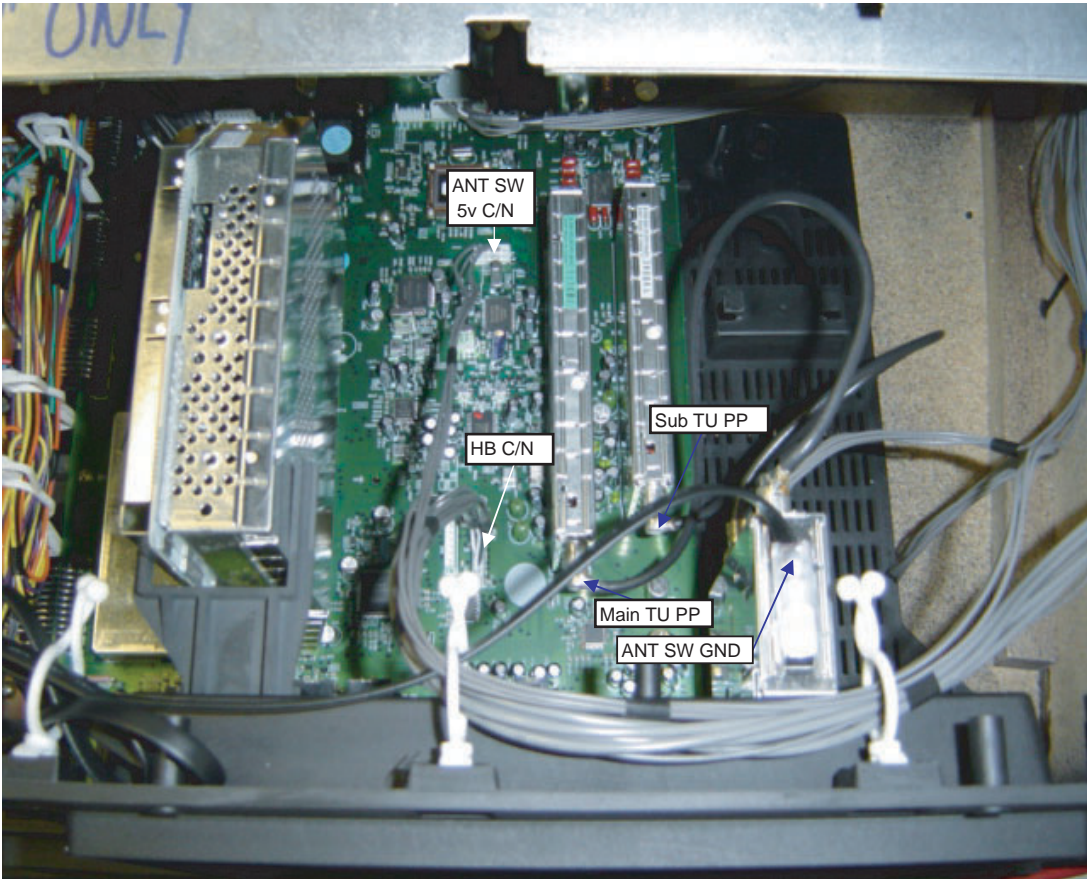
DY



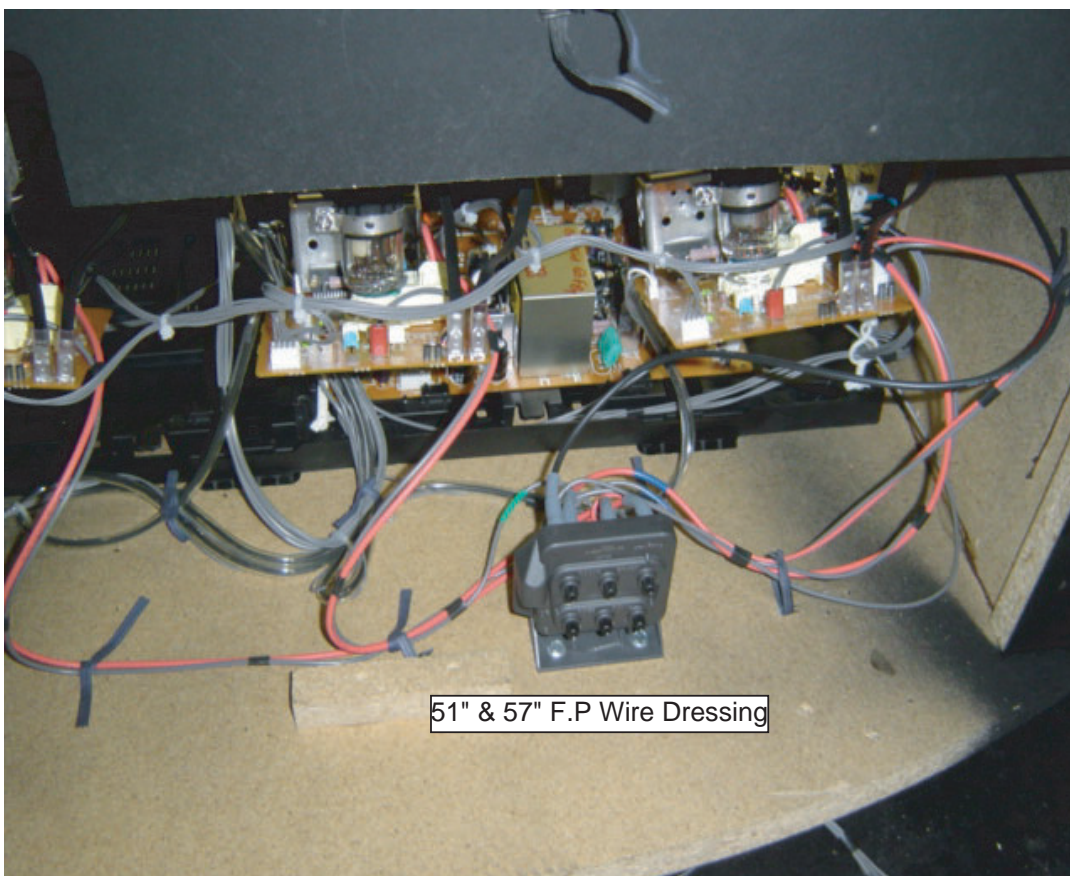
DY



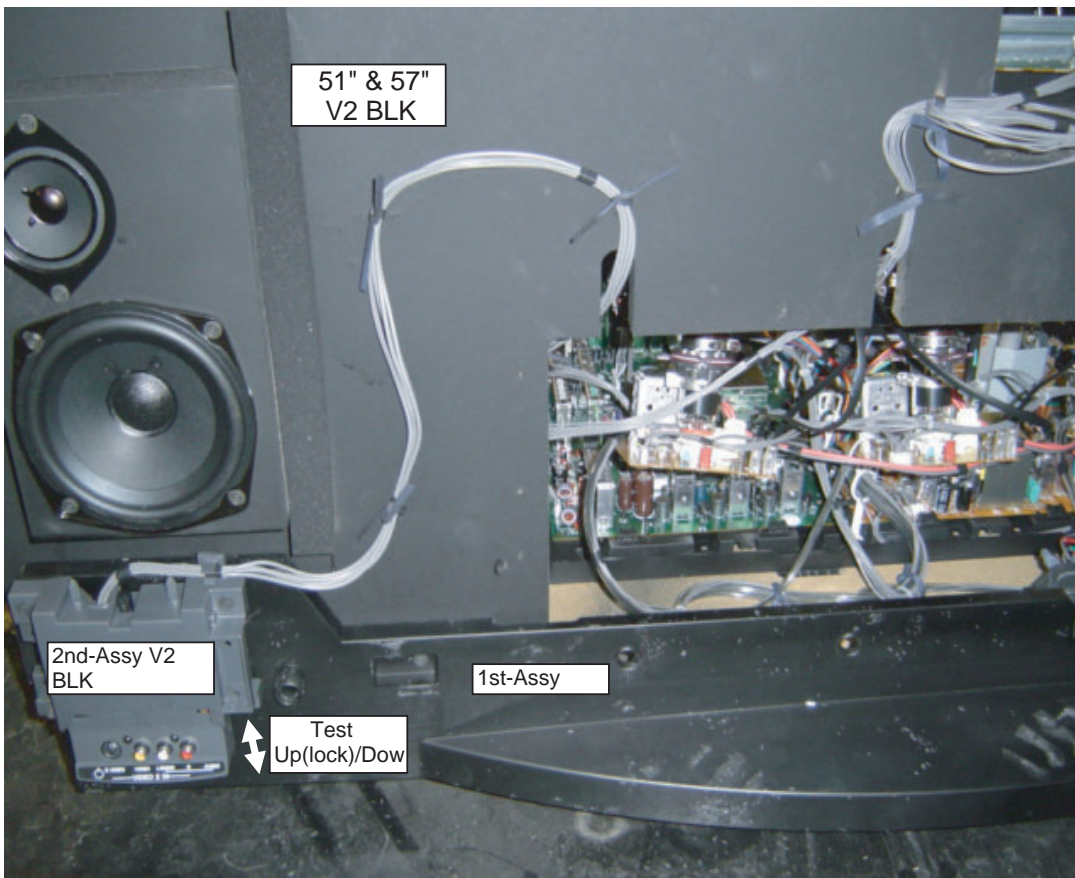
Terminal Bracket Assy



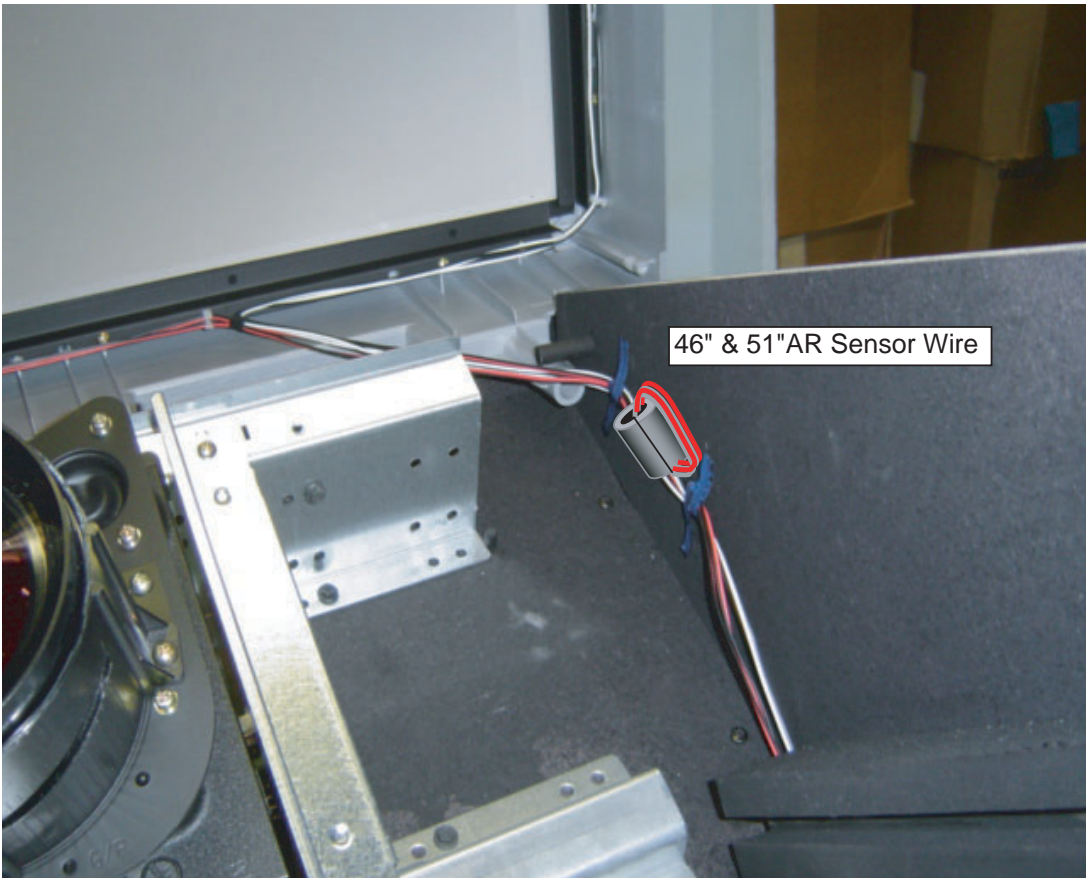
F.P



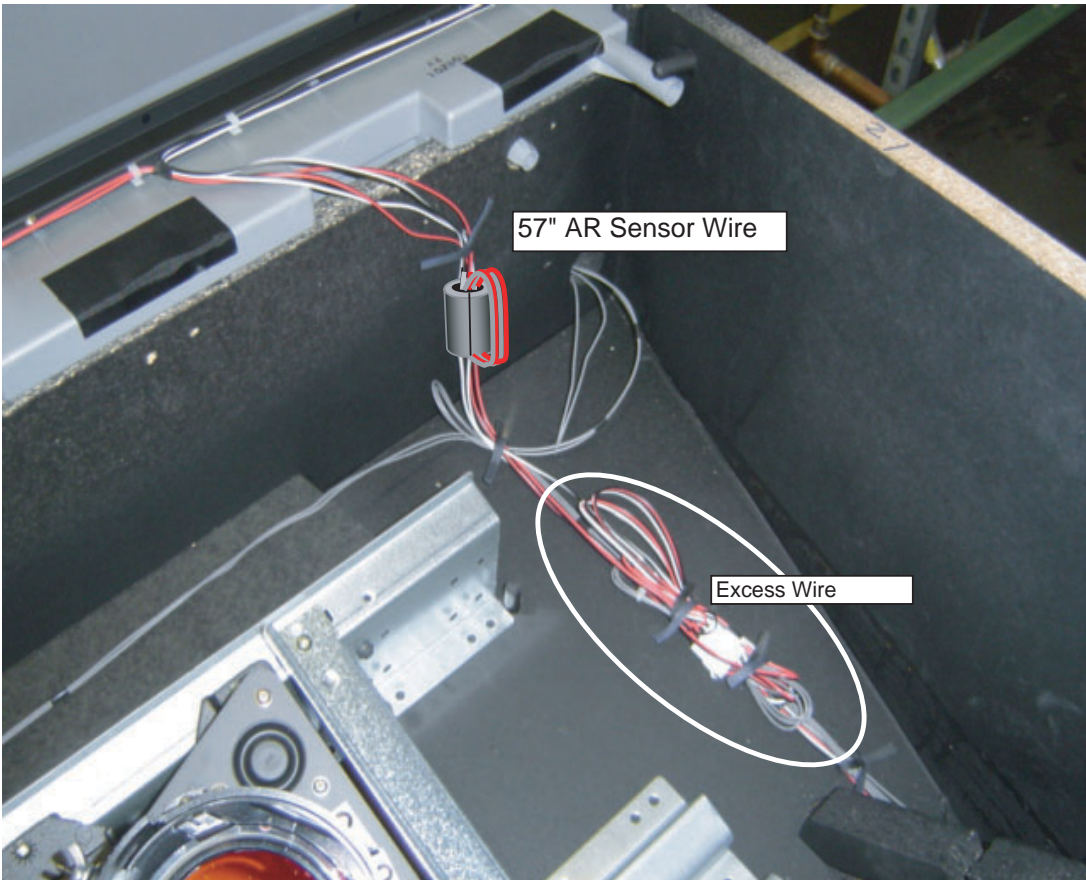
51 & 57 V2 Block Assy



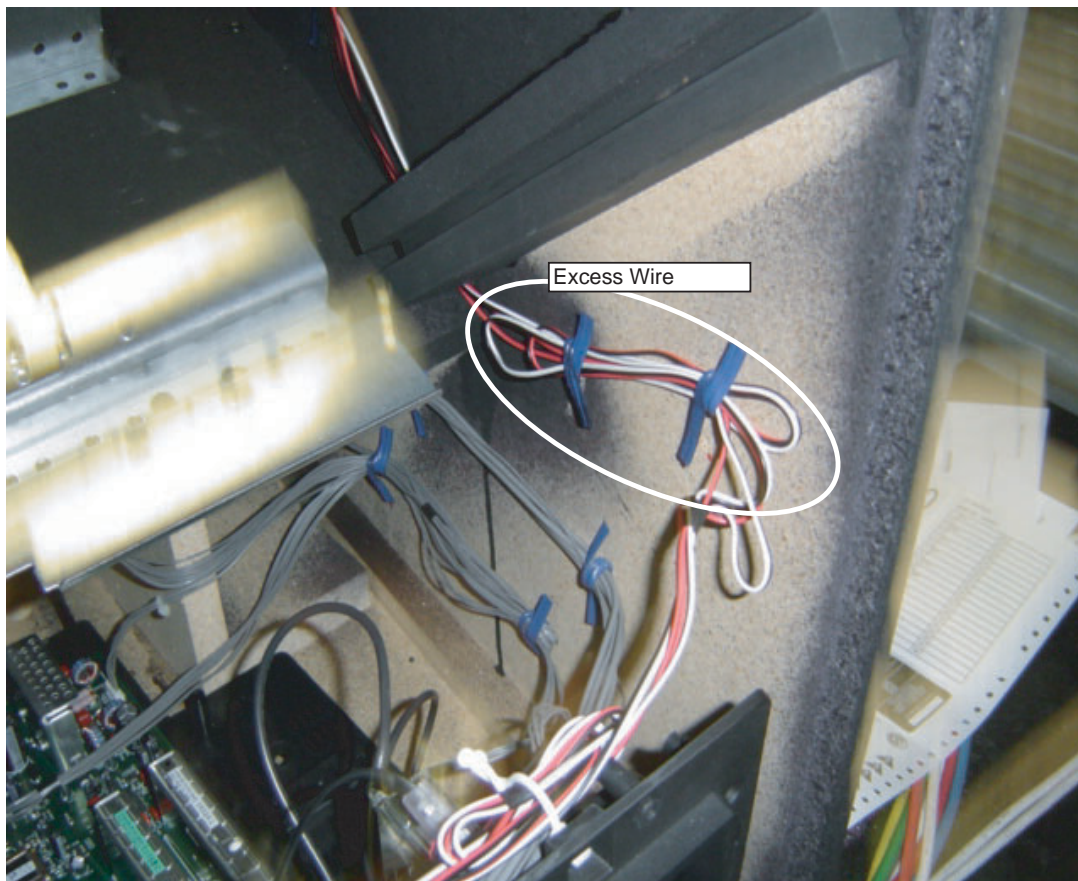
AR Sensor



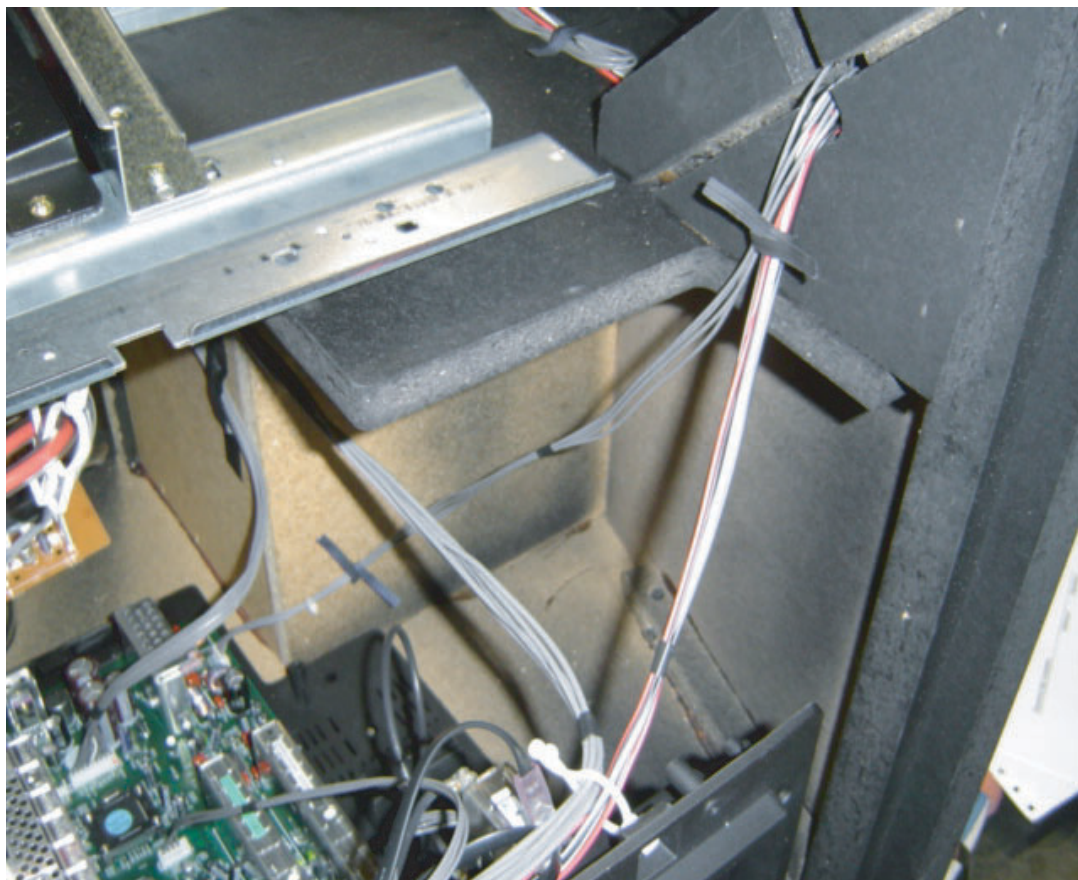
AR Sensor



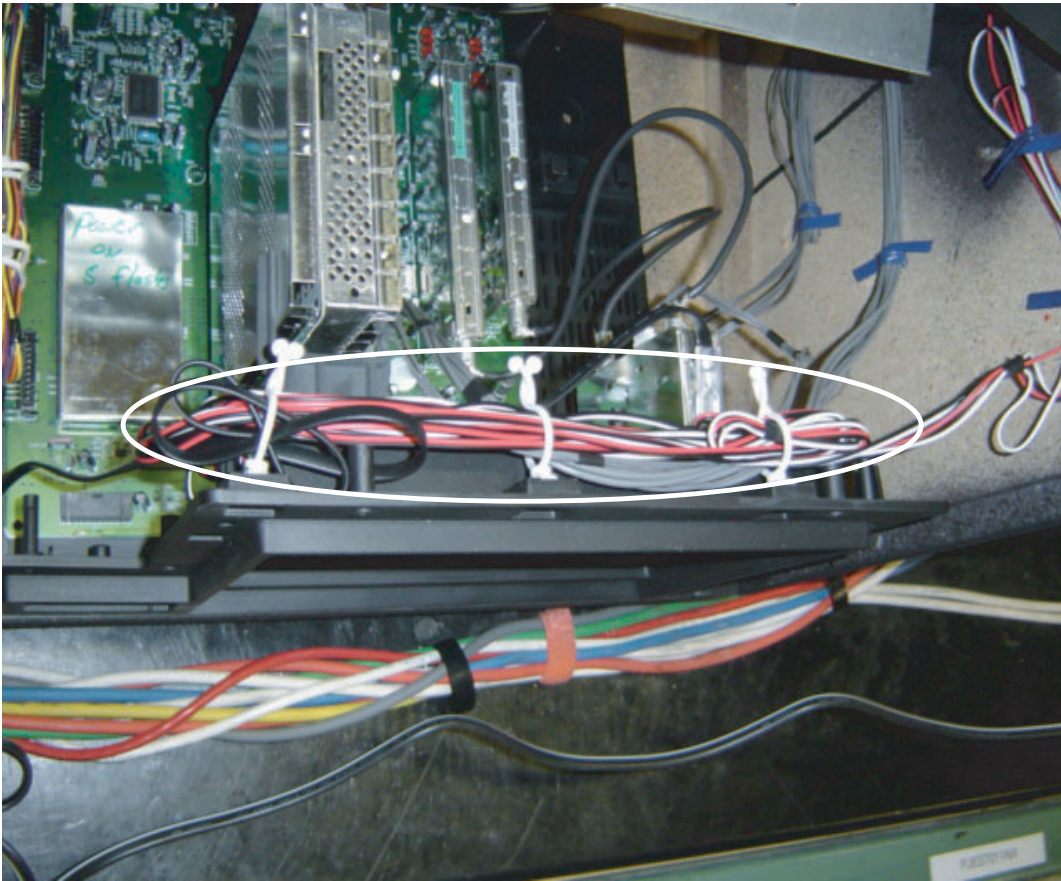
AR Sensor



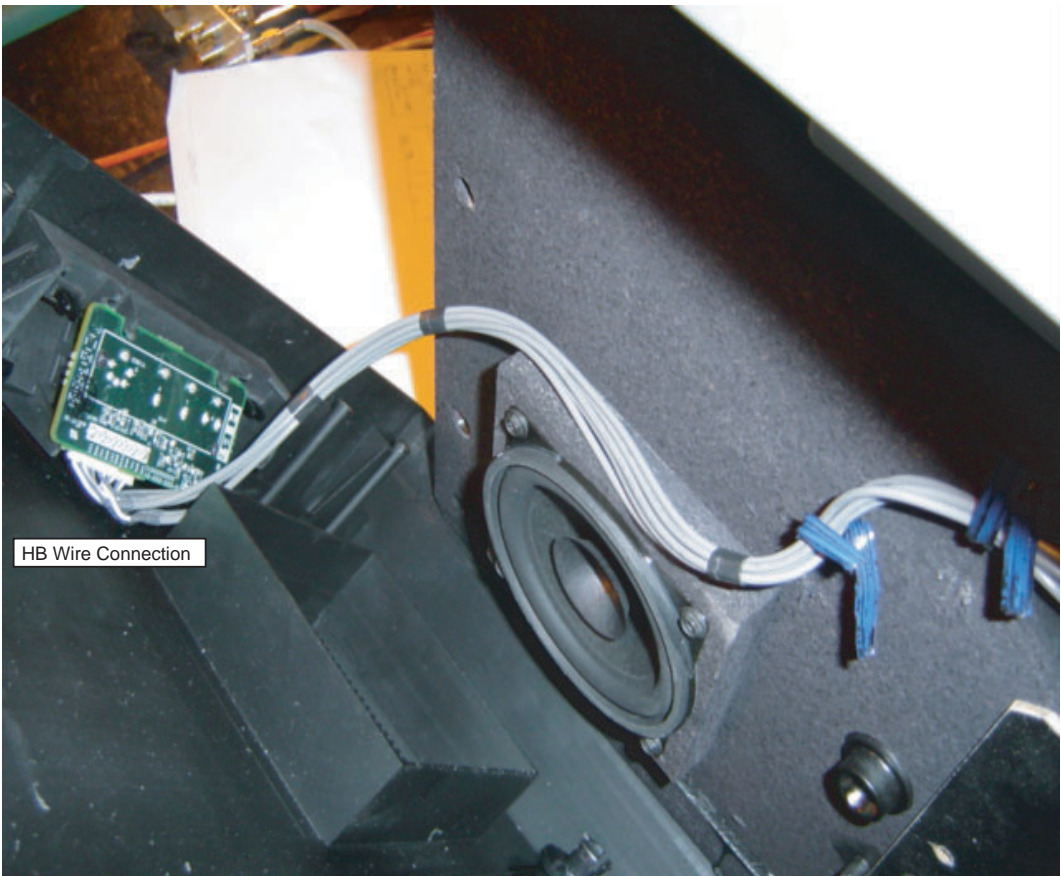
AR Sensor



AR Sensor



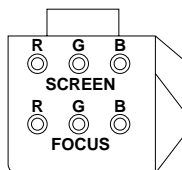
46 V2 Assy



SECTION 2: SET-UP ADJUSTMENTS

2-1. SCREEN VOLTAGE ADJUSTMENT (G2) (COARSE ADJUSTMENT)

1. Receive the Monoscope signal.
2. Set BRIGHTNESS to 50% and PICTURE to minimum.
3. Turn the red VR on the focus block all the way to the left and then gradually turn it to the right until the retrace line is barely visible.
4. Gradually turn the control to the left until the retrace line disappears.

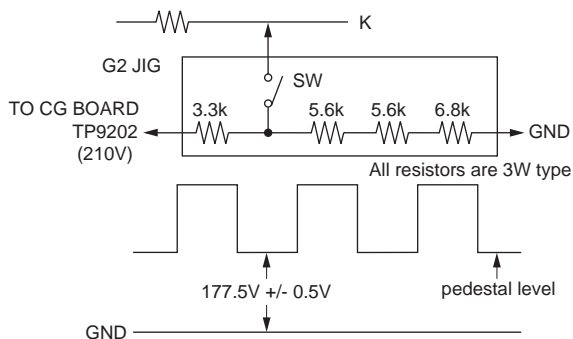


FOCUS Block

2-2. SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT)

If the jig described below is available, it is recommended that the G2 Fine Mode Adjustment be performed to set the screen controls to their optimal condition. If desired, you can build the jig illustrated below, using 3-watt resistors. Please note that if the proper voltage is not obtained with the listed resistor's values, then increase or decrease one of the values in the resistor network to obtain the correct voltage.

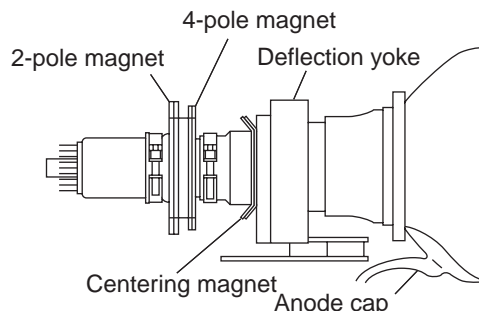
1. Select VIDEO-1 mode no signal applied (the screen must be black).
2. Connect the G2 JIG.
3. SW on JIG.
4. Connect an oscilloscope to the TP9101(KR), TP9201(KG) and TP9301(KB) of CR board, CG board, and CB board.
5. Adjust red, green, and blue screen voltage to 177.5+/-0.5V with screen VR on the focus block.



2-3. DEFLECTION YOKE TILT ADJUSTMENT

1. Connect the color bar generator monoscope pattern to Video 1 input.
 2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
 3. Loosen the CRT's deflection yoke set screw and align the tilt of the deflection yoke so that the horizontal bars at the center of the cross-hatch pattern are parallel to the top and bottom edges of the screen.
 4. After aligning the deflection yoke fasten it securely to the funnel-shaped portion (neck) of the CRT.
 5. Cover the green and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 3 and 4 for the red CRT.
- Cover the green and red CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 3 and 4 for the blue CRT.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.



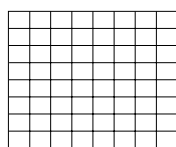
2-4. FOCUS LENS ADJUSTMENT

In this adjustment, use the remote commander while in service mode. For details on the usage of the service mode and the remote commander, please refer to section

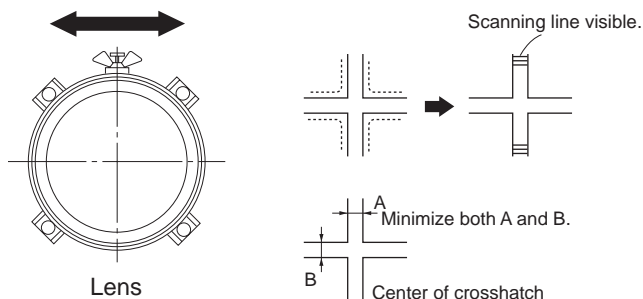
2-10. ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER.

1. Loosen the lens screw.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Turn the green lens to adjust to the optimum focus point with the crosshatch signal.
4. Tighten the lens screw.
5. Cover the green and blue CRT lenses with the lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
6. Turn the red lens to adjust to the optimum focus point with the crosshatch signal.
7. Tighten the lens screw.
8. Cover the green and red CRT lenses with the lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
9. Turn the blue lens to adjust to the optimum focus point with the crosshatch signal.
10. Tighten the lens screw.
11. After adjusting the items:
 2-5. FOCUS VR ADJUSTMENT,
 2-7. 2-POLE MAGNET ADJUSTMENT,
 2-8. 4-POLE MAGNET ADJUSTMENT,
 reconfirm the optimum focus point and adjust again if necessary.

* In PJE mode, every time 6 is pressed, the test signal changes to:
 "crosshatch+video signal" → "crosshatch+borderline (black)" →
 "crosshatch (black)" → "dots (black)" → "all white" → off



Test Signal

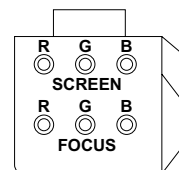


Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

2-5. FOCUS VR ADJUSTMENT

1. Set generator to crosshatch.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Turn the green focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
4. Cover the green and blue picture lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
5. Turn the red focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
6. Cover the green and red picture lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
7. Turn the blue focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
8. After adjusting the items:
 2-4. FOCUS LENS ADJUSTMENT,
 2-7. 2-POLE MAGNET ADJUSTMENT,
 2-8. 4-POLE MAGNET ADJUSTMENT,
 reconfirm the optimum focus point and adjust again if necessary.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.



FOCUS Block

2-6. CENTERING MAGNET ADJUSTMENT

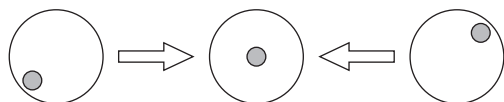
1. Set the mode to PRO.
2. Receive the monoscope signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Adjust the green CRT's centering magnet to put the center of the monoscope signal to the center of the screen.
5. Repeat steps 1 through 4 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red centering magnet.
6. Repeat steps 1 through 4 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue centering magnet.
7. After 2-Pole and 4-Pole adjustment, entering magnet adjustment needs to be confirmed. If centering magnet is re-adjusted, then 2-Pole magnet will need to be confirmed.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

2-7. 2-POLE MAGNET ADJUSTMENT

1. Set the mode to PRO and picture to MAX.
2. Receive the 100IRE 1080i Dot signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the focus VR on the focus block to the left (counter clockwise) and set it to overfocus to enlarge the spot.
5. Adjust the CRT's 2-pole magnet so that the small bright spot is in the center.
6. Align the focus VR on the focus block and set it for the best focus.
7. Repeat steps 1 through 6 for the red CRT covering the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.
8. Repeat steps 1 through 6 for the blue CRT covering the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue focus control on the focus block.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

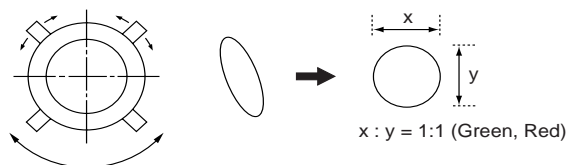


2-8. 4-POLE MAGNET ADJUSTMENT

1. Set the mode to VIVID and WIDE mode = Zoom, VM:Off.
2. Receive the 100IRE 1080i Dot signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the (green) focus VR on the focus block to the right (clockwise) and set it to under-focus to reduce the spot.
5. Adjust the 4-pole magnet so that the small spot in the center of the screen becomes round for green and red.
6. Adjust the blue spot for:
 - a. KP-46WT520/51WS520 to a round shape X:Y=1:1
 - b. KP-57WS520 to an oval shape X:Y=1.2:1
7. Repeat steps 1 through 6 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.
8. Repeat steps 1 through 6 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue focus control on the focus block.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

Use the center dot

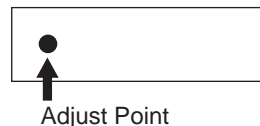


2-9. DEFOCUS ADJUSTMENT (BLUE)

Note: Adjust the blue dot to be slightly larger than red and green dots. This adjustment provides a more pleasing picture to the customer.

1. Set the mode to PRO, PICTURE : Max, COLOR TEMP : Cool.
2. Receive the 100IRE 1080i Dot signal.
3. Cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the blue focus VR on the focus block to the right (clockwise) until blue spot is in focus.
5. Change mode to VIVID to confirm Flare level is minimal using cross hatch signal.
6. Set the generator to an all white signal and check uniformity.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.



2-10.ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

All of the circuit adjustments can be made by using the remote commander (RM-Y916).

Note: The following test equipment is required:

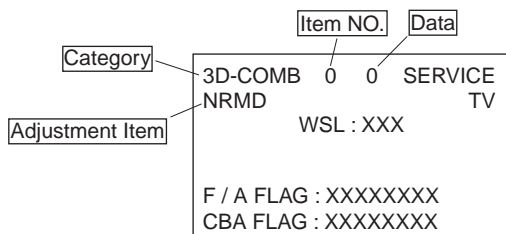
1. Pattern Generator (with component outputs)
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

2-10-1.METHOD OF ENTERING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

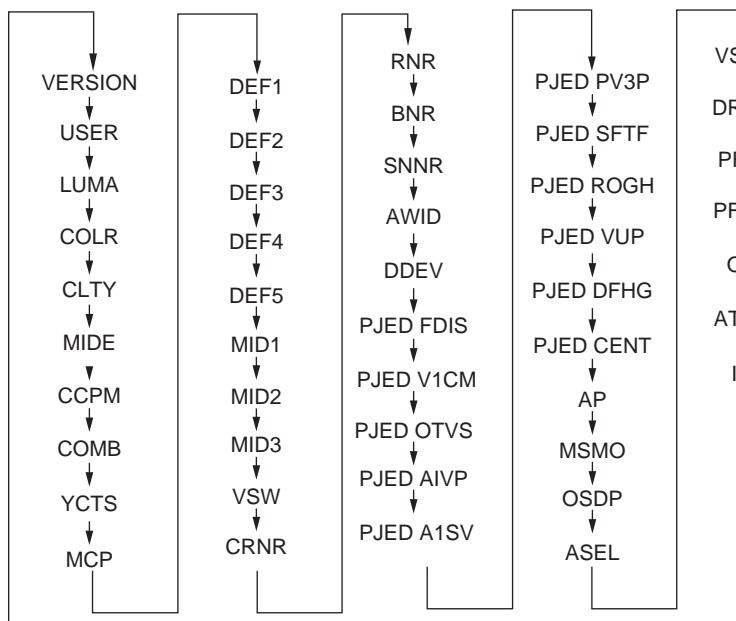
1. TV must be in Standby mode. (Power off)
2. Press "DISPLAY", "5", "VOL +", then "POWER" on the remote commander.
(Press each button within 1 second of pressing the previous button.)

SERVICE MODE ADJUSTMENT



3. The screen displays the item being adjusted within that category.
4. Press 1 or 4 on the remote commander to select the adjustment item
5. Press 3 or 6 on the remote commander to change the data
6. Press 2 or 5 on the remote commander to select the adjustment category

Every time you press 2 (Category up), service mode changes in the order shown below:



7. If you want to go back to the most recently saved value, press "0" then "ENTER" to read the memory.
8. Press "MUTING" then "ENTER" to write the new adjustment data into memory.
9. Turn power off when you want to exit the service mode.

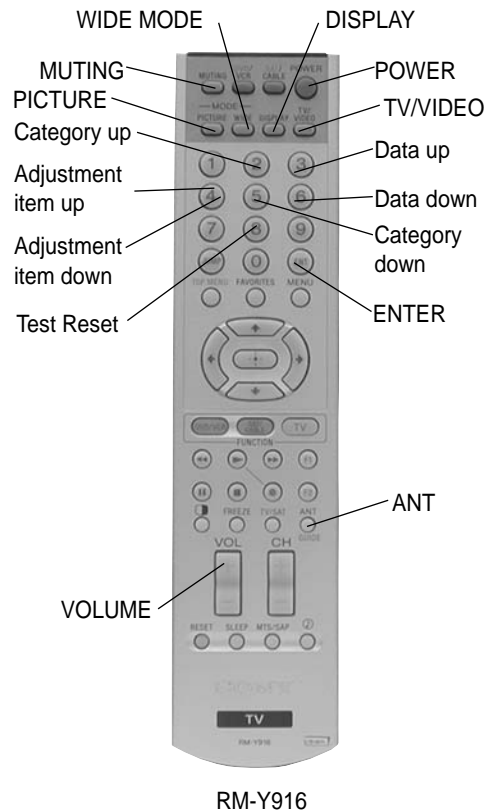
Note: Press "8" then "ENTER" on the remote commander to restore the factory settings for user controls and channel memories (this will also turn set off and then on to exit the service mode).

2-10-2.MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, turn the power off with the remote commander.
2. Turn the power ON and set to service mode.
3. Cycle through the adjusted items again and confirm that the adjustments were saved.

2-10-3.ADJUSTING BUTTONS AND INDICATOR

Note: When the PJE mode (which displays an internally generated signal) is activated, several buttons on the remote commander will have different functions than the ones listed below. Therefore, when in the PJE mode, refer to section 2-12-3 for button functions.



2-11.ADJUSTABLE SERVICE DATA LISTS

Only the Adjustable registers are shown in this data list.

A complete set of the service data, Fixed and Adjustable, can be downloaded at:

http://www-ec.sdp.sel.sony.com/padics/Model_Data_List.htm

Only Sony authorized Service Technician can access this site.

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
OP	5	OSDH	OSD Horizontal Position	(common)	21	21	21	0	255
	6	OSDF	OSD Favorite Position	(common)	28	28	28	0	63

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
CCPM	1	YLEV	Y Level	RF - 60HZ	205	205	205	0	255
				CV - 60HZ	190	190	190	0	255
	2	CLEV	C Level	RF - 60HZ	110	110	110	0	255
				CV - 60HZ	103	103	103	0	255
	3	SHUE	Sub Hue	RF - 60HZ	7	7	7	0	15
				CV - 60HZ	7	7	7	0	15
YCTS (CXA2103)	2	SCON	Sub Contrast	RF	9	9	9	0	15
				OTHER	6	6	6	0	15
	3	SCOL	Sub Color	RF	6	6	6	0	15
				OTHER	5	5	5	0	15
	4	SHUE	Sub Hue	RF	3	3	3	0	15
				OTHER	5	5	5	0	15
MCP	9	CBOF	Cb Offset	DRC - RF/BS/CV/YC	31	31	31	0	63
	10	CROF	Cr Offset	DRC - RF/BS/CV/YC	30	30	30	0	63
DEF1	0	VPOS	Vertical Position	COMMON	25	25	25	0	63
	1	VSIZ	Vertical Size	COMMON	31	31	31	0	63
DEF2	2	HSIZ	Horizontal Size	WIDEZOOM	24	24	24	0	63
				OTHER	24	24	24	0	63
	3	SLIN	S Linearity	WIDEZOOM	7	7	7	0	15
				OTHER	7	7	7	0	15
COLR	2	RDRV	Red Drive Gain	COMMON	38	38	38	0	63
	4	BDRV	Blue Drive Gain	COMMON	23	23	23	0	63
	5	RCUT	Red cut-off	COMMON	23	23	23	0	63
	7	BCUT	Blue cut-off	COMMON	27	27	27	0	63
	8	SBRT	Sub Bright	COMMON	23	23	23	0	63

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	93	R0GH	Ratio Offset S0 G H	(common)	0	0	0	-128	127
	94	R0RH	Ratio Offset S0 R H	(common)	0	0	0	-128	127
	95	R0BH	Ratio Offset S0 B H	(common)	0	0	0	-128	127
	96	R1GH	Ratio Offset S1 G H	(common)	0	0	0	-128	127
	97	R1RH	Ratio Offset S1 R H	(common)	0	0	0	-128	127
	98	R1BH	Ratio Offset S1 B H	(common)	0	0	0	-128	127
	99	R2GH	Ratio Offset S2 G H	(common)	0	0	0	-128	127
	100	R2RH	Ratio Offset S2 R H	(common)	0	0	0	-128	127
	101	R2BH	Ratio Offset S2 B H	(common)	0	0	0	-128	127
	102	R3GH	Ratio Offset S3 G H	(common)	0	0	0	-128	127
	103	R3RH	Ratio Offset S3 R H	(common)	0	0	0	-128	127
	104	R3BH	Ratio Offset S3 B H	(common)	0	0	0	-128	127
	105	R1GV	Ratio Offset S1 G V	(common)	0	0	0	-128	127
	106	R1RV	Ratio Offset S1 R V	(common)	0	0	0	-128	127
	107	R1BV	Ratio Offset S1 B V	(common)	0	0	0	-128	127
	108	R2GV	Ratio Offset S2 G V	(common)	0	0	0	-128	127
	109	R2RV	Ratio Offset S2 R V	(common)	0	0	0	-128	127
	110	R2BV	Ratio Offset S2 B V	(common)	0	0	0	-128	127
	111	PTRH	Pattern Offset Top R H	(common)	0	0	0	-128	127
	112	PTBH	Pattern Offset Top B H	(common)	0	0	0	-128	127
	113	PLRH	Pattern Offset Left R H	(common)	0	0	0	-128	127
	114	PLBH	Pattern Offset Left B H	(common)	0	0	0	-128	127
	115	PLRV	Pattern Offset Left R V	(common)	0	0	0	-128	127
	116	PLBV	Pattern Offset Left B V	(common)	0	0	0	-128	127
	117	PRRH	Pattern Offset Right R H	(common)	0	0	0	-128	127
	118	PRBH	Pattern Offset Right B H	(common)	0	0	0	-128	127
	119	PRGV	Pattern Offset Right G V	(common)	0	0	0	-128	127
	120	PRRV	Pattern Offset Right R V	(common)	0	0	0	-128	127
	121	PRBV	Pattern Offset Right B V	(common)	0	0	0	-128	127
	122	PBGH	Pattern Offset Bottom G H	(common)	0	0	0	-128	127
	123	PBRH	Pattern Offset Bottom R H	(common)	0	0	0	-128	127
	124	PBBH	Pattern Offset Bottom B H	(common)	0	0	0	-128	127
	125	ERR	Auto Regi Error Code	(common)	0	0	0	0	255
	130	VUP	Auto Regi V Upper Pattern Position	(common)	50	50	50	0	2047
	131	VMID	Auto Regi V Middle Pattern Position	(common)	495	495	495	0	2047
	132	VLOW	Auto Regi V Lower Pattern Position	(common)	947	947	947	0	2047
	133	HLE	Auto Regi H Left Pattern Position	(common)	181	181	181	0	2047
	134	HMID	Auto Regi H Middle Pattern Position	(common)	853	853	853	0	2047
	135	HRIT	Auto Regi H Right Pattern Position	(common)	1522	1522	1522	0	2047

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	141	CENT	R H Cent	Full / Normal	40	40	40	-512	511
				Zoom	40	40	40	-512	511
				WideZoom	40	40	40	-512	511
				1080i Full / Normal	40	40	40	-512	511
				1080i Zoom	40	40	40	-512	511
				1080i WideZoom	40	40	40	-512	511
			R V Cent	Full / Normal	20	20	20	-512	511
				Zoom	20	20	20	-512	511
				WideZoom	20	20	20	-512	511
				1080i Full / Normal	20	20	20	-512	511
				1080i Zoom	20	20	20	-512	511
				1080i WideZoom	20	20	20	-512	511
			G H Cent	Full / Normal	40	40	40	-512	511
				Zoom	40	40	40	-512	511
				WideZoom	40	40	40	-512	511
				1080i Full / Normal	40	40	40	-512	511
				1080i Zoom	40	40	40	-512	511
				1080i WideZoom	40	40	40	-512	511
			G V Cent	Full / Normal	20	20	20	-512	511
				Zoom	20	20	20	-512	511
				WideZoom	20	20	20	-512	511
				1080i Full	20	20	20	-512	511
				1080i Zoom	20	20	20	-512	511
				1080i WideZoom	20	20	20	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	141		B H Cent	Full / Normal	40	40	40	-512	511
				Zoom	40	40	40	-512	511
				WideZoom	40	40	40	-512	511
				1080i Full / Normal	40	40	40	-512	511
				1080i Zoom	40	40	40	-512	511
				1080i WideZoom	40	40	40	-512	511
			B V Cent	Full / Normal	20	20	20	-512	511
				Zoom	20	20	20	-512	511
				WideZoom	20	20	20	-512	511
				1080i Full / Normal	20	20	20	-512	511
				1080i Zoom	20	20	20	-512	511
				1080i WideZoom	20	20	20	-512	511
	142	SIZE	R H Size	Full / Normal	-120	-120	-120	-512	511
				Zoom	-120	-120	-120	-512	511
				WideZoom	-120	-120	-120	-512	511
				1080i Full / Normal	-120	-120	-120	-512	511
				1080i Zoom	-120	-120	-120	-512	511
				1080i WideZoom	-120	-120	-120	-512	511
			R V Size	Full / Normal	-80	-80	-80	-512	511
				Zoom	-80	-80	-80	-512	511
				WideZoom	-80	-80	-80	-512	511
				1080i Full / Normal	-80	-80	-80	-512	511
				1080i Zoom	-80	-80	-80	-512	511
				1080i WideZoom	-80	-80	-80	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	142	SIZE	G H Size	Full / Normal	-120	-120	-120	-512	511
				Zoom	-120	-120	-120	-512	511
				WideZoom	-120	-120	-120	-512	511
				1080i Full / Normal	-120	-120	-120	-512	511
				1080i Zoom	-120	-120	-120	-512	511
				1080i WideZoom	-120	-120	-120	-512	511
			G V Size	Full / Normal	-80	-80	-80	-512	511
				Zoom	-80	-80	-80	-512	511
				WideZoom	-80	-80	-80	-512	511
				1080i Full / Normal	-80	-80	-80	-512	511
				1080i Zoom	-80	-80	-80	-512	511
				1080i WideZoom	-80	-80	-80	-512	511
			B H Size	Full / Normal	-120	-120	-120	-512	511
				Zoom	-120	-120	-120	-512	511
				WideZoom	-120	-120	-120	-512	511
				1080i Full / Normal	-120	-120	-120	-512	511
				1080i Zoom	-120	-120	-120	-512	511
				1080i WideZoom	-120	-120	-120	-512	511
			B V Size	Full / Normal	-80	-80	-80	-512	511
				Zoom	-80	-80	-80	-512	511
				WideZoom	-80	-80	-80	-512	511
				1080i Full / Normal	-80	-80	-80	-512	511
				1080i Zoom	-80	-80	-80	-512	511
				1080i WideZoom	-80	-80	-80	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	143	LIN	R H Lin	Full / Normal	300	300	300	-512	511
				Zoom	300	300	300	-512	511
				WideZoom	300	300	300	-512	511
				1080i Full / Normal	300	300	300	-512	511
				1080i Zoom	300	300	300	-512	511
				1080i WideZoom	300	300	300	-512	511
			R V Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	143	LIN	B H Lin	Full / Normal	-300	-300	-300	-512	511
				Zoom	-300	-300	-300	-512	511
				WideZoom	-300	-300	-300	-512	511
				1080i Full / Normal	-300	-300	-300	-512	511
				1080i Zoom	-300	-300	-300	-512	511
				1080i WideZoom	-300	-300	-300	-512	511
			B V Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
	144	SKEW	R H Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	144	SKEW	G H Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B H Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	145	BOW	R H Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
		G V Bow	Full / Normal	0	0	0	-512	511	
			Zoom	0	0	0	-512	511	
			WideZoom	0	0	0	-512	511	
			1080i Full / Normal	0	0	0	-512	511	
			1080i Zoom	0	0	0	-512	511	
			1080i WideZoom	0	0	0	-512	511	

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	145	BOW	B H Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
		B V Bow	Full / Normal	0	0	0	-512	511	
			Zoom	0	0	0	-512	511	
			WideZoom	0	0	0	-512	511	
			1080i Full / Normal	0	0	0	-512	511	
			1080i Zoom	0	0	0	-512	511	
			1080i WideZoom	0	0	0	-512	511	
	146	KEY	R H Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
		R V Key	Full / Normal	130	130	130	-512	511	
			Zoom	130	130	130	-512	511	
			WideZoom	130	130	130	-512	511	
			1080i Full / Normal	130	130	130	-512	511	
			1080i Zoom	130	130	130	-512	511	
			1080i WideZoom	130	130	130	-512	511	

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	146	KEY	G H Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B H Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Key	Full / Normal	-130	-130	-130	-512	511
				Zoom	-130	-130	-130	-512	511
				WideZoom	-130	-130	-130	-512	511
				1080i Full / Normal	-130	-130	-130	-512	511
				1080i Zoom	-130	-130	-130	-512	511
				1080i WideZoom	-130	-130	-130	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	147	PIN	R H Pin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Pin	Full / Normal	380	380	380	-512	511
				Zoom	380	380	380	-512	511
				WideZoom	380	380	380	-512	511
				1080i Full / Normal	380	380	380	-512	511
				1080i Zoom	380	380	380	-512	511
				1080i WideZoom	380	380	380	-512	511
			G H Pin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Pin	Full / Normal	430	430	430	-512	511
				Zoom	430	430	430	-512	511
				WideZoom	430	430	430	-512	511
				1080i Full / Normal	430	430	430	-512	511
				1080i Zoom	430	430	430	-512	511
				1080i WideZoom	430	430	430	-512	511

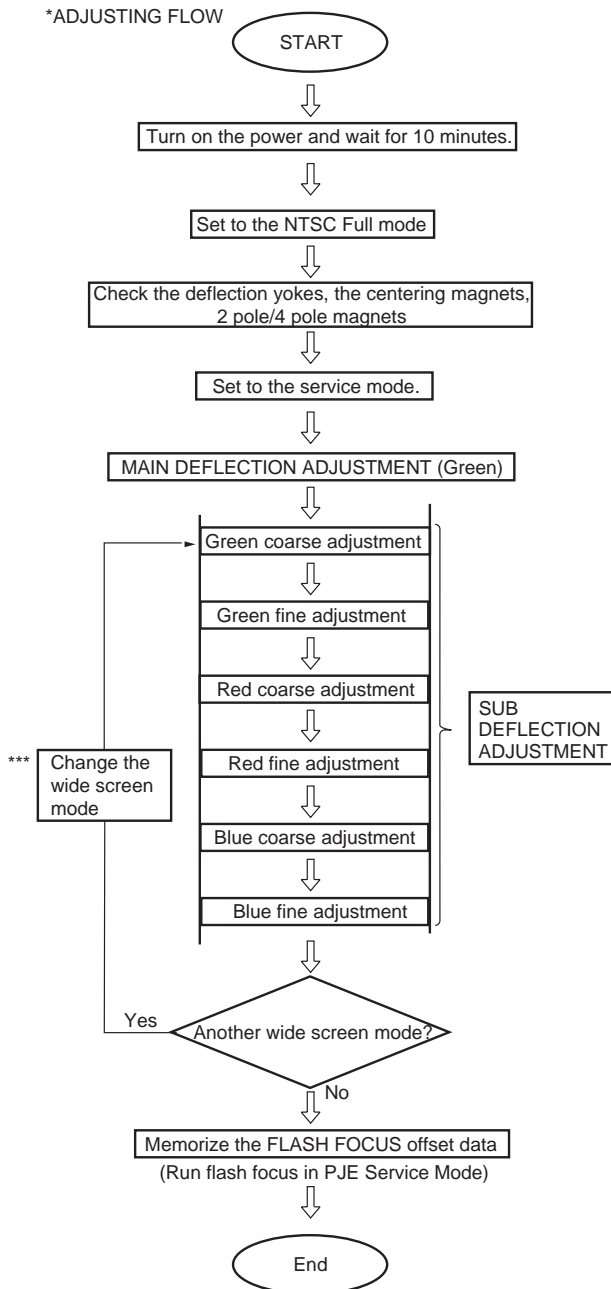
CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	147	PIN	B H Pin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Pin	Full / Normal	380	380	380	-512	511
				Zoom	380	380	380	-512	511
				WideZoom	380	380	380	-512	511
				1080i Full / Normal	380	380	380	-512	511
				1080i Zoom	380	380	380	-512	511
				1080i WideZoom	380	380	380	-512	511
	148	MLIN	R H Middle Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Middle Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	148	MLIN	B H Middle Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
				149	MSIZ	R H Middle Size	Full / Normal	0	0
	Zoom	0	0				0	-512	511
	WideZoom	0	0				0	-512	511
	1080i Full / Normal	0	0				0	-512	511
	1080i Zoom	0	0				0	-512	511
	1080i WideZoom	0	0				0	-512	511
	G H Middle Size	Full / Normal	0				0	0	-512
		Zoom	0			0	0	-512	511
		WideZoom	0			0	0	-512	511
		1080i Full / Normal	0			0	0	-512	511
		1080i Zoom	0			0	0	-512	511
		1080i WideZoom	0			0	0	-512	511
		B H Middle Size	Full / Normal			0	0	0	-512
	Zoom / V.Comp		0			0	0	-512	511
	WideZoom		0	0	0	-512	511		
1080i Full	0		0	0	-512	511			
1080i Full	0		0	0	-512	511			
1080i V.Comp	0		0	0	-512	511			

2-11-1.ID MAP TABLE

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
ID	0	ID0	ID Byte 0	(common)	89	89	89	0	255
	1	ID1	ID Byte 1	(common)	255	255	255	0	255
	2	ID2	ID Byte 2	(common)	239	239	239	0	255
	3	ID3	ID Byte 3	(common)	106	106	106	0	255
	4	ID4	ID Byte 4	(common)	75	75	75	0	255
	5	ID5	ID Byte 5	(common)	243	243	243	0	255
	6	ID6	ID Byte 6	(common)	190	190	190	0	255
	7	ID7	ID Byte 7	(common)	155	155	155	0	255

2-12.REGISTRATION ADJUSTMENT (PJE MODE ONLY)



*** COPY

When the NTSC Full mode adjustment has finished, copy its data to NTSC Zoom, HD Full, and HD Zoom modes the first time only and be sure to adjust in the order given.

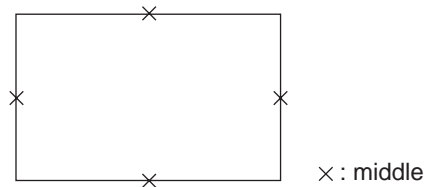
When the NTSC Wide Zoom mode adjustment has finished, copy its data to HD Wide Zoom mode.

This will serve as a starting point for adjusting these other modes. See section 2-13-2. Copying All Registration Data To Other Modes for more information.

2-12-1.SETUP FOR ADJUSTMENT

MARKING

- At the 4 sides of the screen, locate the middle. Use a tape measure to identify the middle.



DATA SETTING

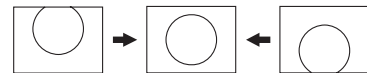
- Set NTSC Full mode.
- Enter the service mode, and select "PJE".

2-12-2.MAIN DEFLECTION ADJUSTMENT

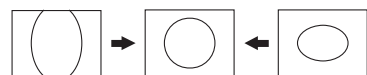
NOTE: Before this adjustment, refer to section 2-11 SERVICE DATA LISTS for PJE item #141-149 input data.

- Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
- Enter the monoscope signal and set to NTSC Full mode.
- Enter the service mode, and select "DEF1".
- Adjust "0 VPOS" and "1 VSIZ" so that the picture is displayed in the center of the screen.

0 VPOS



1 V-Size



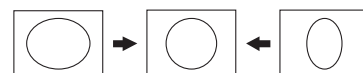
- Select "DEF2" and adjust "2 H-Size" so that the picture size is within the specification.

SPEC

Overscan Spec. = 9%

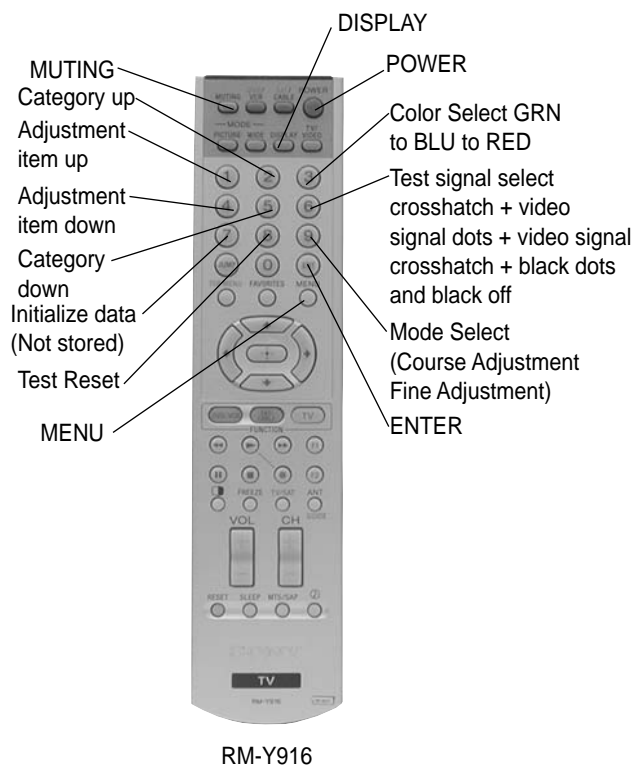
Input Signal	H SIZE	V SIZE
Monoscope	15.6 ± 0.2 sq.	11.5 ± 0.2 sq.

2 H-Size



- Copy the data of the NTSC Full mode to the other wide screen mode and, if necessary, adjust in the other mode.

2-12-3. OPERATION METHOD FOR PROJECTOR ENGINE MODE



RM-Y916

1. FUNCTION OF KEYS ON COMMANDER

- ① Changes adjustment item. (Item # moves up)
Marker moves clockwise from center to outside. (In Fine Adjustment mode)
- ④ Changes adjustment item. (Item # moves down)
Marker moves counter clockwise from outside to center. (In Fine Adjustment mode)
- ② Changes adjustment category. (Category # moves up)
- ⑤ Changes adjustment category. (Category # moves down)

Joystick Changes data value. (Up or down)

Marker moves clockwise from center (up, down, right, and then left) to outside. (In Fine Adjustment mode)

- ③ Changes adjustment color. GRN →BLU →RED
- ⑥ Displays or changes internal test signals.
crosshatch + external signal →
crosshatch + borderline →
crosshatch only →
dot only → off
- ⑨ Switches adjustment mode.
Coarse adjustment model →
Fine adjustment point mode →
Fine adjustment row mode →
Fine adjustment column mode

Press Switches marker moving method.

Joystick (In Fine Adjustment mode)

Pressing down on the joystick in Fine Adjustment mode switches between selecting and un-selecting a point.

When a point is selected, the cursor changes to that color to indicate the point is selected and can be adjusted. If a point is not selected the cursor is white.

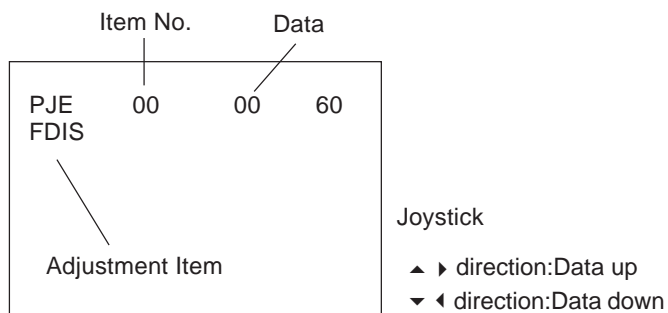
Joystick ▲ ▼ ◀ ▶ keys → 1 and 4 buttons

Commander Function

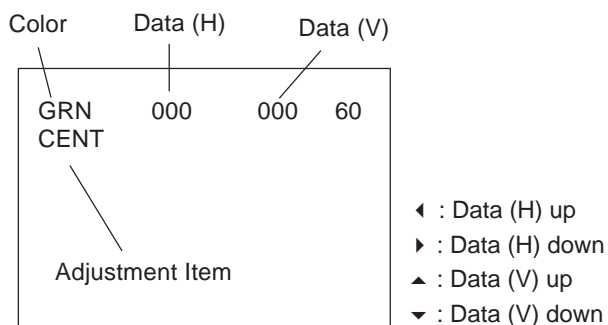
Buttons	Mode	Description
0 + ENTER	READ	Reads data to NVM.
MUTING+ENTER	WRITE	Writes data from NVM.
7 + ENTER	PJE INITIAL	Service data initialization. Not stored. (Be sure not to use usually)

2. OPERATION METHOD FOR COARSE ADJUSTMENT

1. Enter the service mode and select "PJE".
2. Press the "1" or "4" button on the remote commander to select the item, and then use the joystick to change the data.



3. Select "GRN CENT". When BLU or RED is displayed, press the "3" button on the remote commander to change the adjustment color in the order of GRN →BLU →RED.
4. In the GRN, BLU, or RED mode, move the joystick ▲ or ▼ to change the data in vertical direction, or ◀ or ▶ to change the data in a horizontal direction.

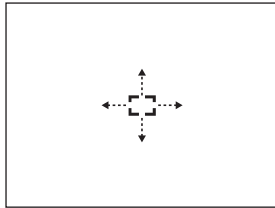


5. Before returning to the service mode, press the "MUTING" + "ENTER" buttons on the remote commander to write the data. (You must complete step 5 to write the data. If you omit step 5 the set data is returned to the data prior to the adjustment.)

3. OPERATION METHOD FOR FINE ADJUSTMENT

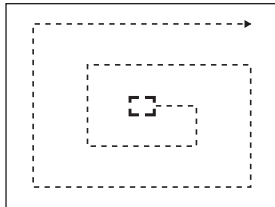
1. Enter the service mode and select "PJE".
2. Select FDIS and set the data to "01" so that the data at each position can be displayed in fine adjustment mode.
3. Press the "9" button on the remote commander and fine adjustment mode will be active where a green marker appears in the center of the screen. (In the case of GRN mode)
4. Press down on the joystick, and the marker color will be alternately switched between green (GRN mode) and white.
5. Press the "1" or "4" button on the remote commander or use the joystick to move the marker to the position to be adjusted, where fine adjustment can be made.

* When the marker color is white:
(in this case, fine adjustment is disabled)



Use the joystick to move the marker up, down, left, or right.

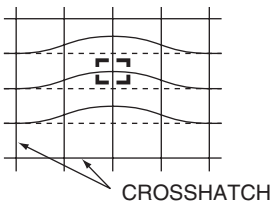
* When the marker color is green:
(GRN mode)



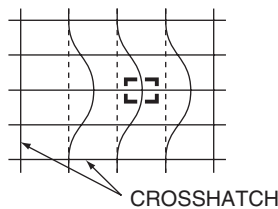
- ① : Moves the marker clockwise from the center to the outside.
- ④ : Moves the marker counter clockwise from the outside to the center.

* Fine adjustment can be made on the basis of a marker position using the joystick to move ▲ ▼ ◀ ▶ or ↵.

Move joystick ▲ direction



Move joystick ▶ direction



6. Press the "9" button on the remote commander to return to the coarse adjustment mode.

2-13.PJE ADJUSTMENT (SUB DEFLECTION ADJUSTMENT)

Adjustment item	Adjustment type		
	G	R	B
	H/V*	H/V*	H/V*
CENT	O/O	O/O	O/O
SKEW	O/O	O/O	O/O
SIZE	O/O	O/O	O/O
LIN	O/O	O/O	O/O
BOW	O/O	O/O	O/O
KEY	O/O	O/O	O/O
PIN	O/O	O/O	O/O
MLIN	O/-	O/-	O/-
MSIZ	O/-	O/-	O/-

* H = Horizontal V = Vertical O = Yes - = No

Note: If the value is over the limit value, adjust these in the fine adjustment.

Coarse Data Limit Value:

CENT H	-135 TO + 205
CENT V	-150 TO + 190
SKEW	-75 TO + 75
SIZE H	-75 MAX
BLUE H LIN	-425 MIN
RED H LIN	+425 MAX
FINE DATA LIMIT	± 107
Except the extreme left & right outside columns which have no limit	

2-13-1. ADJUSTMENT FOR NTSC FULL MODE

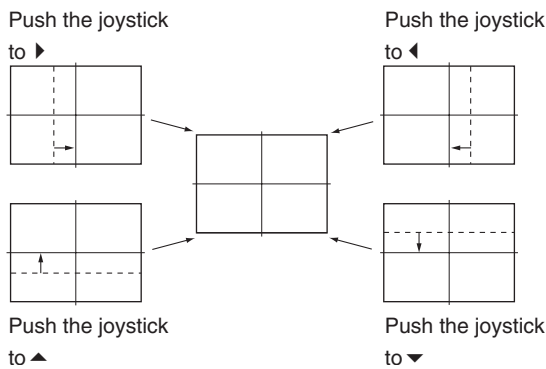
- The adjustment should be done in the numerical order given.

1) GREEN ADJUSTMENT

- Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
- Enter the monoscope signal to set.
- Select the PJE mode.
- Press the "6" button on the remote commander to display the internal test signal (crosshatch).
- Select "GRN CENT", and adjust so that the pictures coincide in the center of screen.

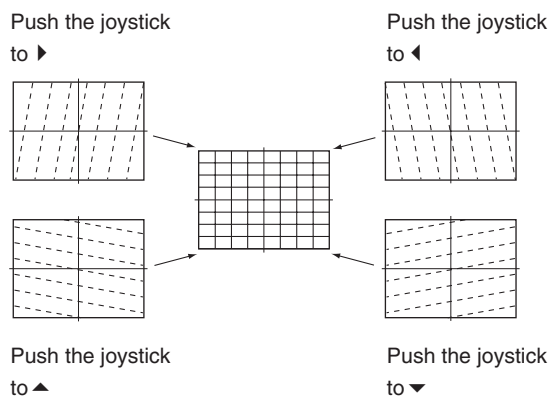
Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

GRN CENT (Horizontally/Vertically)



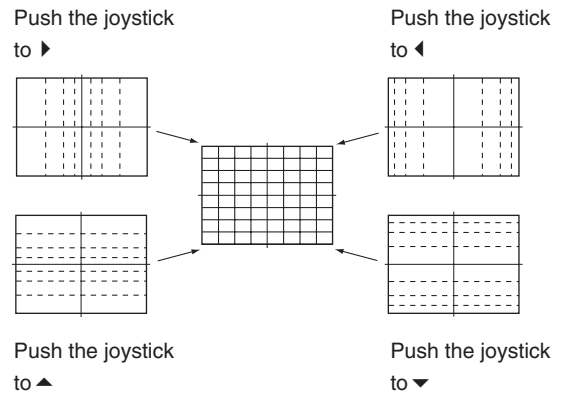
- Select "GRN SKEW", and correct the tilt of horizontal lines and vertical lines.

GRN SKEW (Horizontally/Vertically)



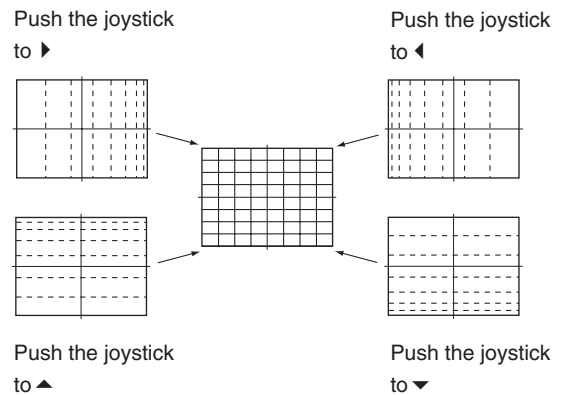
- Select "GRN SIZE", and adjust so that each distance from center to left end and to right end is equal. Adjust so that each distance from center to top and to bottom is equal.

GRN SIZE (Horizontally/Vertically)



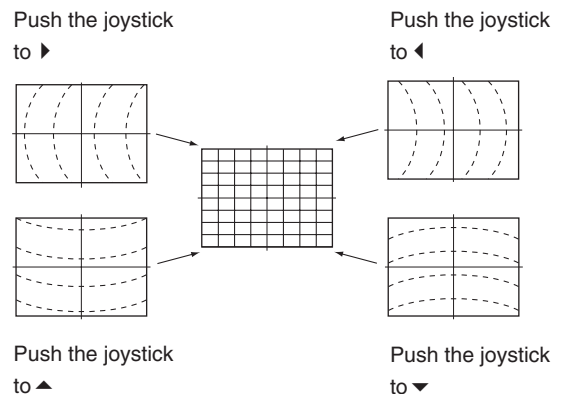
- Select "GRN LIN", and adjust so that each space at the right end and at the left end of screen is equal. Adjust so that each space at the top and at the bottom of screen is equal.

GRN LIN (Horizontally/Vertically)



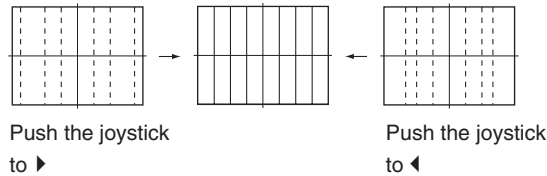
- Select "GRN BOW", and adjust so that the raster is not curved.

GRN BOW (Horizontally/Vertically)



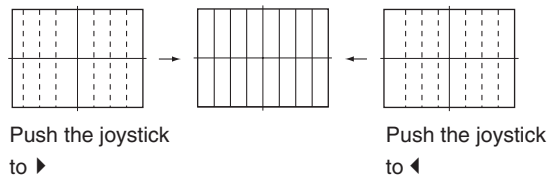
10. Select "GRN MSIZ", and correct the space intervals for the horizontal section so the screen is equal.

GRN MSIZ (Horizontally)



11. Select "GRN MLIN", and correct the sizes of the horizontal line so the center of the screen is symmetrical left and right.

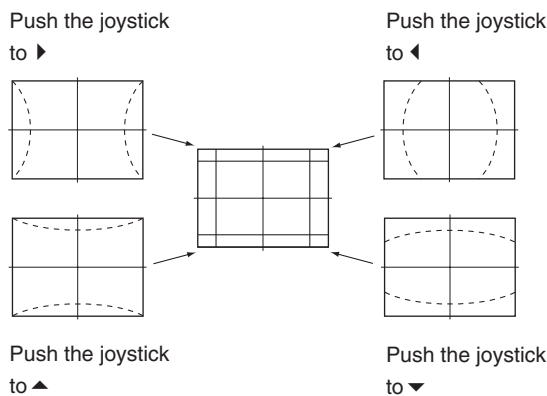
GRN MLIN (Horizontally)



Note: The SIZE and LIN, MSIZ and MLIN adjustments affect each other. If necessary, adjust these mutually.

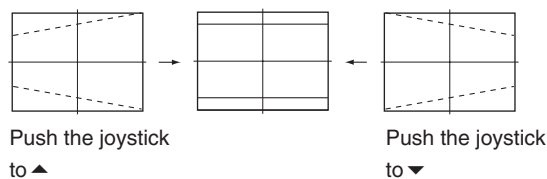
12. Select "GRN PIN", and adjust so that right and left vertical lines on the screen become straight. Adjust so that upper and lower horizontal lines on the screen become straight.

GRN PIN (Horizontally/Vertically)



13. Select "GRN KEY", and adjust so that upper and lower horizontal lines on the screen become parallel.

GRN KEY (Vertically)



Note: The VPIN and KEY adjustments affect each other. If necessary, adjust these mutually.

14. Press the "9" button on the remote commander to enter fine adjustment mode.
15. Make the fine adjustment so that horizontal lines and vertical lines become straight.
16. Press the "9" button on the remote commander to return to coarse adjustment mode.

2) RED ADJUSTMENT

1. Cover the blue CRT lens with a lens caps to allow only the green and red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Press the "3" button on the remote commander to select RED mode.
3. Adjust the following items so that red lines overlap with green lines.
 - RED CENT (horizontally/vertically)
 - RED SKEW (horizontally/vertically)
 - RED SIZE (horizontally/vertically)
 - RED LIN (horizontally/vertically)
 - RED MSIZ (horizontally)
 - RED MLIN (horizontally)
 - RED PIN (horizontally/vertically)
 - RED KEY (vertically)
4. Press the "9" button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green lines.
6. Press the "9" button on the remote commander to return to coarse adjustment mode.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

3) BLUE ADJUSTMENT

1. Remove the lens cap from the blue picture lens to display all colors.
2. Press the "3" button on the remote commander to select BLU mode.
3. Adjust the following items so that blue lines overlap with green lines.
 - BLU CENT (horizontally/vertically)
 - BLU SKEW (horizontally/vertically)
 - BLU SIZE (horizontally/vertically)
 - BLU LIN (horizontally/vertically)
 - BLU PIN (horizontally/vertically)
 - BLU KEY (vertically)
4. Press the "9" button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green and red lines.
6. Press the "9" button on the remote commander to return to coarse adjustment mode.

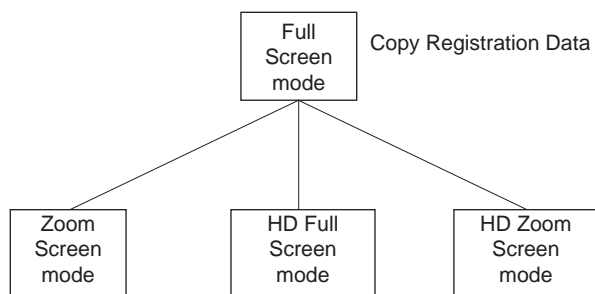
Note: When replacing CRTs, adjust the set-up adjustments (2-1 to 2-9) and the registration adjustment (2-12). When replacing multiple CRTs at the same time, replace and adjust them individually.

4) REGISTRATION DATA WRITING

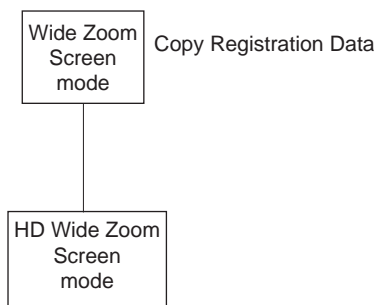
1. After completing each adjustment of green, blue, and red for the NTSC Full mode press the "MUTING"+ "ENTER" buttons in PJE service mode on the remote commander to write the registration data to the NVM.

2-13-2. COPYING ALL REGISTRATION DATA TO OTHER MODES

1. Make sure that the adjustment for NTSC Full mode is complete and the data has already been written.
2. Select the PJE mode.
3. Select Copy and set the data to "01", and press the "MUTING"+"ENTER" buttons on the remote commander.
4. The data from the NTSC Full mode is copied to NTSC Zoom Screen, HD Full Screen, and HD Zoom Screen modes.



5. Make sure that the adjustment for NTSC Wide Zoom mode is complete and the data has already been written.
6. Select the PJE mode.
7. Select Copy and set the data to "01", and press the "MUTING"+"ENTER" buttons on the remote commander.
8. The data from the NTSC Wide Zoom mode is copied to HD Wide Zoom Screen mode.



9. Check in the other modes and adjust as demands.
Be sure to write data in each mode.

2-14.AUTO REGISTRATION OFFSETS

IMPORTANT

This adjustment must be performed after registration adjustment or after readjustment for any reason!

Once registration in all modes is satisfactory:

1. Darken the room environment near the set.
2. Select input of RF (with a signal) or Video1 - Video4 (with a signal), and enter Full Mode.

WARNING: DO NOT USE 1080i SIGNAL!

3. Enter service mode and select the PJE group.
4. Press the "MUTING" + "ENTER" buttons on the remote commander to write the data for Full mode.

Important:

You must complete step 4 even if registration looks OK in Full mode and there were not any adjustments made.

5. To automatically store the offset values, press the "FLASH FOCUS" button on the front panel of the set.

(The offset value is now stored)

If FLASH FOCUS successfully calibrates, it displays "CALIBRATION OK."

If FLASH FOCUS does not successfully calibrate, an error message is displayed. (Refer to section 2-15)

6. Exit the service mode.
7. If the calibration was successful, press the "FLASH FOCUS" button out of service mode.
8. Confirm registration is OK in all modes.

2-15.AUTO REGISTRATION ERROR CODES

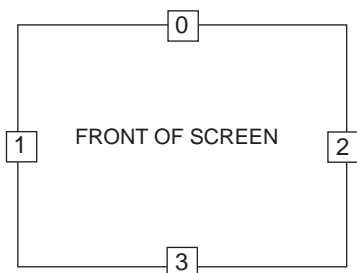
If an error code is displayed after the set has been correctly adjusted, check the following items: position, tilt and sizing. If any of these adjustments are off, even slightly, the auto-registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns are being flashed on the screen for the sensors to read. Therefore, auto registration (called auto convergence) cannot operate properly, causing an error code to be displayed. In order for this function to operate properly, position, tilt and size must be adjusted properly.

ERROR CODE LIST

ERROR CODE	DESCRIPTION	NOTE
00	No Error	
10	Sensor 0 low output	Check sensor 0, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 130 VUP, 134 HMID if necessary.
11	Sensor 1 low output	Check sensor 1, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 133 HLE, 131 VMID if necessary.
12	Sensor 2 low output	Check sensor 2, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 135 HRIV, 131 VMID if necessary.
13	Sensor 3 low output	Check sensor 3, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 132 VLOW, 134 HMID if necessary.
20	Sensor 0 high output	Check sensor 0 and circuit.
21	Sensor 1 high output	Check sensor 1 and circuit.
22	Sensor 2 high output	Check sensor 2 and circuit.
23	Sensor 3 high output	Check sensor 3 and circuit.
30	V CENT or SKEW adjustment loop overflow	Check 131 VMID data and check registration condition.
31	H CENT or SKEW adjustment loop overflow	Check 134 HMID data and check registration condition.
32	H LIN or SIZE adjustment loop overflow	Check 133 HLE and 135 HRIT data and check registration condition.
40	V CENT regi data overflow	Check 131 VMID data and confirm V CENT data (all modes) is not near 511.
41	H CENT regi data overflow	Check 134 HMID data and confirm H CENT data (all modes) is not near 511.
42	V SKEW regi data overflow	Check 131 VMID data and confirm V SKEW data (all modes) is not near 511.
43	H SKEW regi data overflow	Check 134 HMID data and confirm H SKEW data (all modes) is not near 511.
44	H LIN regi data overflow	Check 133 HLE and 135 HRIT data and confirm H CENT data (all modes) is not near 511.
45	H SIZE regi data overflow	Check 133 HLE and 135 HRIT data and confirm H CENT data (all modes) is not near 511.
50	V CENT regi data overdraw	Check 131 VMID data and confirm V CENT data (all modes) is not near -512.
51	H CENT regi data overdraw	Check 134 HMID data and confirm H CENT data (all modes) is not near -512.
52	V SKEW regi data overdraw	Check 131 VMID data and confirm V SKEW data (all modes) is not near -512.
53	H SKEW regi data overdraw	Check 134 HMID data and confirm H SKEW data (all modes) is not near -512.
54	H LIN regi data overdraw	Check 133 HLE and 135 HRIT data and confirm H CENT data (all modes) is not near -512.
55	H SIZE regi data overdraw	Check 133 HLE and 135 HRIT data and confirm V CENT data (all modes) is not near -512.
60	CENT/SKEW calibration loop overflow	Check 134 HMID and 131 VMID data and check registration condition.
61	SIZE/LIN calibration loop overflow	Check 133 HLE, 135 HRIT, 130 VUP, and 132 VLOW data and check registration condition.
70	V CENT/SKEW ratio limit	Check sensors 1 and 2, connection/wiring, circuit, increase 129 RTML.
71	H CENT/SKEW ratio limit	Check sensors 0 and 3, connection/wiring, circuit, increase 129 RTML.
73	H SIZE/Lin ratio limit	Check sensors 1 and 2, connection/wiring, circuit, increase 129 RTML.
80	SIZE Limit Error	Check that horizontal SIZE data is not near 128 SZLM.

* In the case of multiple errors, last error is displayed.

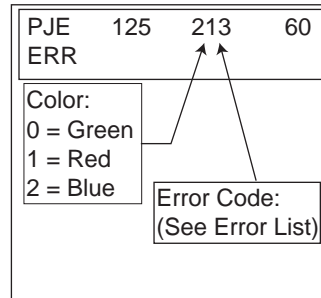
SENSOR POSITIONS



- 0: UPPER SENSOR
- 1: LEFT SENSOR
- 2: RIGHT SENSOR
- 3: LOWER SENSOR

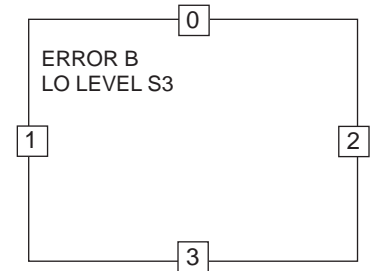
• ERROR CODE SCREEN DISPLAY

Error codes in normal (customer) mode are not displayed. You must enter PJE service mode to see the error code.



(Blue Sensor 3 Low Output)

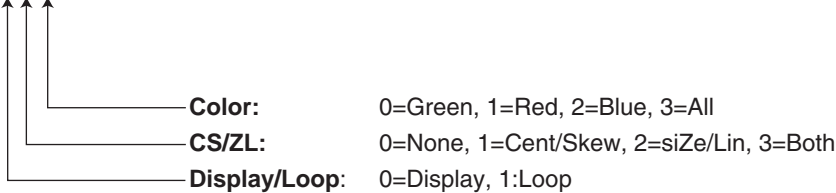
In service mode, the error will be displayed in text format.



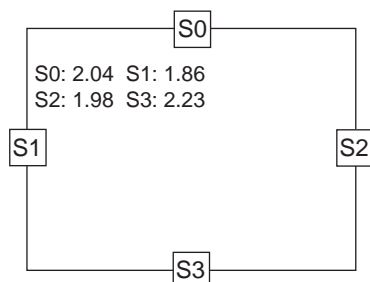
2-16.AUTO REGISTRATION DIAGNOSTICS

The TEST service item (PJE #136) can be used to determine if a sensor or sensor amplifier is working properly. It can also be used to check pattern positions.

133



DISPLAY/ LOOP	CS/ZL	COLOR	ACTION
(0)	0	0	Normal calibration (no diagnostics).
(0)	X	X	Performs one adjustment cycle, then displays average peak voltages for the specified CS/ZL and Color.
(0)	3	3	Does nothing (can't display more than one CS/ZL or Color at a time.)
1	X	X	Adjusts specified CS/ZL and Color until a key is pressed. Useful for measuring signals with oscilloscope.






Sensor 0 peak voltage = 2.04 V, etc.

SECTION 3: SAFETY-RELATED ADJUSTMENTS

D BOARD

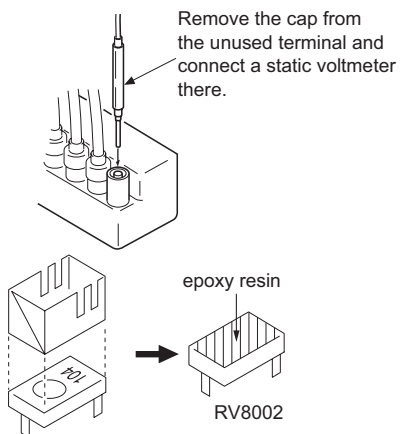
3-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with a  on the schematic diagram always check the HV regulation, and if necessary re-adjust.


Part Replaced ()	Adjustment ()
D BOARD T8001 (RHT), IC8002, IC8004, IC8005, PH8003, R8014, R8015, R8017, R8060, R8012	HV REGULATOR RV8002



HV REGULATION ADJUSTMENT

1. Receive the all white signal.
2. Set PIC MAX/BRT CENT.
3. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
4. Power on the set.
5. Receive the all white signal.
6. Set PIC MAX/BRT CENT.
7. Confirm that the static voltmeter reading is $31.0 \pm 0.3kV$.
8. If not, adjust with RV8002 to the specified value.
9. After adjustment, put the VR cover on RV8002 (as shown below) and apply sufficient amount of epoxy resin around RV8002 .



3-2. HV HOLD DOWN CIRCUIT OPERATION CHECK

When replacing the following components marked with a  on the schematic diagram always check the hold-down operation.

Part Replaced ()	Adjustment ()
D BOARD T8001 (RHT), D8022, IC8001, IC8014, R8008, R8016, R8046, R8052, R8072, R8078, R8079, R8165, R8019	HV HOLD DOWN RV8002

OPERATION CHECK

1. Receive any source.
2. Using an external DC supply, apply 5 VDC to pin 3 of CN5 on A Board. Set will shutdown.

G BOARD

3-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC6503 R6590.

1. Supply 130VAC to variable autotransformer.
2. Receive dot signal pattern and set the PICTURE and BRIGHTNESS settings to their minimum.
3. Confirm the voltage of TP +B 135V is less than 137.0Vdc.
4. If step 3 is not satisfied, replace IC6503 and repeat steps 1-3.

3-4. +B OVP CONFIRMATION

1. Turn on set.
2. Set input conditions.
3. Turn off set.
4. Separate R6809 (D Board) from +135.
5. Apply external $160 \pm 1V$ DC to open end of R6809.
6. Turn on set.
7. Measure voltage at Pin 8 of CN5006 (D Board). Voltage should be less than 0.8V.

Input Conditions

Input Voltage: 120VAC

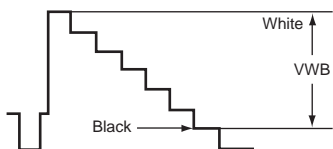
Input Signal: Dot pattern NTSC

Video Controls: PICTURE set to minimum
BRIGHTNESS set to minimum

SECTION 4: CIRCUIT ADJUSTMENTS

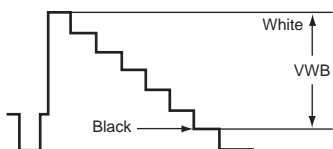
4-1. P & P SUB CONTRAST ADJUSTMENT (VIDEO) (SCON)

- Receive the signal.
VIDEO 1 terminal Composite: Color-bar (white-75%, 7.5% setup)
- VIDEO MODE : Pro
PICTURE : Maximum
COLOR : Minimum
MCP RON = 0
BON = 0
- Set to P & P mode, and receive the color bars in both main and sub (left and right), and set to service mode.
- Connect an oscilloscope between the check point and ground.
Check points : A Board CN5 pin 6 (G)
- Select "CCPM-YLEV" (Main scon), and adjust so that the waveform level of VWB is $1.75 \pm 0.03V_{p-p}$.
- Select "YCTS-SCON" (Sub scon), and adjust so that the waveform level of VWB is $1.75 \pm 0.03V_{p-p}$.
- After completing the adjustments, write the data into memory by pressing "MUTING" → "ENTER" on the remote commander.



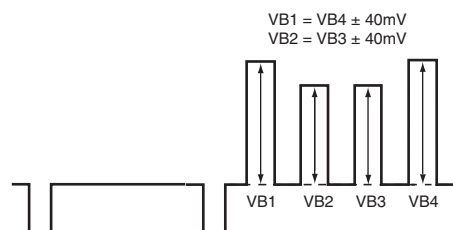
4-2. P & P SUB CONTRAST ADJUSTMENT (RF) (SCON)

- Receive the signal.
TV terminal RF : Color-bar (white-75%, 7.5% setup)
- VIDEO MODE : Pro
PICTURE : Maximum
COLOR : Minimum
MCP RON = 0
BON = 0
- Set to P & P mode, and receive the color bars in both main and sub (left and right), and set to service mode.
- Connect an oscilloscope between the check point and ground.
Check points : A Board CN5 pin 6 (G)
- Select "CCPM-YLEV" (Main scon), and adjust so that the waveform level of VWB is $1.75 \pm 0.03V_{p-p}$.
- Select "YCTS-SCON" (Sub scon), and adjust so that the waveform level of VWB is $1.75 \pm 0.03V_{p-p}$.
- After completing the adjustments, write the data into memory by pressing "MUTING" → "ENTER" on the remote commander.



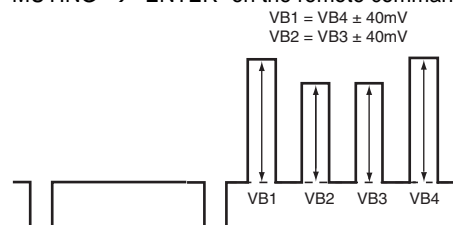
4-3. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT VIDEO (SHUE, SCOL)

- Receive the signal.
VIDEO 1 terminal Composite: Color-bar (white-75%, 7.5% setup)
- VIDEO MODE : Pro
PICTURE : Maximum
COLOR : Center
- Set to P & P mode, and receive the color bars in both main and sub (left and right), set to service mode.
- Connect an oscilloscope between pin 7 of CN5 (A Board) connector and ground.
- Select "CCPM-CLEV, CCPM-SHUE" (Main), and adjust them to have $VB1 = VB4 \pm 40mV$ and $VB2 = VB3 \pm 40mV$ in the waveform levels.
- Select "YCTS-SCOL, YCTS-SHUE" (Sub), and adjust them to have $VB1 = VB4 \pm 40mV$ and $VB2 = VB3 \pm 40mV$ in the waveform levels.
- After completing the adjustments, write the data into memory by pressing "MUTING" → "ENTER" on the remote commander.



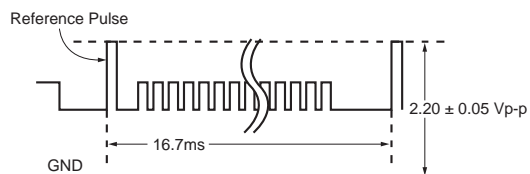
4-4. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (RF) (SHUE, SCOL)

- Receive the signal.
TV terminal : Color-bar (white-75%, 7.5% setup)
- VIDEO MODE : Pro
PICTURE : Maximum
COLOR : Center
- Set to P & P mode, and receive the color bars in both main and sub (left and right), set to service mode.
- Connect an oscilloscope between pin 7 of CN5 (A Board) connector and ground.
- Select "CCPM-CLEV, CCPM-SHUE" (Main), and adjust them to have $VB1 = VB4 \pm 40mV$ and $VB2 = VB3 \pm 40mV$ in the waveform levels.
- Select "YCTS-SCOL, YCTS-SHUE" (Sub), and adjust them to have $VB1 = VB4 \pm 40mV$ and $VB2 = VB3 \pm 40mV$ in the waveform levels.
- After completing the adjustments, write the data into memory by pressing "MUTING" → "ENTER" on the remote commander.



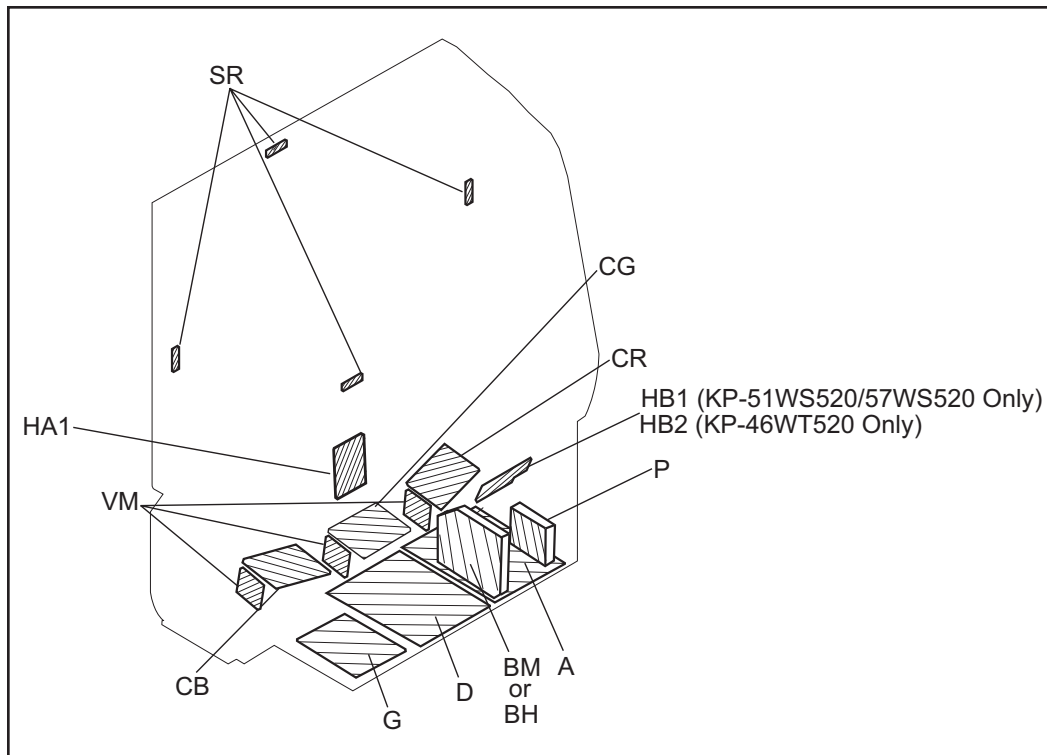
4-5. BLUE OFFSET ADJUSTMENT

1. Receive the all black (1080i, component) signal with VIDEO 5 input, and set PICTURE to maximum.
2. Connect an oscilloscope between CN5 7 pin (B) on the (A Board) and ground.
3. Set in the service mode and select the category "DEF2-SLIN".
4. Adjust "3 SLIN" so that the waveform level is $2.20 \pm 0.05V_{pp}$.
5. After completing the adjustments, write the data into memory by pressing "MUTING" → "ENTER" on the remote commander.
6. Receive the RF signal and change the wide screen mode to "Wide Zoom". Copy the same data to "DEF2-SLIN".



SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

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

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K=1000, M=1000k

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm

Rating electrical power : $\frac{1}{4}$ W

$\frac{1}{4}$ W in resistance, $\frac{1}{10}$ W and $\frac{1}{8}$ W in chip resistance.

: nonflammable resistor.

: fusible resistor.

Δ : internal component.

: panel designation and adjustment for repair.

\perp : earth ground

/// : earth-chassis

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

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

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

KP-46WT520/51WS520/57WS520

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


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



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

Le symbole indique une fusible à action rapide. Doit être remplacé par une fusible de même valeur, comme marqué.

- : B+ line
- : B-line. (Actual measured value may be different).
- : signal path. (RF)



Circled numbers are waveform references.

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


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

(Refer to adjustments in Sections 3-1 and 3-2.)




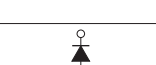





















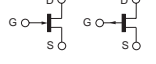

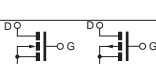



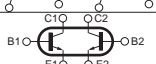

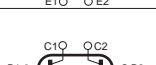



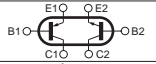

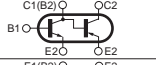

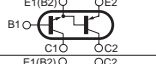

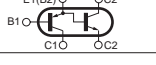
When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced ()	Adjustment ()
D BOARD T8001 (RHT), IC8002, IC8004, IC8005, PH8003, R8014, R8015, R8017, R8060, R8012	HV REGULATOR RV8002
D BOARD T8001 (RHT), D8022, IC8001, IC8014, R8008, R8016, R8046, R8052, R8072, R8078, R8079, R8165, R8019	HV HOLD DOWN RV8002

REFERENCE INFORMATION

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

Terminal name of semiconductors in silk screen printed circuit (*)

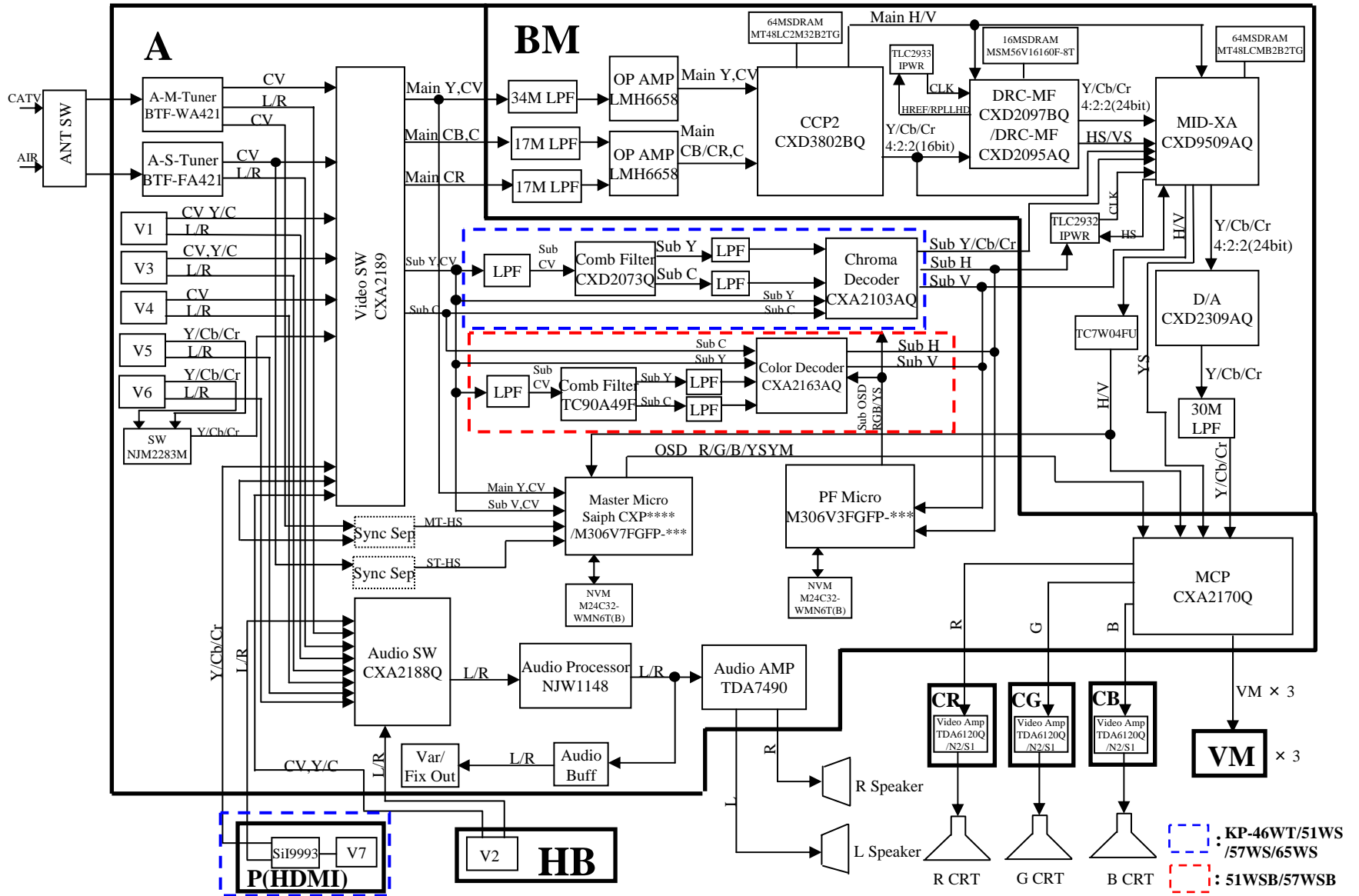
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Anode Cathode Cathode	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		Source Drain Gate	
⑯	Transistor		Emitter Collector Base	
⑰	Transistor		C2 B1 E1 E2 B2 C1	
⑱	Transistor		C1 B2 E2 E1 B1 C2	
⑳	Transistor		C1 B2 E2 E1 B1 C2	
㉑	Transistor		E2 B1 E1 C2 C1(B2)	
㉒	Transistor		(B2) B1 E1 E2 C1 C2	
㉓	Transistor		(B2) E2 E1 B1 C2 C1	
-	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

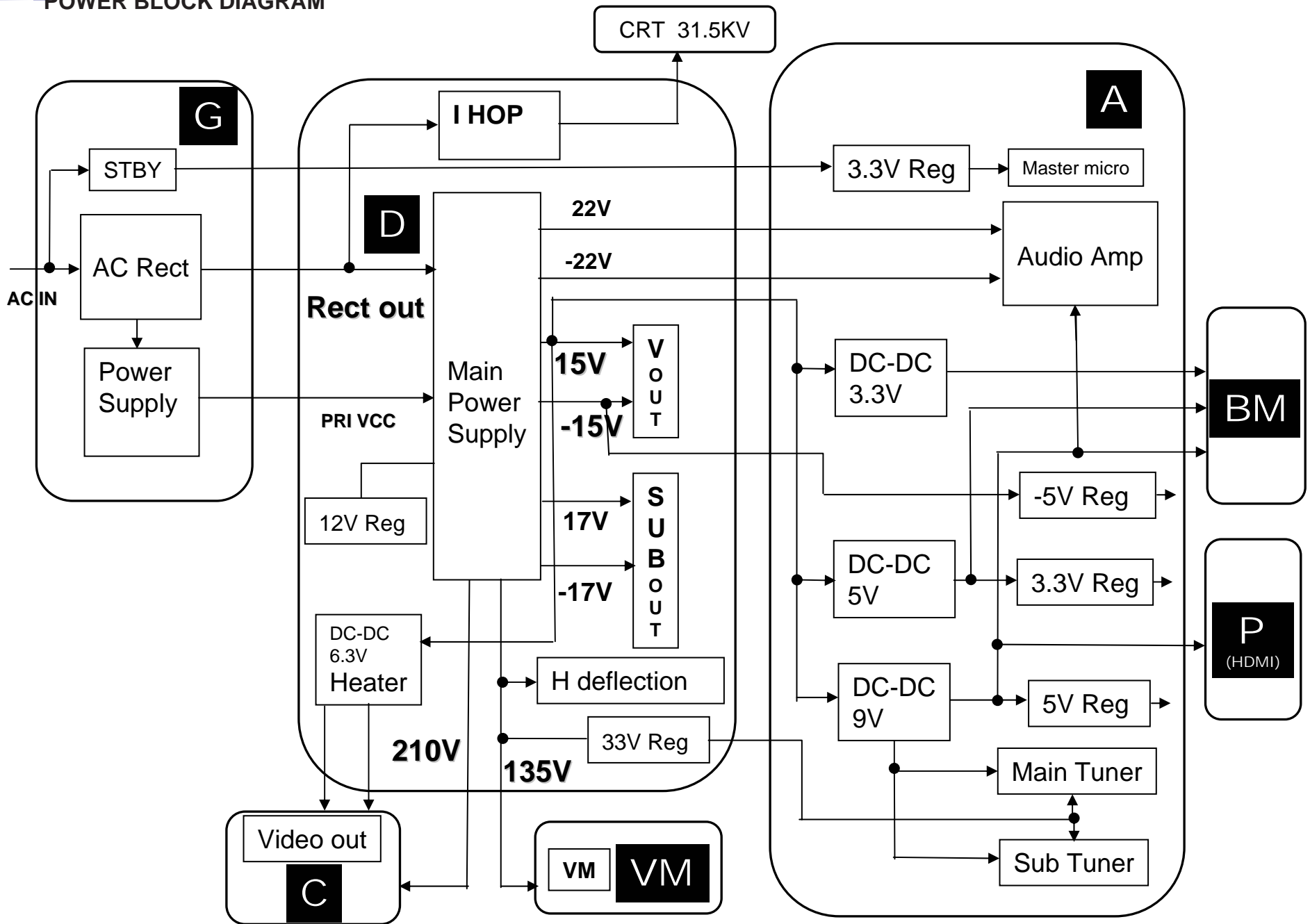
Ver.1.6

5-3. BLOCK DIAGRAMS

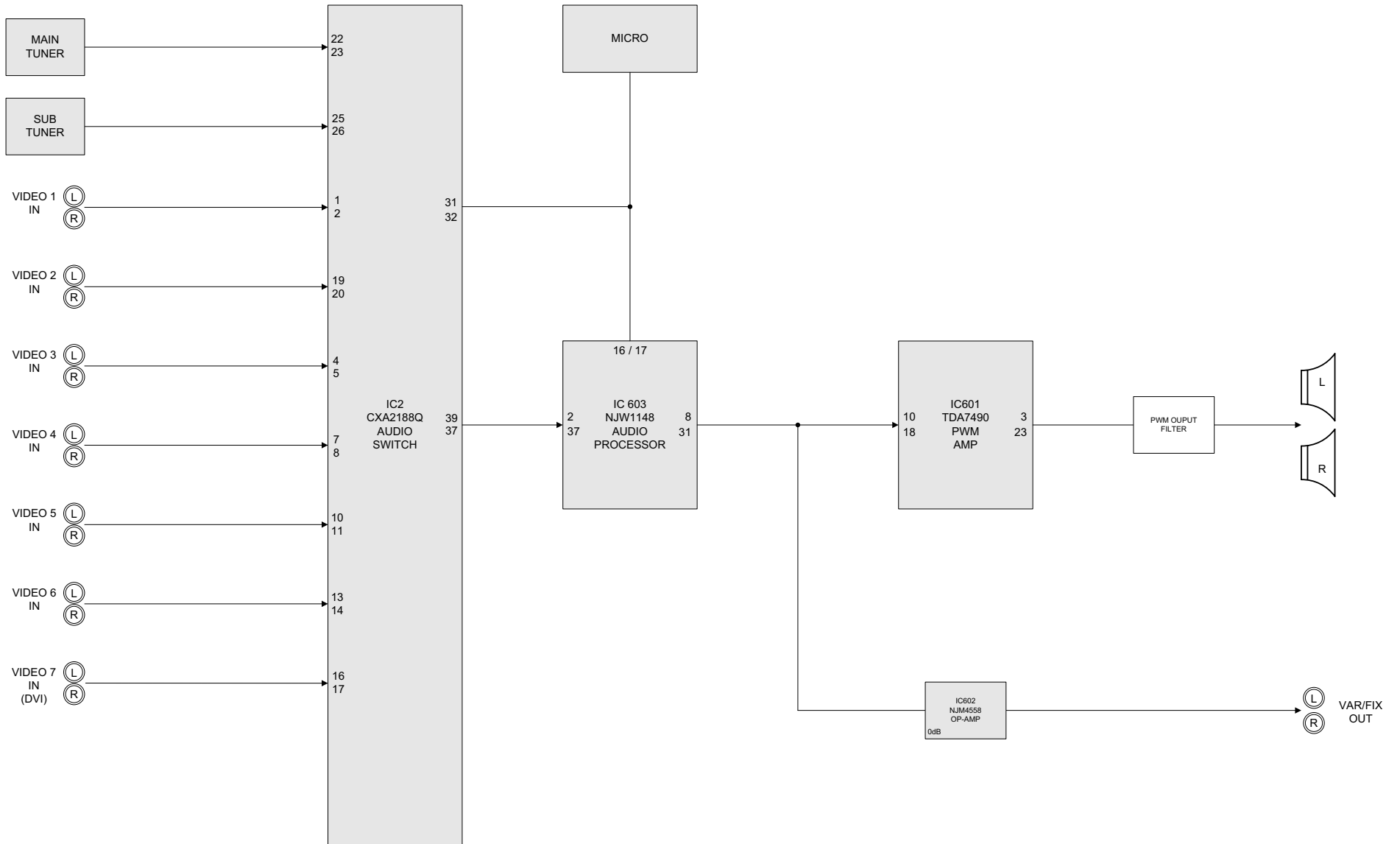
SIGNAL FLOW BLOCK DIAGRAM



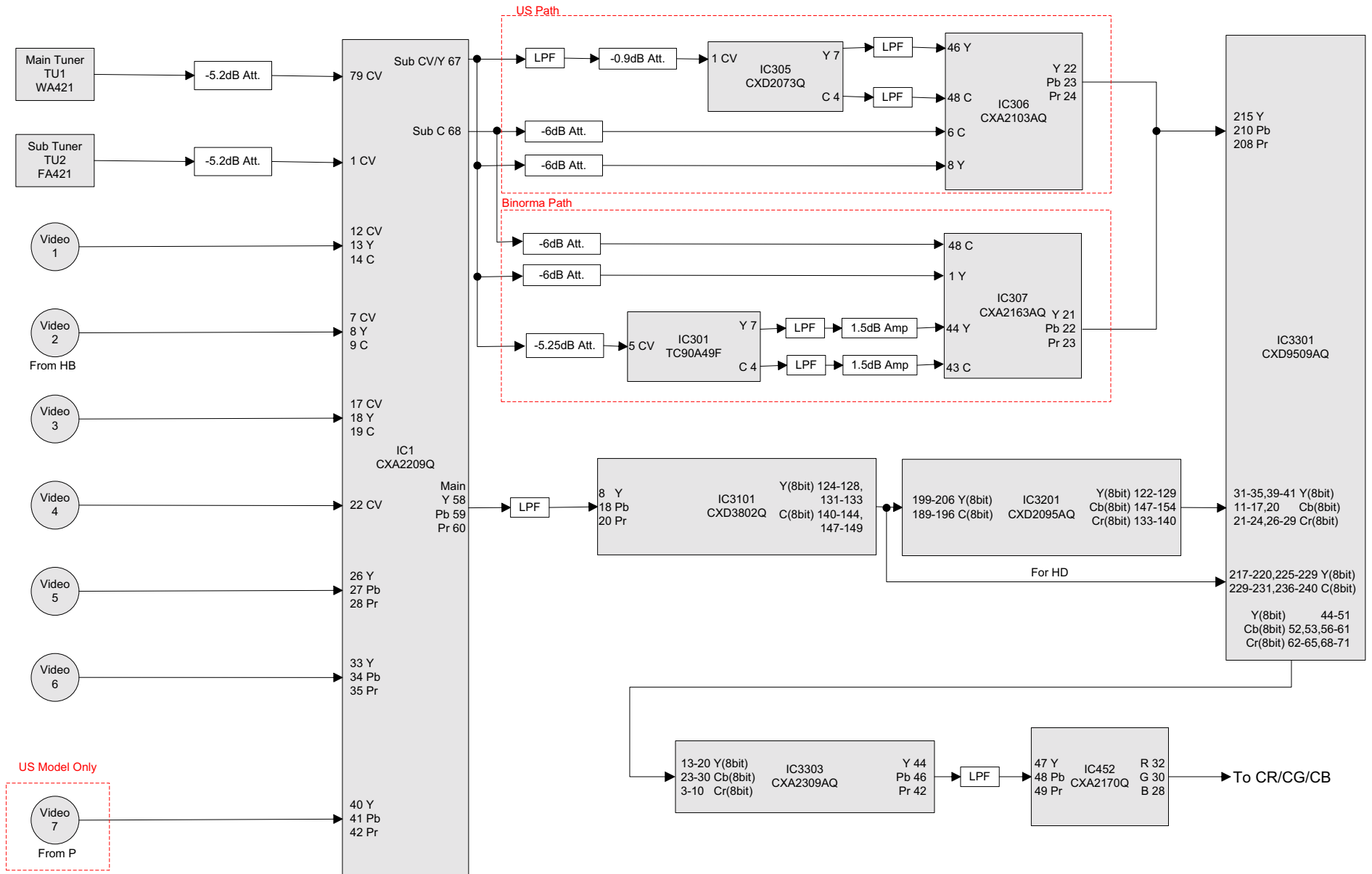
POWER BLOCK DIAGRAM



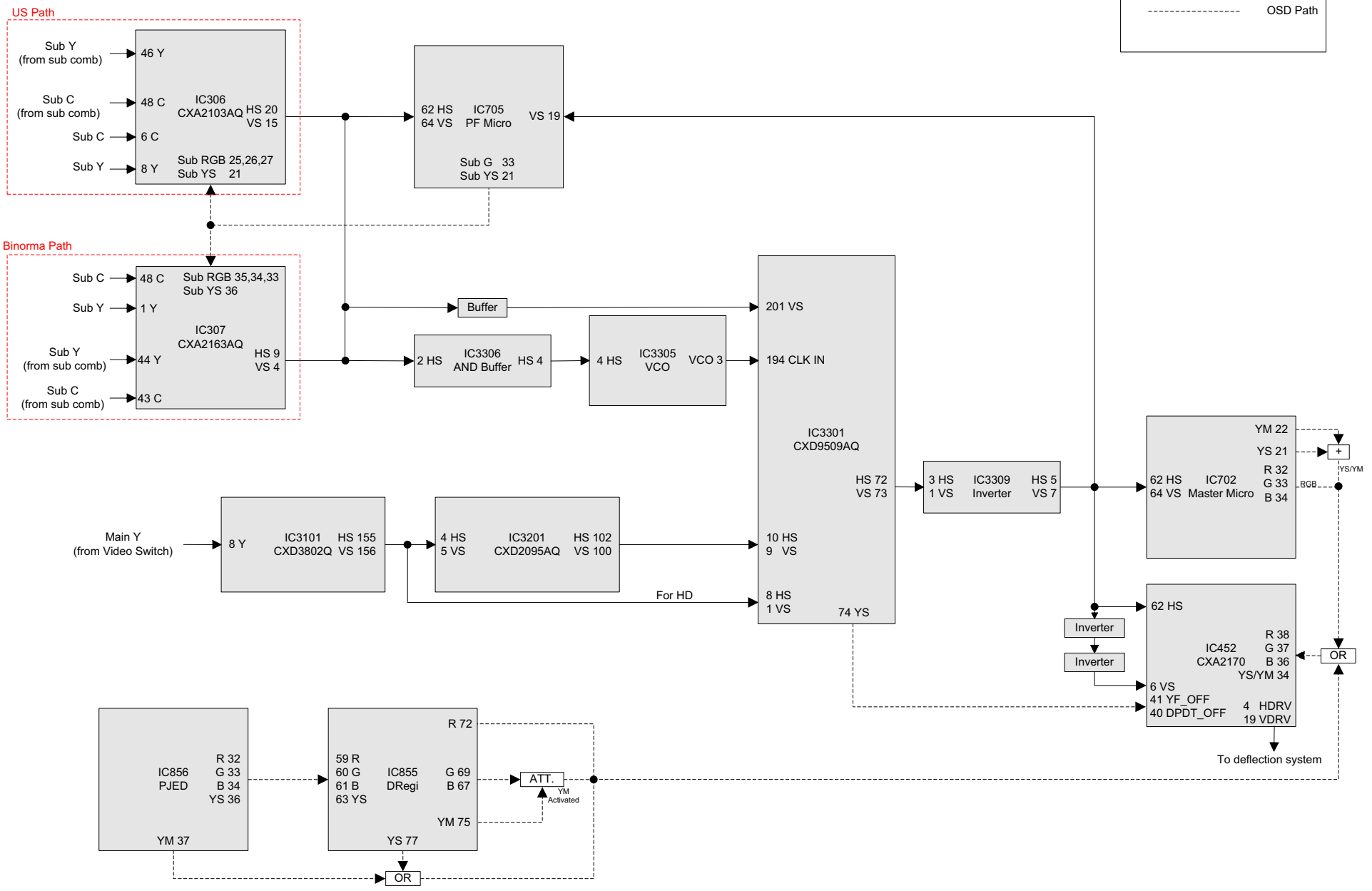
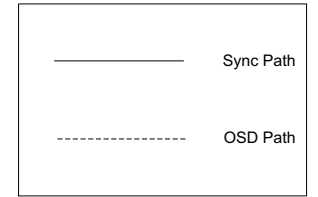
AUDIO SIGNAL PATH BLOCK DIAGRAM



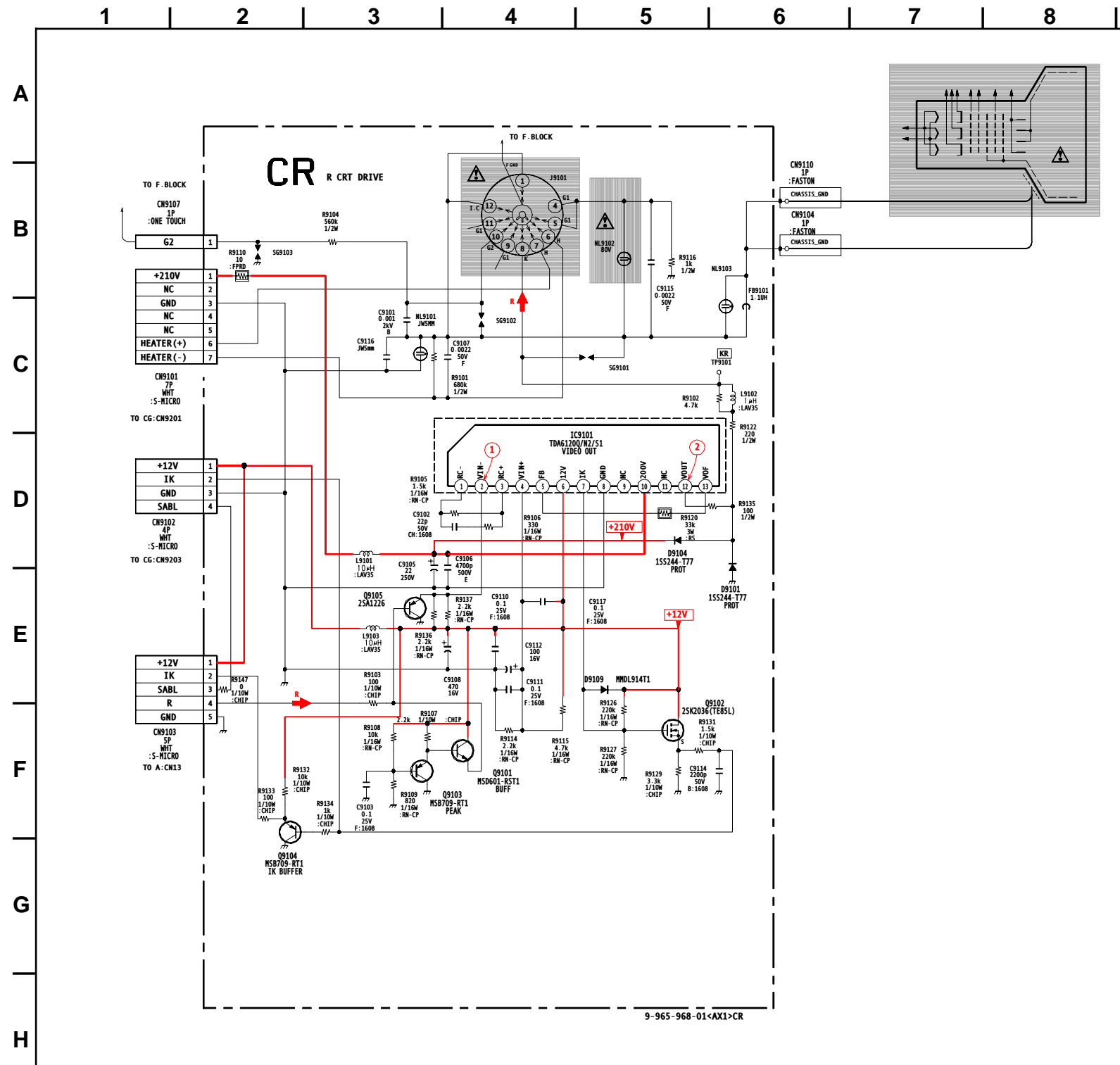
VIDEO PATH BLOCK DIAGRAM



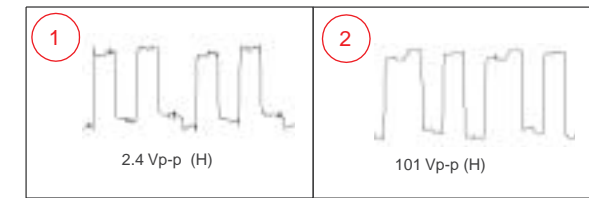
SYNC/OSD PATH BLOCK DIAGRAM



5-4. SCHEMATICS AND SUPPORTING INFORMATION
CR BOARD SCHEMATIC DIAGRAM



CR BOARD WAVEFORMS



CR BOARD IC VOLTAGE LIST

IC9101			
PIN	VOLT	PIN	VOLT
1	2.0	8	GND
2	2.7	9	N/C
3	3.4	10	200.0
4	4.1	11	N/C
5	2.6	12	157.7
6	12.0	13	158.2
7	7.0		All voltages are in V.

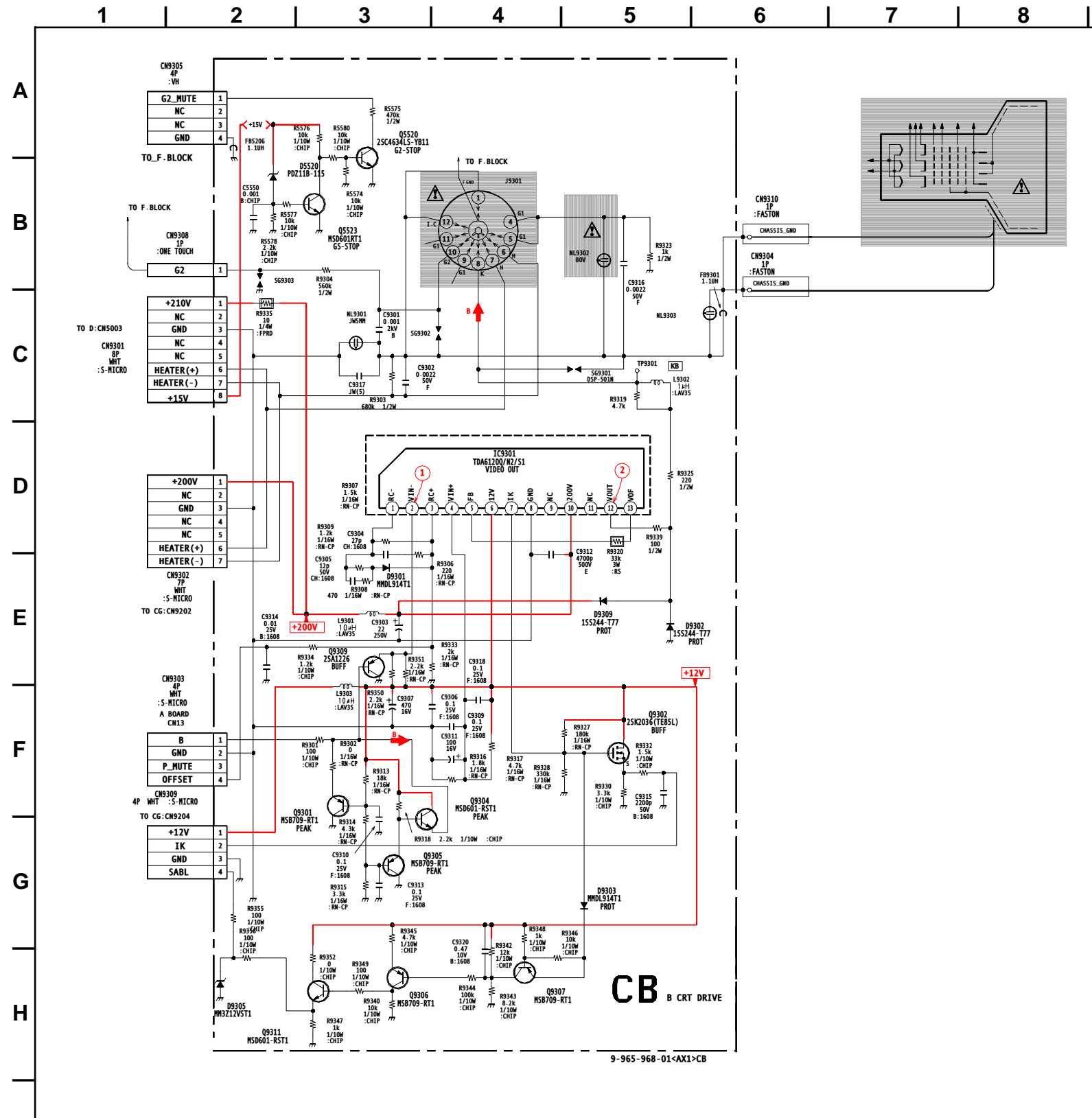
CR BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9101	2.3	12.0	6.3
Q9103	1.7	GND	2.3
Q9104	8.4	GND	8.5
Q9105	2.3	GND	2.9

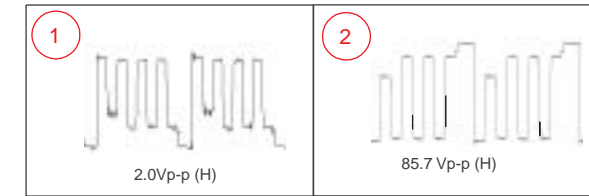
	G	D	S
Q9102	7.0	12.0	5.7

All voltages are in V.

CB BOARD SCHEMATIC DIAGRAM



CB BOARD WAVEFORMS



CB BOARD IC VOLTAGE LIST

IC9301			
PIN	VOLT	PIN	VOLT
1	2.1	8	GND
2	2.9	9	N/C
3	1.6	10	200.0
4	2.9	11	N/C
5	2.5	12	161.8
6	12.0	13	144.5
7	7.3		All voltages are in V.

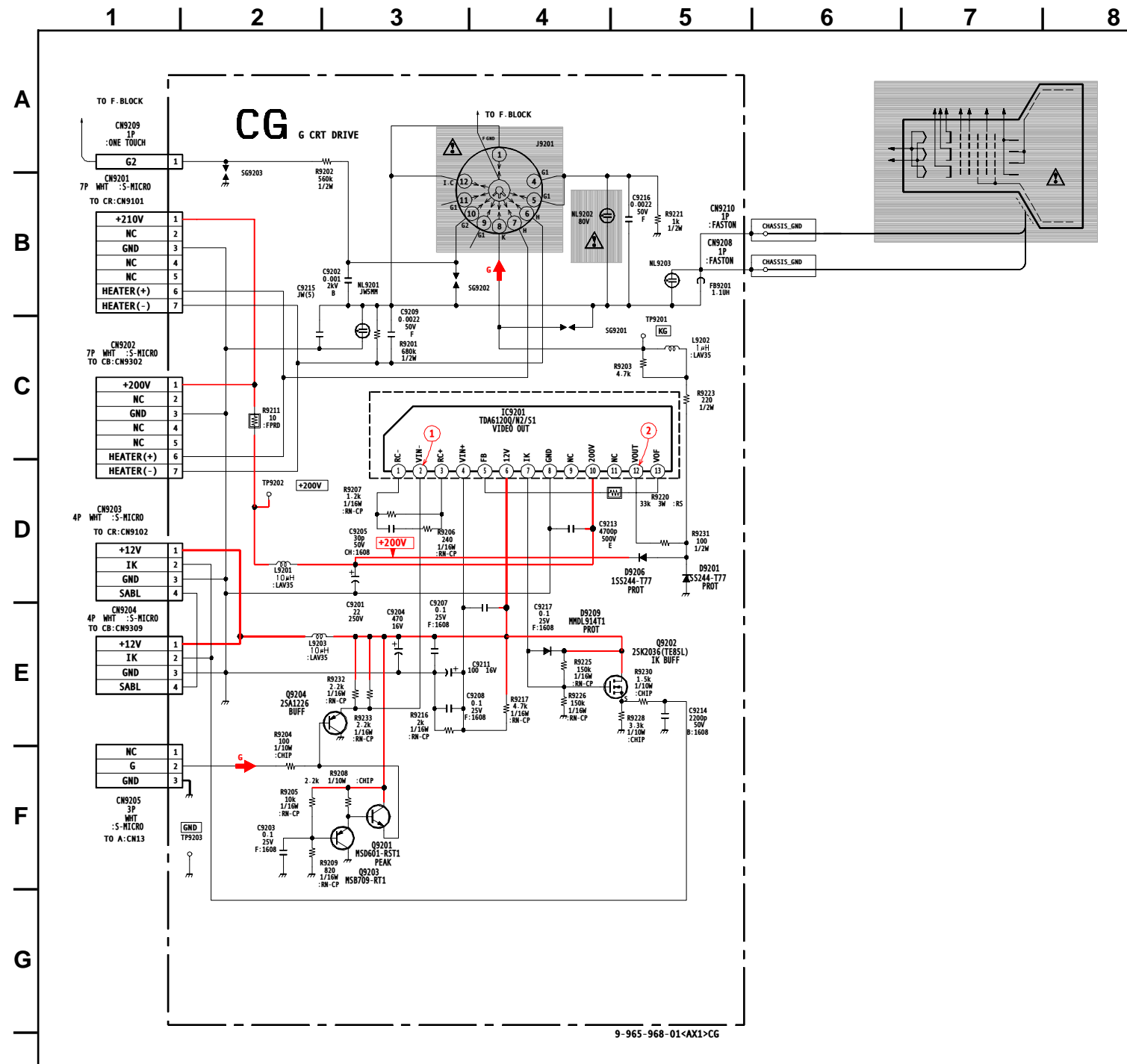
CB BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q5520	0.0	566.0	GND
Q5523	0.0	1.9	GND
Q9301	1.7	GND	2.3
Q9304	2.3	12.0	6.3
Q9305	1.7	GND	2.3
Q9306	7.3	7.7	7.8
Q9307	7.7	11.7	7.0
Q9309	2.3	GND	2.9
Q9311	0.0	12.1	7.6

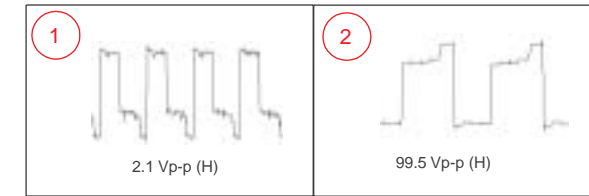
	G	D	S
Q9302	7.3	12.0	6.0

All voltages are in V.

CG BOARD SCHEMATIC DIAGRAM



CG BOARD WAVEFORMS



CG BOARD IC VOLTAGE LIST

IC9201			
PIN	VOLT	PIN	VOLT
1	1.9	8	GND
2	2.6	9	N/C
3	3.1	10	200.0
4	3.8	11	N/C
5	2.5	12	155.1
6	12.0	13	159.2
7	7.6	All voltages are in V.	

CG BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9201	2.3	12.0	6.3
Q9203	1.7	GND	2.3
Q9204	2.3	GND	2.9

	G	D	S
Q9202	7.6	12.0	6.3

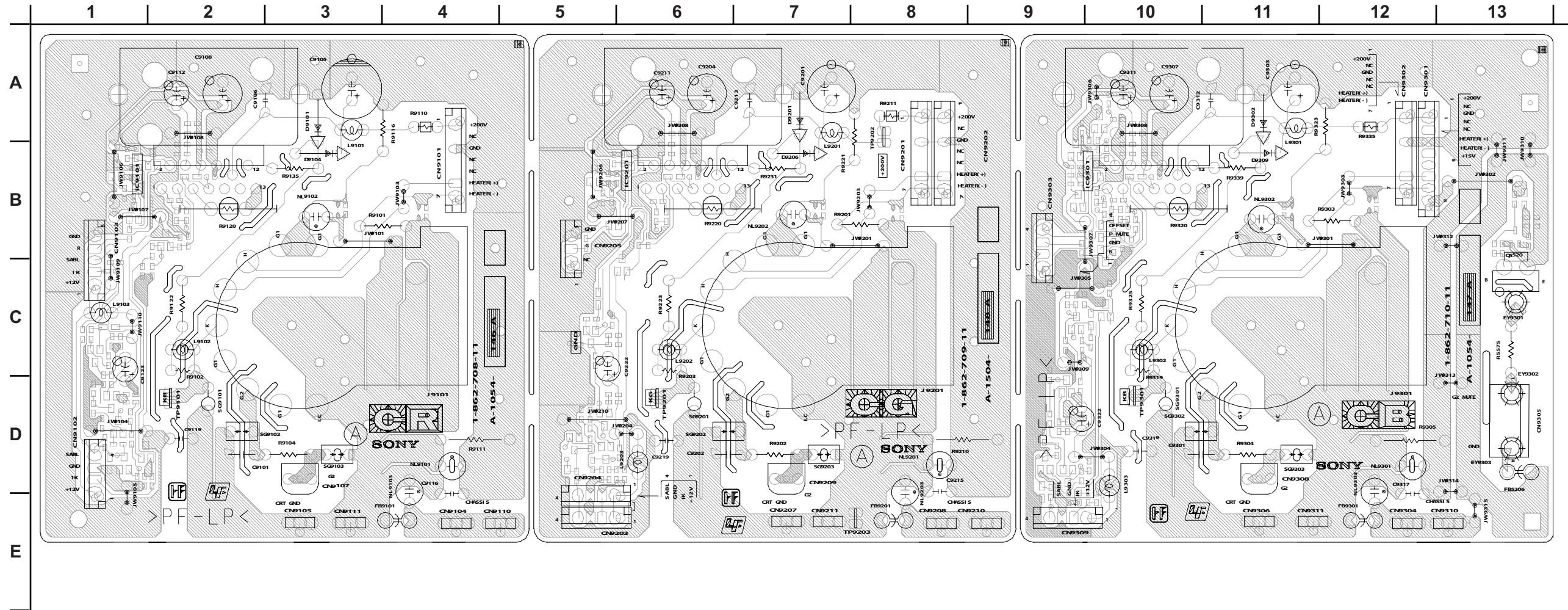
All voltages are in V.

CR [R CRT DRIVE]

CB [B CRT DRIVE]

CG [G CRT DRIVE]

COMPONENT SIDE

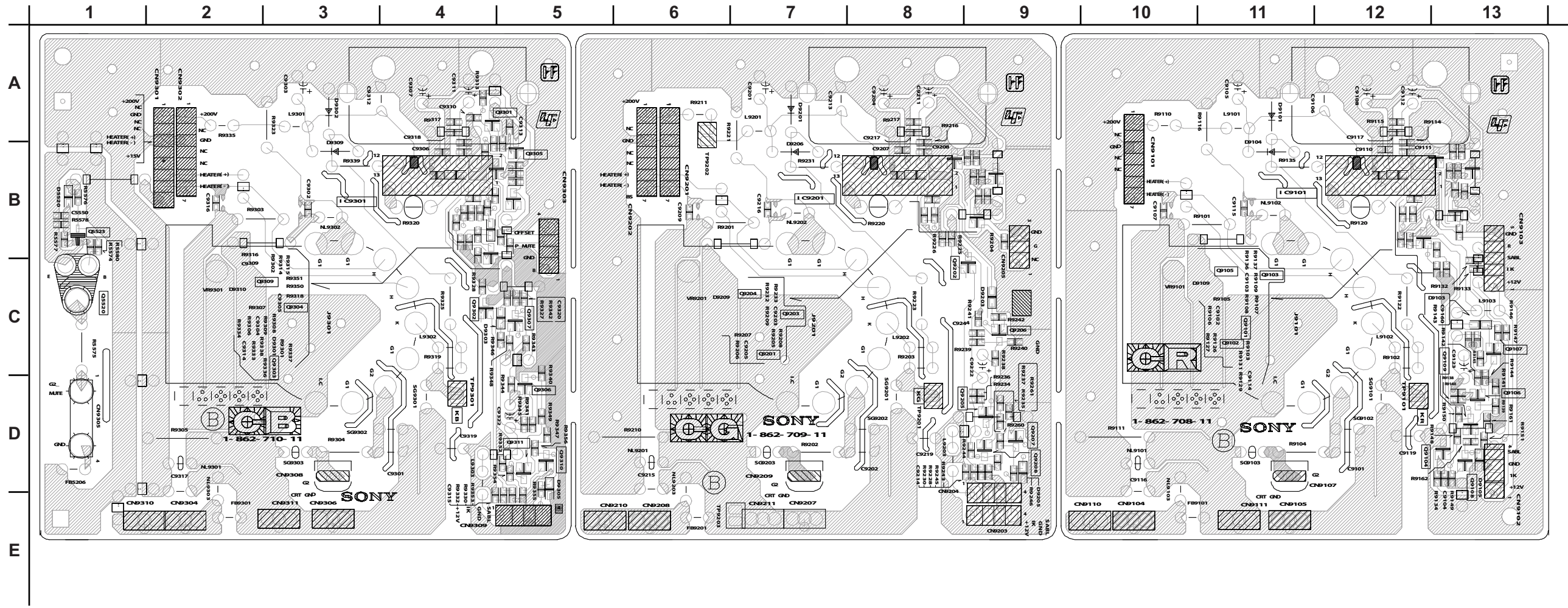


CR [R CRT DRIVE]

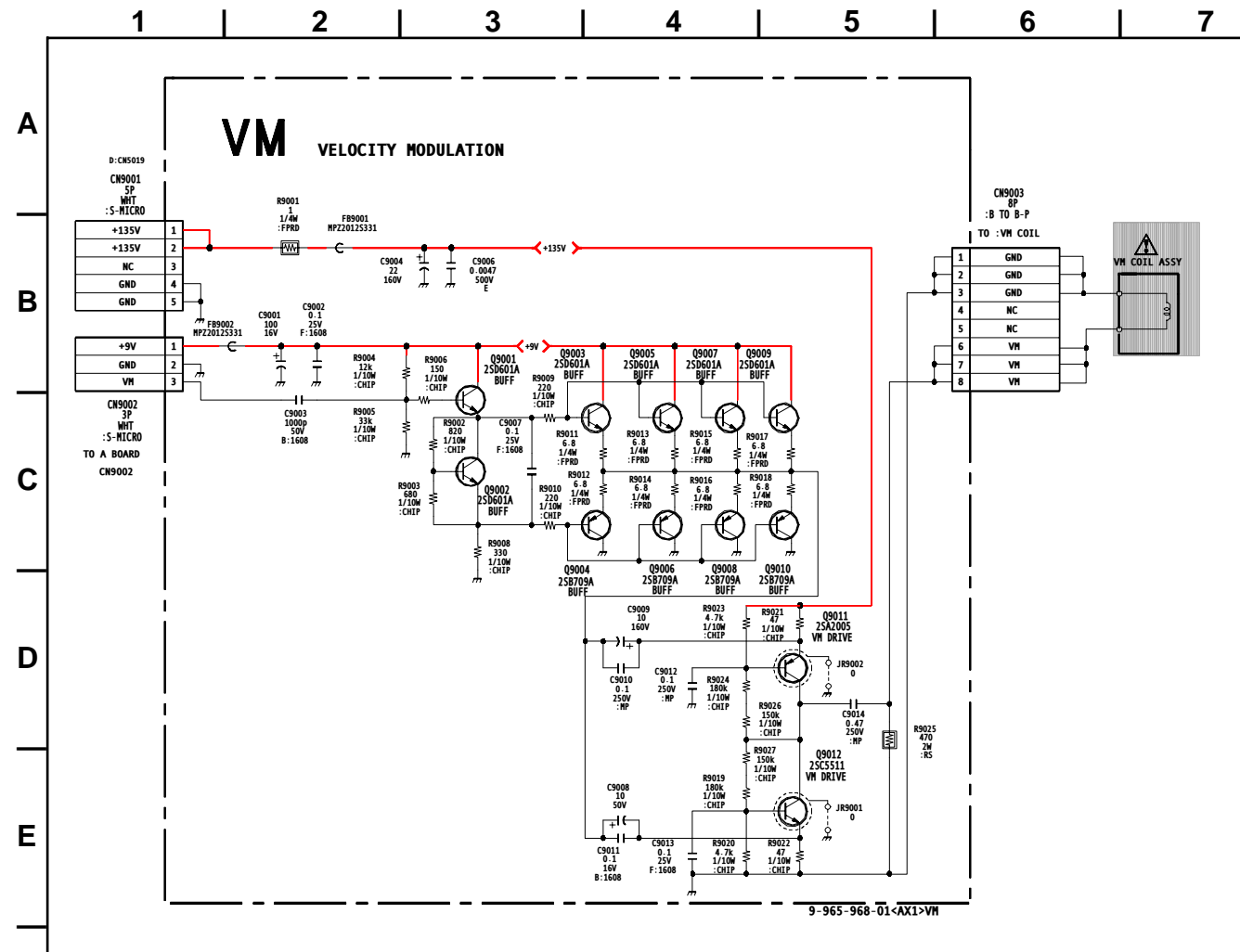
CB [B CRT DRIVE]

CG [G CRT DRIVE]

CONDUCTOR SIDE



VM BOARD SCHEMATIC DIAGRAM

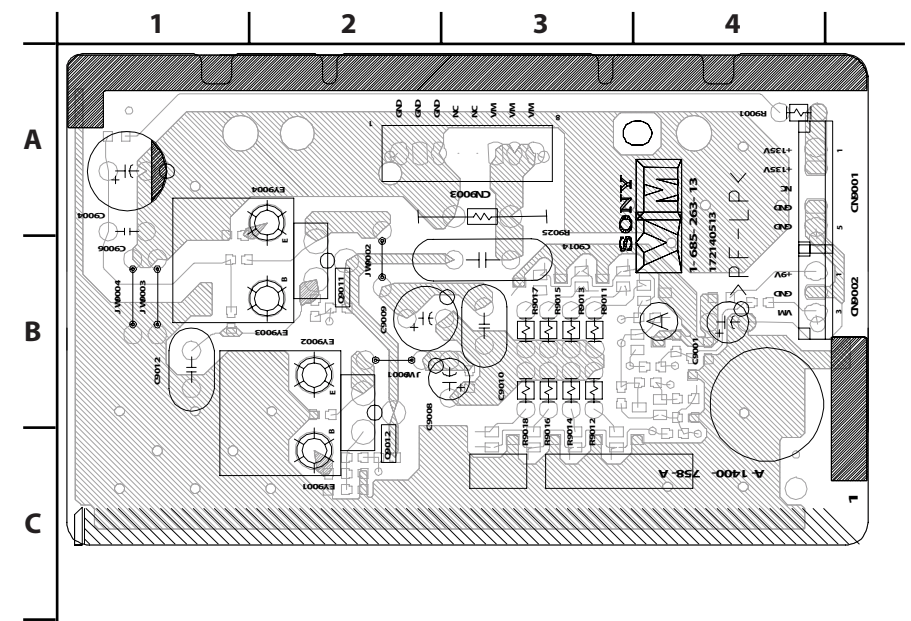


VM BOARD TRANSISTOR VOLTAGE LIST

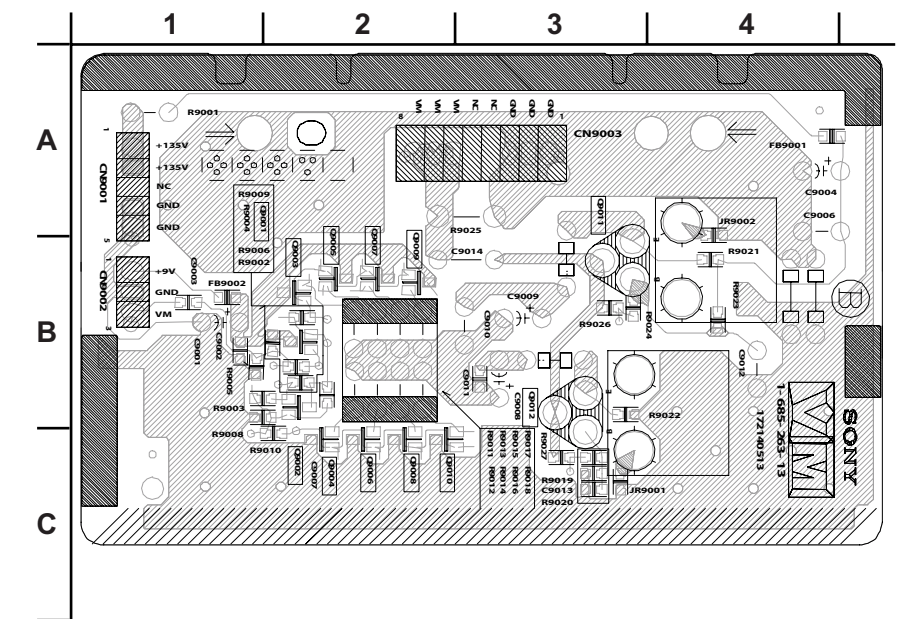
	B	C	E
Q9001	0.0	9.0	5.2
Q9002	3.6	5.2	4.5
Q9003	5.1	9.0	4.5
Q9004	3.6	GND	4.3
Q9005	5.1	9.0	4.5
Q9006	3.6	GND	4.3
Q9007	5.1	9.0	4.5
Q9008	3.6	GND	4.3
Q9009	5.1	9.0	4.5
Q9010	3.6	GND	4.3
Q9011	133	66.7	134
Q9012	0	66.7	0

All voltages are in V.

VM [VELOCITY MODULATION]
COMPONENT SIDE

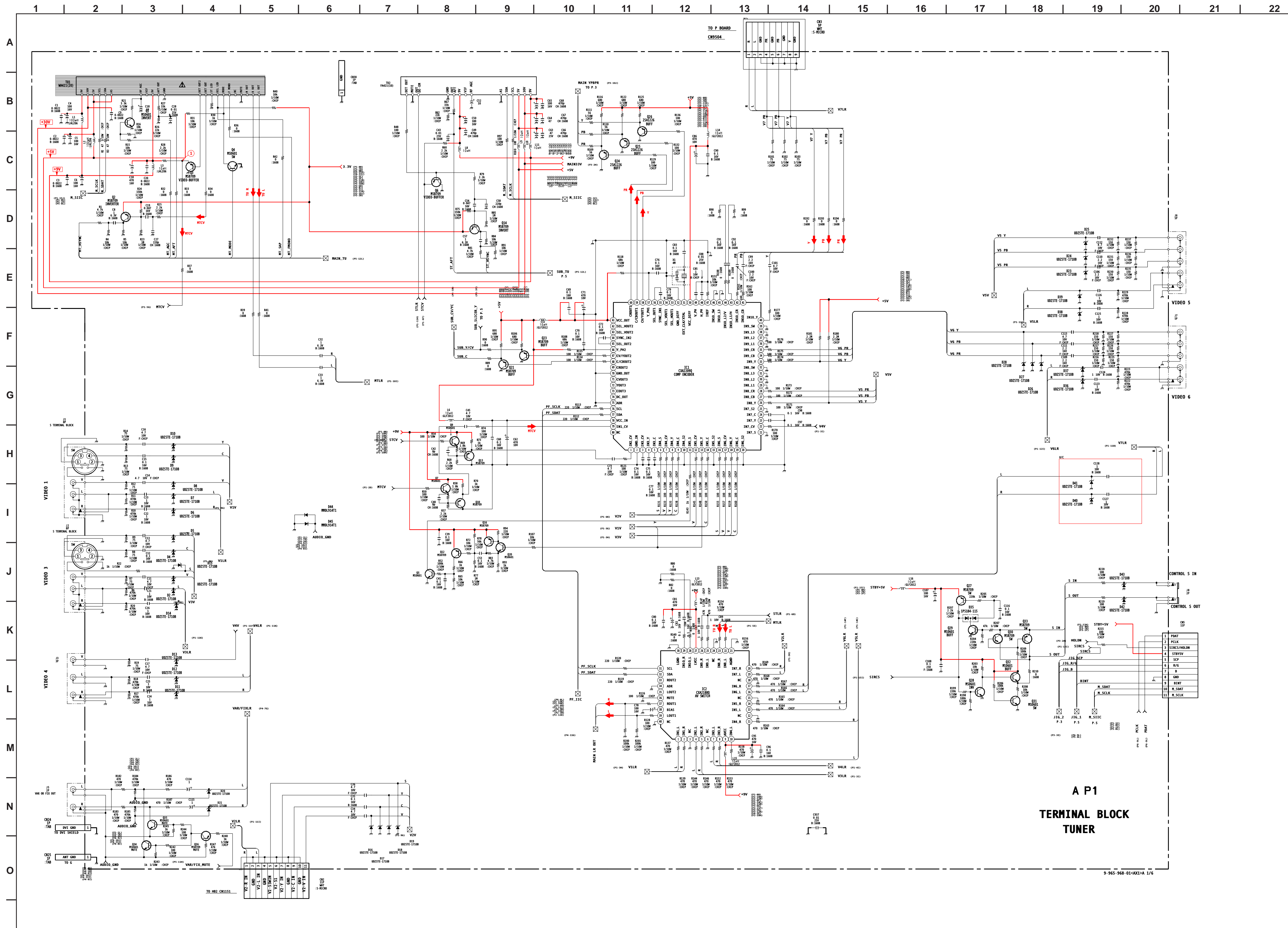
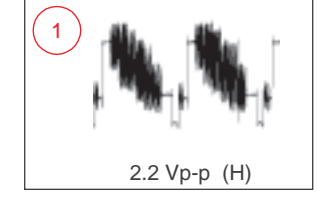


VM [VELOCITY MODULATION]
CONDUCTOR SIDE



A BOARD SCHEMATIC DIAGRAM (1 OF 6)

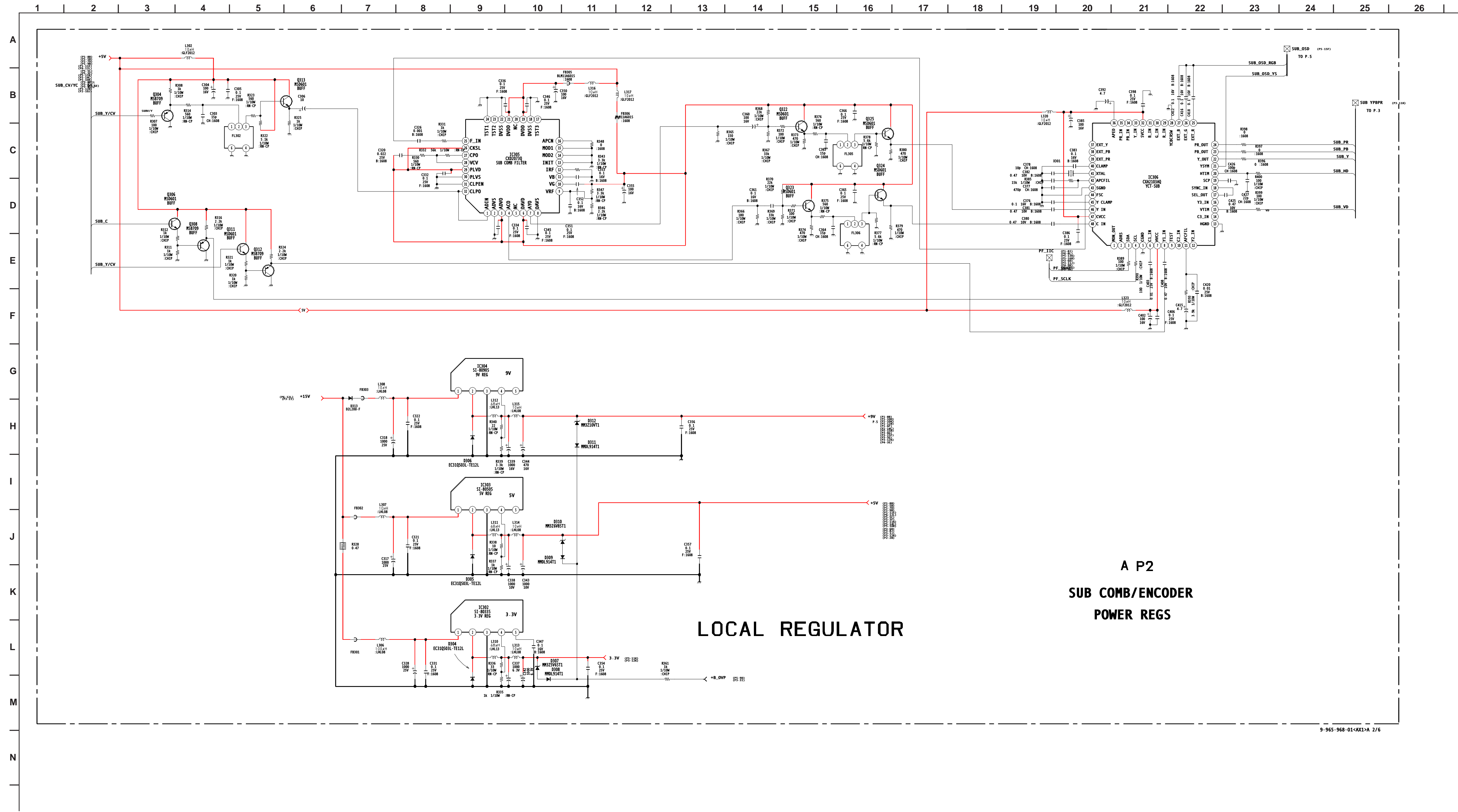
A BOARD WAVEFORMS



**A P1
TERMINAL BLOCK
TUNER**

9-965-968-01-001A 1/76

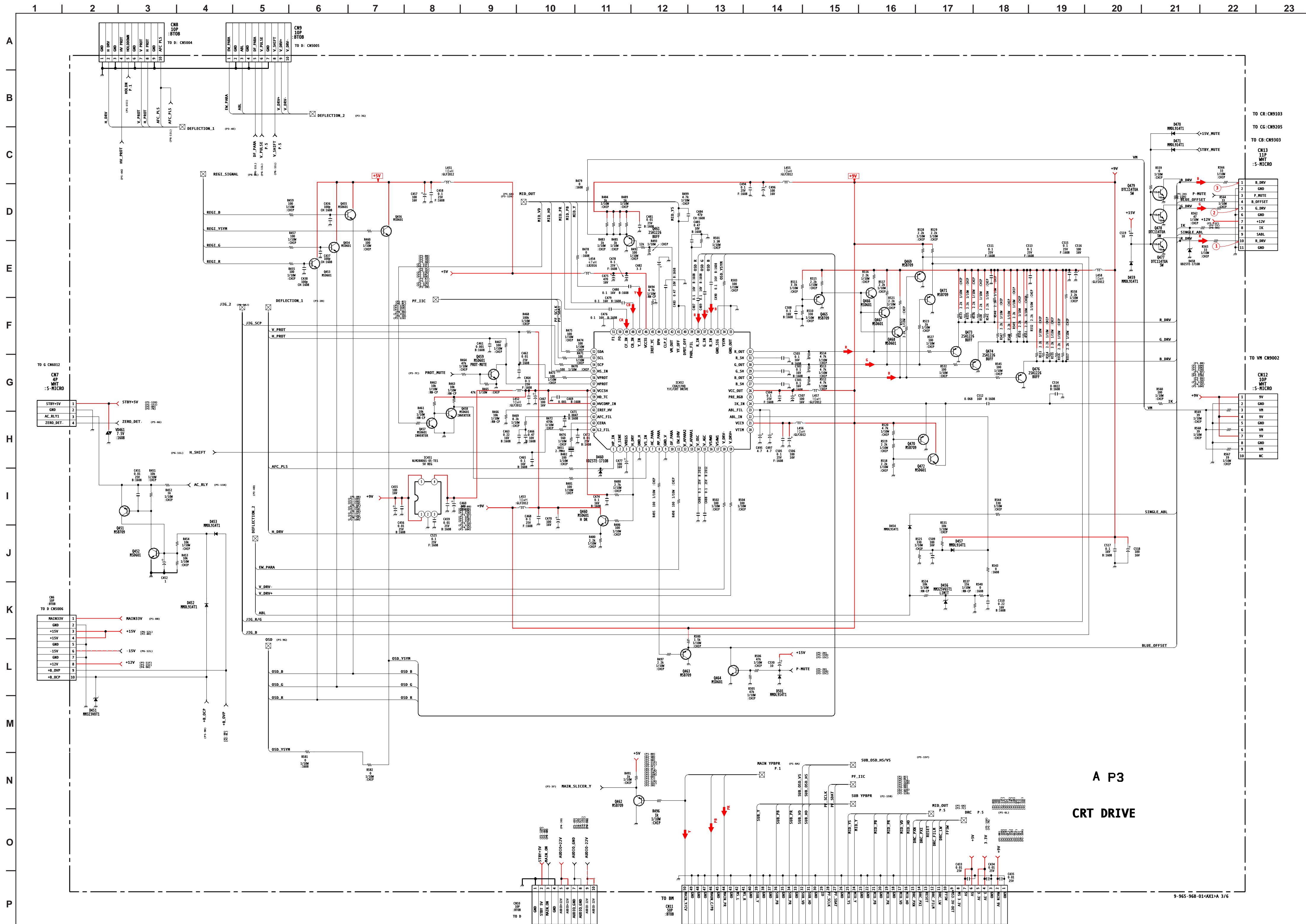
A BOARD SCHEMATIC DIAGRAM (2 OF 6)



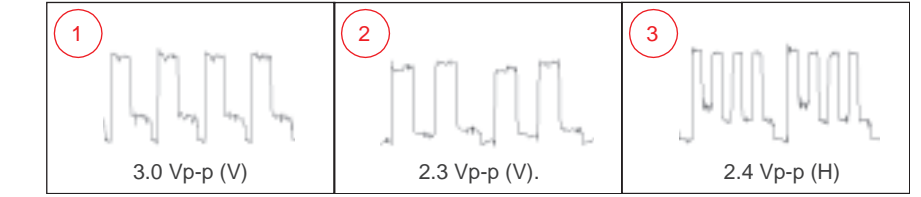
A P2
SUB COMB/ENCODER
POWER REGS

LOCAL REGULATOR

A BOARD SCHEMATIC DIAGRAM (3 OF 6)

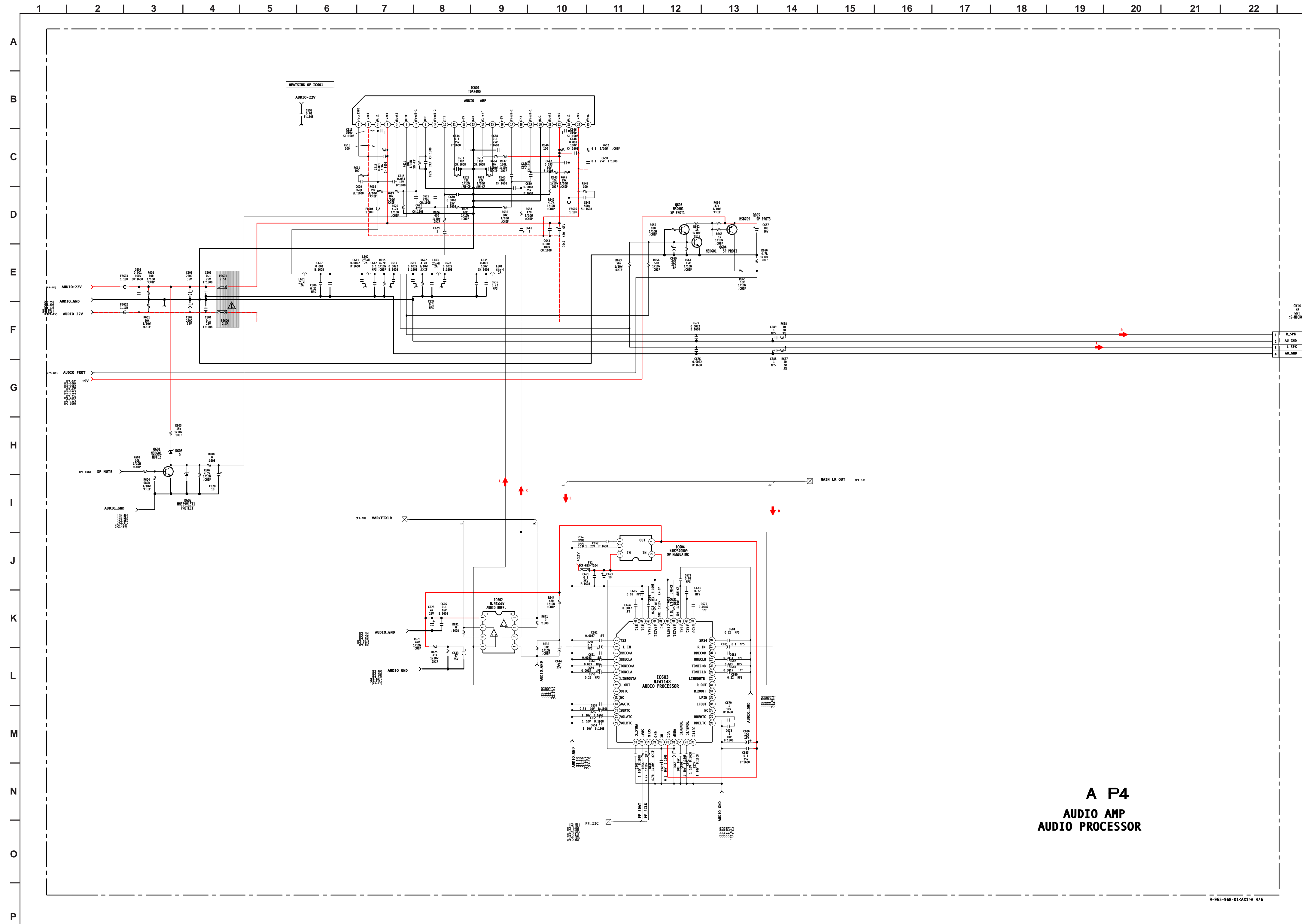


A BOARD WAVEFORMS



A P3
CRT DRIVE

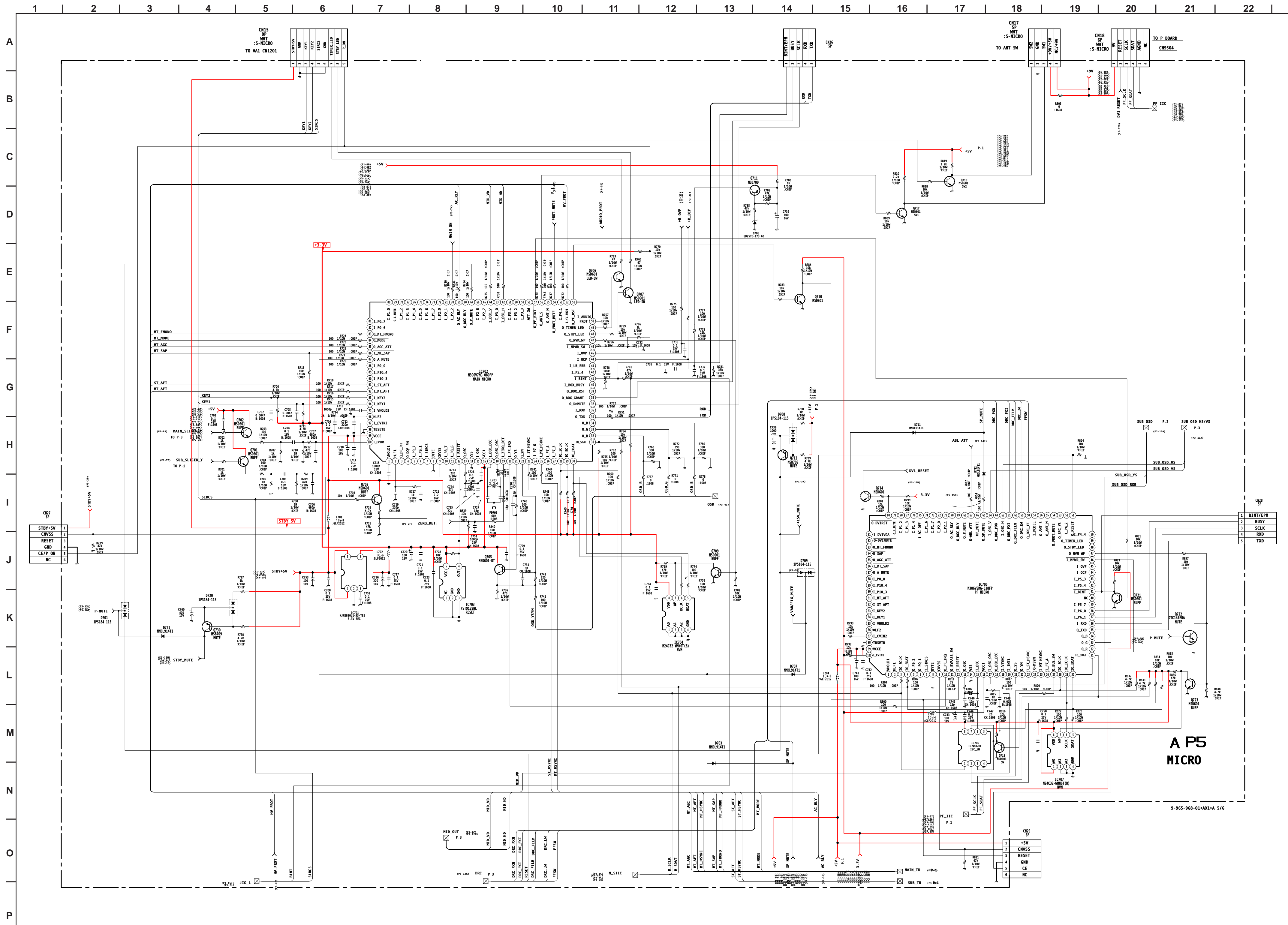
A BOARD SCHEMATIC DIAGRAM (4 OF 6)



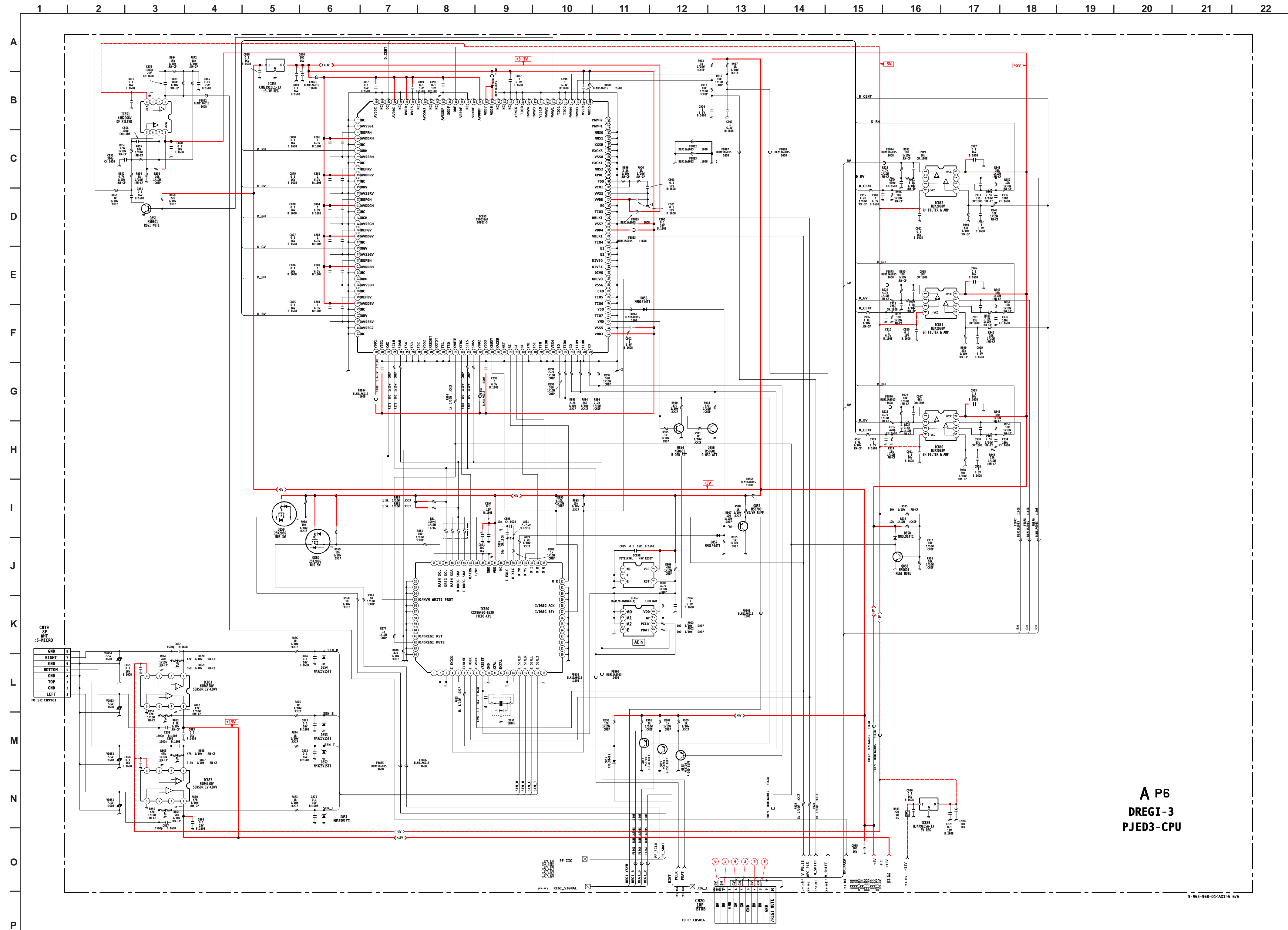
A P4
AUDIO AMP
AUDIO PROCESSOR

9-965-968-01-04X13A 4/6

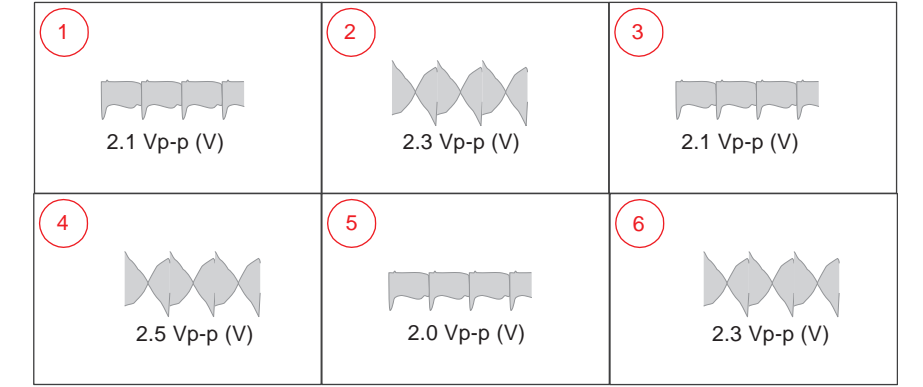
A BOARD SCHEMATIC DIAGRAM (5 OF 6)



A BOARD SCHEMATIC DIAGRAM (6 OF 6)



A BOARD WAVEFORMS



A P6
DREGI-3
PJED3-CPU

9-965-968-01(4X)1A 6/6

A BOARD IC VOLTAGE LIST

IC1		46	GND	11	4.5	2	9.0	8	2.8	5	9.0	45	4.2	IC602		36	4.3	2	0.0	IC854		41	2.2	88	GND	135	GND	36	0.0	IC859	
PIN	VOLT	47	1.1	12	GND	3	GND	9	NC	IC452		46	5.0	PIN	VOLT	37	4.3	3	0.0	PIN	VOLT	42	GND	89	0.0	136	GND	37	0.0	PIN	VOLT
1	2.4	48	0.0	13	4.5	4	9.0	10	NC	PIN	VOLT	47	3.8	1	4.8	38	0	4	GND	I	5.0	43	GND	90	3.3	137	GND	38	2.4	I	-15.0
2	GND	49	0.0	14	4.5	5	NC	11	2.3	1	0.0	48	4.4	2	4.5	39	4.3	5	5.0	O	3.3	44	GND	91	GND	138	GND	39	2.7	O	-5.0
3	2.0	50	5.0	15	GND	IC305		12	NC	2	N/C	49	5.2	3	4.5	40	4.3	6	5.0	G	GND	45	GND	92	GND	139	3.3	40	N/C	G	GND
4	0.0	51	0.0	16	5.2	PIN	VOLT	13	GND	3	0.0	50	N/C	4	GND	41	0	7	0.0	IC855		46	5.0	93	GND	140	GND	41	5.0	IC860	
5	0.0	52	0.0	17	0.0	1	1.0	14	NC	4	3.1	51	GND	5	4.6	42	4.3	8	5.0	PIN	VOLT	47	GND	94	GND	141	3.3	42	GND	PIN	VOLT
6	0.0	53	NC	18	GND	2	GND	15	0.5	5	GND	52	3.4	6	4.5	43	4.3	IC707		1	GND	48	GND	95	3.3	142	1.6	43	GND	1	2.8
7	2.0	54	NC	19	4.5	3	4.8	16	NC	6	3.1	53	3.4	7	4.8	44	N/C	PIN	VOLT	2	GND	49	GND	96	GND	143	GND	44	0.0	2	2.7
8	0.0	55	0.0	20	4.5	4	1.0	17	2	7	N/C	54	0.6	8	9.0	45	4.3	1	5.0	3	2.2	50	4.3	97	1.6	144	GND	45	0.0	3	2.6
9	0.0	56	0.0	21	GND	5	NC	18	3.1	8	3.6	55	8.9	IC603		46	4.3	2	GND	4	3.3	51	0.0	98	1.6	IC856		46	2.2	4	-5.0
10	GND	57	2.9	22	0.0	6	4.8	19	2.0	9	GND	56	4.3	PIN	VOLT	47	4.3	3	GND	5	GND	52	2.5	99	GND	PIN	VOLT	47	2.3	5	1.8
11	0.0	58	0.0	23	0.0	7	0.5	20	0.5	10	N/C	57	4.9	1	4.3	48	4.3	4	GND	6	1.7	53	2.5	100	GND	1	GND	48	4.3	6	1.8
12	0.0	59	0.0	24	GND	8	GND	21	0.0	11	0.0	58	3.7	2	4.3	IC604		5	4.4	7	GND	54	3.3	101	GND	2	GND	49	2.3	7	0.0
13	0.0	60	2.4	25	4.5	9	1.9	22	1.8	12	N/C	59	1.5	3	0.0	PIN	VOLT	6	0.0	8	GND	55	GND	102	GND	3	GND	50	4.4	8	5.0
14	2.5	61	5.0	26	4.5	10	2.6	23	2.1	13	N/C	60	1.5	4	4.3	1	11.0	7	4.9	9	2.2	56	0.0	103	GND	4	2.5	51	GND	IC861	
15	0.0	62	NC	27	9.0	11	0.9	24	2.0	14	2.4	61	8.9	5	0.0	2	GND	8	5.0	10	3.3	57	0.0	104	GND	5	GND	52	GND	PIN	VOLT
16	0.0	63	NC	28	4.5	12	2.0	25	3.4	15	4.9	62	2.9	6	0.0	3	0.0	IC851		11	GND	58	GND	105	GND	6	5.0	53	GND	1	2.8
17	0	64	2.5	29	4.5	13	GND	26	3.4	16	N/C	63	2.9	7	4.3	4	9.0	PIN	VOLT	12	1.7	59	0.0	106	GND	7	0.0	54	GND	2	2.7
18	2.0	65	1.1	30	GND	14	GND	27	3.4	17	N/C	64	2.7	8	0.0	5	11.0	1	5.0	13	GND	60	0.0	107	N/C	8	0.0	55	5.0	3	2.6
19	0.0	66	2.9	31	4.8	15	GND	28	GND	18	1.1	IC601		9	N/C	IC701		2	2.2	14	2.2	61	0.0	108	N/C	9	0.0	56	GND	4	-5.0
20	GND	67	1.3	32	4.7	16	GND	29	NC	19	4.9	PIN	VOLT	10	N/C	PIN	VOLT	3	GND	15	3.3	62	GND	109	3.3	10	GND	57	GND	5	1.8
21	GND	68	2.4	33	4.5	17	NC	30	NC	20	N/C	1	-22.00	11	1.4	1	5.0	4	1.1	16	GND	63	0.0	110	GND	11	2.2	58	N/C	6	1.8
22	2.0	69	2.4	34	GND	18	GND	31	NC	21	9.0	2	-22.00	12	0.8	2	GND	5	1.3	17	1.7	64	GND	111	0.4	12	2.1	59	GND	7	0.0
23	2.0	70	0.0	35	4.5	19	5.0	32	5.0	22	3.4	3	0.0	13	2.9	3	3.3	6	0.0	18	GND	65	GND	112	1.2	13	GND	60	GND	8	5.0
24	0.0	71	0.0	36	GND	20	NC	33	NC	23	5.0	4	22.1	14	2.9	4	3.3	7	0.0	19	2.2	66	GND	113	GND	14	GND	61	5.0	IC862	
25	GND	72	NC	37	4.5	21	5.0	34	NC	24	0.0	5	9.1	15	2.8	5	5.0	8	-5.0	20	3.3	67	0.0	114	GND	15	2.0	62	5.0	PIN	VOLT
26	0.0	73	NC	38	4.5	22	GND	35	NC	25	N/C	6	5.1	16	4.6	IC703		IC852		21	GND	68	GND	115	0.0	16	0.5	63	GND	1	2.8
27	0.0	74	0.0	39	4.5	23	NC	36	2.6	26	9.0	7	0.0	17	0	PIN	VOLT	PIN	VOLT	22	1.7	69	GND	116	N/C	17	5	64	GND	2	2.7
28	2.5	75	0.0	40	GND	24	GND	37	NC	27	0.9	8	2.7	18	GND	1	N/C	1	15.0	23	GND	70	GND	117	GND	18	1.7	IC857		3	2.6
29	GND	76	4.8	IC302		25	2.4	38	NC	28	0.3	9	0.0	19	N/C	2	GND	2	2.2	24	2.2	71	GND	118	N/C	19	GND	PIN	VOLT	4	-5.0
30	GND	77	4.7	PIN	VOLT	26	5.0	39	NC	29	5.0	10	0.0	20	9.0	3	GND	3	GND	25	3.3	72	0.0	119	N/C	20	GND	1	4.9	5	1.8
31	GND	78	5.0	1	15.0	27	2.2	40	1.7	30	5.7	11	0.0	21	4.3	4	3.3	4	0.0	26	GND	73	3.3	120	GND	21	GND	2	4.9	6	1.8
32	GND	79	2.4	2	3.3	28	2.2	41	1.7	31	1.3	12	5.3	22	3.3	5	3.3	5	0.5	27	1.7	74	GND	121	GND	22	GND	3	4.9	7	0.0
33	2.0	80	NC	3	GND	29	5.0	42	2.4	32	3.1	13	GND	23	3.3	IC704		6	0.0	28	GND	75	0.0	122	GND	23	GND	4	GND	8	5.0
34	2.5	IC2		4	3.3	30	GND	43	GND	33	GND	14	-20.7	24	4.9	PIN	VOLT	7	2.8	29	GND	76	GND	123	GND	24	GND	5	4.6	All voltages are in V.	
35	2.5	PIN	VOLT	5	15.0	31	GND	44	0.0	34	0.0	15	0.0	25	0.0	1	GND	8	-5.0	30	2.2	77	0.0	124	GND	25	GND	6	4.7		
36	GND	1	4.5	IC303		32	1.0	45	3.1	35	GND	16	-5.5	26	3.3	2	GND	IC853		31	3.3	78	GND	125	3.3	26	GND	7	4.7		
37	GND	2	GND	PIN	VOLT	IC306		46	2.8	36	2.3	17	0.0	27	N/C	3	GND	PIN	VOLT	32	GND	79	GND	126	3.3	27	0.0	8	4.9		
38	GND	3	0.0	1	15.0	PIN	VOLT	47	5.0	37	0.0	18	0.0	28	N/C	4	GND	1	15.0	33	1.7	80	N/C	127	3.3	28	N/C	IC858			
39	GND	4	4.5	2	5.0	1	NC	48	3.1	38	2.3	19	0.0	29	N/C	5	4.5	2	2.2	34	GND	81	GND	128	N/C	29	GND	PIN	VOLT		
40	2.1	5	4.5	3	GND	2	NC	IC451		39	2.1	20	0.0	30	N/C	6	4.5	3	GND	35	GND	82	2.5	129	GND	30	GND	1	NC		
41	2.5	6	GND	4	5.0	3	4.6	PIN	VOLT	40	2.8	21	9.3	31	4.3	7	4.9	4	0.0	36	GND	83	N/C	130	N/C	31	GND	2	GND		
42	0.0	7	4.5	5	NC	4	4.6	1	9.0	41	0.0	22	22.1	32	N/C	8	5.0	5	0.5	37	3.3	84	GND	131	0.0	32	0.0	3	GND		
43	0.0	8	4.5	IC304		5	GND	2	GND	42	0.0	23	0.0	33	4.3	IC706		6	0.0	38	GND	85	GND	132	N/C	33	0.0	4	4.9		
44	0.0	9	9.0	PIN	VOLT	6	2.8	3	5.0	43	3.3	24	-22.0	34	0	PIN	VOLT	7	2.8	39	4.9	86	GND	133	GND	34	0.0	5	5.0		
45	GND	10	4.5	1	15.0	7	4.9	4	5.0	44	0.0	25	-11.6	35	4.3	1	5.0	8	-5.0	40	1.9	87	GND	134	GND	35	0.0				

A BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E		B	C	E
Q1	0.1	7.5	GND	Q313	3.2	5.0	2.6	Q603	0.0	9.0	0.0
Q2	3.5	0.5	3.3	Q322	2.7	5.0	2.1	Q604	0.0	9.0	GND
Q3	5.9	GND	6.5	Q323	2.7	5.0	0.0	Q605	9.0	0.0	9.0
Q4	0.8	0.0	GND	Q324	1.9	5.0	1.2	Q705	0.0	3.3	0.4
Q5	0.0	0.0	GND	Q325	1.9	5.0	1.2	Q706	0.0	0.0	GND
Q6	2.8	GND	3.5	Q451	2.2	0.0	2.2	Q707	0.0	0.0	GND
Q7	6.5	9.0	3.9	Q452	0.0	2.2	GND	Q710	0.0	3.4	GND
Q9	4.5	9.0	3.9	Q453	0.7	5.0	0.0	Q711	4.3	4.9	4.9
Q10	3.3	GND	4.0	Q454	0.7	5.0	0.0	Q712	12.1	12.0	12.1
Q12	0.0	0.0	9.0	Q455	0.7	5.0	0.0	Q714	3.3	0.0	GND
Q13	2.0	GND	2.7	Q456	1.1	5.0	0.5	Q717	0.0	0.0	GND
Q14	3.4	0.0	3.3	Q457	0.0	0.6	GND	Q718	0.7	0.0	GND
Q16	8.8	9.0	9.0	Q458	0.6	0.0	GND	Q719	0.0	0.0	GND
Q20	0.0	8.8	0.0	Q459	0.0	0.0	GND	Q721	0.0	0.0	GND
Q21	2.3	GND	3.0	Q460	2.8	9.0	2.8	Q722	0.0	0.0	GND
Q23	1.2	GND	1.9	Q461	2.4	0.0	3.2	Q723	0.0	4.9	GND
Q24	0.0	GND	3.0	Q462	2.7	GND	2.0	Q851	0.0	0.2	GND
Q25	2.0	GND	3.1	Q463	2.9	GND	3.6	Q852	0.0	GND	0.7
Q26	1.5	GND	2.3	Q464	0.0	3.6	GND	Q853	0.0	GND	0.0
Q27	4.9	4.2	5.0	Q465	0.8	GND	1.5	Q854	0.0	0.0	GND
Q28	0.6	0.1	GND	Q466	1.5	8.7	1.9	Q855	0.0	GND	0.7
Q29	0.0	4.9	GND	Q467	1.5	8.7	1.9	Q856	0.0	0.0	GND
Q30	5.0	0.0	0.0	Q468	1.5	8.7	1.6	Q857	0.5	GND	1.1
Q31	0.6	0.0	GND	Q469	1.4	GND	2.0	Q858	0.0	4.3	GND
Q32	0.1	5.0	0.0	Q470	4.4	GND	4.0				
Q33	5.0	0.0	0.0	Q471	1.7	GND	2.3				
Q34	0.0	0.0	GND	Q472	2.2	9.0	4.0				
Q35	0.0	0.0	GND	Q473	1.9	0.0	2.7				
Q36	0.0	0.0	0.0	Q474	1.9	GND	0.0				
Q304	1.9	GND	0.0	Q476	1.6	GND	2.6				
Q306	1.9	5.0	0.0	Q477	0.0	2.5	GND				
Q308	1.2	GND	1.9	Q478	0.0	2.5	GND				
Q311	2.1	5.0	1.5	Q479	0.0	2.5	GND				
Q312	0.7	GND	1.3	Q601	0.0	5.2	GND				

All voltages are in V.

A BOARD LOCATOR LIST COMPONENT SIDE

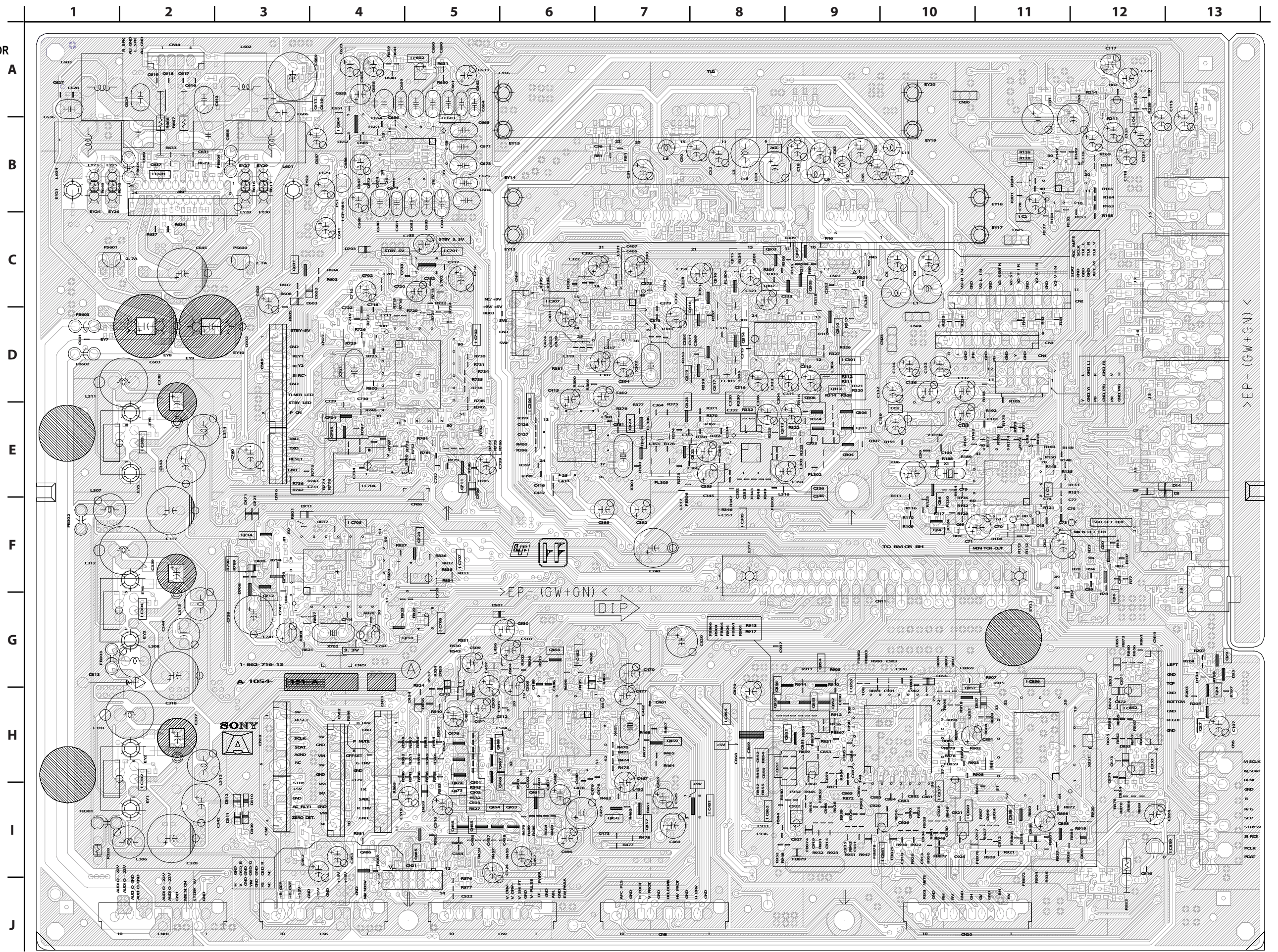
DIODE		IC		TRANSISTOR	
D3	E-13	IC1	E-11	Q16	F-12
D7	E-12	IC2	C-11	Q20	F-12
D14	E-13	IC305	F-8	Q24	F-10
D35	G-13	IC306	E-6	Q26	F-10
D309	I-3	IC451	I-8	Q27	H-13
D310	I-3	IC452	G-6	Q28	G-13
D311	I-3	IC602	A-5	Q29	G-13
D312	I-3	IC603	B-5	Q304	Q304
D313	G-1	IC604	B-4	Q306	E-9
D454	H-4	IC701	C-5	Q308	D-9
D456	H-4	IC702	D-5	Q311	E-9
D457	H-5	IC704	E-4	Q312	D-9
D459	I-4	IC705	F-4	Q313	E-9
D460	G-6	IC706	F-4	Q322	E-8
D470	F-3	IC707	F-5	Q323	D-7
D471	F-3	IC851	I-8	Q324	E-7
D501	G-5	IC852	H-12	Q325	E-7
D602	C-3	IC853	H-12	Q453	I-6
D603	C-3	IC854	H-8	Q454	I-6
D703	C-4	IC855	G-9	Q455	I-5
D706	F-5	IC856	H-11	Q456	I-5
D708	F-3	IC857	H-10	Q457	I-7
D709	F-3	IC858	I-11	Q458	I-7
D711	F-4	IC859	I-13	Q459	H-7
D721	F-3	IC860	I-10	Q461	I-6
D851	F-4	IC861	I-10	Q464	G-6
D852	H-12	IC862	I-8	Q466	I-5
D853	I-12			Q467	H-5
D854	I-12			Q468	H-5
D855	I-12			Q473	I-5
D856	G-10			Q474	I-5
D857	G-10			Q476	H-5
D858	I-11			Q601	C-3
				Q705	E-4
				Q711	E-5
				Q712	F-3
				Q714	F-3
				Q718	G-4
				Q723	F-5
				Q851	H-8
				Q852	H-9
				Q853	H-9
				Q854	H-9
				Q855	H-8
				Q856	H-8
				Q857	G-10
				Q858	I-12

A BOARD LOCATOR LIST CONDUCTOR SIDE

DIODE		IC		TRANSISTOR	
D2	E-1	IC302	H-13	Q703	C-10
D3	E-2	IC303	E-13	Q706	D-8
D4	E-2	IC304	F-13	Q707	D-8
D5	E-2	IC601	C-12	Q709	E-9
D6	F-2	IC703	D-9	Q710	F-10
D8	F-1	TRANSISTOR		Q717	C-8
D9	F-2	Q1	C-6	Q719	D-8
D10	F-2	Q2	C-6	Q721	F-10
D11	E-2	Q3	B-7	Q722	F-10
D12	D-2	Q4	B-7	Q730	E-12
D13	D-2	Q5	F-2	Q859	I-2
D15	E-2	Q6	B-7	Q860	I-3
D16	D-3	Q7	G-3		
D17	D-3	Q9	F-2		
D18	D-3	Q10	G-2		
D19	D-3	Q12	F-2		
D20	A-1	Q13	F-2		
D21	A-2	Q14	B-7		
D23	C-2	Q21	F-3		
D24	D-2	Q23	F-3		
D25	D-2	Q25	F-4		
D26	C-2	Q30	G-2		
D27	C-2	Q31	G-1		
D28	C-2	Q32	G-1		
D36	C-1	Q33	G-1		
D37	B-2	Q34	B-1		
D38	D-1	Q35	B-1		
D39	C-2	Q36	A-1		
D40	C-4	Q451	I-11		
D41	C-4	Q452	I-11		
D42	F-1	Q460	G-7		
D43	G-2	Q462	G-3		
D44	C-1	Q463	G-7		
D45	C-1	Q465	I-9		
D304	H-12	Q469	H-9		
D305	D-12	Q470	G-8		
D306	F-12	Q471	H-9		
D307	I-11	Q472	G-8		
D308	I-11	Q477	H-9		
D451	I-11	Q478	H-9		
D452	I-11	Q479	H-9		
D453	I-11	Q603	A-11		
D701	F-11	Q604	A-11		
D707	F-11	Q605	A-10		
D712	F-10	Q701	D-10		
D720	E-12	Q702	C-11		

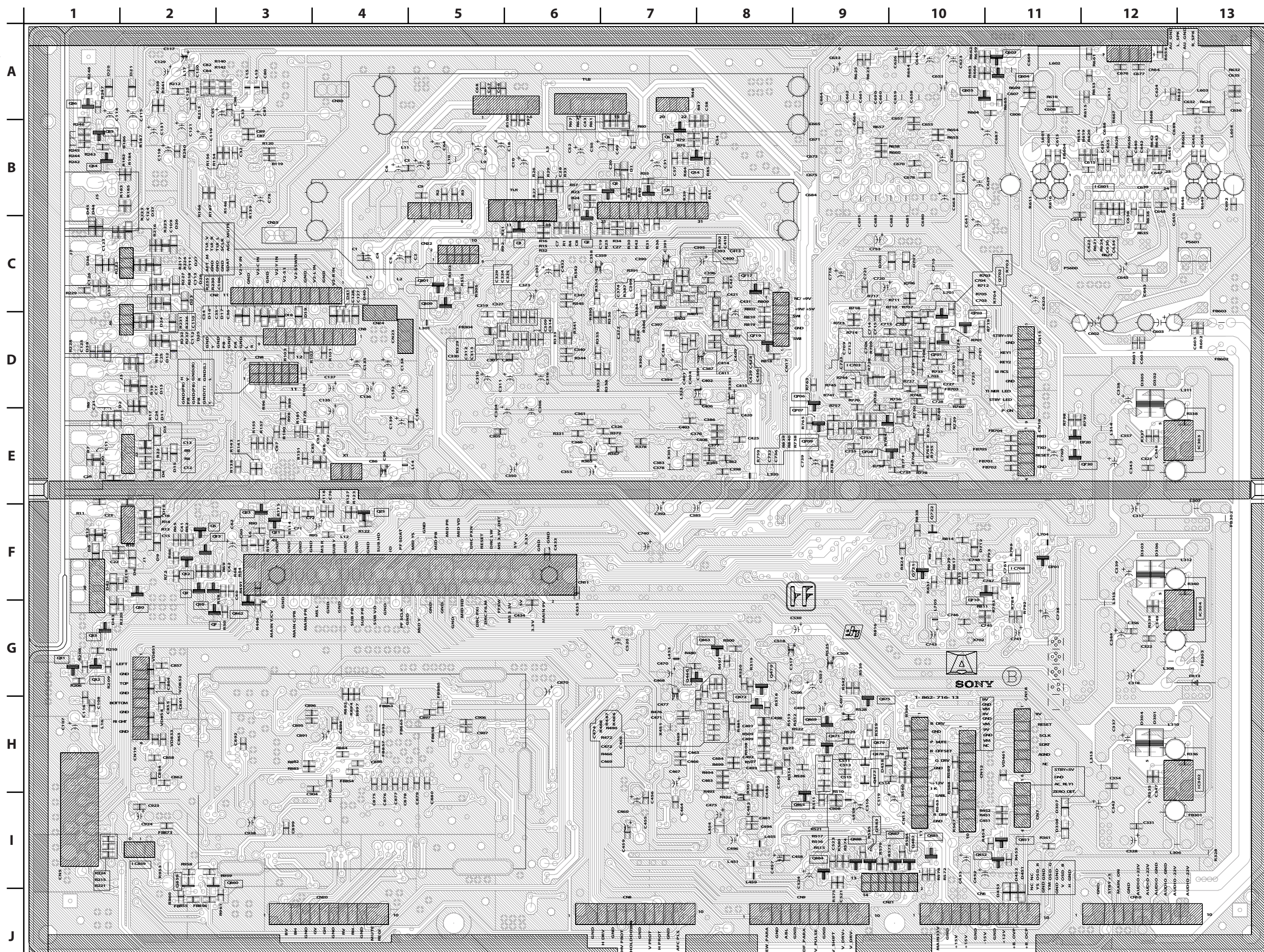
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TERMINAL BLOCK, TUNER
SUB COMB/ENCODER, POWER REGS,
CRT DRIVE, AUDIO AMP, AUDIO PROCESSOR
MICRO, DREGI-3, PJED3-CPU]
COMPONENT SIDE

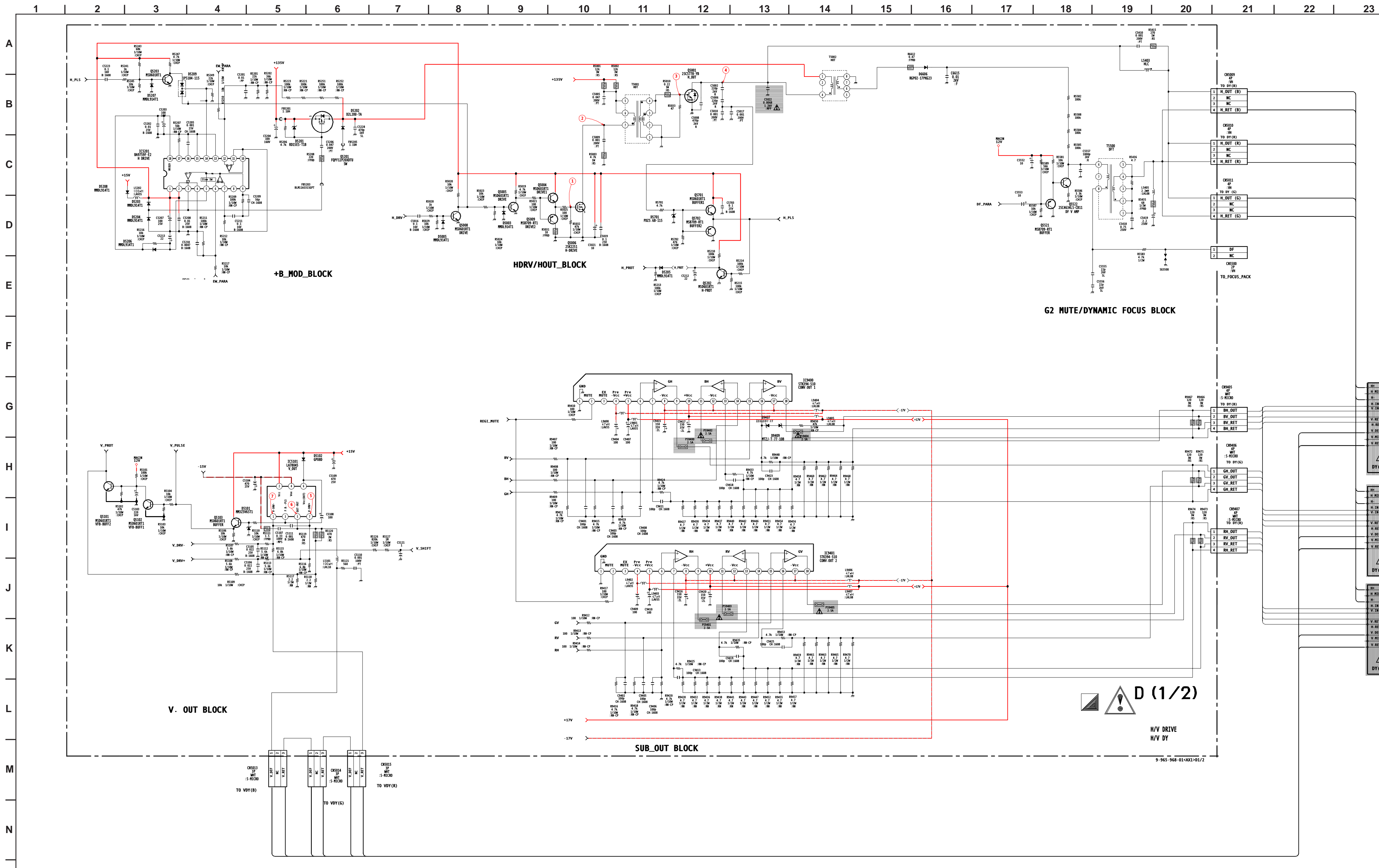


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[TERMINAL BLOCK, TUNER
SUB COMB/ENCODER, POWER REGS,
CRT DRIVE, AUDIO AMP, AUDIO PROCESSOR
MICRO, DREGI-3, PJED3-CPU]
CONDUCTOR SIDE



D BOARD SCHEMATIC DIAGRAM (1 OF 2)



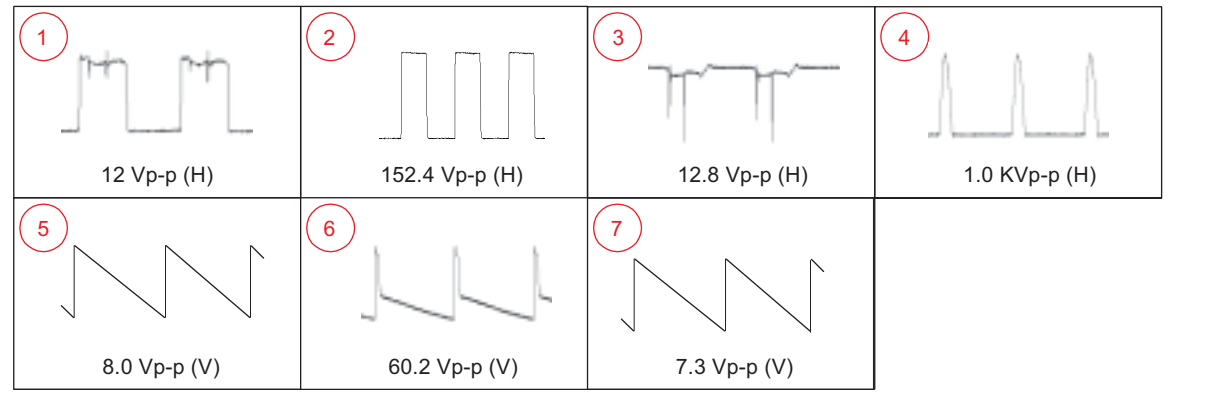
D BOARD IC VOLTAGE LIST

IC5101		IC6400		IC6503		IC8002		IC8005		IC9401	
PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT
1	1.2	1	2.8	1	134.0	1	2.8	1	2.5	1	GND
2	15.0	2	1.8	2	N/C	2	1.8	2	GND	2	4.3
3	-13.1	3	2.2	3	N/C	3	2.2	3	9.9	3	N/C
4	-15.0	4	2.5	4	N/C	4	2.5	4	GND	4	-17.0
5	0.0	5	GND	5	2.5	5	GND	5	GND	5	17.0
6	14.6	6	0.0	6	1	6	0.0	6	2.5	6	-0.1
7	1.2	7	4.6	7	GND	7	4.6	7	GND	7	-0.1
8	17.9	8	12	8	12	8	17.9	8	2.5	8	-17.0
9	0.0	9	0.0	9	0.0	9	0.0	9	0.0	9	0.0
10	15.0	10	10.5	10	15.0	10	10.5	10	GND	10	17.0
11	15.0	11	GND	11	15.0	11	GND	11	GND	11	0.5
12	5.8	12	4.8	12	6.35	12	4.8	12	4.3	12	-17.0
13	GND	13	N/C	13	GND	13	N/C	13	N/C	13	0.3
14	7.9	14	151.8	14	6.35	14	151.8	14	-17.0	14	0.3
15	3.8	15	142.2	15	N/C	15	142.2	15	17.0	15	0
16	3.8	16	146.3	16	GND	16	146.3	16	-0.3	16	0
17	N/C	17	N/C	17	N/C	17	N/C	17	-0.3	17	-17.0
18	3.9	18	342.0	18	134.0	18	N/C	18	-17.0	18	0.1
19	3.6	19	15.4	19	GND	19	15.4	19	17.0	19	0.1
20	3.6	20	15.0	20	GND	20	15.0	20	17.0	20	0.1
21	3.6	21	15.0	21	GND	21	15.0	21	17.0	21	0.1
22	3.6	22	15.0	22	GND	22	15.0	22	17.0	22	0.1
23	3.6	23	15.0	23	GND	23	15.0	23	17.0	23	0.1

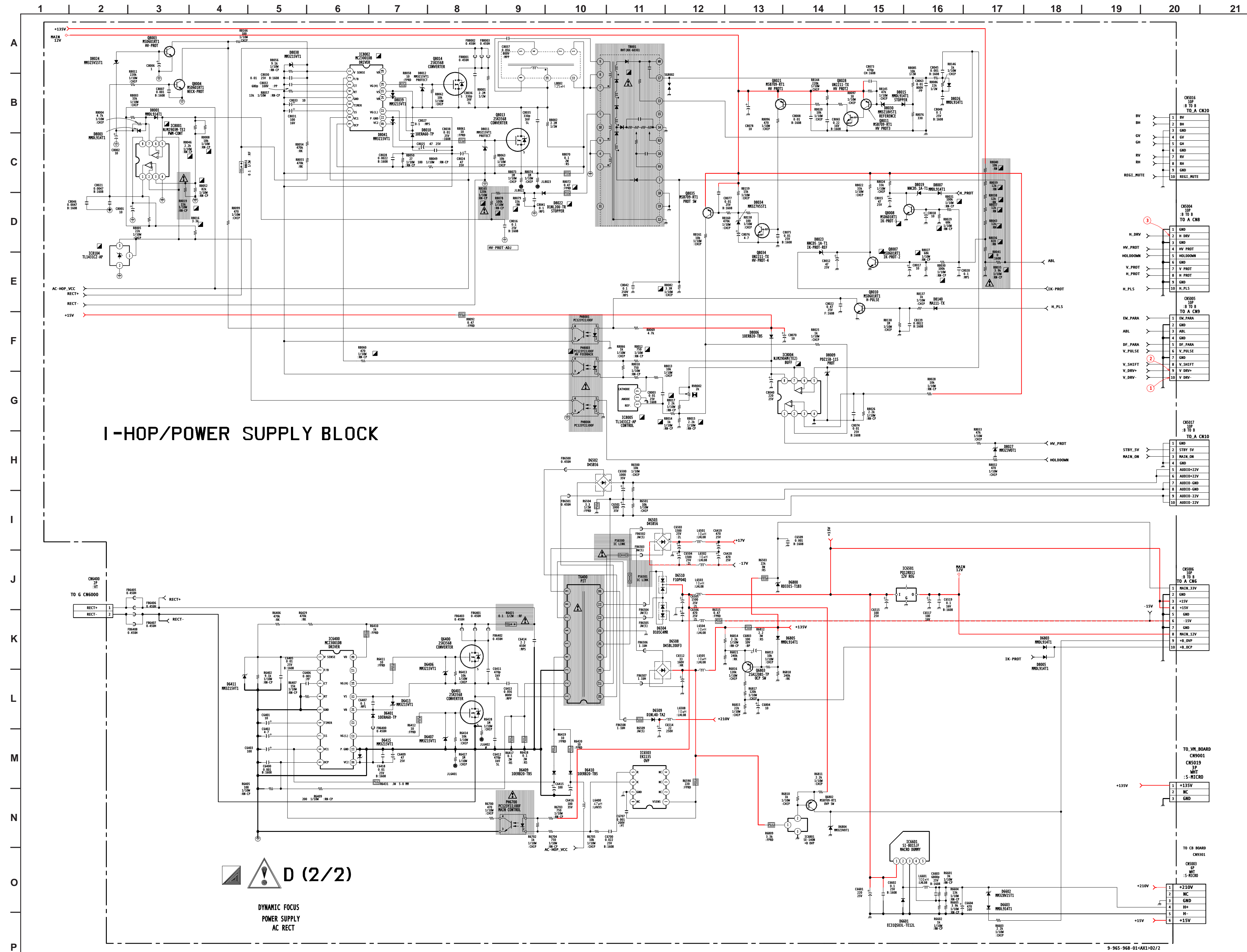
D BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E
Q5001	0.0	84.3	GND	Q6403	157.0	156.0	GND
Q5004	3.8	12.0	3.8	Q6404	0.0	0.0	GND
Q5005	0.2	3.8	GND	Q6802	15.4	0.0	15.4
Q5008	0.0	2.1	GND	Q6803	133.0	3.7	132.0
Q5009	3.8	0.0	3.8	Q8003	0.1	2.6	GND
Q5101	0.1	0.8	GND	Q8004	0.1	2.6	GND
Q5102	0.0	0.1	GND	Q8007	0.6	0.1	GND
Q5103	0.0	15.0	0.2	Q8008	0.6	0.1	GND
Q5202	0.6	0.0	GND	Q8009	2.6	15.0	2.6
Q5203	0.9	9.0	GND	Q8010	0.6	0.1	GND
Q5406	2.7	76.7	2.7	Q8011	12.0	0.0	12.0
Q5521	14.6	GND	14.6	Q8021	12.0	0.0	12.0
Q5522	3.1	191.6	2.8	Q8028	0.0	11.7	GND
Q5701	7.4	12.0	7.2	Q8034	0.0	12.0	GND
Q5702	7.4	GND	7.2	Q8035	11.6	2.5	12.0
Q6402	5.5	0.0	GND				

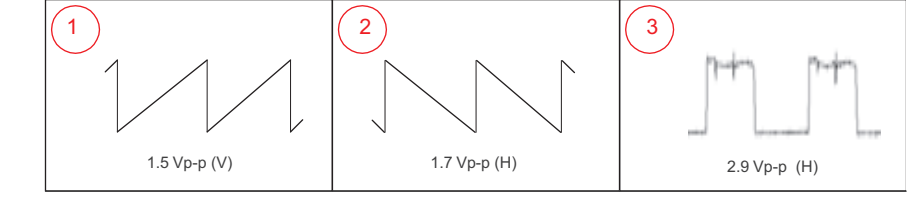
D BOARD WAVEFORMS



D BOARD SCHEMATIC DIAGRAM (2 OF 2)



D BOARD WAVEFORMS

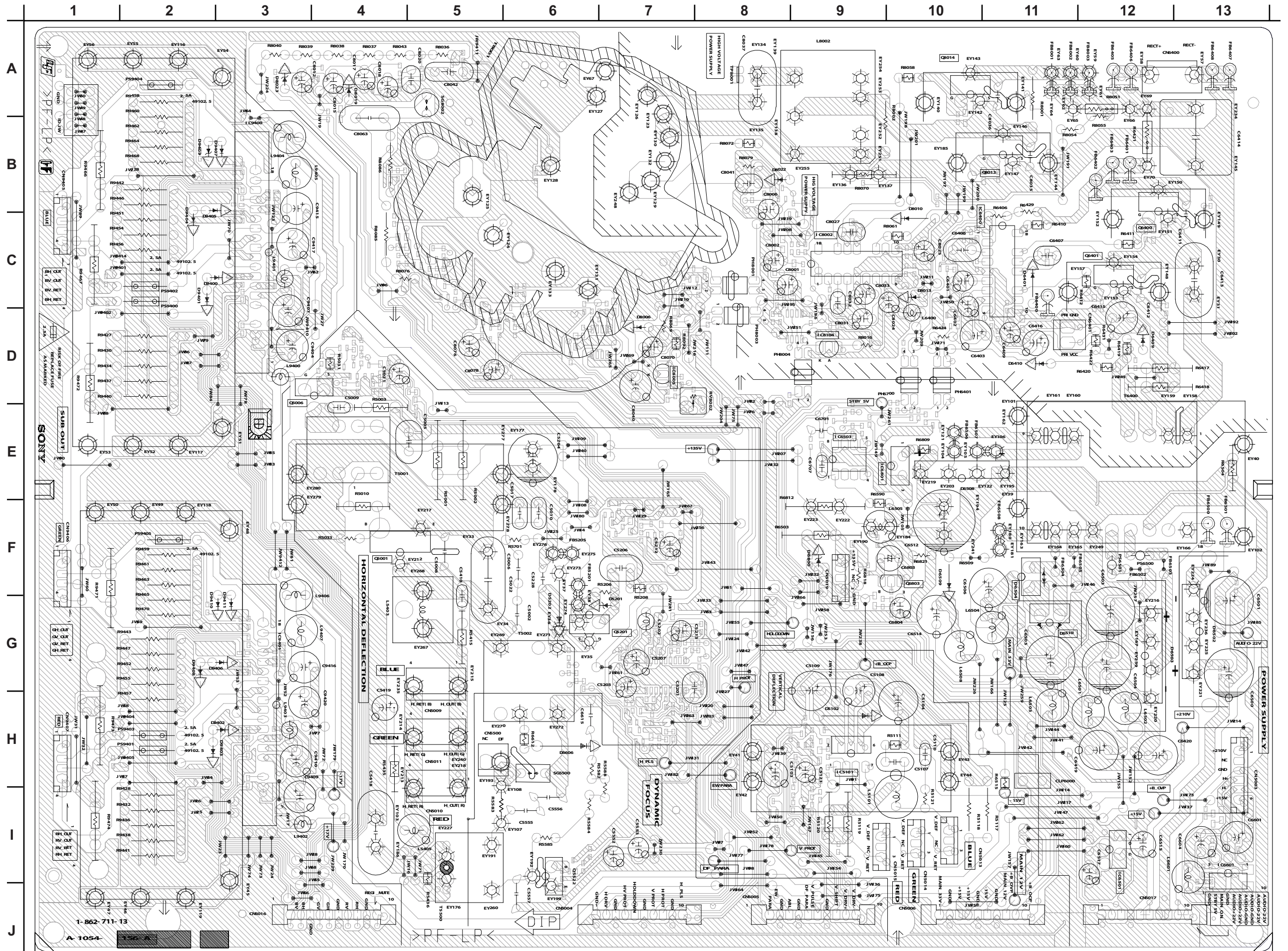


I-HOP/POWER SUPPLY BLOCK



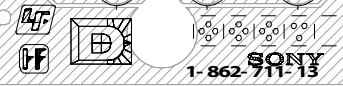
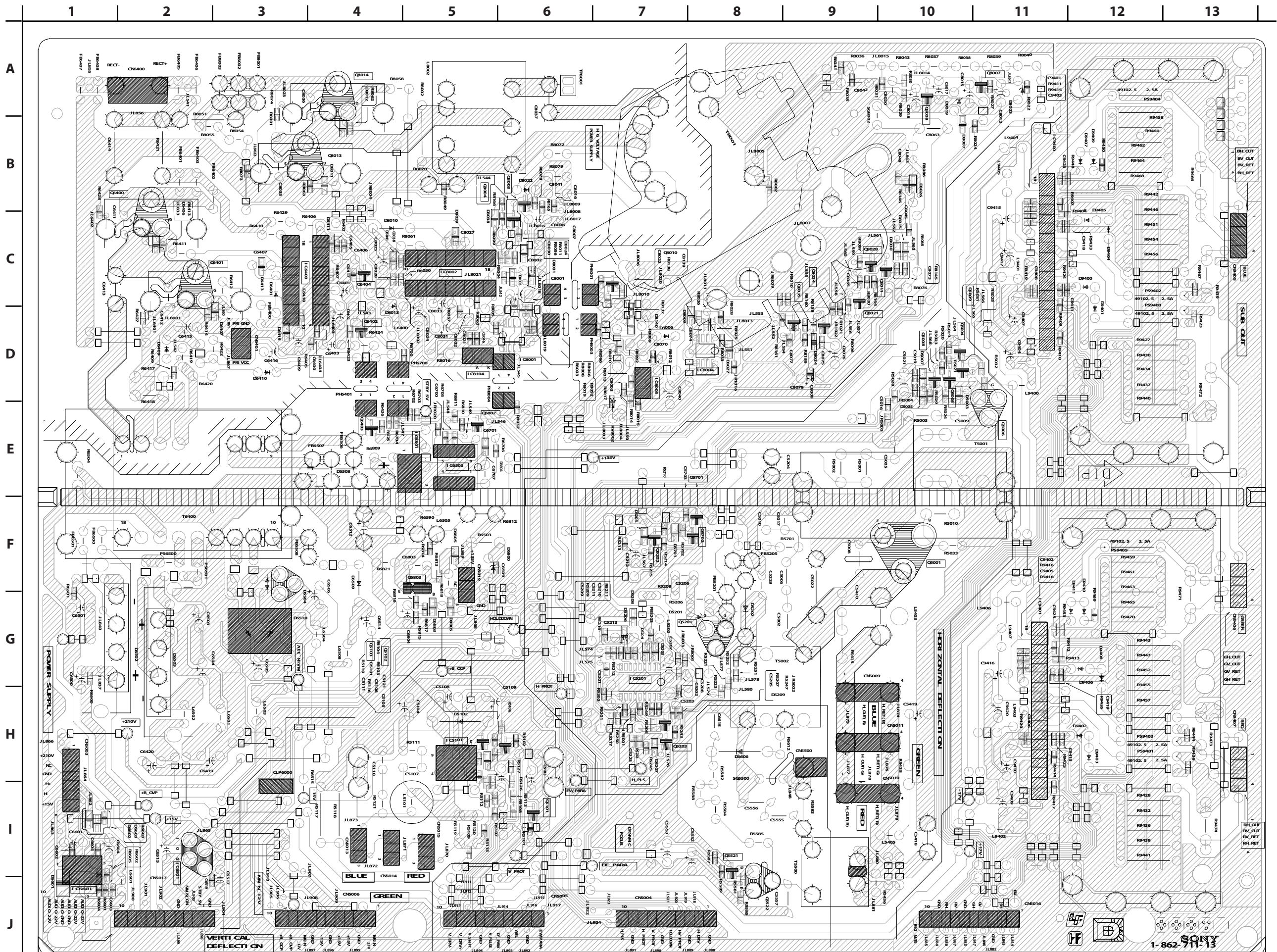


[H/V DRIVE, H/V DY, DYNAMIC FOCUS, POWER SUPPLY, AC RECT]
COMPONENT SIDE





[H/V DRIVE, H/V DY, DYNAMIC FOCUS, POWER SUPPLY, AC RECT]
CONDUCTOR SIDE



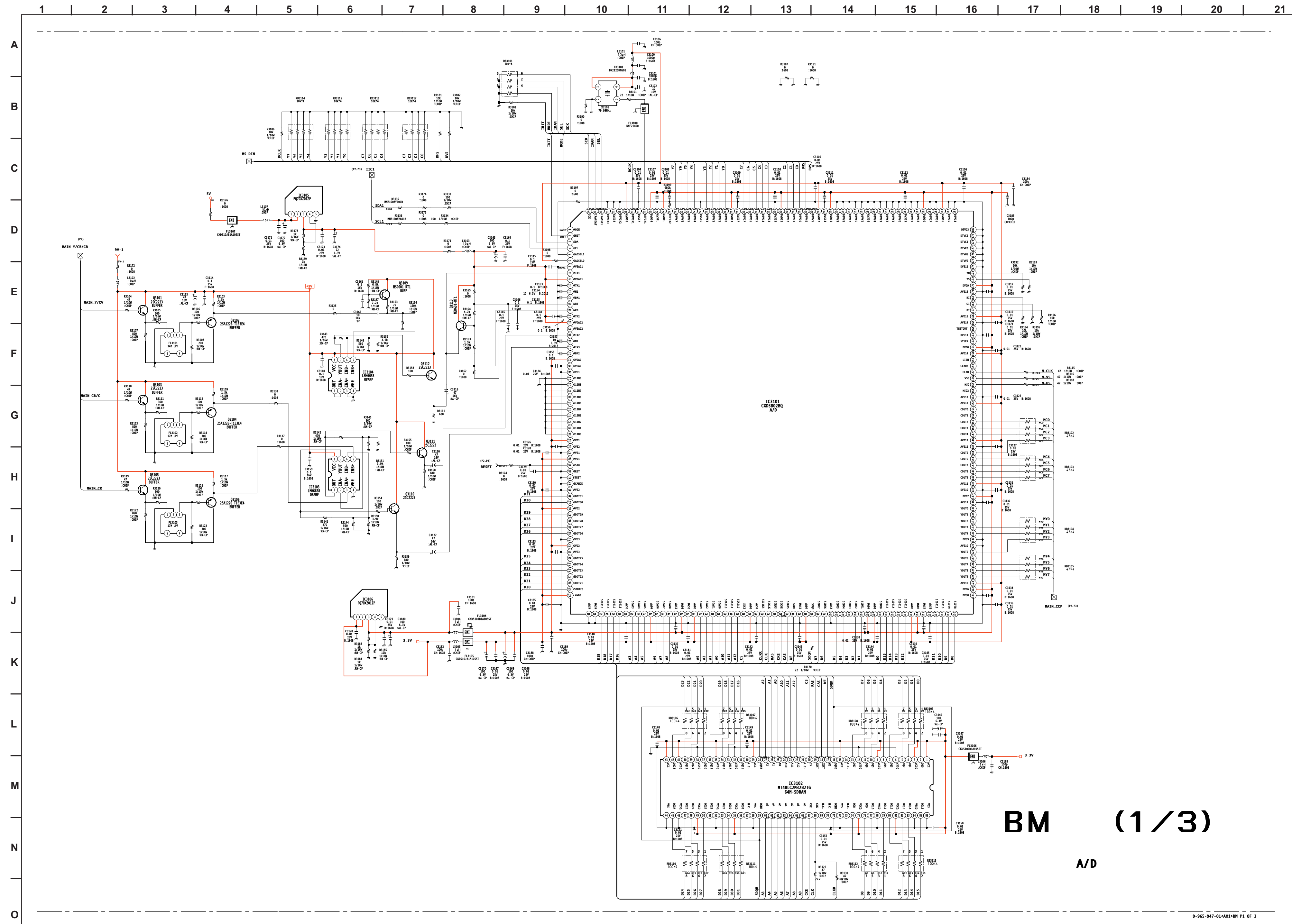
D BOARD LOCATOR LIST CONDUCTOR SIDE

DIODE		DIODE		TRANSISTOR	
D5003	D-10	D8010	C-4	Q5001	F-10
D5005	E-10	D8011	B-4	Q5004	D-10
D5101	G-4	D8012	A-4	Q5005	D-10
D5102	H-5	D8015	C-10	Q5006	E-11
D5201	G-8	D8019	A-10	Q5008	D-10
D5202	G-8	D8022	B-6	Q5009	C-11
D5203	G-7	D8023	B-11	Q5101	I-6
D5204	G-7	D8024	C-6	Q5102	G-4
D5205	F-7	D8026	B-10	Q5103	G-4
D5206	G-7	D8027	D-8	Q5201	G-8
D5207	H-7	D8030	C-10	Q5202	F-7
D5208	G-7	D8034	D-9	Q5203	H-7
D5209	H-8	D8038	C-5	Q5521	I-8
D5701	F-7	D8039	C-5	Q5522	J-8
D6401	C-3	D8041	C-4	Q5701	E-7
D6406	B-2	D8140	D-7	Q5702	F-8
D6407	D-2	D9407	B-12	Q6400	B-1
D6409	D-2	D9409	B-12	Q6401	C-2
D6410	D-3	IC		Q6402	D-4
D6411	C-4	IC5101	H-5	Q6403	E-4
D6413	C-3	IC5201	G-7	Q6404	C-4
D6415	D-3	IC6400	C-4	Q6802	E-6
D6502	G-2	IC6501	J-2	Q6803	F-5
D6503	G-2	IC6503	E-5	Q8003	B-6
D6504	D-3	IC6601	J-1	Q8004	B-4
D6508	E-4	IC6801	E-5	Q8007	A-11
D6509	F-4	IC8001	D-6	Q8008	A-10
D6510	G-3	IC8002	C-5	Q8010	C-7
D6601	J-1	IC8004	D-8	Q8011	C-10
D6602	I-2	IC8005	D-7	Q8013	B-4
D6603	I-2	IC8104	D-5	Q8014	A-4
D6606	H-8	IC9400	B-11	Q8021	D-10
D6800	F-6	IC9401	G-11	Q8028	C-9
D6803	G-5			Q8034	C-9
D6804	E-5			Q8035	C-9
D6805	F-5				
D8001	C-6				
D8003	C-6				
D8005	G-5				
D8006	D-7				
D8007	B-10				
D8009	D-8				

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BM BOARD SCHEMATIC DIAGRAM (1 OF 3)

Due to the complexity of this board, performing component level repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.

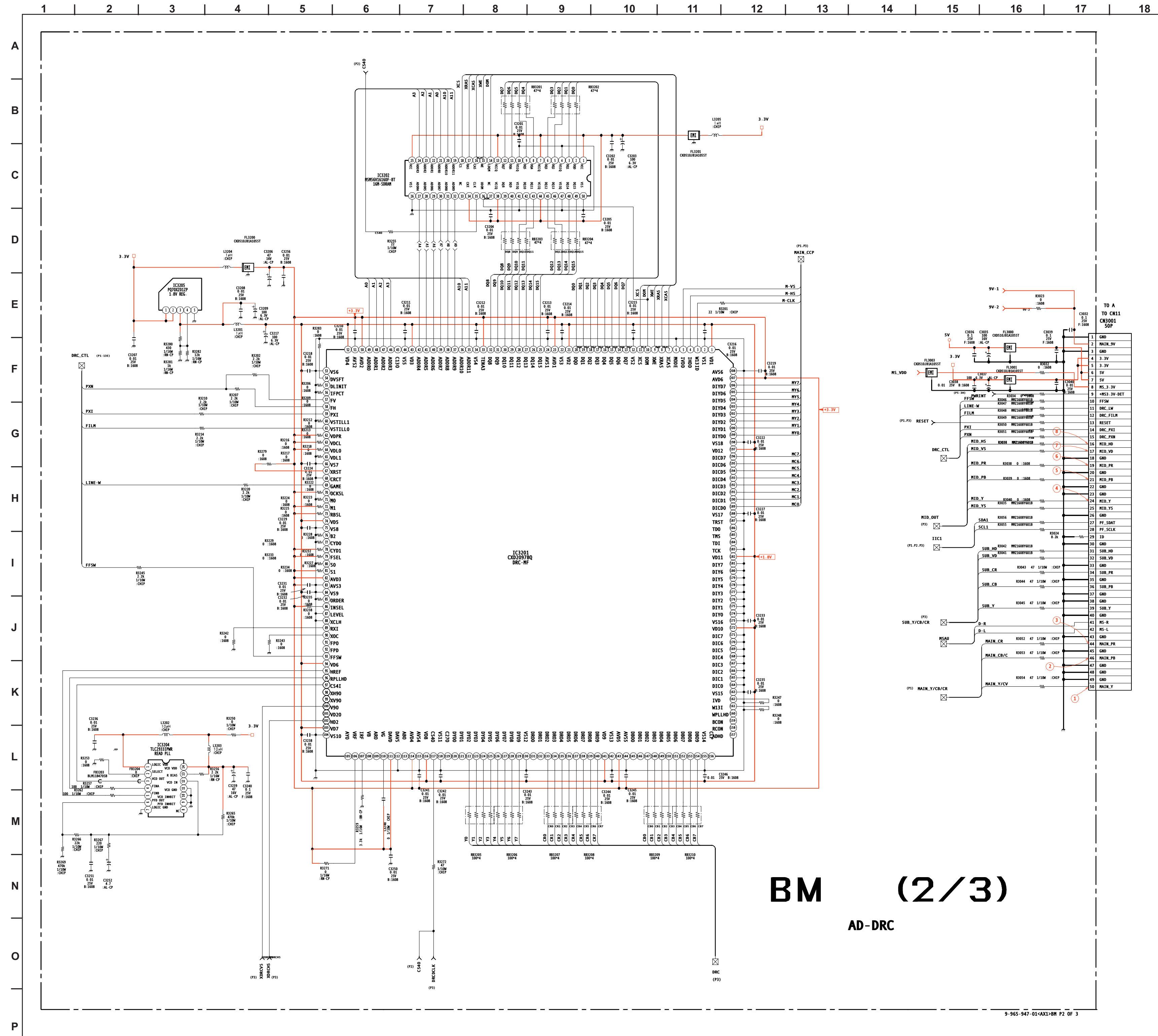


BM (1/3)
A/D

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BM BOARD SCHEMATIC DIAGRAM (2 OF 3)

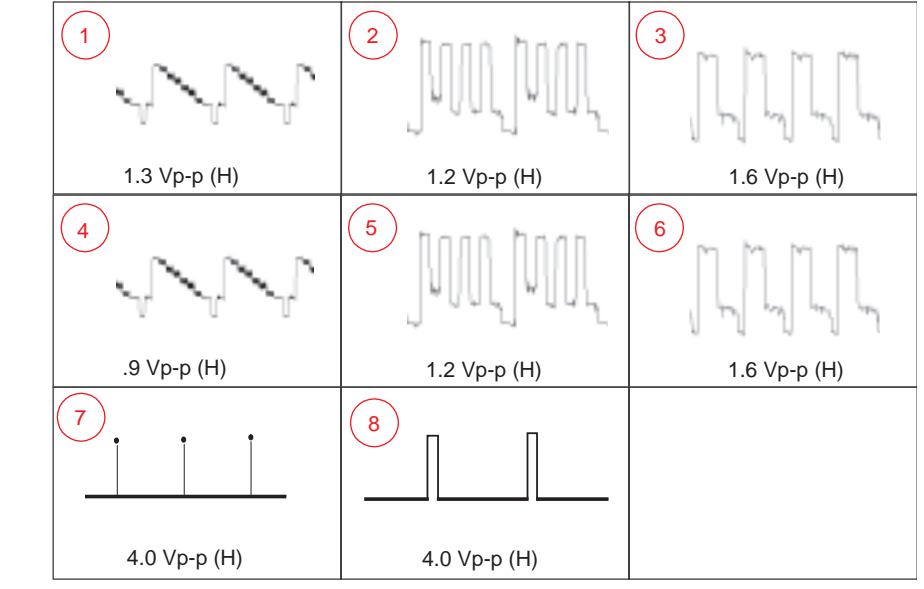
Due to the complexity of this board, performing component level repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.



BM (2/3)
AD-DRC

9-965-947-01<A1>BM P2 OF 3

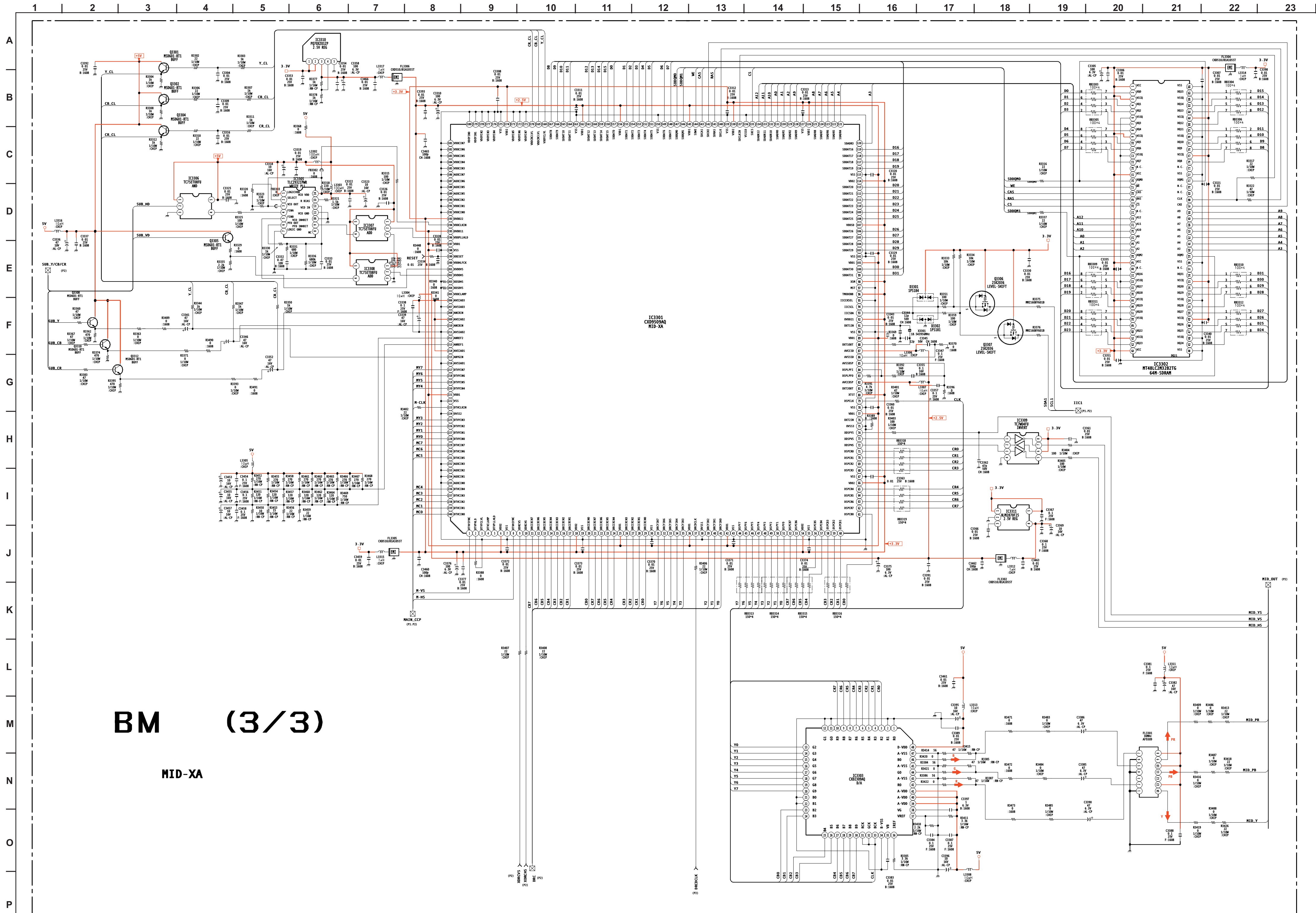
BM BOARD WAVEFORMS



NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BM BOARD SCHEMATIC DIAGRAM (3 OF 3)

Due to the complexity of this board, performing component level repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.

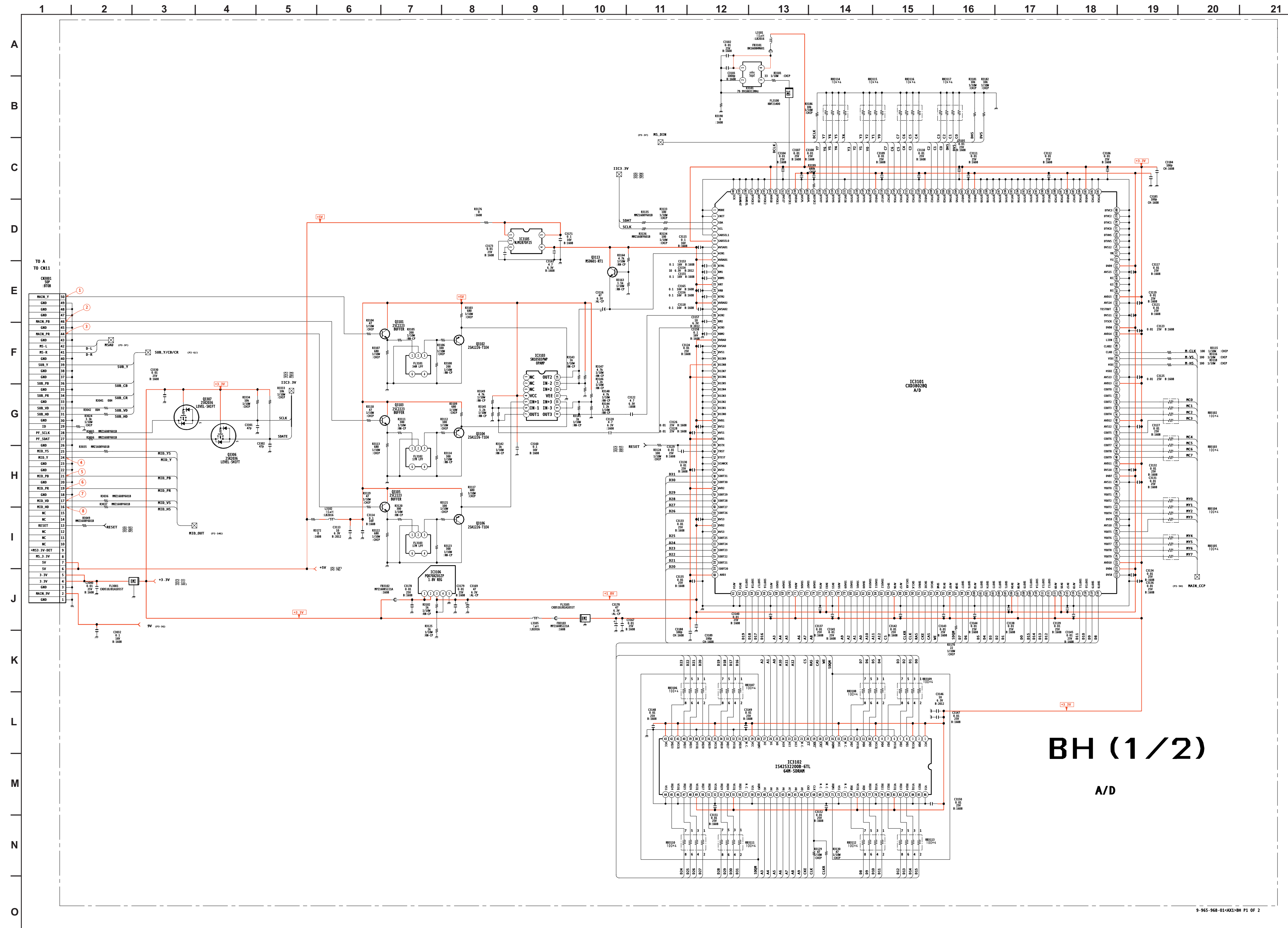


BM (3/3)
MID-XA

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BH BOARD SCHEMATIC DIAGRAM (1 OF 2)

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.

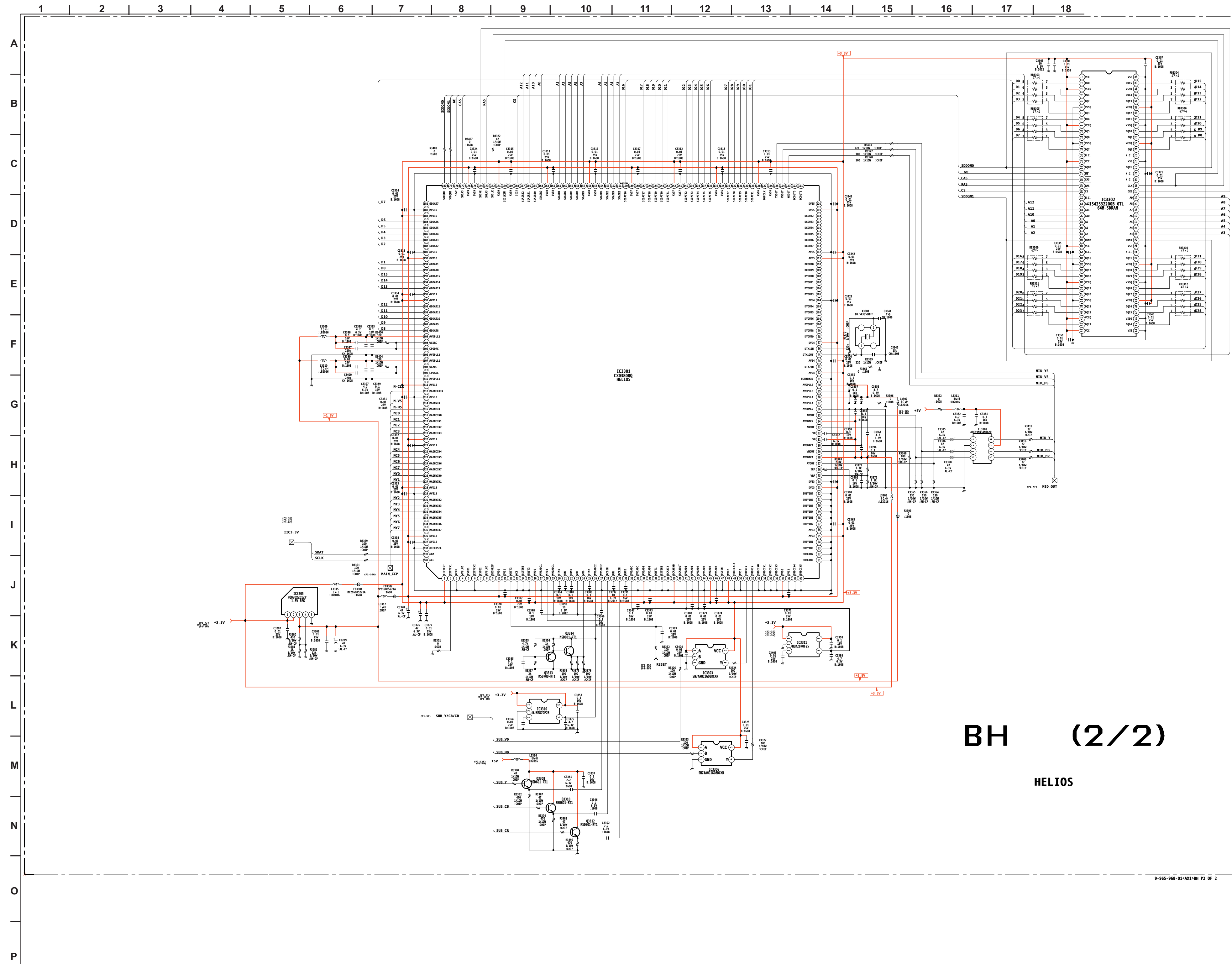


BH (1/2)
A/D

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BH BOARD SCHEMATIC DIAGRAM (2 OF 2)

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.

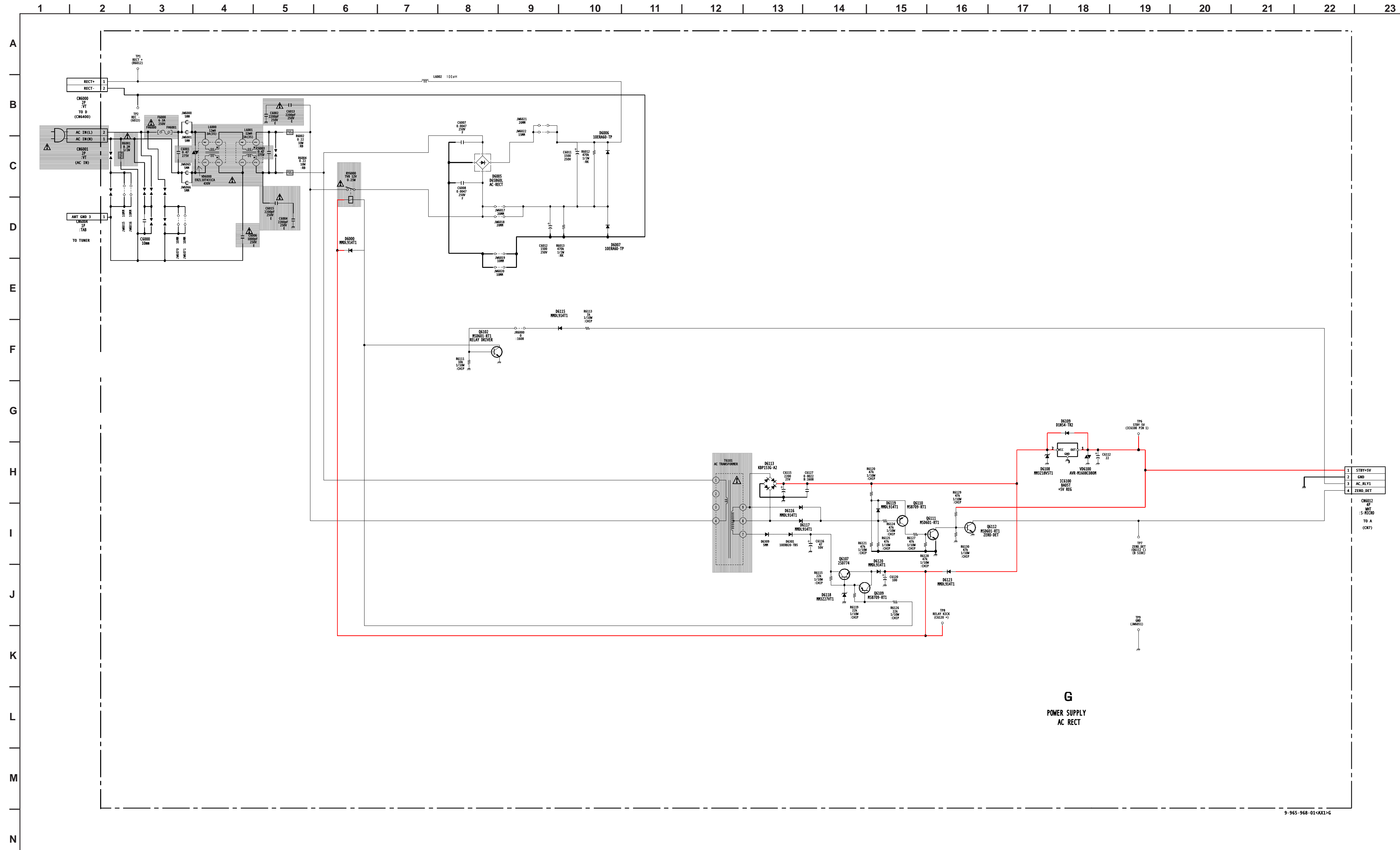


BH (2/2)

HELIOS

9-965-968-01-AX1-BH P2 OF 2

G BOARD SCHEMATIC DIAGRAM



G BOARD IC VOLTAGE LIST

IC6100

PIN	VOLT
I	7.0
O	5.0
G	GND

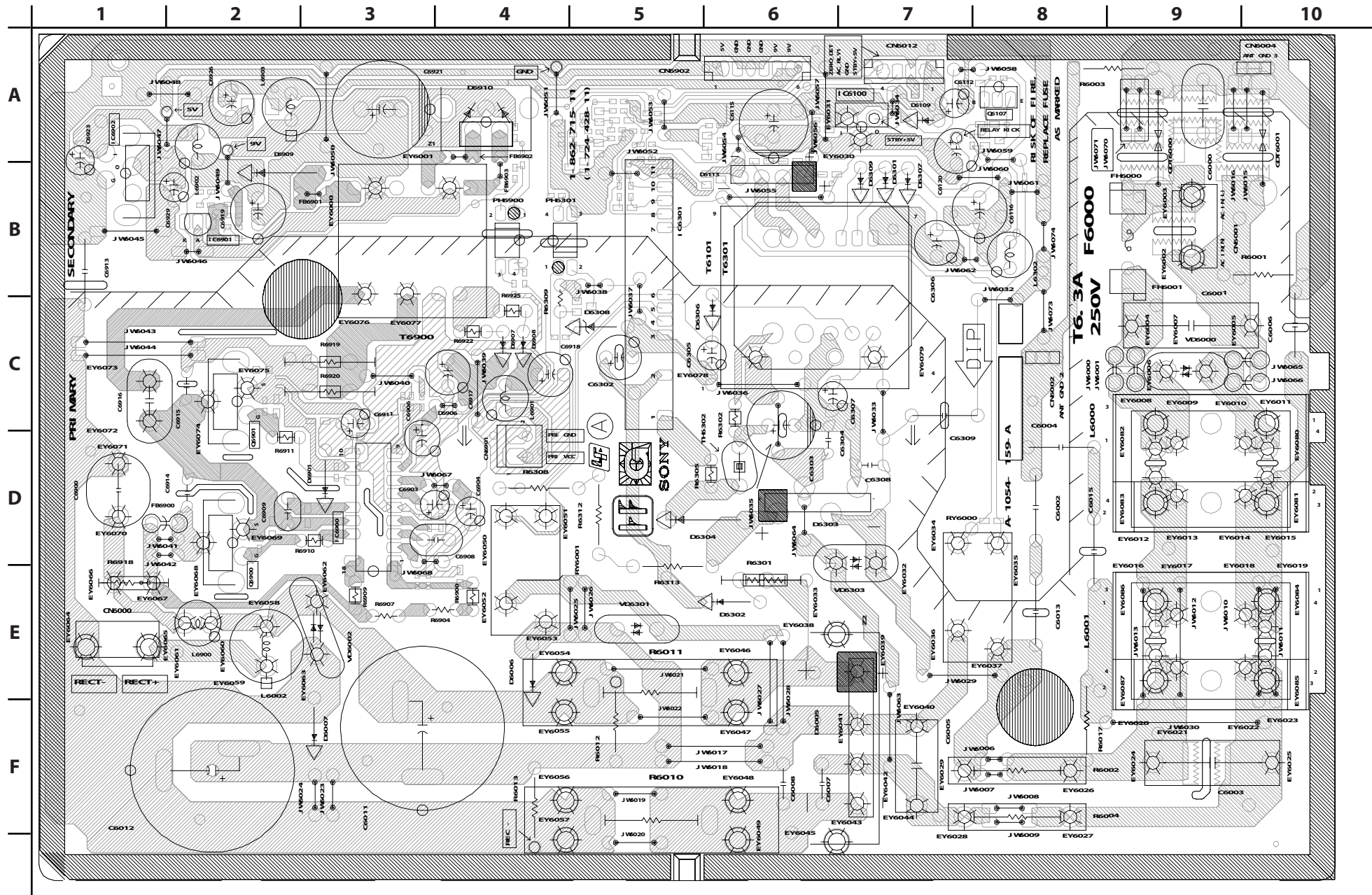
All voltages are in V.

G BOARD TRANSISTOR VOLTAGE LIST

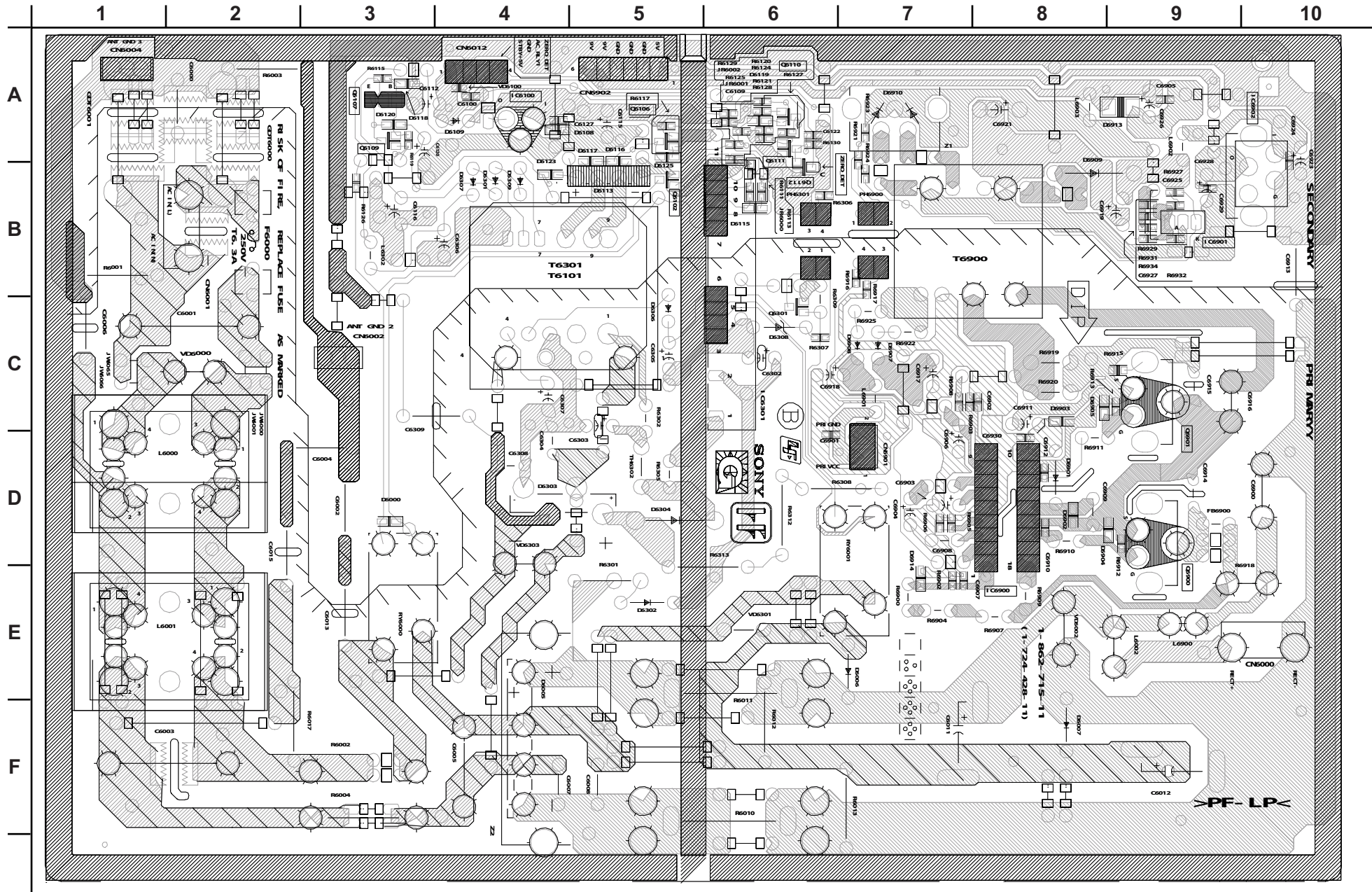
	B	C	E
Q6102	0.8	0.0	GND
Q6107	8.4	41.5	8.4
Q6109	7.7	8.3	8.3
Q6110	6.4	0.7	6.2
Q6111	0.5	0.8	GND
Q6112	0.8	0.5	GND

All voltages are in V.

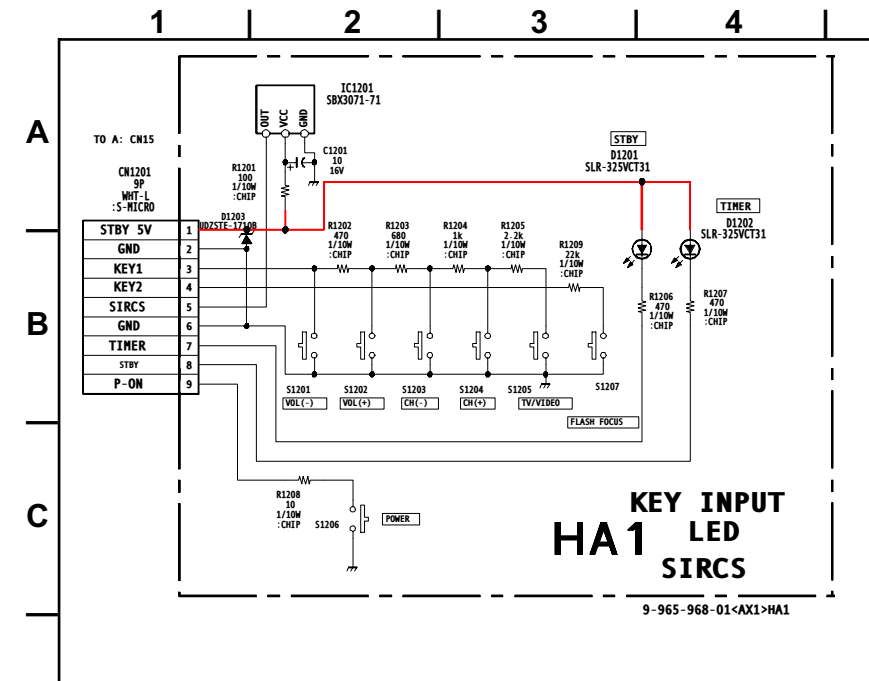
G [POWER SUPPLY, AC RECT]
COMPONENT SIDE



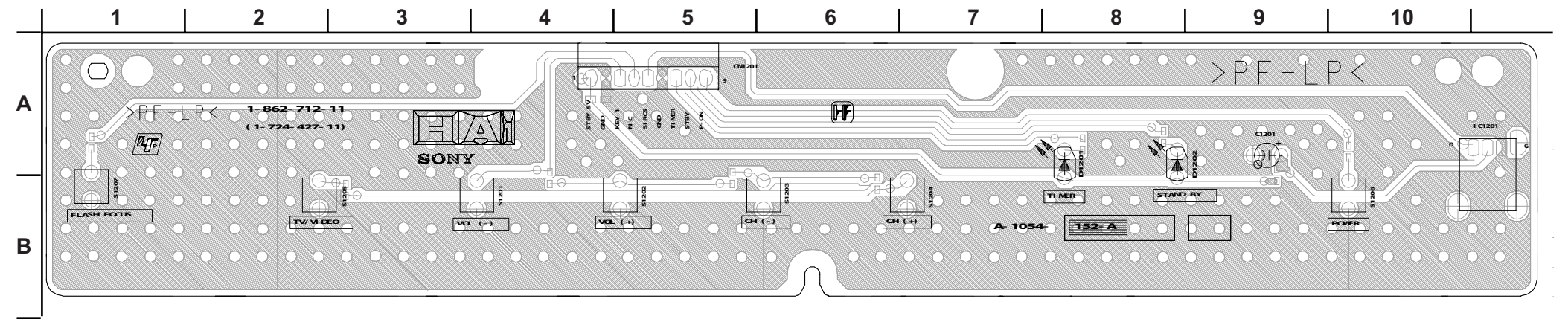
G [POWER SUPPLY, AC RECT]
CONDUCTOR SIDE



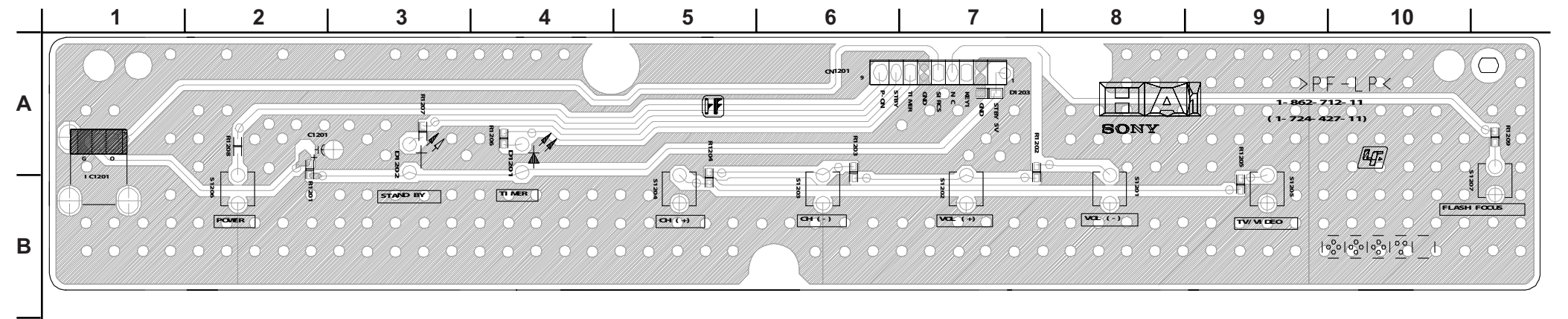
HA1 BOARD SCHEMATIC DIAGRAM



HA1 [KEY INPUT, LED, SIRCS]
 COMPONENT SIDE

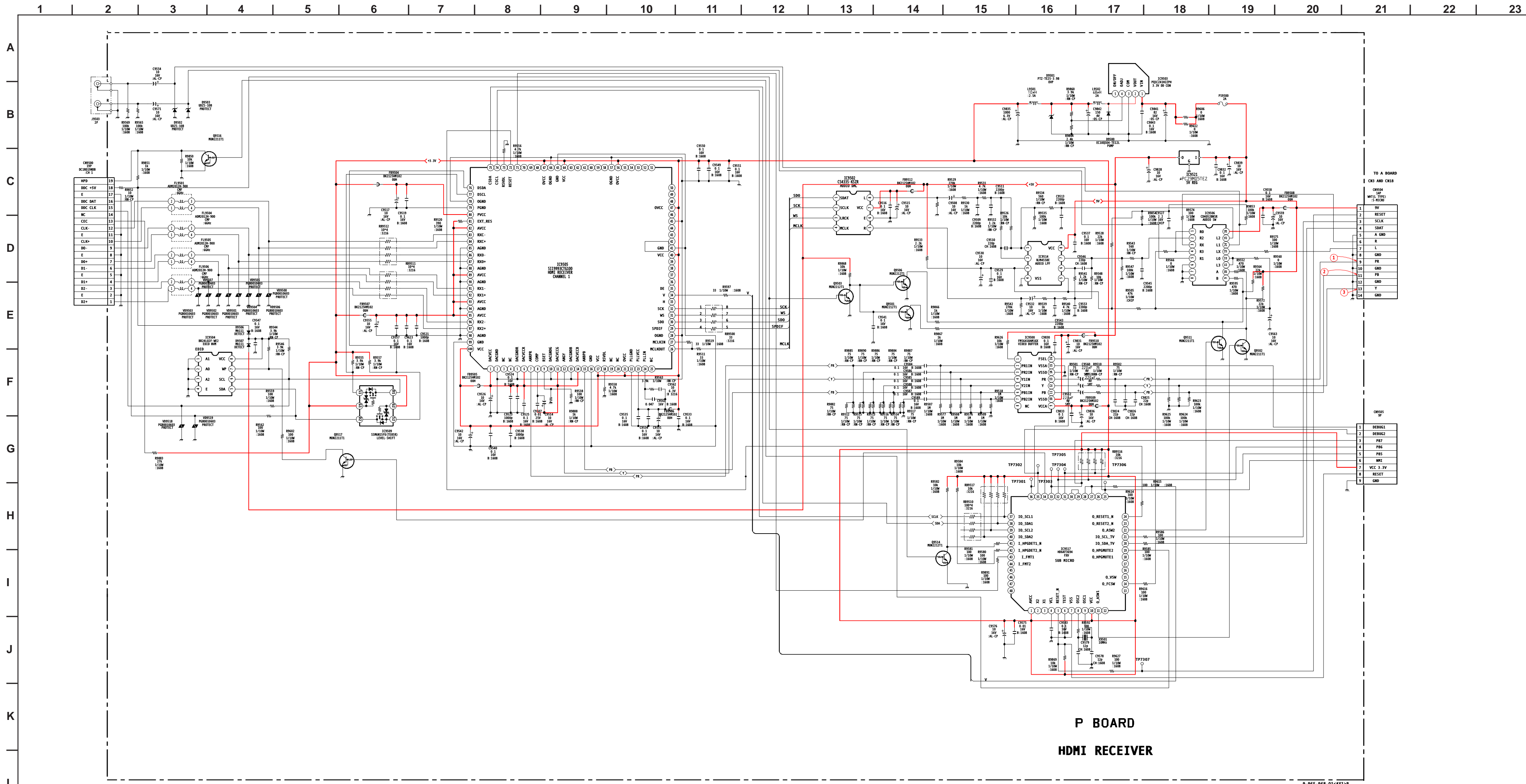


HA1 [KEY INPUT, LED, SIRCS]
 CONDUCTOR SIDE



P BOARD SCHEMATIC DIAGRAM

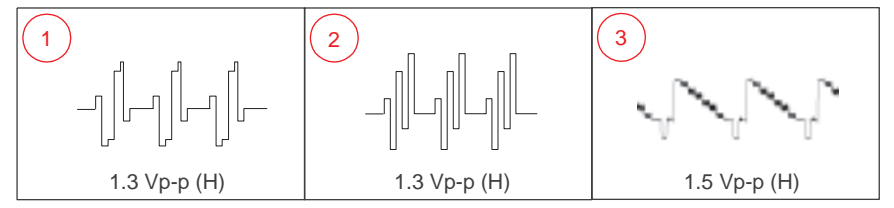
Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.



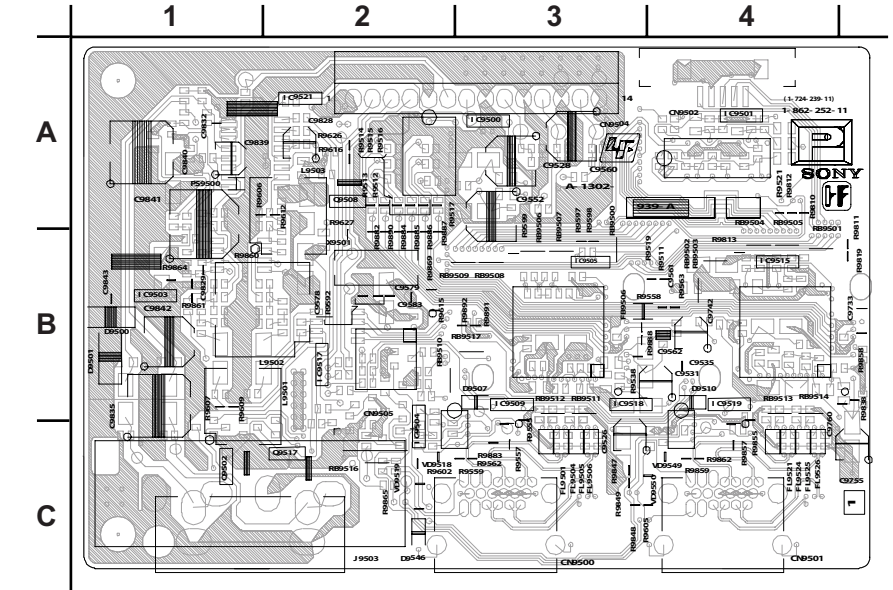
P BOARD
HDMI RECEIVER

9-965-968-01-0211V

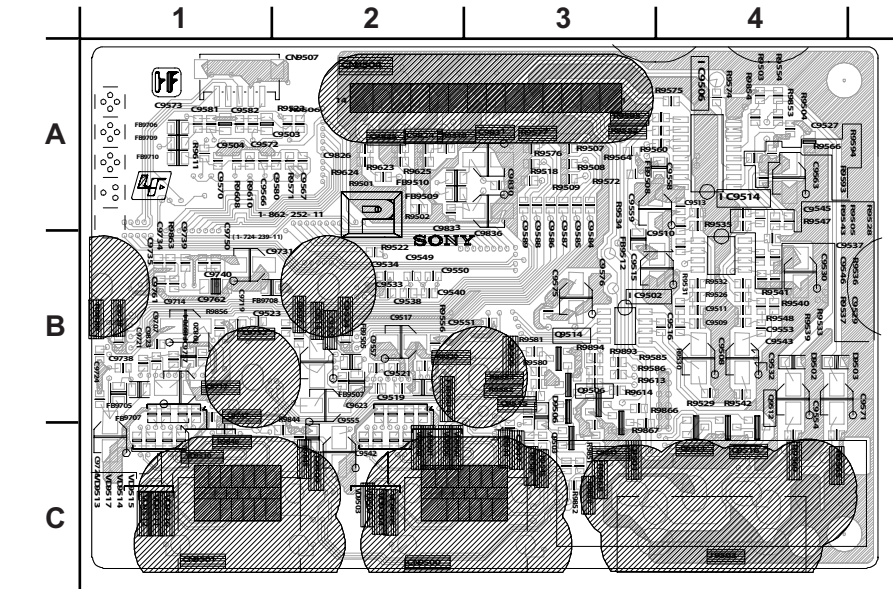
P BOARD WAVEFORMS



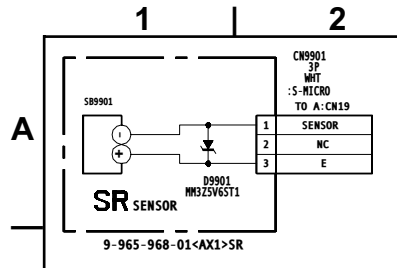
P [HDMI RECEIVER]
COMPONENT SIDE



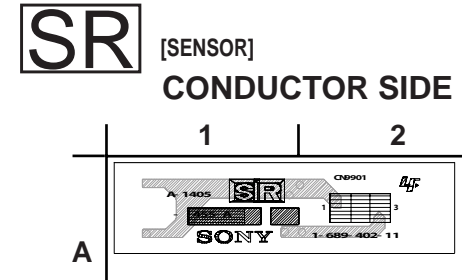
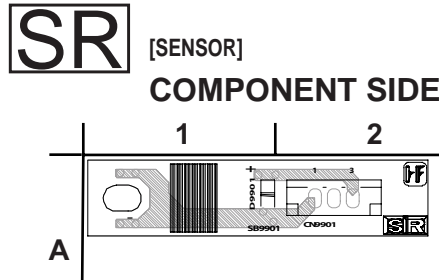
P [HDMI RECEIVER]
CONDUCTOR SIDE



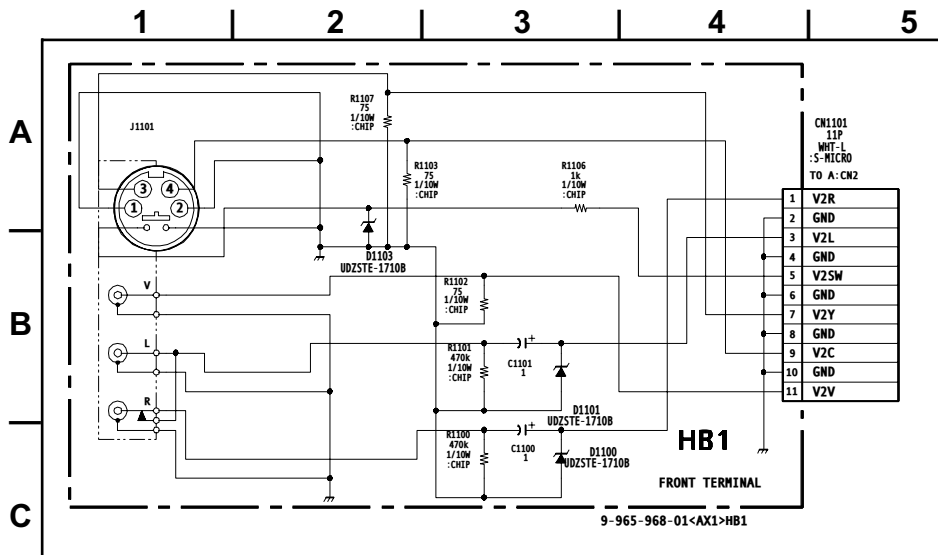
SR BOARD SCHEMATIC DIAGRAM



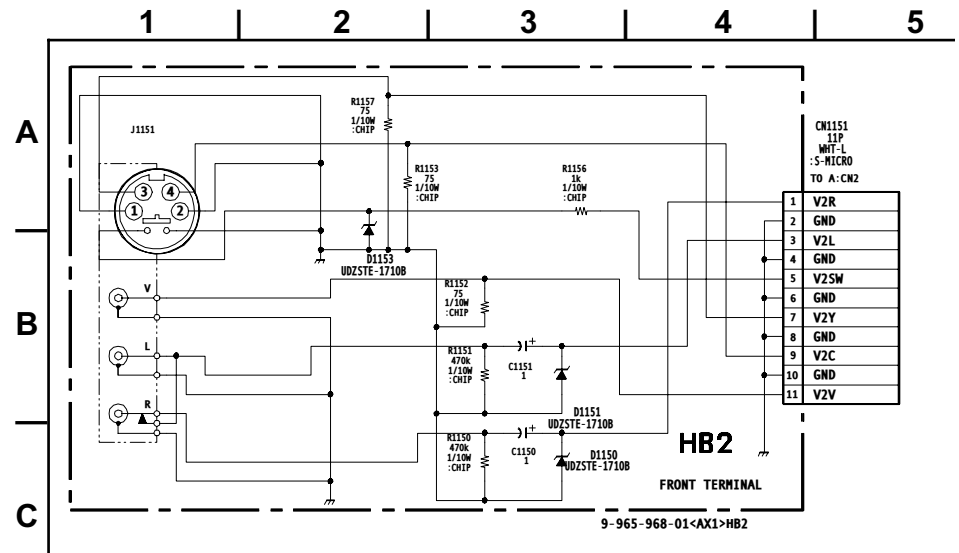
Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.



HB1 BOARD SCHEMATIC DIAGRAM (KP-51WS520/57WS520 ONLY)



HB2 BOARD SCHEMATIC DIAGRAM (KP-46WT520 ONLY)



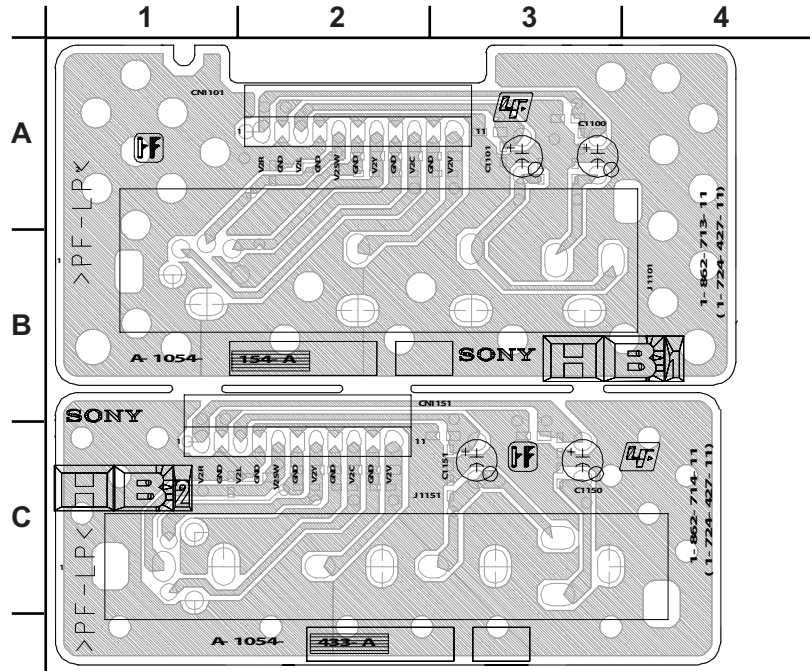
HB1

[FRONT TERMINAL] (KP-51WS520/57WS520 ONLY)

HB2

[FRONT TERMINAL] (KP-46WT520 ONLY)

COMPONENT SIDE



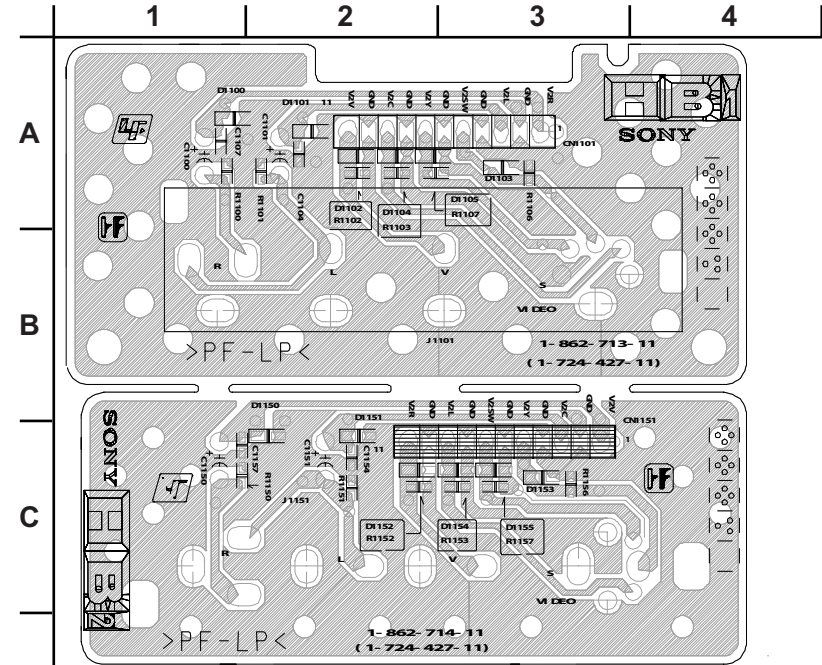
HB1

[FRONT TERMINAL] (KP-51WS520/57WS520 ONLY)

HB2

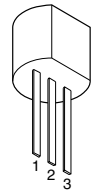
[FRONT TERMINAL] (KP-46WT520 ONLY)

CONDUCTOR SIDE

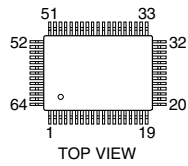


5-5. SEMICONDUCTORS

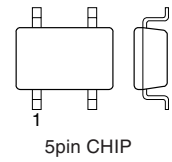
AN77L12-TA
NJM78L12A-T3
NJM79L05A
NJM79L05A-T3



CXA2069Q
CXA2150AQ

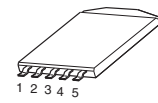


MAX4450EUK-TG069

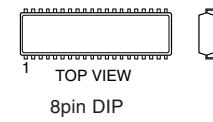


M24C04-WMN6T(A)
M24C32-WMN6T(A)
NJM2068V-TE2
NJM2521M(TE2)
NJM2903M
NJM2903M-TE2
NJM2904M
NJM2904M(TE2)
NJM4558M-T2
NJM4558M-TE2
NJM4558V-TE2
μPC4558G2

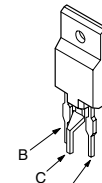
PST9143NL



μPC393C

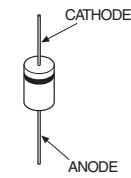


2SC5681-YB

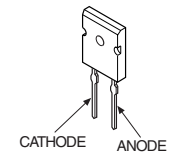


DTZ10B
MA111-TX
UDZ-TE-17- 8.2B
UDZ-TE-17-7.5B
UDZS-TE17-12B
UDZS-TE17-22B
UDZS-TE17-33B
UDZSTE-1710B
UDZSTE-1720B
UDZSTE-175.1B
UDZSTE-175.6B
UDZSTE-177.5B
UDZSTE-178.2B
1SS355TE-17

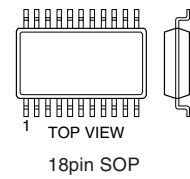
D2L20U-F
ERC04-06SE



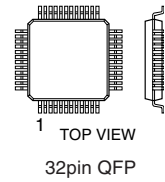
FMQ-G5FMS
PG124S15



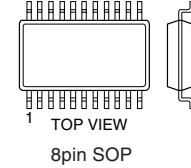
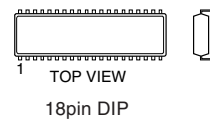
BA9759F-E2



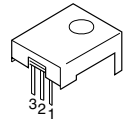
CXD2073Q-T4



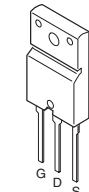
MCZ3001D



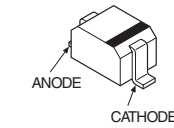
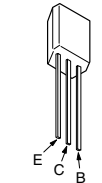
SBX1971-51P



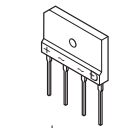
IRFIB7N50A-LF31



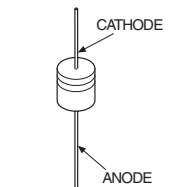
2SD2144S-TP-V
2SD2144S-V



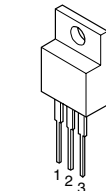
D2SB60A-F04
D4SBS4-F
D6SB60LF



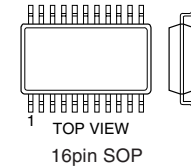
MTZJ-T-77-15B
MTZJ-T-77-20B
MTZJ-T-77-5.1B
RD18ES-B2
RD18ES-B2
RD20ES-B2
RD5.1ESB2
RD5.6ESB2
1SS133T-77



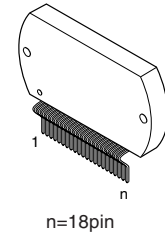
MC7805CT
MC7812CT
NJM7805FA
NJM7812FA
PQ09RF21
TA7805S
TA7812S



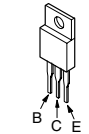
M52055FP
TC74HCT157AF
TC74HCT157AF(EL)
TC74LVX157FT(EL)



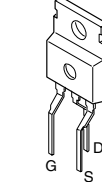
STK392-560



1MB12-140-F153A
2SA2005
2SC4634LS-CB11
2SC5511

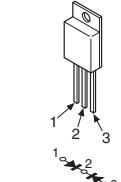


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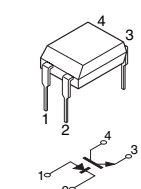


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D2L20U
D2L20U-TA
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ERA22-08TP3
GP08D
GP08DPKG23
MTZJ-T-77-18B
MTZJ-T-77-22B
MTZJ-T-77-5.6B
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RGP10GPKG23
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1SS83TD

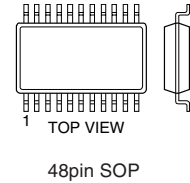
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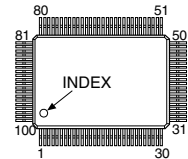
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PC123FY2



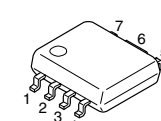
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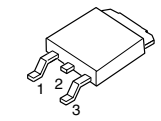
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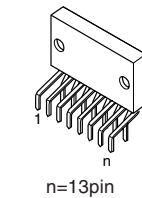
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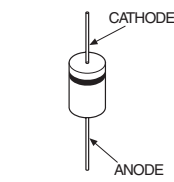
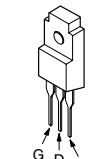
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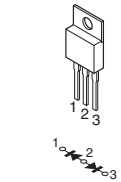
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2SA1226-T1E3E4
2SB709A-QRS-TX
2SC1623-L5L6
2SC2412K-T-146-QR
2SD601A-Q
2SD601A-QRS-TX



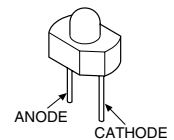
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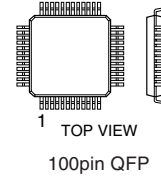
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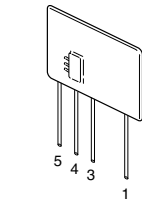
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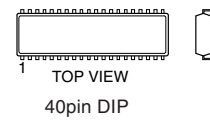
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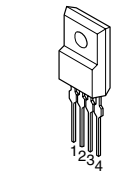
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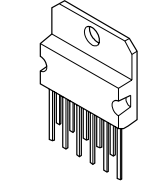
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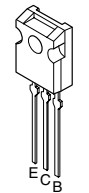
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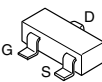
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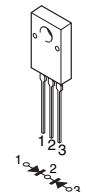
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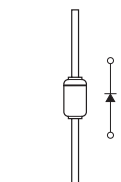
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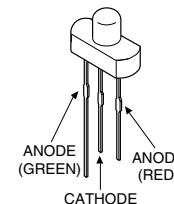
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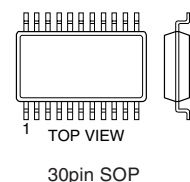
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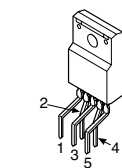
SPR-325MVW



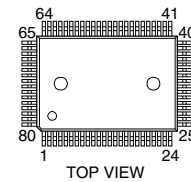
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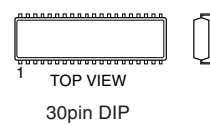
LA6500-FA
LA6500P-FA



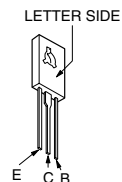
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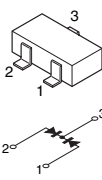
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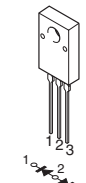
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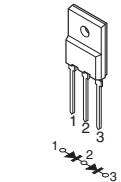
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DAN202K-T-146



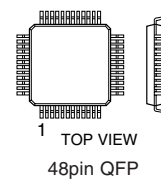
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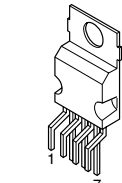
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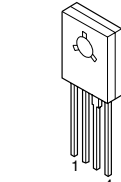
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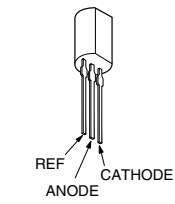
LA78045
TDA2052



PQ30RV11



μPC1093J-1-T





SECTION 6: EXPLODED VIEWS

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

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

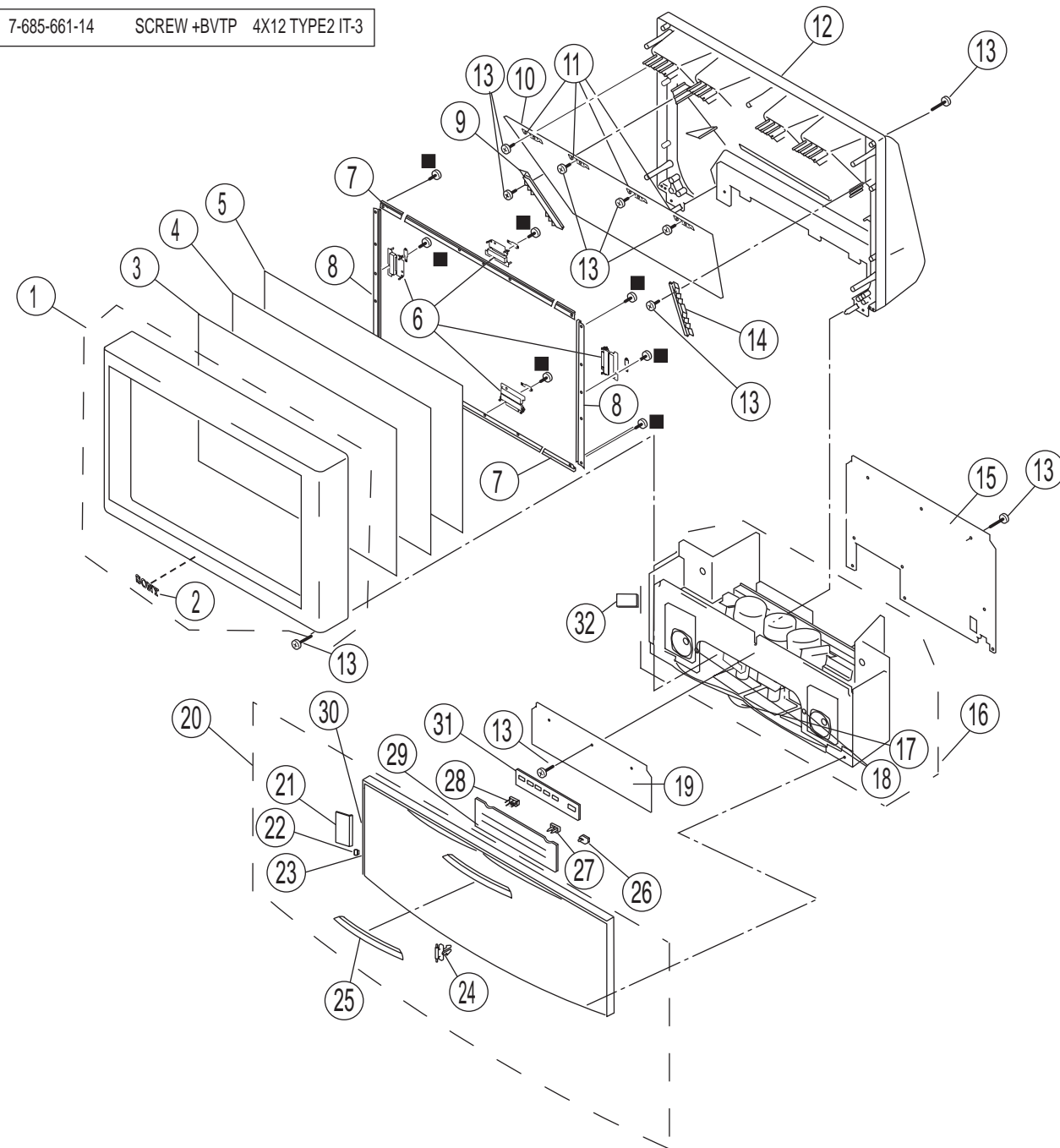
* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.



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

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

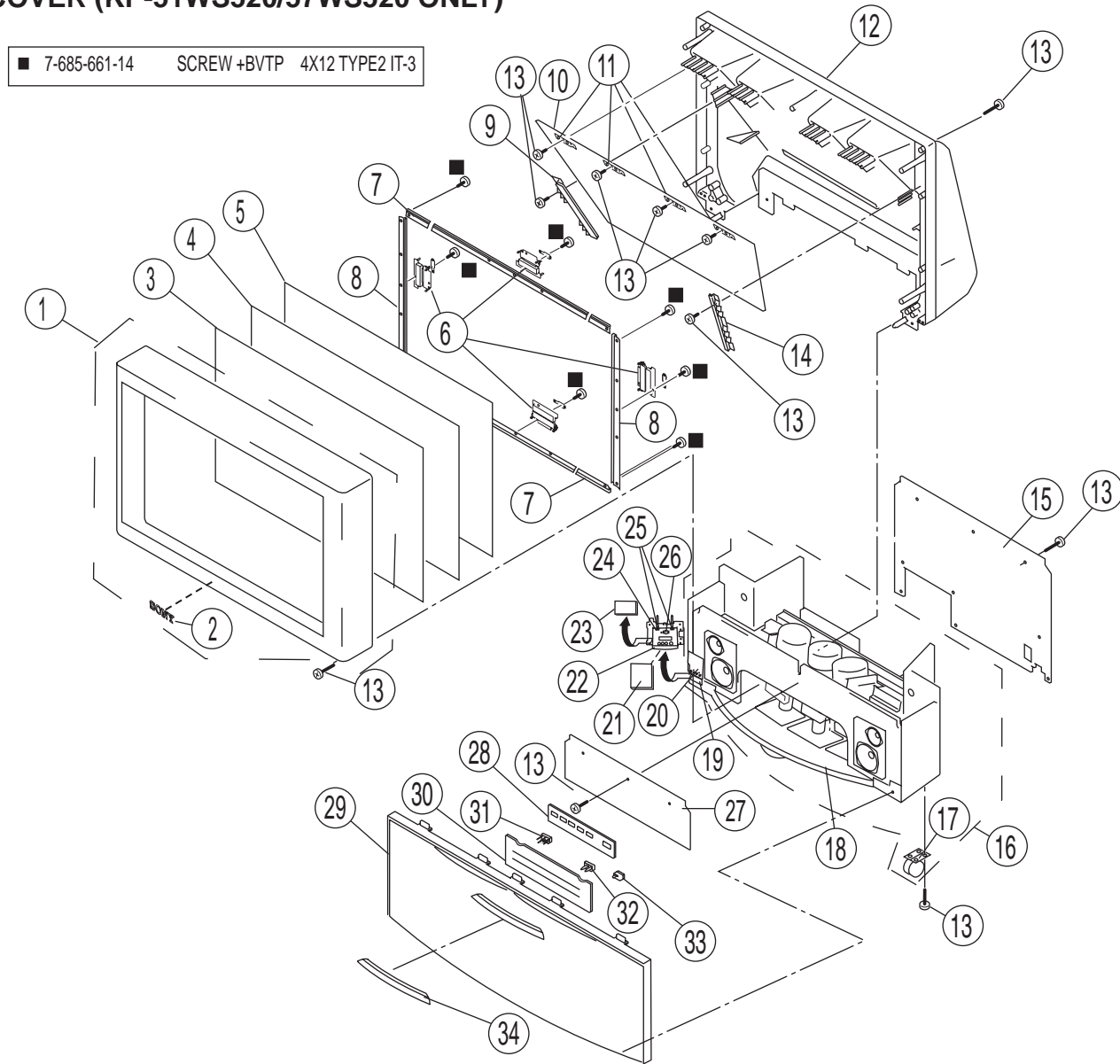
6-1. COVER (KP-46WT520 ONLY)

■ 7-685-661-14 SCREW +BVTP 4X12 TYPE2 IT-3



REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES	REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
1	X-2021-272-1	BEZEL (46) ASSY	[2]		16	X-2021-174-1	CABINET(46) ASSY,BOTTOM [17-18]
2	3-704-179-01	EMBLEM (NO.9), SONY		17	4-084-920-01	FOOT	
3	4-090-943-11	SCREEN (46W), CONTRAST		18	4-084-932-21	CATCH (S)	
4	2-059-421-11	PLATE (46WL), DIFFUSION		*	19	2-023-378-02	BOARD(46), FRONT
5	2-059-420-31	PLATE (46WF), DIFFUSION			20	X-2021-274-1	GRILLE (46) ASSY, SPEAKER [21-24]
*	6	A-1405-083-A	SR BOARD, MOUNTED	21	2-023-212-11	DOOR, SIDE TERMINAL	
*	7	4-084-568-21	HOLDER, SCREEN	22	4-042-192-01	CATCHER, PUSH	
*	8	4-084-568-31	HOLDER, SCREEN	23	4-045-250-01	DAMPER	
*	9	4-091-245-01	HOLDER (46L), MIRROR	24	3-703-035-11	SHAFT, LID	
10	4-090-957-01	MIRROR (46)		25	2-023-098-01	PANEL (S), CONTROL	
*	11	4-081-501-01	HOLDER, MIRROR	26	2-023-102-01	GUIDE, IR	
*	12	4-090-956-11	COVER (46), MIRROR	27	2-023-101-01	GUIDE, LED	
13	4-081-063-11	SCREW, DOME WASHER HEX TAP 4X20		28	2-023-096-01	BUTTON (M)	
*	14	4-091-246-01	HOLDER (46R), MIRROR	29	2-023-100-01	BUTTON, CONTROL	
*	15	2-023-379-01	BOARD(46), REAR	30	2-022-622-01	LABEL, SIDE INPUT TERMINAL	
				*	31	A-1054-152-A	HA1 BOARD, MOUNTED
				*	32	A-1054-799-A	HB2 BOARD, MOUNTED

6-2. COVER (KP-51WS520/57WS520 ONLY)



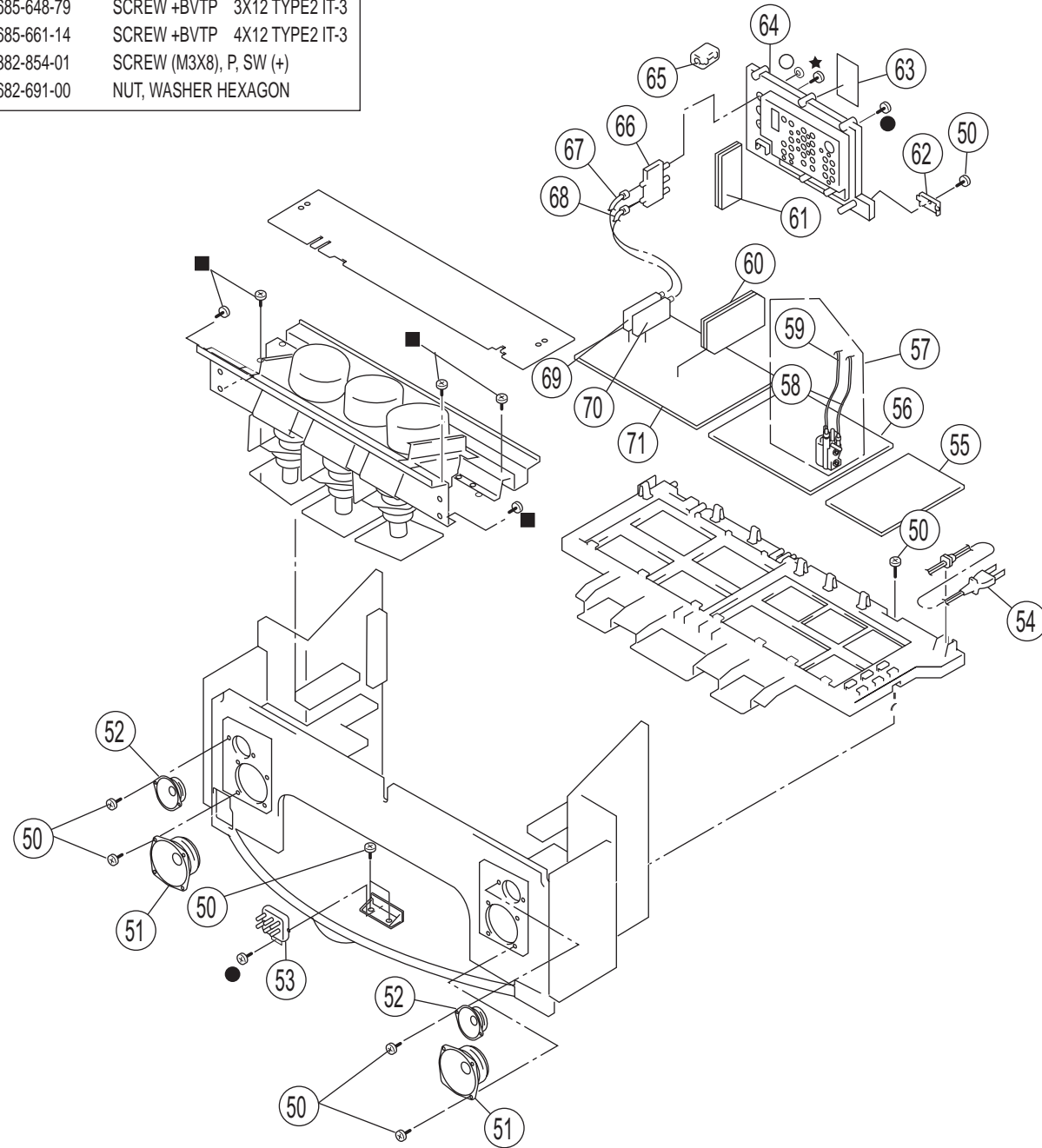
REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES	REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
1	X-2021-273-1	BEZEL (51) ASSY (KP-51WS520 ONLY)	[2]	* 15	2-023-380-01	BOARD(51), REAR (KP-51WS520 ONLY)	
1	X-2021-281-1	BEZNET (57) ASSY (KP-57WS520 ONLY)	[2]	* 15	2-022-468-01	BOARD (57), REAR (KP-57WS520 ONLY)	
2	3-704-179-01	EMBLEM (NO.9), SONY (KP-51WS520 ONLY)		16	X-2021-270-1	CABINET(51)ASSY, BOTTOM (KP-51WS520 ONLY)	[17]
2	4-381-079-01	EMBLEM (NO.10), SONY (KP-57WS520 ONLY)		16	X-2021-166-1	CABINET (57), ASSY (KP-57WS520 ONLY)	[17]
3	4-090-910-11	SCREEN (51), CONTRAST (KP-51WS520 ONLY)		17	4-040-755-01	CASTER (DIA. 30) (KP-51WS520/57WS520 ONLY)	
3	4-090-881-11	SCREEN (57), CONTRAST (KP-57WS520 ONLY)		18	2-023-069-01	SKIRT (51), FRONT (KP-51WS520 ONLY)	
4	2-059-423-31	PLATE (51WL), DIFFUSION (KP-51WS520 ONLY)		18	2-022-470-01	SKIRT (57), FRONT (KP-57WS520 ONLY)	
4	2-059-426-11	PLATE (57WL), DIFFUSION (KP-57WS520 ONLY)		19	4-088-572-01	LABEL, INPUT TERMINAL (KP-51WS520/57WS520 ONLY)	
5	2-059-422-31	PLATE (51WFV), DIFFUSION (KP-51WS520 ONLY)		20	4-088-569-03	BRACKET, INPUT TERMINAL (KP-51WS520/57WS520 ONLY)	
5	2-059-425-11	PLATE (57WF), DIFFUSION (KP-57WS520 ONLY)		21	4-088-571-02	PLATE, INPUT TERMINAL (KP-51WS520/57WS520 ONLY)	
* 6	A-1405-083-A	SR BOARD, MOUNTED		22	3-973-975-41	DAMPER, OIL (KP-51WS520/57WS520 ONLY)	
* 7	4-084-617-02	HOLDER, SCREEN (KP-51WS520 ONLY)		* 23	A-1054-154-A	HB1 BOARD, MOUNTED (KP-51WS520/57WS520 ONLY)	
* 7	4-084-568-02	HOLDER, SCREEN (KP-57WS520 ONLY)		24	4-088-570-01	COVER, INPUT TERMINAL (KP-51WS520/57WS520 ONLY)	
* 8	4-084-617-12	HOLDER, SCREEN (KP-51WS520 ONLY)		25	4-088-573-01	SPRING (KP-51WS520/57WS520 ONLY)	
* 8	4-084-568-12	HOLDER, SCREEN (KP-57WS520 ONLY)		26	4-047-464-01	CATCHER, PUSH (KP-51WS520/57WS520 ONLY)	
* 9	2-023-093-01	HOLDER (L), MIRROR SIDE (KP-51WS520 ONLY)		* 27	2-023-377-01	BOARD(51), FRONT (KP-51WS520 ONLY)	
* 9	4-083-462-01	HOLDER (L), MIRROR SIDE (KP-57WS520 ONLY)		* 27	2-022-471-01	BOARD (57), FRONT (KP-57WS520 ONLY)	
* 10	2-023-094-01	MIRROR (51) (KP-51WS520 ONLY)		* 28	A-1054-152-A	HA1 BOARD, MOUNTED	
10	4-084-561-03	MIRROR (57) (KP-57WS520 ONLY)		29	X-2021-275-1	GRILLE (51) ASSY, SPEAKER (KP-51WS520 ONLY)	
* 11	4-081-501-01	HOLDER, MIRROR		29	X-2021-167-1	GRILLE (57) SPEAKER, ASSY (KP-57WS520 ONLY)	
* 12	2-023-091-01	COVER (51), MIRROR (KP-51WS520 ONLY)		30	2-023-100-01	BUTTON, CONTROL	
* 12	4-083-466-11	COVER (57), MIRROR (KP-57WS520 ONLY)		31	2-023-096-01	BUTTON (M)	
13	4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20 (KP-51WS520/57WS520 ONLY)		32	2-023-102-01	GUIDE, IR	
* 14	2-023-092-01	HOLDER (R), MIRROR SIDE (KP-51WS520 ONLY)		33	2-023-101-01	GUIDE, LED	
* 14	4-083-461-01	HOLDER (R), MIRROR SIDE (KP-57WS520 ONLY)		34	2-023-098-01	PANEL (S), CONTROL (KP-51WS520 ONLY)	
				34	2-023-097-01	PANEL (L), CONTROL (KP-57WS520 ONLY)	

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

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

6-3. CHASSIS

- 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
- 7-685-661-14 SCREW +BVTP 4X12 TYPE2 IT-3
- ★ 4-382-854-01 SCREW (M3X8), P, SW (+)
- 3-682-691-00 NUT, WASHER HEXAGON



REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES	REF.NO.	PART NO.	DESCRIPTION
50	4-081-063-11	SCREW,DOME WASHER HEX TAP 4X20 (KP-46WT520 ONLY)		* 60	A-1063-104-A	BM BOARD, COMPLETE
50	4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20 (KP-51WS520/57WS520 ONLY)		* 60	(See 71)	BH BOARD, COMPLETE
51	1-544-893-21	SPEAKER (10CM) (KP-46WT520 ONLY)		If the BH board needs to be replaced use an A Board part number to order the replacement kit.		
51	1-825-525-11	LOUDSPEAKER (13CM) (KP-51WS520/57WS520 ONLY)		* 61	A-1068-754-A	P BOARD, COMPLETE
52	1-529-403-41	LOUDSPEAKER (6.6CM) (KP-51WS520/57WS520 ONLY)		62	4-069-675-01	CAP, TERMINAL BOARD
\triangle 53	1-223-925-34	RESISTOR ASSY (HIGH-VOLTAGE)		63	2-023-279-02	LABEL, TERMINAL
\triangle 54	1-827-159-11	CORD, AC POWER(WITH CONNECTOR) (KP-46WT520 ONLY)		64	2-023-282-01	BOARD, TERMINAL
\triangle 54	1-790-001-12	CORD, AC POWER(WITH CONNECTOR) (KP-51WS520/57WS520 ONLY)		65	1-500-497-11	FILTER, CLAMP (FERRITE CORE)
* 55	A-1054-157-A	G BOARD, COMPLETE		\triangle 66	1-771-787-21	SWITCH, RF ANTENNA
\triangle *56	A-1054-155-A	D BOARD, COMPLETE		* 67	1-556-945-21	CABLE, P-P
The high-voltage leads associated with the FBT on the D board are not included and must be ordered separately. (See 58-60)				* 68	1-557-056-31	CABLE, P-P
\triangle 57	1-453-450-11	FBT ASSY NX-6030/M3A4	[58-60]	69	8-598-594-10	TUNER, FSS BTF-FA421
\triangle 58	1-779-095-51	LEAD ASSY, HIGH-VOLTAGE		\triangle 70	8-598-593-20	TUNER, FSS BTF-WA421
\triangle 59	1-900-260-40	CONNECTOR ASSY, MV		* 71	A-1054-149-A	A BOARD, COMPLETE
				* 71	A-1082-955-A	A BOARD, COMPLETE

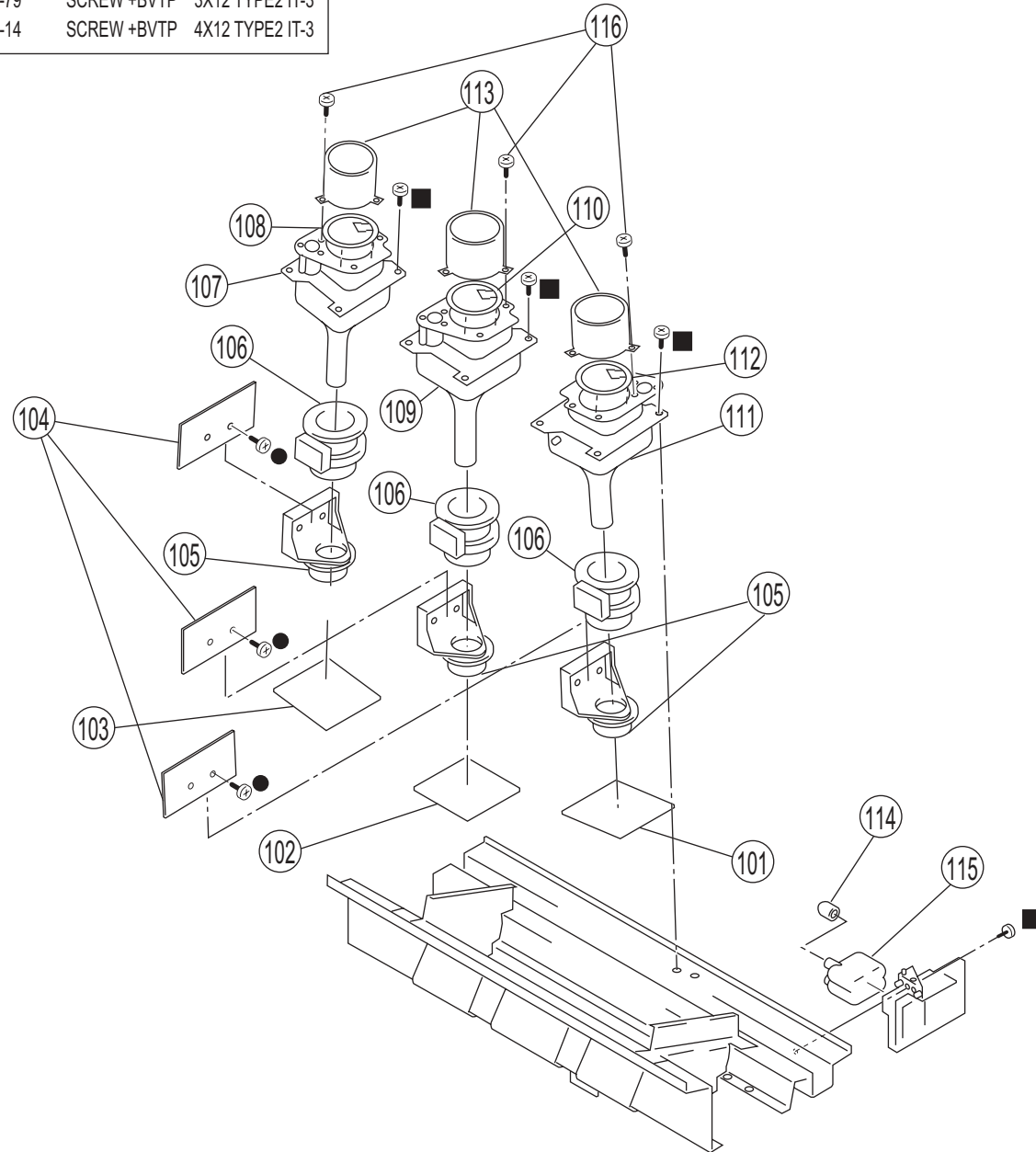
The A Boards are manufactured at different facilities. Either part can be used as a replacement.

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

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

6-4. PICTURE TUBE

- 7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3
- 7-685-661-14 SCREW +BVTP 4X12 TYPE2 IT-3



REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
* 101	A-1054-147-A	CB BOARD, MOUNTED	\triangle 109	8-735-182-05	CRT 07MRC21(G) 16LWP12HAA (KP-46WT520/51WS520 ONLY)
* 102	A-1054-148-A	CG BOARD, MOUNTED	\triangle 109	A-1107-615-A	COUPLER (G) ASSY, CRT (KP-46WT520/51WS520 SERIAL # 8,500,001 AND UP ONLY)
* 103	A-1054-146-A	CR BOARD, MOUNTED	\triangle 109	A-1604-483-A	COUPLER (G) ASSY, CRT (KP-57WS520 ONLY)
* 104	A-1405-662-A	VM BOARD, MOUNTED	110	4-096-119-02	SHADE (G) (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
\triangle 105	1-452-790-33	NECK ASSEMBLY (KP-46WT520/51WS520 ONLY)	110	4-101-291-02	SHADE (G) (KP-57WS520 ONLY)
\triangle 105	1-451-535-14	COIL ASSY, VM (KP-57WS520 ONLY)	\triangle 111	8-735-183-05	CRT 07MRC21(B) 16WP12BMB (KP-46WT520 ONLY)
\triangle 106	1-451-537-41	DEFLECTION YOKE (KP-46WT520/51WS520 ONLY)	\triangle 111	A-1107-618-A	COUPLER (B) ASSY, CRT (KP-46WT520 SERIAL # 8,500,001 AND UP ONLY)
\triangle 106	1-451-537-31	DEFLECTION YOKE (KP-57WS520 ONLY)	\triangle 111	8-735-185-05	CRT 07MRC31(B) 16LWP13BMB (KP-51WS520 ONLY)
\triangle 107	8-735-184-05	CRT 07MRC21(R) 16LWP12RFA (KP-46WT520 ONLY)	\triangle 111	A-1107-616-A	COUPLER (B) ASSY, CRT (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
\triangle 107	A-1107-619-A	COUPLER (R) ASSY, CRT (KP-46WT520 SERIAL # 8,500,001 AND UP ONLY)	\triangle 111	A-1604-493-A	COUPLER (B) ASSY, CRT (KP-57WS520 ONLY)
\triangle 107	8-735-186-05	CRT 07MRC31(R) 16LWP13RFA (KP-51WS520 ONLY)	112	4-101-761-02	SHADE (B) (KP-46WT520/51WS520 ONLY)
\triangle 107	A-1107-617-A	COUPLER (R) ASSY, CRT (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)	112	2-590-896-01	SHADE (B) (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
\triangle 107	A-1604-491-A	COUPLER (R) ASSY, CRT (KP-57WS520 ONLY)	112	4-101-444-02	SHADE BLUE (KP-57WS520 ONLY)
108	4-096-118-02	SHADE (R) (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)	113	4-083-751-01	LENS (DELTA 250) (KP-46WT520/51WS520 ONLY)
108	4-088-542-02	SHADE (R) (KP-57WS520 ONLY)	113	4-083-750-01	LENS (DELTA 260) (KP-57WS520 ONLY)
			114	4-373-137-01	CAP (Z), RUBBER
			\triangle 115	8-598-875-00	BLOCK ASSY, HIGH-VOLTAGE
			116	7-685-663-71	SCREW +BVTP 4X16 TYPE2 IT-3

SECTION 7: ELECTRICAL PARTS LIST

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

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

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

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

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

RESISTORS

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



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

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<div style="float: left; width: 50px; text-align: center;">CR</div> <p>* A-1054-146-A CR BOARD, MOUNTED 4-382-854-11 SCREW (M3X10), P, SW (+)</p>				FERRITE BEAD			
				FB9101	1-469-578-11	FERRITE	1.1 μ H
<p>CAPACITOR</p> <p>C9101 1-104-570-11 CERAMIC 0.001μF 10% 2KV C9102 1-162-919-11 CERAMIC CHIP 22pF 5% 50V C9103 1-164-156-11 CERAMIC CHIP 0.1μF 25V C9105 1-107-962-11 ELECT 22μF 20% 250V C9106 1-162-114-00 CERAMIC 4700pF 1KV</p> <p>C9107 1-162-966-11 CERAMIC CHIP 0.0022μF 10% 50V C9108 1-126-935-11 ELECT 470μF 20% 16V C9110 1-164-156-11 CERAMIC CHIP 0.1μF 25V C9111 1-164-156-11 CERAMIC CHIP 0.1μF 25V C9112 1-126-933-11 ELECT 100μF 20% 16V</p> <p>C9114 1-162-966-11 CERAMIC CHIP 0.0022μF 10% 50V C9115 1-162-966-11 CERAMIC CHIP 0.0022μF 10% 50V C9117 1-164-156-11 CERAMIC CHIP 0.1μF 25V</p>				IC			
				IC9101	8-759-680-01	IC	TDA6120Q/N2/S1
<p>CONNECTOR</p> <p>* CN9101 1-564-510-11 PLUG, CONNECTOR 7P * CN9102 1-564-507-11 PLUG, CONNECTOR 4P * CN9103 1-564-508-11 PLUG, CONNECTOR 5P CN9104 1-695-915-11 TAB (CONTACT) CN9107 1-785-879-11 CONNECTOR, ONE TOUCH CN9110 1-695-915-11 TAB (CONTACT)</p>				JACK			
				\triangle J9101	1-251-182-11	SOCKET, CRT	
<p>DIODE</p> <p>D9101 8-719-970-83 DIODE HSS82-TJ D9104 8-719-970-83 DIODE HSS82-TJ D9109 8-719-081-97 DIODE MMDL914T1</p>				COIL			
				L9101	1-414-856-11	INDUCTOR	10 μ H
				L9102	1-414-855-31	INDUCTOR	1 μ H
				L9103	1-414-856-11	INDUCTOR	10 μ H
<p>TRANSISTOR</p> <p>Q9101 8-729-010-25 TRANSISTOR MSD601-RT1 Q9102 8-729-028-28 TRANSISTOR 2SK2036(TE85L) Q9103 8-729-010-05 TRANSISTOR MSB709-RT1 Q9104 8-729-010-05 TRANSISTOR MSB709-RT1 Q9105 8-729-122-63 TRANSISTOR 2SA1226-E4</p>				NEON LAMP			
				\triangle NL9102	1-517-778-21	LAMP, NEON	
				NL9103	1-517-778-21	LAMP, NEON	
<p>RESISTOR</p> <p>R9101 1-260-133-11 CARBON 680K 5% 1/2W R9102 1-249-425-11 CARBON 4.7K 5% 1/4W R9103 1-216-809-11 METAL CHIP 100 5% 1/10W R9104 1-260-132-11 CARBON 560K 5% 1/2W</p>				RESISTOR			
				R9101	1-260-133-11	CARBON	680K 5% 1/2W
				R9102	1-249-425-11	CARBON	4.7K 5% 1/4W
				R9103	1-216-809-11	METAL CHIP	100 5% 1/10W
				R9104	1-260-132-11	CARBON	560K 5% 1/2W

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

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



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9105	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W	C9309	1-164-156-11	CERAMIC CHIP	0.1 μ F		25V
R9106	1-218-835-11	METAL CHIP	330	0.50%	1/10W	C9310	1-164-156-11	CERAMIC CHIP	0.1 μ F		25V
R9107	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C9311	1-126-933-11	ELECT	100 μ F	20%	16V
R9108	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	C9312	1-162-114-00	CERAMIC	4700pF		1KV
R9109	1-218-845-11	METAL CHIP	820	0.50%	1/10W	C9313	1-164-156-11	CERAMIC CHIP	0.1 μ F		25V
R9110	1-249-393-11	CARBON	10	5%	1/4W	C9314	1-162-970-11	CERAMIC CHIP	0.01 μ F	10%	25V
R9114	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W	C9315	1-162-966-11	CERAMIC CHIP	0.0022 μ F	10%	50V
R9115	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	C9316	1-162-966-11	CERAMIC CHIP	0.0022 μ F	10%	50V
R9116	1-260-328-11	CARBON	1K	5%	1/2W	C9318	1-164-156-11	CERAMIC CHIP	0.1 μ F		25V
R9120	1-243-624-71	METAL OXIDE	33K	5%	3W	C9320	1-125-891-11	CERAMIC CHIP	0.47 μ F	10%	10V
R9122	1-260-320-11	CARBON	220	5%	1/2W						
R9126	1-218-903-11	METAL CHIP	220K	0.50%	1/10W			CONNECTOR			
R9127	1-218-903-11	METAL CHIP	220K	0.50%	1/10W						
R9129	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	*	CN9301	1-564-511-11	PLUG, CONNECTOR		8P
R9131	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	*	CN9302	1-564-510-11	PLUG, CONNECTOR		7P
R9132	1-216-833-11	METAL CHIP	10K	5%	1/10W	*	CN9303	1-564-507-11	PLUG, CONNECTOR		4P
R9133	1-216-809-11	METAL CHIP	100	5%	1/10W		CN9304	1-695-915-11	TAB (CONTACT)		
R9134	1-216-821-11	METAL CHIP	1K	5%	1/10W	*	CN9305	1-580-689-11	PIN, CONNECTOR (PC BOARD)		4P
R9135	1-260-087-11	CARBON	100	5%	1/2W		CN9308	1-785-879-11	CONNECTOR, ONE TOUCH		
R9136	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W	*	CN9309	1-564-507-11	PLUG, CONNECTOR		4P
R9137	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W		CN9310	1-695-915-11	TAB (CONTACT)		
R9147	1-216-864-11	SHORT CHIP									
		SPARK GAP						DIODE			
SG9101	1-518-925-31	GAP, SPARK				D5520	8-719-072-66	DIODE			PDZ11B-115
SG9102	1-519-422-11	GAP, SPARK				D9301	8-719-081-97	DIODE			MMDL914T1
SG9103	1-519-422-11	GAP, SPARK				D9302	8-719-970-83	DIODE			HSS82-TJ
						D9303	8-719-081-97	DIODE			MMDL914T1
						D9305	6-500-029-01	DIODE			MM3Z12VST1
						D9309	8-719-970-83	DIODE			HSS82-TJ
								FERRITE BEAD			
						FB5206	1-469-578-11	FERRITE			1.1 μ H
						FB9301	1-469-578-11	FERRITE			1.1 μ H
								IC			
						IC9301	8-759-680-01	IC			TDA6120Q/N2/S1
								JACK			
						Δ J9301	1-251-182-11	SOCKET, CRT			



* **A-1054-147-A CB BOARD, MOUNTED**
4-382-854-11 SCREW (M3X10), P, SW (+)

CAPACITOR

C5550	1-162-964-11	CERAMIC CHIP	0.001 μ F	10%	50V
C9301	1-104-570-11	CERAMIC	0.001 μ F	10%	2KV
C9302	1-162-966-11	CERAMIC CHIP	0.0022 μ F	10%	50V
C9303	1-107-662-11	ELECT	22 μ F	20%	350V
C9304	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C9305	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C9306	1-164-156-11	CERAMIC CHIP	0.1 μ F		25V
C9307	1-126-935-11	ELECT	470 μ F	20%	16V

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

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



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
COIL				R9319	1-249-425-11	CARBON	4.7K 5% 1/4W
L9301	1-414-856-11	INDUCTOR	10 μ H	R9320	1-243-624-71	METAL OXIDE	33K 5% 3W
L9302	1-414-855-31	INDUCTOR	1 μ H	R9323	1-260-328-11	CARBON	1K 5% 1/2W
L9303	1-414-856-11	INDUCTOR	10 μ H	R9325	1-260-320-11	CARBON	220 5% 1/2W
NEON LAMP				R9327	1-218-901-11	METAL CHIP	180K 0.50% 1/10W
\triangle NL9302	1-517-778-21	LAMP, NEON		R9328	1-218-907-11	METAL CHIP	330K 0.50% 1/10W
NL9303	1-517-778-21	LAMP, NEON		R9330	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
TRANSISTOR				R9332	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q5520	6-550-659-01	TRANSISTOR	2SC4634LS-YB11	R9333	1-218-854-11	METAL CHIP	2K 0.50% 1/10W
Q5523	8-729-010-25	TRANSISTOR	MSD601-RT1	R9334	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
Q9301	8-729-010-05	TRANSISTOR	MSB709-RT1	R9335	1-249-393-11	CARBON	10 5% 1/4W
Q9302	8-729-028-28	TRANSISTOR	2SK2036(TE85L)	R9339	1-260-087-11	CARBON	100 5% 1/2W
Q9304	8-729-010-25	TRANSISTOR	MSD601-RT1	R9340	1-218-871-11	METAL CHIP	10K 0.50% 1/10W
Q9305	8-729-010-05	TRANSISTOR	MSB709-RT1	R9342	1-216-834-11	METAL CHIP	12K 5% 1/10W
Q9306	8-729-010-05	TRANSISTOR	MSB709-RT1	R9343	1-216-832-11	METAL CHIP	8.2K 5% 1/10W
Q9307	8-729-010-05	TRANSISTOR	MSB709-RT1	R9344	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q9309	8-729-122-63	TRANSISTOR	2SA1226-E4	R9345	1-218-863-11	METAL CHIP	4.7K 0.50% 1/10W
Q9311	8-729-010-25	TRANSISTOR	MSD601-RT1	R9346	1-216-833-11	METAL CHIP	10K 5% 1/10W
RESISTOR				R9347	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5574	1-216-833-11	METAL CHIP	10K 5% 1/10W	R9348	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5575	1-260-131-11	CARBON	470K 5% 1/2W	R9349	1-216-809-11	METAL CHIP	100 5% 1/10W
R5576	1-216-833-11	METAL CHIP	10K 5% 1/10W	R9350	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W
R5577	1-216-833-11	METAL CHIP	10K 5% 1/10W	R9351	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W
R5578	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R9352	1-216-864-11	SHORT CHIP	
R5580	1-216-833-11	METAL CHIP	10K 5% 1/10W	R9355	1-216-809-11	METAL CHIP	100 5% 1/10W
R9301	1-216-809-11	METAL CHIP	100 5% 1/10W	R9356	1-216-809-11	METAL CHIP	100 5% 1/10W
R9302	1-216-864-11	SHORT CHIP		SPARK GAP			
R9303	1-260-133-11	CARBON	680K 5% 1/2W	SG9301	1-518-925-31	GAP, SPARK	
R9304	1-260-132-11	CARBON	560K 5% 1/2W	SG9302	1-519-422-11	GAP, SPARK	
R9306	1-218-831-11	METAL CHIP	220 0.50% 1/10W	SG9303	1-519-422-11	GAP, SPARK	
R9307	1-218-851-11	METAL CHIP	1.5K 0.50% 1/10W	CG BOARD, MOUNTED			
R9308	1-218-839-11	METAL CHIP	470 0.50% 1/10W	* A-1054-148-A 4-382-854-11 SCREW (M3X10), P, SW (+)			
R9309	1-218-849-11	METAL CHIP	1.2K 0.50% 1/10W	CAPACITOR			
R9313	1-218-877-11	METAL CHIP	18K 0.50% 1/10W	C9201	1-107-662-11	ELECT	22 μ F 20% 350V
R9314	1-218-862-11	METAL CHIP	4.3K 0.50% 1/10W	C9202	1-104-570-11	CERAMIC	0.001 μ F 10% 2KV
R9315	1-218-859-11	METAL CHIP	3.3K 0.50% 1/10W	C9203	1-164-156-11	CERAMIC CHIP	0.1 μ F 25V
R9316	1-218-853-11	METAL CHIP	1.8K 0.50% 1/10W	C9204	1-126-935-11	ELECT	470 μ F 20% 16V
R9317	1-218-863-11	METAL CHIP	4.7K 0.50% 1/10W				
R9318	1-216-825-11	METAL CHIP	2.2K 5% 1/10W				



* A-1054-148-A 4-382-854-11 CG BOARD, MOUNTED SCREW (M3X10), P, SW (+)

CAPACITOR

C9201	1-107-662-11	ELECT	22 μ F	20%	350V
C9202	1-104-570-11	CERAMIC	0.001 μ F	10%	2KV
C9203	1-164-156-11	CERAMIC CHIP	0.1 μ F		25V
C9204	1-126-935-11	ELECT	470 μ F	20%	16V




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

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

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
C9205	1-164-378-11	CERAMIC CHIP	30pF 5% 50V	NEON LAMP			
C9207	1-164-156-11	CERAMIC CHIP	0.1 μ F 25V	\triangle NL9202	1-517-778-21	LAMP, NEON	
C9208	1-164-156-11	CERAMIC CHIP	0.1 μ F 25V	NL9203	1-517-778-21	LAMP, NEON	
C9209	1-162-966-11	CERAMIC CHIP	0.0022 μ F 10% 50V	TRANSISTOR			
C9211	1-126-933-11	ELECT	100 μ F 20% 16V	Q9201	8-729-010-25	TRANSISTOR	MSD601-RT1
C9213	1-162-114-00	CERAMIC	4700pF 1KV	Q9202	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
C9214	1-162-966-11	CERAMIC CHIP	0.0022 μ F 10% 50V	Q9203	8-729-010-05	TRANSISTOR	MSB709-RT1
C9216	1-162-966-11	CERAMIC CHIP	0.0022 μ F 10% 50V	Q9204	8-729-122-63	TRANSISTOR	2SA1226-E4
C9217	1-164-156-11	CERAMIC CHIP	0.1 μ F 25V	RESISTOR			
CONNECTOR				R9201	1-260-133-11	CARBON	680K 5% 1/2W
* CN9201	1-564-510-11	PLUG, CONNECTOR	7P	R9202	1-260-132-11	CARBON	560K 5% 1/2W
* CN9202	1-564-510-11	PLUG, CONNECTOR	7P	R9203	1-249-425-11	CARBON	4.7K 5% 1/4W
* CN9203	1-564-507-11	PLUG, CONNECTOR	4P	R9204	1-216-809-11	METAL CHIP	100 5% 1/10W
* CN9204	1-564-507-11	PLUG, CONNECTOR	4P	R9205	1-218-871-11	METAL CHIP	10K 0.50% 1/10W
* CN9205	1-564-506-11	PLUG, CONNECTOR	3P	R9206	1-218-832-11	METAL CHIP	240 0.50% 1/10W
CN9208	1-695-915-11	TAB (CONTACT)		R9207	1-218-849-11	METAL CHIP	1.2K 0.50% 1/10W
CN9209	1-785-879-11	CONNECTOR, ONE TOUCH		R9208	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
CN9210	1-695-915-11	TAB (CONTACT)		R9209	1-218-845-11	METAL CHIP	820 0.50% 1/10W
DIODE				R9211	1-249-393-11	CARBON	10 5% 1/4W
D9201	8-719-970-83	DIODE	HSS82-TJ	R9216	1-218-854-11	METAL CHIP	2K 0.50% 1/10W
D9206	8-719-970-83	DIODE	HSS82-TJ	R9217	1-218-863-11	METAL CHIP	4.7K 0.50% 1/10W
D9209	8-719-081-97	DIODE	MMDL914T1	R9220	1-243-624-71	METAL OXIDE	33K 5% 3W
FERRITE BEAD				R9221	1-260-328-11	CARBON	1K 5% 1/2W
FB9201	1-469-578-11	FERRITE	1.1 μ H	R9223	1-260-320-11	CARBON	220 5% 1/2W
IC				R9225	1-218-899-11	METAL CHIP	150K 0.50% 1/16W
IC9201	8-759-680-01	IC	TDA6120Q/N2/S1	R9226	1-218-899-11	METAL CHIP	150K 0.50% 1/16W
JACK				R9228	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
\triangle J9201	1-251-182-11	SOCKET, CRT		R9230	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
COIL				R9231	1-260-087-11	CARBON	100 5% 1/2W
L9201	1-414-856-11	INDUCTOR	10 μ H	R9232	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W
L9202	1-414-855-31	INDUCTOR	1 μ H	R9233	1-218-855-11	METAL CHIP	2.2K 0.50% 1/10W
L9203	1-414-856-11	INDUCTOR	10 μ H	SPARK GAP			
				SG9201	1-518-925-31	GAP, SPARK	
				SG9202	1-519-422-11	GAP, SPARK	
				SG9203	1-519-422-11	GAP, SPARK	



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
				Q9006	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q9007	8-729-422-27	TRANSISTOR	2SD601A-Q
<p>* A-1405-662-A VM BOARD, MOUNTED 4-382-854-11 SCREW (M3X10), P, SW (+)</p>				Q9008	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q9009	8-729-422-27	TRANSISTOR	2SD601A-Q
<p>CAPACITOR</p>				Q9010	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX
				Q9011	8-729-045-05	TRANSISTOR	2SA2005
C9001	1-126-933-11	ELECT	100µF 20% 16V	Q9012	8-729-045-04	TRANSISTOR	2SC5511
C9002	1-164-156-11	CERAMIC CHIP	0.1µF 25V	<p>RESISTOR</p>			
C9003	1-162-964-11	CERAMIC CHIP	0.001µF 10% 50V				
C9004	1-107-645-11	ELECT	22µF 20% 200V	R9001	1-249-381-11	CARBON	1 5% 1/4W
C9006	1-162-114-00	CERAMIC	4700pF 1KV	R9002	1-216-820-11	METAL CHIP	820 5% 1/10W
C9007	1-164-156-11	CERAMIC CHIP	0.1µF 25V	R9003	1-216-819-11	METAL CHIP	680 5% 1/10W
C9008	1-126-964-11	ELECT	10µF 20% 50V	R9004	1-216-834-11	METAL CHIP	12K 5% 1/10W
C9009	1-107-636-11	ELECT	10µF 20% 160V	R9005	1-216-839-11	METAL CHIP	33K 5% 1/10W
C9010	1-137-528-11	MYLAR	0.1µF 10% 250V	R9006	1-216-811-11	METAL CHIP	150 5% 1/10W
C9011	1-107-826-11	CERAMIC CHIP	0.1µF 10% 16V	R9008	1-216-815-11	METAL CHIP	330 5% 1/10W
C9012	1-137-528-11	MYLAR	0.1µF 10% 250V	R9009	1-216-813-11	METAL CHIP	220 5% 1/10W
C9013	1-164-156-11	CERAMIC CHIP	0.1µF 25V	R9010	1-216-813-11	METAL CHIP	220 5% 1/10W
C9014	1-117-450-11	MYLAR	0.47µF 10% 250V	R9011	1-249-391-11	CARBON	6.8 5% 1/4W
<p>CONNECTOR</p>				R9012	1-249-391-11	CARBON	6.8 5% 1/4W
				R9013	1-249-391-11	CARBON	6.8 5% 1/4W
* CN9001	1-564-508-11	PLUG, CONNECTOR	5P	R9014	1-249-391-11	CARBON	6.8 5% 1/4W
* CN9002	1-564-506-11	PLUG, CONNECTOR	3P	R9015	1-249-391-11	CARBON	6.8 5% 1/4W
* CN9003	1-770-723-11	CONNECTOR, BOARD TO BOARD	8P	R9016	1-249-391-11	CARBON	6.8 5% 1/4W
<p>FERRITE BEAD</p>				R9017	1-249-391-11	CARBON	6.8 5% 1/4W
				R9018	1-249-391-11	CARBON	6.8 5% 1/4W
FB9001	1-469-869-21	FERRITE	0µH	R9019	1-216-848-11	METAL CHIP	180K 5% 1/10W
FB9002	1-469-869-21	FERRITE	0µH	R9020	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
<p>CHIP CONDUCTOR</p>				R9021	1-216-805-11	METAL CHIP	47 5% 1/10W
				R9022	1-216-805-11	METAL CHIP	47 5% 1/10W
JR9001	1-216-864-11	SHORT CHIP		R9023	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
JR9002	1-216-864-11	SHORT CHIP		R9024	1-216-848-11	METAL CHIP	180K 5% 1/10W
<p>TRANSISTOR</p>				R9025	1-243-572-71	METAL OXIDE	470 5% 2W
				Q9001	8-729-422-27	TRANSISTOR	2SD601A-Q
Q9002	8-729-422-27	TRANSISTOR	2SD601A-Q	R9026	1-216-847-11	METAL CHIP	150K 5% 1/10W
Q9003	8-729-422-27	TRANSISTOR	2SD601A-Q	R9027	1-216-847-11	METAL CHIP	150K 5% 1/10W
Q9004	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX				
Q9005	8-729-422-27	TRANSISTOR	2SD601A-Q				



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C97	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C346	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C98	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C347	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C99	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C350	1-126-933-11	ELECT	100μF	20%	16V
C100	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C351	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C101	1-117-720-11	CERAMIC CHIP	4.7μF		10V	C352	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C106	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C353	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C107	1-126-933-11	ELECT	100μF	20%	16V	C354	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C108	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C355	1-126-933-11	ELECT	100μF	20%	16V
C109	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C356	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C110	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C357	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C111	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C360	1-126-933-11	ELECT	100μF	20%	16V
C112	1-117-720-11	CERAMIC CHIP	4.7μF		10V	C361	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C113	1-117-720-11	CERAMIC CHIP	4.7μF		10V	C363	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C114	1-126-960-11	ELECT	1μF	20%	50V	C364	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C115	1-126-960-11	ELECT	1μF	20%	50V	C365	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C116	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C366	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C123	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C376	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C124	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C377	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C125	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C378	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C126	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C380	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C127	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C381	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C128	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C382	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C303	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C383	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C304	1-126-933-11	ELECT	100μF	20%	16V	C385	1-126-933-11	ELECT	100μF	20%	16V
C305	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C386	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C306	1-126-964-11	ELECT	10μF	20%	50V	C392	1-126-963-11	ELECT	4.7μF	20%	50V
C317	1-128-954-11	ELECT	1000μF	20%	25V	C398	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C318	1-128-954-11	ELECT	1000μF	20%	25V	C402	1-126-933-11	ELECT	100μF	20%	16V
C320	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V	C403	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C321	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C406	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C322	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C408	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C326	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V	C412	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C328	1-128-954-11	ELECT	1000μF	20%	25V	C415	1-126-963-11	ELECT	4.7μF	20%	50V
C331	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C416	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C332	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C418	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C334	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C420	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C336	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C425	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C337	1-128-942-31	ELECT	1000μF	20%	6.3V	C426	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C338	1-128-945-31	ELECT	1000μF	20%	10V	C427	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C339	1-128-950-31	ELECT	1000μF	20%	16V	C433	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C342	1-126-916-11	ELECT	1000μF	20%	6.3V	C434	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C343	1-126-926-11	ELECT	1000μF	20%	10V	C435	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C344	1-126-935-11	ELECT	470μF	20%	16V	C436	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C345	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C437	1-162-927-11	CERAMIC CHIP	100pF	5%	50V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C438	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C503	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C451	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C504	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C452	1-126-960-11	ELECT	1μF	20%	50V	C505	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C455	1-126-933-11	ELECT	100μF	20%	16V	C506	1-126-933-11	ELECT	100μF	20%	16V
C456	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C507	1-126-933-11	ELECT	100μF	20%	16V
C457	1-126-933-11	ELECT	100μF	20%	16V	C508	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C458	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C509	1-126-933-11	ELECT	100μF	20%	16V
C459	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C510	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
C460	1-165-733-31	ELECT	100μF	20%	25V	C511	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C461	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V	C512	1-110-563-11	CERAMIC CHIP	0.068μF	10%	16V
C462	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C513	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C463	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V	C514	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C464	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C515	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C465	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C516	1-126-933-11	ELECT	100μF	20%	16V
C466	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C517	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C467	1-126-933-11	ELECT	100μF	20%	16V	C518	1-126-933-11	ELECT	100μF	20%	16V
C468	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C519	1-126-964-11	ELECT	10μF	20%	50V
C469	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V	C525	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C470	1-126-933-11	ELECT	100μF	20%	16V	C530	1-126-964-11	ELECT	10μF	20%	50V
C471	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V	C601	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V
C472	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C602	1-126-041-11	ELECT	2200μF	20%	35V
C474	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C603	1-126-041-11	ELECT	2200μF	20%	35V
C475	1-126-935-11	ELECT	470μF	20%	16V	C604	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C476	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C605	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C477	1-126-933-11	ELECT	100μF	20%	16V	C606	1-137-190-91	FILM	0.22μF	5%	50V
C478	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C607	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C479	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C609	1-164-363-11	CERAMIC CHIP	560pF	5%	50V
C480	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C611	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C481	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C612	1-136-497-81	FILM	0.1μF	5%	50V
C482	1-126-962-11	ELECT	3.3μF	20%	50V	C613	1-164-363-11	CERAMIC CHIP	560pF	5%	50V
C483	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C614	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V
C484	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	C615	1-164-677-11	CERAMIC CHIP	0.033μF	10%	16V
C485	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C617	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C486	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C619	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C487	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C620	1-126-964-11	ELECT	10μF	20%	50V
C488	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25V	C621	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C489	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C622	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C490	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C623	1-126-947-11	ELECT	47μF	20%	35V
C494	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C624	1-136-497-81	FILM	0.1μF	5%	50V
C495	1-126-963-11	ELECT	4.7μF	20%	50V	C625	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C496	1-126-933-11	ELECT	100μF	20%	16V	C626	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C497	1-126-963-11	ELECT	4.7μF	20%	50V	C628	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C501	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C629	1-126-960-11	ELECT	1μF	20%	50V
C502	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C630	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C631	1-162-959-11	CERAMIC CHIP	330pF	5%	50V	C676	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C633	1-126-947-11	ELECT	47μF	20%	35V	C677	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C634	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C678	1-165-908-11	CERAMIC CHIP	1μF	10%	10V
C635	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V	C679	1-165-908-11	CERAMIC CHIP	1μF	10%	10V
C636	1-137-190-91	FILM	0.22μF	5%	50V	C680	1-137-190-91	FILM	0.22μF	5%	50V
C637	1-162-959-11	CERAMIC CHIP	330pF	5%	50V	C681	1-137-365-11	MYLAR	0.0015μF	5%	50V
C638	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C682	1-136-159-00	FILM	0.033μF	5%	50V
C639	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C683	1-137-367-11	MYLAR	0.0033μF	5%	50V
C640	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C684	1-137-190-91	FILM	0.22μF	5%	50V
C641	1-126-960-11	ELECT	1μF	20%	50V	C685	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C642	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C686	1-126-933-11	ELECT	100μF	20%	16V
C643	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V	C687	1-126-933-11	ELECT	100μF	20%	16V
C644	1-126-947-11	ELECT	47μF	20%	35V	C688	1-136-177-00	FILM	1μF	5%	50V
C645	1-126-066-11	ELECT	470μF	20%	63V	C689	1-136-177-00	FILM	1μF	5%	50V
C646	1-164-363-11	CERAMIC CHIP	560pF	5%	50V	C690	1-136-497-81	FILM	0.1μF	5%	50V
C647	1-164-677-11	CERAMIC CHIP	0.033μF	10%	16V	C691	1-136-497-81	FILM	0.1μF	5%	50V
C648	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V	C692	1-162-974-11	CERAMIC CHIP	0.01μF		50V
C649	1-164-363-11	CERAMIC CHIP	560pF	5%	50V	C701	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C650	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C702	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C651	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C703	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C652	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C704	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C653	1-126-964-11	ELECT	10μF	20%	50V	C705	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V
C654	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C706	1-162-963-11	CERAMIC CHIP	680pF	10%	50V
C655	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C707	1-162-963-11	CERAMIC CHIP	680pF	10%	50V
C656	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C708	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C657	1-128-934-91	CERAMIC CHIP	0.33μF	20%	10V	C709	1-164-505-11	CERAMIC CHIP	2.2μF		16V
C658	1-137-190-91	FILM	0.22μF	5%	50V	C710	1-126-933-11	ELECT	100μF	20%	16V
C659	1-137-365-11	MYLAR	0.0015μF	5%	50V	C711	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C660	1-136-159-00	FILM	0.033μF	5%	50V	C712	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C661	1-137-367-11	MYLAR	0.0033μF	5%	50V	C713	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C662	1-136-287-11	FILM	0.0047μF	5%	100V	C716	1-126-934-11	ELECT	220μF	20%	16V
C663	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C717	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C664	1-136-287-11	FILM	0.0047μF	5%	100V	C718	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V
C665	1-136-153-00	FILM	0.01μF	5%	50V	C719	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C666	1-164-227-11	CERAMIC CHIP	0.022μF	10%	25V	C720	1-126-933-11	ELECT	100μF	20%	16V
C667	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C721	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C668	1-126-933-11	ELECT	100μF	20%	16V	C722	1-164-505-11	CERAMIC CHIP	2.2μF		16V
C669	1-107-704-51	ELECT	470μF	20%	25V	C723	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C670	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C724	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C671	1-136-153-00	FILM	0.01μF	5%	50V	C725	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C672	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C726	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C673	1-137-190-91	FILM	0.22μF	5%	50V	C727	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C674	1-165-908-11	CERAMIC CHIP	1μF	10%	10V	C728	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C675	1-136-287-11	FILM	0.0047μF	5%	100V	C729	1-164-156-11	CERAMIC CHIP	0.1μF		25V




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C730	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C875	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C731	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C876	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C732	1-115-156-11	CERAMIC CHIP	1μF		10V	C877	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C734	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C878	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C735	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C879	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C736	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C880	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C737	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C881	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C738	1-126-942-61	ELECT	1000μF	20%	25V	C882	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C739	1-126-933-11	ELECT	100μF	20%	16V	C883	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C741	1-126-933-11	ELECT	100μF	20%	16V	C884	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C742	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C885	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C743	1-126-933-11	ELECT	100μF	20%	16V	C886	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C744	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C887	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C745	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C888	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C746	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C889	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C747	1-162-907-11	CERAMIC CHIP	2pF	0.25pF	50V	C890	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C748	1-164-245-11	CERAMIC CHIP	0.015μF	10%	25V	C891	1-126-933-11	ELECT	100μF	20%	16V
C750	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C892	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C751	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C893	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C752	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C894	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C753	1-126-933-11	ELECT	100μF	20%	16V	C895	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C760	1-126-925-91	ELECT	470μF	20%	10V	C896	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C851	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C897	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C852	1-164-392-11	CERAMIC CHIP	390pF	5%	50V	C898	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C853	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C899	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C854	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C900	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C855	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C901	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C856	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C902	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C857	1-162-965-11	CERAMIC CHIP	0.0015μF	10%	50V	C903	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C858	1-162-965-11	CERAMIC CHIP	0.0015μF	10%	50V	C904	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C859	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C906	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C860	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C907	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C861	1-162-965-11	CERAMIC CHIP	0.0015μF	10%	50V	C908	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C862	1-162-965-11	CERAMIC CHIP	0.0015μF	10%	50V	C909	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C863	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C910	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C864	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C912	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C865	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C913	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C868	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C914	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C869	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C916	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C870	1-126-933-11	ELECT	100μF	20%	16V	C917	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C871	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C918	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C872	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C919	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C873	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C920	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C874	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C921	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V




REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
D309	8-719-081-97	DIODE	MMDL914T1	FB306	1-414-445-11	FERRITE	0μH
D310	8-719-056-83	DIODE	UDZ-TE-17-6.8B	FB602	1-469-578-11	FERRITE	1.1μH
D311	8-719-081-97	DIODE	MMDL914T1	FB603	1-469-578-11	FERRITE	1.1μH
D312	8-719-977-28	DIODE	DTZ10B	FB604	1-469-578-11	FERRITE	1.1μH
D313	8-719-028-45	DIODE	D2L20U	FB605	1-469-578-11	FERRITE	1.1μH
D451	6-500-654-01	DIODE	MM3Z3V0T1	FB703	1-543-949-22	FERRITE	0μH
D452	8-719-081-97	DIODE	MMDL914T1	FB852	1-414-445-11	FERRITE	0μH
D453	8-719-081-97	DIODE	MMDL914T1	FB853	1-414-445-11	FERRITE	0μH
D454	8-719-081-97	DIODE	MMDL914T1	FB854	1-414-445-11	FERRITE	0μH
D456	8-719-036-94	DIODE	RD5.6SB-T1	FB855	1-414-445-11	FERRITE	0μH
D457	8-719-081-97	DIODE	MMDL914T1	FB856	1-414-445-11	FERRITE	0μH
D458	8-719-977-28	DIODE	DTZ10B	FB857	1-414-445-11	FERRITE	0μH
D459	8-719-081-97	DIODE	MMDL914T1	FB858	1-414-445-11	FERRITE	0μH
D460	8-719-977-28	DIODE	DTZ10B	FB859	1-414-445-11	FERRITE	0μH
D470	8-719-081-97	DIODE	MMDL914T1	FB860	1-414-445-11	FERRITE	0μH
D471	8-719-081-97	DIODE	MMDL914T1	FB861	1-414-445-11	FERRITE	0μH
D501	8-719-081-97	DIODE	MMDL914T1	FB862	1-414-445-11	FERRITE	0μH
D602	6-500-028-01	DIODE	MM3Z9V1ST1	FB863	1-414-445-11	FERRITE	0μH
D603	1-216-295-91	SHORT CHIP		FB864	1-414-445-11	FERRITE	0μH
D701	8-719-066-11	DIODE	1PS184-115	FB865	1-414-445-11	FERRITE	0μH
D703	8-719-081-97	DIODE	MMDL914T1	FB866	1-414-445-11	FERRITE	0μH
D706	8-719-083-57	DIODE	UDZSTE-173.6B	FB867	1-414-445-11	FERRITE	0μH
D707	8-719-081-97	DIODE	MMDL914T1	FB868	1-414-445-11	FERRITE	0μH
D708	8-719-066-11	DIODE	1PS184-115	FB869	1-414-445-11	FERRITE	0μH
D709	8-719-066-11	DIODE	1PS184-115	FB870	1-414-445-11	FERRITE	0μH
D711	8-719-081-97	DIODE	MMDL914T1	FB871	1-414-445-11	FERRITE	0μH
D712	8-719-081-97	DIODE	MMDL914T1	FB872	1-414-445-11	FERRITE	0μH
D720	8-719-066-11	DIODE	1PS184-115	FB873	1-414-445-11	FERRITE	0μH
D721	8-719-081-97	DIODE	MMDL914T1	FB874	1-414-445-11	FERRITE	0μH
D851	8-719-976-99	DIODE	DTZ5.1B	FB875	1-414-445-11	FERRITE	0μH
D852	8-719-976-99	DIODE	DTZ5.1B	FB876	1-414-445-11	FERRITE	0μH
D853	8-719-976-99	DIODE	DTZ5.1B	FB877	1-414-445-11	FERRITE	0μH
D854	8-719-976-99	DIODE	DTZ5.1B	FB878	1-414-445-11	FERRITE	0μH
D855	8-719-081-97	DIODE	MMDL914T1	FB879	1-414-445-11	FERRITE	0μH
D856	8-719-081-97	DIODE	MMDL914T1	FB880	1-414-445-11	FERRITE	0μH
D857	8-719-081-97	DIODE	MMDL914T1	FB882	1-414-445-11	FERRITE	0μH
D858	8-719-081-97	DIODE	MMDL914T1	FB883	1-414-445-11	FERRITE	0μH
<u>FERRITE BEAD</u>				<u>FILTER</u>			
FB301	1-412-911-11	FERRITE	0μH	FL302	1-239-848-21	FILTER, LOW PASS	
FB302	1-412-911-11	FERRITE	0μH	FL305	1-239-848-21	FILTER, LOW PASS	
FB303	1-412-911-11	FERRITE	0μH	FL306	1-239-848-21	FILTER, LOW PASS	
FB305	1-414-445-11	FERRITE	0μH				



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
IC				COIL			
IC1	8-753-204-12	IC	CXA2209Q-T6	L1	1-469-320-21	INDUCTOR	100µH
IC2	8-752-107-98	IC	CXA2188Q-T4	L2	1-469-320-21	INDUCTOR	100µH
IC302	8-759-659-28	IC	SI-8033S	L3	1-469-317-21	INDUCTOR	10µH
IC303	8-759-474-09	IC	SI-8050S-LF1101	L6	1-400-397-11	INDUCTOR	10µH
IC304	6-703-656-01	IC	SI-8090S	L8	1-414-856-11	INDUCTOR	10µH
IC305	8-752-394-69	IC	CXD2073Q-T4	L9	1-414-856-11	INDUCTOR	10µH
IC306	8-752-102-21	IC	CXA2103AQ	L10	1-414-856-11	INDUCTOR	10µH
IC451	6-706-445-01	IC	NJM2880U1-05-TE1	L11	1-414-856-11	INDUCTOR	10µH
IC452	8-752-102-68	IC	CXA2170Q	L12	1-400-397-11	INDUCTOR	10µH
IC601	6-704-233-01	IC	TDA7490	L13	1-400-397-11	INDUCTOR	10µH
IC602	8-759-278-58	IC	NJM4558V-TE2	L14	1-400-397-11	INDUCTOR	10µH
IC603	6-704-236-01	IC	NJW1148	L15	1-400-397-11	INDUCTOR	10µH
IC604	8-759-569-92	IC	NJM2370U09-TE2	L16	1-400-397-11	INDUCTOR	10µH
IC701	6-706-444-01	IC	NJM2880U1-33-TE1	L302	1-400-397-11	INDUCTOR	10µH
IC702	6-706-730-01	IC	M306V7MG-080FP	L306	1-412-537-31	INDUCTOR	100µH
IC703	6-801-375-01	IC	PST9129NL	L307	1-412-525-31	INDUCTOR	10µH
IC704	6-704-573-01	IC	M24C32-WMN6T(B)	L308	1-412-525-31	INDUCTOR	10µH
IC705	6-706-729-01	IC	M306VSMG-538FP	L310	1-456-414-11	COIL, CHOPPER	
	(A-1054-149-A A BOARD, COMPLETE ONLY)			L311	1-456-414-11	COIL, CHOPPER	
IC705	6-804-751-01	IC	M306VSMG-539FP	L312	1-456-414-11	COIL, CHOPPER	
	(A-1082-955-A A BOARD, COMPLETE ONLY)			L313	1-412-525-31	INDUCTOR	10µH
IC706	8-759-488-29	IC	TC7W66FU(TE12R)	L314	1-412-525-31	INDUCTOR	10µH
IC707	6-704-573-01	IC	M24C32-WMN6T(B)	L315	1-412-525-31	INDUCTOR	10µH
IC851	8-759-830-08	IC	NJM2068V-TE2	L316	1-400-397-11	INDUCTOR	10µH
IC852	8-759-278-58	IC	NJM4558V-TE2	L317	1-400-397-11	INDUCTOR	10µH
IC853	8-759-278-58	IC	NJM4558V-TE2	L320	1-400-397-11	INDUCTOR	10µH
IC854	8-759-641-26	IC	NJM2391DL1-33(TE1)	L323	1-400-397-11	INDUCTOR	10µH
IC855	6-704-266-01	IC	CM0033AF	L451	1-400-397-11	INDUCTOR	10µH
IC856	8-753-224-46	IC	CXP86460-653Q	L452	1-400-397-11	INDUCTOR	10µH
IC857	6-704-067-01	IC	M24128-BWMN6T(A)	L453	1-400-397-11	INDUCTOR	10µH
IC858	8-759-352-91	IC	PST9143NL	L454	1-469-559-21	INDUCTOR	47µH
IC859	8-759-700-65	IC	NJM79L05A	L455	1-400-397-11	INDUCTOR	10µH
IC860	8-759-830-08	IC	NJM2068V-TE2	L456	1-400-397-11	INDUCTOR	10µH
IC861	8-759-830-08	IC	NJM2068V-TE2	L457	1-400-397-11	INDUCTOR	10µH
IC862	8-759-830-08	IC	NJM2068V-TE2	L458	1-400-397-11	INDUCTOR	10µH
JACK				L601	1-456-621-11	INDUCTOR	35µH
J1	1-780-168-11	TERMINAL BLOCK, S	8P	L602	1-456-620-11	INDUCTOR	25µH
J3	1-794-118-11	JACK BLOCK, PIN	3P	L603	1-456-620-11	INDUCTOR	25µH
J5	1-794-116-11	JACK BLOCK, PIN	2P	L604	1-456-621-11	INDUCTOR	35µH
* J6	1-818-012-11	PIN JACK BLOCK	10P	L701	1-400-397-11	INDUCTOR	10µH
J8	1-565-790-21	JACK, SMALL TYPE	2P	L702	1-400-397-11	INDUCTOR	10µH
				L703	1-412-943-11	INDUCTOR	2.2µH

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

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



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L704	1-400-397-11	INDUCTOR	10µH	Q311	8-729-010-25	TRANSISTOR	MSD601-RT1
L705	1-400-397-11	INDUCTOR	10µH	Q312	8-729-010-05	TRANSISTOR	MSB709-RT1
L851	1-469-552-21	INDUCTOR	3.3µH	Q313	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q322	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q323	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q324	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q325	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q451	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q452	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q453	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q454	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q455	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q456	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q457	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q458	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q459	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q460	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q461	8-729-122-63	TRANSISTOR	2SA1226-E4
				Q462	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q463	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q464	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q465	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q466	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q467	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q468	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q469	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q470	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q471	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q472	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q473	8-729-122-63	TRANSISTOR	2SA1226-E4
				Q474	8-729-122-63	TRANSISTOR	2SA1226-E4
				Q476	8-729-122-63	TRANSISTOR	2SA1226-E4
				Q477	8-729-028-97	TRANSISTOR	DTC114TUA-T106
				Q478	8-729-028-97	TRANSISTOR	DTC114TUA-T106
				Q479	8-729-028-97	TRANSISTOR	DTC114TUA-T106
				Q601	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q603	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q604	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q605	8-729-010-05	TRANSISTOR	MSB709-RT1
				Q701	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q702	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q703	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q705	8-729-010-25	TRANSISTOR	MSD601-RT1
				Q706	8-729-010-25	TRANSISTOR	MSD601-RT1

IC LINK

PS1	1-532-679-00	IC LINK	0.6A	50V
 PS600	1-576-390-91	IC LINK	2.5A	50V
 PS601	1-576-390-91	IC LINK	2.5A	50V

TRANSISTOR

Q1	8-729-010-25	TRANSISTOR	MSD601-RT1
Q2	8-729-010-05	TRANSISTOR	MSB709-RT1
Q3	8-729-010-05	TRANSISTOR	MSB709-RT1
Q4	8-729-010-25	TRANSISTOR	MSD601-RT1
Q5	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6	8-729-010-05	TRANSISTOR	MSB709-RT1
Q7	8-729-010-25	TRANSISTOR	MSD601-RT1
Q9	8-729-010-25	TRANSISTOR	MSD601-RT1
Q10	8-729-010-05	TRANSISTOR	MSB709-RT1
Q12	8-729-010-05	TRANSISTOR	MSB709-RT1
Q13	8-729-010-05	TRANSISTOR	MSB709-RT1
Q14	8-729-010-05	TRANSISTOR	MSB709-RT1
Q16	8-729-010-05	TRANSISTOR	MSB709-RT1
Q20	8-729-010-25	TRANSISTOR	MSD601-RT1
Q21	8-729-010-05	TRANSISTOR	MSB709-RT1
Q23	8-729-010-05	TRANSISTOR	MSB709-RT1
Q24	8-729-122-63	TRANSISTOR	2SA1226-E4
Q25	8-729-122-63	TRANSISTOR	2SA1226-E4
Q26	8-729-122-63	TRANSISTOR	2SA1226-E4
Q27	8-729-010-05	TRANSISTOR	MSB709-RT1
Q28	8-729-010-25	TRANSISTOR	MSD601-RT1
Q29	8-729-010-25	TRANSISTOR	MSD601-RT1
Q30	8-729-010-05	TRANSISTOR	MSB709-RT1
Q31	8-729-010-25	TRANSISTOR	MSD601-RT1
Q32	8-729-010-25	TRANSISTOR	MSD601-RT1
Q33	8-729-010-05	TRANSISTOR	MSB709-RT1
Q34	8-729-010-25	TRANSISTOR	MSD601-RT1
Q35	8-729-010-25	TRANSISTOR	MSD601-RT1
Q36	8-729-010-05	TRANSISTOR	MSB709-RT1
Q304	8-729-010-05	TRANSISTOR	MSB709-RT1
Q306	8-729-010-25	TRANSISTOR	MSD601-RT1
Q308	8-729-010-05	TRANSISTOR	MSB709-RT1



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
Q707	8-729-010-25	TRANSISTOR	MSD601-RT1	R19	1-218-285-11	METAL CHIP	75 5% 1/10W
Q709	8-729-010-25	TRANSISTOR	MSD601-RT1	R20	1-216-853-11	METAL CHIP	470K 5% 1/10W
Q710	8-729-010-25	TRANSISTOR	MSD601-RT1	R21	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
Q711	8-729-010-05	TRANSISTOR	MSB709-RT1	R22	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q712	8-729-010-05	TRANSISTOR	MSB709-RT1	R23	1-216-857-11	METAL CHIP	1M 5% 1/10W
Q714	8-729-010-25	TRANSISTOR	MSD601-RT1	R24	1-216-847-11	METAL CHIP	150K 5% 1/10W
Q717	8-729-010-25	TRANSISTOR	MSD601-RT1	R25	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q718	8-729-010-25	TRANSISTOR	MSD601-RT1	R26	1-216-837-11	METAL CHIP	22K 5% 1/10W
Q719	8-729-010-25	TRANSISTOR	MSD601-RT1	R27	1-216-839-11	METAL CHIP	33K 5% 1/10W
Q721	8-729-010-25	TRANSISTOR	MSD601-RT1	R28	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q722	8-729-029-14	TRANSISTOR	DTC144EUA-T106	R30	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q723	8-729-010-25	TRANSISTOR	MSD601-RT1	R31	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q730	8-729-010-05	TRANSISTOR	MSB709-RT1	R32	1-216-864-11	SHORT CHIP	
Q851	8-729-010-25	TRANSISTOR	MSD601-RT1	R33	1-216-864-11	SHORT CHIP	
Q852	8-729-010-05	TRANSISTOR	MSB709-RT1	R34	1-216-864-11	SHORT CHIP	
Q853	8-729-010-05	TRANSISTOR	MSB709-RT1	R36	1-216-864-11	SHORT CHIP	
Q854	8-729-010-25	TRANSISTOR	MSD601-RT1	R37	1-216-864-11	SHORT CHIP	
Q855	8-729-010-05	TRANSISTOR	MSB709-RT1	R39	1-216-864-11	SHORT CHIP	
Q856	8-729-010-25	TRANSISTOR	MSD601-RT1	R40	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q857	8-729-010-05	TRANSISTOR	MSB709-RT1	R41	1-216-864-11	SHORT CHIP	
Q858	8-729-010-25	TRANSISTOR	MSD601-RT1	R42	1-216-864-11	SHORT CHIP	
Q859	8-729-028-28	TRANSISTOR	2SK2036(TE85L)	R48	1-216-809-11	METAL CHIP	100 5% 1/10W
Q860	8-729-028-28	TRANSISTOR	2SK2036(TE85L)	R50	1-216-809-11	METAL CHIP	100 5% 1/10W
				R52	1-216-845-11	METAL CHIP	100K 5% 1/10W
				R54	1-216-809-11	METAL CHIP	100 5% 1/10W
				R57	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R58	1-216-824-11	METAL CHIP	1.8K 5% 1/10W
				R60	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R62	1-216-837-11	METAL CHIP	22K 5% 1/10W
				R65	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R66	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R67	1-216-839-11	METAL CHIP	33K 5% 1/10W
				R68	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R69	1-216-824-11	METAL CHIP	1.8K 5% 1/10W
				R70	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R72	1-216-833-11	METAL CHIP	10K 5% 1/10W
				R73	1-216-821-11	METAL CHIP	1K 5% 1/10W
				R74	1-216-809-11	METAL CHIP	100 5% 1/10W
				R75	1-216-847-11	METAL CHIP	150K 5% 1/10W
				R77	1-216-857-11	METAL CHIP	1M 5% 1/10W
				R78	1-216-842-11	METAL CHIP	56K 5% 1/10W
				R79	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
				R80	1-216-864-11	SHORT CHIP	
				R81	1-216-829-11	METAL CHIP	4.7K 5% 1/10W

RESISTOR



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R82	1-216-864-11	SHORT CHIP				R139	1-216-817-11	METAL CHIP	470	5%	1/10W
R83	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R140	1-216-864-11	SHORT CHIP			
R84	1-216-833-11	METAL CHIP	10K	5%	1/10W	R142	1-216-864-11	SHORT CHIP			
R85	1-216-857-11	METAL CHIP	1M	5%	1/10W	R143	1-216-821-11	METAL CHIP	1K	5%	1/10W
R89	1-216-864-11	SHORT CHIP				R144	1-216-817-11	METAL CHIP	470	5%	1/10W
R90	1-216-864-11	SHORT CHIP				R145	1-216-809-11	METAL CHIP	100	5%	1/10W
R91	1-216-833-11	METAL CHIP	10K	5%	1/10W	R146	1-216-817-11	METAL CHIP	470	5%	1/10W
R93	1-216-821-11	METAL CHIP	1K	5%	1/10W	R147	1-216-817-11	METAL CHIP	470	5%	1/10W
R94	1-216-813-11	METAL CHIP	220	5%	1/10W	R148	1-216-809-11	METAL CHIP	100	5%	1/10W
R95	1-216-819-11	METAL CHIP	680	5%	1/10W	R149	1-216-817-11	METAL CHIP	470	5%	1/10W
R97	1-216-809-11	METAL CHIP	100	5%	1/10W	R150	1-216-809-11	METAL CHIP	100	5%	1/10W
R98	1-216-864-11	SHORT CHIP				R151	1-216-833-11	METAL CHIP	10K	5%	1/10W
R99	1-216-864-11	SHORT CHIP				R152	1-216-817-11	METAL CHIP	470	5%	1/10W
R100	1-216-809-11	METAL CHIP	100	5%	1/10W	R153	1-216-817-11	METAL CHIP	470	5%	1/10W
R101	1-218-285-11	METAL CHIP	75	5%	1/10W	R154	1-216-817-11	METAL CHIP	470	5%	1/10W
R102	1-218-285-11	METAL CHIP	75	5%	1/10W	R155	1-216-809-11	METAL CHIP	100	5%	1/10W
R103	1-218-285-11	METAL CHIP	75	5%	1/10W	R156	1-216-817-11	METAL CHIP	470	5%	1/10W
R106	1-216-819-11	METAL CHIP	680	5%	1/10W	R157	1-216-809-11	METAL CHIP	100	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W	R158	1-216-817-11	METAL CHIP	470	5%	1/10W
R108	1-216-843-11	METAL CHIP	68K	5%	1/10W	R159	1-216-809-11	METAL CHIP	100	5%	1/10W
R109	1-216-806-11	METAL CHIP	56	5%	1/10W	R160	1-216-809-11	METAL CHIP	100	5%	1/10W
R110	1-216-806-11	METAL CHIP	56	5%	1/10W	R161	1-216-809-11	METAL CHIP	100	5%	1/10W
R111	1-216-806-11	METAL CHIP	56	5%	1/10W	R162	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-216-813-11	METAL CHIP	220	5%	1/10W	R163	1-216-817-11	METAL CHIP	470	5%	1/10W
R113	1-216-813-11	METAL CHIP	220	5%	1/10W	R164	1-216-817-11	METAL CHIP	470	5%	1/10W
R114	1-216-809-11	METAL CHIP	100	5%	1/10W	R165	1-216-817-11	METAL CHIP	470	5%	1/10W
R115	1-216-809-11	METAL CHIP	100	5%	1/10W	R166	1-216-817-11	METAL CHIP	470	5%	1/10W
R116	1-216-819-11	METAL CHIP	680	5%	1/10W	R167	1-216-817-11	METAL CHIP	470	5%	1/10W
R118	1-216-843-11	METAL CHIP	68K	5%	1/10W	R168	1-216-817-11	METAL CHIP	470	5%	1/10W
R119	1-216-813-11	METAL CHIP	220	5%	1/10W	R169	1-216-817-11	METAL CHIP	470	5%	1/10W
R120	1-216-813-11	METAL CHIP	220	5%	1/10W	R170	1-216-809-11	METAL CHIP	100	5%	1/10W
R121	1-216-809-11	METAL CHIP	100	5%	1/10W	R171	1-216-809-11	METAL CHIP	100	5%	1/10W
R122	1-216-819-11	METAL CHIP	680	5%	1/10W	R172	1-216-809-11	METAL CHIP	100	5%	1/10W
R125	1-216-819-11	METAL CHIP	680	5%	1/10W	R173	1-216-809-11	METAL CHIP	100	5%	1/10W
R126	1-216-809-11	METAL CHIP	100	5%	1/10W	R174	1-216-809-11	METAL CHIP	100	5%	1/10W
R128	1-216-809-11	METAL CHIP	100	5%	1/10W	R175	1-216-809-11	METAL CHIP	100	5%	1/10W
R129	1-216-809-11	METAL CHIP	100	5%	1/10W	R176	1-216-809-11	METAL CHIP	100	5%	1/10W
R131	1-216-809-11	METAL CHIP	100	5%	1/10W	R177	1-216-809-11	METAL CHIP	100	5%	1/10W
R132	1-216-809-11	METAL CHIP	100	5%	1/10W	R180	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R133	1-216-809-11	METAL CHIP	100	5%	1/10W	R181	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R135	1-216-809-11	METAL CHIP	100	5%	1/10W	R182	1-216-817-11	METAL CHIP	470	5%	1/10W
R136	1-216-809-11	METAL CHIP	100	5%	1/10W	R183	1-216-817-11	METAL CHIP	470	5%	1/10W
R137	1-216-817-11	METAL CHIP	470	5%	1/10W	R184	1-216-853-11	METAL CHIP	470K	5%	1/10W
R138	1-216-809-11	METAL CHIP	100	5%	1/10W	R185	1-216-853-11	METAL CHIP	470K	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R186	1-216-817-11	METAL CHIP	470	5%	1/10W	R248	1-216-821-11	METAL CHIP	1K	5%	1/10W
R187	1-216-817-11	METAL CHIP	470	5%	1/10W	R307	1-216-809-11	METAL CHIP	100	5%	1/10W
R188	1-216-864-11	SHORT CHIP				R308	1-216-821-11	METAL CHIP	1K	5%	1/10W
R189	1-216-864-11	SHORT CHIP				R311	1-216-821-11	METAL CHIP	1K	5%	1/10W
R192	1-216-864-11	SHORT CHIP				R312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R193	1-216-864-11	SHORT CHIP				R314	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R194	1-216-864-11	SHORT CHIP				R316	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R197	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R320	1-216-821-11	METAL CHIP	1K	5%	1/10W
R198	1-216-845-11	METAL CHIP	100K	5%	1/10W	R321	1-216-821-11	METAL CHIP	1K	5%	1/10W
R199	1-216-849-11	METAL CHIP	220K	5%	1/10W	R322	1-218-864-11	METAL CHIP	5.1K	0.50%	1/10W
R200	1-216-845-11	METAL CHIP	100K	5%	1/10W	R323	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R201	1-216-845-11	METAL CHIP	100K	5%	1/10W	R324	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W	R325	1-216-821-11	METAL CHIP	1K	5%	1/10W
R204	1-216-849-11	METAL CHIP	220K	5%	1/10W	R328	1-249-377-11	CARBON	0.47	5%	1/4W
R205	1-216-849-11	METAL CHIP	220K	5%	1/10W	R330	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R206	1-216-845-11	METAL CHIP	100K	5%	1/10W	R331	1-216-821-11	METAL CHIP	1K	5%	1/10W
R207	1-216-841-11	METAL CHIP	47K	5%	1/10W	R332	1-218-889-11	METAL CHIP	56K	0.50%	1/10W
R208	1-216-833-11	METAL CHIP	10K	5%	1/10W	R335	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R209	1-216-845-11	METAL CHIP	100K	5%	1/10W	R336	1-211-981-11	METAL CHIP	33	0.50%	1/10W
R210	1-216-864-11	SHORT CHIP				R337	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R215	1-216-809-11	METAL CHIP	100	5%	1/10W	R338	1-211-969-11	METAL CHIP	10	0.50%	1/10W
R216	1-216-811-11	METAL CHIP	150	5%	1/10W	R339	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R217	1-216-811-11	METAL CHIP	150	5%	1/10W	R340	1-211-977-11	METAL CHIP	22	0.50%	1/10W
R218	1-216-811-11	METAL CHIP	150	5%	1/10W	R343	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R219	1-216-809-11	METAL CHIP	100	5%	1/10W	R346	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R220	1-216-809-11	METAL CHIP	100	5%	1/10W	R347	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R222	1-216-853-11	METAL CHIP	470K	5%	1/10W	R348	1-216-864-11	SHORT CHIP			
R223	1-216-853-11	METAL CHIP	470K	5%	1/10W	R361	1-216-821-11	METAL CHIP	1K	5%	1/10W
R225	1-216-811-11	METAL CHIP	150	5%	1/10W	R365	1-216-811-11	METAL CHIP	150	5%	1/10W
R226	1-216-811-11	METAL CHIP	150	5%	1/10W	R366	1-216-812-11	METAL CHIP	180	5%	1/10W
R227	1-216-811-11	METAL CHIP	150	5%	1/10W	R367	1-216-839-11	METAL CHIP	33K	5%	1/10W
R228	1-216-853-11	METAL CHIP	470K	5%	1/10W	R368	1-216-837-11	METAL CHIP	22K	5%	1/10W
R229	1-216-853-11	METAL CHIP	470K	5%	1/10W	R369	1-216-839-11	METAL CHIP	33K	5%	1/10W
R230	1-216-811-11	METAL CHIP	150	5%	1/10W	R370	1-216-837-11	METAL CHIP	22K	5%	1/10W
R231	1-216-811-11	METAL CHIP	150	5%	1/10W	R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R232	1-216-811-11	METAL CHIP	150	5%	1/10W	R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R235	1-216-811-11	METAL CHIP	150	5%	1/10W	R373	1-216-817-11	METAL CHIP	470	5%	1/10W
R236	1-216-811-11	METAL CHIP	150	5%	1/10W	R374	1-216-817-11	METAL CHIP	470	5%	1/10W
R237	1-216-811-11	METAL CHIP	150	5%	1/10W	R375	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R242	1-216-809-11	METAL CHIP	100	5%	1/10W	R376	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R243	1-216-821-11	METAL CHIP	1K	5%	1/10W	R377	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R244	1-216-809-11	METAL CHIP	100	5%	1/10W	R378	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R245	1-216-821-11	METAL CHIP	1K	5%	1/10W	R379	1-216-817-11	METAL CHIP	470	5%	1/10W
R247	1-216-841-11	METAL CHIP	47K	5%	1/10W	R380	1-216-817-11	METAL CHIP	470	5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R385	1-216-835-11	METAL CHIP	15K	5%	1/10W	R491	1-216-821-11	METAL CHIP	1K	5%	1/10W
R389	1-216-809-11	METAL CHIP	100	5%	1/10W	R492	1-216-809-11	METAL CHIP	100	5%	1/10W
R390	1-216-809-11	METAL CHIP	100	5%	1/10W	R493	1-216-834-11	METAL CHIP	12K	5%	1/10W
R393	1-216-828-11	METAL CHIP	3.9K	5%	1/10W	R494	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R396	1-216-864-11	SHORT CHIP				R495	1-216-809-11	METAL CHIP	100	5%	1/10W
R397	1-216-864-11	SHORT CHIP				R496	1-216-821-11	METAL CHIP	1K	5%	1/10W
R398	1-216-864-11	SHORT CHIP				R497	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R399	1-216-809-11	METAL CHIP	100	5%	1/10W	R498	1-216-809-11	METAL CHIP	100	5%	1/10W
R400	1-216-809-11	METAL CHIP	100	5%	1/10W	R499	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W	R500	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R452	1-216-821-11	METAL CHIP	1K	5%	1/10W	R501	1-216-863-11	METAL CHIP	3.3M	5%	1/10W
R453	1-216-833-11	METAL CHIP	10K	5%	1/10W	R502	1-216-809-11	METAL CHIP	100	5%	1/10W
R454	1-216-833-11	METAL CHIP	10K	5%	1/10W	R503	1-216-809-11	METAL CHIP	100	5%	1/10W
R455	1-216-809-11	METAL CHIP	100	5%	1/10W	R504	1-216-809-11	METAL CHIP	100	5%	1/10W
R457	1-216-809-11	METAL CHIP	100	5%	1/10W	R505	1-216-841-11	METAL CHIP	47K	5%	1/10W
R459	1-216-809-11	METAL CHIP	100	5%	1/10W	R506	1-216-841-11	METAL CHIP	47K	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W	R510	1-216-815-11	METAL CHIP	330	5%	1/10W
R461	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R511	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R462	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R512	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R463	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R513	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R464	1-216-841-11	METAL CHIP	47K	5%	1/10W	R514	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W	R515	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R466	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R516	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R467	1-216-809-11	METAL CHIP	100	5%	1/10W	R517	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R468	1-216-845-11	METAL CHIP	100K	5%	1/10W	R518	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R469	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R519	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R470	1-216-809-11	METAL CHIP	100	5%	1/10W	R520	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R471	1-216-809-11	METAL CHIP	100	5%	1/10W	R521	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R472	1-216-853-11	METAL CHIP	470K	5%	1/10W	R522	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R473	1-216-809-11	METAL CHIP	100	5%	1/10W	R523	1-216-821-11	METAL CHIP	1K	5%	1/10W
R474	1-216-809-11	METAL CHIP	100	5%	1/10W	R524	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W	R525	1-216-815-11	METAL CHIP	330	5%	1/10W
R476	1-216-818-11	METAL CHIP	560	5%	1/10W	R527	1-216-809-11	METAL CHIP	100	5%	1/10W
R478	1-216-864-11	SHORT CHIP				R528	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R479	1-216-864-11	SHORT CHIP				R529	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R480	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R531	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-809-11	METAL CHIP	100	5%	1/10W	R532	1-216-809-11	METAL CHIP	100	5%	1/10W
R482	1-216-809-11	METAL CHIP	100	5%	1/10W	R533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R483	1-216-821-11	METAL CHIP	1K	5%	1/10W	R535	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R484	1-216-821-11	METAL CHIP	1K	5%	1/10W	R536	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R485	1-216-821-11	METAL CHIP	1K	5%	1/10W	R537	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R486	1-216-809-11	METAL CHIP	100	5%	1/10W	R538	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R488	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R540	1-216-864-11	SHORT CHIP			
R489	1-216-821-11	METAL CHIP	1K	5%	1/10W	R541	1-216-825-11	METAL CHIP	2.2K	5%	1/10W




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R543	1-216-864-11	SHORT CHIP				R625	1-216-839-11	METAL CHIP	33K	5%	1/10W
R544	1-216-815-11	METAL CHIP	330	5%	1/10W	R628	1-216-843-11	METAL CHIP	68K	5%	1/10W
R545	1-216-809-11	METAL CHIP	100	5%	1/10W	R629	1-218-879-11	METAL CHIP	22K	0.50%	1/10W
R546	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R631	1-216-864-11	SHORT CHIP			
R547	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R633	1-218-879-11	METAL CHIP	22K	0.50%	1/10W
R548	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R634	1-216-833-11	METAL CHIP	10K	5%	1/10W
R549	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R636	1-216-843-11	METAL CHIP	68K	5%	1/10W
R550	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R637	1-216-846-11	METAL CHIP	120K	5%	1/10W
R551	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R638	1-216-817-11	METAL CHIP	470	5%	1/10W
R552	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R639	1-216-839-11	METAL CHIP	33K	5%	1/10W
R553	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R641	1-216-864-11	SHORT CHIP			
R554	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R642	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R555	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R643	1-216-833-11	METAL CHIP	10K	5%	1/10W
R556	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R644	1-216-841-11	METAL CHIP	47K	5%	1/10W
R557	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R645	1-216-840-11	METAL CHIP	39K	5%	1/10W
R558	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R646	1-249-405-11	CARBON	100	5%	1/4W
R559	1-216-864-11	SHORT CHIP				R649	1-249-405-11	CARBON	100	5%	1/4W
R560	1-216-809-11	METAL CHIP	100	5%	1/10W	R652	1-216-795-11	METAL CHIP	6.8	5%	1/10W
R562	1-216-805-11	METAL CHIP	47	5%	1/10W	R653	1-216-842-11	METAL CHIP	56K	5%	1/10W
R564	1-216-803-11	METAL CHIP	33	5%	1/10W	R654	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R565	1-216-803-11	METAL CHIP	33	5%	1/10W	R655	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R566	1-216-803-11	METAL CHIP	33	5%	1/10W	R656	1-216-842-11	METAL CHIP	56K	5%	1/10W
R567	1-216-804-11	METAL CHIP	39	5%	1/10W	R657	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R568	1-216-804-11	METAL CHIP	39	5%	1/10W	R658	1-218-870-11	METAL CHIP	9.1K	0.50%	1/10W
R569	1-216-804-11	METAL CHIP	39	5%	1/10W	R659	1-216-809-11	METAL CHIP	100	5%	1/10W
R581	1-216-864-11	SHORT CHIP				R660	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R582	1-216-864-11	SHORT CHIP				R661	1-216-835-11	METAL CHIP	15K	5%	1/10W
R601	1-216-833-11	METAL CHIP	10K	5%	1/10W	R662	1-216-821-11	METAL CHIP	1K	5%	1/10W
R602	1-216-833-11	METAL CHIP	10K	5%	1/10W	R663	1-216-821-11	METAL CHIP	1K	5%	1/10W
R603	1-216-833-11	METAL CHIP	10K	5%	1/10W	R664	1-216-841-11	METAL CHIP	47K	5%	1/10W
R604	1-216-855-11	METAL CHIP	680K	5%	1/10W	R665	1-216-833-11	METAL CHIP	10K	5%	1/10W
R605	1-216-835-11	METAL CHIP	15K	5%	1/10W	R666	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R607	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R667	1-215-880-00	METAL OXIDE	10	5%	2W
R608	1-216-864-11	SHORT CHIP				R668	1-215-880-00	METAL OXIDE	10	5%	2W
R611	1-249-405-11	CARBON	100	5%	1/4W	R701	1-216-821-11	METAL CHIP	1K	5%	1/10W
R614	1-216-840-11	METAL CHIP	39K	5%	1/10W	R702	1-216-821-11	METAL CHIP	1K	5%	1/10W
R615	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R703	1-216-809-11	METAL CHIP	100	5%	1/10W
R616	1-249-405-11	CARBON	100	5%	1/4W	R704	1-216-809-11	METAL CHIP	100	5%	1/10W
R619	1-216-833-11	METAL CHIP	10K	5%	1/10W	R705	1-216-821-11	METAL CHIP	1K	5%	1/10W
R620	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R706	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R621	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R707	1-216-821-11	METAL CHIP	1K	5%	1/10W
R622	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R708	1-216-857-11	METAL CHIP	1M	5%	1/10W
R623	1-216-841-11	METAL CHIP	47K	5%	1/10W	R709	1-216-817-11	METAL CHIP	470	5%	1/10W
R624	1-216-817-11	METAL CHIP	470	5%	1/10W	R710	1-216-857-11	METAL CHIP	1M	5%	1/10W




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R711	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R758	1-216-845-11	METAL CHIP	100K	5%	1/10W
R712	1-216-817-11	METAL CHIP	470	5%	1/10W	R759	1-216-833-11	METAL CHIP	10K	5%	1/10W
R713	1-216-833-11	METAL CHIP	10K	5%	1/10W	R760	1-216-809-11	METAL CHIP	100	5%	1/10W
R714	1-216-821-11	METAL CHIP	1K	5%	1/10W	R761	1-216-841-11	METAL CHIP	47K	5%	1/10W
R715	1-216-809-11	METAL CHIP	100	5%	1/10W	R762	1-216-809-11	METAL CHIP	100	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W	R763	1-216-805-11	METAL CHIP	47	5%	1/10W
R717	1-216-809-11	METAL CHIP	100	5%	1/10W	R764	1-216-833-11	METAL CHIP	10K	5%	1/10W
R718	1-216-809-11	METAL CHIP	100	5%	1/10W	R765	1-216-805-11	METAL CHIP	47	5%	1/10W
R719	1-216-833-11	METAL CHIP	10K	5%	1/10W	R766	1-216-821-11	METAL CHIP	1K	5%	1/10W
R720	1-216-809-11	METAL CHIP	100	5%	1/10W	R767	1-216-864-11	SHORT CHIP			
R721	1-216-809-11	METAL CHIP	100	5%	1/10W	R768	1-216-816-11	METAL CHIP	390	5%	1/10W
R722	1-216-809-11	METAL CHIP	100	5%	1/10W	R769	1-216-841-11	METAL CHIP	47K	5%	1/10W
R723	1-216-809-11	METAL CHIP	100	5%	1/10W	R770	1-216-833-11	METAL CHIP	10K	5%	1/10W
R724	1-216-809-11	METAL CHIP	100	5%	1/10W	R771	1-216-864-11	SHORT CHIP			
R725	1-216-841-11	METAL CHIP	47K	5%	1/10W	R772	1-216-816-11	METAL CHIP	390	5%	1/10W
R726	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R774	1-216-809-11	METAL CHIP	100	5%	1/10W
R727	1-216-821-11	METAL CHIP	1K	5%	1/10W	R775	1-216-809-11	METAL CHIP	100	5%	1/10W
R728	1-216-833-11	METAL CHIP	10K	5%	1/10W	R776	1-216-809-11	METAL CHIP	100	5%	1/10W
R729	1-216-841-11	METAL CHIP	47K	5%	1/10W	R777	1-216-809-11	METAL CHIP	100	5%	1/10W
R730	1-216-809-11	METAL CHIP	100	5%	1/10W	R778	1-216-864-11	SHORT CHIP			
R731	1-216-809-11	METAL CHIP	100	5%	1/10W	R779	1-216-837-11	METAL CHIP	22K	5%	1/10W
R732	1-216-809-11	METAL CHIP	100	5%	1/10W	R780	1-216-816-11	METAL CHIP	390	5%	1/10W
R733	1-216-813-11	METAL CHIP	220	5%	1/10W	R781	1-216-839-11	METAL CHIP	33K	5%	1/10W
R734	1-216-809-11	METAL CHIP	100	5%	1/10W	R782	1-216-833-11	METAL CHIP	10K	5%	1/10W
R735	1-216-809-11	METAL CHIP	100	5%	1/10W	R783	1-216-833-11	METAL CHIP	10K	5%	1/10W
R736	1-216-817-11	METAL CHIP	470	5%	1/10W	R784	1-216-833-11	METAL CHIP	10K	5%	1/10W
R737	1-216-816-11	METAL CHIP	390	5%	1/10W	R785	1-216-841-11	METAL CHIP	47K	5%	1/10W
R738	1-216-809-11	METAL CHIP	100	5%	1/10W	R786	1-216-841-11	METAL CHIP	47K	5%	1/10W
R740	1-216-809-11	METAL CHIP	100	5%	1/10W	R788	1-216-821-11	METAL CHIP	1K	5%	1/10W
R741	1-216-809-11	METAL CHIP	100	5%	1/10W	R789	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R742	1-216-809-11	METAL CHIP	100	5%	1/10W	R790	1-216-821-11	METAL CHIP	1K	5%	1/10W
R743	1-216-820-11	METAL CHIP	820	5%	1/10W	R792	1-216-833-11	METAL CHIP	10K	5%	1/10W
R744	1-216-809-11	METAL CHIP	100	5%	1/10W	R793	1-216-833-11	METAL CHIP	10K	5%	1/10W
R745	1-216-809-11	METAL CHIP	100	5%	1/10W	R797	1-216-821-11	METAL CHIP	1K	5%	1/10W
R746	1-216-809-11	METAL CHIP	100	5%	1/10W	R798	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R747	1-216-809-11	METAL CHIP	100	5%	1/10W	R799	1-216-833-11	METAL CHIP	10K	5%	1/10W
R748	1-216-833-11	METAL CHIP	10K	5%	1/10W	R800	1-216-809-11	METAL CHIP	100	5%	1/10W
R749	1-216-833-11	METAL CHIP	10K	5%	1/10W	R801	1-216-833-11	METAL CHIP	10K	5%	1/10W
R750	1-216-833-11	METAL CHIP	10K	5%	1/10W	R803	1-216-864-11	SHORT CHIP			
R751	1-216-809-11	METAL CHIP	100	5%	1/10W	R804	1-216-809-11	METAL CHIP	100	5%	1/10W
R752	1-216-809-11	METAL CHIP	100	5%	1/10W	R807	1-216-809-11	METAL CHIP	100	5%	1/10W
R755	1-216-833-11	METAL CHIP	10K	5%	1/10W	R809	1-216-833-11	METAL CHIP	10K	5%	1/10W
R756	1-216-833-11	METAL CHIP	10K	5%	1/10W	R810	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R757	1-216-833-11	METAL CHIP	10K	5%	1/10W	R811	1-211-990-11	METAL CHIP	75	0.50%	1/10W








REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R812	1-216-809-11	METAL CHIP	100	5%	1/10W	R872	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R814	1-216-809-11	METAL CHIP	100	5%	1/10W	R873	1-216-821-11	METAL CHIP	1K	5%	1/10W
R815	1-216-821-11	METAL CHIP	1K	5%	1/10W	R874	1-216-821-11	METAL CHIP	1K	5%	1/10W
R816	1-216-833-11	METAL CHIP	10K	5%	1/10W	R875	1-216-821-11	METAL CHIP	1K	5%	1/10W
R817	1-216-809-11	METAL CHIP	100	5%	1/10W	R876	1-216-821-11	METAL CHIP	1K	5%	1/10W
R818	1-216-833-11	METAL CHIP	10K	5%	1/10W	R877	1-216-821-11	METAL CHIP	1K	5%	1/10W
R819	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R878	1-216-809-11	METAL CHIP	100	5%	1/10W
R820	1-216-833-11	METAL CHIP	10K	5%	1/10W	R879	1-216-809-11	METAL CHIP	100	5%	1/10W
R821	1-216-841-11	METAL CHIP	47K	5%	1/10W	R880	1-216-841-11	METAL CHIP	47K	5%	1/10W
R822	1-216-809-11	METAL CHIP	100	5%	1/10W	R881	1-216-809-11	METAL CHIP	100	5%	1/10W
R823	1-216-809-11	METAL CHIP	100	5%	1/10W	R882	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R824	1-216-833-11	METAL CHIP	10K	5%	1/10W	R883	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R829	1-216-833-11	METAL CHIP	10K	5%	1/10W	R884	1-216-821-11	METAL CHIP	1K	5%	1/10W
R831	1-216-833-11	METAL CHIP	10K	5%	1/10W	R885	1-216-821-11	METAL CHIP	1K	5%	1/10W
R832	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R886	1-216-809-11	METAL CHIP	100	5%	1/10W
R833	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R887	1-216-809-11	METAL CHIP	100	5%	1/10W
R834	1-216-833-11	METAL CHIP	10K	5%	1/10W	R888	1-216-821-11	METAL CHIP	1K	5%	1/10W
R835	1-216-833-11	METAL CHIP	10K	5%	1/10W	R889	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R836	1-216-841-11	METAL CHIP	47K	5%	1/10W	R890	1-216-833-11	METAL CHIP	10K	5%	1/10W
R837	1-216-833-11	METAL CHIP	10K	5%	1/10W	R891	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R838	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R892	1-216-818-11	METAL CHIP	560	5%	1/10W
R839	1-216-833-11	METAL CHIP	10K	5%	1/10W	R893	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R840	1-216-809-11	METAL CHIP	100	5%	1/10W	R894	1-216-818-11	METAL CHIP	560	5%	1/10W
R851	1-216-821-11	METAL CHIP	1K	5%	1/10W	R895	1-216-833-11	METAL CHIP	10K	5%	1/10W
R852	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R896	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R853	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R897	1-216-818-11	METAL CHIP	560	5%	1/10W
R854	1-218-858-11	METAL CHIP	3K	0.50%	1/10W	R898	1-216-833-11	METAL CHIP	10K	5%	1/10W
R855	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R899	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R856	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R900	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R857	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R901	1-216-821-11	METAL CHIP	1K	5%	1/10W
R858	1-216-837-11	METAL CHIP	22K	5%	1/10W	R902	1-216-809-11	METAL CHIP	100	5%	1/10W
R859	1-216-833-11	METAL CHIP	10K	5%	1/10W	R903	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R861	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R905	1-216-821-11	METAL CHIP	1K	5%	1/10W
R862	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R863	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W	R907	1-216-809-11	METAL CHIP	100	5%	1/10W
R864	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R908	1-216-817-11	METAL CHIP	470	5%	1/10W
R865	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R909	1-216-821-11	METAL CHIP	1K	5%	1/10W
R866	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R910	1-216-817-11	METAL CHIP	470	5%	1/10W
R867	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R911	1-216-821-11	METAL CHIP	1K	5%	1/10W
R868	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R912	1-216-833-11	METAL CHIP	10K	5%	1/10W
R869	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R913	1-216-821-11	METAL CHIP	1K	5%	1/10W
R870	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R914	1-216-820-11	METAL CHIP	820	5%	1/10W
R871	1-218-895-11	METAL CHIP	100K	0.50%	1/10W	R915	1-216-821-11	METAL CHIP	1K	5%	1/10W

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

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



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R916	1-216-833-11	METAL CHIP	10K	5%	1/10W	RESISTOR BRIDGE					
R917	1-216-821-11	METAL CHIP	1K	5%	1/10W		RB1	1-233-576-11	RES, CHIP NETWORK 100	(3216)	
R918	1-216-821-11	METAL CHIP	1K	5%	1/10W	TUNER					
R919	1-216-821-11	METAL CHIP	1K	5%	1/10W		TU1	8-598-593-60	TUNER, FSS BTF-WA421		
R920	1-216-821-11	METAL CHIP	1K	5%	1/10W		TU2	8-598-594-10	TUNER, FSS BTF-FA421		
R921	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	VARISTOR					
R922	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	VD461	1-804-499-21	VARISTOR, CHIP	(1608)		
R923	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	VD851	1-804-499-21	VARISTOR, CHIP	(1608)		
R924	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	VD852	1-804-499-21	VARISTOR, CHIP	(1608)		
R925	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	VD853	1-804-499-21	VARISTOR, CHIP	(1608)		
R926	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	VD854	1-804-499-21	VARISTOR, CHIP	(1608)		
R927	1-218-860-11	METAL CHIP	3.6K	0.50%	1/10W	CRYSTAL					
R928	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	X1	1-781-282-11	VIBRATOR, CERAMIC			
R929	1-218-860-11	METAL CHIP	3.6K	0.50%	1/10W	X301	1-781-131-31	VIBRATOR, CRYSTAL			
R930	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	X451	1-760-895-21	VIBRATOR, CERAMIC			
R931	1-218-860-11	METAL CHIP	3.6K	0.50%	1/10W	X701	1-767-686-21	VIBRATOR, CRYSTAL			
R932	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	X702	1-781-589-21	VIBRATOR, CRYSTAL			
R933	1-243-692-71	METAL OXIDE	220	5%	1W	X851	1-795-954-21	PIEZOELECTRIC OSCILLATOR			
R934	1-216-833-11	METAL CHIP	10K	5%	1/10W	D					
R935	1-218-871-11	METAL CHIP	10K	0.50%	1/10W		A-1054-155-A	D BOARD, COMPLETE			
R936	1-216-833-11	METAL CHIP	10K	5%	1/10W		4-382-854-01	SCREW (M3X8), P, SW (+)			
R937	1-216-833-11	METAL CHIP	10K	5%	1/10W		7-682-952-09	SCREW +PSW 3X16			
R938	1-218-882-11	METAL CHIP	30K	0.50%	1/10W	The high-voltage leads associated with the FBT on the D board are not included and must be ordered separately. Order the following leads when requesting this D Board:					
R939	1-218-883-11	METAL CHIP	33K	0.50%	1/10W		1-779-095-51	LEAD ASSY, HIGH-VOLTAGE			
R940	1-218-886-11	METAL CHIP	43K	0.50%	1/10W		1-900-260-40	CONNECTOR ASSY, MV			
R941	1-218-868-11	METAL CHIP	7.5K	0.50%	1/10W	CAPACITOR					
R942	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	C5002	1-165-602-91	CERAMIC	220pF	10 2KV	
R943	1-218-868-11	METAL CHIP	7.5K	0.50%	1/10W	C5005	1-106-383-00	MYLAR	0.047µF	5% 200V	
R944	1-218-868-11	METAL CHIP	7.5K	0.50%	1/10W	C5006	1-165-602-91	CERAMIC	220pF	10 2KV	
R945	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	C5008	1-104-332-11	CERAMIC	470pF	10% 2KV	
R946	1-218-883-11	METAL CHIP	33K	0.50%	1/10W	C5009	1-104-987-11	MYLAR	0.001µF	5% 200V	
R947	1-218-883-11	METAL CHIP	33K	0.50%	1/10W	C5010	1-104-987-11	MYLAR	0.001µF	5% 200V	
R948	1-218-883-11	METAL CHIP	33K	0.50%	1/10W	C5016	1-107-826-11	CERAMIC CHIP	0.1µF	10% 16V	
R949	1-218-873-11	METAL CHIP	12K	0.50%	1/10W						
R950	1-218-871-11	METAL CHIP	10K	0.50%	1/10W						
R951	1-218-871-11	METAL CHIP	10K	0.50%	1/10W						
R952	1-218-871-11	METAL CHIP	10K	0.50%	1/10W						
R955	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W						
R956	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W						
R957	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W						
R958	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R959	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R960	1-216-797-11	METAL CHIP	10	5%	1/10W						
R961	1-216-797-11	METAL CHIP	10	5%	1/10W						

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




REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C5017	1-104-987-11	MYLAR	0.001 μ F	5%	200V	C6407	1-136-497-81	FILM	0.1 μ F	5%	50V
C5019	1-100-566-91	CERAMIC CHIP	0.1 μ F	10%	25V	C6409	1-126-947-11	ELECT	47 μ F	20%	35V
C5021	1-126-964-11	ELECT	10 μ F	20%	50V	C6411	1-100-613-81	CERAMIC	470pF	5%	1KV
\triangle C5022	1-117-640-11	FILM	6800pF	3%	1.2KV	C6412	1-100-613-81	CERAMIC	470pF	5%	1KV
C5103	1-126-934-11	ELECT	220 μ F	20%	16V	C6413	1-165-954-11	FILM	56000pF	3%	800V
C5104	1-126-941-11	ELECT	470 μ F	20%	25V	C6414	1-117-228-71	MYLAR	2.2 μ F	10%	450V
C5105	1-164-227-11	CERAMIC CHIP	0.022 μ F	10%	25V	C6415	1-126-968-11	ELECT	100 μ F	20%	50V
C5106	1-164-227-11	CERAMIC CHIP	0.022 μ F	10%	25V	C6416	1-126-948-11	ELECT	100 μ F	20%	35V
C5107	1-130-783-71	MYLAR	0.33 μ F	10%	100V	C6418	1-162-970-11	CERAMIC CHIP	0.01 μ F	10%	25V
C5108	1-126-968-11	ELECT	100 μ F	20%	50V	C6419	1-126-941-11	ELECT	470 μ F	20%	25V
C5109	1-126-941-11	ELECT	470 μ F	20%	25V	C6420	1-126-941-11	ELECT	470 μ F	20%	25V
C5110	1-104-987-11	MYLAR	0.001 μ F	5%	200V	C6500	1-126-952-11	ELECT	1000 μ F	20%	35V
C5111	1-162-964-11	CERAMIC CHIP	0.001 μ F	10%	50V	C6501	1-126-952-11	ELECT	1000 μ F	20%	35V
C5121	1-126-960-11	ELECT	1 μ F	20%	50V	C6503	1-131-970-11	ELECT	1500 μ F	20%	25V
C5201	1-137-150-51	FILM	0.01 μ F	5%	100V	C6504	1-131-970-11	ELECT	1500 μ F	20%	25V
C5202	1-162-970-11	CERAMIC CHIP	0.01 μ F	10%	25V	C6505	1-131-970-11	ELECT	1500 μ F	20%	25V
C5203	1-126-933-11	ELECT	100 μ F	20%	16V	C6506	1-126-941-11	ELECT	470 μ F	20%	25V
C5204	1-107-648-91	ELECT	100 μ F	20%	200V	C6509	1-162-964-11	CERAMIC CHIP	0.001 μ F	10%	50V
C5205	1-115-416-11	CERAMIC CHIP	0.001 μ F	5%	25V	C6512	1-165-441-81	ELECT	33 μ F	20%	160V
C5206	1-106-383-00	MYLAR	0.047 μ F	5%	200V	C6514	1-107-662-11	ELECT	22 μ F	20%	350V
C5207	1-104-665-11	ELECT	100 μ F	20%	25V	C6515	1-165-733-31	ELECT	100 μ F	20%	25V
C5208	1-162-970-11	CERAMIC CHIP	0.01 μ F	10%	25V	C6517	1-126-933-11	ELECT	100 μ F	20%	16V
C5209	1-162-924-11	CERAMIC CHIP	56pF	5%	50V	C6519	1-107-826-11	CERAMIC CHIP	0.1 μ F	10%	16V
C5210	1-162-968-11	CERAMIC CHIP	0.0047 μ F	10%	50V	C6601	1-104-666-11	ELECT	220 μ F	20%	25V
C5211	1-107-826-11	CERAMIC CHIP	0.1 μ F	10%	16V	C6602	1-100-566-91	CERAMIC CHIP	0.1 μ F	10%	25V
C5212	1-126-965-91	ELECT	22 μ F	20%	50V	C6603	1-162-969-11	CERAMIC CHIP	0.0068 μ F	10%	25V
C5213	1-126-965-91	ELECT	22 μ F	20%	50V	C6604	1-126-935-11	ELECT	470 μ F	20%	16V
C5223	1-107-826-11	CERAMIC CHIP	0.1 μ F	10%	16V	C6615	1-115-349-51	CERAMIC	0.01 μ F		2KV
C5228	1-100-613-81	CERAMIC	470pF	5%	1KV	C6700	1-164-227-11	CERAMIC CHIP	0.022 μ F	10%	25V
C5410	1-104-987-11	MYLAR	0.001 μ F	5%	200V	C6707	1-104-987-11	MYLAR	0.001 μ F	5%	200V
C5418	1-117-813-11	FILM	0.75 μ F	5%	250V	C6803	1-126-235-11	ELECT	100 μ F	20%	16V
C5419	1-107-649-11	ELECT	2.2 μ F	20%	250V	C6804	1-126-964-11	ELECT	10 μ F	20%	50V
C5552	1-126-964-11	ELECT	10 μ F	20%	50V	C8001	1-126-964-11	ELECT	10 μ F	20%	50V
C5553	1-107-698-11	ELECT	10 μ F	20%	25V	C8002	1-126-964-11	ELECT	10 μ F	20%	50V
C5555	1-109-879-11	CERAMIC	22pF	5%	2KV	C8003	1-162-970-11	CERAMIC CHIP	0.01 μ F	10%	25V
C5556	1-109-879-11	CERAMIC	22pF	5%	2KV	C8006	1-126-960-11	ELECT	1 μ F	20%	50V
C5557	1-117-214-11	CERAMIC	0.001 μ F	10%	2KV	C8007	1-162-964-11	CERAMIC CHIP	0.001 μ F	10%	50V
C5703	1-100-566-91	CERAMIC CHIP	0.1 μ F	10%	25V	C8008	1-163-021-91	CERAMIC CHIP	0.01 μ F	10%	50V
C6400	1-162-964-11	CERAMIC CHIP	0.001 μ F	10%	50V	C8012	1-126-947-11	ELECT	47 μ F	20%	35V
C6401	1-126-964-11	ELECT	10 μ F	20%	50V	C8015	1-126-947-11	ELECT	47 μ F	20%	35V
C6402	1-126-963-11	ELECT	4.7 μ F	20%	50V	C8016	1-100-566-91	CERAMIC CHIP	0.1 μ F	10%	25V
C6403	1-126-968-11	ELECT	100 μ F	20%	50V	C8017	1-126-964-11	ELECT	10 μ F	20%	50V
C6405	1-162-970-11	CERAMIC CHIP	0.01 μ F	10%	25V	C8018	1-126-964-11	ELECT	10 μ F	20%	50V
C6406	1-136-479-11	FILM	0.001 μ F	5%	100V	C8020	1-136-497-81	FILM	0.1 μ F	5%	50V




REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
D6406	8-719-082-03	DIODE	MM3Z15VT1	D8039	8-719-082-03	DIODE	MM3Z15VT1
D6407	8-719-082-03	DIODE	MM3Z15VT1	D8041	8-719-082-03	DIODE	MM3Z15VT1
D6409	6-500-567-21	DIODE	10ERB20-TB5	D8140	8-719-404-50	DIODE	MA111-TX
D6410	6-500-567-21	DIODE	10ERB20-TB5	D9407	8-719-991-33	DIODE	1SS133T-77
D6411	8-719-082-03	DIODE	MM3Z15VT1	D9409	8-719-110-17	DIODE	RD10ESB2
D6413	8-719-082-03	DIODE	MM3Z15VT1				
D6415	8-719-082-03	DIODE	MM3Z15VT1			FERRITE BEAD	
D6502	8-719-060-88	DIODE	D4SBS6	FB5201	1-469-578-11	FERRITE	1.1µH
D6503	8-719-060-88	DIODE	D4SBS6	FB5203	1-469-127-21	FERRITE	0µH
D6504	8-719-510-13	DIODE	D10SC4MR	FB5205	1-469-578-11	FERRITE	1.1µH
D6508	8-719-062-40	DIODE	D4SBL20µF3	FB6400	1-469-579-11	FERRITE	0.45µH
D6509	8-719-052-90	DIODE	D1NL40-TA2	FB6401	1-469-579-11	FERRITE	0.45µH
D6510	8-719-052-37	DIODE	F10P04Q				
D6601	8-719-078-04	DIODE	EC31QS03L-TE12L	FB6402	1-469-579-11	FERRITE	0.45µH
D6602	6-500-027-01	DIODE	MM3Z8V2ST1	FB6403	1-469-579-11	FERRITE	0.45µH
D6603	8-719-081-97	DIODE	MMDL914T1	FB6405	1-469-579-11	FERRITE	0.45µH
D6606	8-719-028-72	DIODE	RGF02-17EL-6433	FB6406	1-469-579-11	FERRITE	0.45µH
D6800	8-719-150-92	DIODE	RD33EB3T	FB6407	1-469-579-11	FERRITE	0.45µH
D6803	8-719-081-97	DIODE	MMDL914T1				
D6804	6-500-654-01	DIODE	MM3Z3V0T1	FB6408	1-469-579-11	FERRITE	0.45µH
D6805	8-719-081-97	DIODE	MMDL914T1	FB6500	1-469-579-11	FERRITE	0.45µH
D8001	8-719-081-97	DIODE	MMDL914T1	FB6501	1-469-579-11	FERRITE	0.45µH
D8003	8-719-081-97	DIODE	MMDL914T1	FB6506	1-469-578-11	FERRITE	1.1µH
D8005	8-719-081-97	DIODE	MMDL914T1	FB6507	1-469-578-11	FERRITE	1.1µH
D8006	6-500-567-21	DIODE	10ERB20-TB5				
D8007	8-719-081-97	DIODE	MMDL914T1	FB6508	1-469-578-11	FERRITE	1.1µH
D8009	8-719-072-69	DIODE	PDZ15B-115	FB8001	1-469-579-11	FERRITE	0.45µH
D8010	8-719-083-78	DIODE	10ERA60-TP	FB8002	1-469-579-11	FERRITE	0.45µH
D8011	8-719-082-03	DIODE	MM3Z15VT1	FB8003	1-469-579-11	FERRITE	0.45µH
D8012	8-719-082-03	DIODE	MM3Z15VT1			IC	
D8015	8-719-081-97	DIODE	MMDL914T1	IC5101	8-759-593-33	IC	LA78045
D8019	8-719-070-10	DIODE	NNCD5.1A-T1	IC5201	8-759-585-82	IC	BA9759F-E2
D8022	8-719-063-73	DIODE	D1NL20U-TR	IC6400	6-705-810-01	IC	MCZ3001DB
D8023	8-719-070-10	DIODE	NNCD5.1A-T1	IC6501	8-759-458-79	IC	PQ12RD11
D8024	8-719-976-99	DIODE	DTZ5.1B	IC6503	6-704-264-01	IC	EK1135
D8026	8-719-081-97	DIODE	MMDL914T1	IC6601	6-706-502-01	IC	SI-8015JF
D8027	6-500-654-01	DIODE	MM3Z3V0T1	IC6801	8-749-921-86	IC	SE-140N
D8030	8-719-056-93	DIODE	UDZ-TE-17-18B	IC8001	8-759-700-07	IC	NJM2903M
D8034	8-719-056-83	DIODE	UDZ-TE-17-6.8B	IC8002	6-705-810-01	IC	MCZ3001DB
D8038	8-719-082-03	DIODE	MM3Z15VT1	IC8004	8-759-701-01	IC	NJM2904M
				IC8005	8-759-586-17	IC	TL1431CZ-AP
				IC8104	8-759-586-17	IC	TL1431CZ-AP
				IC9400	6-600-383-01	IC	STK394-510
				IC9401	6-600-383-01	IC	STK394-510














REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
RESISTOR						R5210	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5001	1-243-619-71	METAL OXIDE	12K	5%	3W	R5211	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5002	1-243-619-71	METAL OXIDE	12K	5%	3W	R5212	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R5003	1-215-873-00	METAL OXIDE	4.7K	5%	1W	R5213	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5010	1-243-801-71	METAL OXIDE	0.22	5%	1W	R5214	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5019	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R5215	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5020	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5216	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5021	1-216-809-11	METAL CHIP	100	5%	1/10W	R5217	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R5023	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5221	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5024	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5223	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5025	1-216-809-11	METAL CHIP	100	5%	1/10W	R5241	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5028	1-216-821-11	METAL CHIP	1K	5%	1/10W	R5243	1-216-843-11	METAL CHIP	68K	5%	1/10W
R5029	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5245	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5031	1-249-393-11	CARBON	10	5%	1/4W	R5247	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5032	1-216-841-11	METAL CHIP	47K	5%	1/10W	R5249	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5033	1-249-401-11	CARBON	47	5%	1/4W	R5250	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R5101	1-216-845-11	METAL CHIP	100K	5%	1/10W	R5251	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5102	1-216-841-11	METAL CHIP	47K	5%	1/10W	R5252	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5103	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5415	1-243-693-71	METAL OXIDE	270	5%	1W
R5104	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5435	1-260-314-11	CARBON	68	5%	1/2W
R5106	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5436	1-249-389-11	CARBON	4.7	5%	1/4W
R5107	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W	R5581	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5108	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W	R5582	1-249-441-11	CARBON	100K	5%	1/4W
R5109	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5583	1-260-107-11	CARBON	4.7K	5%	1/2W
R5110	1-216-833-11	METAL CHIP	10K	5%	1/10W	R5584	1-249-441-11	CARBON	100K	5%	1/4W
R5111	1-249-383-11	CARBON	1.5	5%	1/4W	R5585	1-249-441-11	CARBON	100K	5%	1/4W
R5112	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W	R5586	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R5113	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W	R5587	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5115	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W	R5588	1-249-441-11	CARBON	100K	5%	1/4W
R5116	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W	R5589	1-216-842-11	METAL CHIP	56K	5%	1/10W
R5117	1-214-800-11	METAL	2.2	1%	1/2W	R5701	1-249-425-11	CARBON	4.7K	5%	1/4W
R5118	1-214-800-11	METAL	2.2	1%	1/2W	R5702	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5119	1-243-572-71	METAL OXIDE	470	5%	2W	R6402	1-218-870-11	METAL CHIP	9.1K	0.50%	1/10W
R5120	1-243-572-71	METAL OXIDE	470	5%	2W	R6405	1-218-823-11	METAL CHIP	100	0.50%	1/10W
R5121	1-249-414-11	CARBON	560	5%	1/4W	R6406	1-245-478-21	METAL	470K	1%	1/4W
R5126	1-218-917-11	METAL CHIP	820K	0.50%	1/10W	R6407	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R5127	1-216-857-11	METAL CHIP	1M	5%	1/10W	R6409	1-218-830-11	METAL CHIP	200	0.50%	1/10W
R5201	1-218-879-11	METAL CHIP	22K	0.50%	1/10W	R6410	1-249-417-11	CARBON	1K	5%	1/4W
R5202	1-218-884-11	METAL CHIP	36K	0.50%	1/10W	R6411	1-249-393-11	CARBON	10	5%	1/4W
R5206	1-249-425-11	CARBON	4.7K	5%	1/4W	R6412	1-249-393-11	CARBON	10	5%	1/4W
R5207	1-218-889-11	METAL CHIP	56K	0.50%	1/10W	R6413	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5208	1-249-409-11	CARBON	220	5%	1/4W	R6414	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5209	1-218-895-11	METAL CHIP	100K	0.50%	1/10W	R6417	1-245-315-71	METAL OXIDE	0.1	5%	2W
						R6418	1-245-315-71	METAL OXIDE	0.1	5%	2W


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

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














REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R6419	1-249-393-11	CARBON	10	5%	1/4W	R8014	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R6420	1-249-393-11	CARBON	10	5%	1/4W	R8015	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
 R6421	1-202-933-61	FUSIBLE	0.1	10%	1/2W	R8016	1-247-843-11	CARBON	3.3K	5%	1/4W
R6427	1-216-857-11	METAL CHIP	1M	5%	1/10W	R8017	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R6428	1-216-857-11	METAL CHIP	1M	5%	1/10W	 R8019	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R6429	1-245-478-21	METAL	470K	1%	1/4W	R8020	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6500	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8022	1-216-839-11	METAL CHIP	33K	5%	1/10W
R6501	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8024	1-216-839-11	METAL CHIP	33K	5%	1/10W
R6503	1-215-925-11	METAL OXIDE	22K	5%	3W	R8025	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6504	1-260-298-51	CARBON	3.3	5%	1/2W	R8026	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R6515	1-249-377-11	CARBON	0.47	5%	1/4W	R8027	1-218-891-11	METAL CHIP	68K	0.50%	1/10W
R6590	1-249-409-11	CARBON	220	5%	1/4W	R8028	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R6601	1-218-858-11	METAL CHIP	3K	0.50%	1/10W	R8029	1-218-891-11	METAL CHIP	68K	0.50%	1/10W
R6602	1-218-847-11	METAL CHIP	1K	0.50%	1/10W	R8030	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R6603	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R8031	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R6604	1-218-874-11	METAL CHIP	13K	0.50%	1/10W	R8032	1-216-817-11	METAL CHIP	470	5%	1/10W
R6605	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R8033	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6612	1-249-377-11	CARBON	0.47	5%	1/4W	 R8035	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W
R6700	1-216-817-11	METAL CHIP	470	5%	1/10W	 R8036	1-215-419-00	METAL	820	1%	1/4W
R6702	1-216-821-11	METAL CHIP	1K	5%	1/10W	 R8037	1-215-447-00	METAL	12K	1%	1/4W
R6703	1-218-484-11	METAL CHIP	750	5%	1/10W	 R8038	1-215-447-00	METAL	12K	1%	1/4W
R6704	1-218-484-11	METAL CHIP	750	5%	1/10W	 R8039	1-215-447-00	METAL	12K	1%	1/4W
R6705	1-216-833-11	METAL CHIP	10K	5%	1/10W	 R8040	1-215-445-00	METAL	10K	1%	1/4W
R6809	1-249-423-11	CARBON	3.3K	5%	1/4W	 R8041	1-216-864-11	SHORT CHIP			
R6810	1-216-821-11	METAL CHIP	1K	5%	1/10W	 R8043	1-215-447-00	METAL	12K	1%	1/4W
R6811	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R8046	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R6812	1-243-511-71	METAL OXIDE	2.2	5%	3W	R8049	1-218-823-11	METAL CHIP	100	0.50%	1/10W
R6813	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8050	1-211-979-11	METAL CHIP	27	0.50%	1/10W
R6814	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W	R8051	1-202-933-61	FUSIBLE	0.1	10%	1/2W
R6815	1-216-837-11	METAL CHIP	22K	5%	1/10W	R8052	1-218-893-11	METAL CHIP	82K	0.50%	1/10W
R6816	1-216-846-11	METAL CHIP	120K	5%	1/10W	R8054	1-245-478-21	METAL	470K	1%	1/4W
R6817	1-216-846-11	METAL CHIP	120K	5%	1/10W	R8055	1-245-478-21	METAL	470K	1%	1/4W
R6818	1-245-471-21	METAL	240K	1%	1/4W	R8056	1-218-870-11	METAL CHIP	9.1K	0.50%	1/10W
R6821	1-245-471-21	METAL	240K	1%	1/4W	R8057	1-218-874-11	METAL CHIP	13K	0.50%	1/10W
R8001	1-219-512-11	METAL	2.2M	5%	1/2W	R8058	1-249-393-11	CARBON	10	5%	1/4W
R8002	1-219-512-11	METAL	2.2M	5%	1/2W	R8060	1-218-839-11	METAL CHIP	470	0.50%	1/10W
R8003	1-216-839-11	METAL CHIP	33K	5%	1/10W	R8061	1-249-393-11	CARBON	10	5%	1/4W
R8004	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R8062	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8005	1-216-837-11	METAL CHIP	22K	5%	1/10W	R8063	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8008	1-218-877-11	METAL CHIP	18K	0.50%	1/10W	R8066	1-216-821-11	METAL CHIP	1K	5%	1/10W
R8010	1-218-484-11	METAL CHIP	750	5%	1/10W	R8069	1-249-425-11	CARBON	4.7K	5%	1/4W
R8011	1-216-849-11	METAL CHIP	220K	5%	1/10W	R8070	1-245-315-71	METAL OXIDE	0.1	5%	2W
R8012	1-218-484-11	METAL CHIP	750	5%	1/10W	R8072	1-249-377-11	CARBON	0.47	5%	1/4W
R8013	1-216-833-11	METAL CHIP	10K	5%	1/10W	R8073	1-216-857-11	METAL CHIP	1M	5%	1/10W


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REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
TRANSFORMER				D6108	8-719-056-93	DIODE	UDZ-TE-17-18B
T5001	1-437-739-11	TRANSFORMER, FERRITE (HDT)		D6109	8-719-510-02	DIODE	D1NS4
T5002	1-443-395-11	FERRITE TRANSFORMER (HOT)		D6113	6-500-582-01	DIODE	KBP153G-A2
T5500	1-443-394-11	TRANSFORMER, FERRITE (DFT)		D6115	8-719-081-97	DIODE	MMDL914T1
 T6400	1-439-821-11	TRANSFORMER, CONVERTER (PIT)		D6116	8-719-081-97	DIODE	MMDL914T1
 T8001	1-453-450-11	FBT ASSY NX-6030/M3A4		D6117	8-719-081-97	DIODE	MMDL914T1
DIODE				D6118	6-500-555-01	DIODE	MM3Z27VT1
D6000	8-719-081-97	DIODE	MMDL914T1	D6119	8-719-081-97	DIODE	MMDL914T1
D6005	8-719-022-99	DIODE	D6SB60L	D6120	8-719-081-97	DIODE	MMDL914T1
D6006	8-719-083-78	DIODE	10ERA60-TP	D6123	8-719-081-97	DIODE	MMDL914T1
D6007	8-719-083-78	DIODE	10ERA60-TP	D6301	6-500-567-21	DIODE	10ERB20-TB5
CONNECTOR				FUSE			
* CN6000	1-580-843-11	PIN, CONNECTOR (POWER)		 F6000	1-576-753-11	FUSE	6.3A 250V
*  CN6001	1-580-843-11	PIN, CONNECTOR (POWER)		FUSE HOLDER			
CN6004	1-695-915-11	TAB (CONTACT)		 FH6000	1-533-223-11	FUSE HOLDER	0A 0V
CN6012	1-564-507-11	PLUG, CONNECTOR	4P	 FH6001	1-533-223-11	FUSE HOLDER	0A 0V
CAPACITOR				IC			
 C6001	1-165-530-31	MYLAR	0.47µF 10 0V	IC6100	8-759-450-47	IC	BA05T
 C6002	1-119-894-51	CERAMIC	2200pF 20% 250V	CHIP CONDUCTOR			
 C6003	1-165-530-31	MYLAR	0.47µF 10 0V	JR6000	1-216-864-11	SHORT CHIP	
 C6004	1-119-894-51	CERAMIC	2200pF 20% 250V	JR6001	1-216-864-11	SHORT CHIP	
 C6006	1-113-889-11	CERAMIC	0.001µF 20% 250V	JR6002	1-216-864-11	SHORT CHIP	
C6007	1-161-964-91	CERAMIC	0.0047µF 250V	COIL			
C6008	1-161-964-91	CERAMIC	0.0047µF 250V	 L6000	1-433-900-31	TRANSFORMER, LINE FILTER	
C6011	1-137-750-11	ELECT	1500µF 20% 250V	 L6001	1-433-900-31	TRANSFORMER, LINE FILTER	
C6012	1-137-750-11	ELECT	1500µF 20% 250V	L6002	1-406-977-21	INDUCTOR	100µH
 C6013	1-119-894-51	CERAMIC	2200pF 20% 250V	TRANSISTOR			
 C6015	1-119-894-51	CERAMIC	2200pF 20% 250V	Q6102	8-729-010-25	TRANSISTOR	MSD601-RT1
C6112	1-126-965-91	ELECT	22µF 20% 50V	Q6107	8-729-140-96	TRANSISTOR	2SD774-34
C6115	1-126-943-11	ELECT	2200µF 20% 25V	Q6109	8-729-010-05	TRANSISTOR	MSB709-RT1
C6116	1-126-967-11	ELECT	47µF 20% 50V	Q6110	8-729-010-05	TRANSISTOR	MSB709-RT1
C6120	1-126-968-11	ELECT	100µF 20% 50V	Q6111	8-729-010-25	TRANSISTOR	MSD601-RT1
C6127	1-162-966-11	CERAMIC CHIP	0.0022µF 10% 50V	Q6112	8-729-010-25	TRANSISTOR	MSD601-RT1

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES																																																																																																																																																																																																																				
RESISTOR						<div style="font-size: 2em; font-weight: bold; margin-bottom: 10px;">BM</div> <p>Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.</p> <p style="text-align: center;">* A-1063-104-A BM BOARD, COMPLETE</p> <p style="text-align: center;">CAPACITOR</p> <table border="0"> <tr><td>C3032</td><td>1-164-156-11</td><td>CERAMIC CHIP</td><td>0.1µF</td><td></td><td>25V</td></tr> <tr><td>C3035</td><td>1-117-681-11</td><td>ELECT CHIP</td><td>100µF</td><td>20%</td><td>16V</td></tr> <tr><td>C3036</td><td>1-164-156-11</td><td>CERAMIC CHIP</td><td>0.1µF</td><td></td><td>25V</td></tr> <tr><td>C3037</td><td>1-126-206-11</td><td>ELECT CHIP</td><td>100µF</td><td>20%</td><td>6.3V</td></tr> <tr><td>C3038</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3039</td><td>1-164-156-11</td><td>CERAMIC CHIP</td><td>0.1µF</td><td></td><td>25V</td></tr> <tr><td>C3040</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3100</td><td>1-162-964-11</td><td>CERAMIC CHIP</td><td>0.001µF</td><td>10%</td><td>50V</td></tr> <tr><td>C3101</td><td>1-162-964-11</td><td>CERAMIC CHIP</td><td>0.001µF</td><td>10%</td><td>50V</td></tr> <tr><td>C3102</td><td>1-124-779-00</td><td>ELECT CHIP</td><td>10µF</td><td>20%</td><td>16V</td></tr> <tr><td>C3104</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3105</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3106</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3107</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3108</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3109</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3110</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3111</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3112</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3113</td><td>1-126-204-11</td><td>ELECT CHIP</td><td>47µF</td><td>20%</td><td>16V</td></tr> <tr><td>C3114</td><td>1-164-156-11</td><td>CERAMIC CHIP</td><td>0.1µF</td><td></td><td>25V</td></tr> <tr><td>C3115</td><td>1-164-156-11</td><td>CERAMIC CHIP</td><td>0.1µF</td><td></td><td>25V</td></tr> <tr><td>C3116</td><td>1-126-204-11</td><td>ELECT CHIP</td><td>47µF</td><td>20%</td><td>16V</td></tr> <tr><td>C3117</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3118</td><td>1-164-156-11</td><td>CERAMIC CHIP</td><td>0.1µF</td><td></td><td>25V</td></tr> <tr><td>C3119</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3120</td><td>1-126-204-11</td><td>ELECT CHIP</td><td>47µF</td><td>20%</td><td>16V</td></tr> <tr><td>C3121</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3122</td><td>1-126-204-11</td><td>ELECT CHIP</td><td>47µF</td><td>20%</td><td>16V</td></tr> <tr><td>C3123</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3124</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3125</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3126</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3127</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> <tr><td>C3128</td><td>1-162-970-11</td><td>CERAMIC CHIP</td><td>0.01µF</td><td>10%</td><td>25V</td></tr> </table>						C3032	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3035	1-117-681-11	ELECT CHIP	100µF	20%	16V	C3036	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3037	1-126-206-11	ELECT CHIP	100µF	20%	6.3V	C3038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3039	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3040	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3100	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C3101	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C3102	1-124-779-00	ELECT CHIP	10µF	20%	16V	C3104	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3105	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3106	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3107	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3108	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3109	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3110	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3111	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3113	1-126-204-11	ELECT CHIP	47µF	20%	16V	C3114	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3115	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3116	1-126-204-11	ELECT CHIP	47µF	20%	16V	C3117	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3118	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3119	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3120	1-126-204-11	ELECT CHIP	47µF	20%	16V	C3121	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3122	1-126-204-11	ELECT CHIP	47µF	20%	16V	C3123	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3124	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3125	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3126	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3127	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3128	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3032	1-164-156-11	CERAMIC CHIP	0.1µF		25V																																																																																																																																																																																																																								
C3035	1-117-681-11	ELECT CHIP	100µF	20%	16V																																																																																																																																																																																																																								
C3036	1-164-156-11	CERAMIC CHIP	0.1µF		25V																																																																																																																																																																																																																								
C3037	1-126-206-11	ELECT CHIP	100µF	20%	6.3V																																																																																																																																																																																																																								
C3038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3039	1-164-156-11	CERAMIC CHIP	0.1µF		25V																																																																																																																																																																																																																								
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C3100	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V																																																																																																																																																																																																																								
C3101	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V																																																																																																																																																																																																																								
C3102	1-124-779-00	ELECT CHIP	10µF	20%	16V																																																																																																																																																																																																																								
C3104	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3105	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3106	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3107	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3108	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3109	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3110	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3111	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3113	1-126-204-11	ELECT CHIP	47µF	20%	16V																																																																																																																																																																																																																								
C3114	1-164-156-11	CERAMIC CHIP	0.1µF		25V																																																																																																																																																																																																																								
C3115	1-164-156-11	CERAMIC CHIP	0.1µF		25V																																																																																																																																																																																																																								
C3116	1-126-204-11	ELECT CHIP	47µF	20%	16V																																																																																																																																																																																																																								
C3117	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3118	1-164-156-11	CERAMIC CHIP	0.1µF		25V																																																																																																																																																																																																																								
C3119	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3120	1-126-204-11	ELECT CHIP	47µF	20%	16V																																																																																																																																																																																																																								
C3121	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3122	1-126-204-11	ELECT CHIP	47µF	20%	16V																																																																																																																																																																																																																								
C3123	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3124	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3125	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3126	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
C3127	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V																																																																																																																																																																																																																								
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	R6001	1-219-568-91	METAL	8.2M	5%	1/2W
	R6002	1-240-303-31	CEMENTED	0.22	5%	10W
	R6004	1-240-303-31	CEMENTED	0.22	5%	10W
	R6012	1-219-510-11	METAL	470K	5%	1/2W
	R6013	1-219-510-11	METAL	470K	5%	1/2W
	R6111	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R6113	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R6115	1-216-837-11	METAL CHIP	22K	5%	1/10W
	R6119	1-216-837-11	METAL CHIP	22K	5%	1/10W
	R6120	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6121	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6124	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6125	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6126	1-216-837-11	METAL CHIP	22K	5%	1/10W
	R6127	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6128	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6129	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R6130	1-216-841-11	METAL CHIP	47K	5%	1/10W
RELAY						
	RY6000	1-755-395-11	RELAY (AC POWER)			
TRANSFORMER						
	T6101	1-437-783-11	TRANSFORMER, STANDBY			
VARISTOR						
	VD6000	1-804-992-21	VARISTOR			
	VD6100	1-804-499-21	VARISTOR, CHIP	(1608)		



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3129	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3173	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3130	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3174	1-124-778-00	ELECT CHIP	22μF	20%	6.3V
C3131	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3178	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3132	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3179	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3133	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3180	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3134	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3181	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3135	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3182	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3136	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3183	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3137	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3184	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3138	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3185	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3139	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3186	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3140	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3188	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3141	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3189	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3142	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3201	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3143	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3202	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3144	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3203	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3145	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3204	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3146	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3205	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3147	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3206	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3148	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3207	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3149	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3208	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3150	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3209	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3151	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3210	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3152	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3211	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3153	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3212	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3154	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V	C3213	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3155	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3214	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3156	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3215	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3157	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V	C3216	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3158	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3217	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3159	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3218	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3160	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3219	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3161	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3222	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3162	1-128-357-11	ELECT CHIP	10μF	20%	16V	C3224	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3163	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3227	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3164	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3229	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3165	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3231	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3166	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3232	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3167	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3233	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3168	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3235	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3169	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3236	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3170	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3238	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3171	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3239	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3172	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3240	1-164-156-11	CERAMIC CHIP	0.1μF		25V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3241	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3344	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3242	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3345	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3243	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3346	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3244	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3347	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3245	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3351	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3246	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3352	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3248	1-216-864-11	SHORT CHIP				C3353	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3250	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3354	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3251	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3355	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3252	1-128-996-11	ELECT CHIP	4.7μF	20%	50V	C3357	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3256	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3358	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3304	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3360	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3305	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3361	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3306	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3362	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3307	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3363	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3308	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3366	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3309	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3367	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3310	1-126-206-11	ELECT CHIP	100μF	20%	6.3V	C3368	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3311	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3369	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3312	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3370	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3313	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3371	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3316	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3372	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3318	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3373	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3319	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3374	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3320	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3375	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3321	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3376	1-126-206-11	ELECT CHIP	100μF	20%	6.3V
C3322	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3377	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3323	1-124-779-00	ELECT CHIP	10μF	20%	16V	C3381	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3325	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3382	1-126-204-11	ELECT CHIP	47μF	20%	16V
C3326	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3383	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3328	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3384	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3329	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3385	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C3330	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3386	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C3332	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V	C3387	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3333	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3388	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C3334	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3389	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3335	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3390	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C3336	1-128-994-21	ELECT CHIP	47μF	20%	10V	C3391	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3337	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3392	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3338	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C3393	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3339	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3395	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3340	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3396	1-124-779-00	ELECT CHIP	10μF	20%	16V
C3341	1-126-204-11	ELECT CHIP	47μF	20%	16V	C3397	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C3343	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3398	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L3303	1-469-561-21	INDUCTOR	100µH	R3036	1-543-949-22	FERRITE	0µH
L3304	1-469-555-21	INDUCTOR	10µH	R3037	1-543-949-22	FERRITE	0µH
L3305	1-469-555-21	INDUCTOR	10µH	R3038	1-216-864-11	SHORT CHIP	
L3306	1-469-555-21	INDUCTOR	10µH	R3039	1-216-864-11	SHORT CHIP	
L3307	1-469-555-21	INDUCTOR	10µH	R3040	1-216-864-11	SHORT CHIP	
L3308	1-412-029-11	INDUCTOR	10µH	R3041	1-543-949-22	FERRITE	0µH
L3311	1-469-555-21	INDUCTOR	10µH	R3042	1-543-949-22	FERRITE	0µH
L3312	1-412-026-11	INDUCTOR	1µH	R3043	1-216-805-11	METAL CHIP	47 5% 1/10W
L3313	1-412-029-11	INDUCTOR	10µH	R3044	1-216-805-11	METAL CHIP	47 5% 1/10W
L3314	1-412-026-11	INDUCTOR	1µH	R3045	1-216-805-11	METAL CHIP	47 5% 1/10W
L3315	1-412-026-11	INDUCTOR	1µH	R3046	1-543-949-22	FERRITE	0µH
L3316	1-469-555-21	INDUCTOR	10µH	R3047	1-543-949-22	FERRITE	0µH
L3317	1-412-026-11	INDUCTOR	1µH	R3048	1-543-949-22	FERRITE	0µH
TRANSISTOR				R3049	1-543-949-22	FERRITE	0µH
Q3101	8-729-102-07	TRANSISTOR	2SC2223-F13	R3050	1-543-949-22	FERRITE	0µH
Q3102	8-729-122-63	TRANSISTOR	2SA1226-E4	R3051	1-543-949-22	FERRITE	0µH
Q3103	8-729-102-07	TRANSISTOR	2SC2223-F13	R3052	1-216-805-11	METAL CHIP	47 5% 1/10W
Q3104	8-729-122-63	TRANSISTOR	2SA1226-E4	R3053	1-216-805-11	METAL CHIP	47 5% 1/10W
Q3105	8-729-102-07	TRANSISTOR	2SC2223-F13	R3054	1-216-805-11	METAL CHIP	47 5% 1/10W
Q3106	8-729-122-63	TRANSISTOR	2SA1226-E4	R3055	1-543-949-22	FERRITE	0µH
Q3109	8-729-010-25	TRANSISTOR	MSD601-RT1	R3056	1-543-949-22	FERRITE	0µH
Q3110	8-729-102-07	TRANSISTOR	2SC2223-F13	R3101	1-216-801-11	METAL CHIP	22 5% 1/10W
Q3111	8-729-102-07	TRANSISTOR	2SC2223-F13	R3102	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q3112	8-729-102-07	TRANSISTOR	2SC2223-F13	R3103	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q3113	8-729-010-25	TRANSISTOR	MSD601-RT1	R3104	1-216-805-11	METAL CHIP	47 5% 1/10W
Q3301	8-729-010-25	TRANSISTOR	MSD601-RT1	R3105	1-218-830-11	METAL CHIP	200 0.50% 1/10W
Q3302	8-729-010-25	TRANSISTOR	MSD601-RT1	R3106	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3304	8-729-010-25	TRANSISTOR	MSD601-RT1	R3107	1-216-820-11	METAL CHIP	820 5% 1/10W
Q3305	8-729-010-25	TRANSISTOR	MSD601-RT1	R3108	1-218-830-11	METAL CHIP	200 0.50% 1/10W
Q3306	8-729-028-28	TRANSISTOR	2SK2036(TE85L)	R3109	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
Q3307	8-729-028-28	TRANSISTOR	2SK2036(TE85L)	R3110	1-216-805-11	METAL CHIP	47 5% 1/10W
Q3308	8-729-010-25	TRANSISTOR	MSD601-RT1	R3111	1-218-834-11	METAL CHIP	300 0.50% 1/10W
Q3310	8-729-010-25	TRANSISTOR	MSD601-RT1	R3112	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3312	8-729-010-25	TRANSISTOR	MSD601-RT1	R3113	1-216-820-11	METAL CHIP	820 5% 1/10W
RESISTOR				R3114	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3023	1-216-864-11	SHORT CHIP		R3115	1-216-805-11	METAL CHIP	47 5% 1/10W
R3024	1-216-832-11	METAL CHIP	8.2K 5% 1/10W	R3116	1-216-805-11	METAL CHIP	47 5% 1/10W
R3032	1-216-864-11	SHORT CHIP		R3117	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R3034	1-216-864-11	SHORT CHIP		R3118	1-216-805-11	METAL CHIP	47 5% 1/10W
R3035	1-543-949-22	FERRITE	0µH	R3119	1-216-805-11	METAL CHIP	47 5% 1/10W
				R3120	1-218-834-11	METAL CHIP	300 0.50% 1/10W
				R3121	1-216-809-11	METAL CHIP	100 5% 1/10W
				R3122	1-216-820-11	METAL CHIP	820 5% 1/10W
				R3123	1-218-834-11	METAL CHIP	300 0.50% 1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3124	1-216-864-11	SHORT CHIP				R3184	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3125	1-216-864-11	SHORT CHIP				R3185	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R3129	1-216-805-11	METAL CHIP	47	5%	1/10W	R3186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3130	1-216-805-11	METAL CHIP	47	5%	1/10W	R3187	1-216-864-11	SHORT CHIP			
R3133	1-216-809-11	METAL CHIP	100	5%	1/10W	R3190	1-216-864-11	SHORT CHIP			
R3134	1-216-809-11	METAL CHIP	100	5%	1/10W	R3191	1-216-864-11	SHORT CHIP			
R3135	1-543-949-22	FERRITE	0μH			R3192	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3136	1-543-949-22	FERRITE	0μH			R3193	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3137	1-216-864-11	SHORT CHIP				R3194	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3138	1-216-864-11	SHORT CHIP				R3195	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3141	1-218-839-11	METAL CHIP	470	0.50%	1/10W	R3196	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3142	1-218-839-11	METAL CHIP	470	0.50%	1/10W	R3197	1-216-864-11	SHORT CHIP			
R3143	1-218-839-11	METAL CHIP	470	0.50%	1/10W	R3198	1-216-864-11	SHORT CHIP			
R3144	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R3199	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3145	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R3201	1-216-801-11	METAL CHIP	22	5%	1/10W
R3146	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R3202	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3147	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W	R3206	1-216-864-11	SHORT CHIP			
R3148	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W	R3207	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3150	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R3209	1-216-864-11	SHORT CHIP			
R3151	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R3210	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3152	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R3212	1-216-864-11	SHORT CHIP			
R3153	1-211-977-11	METAL CHIP	22	0.50%	1/10W	R3213	1-216-864-11	SHORT CHIP			
R3154	1-216-809-11	METAL CHIP	100	5%	1/10W	R3214	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3155	1-216-809-11	METAL CHIP	100	5%	1/10W	R3216	1-216-864-11	SHORT CHIP			
R3156	1-216-847-11	METAL CHIP	150K	5%	1/10W	R3217	1-216-864-11	SHORT CHIP			
R3158	1-216-809-11	METAL CHIP	100	5%	1/10W	R3218	1-216-864-11	SHORT CHIP			
R3159	1-216-819-11	METAL CHIP	680	5%	1/10W	R3220	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3160	1-216-819-11	METAL CHIP	680	5%	1/10W	R3222	1-216-864-11	SHORT CHIP			
R3161	1-216-819-11	METAL CHIP	680	5%	1/10W	R3223	1-216-864-11	SHORT CHIP			
R3162	1-216-864-11	SHORT CHIP				R3224	1-216-864-11	SHORT CHIP			
R3163	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W	R3225	1-216-864-11	SHORT CHIP			
R3164	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R3227	1-216-864-11	SHORT CHIP			
R3165	1-216-864-11	SHORT CHIP				R3228	1-216-864-11	SHORT CHIP			
R3170	1-216-801-11	METAL CHIP	22	5%	1/10W	R3229	1-216-864-11	SHORT CHIP			
R3171	1-216-864-11	SHORT CHIP				R3232	1-216-864-11	SHORT CHIP			
R3172	1-216-864-11	SHORT CHIP				R3233	1-216-864-11	SHORT CHIP			
R3174	1-216-864-11	SHORT CHIP				R3234	1-216-864-11	SHORT CHIP			
R3175	1-216-864-11	SHORT CHIP				R3235	1-216-864-11	SHORT CHIP			
R3176	1-216-864-11	SHORT CHIP				R3238	1-216-864-11	SHORT CHIP			
R3178	1-218-847-11	METAL CHIP	1K	0.50%	1/10W	R3242	1-216-864-11	SHORT CHIP			
R3179	1-218-847-11	METAL CHIP	1K	0.50%	1/10W	R3243	1-216-864-11	SHORT CHIP			
R3181	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3245	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3182	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3247	1-216-864-11	SHORT CHIP			
R3183	1-218-847-11	METAL CHIP	1K	0.50%	1/10W	R3248	1-216-864-11	SHORT CHIP			



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3250	1-216-864-11	SHORT CHIP				R3337	1-216-801-11	METAL CHIP	22	5%	1/10W
R3253	1-216-864-11	SHORT CHIP				R3340	1-216-864-11	SHORT CHIP			
R3255	1-216-801-11	METAL CHIP	22	5%	1/10W	R3341	1-216-864-11	SHORT CHIP			
R3256	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3344	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3257	1-216-809-11	METAL CHIP	100	5%	1/10W	R3347	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3259	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W	R3350	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3262	1-216-809-11	METAL CHIP	100	5%	1/10W	R3351	1-216-809-11	METAL CHIP	100	5%	1/10W
R3265	1-216-853-11	METAL CHIP	470K	5%	1/10W	R3359	1-216-809-11	METAL CHIP	100	5%	1/10W
R3266	1-216-837-11	METAL CHIP	22K	5%	1/10W	R3360	1-216-805-11	METAL CHIP	47	5%	1/10W
R3267	1-216-813-11	METAL CHIP	220	5%	1/10W	R3362	1-216-817-11	METAL CHIP	470	5%	1/10W
R3269	1-216-853-11	METAL CHIP	470K	5%	1/10W	R3363	1-216-864-11	SHORT CHIP			
R3271	1-216-864-11	SHORT CHIP				R3367	1-216-805-11	METAL CHIP	47	5%	1/10W
R3272	1-216-805-11	METAL CHIP	47	5%	1/10W	R3368	1-216-864-11	SHORT CHIP			
R3279	1-216-864-11	SHORT CHIP				R3369	1-216-864-11	SHORT CHIP			
R3280	1-218-838-11	METAL CHIP	430	0.50%	1/10W	R3370	1-216-864-11	SHORT CHIP			
R3281	1-218-847-11	METAL CHIP	1K	0.50%	1/10W	R3371	1-216-864-11	SHORT CHIP			
R3282	1-218-873-11	METAL CHIP	12K	0.50%	1/10W	R3374	1-216-817-11	METAL CHIP	470	5%	1/10W
R3283	1-216-864-11	SHORT CHIP				R3375	1-543-949-22	FERRITE	0μH		
R3302	1-216-801-11	METAL CHIP	22	5%	1/10W	R3376	1-543-949-22	FERRITE	0μH		
R3303	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3377	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3304	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3378	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3305	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W	R3383	1-216-805-11	METAL CHIP	47	5%	1/10W
R3306	1-216-801-11	METAL CHIP	22	5%	1/10W	R3384	1-211-987-11	METAL CHIP	56	0.50%	1/10W
R3307	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3385	1-211-985-11	METAL CHIP	47	0.50%	1/10W
R3308	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3386	1-211-987-11	METAL CHIP	56	0.50%	1/10W
R3310	1-216-801-11	METAL CHIP	22	5%	1/10W	R3387	1-211-985-11	METAL CHIP	47	0.50%	1/10W
R3311	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3388	1-216-864-11	SHORT CHIP			
R3312	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3389	1-216-864-11	SHORT CHIP			
R3315	1-216-809-11	METAL CHIP	100	5%	1/10W	R3391	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3316	1-216-801-11	METAL CHIP	22	5%	1/10W	R3392	1-216-818-11	METAL CHIP	560	5%	1/10W
R3317	1-216-801-11	METAL CHIP	22	5%	1/10W	R3393	1-216-864-11	SHORT CHIP			
R3318	1-216-813-11	METAL CHIP	220	5%	1/10W	R3395	1-216-817-11	METAL CHIP	470	5%	1/10W
R3320	1-216-864-11	SHORT CHIP				R3396	1-216-864-11	SHORT CHIP			
R3321	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R3401	1-216-805-11	METAL CHIP	47	5%	1/10W
R3322	1-216-805-11	METAL CHIP	47	5%	1/10W	R3402	1-216-801-11	METAL CHIP	22	5%	1/10W
R3323	1-216-815-11	METAL CHIP	330	5%	1/10W	R3403	1-216-809-11	METAL CHIP	100	5%	1/10W
R3325	1-216-809-11	METAL CHIP	100	5%	1/10W	R3404	1-216-809-11	METAL CHIP	100	5%	1/10W
R3329	1-216-864-11	SHORT CHIP				R3405	1-216-809-11	METAL CHIP	100	5%	1/10W
R3330	1-216-821-11	METAL CHIP	1K	5%	1/10W	R3406	1-216-801-11	METAL CHIP	22	5%	1/10W
R3331	1-216-819-11	METAL CHIP	680	5%	1/10W	R3407	1-216-801-11	METAL CHIP	22	5%	1/10W
R3333	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3408	1-216-801-11	METAL CHIP	22	5%	1/10W
R3334	1-216-833-11	METAL CHIP	10K	5%	1/10W	R3409	1-216-864-11	SHORT CHIP			
R3335	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R3410	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R3336	1-216-855-11	METAL CHIP	680K	5%	1/10W	R3411	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES
R3413	1-216-801-11	METAL CHIP	22	5%	1/10W	RESISTOR BRIDGE			
R3414	1-211-987-11	METAL CHIP	56	0.50%	1/10W	RB3101	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
R3415	1-211-985-11	METAL CHIP	47	0.50%	1/10W	RB3102	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3416	1-216-864-11	SHORT CHIP				RB3103	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3418	1-216-801-11	METAL CHIP	22	5%	1/10W	RB3104	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3419	1-216-864-11	SHORT CHIP				RB3105	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3420	1-216-864-11	SHORT CHIP				RB3106	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3421	1-216-864-11	SHORT CHIP				RB3107	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3422	1-216-864-11	SHORT CHIP				RB3108	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3426	1-216-801-11	METAL CHIP	22	5%	1/10W	RB3109	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3448	1-216-864-11	SHORT CHIP				RB3110	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3450	1-211-969-11	METAL CHIP	10	0.50%	1/10W	RB3111	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3451	1-218-825-11	METAL CHIP	120	0.50%	1/10W	RB3112	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3452	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3113	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3453	1-211-973-11	METAL CHIP	15	0.50%	1/10W	RB3114	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
R3454	1-218-825-11	METAL CHIP	120	0.50%	1/10W	RB3115	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
R3455	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3116	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
R3456	1-211-977-11	METAL CHIP	22	0.50%	1/10W	RB3117	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
R3457	1-218-825-11	METAL CHIP	120	0.50%	1/10W	RB3201	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3458	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3202	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3459	1-211-977-11	METAL CHIP	22	0.50%	1/10W	RB3203	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3460	1-218-825-11	METAL CHIP	120	0.50%	1/10W	RB3204	1-239-409-11	NETWORK RESISTOR(CHIP)	47
R3461	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3205	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3462	1-218-825-11	METAL CHIP	120	0.50%	1/10W	RB3206	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3463	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3207	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3464	1-218-825-11	METAL CHIP	120	0.50%	1/10W	RB3208	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3465	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3209	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3466	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3210	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3467	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3303	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3468	1-218-833-11	METAL CHIP	270	0.50%	1/10W	RB3304	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3469	1-218-844-11	METAL CHIP	750	0.50%	1/10W	RB3305	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3471	1-216-864-11	SHORT CHIP				RB3306	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3472	1-216-864-11	SHORT CHIP				RB3309	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3473	1-216-864-11	SHORT CHIP				RB3310	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3483	1-216-864-11	SHORT CHIP				RB3311	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3484	1-216-864-11	SHORT CHIP				RB3312	1-233-576-11	RES, CHIP NETWORK 100	(3216)
R3485	1-216-864-11	SHORT CHIP				RB3313	1-233-813-11	RES, NETWORK 150	(3216)
R3486	1-216-864-11	SHORT CHIP				RB3314	1-233-813-11	RES, NETWORK 150	(3216)
R3487	1-216-864-11	SHORT CHIP				RB3315	1-233-813-11	RES, NETWORK 150	(3216)
R3488	1-216-864-11	SHORT CHIP				RB3316	1-233-813-11	RES, NETWORK 150	(3216)
R3489	1-216-864-11	SHORT CHIP				RB3318	1-233-813-11	RES, NETWORK 150	(3216)
R3490	1-216-864-11	SHORT CHIP				RB3319	1-233-813-11	RES, NETWORK 150	(3216)
R3491	1-216-864-11	SHORT CHIP							



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
CRYSTAL											
X3101	1-813-373-11	OSCILLATOR, CRYSTAL				C9542	1-126-394-11	ELECT CHIP	10µF	20%	16V
X3301	1-781-887-21	VIBRATOR, CRYSTAL				C9543	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
						C9545	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
						C9546	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
						C9547	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
						C9549	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9550	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9551	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9552	1-126-246-11	ELECT CHIP	220µF	20%	4V
						C9553	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
						C9554	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9555	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9557	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9558	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
						C9559	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9560	1-126-246-11	ELECT CHIP	220µF	20%	4V
						C9561	1-100-756-91	CERAMIC CHIP	0.047µF		50V
						C9562	1-127-692-11	CERAMIC CHIP	10µF	10%	16V
						C9563	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9571	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9575	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
						C9576	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9578	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
						C9579	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
						C9583	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
						C9584	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9585	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9586	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9587	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9588	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9589	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9623	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9824	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
						C9825	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
						C9826	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
						C9828	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9830	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9831	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9832	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
						C9833	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
						C9835	1-100-588-21	ELECT CHIP	1000µF	20%	6.3V
						C9836	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9839	1-126-394-11	ELECT CHIP	10µF	20%	16V
						C9841	1-100-118-21	ELECT CHIP	82µF	20%	16V



Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.

Data is provided for reference only.

* **A-1068-754-A P BOARD, COMPLETE**

4-382-854-01 SCREW (M3X8), P, SW (+)

7-685-872-09 SCREW 3X8 (S)

CAPACITOR

C9507	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9508	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9509	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9510	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C9511	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9513	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9514	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9515	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9516	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9517	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9519	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9521	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9523	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9524	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9525	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9526	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9527	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C9528	1-126-246-11	ELECT CHIP	220µF	20%	4V
C9529	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9530	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9531	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9532	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9533	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9534	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9535	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9537	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9538	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9540	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9541	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
C9842	1-137-897-21	ELECT CHIP	150µF 20% 4V				
C9843	1-107-826-11	CERAMIC CHIP	0.1µF 10% 16V				
CONNECTOR				JACK			
* CN9500	1-818-400-11	HDMI CONNECTOR		J9503	1-794-623-11	JACK, PIN	2P
CN9504	1-564-593-11	PLUG, CONNECTOR	14P				
DIODE				COIL			
D9500	8-719-210-39	DIODE	EC10QS-04	L9501	1-416-948-21	INDUCTOR	10µH
D9501	6-500-294-01	DIODE	PTZ-TE25-3.9B	L9502	1-400-303-21	INDUCTOR	68µH
D9502	8-719-977-28	DIODE	DTZ10B				
D9503	8-719-977-28	DIODE	DTZ10B				
D9506	8-719-404-50	DIODE	MA111-TX				
D9507	8-719-404-50	DIODE	MA111-TX				
FERRITE BEAD				IC LINK			
FB9504	1-414-235-22	FERRITE	0µH	PS9500	1-576-415-21	FUSE	2A 32V
FB9505	1-414-235-22	FERRITE	0µH				
FB9506	1-414-235-22	FERRITE	0µH				
FB9507	1-414-235-22	FERRITE	0µH				
FB9508	1-414-235-22	FERRITE	0µH				
FB9509	1-414-235-22	FERRITE	0µH				
FB9510	1-414-235-22	FERRITE	0µH				
FB9512	1-414-235-22	FERRITE	0µH				
FILTER				TRANSISTOR			
* FL9501	1-813-308-11	INDUCTOR	0µH	Q9501	8-729-024-88	TRANSISTOR	MUN2212T1
* FL9504	1-813-308-11	INDUCTOR	0µH	Q9502	8-729-421-22	TRANSISTOR	UN2211
* FL9505	1-813-308-11	INDUCTOR	0µH	Q9503	8-729-027-62	TRANSISTOR	DTC144WKA-T146
* FL9506	1-813-308-11	INDUCTOR	0µH	Q9506	8-729-024-88	TRANSISTOR	MUN2212T1
				Q9511	8-729-421-22	TRANSISTOR	UN2211
				Q9514	8-729-027-62	TRANSISTOR	DTC144WKA-T146
				Q9516	8-729-421-22	TRANSISTOR	UN2211
				Q9517	8-729-421-22	TRANSISTOR	UN2211
IC				RESISTOR			
IC9500	6-706-257-01	IC	FMS6418AM16X	R9501	1-218-665-11	METAL CHIP	75 0.50% 1/10W
IC9502	6-704-819-01	IC	CS4335-KSZR	R9502	1-218-665-11	METAL CHIP	75 0.50% 1/10W
IC9503	6-704-407-01	IC	PQ1CZ41H2ZPH	R9505	1-216-841-11	METAL CHIP	47K 5% 1/10W
IC9504	6-704-001-01	IC	BR24L02F-WE2	R9507	1-216-857-11	METAL CHIP	1M 5% 1/10W
IC9505	6-704-499-01	IC	SII9993CTG100	R9508	1-216-857-11	METAL CHIP	1M 5% 1/10W
IC9506	6-703-042-01	IC	CD4052BNSR	R9509	1-216-857-11	METAL CHIP	1M 5% 1/10W
IC9509	6-550-014-01	TRANSISTOR	SSM6N15FU(TE85R)	R9510	1-218-665-11	METAL CHIP	75 0.50% 1/10W
IC9514	8-759-331-71	IC	NJM4558E(TE2)	R9511	1-216-803-11	METAL CHIP	33 5% 1/10W
IC9517	6-804-248-01	IC	HD64F3694FXV-DA4	R9512	1-218-665-11	METAL CHIP	75 0.50% 1/10W
IC9521	8-759-642-22	IC	UPC29M05T-E2	R9513	1-218-665-11	METAL CHIP	75 0.50% 1/10W
				R9514	1-218-665-11	METAL CHIP	75 0.50% 1/10W
				R9515	1-218-665-11	METAL CHIP	75 0.50% 1/10W
				R9516	1-218-665-11	METAL CHIP	75 0.50% 1/10W
				R9517	1-218-665-11	METAL CHIP	75 0.50% 1/10W
				R9518	1-216-857-11	METAL CHIP	1M 5% 1/10W
				R9519	1-216-803-11	METAL CHIP	33 5% 1/10W
				R9520	1-216-816-11	METAL CHIP	390 5% 1/10W
				R9526	1-218-716-11	METAL CHIP	10K 0.50% 1/10W
				R9528	1-216-837-11	METAL CHIP	22K 5% 1/10W

P HA1 HB1

REF. NO.	PART NO.	DESCRIPTION	VALUES
VD9504	6-500-701-01	DIODE	PGB0010603NR
VD9505	6-500-701-01	DIODE	PGB0010603NR
VD9506	6-500-701-01	DIODE	PGB0010603NR
VD9507	6-500-701-01	DIODE	PGB0010603NR
VD9518	6-500-701-01	DIODE	PGB0010603NR
VD9519	6-500-701-01	DIODE	PGB0010603NR

CRYSTAL

X9501	1-767-984-21	VIBRATOR, CRYSTAL
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HA1

* **A-1054-152-A HA1 BOARD, MOUNTED**

CAPACITOR

C1201	1-126-157-11	ELECT	10µF	20%	16V
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CONNECTOR

* CN1201 1-564-524-11 PLUG, CONNECTOR 9P

DIODE

D1201	8-719-053-43	DIODE	SLR-325VCT31
D1202	8-719-053-43	DIODE	SLR-325VCT31
D1203	8-719-977-28	DIODE	DTZ10B

IC

IC1201	8-742-211-20	HYB IC	SBX3071-71
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RESISTOR

R1201	1-216-809-11	METAL CHIP	100	5%	1/10W
R1202	1-216-817-11	METAL CHIP	470	5%	1/10W
R1203	1-216-819-11	METAL CHIP	680	5%	1/10W
R1204	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1205	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1206	1-216-817-11	METAL CHIP	470	5%	1/10W
R1207	1-216-817-11	METAL CHIP	470	5%	1/10W
R1208	1-216-797-11	METAL CHIP	10	5%	1/10W
R1209	1-216-837-11	METAL CHIP	22K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES
SWITCH			
S1201	1-572-198-11	SWITCH, KEYBOARD	
S1202	1-572-198-11	SWITCH, KEYBOARD	
S1203	1-572-198-11	SWITCH, KEYBOARD	
S1204	1-572-198-11	SWITCH, KEYBOARD	
S1205	1-572-198-11	SWITCH, KEYBOARD	
S1206	1-572-198-11	SWITCH, KEYBOARD	
S1207	1-572-198-11	SWITCH, KEYBOARD	

HB1

* **A-1054-154-A HB1 BOARD, MOUNTED**
(KP-51WS520/57WS520 ONLY)

CAPACITOR

C1100	1-126-960-11	ELECT	1µF	20%	50V
C1101	1-126-960-11	ELECT	1µF	20%	50V

CONNECTOR

* CN1101 1-564-526-11 PLUG, CONNECTOR 11P

DIODE

D1100	8-719-977-28	DIODE	DTZ10B
D1101	8-719-977-28	DIODE	DTZ10B
D1103	8-719-977-28	DIODE	DTZ10B

JACK

J1101	1-770-361-11	TERMINAL BLOCK, S
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RESISTOR

R1100	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1101	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1102	1-218-285-11	METAL CHIP	75	5%	1/10W
R1103	1-218-285-11	METAL CHIP	75	5%	1/10W
R1106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1107	1-218-285-11	METAL CHIP	75	5%	1/10W

HB2 SR BH

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1103	1-218-285-11	METAL CHIP	75	5%	1/10W
R1106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1107	1-218-285-11	METAL CHIP	75	5%	1/10W

HB2

* **A-1054-799-A HB2 BOARD, MOUNTED**
(KP-46WT520 ONLY)

CAPACITOR

C1150	1-126-960-11	ELECT	1μF	20%	50V
C1151	1-126-960-11	ELECT	1μF	20%	50V

CONNECTOR

* CN1151	1-564-526-11	PLUG, CONNECTOR			11P
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DIODE

D1150	8-719-977-28	DIODE	DTZ10B		
D1151	8-719-977-28	DIODE	DTZ10B		
D1153	8-719-977-28	DIODE	DTZ10B		

JACK

J1151	1-750-515-11	TERMINAL BLOCK, S			3P
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RESISTOR

R1150	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1151	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1152	1-218-285-11	METAL CHIP	75	5%	1/10W
R1153	1-218-285-11	METAL CHIP	75	5%	1/10W
R1156	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1157	1-218-285-11	METAL CHIP	75	5%	1/10W

SR

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

* **A-1405-083-A SR BOARD, MOUNTED**

CONNECTOR

* CN9901	1-564-506-11	PLUG, CONNECTOR			3P
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DIODE

D9901	8-719-036-94	DIODE			RD5.6SB-T1
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SWITCH

SB9901	1-477-983-21	PHOTO SENSOR			
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BH

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

BH BOARD, MOUNTED

If the BH board needs to be replaced use an A Board part number to order the replacement kit.

CAPACITOR

C3032	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3040	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3101	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C3102	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3104	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3105	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3106	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3107	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3108	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3109	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3110	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3153	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3111	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3154	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V
C3112	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3155	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3113	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V	C3156	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3114	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3157	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V
C3115	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3158	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3116	1-126-205-11	ELECT CHIP	47μF	20%	6.3V	C3160	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3117	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3163	1-100-507-91	CERAMIC CHIP	4.7μF	20%	6.3V
C3118	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C3165	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3119	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3167	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3120	1-100-507-91	CERAMIC CHIP	4.7μF	20%	6.3V	C3169	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C3121	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3170	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C3122	1-100-507-91	CERAMIC CHIP	4.7μF	20%	6.3V	C3171	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C3123	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3173	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3124	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3178	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3125	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3179	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3126	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3184	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3127	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3185	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3128	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3188	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3129	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3189	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3130	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3207	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3131	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3208	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3132	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3209	1-126-205-11	ELECT CHIP	47μF	20%	6.3V
C3133	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3301	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3134	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3302	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3135	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3305	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V
C3136	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3306	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3137	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3307	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3138	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3311	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3139	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3312	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3140	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3313	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3141	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3314	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3142	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3315	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3143	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3316	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3144	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3317	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3145	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3318	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3146	1-137-710-11	CERAMIC CHIP	10μF	20%	6.3V	C3320	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3147	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3321	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3148	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3324	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3149	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3325	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3150	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3328	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3151	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C3329	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C3152	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V						



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3330	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3377	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3331	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3378	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3332	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3379	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3333	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3380	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3334	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3381	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3335	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3382	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3337	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3383	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3338	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3384	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3340	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3385	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3341	1-165-884-91	CERAMIC CHIP	2.2µF	10%	6.3V	C3386	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3342	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3387	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3343	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3388	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3344	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C3389	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3345	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C3390	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3346	1-165-884-91	CERAMIC CHIP	2.2µF	10%	6.3V	C3391	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3347	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3392	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3348	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3393	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3349	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3394	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3350	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3395	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3351	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3397	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3352	1-165-884-91	CERAMIC CHIP	2.2µF	10%	6.3V	C3398	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3353	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3399	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3354	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3400	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3355	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3402	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3356	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V	C3403	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3357	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3404	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3358	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	<u>CONNECTOR</u>					
C3359	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	* CN3001	1-816-448-11	CONNECTOR, BOARD TO BOARD	50P		
C3360	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	<u>FERRITE BEAD</u>					
C3361	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V	FB3101	1-414-228-11	FERRITE	0µH		
C3362	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V	FB3102	1-400-180-21	INDUCTOR	0µH		
C3363	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	FB3103	1-400-180-21	INDUCTOR	0µH		
C3365	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	FB3301	1-400-180-21	INDUCTOR	0µH		
C3366	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	FB3302	1-400-180-21	INDUCTOR	0µH		
C3367	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	<u>FILTER</u>					
C3368	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V	FL3001	1-234-177-21	FERRITE	0µH		
C3370	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	FL3100	1-234-677-21	FILTER, EMI			
C3371	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	FL3101	1-234-560-21	FILTER, LOW PASS			
C3372	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V						
C3373	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V						
C3374	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V						
C3375	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V						
C3376	1-126-205-11	ELECT CHIP	47µF	20%	6.3V						



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
FL3102	1-234-559-21	FILTER, LOW PASS		Q3307	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
FL3103	1-234-559-21	FILTER, LOW PASS		Q3308	8-729-120-28	TRANSISTOR	2SC1623-L5L6
FL3105	1-234-177-21	FERRITE	0μH	Q3310	8-729-120-28	TRANSISTOR	2SC1623-L5L6
FL3301	1-234-854-21	FILTER, LOW PASS (SMD)		Q3312	8-729-120-28	TRANSISTOR	2SC1623-L5L6
IC				Q3313	8-729-600-22	TRANSISTOR	2SA1235-F
IC3101	8-752-425-02	IC	CXD3802BQ	Q3314	8-729-120-28	TRANSISTOR	2SC1623-L5L6
IC3102	6-705-983-01	IC	IS42S32200B-6TL-TR	RESISTOR			
IC3103	6-706-706-01	IC	SN10503PWPR	R3024	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
IC3105	8-759-833-72	IC	NJM2870F25-TE2	R3035	1-543-949-22	FERRITE	0μH
IC3106	6-705-403-01	IC	PQ070XZ01ZPH	R3036	1-543-949-22	FERRITE	0μH
IC3205	6-705-403-01	IC	PQ070XZ01ZPH	R3037	1-543-949-22	FERRITE	0μH
IC3302	6-705-983-01	IC	IS42S32200B-6TL-TR	R3041	1-543-949-22	FERRITE	0μH
IC3303	8-759-649-46	IC	SN74AHC1G08DCKR	R3042	1-543-949-22	FERRITE	0μH
IC3306	8-759-649-46	IC	SN74AHC1G08DCKR	R3049	1-543-949-22	FERRITE	0μH
IC3310	8-759-833-72	IC	NJM2870F25-TE2	R3055	1-543-949-22	FERRITE	0μH
IC3311	8-759-833-72	IC	NJM2870F25-TE2	R3056	1-543-949-22	FERRITE	0μH
COIL				R3101	1-216-803-11	METAL CHIP	33 5% 1/10W
L3101	1-469-555-21	INDUCTOR	10μH	R3102	1-218-847-11	METAL CHIP	1K 0.50% 1/10W
L3102	1-469-555-21	INDUCTOR	10μH	R3103	1-216-819-11	METAL CHIP	680 5% 1/10W
L3105	1-469-549-21	INDUCTOR	1μH	R3104	1-216-805-11	METAL CHIP	47 5% 1/10W
L3307	1-469-555-21	INDUCTOR	10μH	R3105	1-218-830-11	METAL CHIP	200 0.50% 1/10W
L3308	1-469-555-21	INDUCTOR	10μH	R3106	1-216-809-11	METAL CHIP	100 5% 1/10W
L3309	1-469-555-21	INDUCTOR	10μH	R3107	1-216-819-11	METAL CHIP	680 5% 1/10W
L3310	1-469-555-21	INDUCTOR	10μH	R3108	1-218-830-11	METAL CHIP	200 0.50% 1/10W
L3311	1-469-555-21	INDUCTOR	10μH	R3109	1-216-819-11	METAL CHIP	680 5% 1/10W
L3315	1-469-549-21	INDUCTOR	1μH	R3110	1-216-805-11	METAL CHIP	47 5% 1/10W
L3316	1-469-555-21	INDUCTOR	10μH	R3111	1-218-834-11	METAL CHIP	300 0.50% 1/10W
L3317	1-412-026-11	INDUCTOR	1μH	R3112	1-216-809-11	METAL CHIP	100 5% 1/10W
TRANSISTOR				R3113	1-216-819-11	METAL CHIP	680 5% 1/10W
Q3101	8-729-102-07	TRANSISTOR	2SC2223-F13	R3114	1-218-834-11	METAL CHIP	300 0.50% 1/10W
Q3102	8-729-122-63	TRANSISTOR	2SA1226-E4	R3115	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3103	8-729-102-07	TRANSISTOR	2SC2223-F13	R3116	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3104	8-729-122-63	TRANSISTOR	2SA1226-E4	R3117	1-216-819-11	METAL CHIP	680 5% 1/10W
Q3105	8-729-102-07	TRANSISTOR	2SC2223-F13	R3118	1-216-809-11	METAL CHIP	100 5% 1/10W
Q3106	8-729-122-63	TRANSISTOR	2SA1226-E4	R3119	1-216-805-11	METAL CHIP	47 5% 1/10W
Q3113	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R3120	1-218-834-11	METAL CHIP	300 0.50% 1/10W
Q3306	8-729-028-28	TRANSISTOR	2SK2036(TE85L)	R3121	1-216-809-11	METAL CHIP	100 5% 1/10W
				R3122	1-216-819-11	METAL CHIP	680 5% 1/10W
				R3123	1-218-834-11	METAL CHIP	300 0.50% 1/10W
				R3124	1-216-809-11	METAL CHIP	100 5% 1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
RB3110	1-233-576-11	RES, CHIP NETWORK	100 (3216)	*	4-076-420-01	BAG, PROTECTION (KP-57WS520 ONLY)	
RB3111	1-233-576-11	RES, CHIP NETWORK	100 (3216)				
RB3112	1-233-576-11	RES, CHIP NETWORK	100 (3216)	*	2-159-715-01	CARTON, INDIVIDUAL (KP-46WT520 ONLY)	
RB3113	1-233-576-11	RES, CHIP NETWORK	100 (3216)				
RB3114	1-236-908-11	NETWORK RESISTOR(CHIP)	10K	*	2-021-821-01	CARTON, INDIVIDUAL (KP-51WS520 ONLY)	
RB3115	1-236-908-11	NETWORK RESISTOR(CHIP)	10K				
RB3116	1-236-908-11	NETWORK RESISTOR(CHIP)	10K	*	2-159-716-01	CARTON, INDIVIDUAL (KP-57WS520 ONLY)	
RB3117	1-236-908-11	NETWORK RESISTOR(CHIP)	10K				
RB3303	1-239-409-11	NETWORK RESISTOR(CHIP)	47	*	2-021-820-01	CUSHION, LOWER (KP-46WT520 ONLY)	
RB3304	1-239-409-11	NETWORK RESISTOR(CHIP)	47				
RB3305	1-239-409-11	NETWORK RESISTOR(CHIP)	47	*	2-021-823-01	CUSHION, LOWER (KP-51WS520 ONLY)	
RB3306	1-239-409-11	NETWORK RESISTOR(CHIP)	47				
RB3309	1-239-409-11	NETWORK RESISTOR(CHIP)	47	*	2-021-825-01	CUSHION, LOWER (KP-57WS520 ONLY)	
RB3310	1-239-409-11	NETWORK RESISTOR(CHIP)	47				
RB3311	1-239-409-11	NETWORK RESISTOR(CHIP)	47	*	4-091-086-01	CUSHION, UPPER (KP-46WT520 ONLY)	
RB3312	1-239-409-11	NETWORK RESISTOR(CHIP)	47				
	CRYSTAL			*	2-021-824-01	CUSHION, UPPER (KP-51WS520 ONLY)	
X3101	1-813-373-11	OSCILLATOR, CRYSTAL					
X3301	1-813-114-21	VIBRATOR, CRYSTAL		*	4-094-656-01	CUSHION, UPPER (KP-57WS520 ONLY)	
	MISCELLANEOUS				2-022-745-11	MANUAL, INSTRUCTION	
					2-022-745-21	MANUAL, INSTRUCTION	
					2-022-745-31	MANUAL, INSTRUCTION	
				*	4-042-463-01	SHEET, PROTECTION (KP-51WS520/57WS520 ONLY)	
	7-600-001-97	TAPE, ACETATE (P2412) 25X30M					
	7-600-003-52	TAPE, ACETATE (2142) 46X30M (KP-51WS520/57WS520 ONLY)		*	4-096-700-01	TRAY (KP-46WT520 ONLY)	
	7-600-005-96	BLACK ACETATE (NO.570F) 46X50M (KP-51WS520/57WS520 ONLY)		*	4-094-659-01	TRAY (KP-57WS520 ONLY)	
	7-600-019-13	TAPE, ACETATE (P2412HD) 25MMX30MM					
	ACCESSORIES AND PACKING			REMOTE COMMANDER			
*	4-091-919-11	BAG, PROTECTION (KP-46WT520 ONLY)		1-478-780-11	REMOTE COMMANDER (RM-Y916)		
	4-041-426-01	BAG, PROTECTION (KP-51WS520 ONLY)		3-072-138-01	BATTERY COVER (for RM-Y916)		

Sony Corporation
 Sony Technology Center
 Technical Services
 Service Promotion Department

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In an effort to reduce the size of this pdf file the tiled schematics are not attached to this Service Manual. To receive a complete set of the tiled schematics for this manual please submit a request to Service_Promotion@am.sony.com.