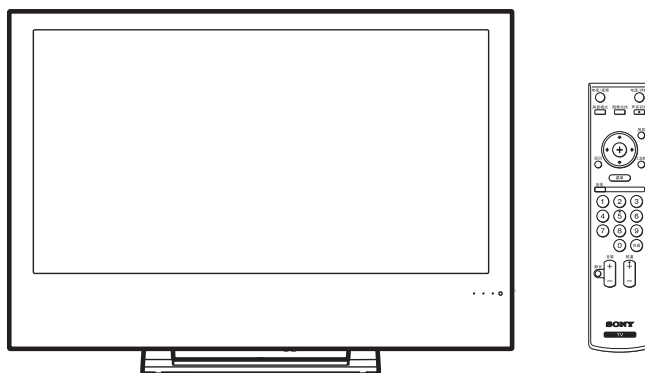


KL V-32T200A/40T200A

SERVICE MANUAL

China Model



CH-1 CHASSIS

SPECIFICATIONS

Display Unit

Power Requirements:

220 V AC, 50 Hz

Screen Size:

KL V-40T200A:

40 inches (Approx. 102 cm measured diagonally)

KL V-32T200A:

32 inches (Approx. 80 cm measured diagonally)

Display Resolution:

1,366 dots (horizontal) × 768 lines (vertical)

Power Consumption:

Indicated on the rear of the TV

Standby Power Consumption:

1 W or less

Dimensions (w × h × d):

KL V-40T200A:

989 × 806 × 269 mm (with stand)

989 × 705 × 60 mm (without stand)

KL V-32T200A:

809 × 709 × 269 mm (with stand)

809 × 608 × 60 mm (without stand)

Weight:

KL V-40T200A:

Approx. 24 kg (with stand)

Approx. 21 kg (without stand)

KL V-32T200A:

Approx. 16 kg (with stand)

Approx. 13 kg (without stand)

Panel System

LCD (Liquid Crystal Display) Panel

TV System

B/G, I, D/K, M

Color/Video System

PAL, PAL60, NTSC 3.58, NTSC4.43

Antenna

75 ohm external terminal

TV System

B/G, I, D/K, M

Color/Video System

PAL, PAL60, NTSC 3.58, NTSC4.43

Antenna

75 ohm external terminal

Channel Coverage

B/G

VHF: E2 to E12 / UHF: E21 to E69 /

CATV: S01 to S03, S1 to S41

I

UHF: B21 to B68 / CATV: S01 to S03, S1 to S41

D/K

VHF: C1 to C12 / UHF: C13 to C57,

R21 to R60 /

CATV: S01 to S03, S1 to S41, Z1 to Z39

M

VHF: A2 to A13 / UHF: A14 to A79 /

CATV: A-8 to A-2, A to W+4, W+6 to W+84

Terminals

S VIDEO 1/2: S →

S VIDEO (4-pin mini DIN) S →

Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative

C: 0.286 Vp-p (Burst signal), 75ohms

VIDEO IN 1/2: →

VIDEO: →

1 Vp-p, 75 ohms unbalanced, sync negative








AUDIO: →

500 mV rms

Impedance: 47 kilohms

LCD Colour TV

SONY®

HD/DVD IN 1: 
 Y, PB/CB, PR/CR (Component Video):
 Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative
 PB/CB: 0.7 Vp-p, 75 ohms
 PR/CR: 0.7 Vp-p, 75 ohms
 Signal format: 480i, 576i, 480p, 576p, 720p, 1080i
 AUDIO: 
 500 mV rms
 Impedance: 47 kilohms
 VIDEO OUT: 
 VIDEO: 
 1 Vp-p, 75 ohms unbalanced, sync negative
 AUDIO: 
 More than 1 Vrms at the maximum volume setting
 (Variable)
 More than 500 mV rms (Fixed)
 HDMI IN
 Video: 1080i, 720p, 576p, 576i, 480p, 480i
 Audio: Two channel Linear PCM
 32, 44.1 and 48kHz, 16, 20 and 24bits,
 PC: 
 D-sub 15-pin, analogue RGB, 0.7 Vp-p,
 75 ohms, positive
 See the PC input signal Reference chart on page 32
 Audio: 
 Stereo minijack, 0.5 Vrms, 1 kilohm
 Headphones
 Stereo minijack
 Sound Output
 8W + 8W (7% distortion)

Design and specifications are subject to change
 without notice.

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

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).

Leakage Test

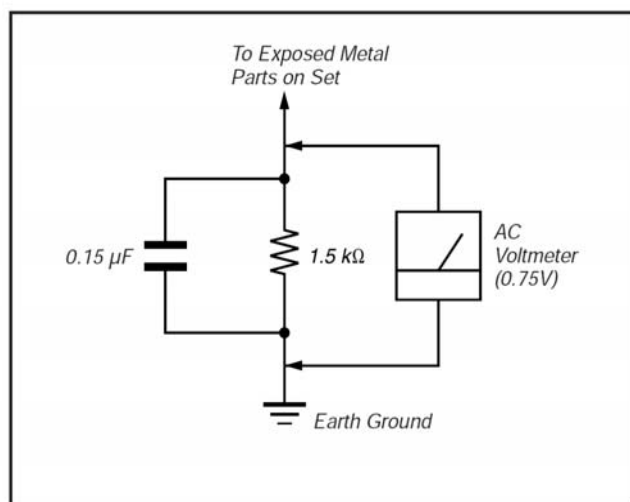


Figure A. Using an AC voltmeter to check AC leakage.

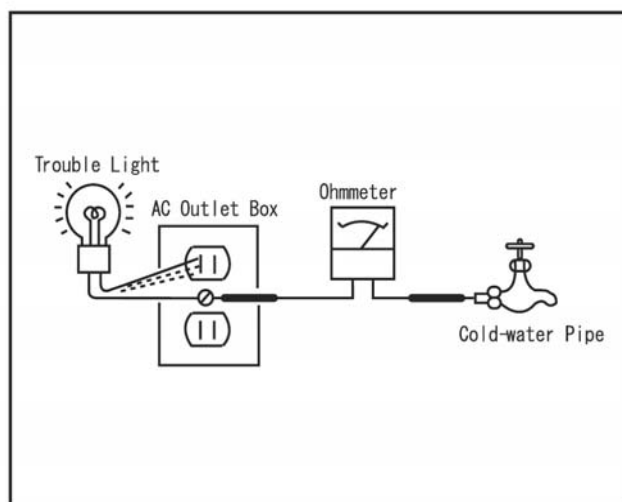


Figure B. Checking for earth ground.

WARNING 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!!

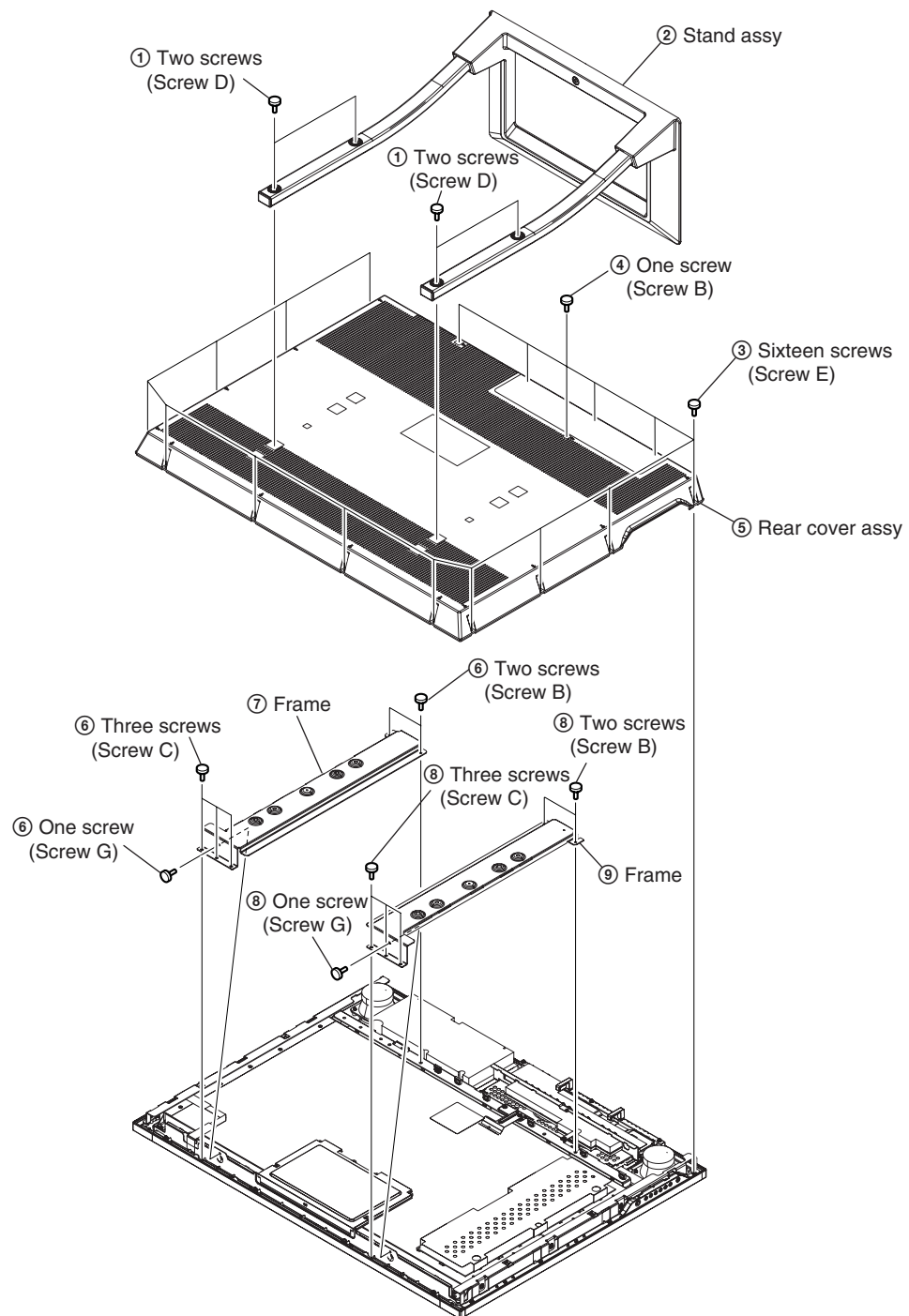
Replace all components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony.

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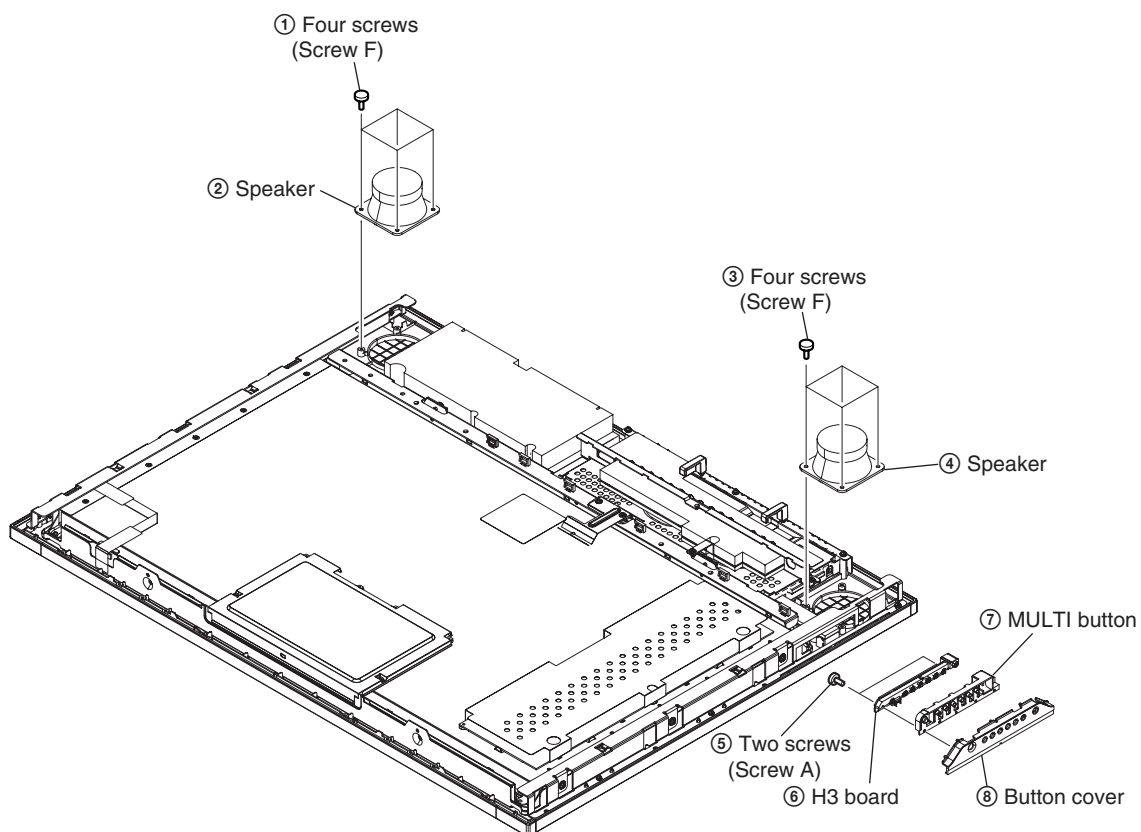
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SECTION 1 DISASSEMBLY

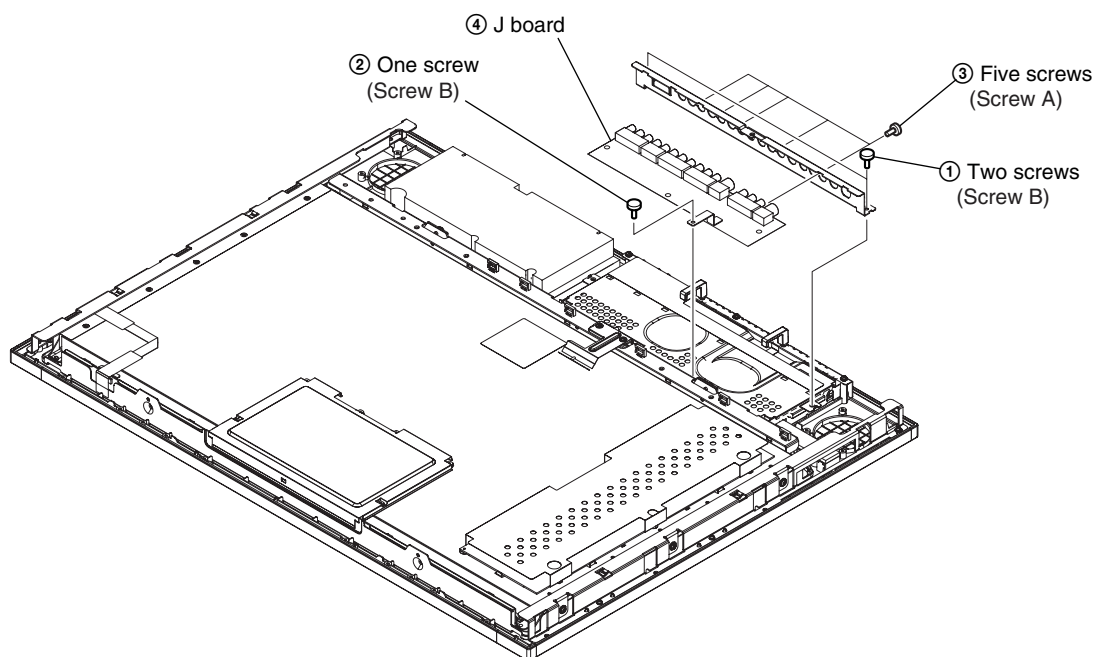
1-1. STAND ASSY AND REAR COVER REMOVAL



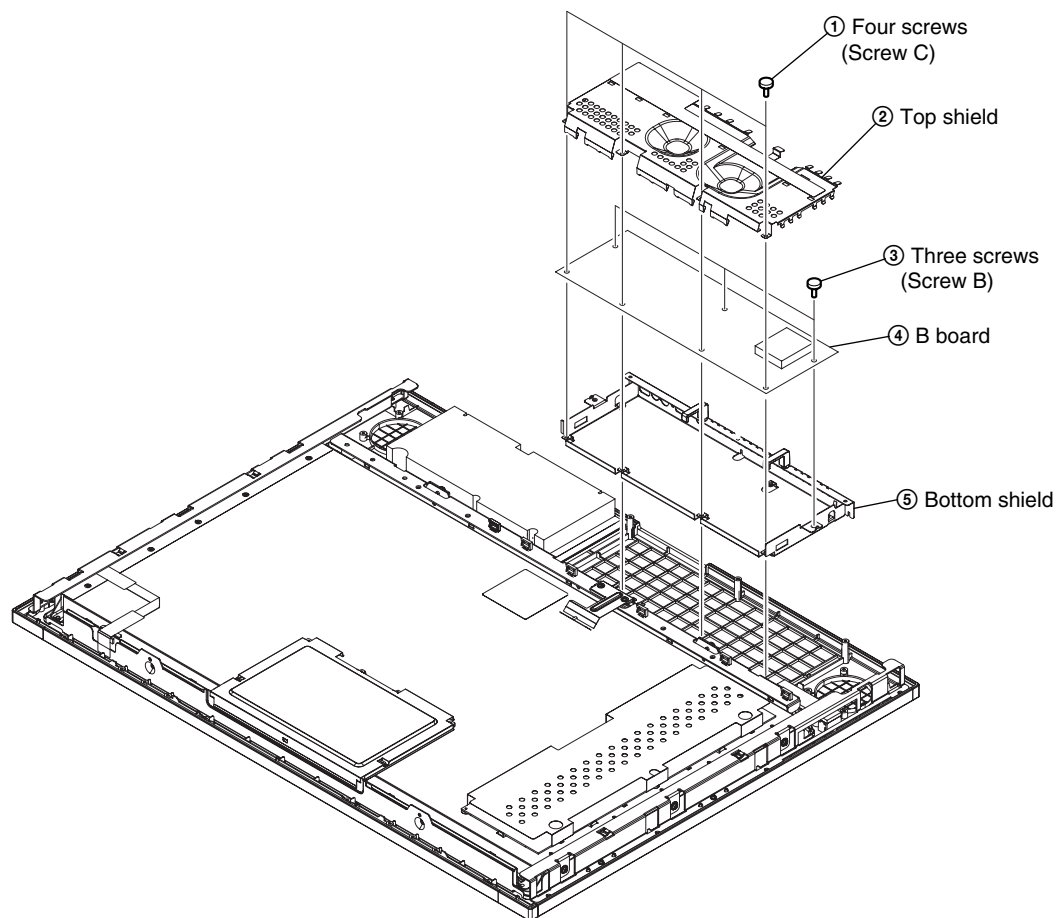
1-2. H3 BOARD AND SPEAKER REMOVAL



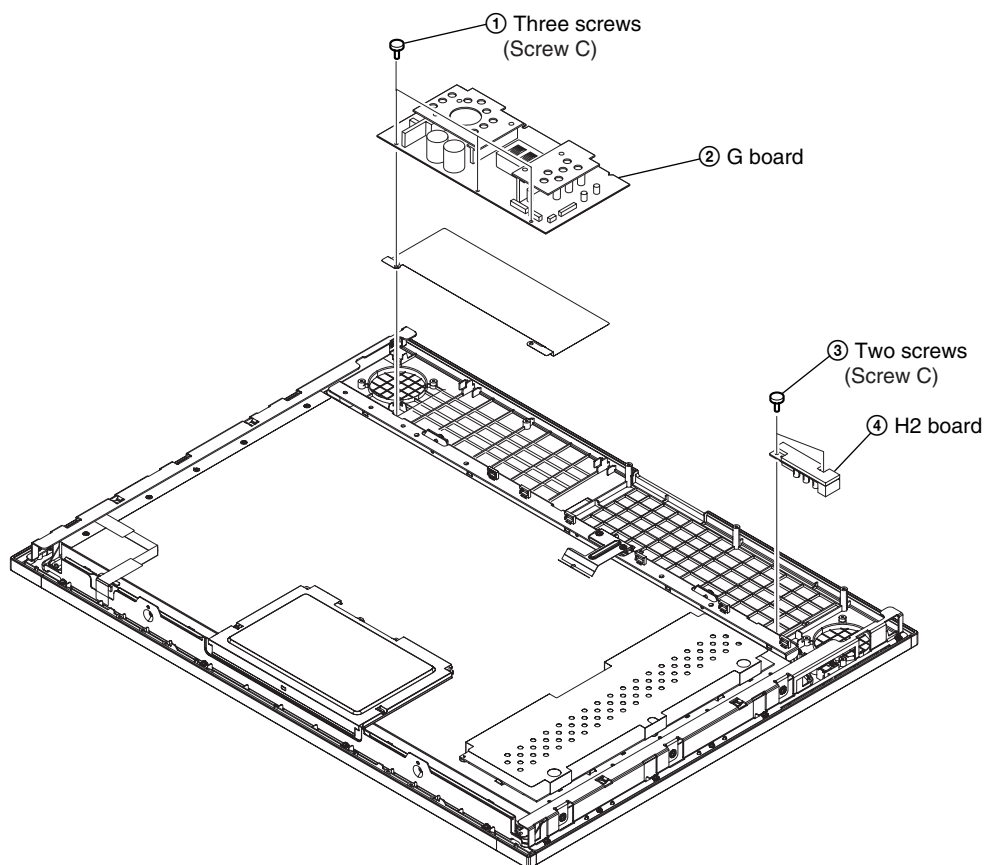
1-3. J BOARD REMOVAL



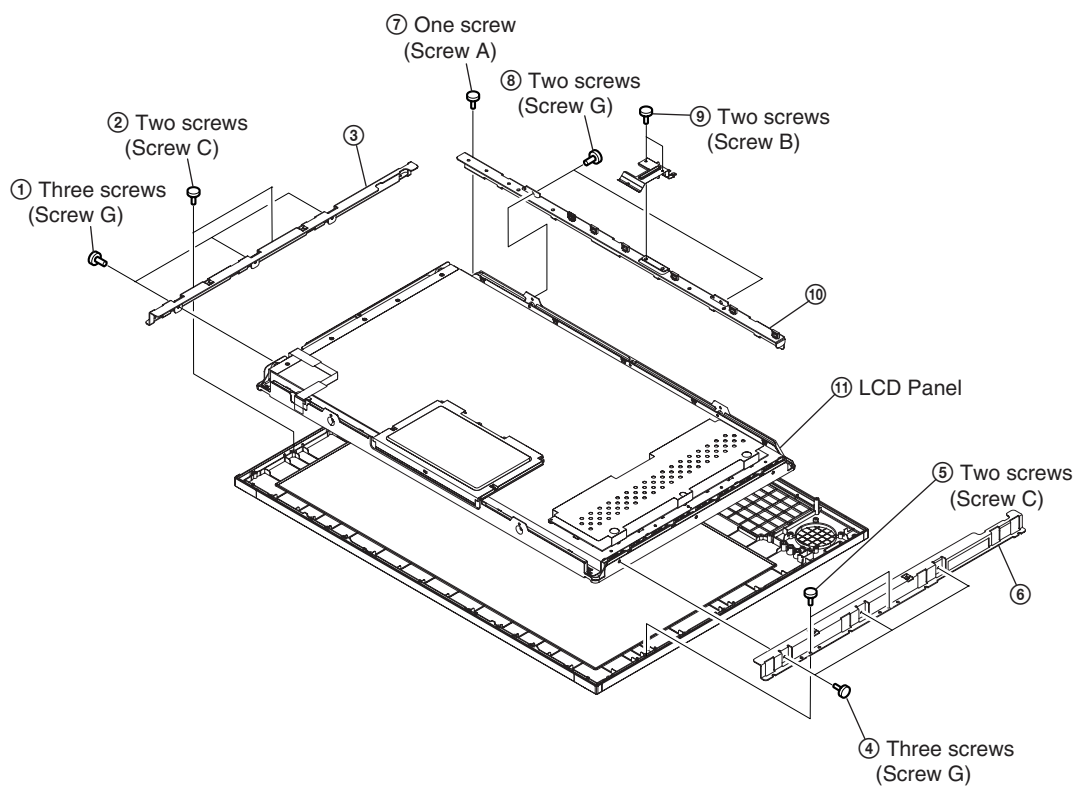
1-4. B BOARD REMOVAL



1-5. G AND H2 BOARDS REMOVAL



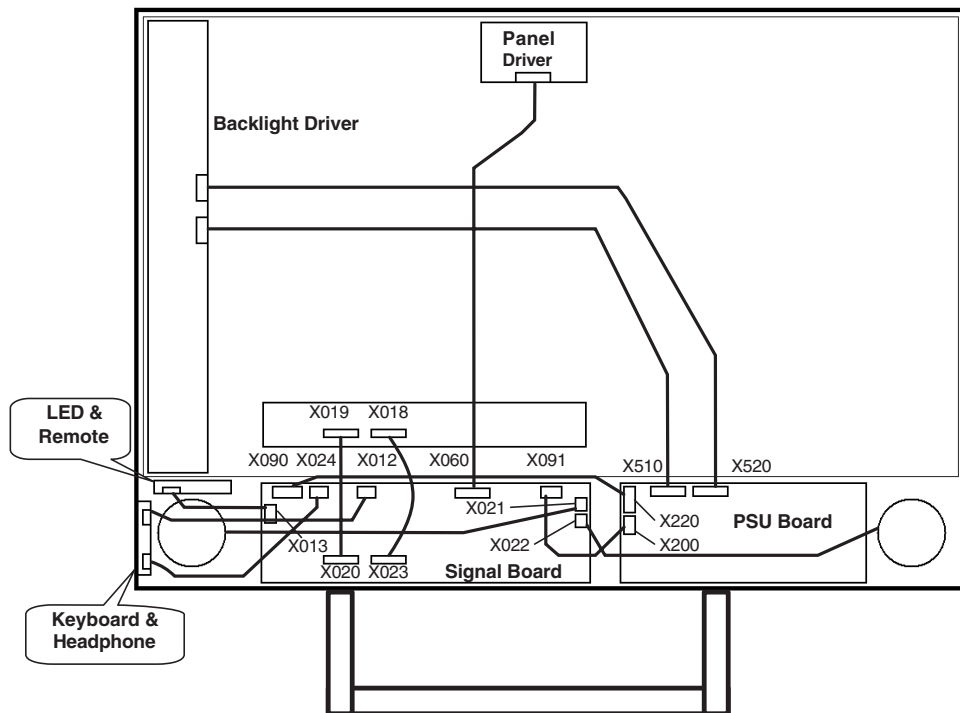
1-6. PANEL REMOVAL



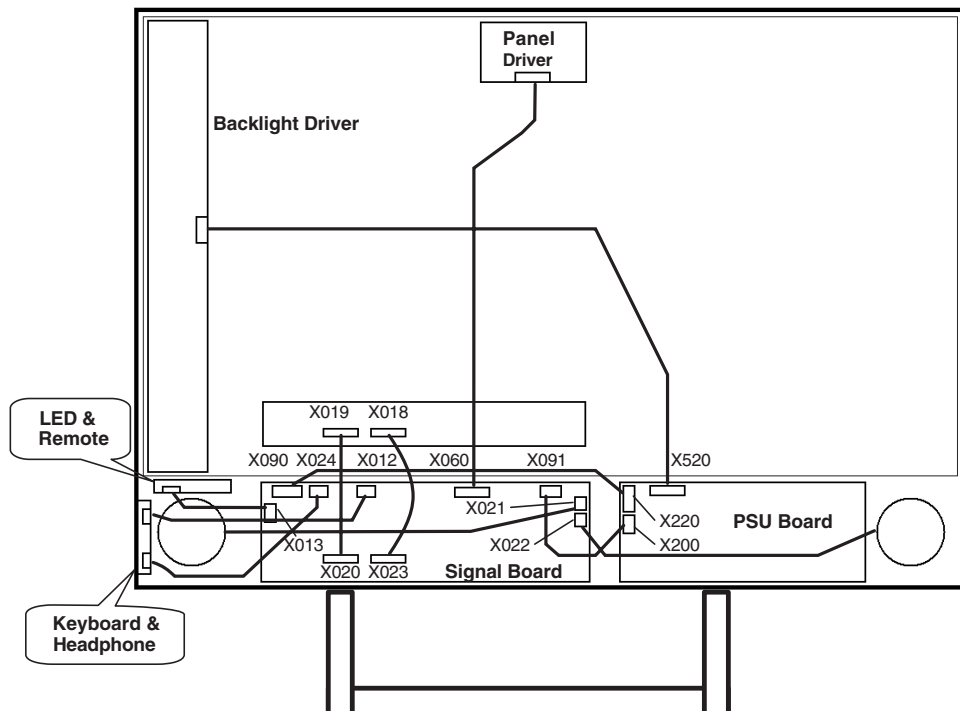
SECTION 2 DIAGRAMS

2-1. BOARD LAYOUT AND WIRING LAYOUT

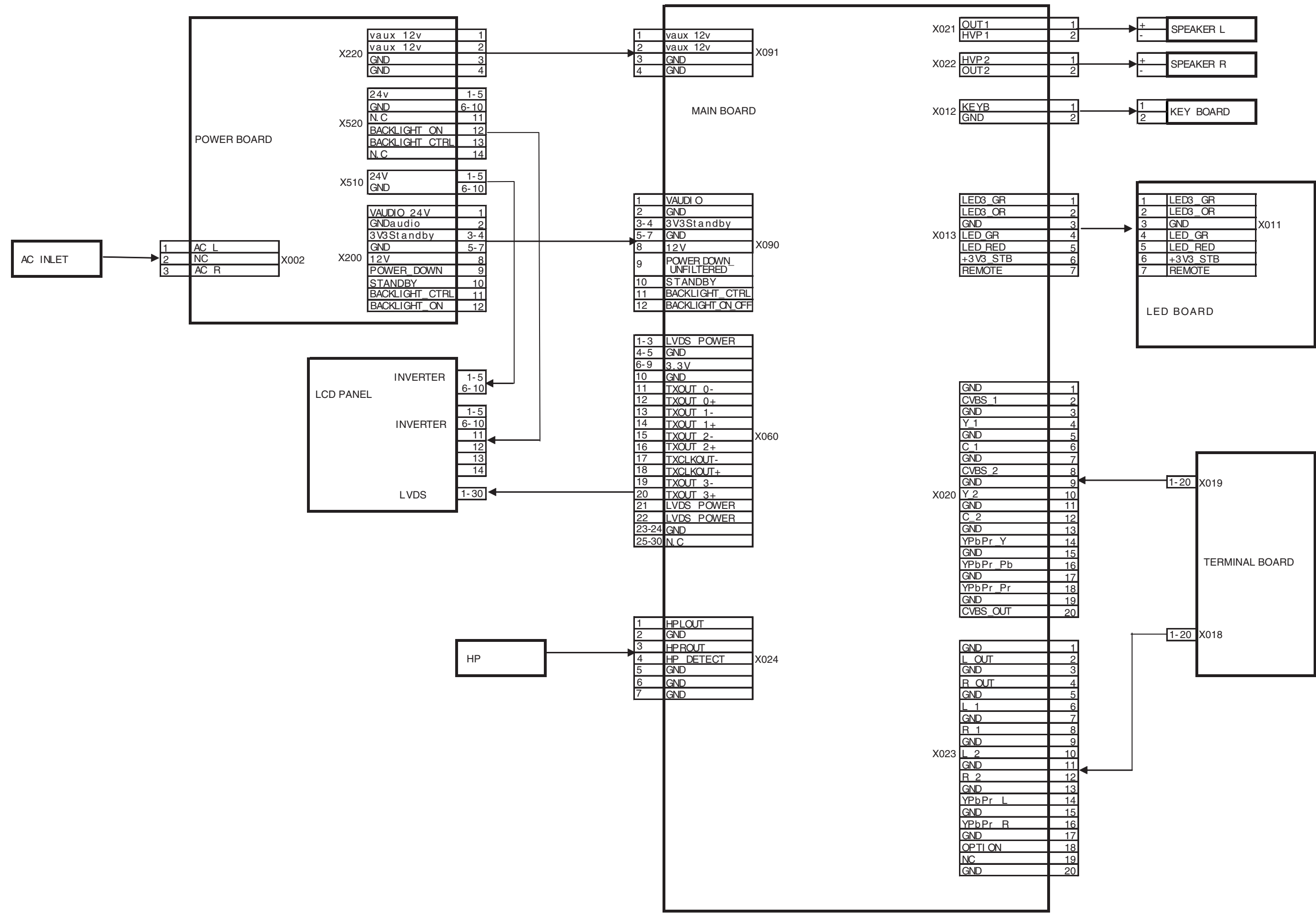
(1) KLV-32T200A

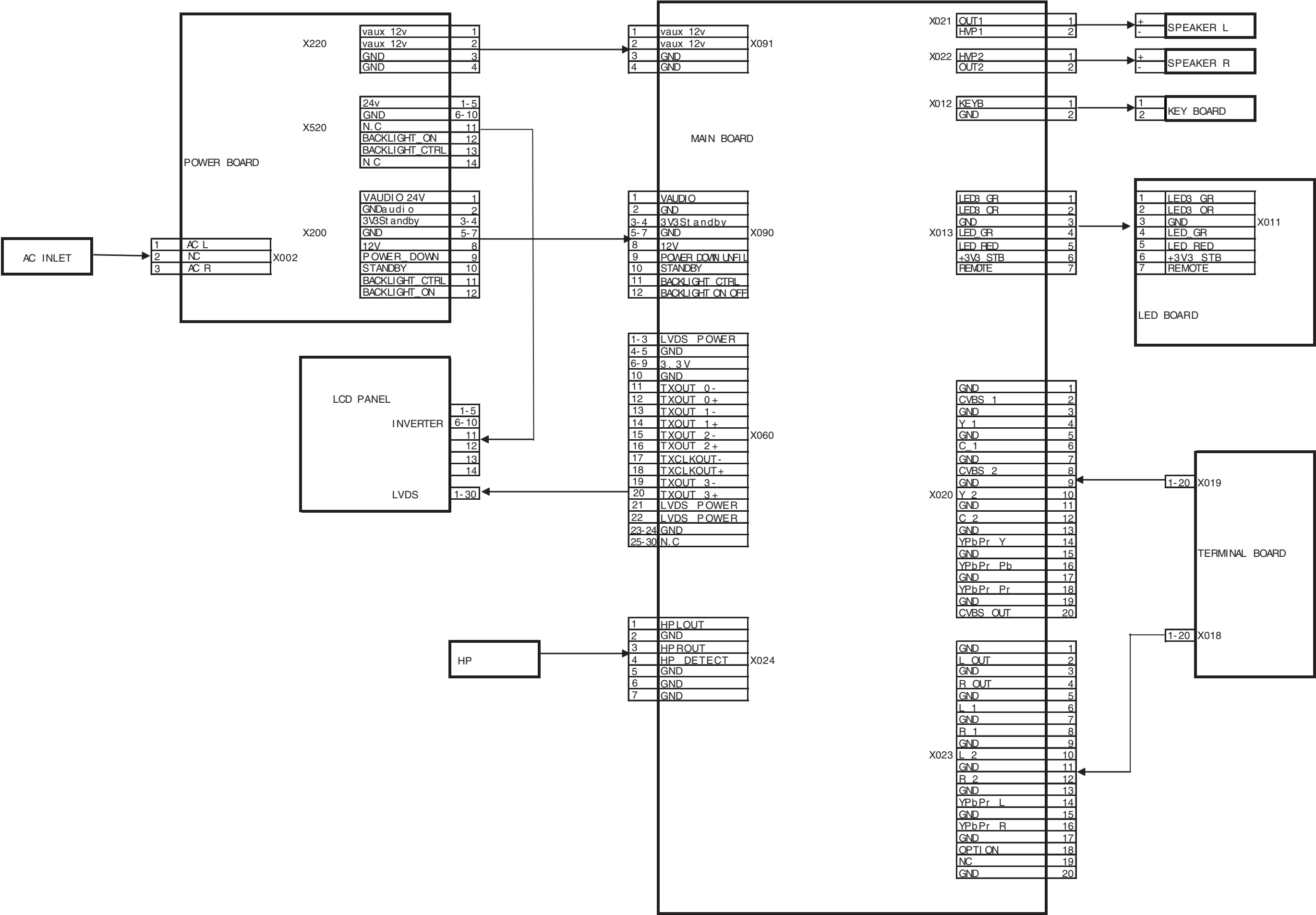


(2) KLV-40T200A



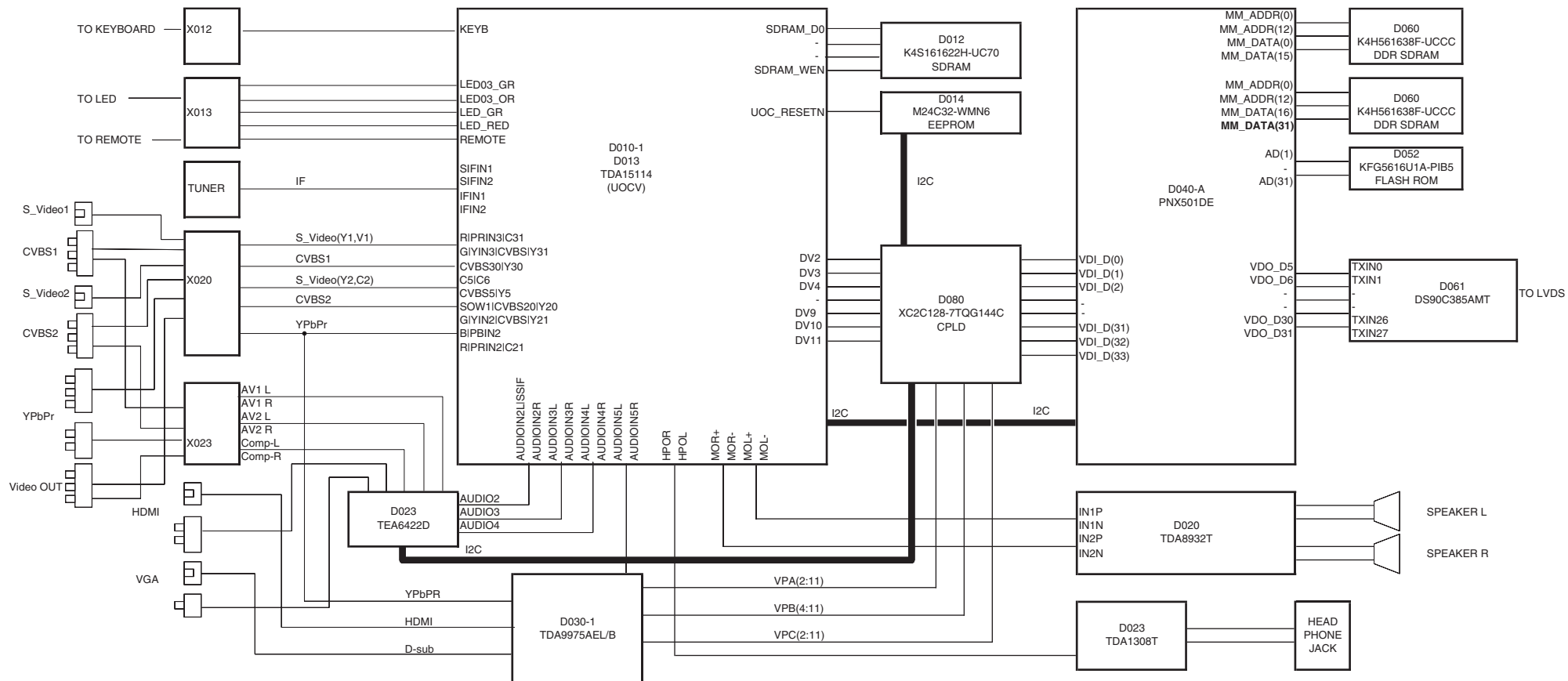
2-2. FRAME DIAGRAMS
(1) KLV-32T200A





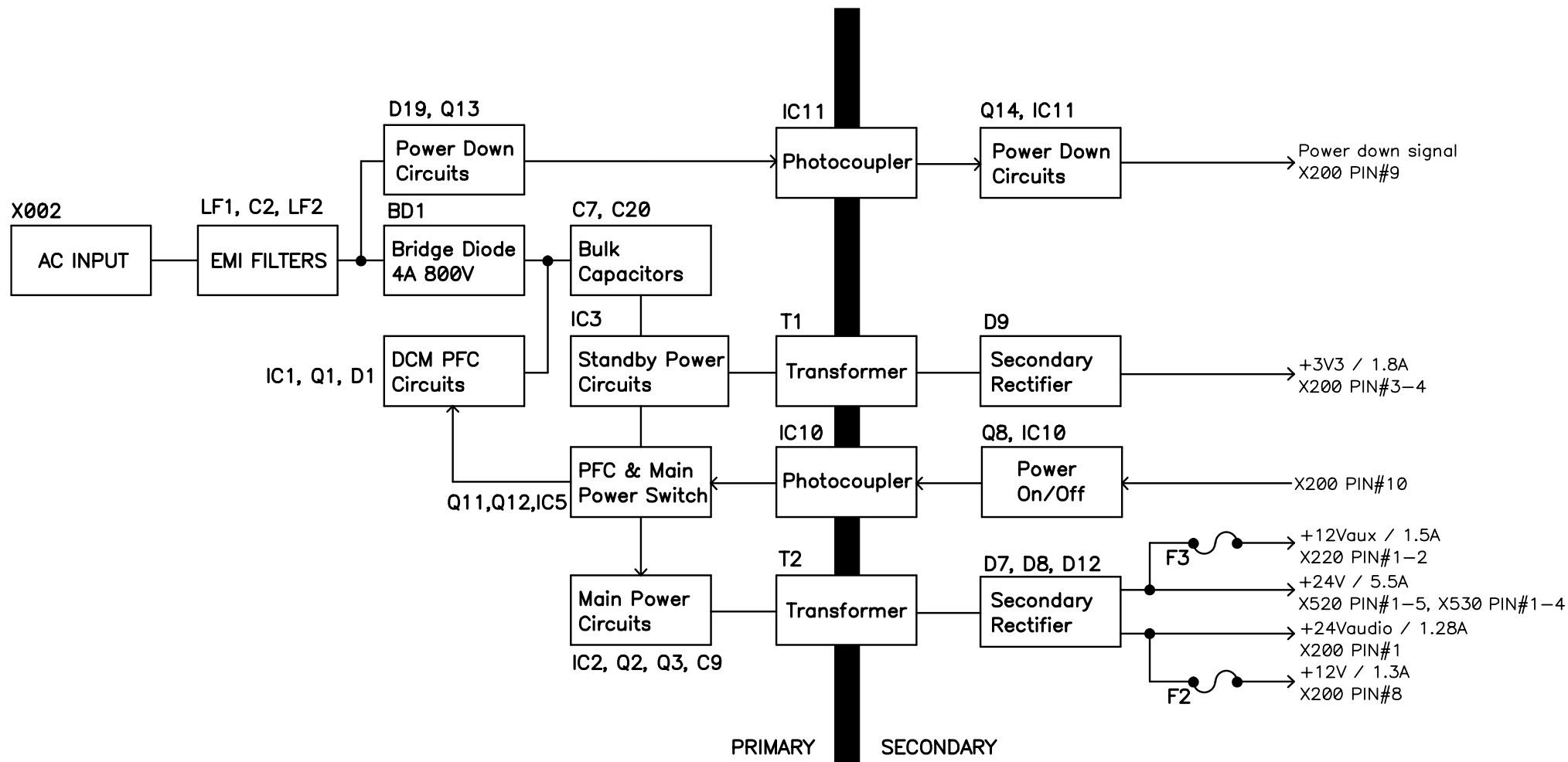
2-3. BLOCK DIAGRAMS

2-3-1. SIGNAL BLOCK DIAGRAM

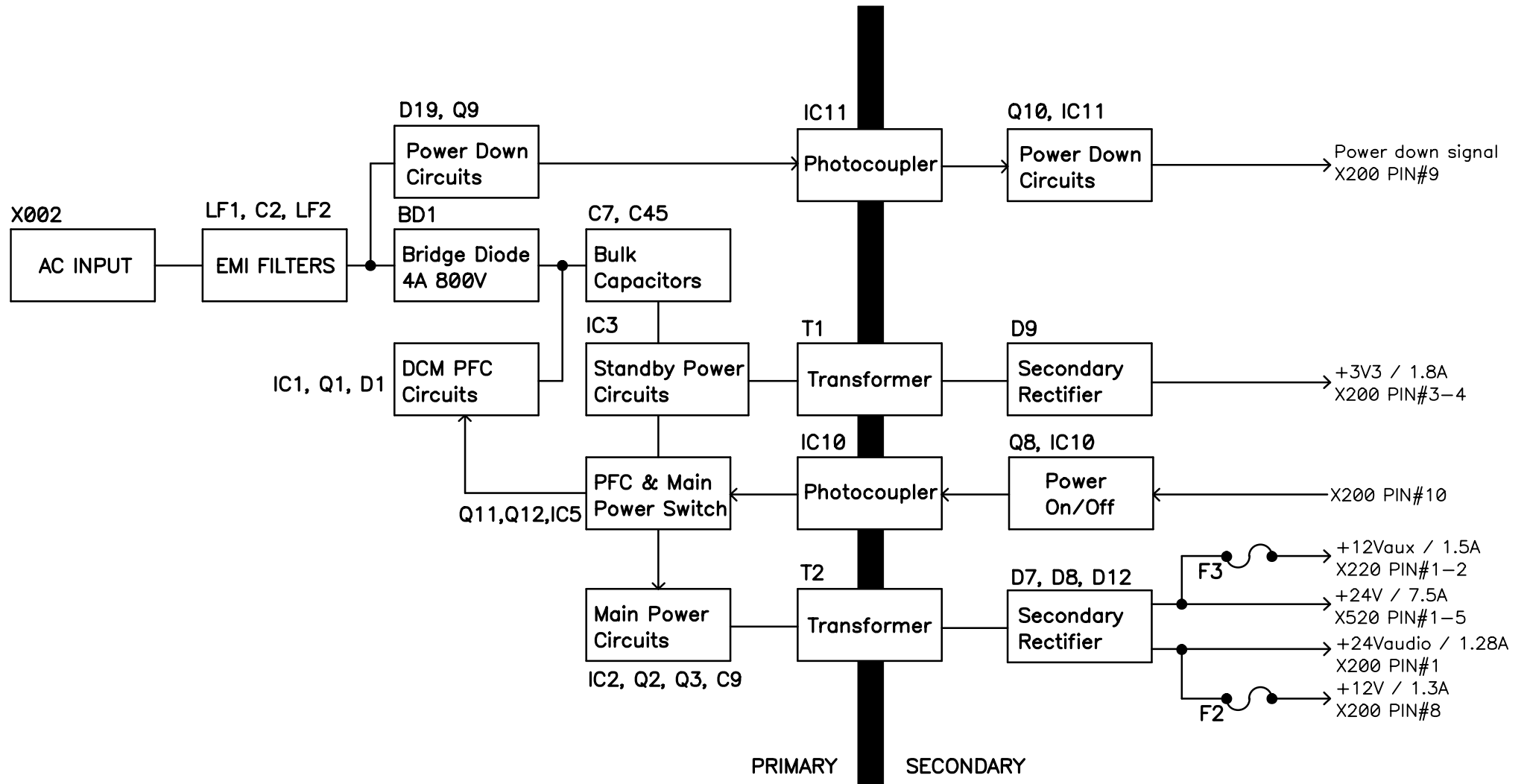


2-3-2. POWER BOARD BLOCK DIAGRAMS

(1) KLV-32T200A



(2) KLV-40T200A

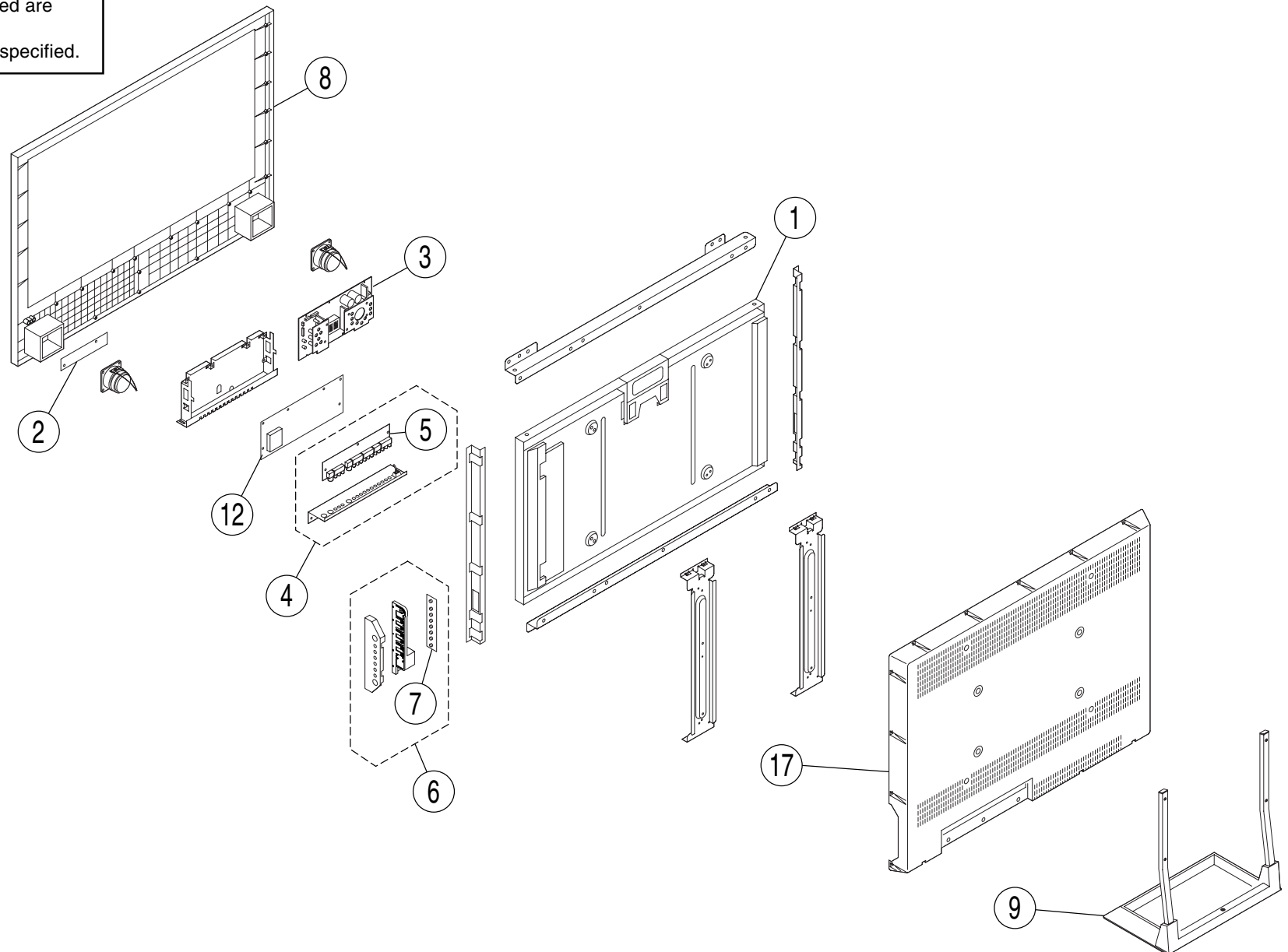


SECTION 3 EXPLODED VIEWS

NOTE:

The components identified \triangle marked are critical for safety.
Replace only with the part number specified.

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- For mounting location of Screw A, B, C, D, E, F, and G, refer to DISASSEMBLY of SECTION 1.



No.	Part No	DESCRIPTION	REMARKS
1	A1215540A	PANEL ASSY	
2	A1215514A	H2 MOUNT	
3	A1215541A	G COMPLE	
4	A1215519A	TERMINAL ASSY	
5	A1215520A	J COMPLE	
6	A1215521A	BUTTON BLOCK ASSY	
7	A1215523A	H3 COMPLE	
8	* A1215547A	BEZEL COMPLETE ASSY	
9	* A1215525A	STAND ASSY	
10	A1216287A	PACKING GROUP	
11	A1215531A	ACCESSORY ASSY	
12	A1216099A	B MOUNT (SERVICE)	
13	183394111	POWER SUPPLY CORD	
14	147986311	REMOTE COMMANDER	
15	309406701	MANUAL INSRTCTION	
16	X21499561	WALL MOUNT BRACKET ASSY	
17	X21765841	REAR COVER ASSY (32)	
	309498201	Screw A	
	309498301	Screw B	
	309498401	Screw C	
	309498501	Screw D	
	309498601	Screw E	
	320900701	Screw F	
	320909701	Screw G	

NOTE:

- For mounting location of Screw A, B, C, D, E, F, and G, refer to DISASSEMBLY of SECTION 1.

No.	Part No	DESCRIPTION	REMARKS
1	A1215513A	PANEL ASSY	
2	A1215514A	H2 MOUNT	
3	A1215515A	G COMPLE	
4	A1215519A	TERMINAL ASSY	
5	A1215520A	J COMPLE	
6	A1215521A	BUTTON BLOCK ASSY	
7	A1215523A	H3 COMPLE	
8	* A1215524A	BEZEL COMPLETE ASSY	
9	* A1215525A	STAND ASSY	
10	A1215529A	PACKING GROUP	
11	A1215531A	ACCESSORY ASSY	
12	A1216121A	B MOUNT (SERVICE)	
13	183394111	POWER SUPPLY CORD	
14	147986311	REMOTE COMMANDER	
15	309406701	MANUAL INSRTCTION	
16	X21499561	WALL MOUNT BRACKET ASSY	
17	X21765851	REAR COVER ASSY (40)	
	309498201	Screw A	
	309498301	Screw B	
	309498401	Screw C	
	309498501	Screw D	
	309498601	Screw E	
	320900701	Screw F	
	320909701	Screw G	

NOTE:

- For mounting location of Screw A, B, C, D, E, F, and G, refer to DISASSEMBLY of SECTION 1.

