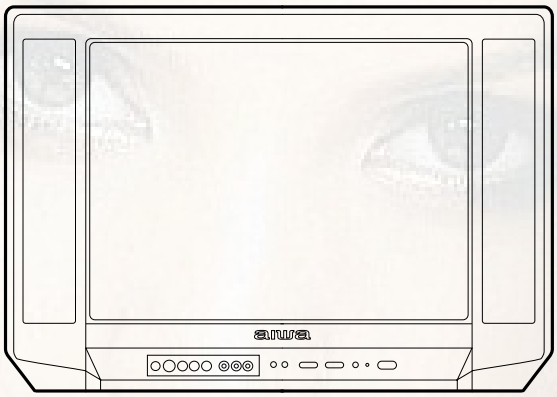
aiwa SERVICE

TV-FA2110

SHJ2
KERJ2
KER71



SERVICE MANUAL

COLOR TELEVISION

This Service Manual is the “Revision Publishing” and replaces “Simple Manual” (S/M Code 09-023-457-3T1).

aiwa

S/M Code No. 09-023-457-3R1

REVISION DATA

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To make the best use of this equipment, make sure to obey the following items when repairing (or mending).

1. Do not damage or melt the tunicate of the leading wire on the AC1 side, including the power supply cord.
2. Do not soil or stain the letters on the spec. inscription plates, notice labels, fuse labels, etc.
3. When repairing the part extracted from the conducted side of the board pattern, fix it firmly with applying bond to the pattern and the part.
4. Restore the following items after repairing.
   1) Conditions of soldering of the wires (especially, the distance on the AC1 side).
   2) Conditions of wiring, bundling of wires, etc.
   3) Types of the wries.
   4) Attachment conditions of all types of the insulation.
5. After repairing, always measure the insulation resistance and perform the voltage-withstand test (See Fig-1).

1) The insulation resistance must be 7.0 to 9.5 M when applying 500V per second.
2) In the voltage withstand test, apply 3 kV for 1 minute and check that the GO lamp lights.

* Breaking current set to 10 mA.
* Connect the safety checker as shown in Fig-1, then measure the resistance and perform the test.
* Do not touch the equipment during testing.
* For details of the safety checker, refer to the supplied Operation manual.

Insulation resistance: 7.0 to 9.5 M (500 V/s)
Voltage-withstand: 3 kV for 1 minute

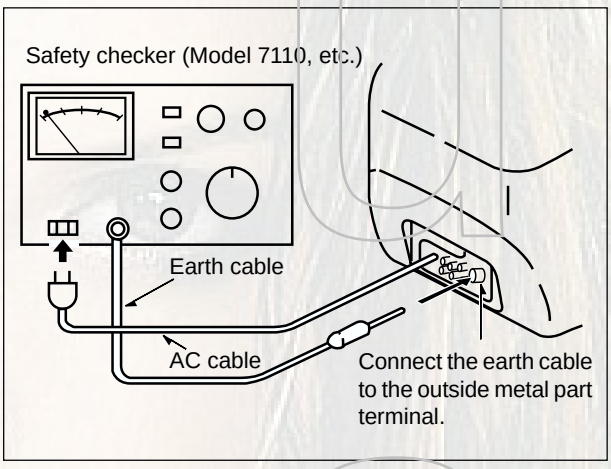

Fig-1

When servicing and checking on the TV, note the followings.

1. Keep the notices.
   As for the places which need special attentions, they are indicated with labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.
2. Avoid an electric shock.
   There is a high voltage part inside. Avoid an electric shock while the e ectric current is flowing.
3. Use the designated parts.
   The parts in this equipment have the specific characteristics of incombustibility and withstand voltage for safety.
   Therefore, use a part which has the same character as the replaced part. Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts with a ⚠ mark, the designated parts must be used.
4. Put parts and wires in the original position after assembling or wiring.
   There are parts which use the insulation material such as a tube or tape for safety, or which are assembled so that these parts do not make contact with the printed board. The inside wiring is designed not to get close to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.
5. Take care of the cathode-ray tube.
   By setting an explosion-proof cathode-ray tube in this equipment, safety is secured against implosion. However, when removing it or servicing from the back, it gives out shock that is dangerous. Take enough care to deal with it.
6. Avoid an X-ray.
   Safety is secured against an X-ray by giving considerations to the cathode-ray tube and the high voltage peripheral circuit, etc. Therefore, when repairing the high voltage peripheral circuit, use the designated parts and do not change the circuit. Repairing, except indicates, causes rising of high voltage, and the cathode-ray tube emits an X-ray.
7. Perform a safety check after servicing.
   Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are deteriorated portions around the places serviced.

⚠ Safety Components Symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to confirm to special Safety Specifications.
Therefore, when replacing a component with this symbol make absolutely sure that you use a designated part.

SPECIFICATIONS

KERJ2, KER71M MODEL

Tuner system	Frequency synthesized tuner
Screen Size	406 (W) × 305 (H) mm (16 × 12 1/8 in.) 508 mm (Visual diagonal) (20 in.)
TV system	PAL-B/G, D/K, H SECAM-B/G, D/K, K1 NTSC3.58 (5.5, 6.5 MHz) NTSC4.43 (5.5, 6.5 MHz) PAL60 (5.5, 6.5 MHz) SECAM60 (5.5, 6.5 MHz)
Color system	PAL, SECAM, PAL60, SECAM60, NTSC3.58, NTSC4.43
Channel coverage	VHF: E2-E12 UHF: E21-E69 CABLE: S1-S41
Antenna input	75 ohms, unbalanced
Video input	1 Vp-p, 75 ohms
Video output	1 Vp-p, 75 ohms
Audio input	0.5 Vrms, 33 K ohms more
Audio output	0.5 Vrms, 2.2 K ohms less
Speaker	120 mm × 60 mm, 8 ohms
Speaker output	7 W + 7 W (THD 10 %)
Operating temperature	5°C to 40°C
Operating humidity	35 % - 80 %
Power requirements	110-240 V AC, 50/60 Hz
Power consumption	98 watts (Standby mode: 8 watts)
Dimensions	610 (W) × 440 (H) × 485 (D) mm
Weight	Approx. 26.5 kg

SHJ2 MODEL

Tuner system	Frequency synthesized tuner
Screen Size	406 (W) × 305 (H) mm (16 × 12 1/8 in.) 508 mm (Visual diagonal) (20 in.)
TV system	PAL-B/G, D/K, H, I SECAM-B/G, D/K, K1, I NTSC-M NTSC3.58 (5.5, 6.0, 6.5 MHz) NTSC4.43 (5.5, 6.0, 6.5 MHz) PAL60 (5.5, 6.0, 6.5 MHz) SECAM60 (5.5, 6.0, 6.5 MHz)
Color system	PAL, SECAM, PAL60, SECAM60, NTSC3.58, NTSC4.43
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Power requirements	110-240 V AC, 50/60 Hz
Power consumption	98 watts (Standby mode: 8 watts)
Dimensions	610 (W) × 440 (H) × 485 (D) mm
Weight	Approx. 26.5 kg

Design and specifications are subject to change without notice for the purpose of performance improvement.

ACCESSORIES PARTS LIST -1/1

! = ⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		O	AS1001	83-JEU-906-010	IB,KE (E/CH/A/PE) TV-FA2110 -M	a	.	.
		O	AS1001	83-JEU-901-010	IB,KE (E/CH/A/PE) TV-FA2110 -S	.	b	.
		O	AS1001	83-JEU-903-010	IB,SH (E/CH/A/PE) TV-FA2110 -S	.	.	c
		O	AS1002	83-JBC-950-010	RC UNIT,RC-BVT08	a	b	c

1. REAR CABINET REMOVAL

(1) Remove four screws ①, and three screws ②, then remove the rear cabinet in the direction of the arrow. (See Figure1-1)

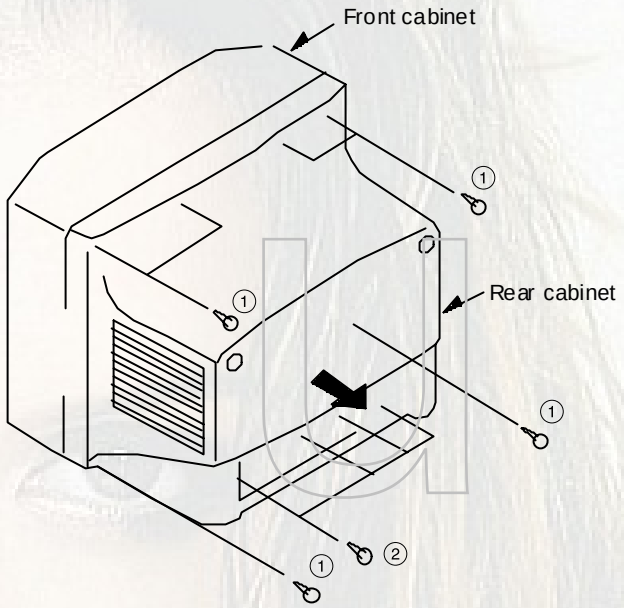


Figure 1-1

2. HIGH-VOLTAGE CAP (ANODE CAP) REMOVAL

2-1. Cautions before Removing

Discharge the anode voltage

(1) The anode voltage is not discharged completely from the CRT of this unit even after the power is turned off. Be sure to discharge the residual anode voltage before removing the anode cap.

Do not use pliers

(2) Do not use pliers, etc. to remove the anode cap. If you used pliers and bent the hook to remove the cap, the spring characteristics of the hook could be lost, and when reinstalled, the cap would come off from the CRT anode button easily, causing an accident.

Do not turn the anode cap

(3) If the anode cap is turned in the direction of its circumference, the hook is likely to come off.

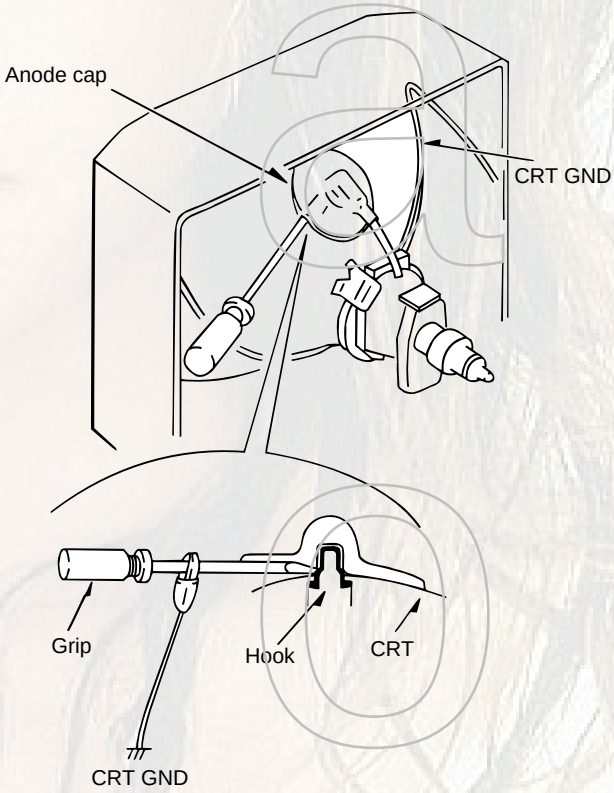


Figure 2-1

2-2. Anode Cap Removal

Discharge the anode voltage. (See Figure 2-1)

(1) Connect a flat-bladed screwdriver to the CRT GND via an alligator clip.
(2) Use a tester to check the end of the screwdriver and ground of the TV for continuity.
(3) Touch the hook with the end of the screwdriver.
Caution : Be careful not to damage the anode cap.
(4) Turn over the anode cap.
Caution : Be careful not to damage the anode cap.

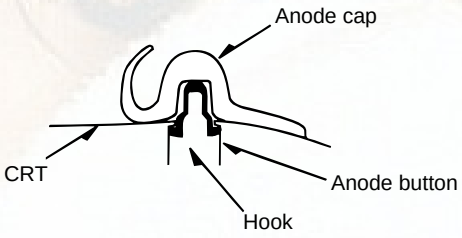


Figure 2-2

(5) Push the anode cap with your thumb in the direction of arrow ① as shown in the figure, then lift the cap in the direction of arrow ② to release the hook on one side. (See Figure 2-3)

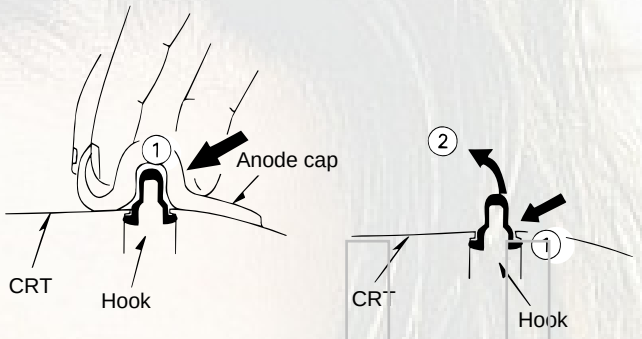


Figure 2-3

(6) Turn over the anode cap on the side where the hook was released and pull out the cap in the direction opposite to that on which the cap was pushed. (See Figure 2-4)
Caution : Do not pull out the anode cap straight up.
: Do not pull the cap forcibly. After removing the cap, check that the hook is not deformed.

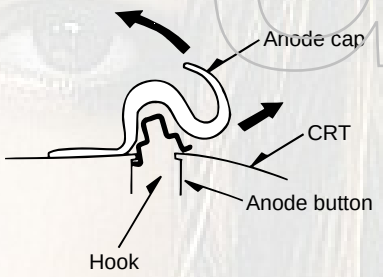


Figure 2-4

3. ANODE CAP REINSTALLTION

Observe the cautions carefully so that no accident occurs due to a defect in installing the anode cap and so it does not come off.

3-1. Caution before Reinstalling

Never turn the anode cap after installing it

Never re-use the hook when it has been deformed

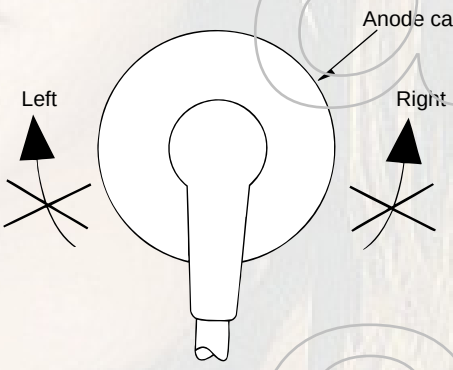


Figure 3-1

(1) If the anode cap is turned after it is installed, it may come off. Therefore, arrange the high-voltage cable before attaching the anode cap. (See Figure 3-1)
(2) If you have attached the anode cap before arranging the high-voltage cable, arrange the cable carefully so the cap does not turn.

3-2. Anode cap reinstallation

(1) Use a clean cloth moistened slightly with alcohol to clean the installation section. (See Figure 3-2)
Caution : Check that the installation section is free from dust, foreign matter, etc.
(2) Coat the anode cap installation circumference with an appropriate amount of the specified silicone grease (KS-650N).
Caution : Be careful that silicone grease does not enter the anode button.

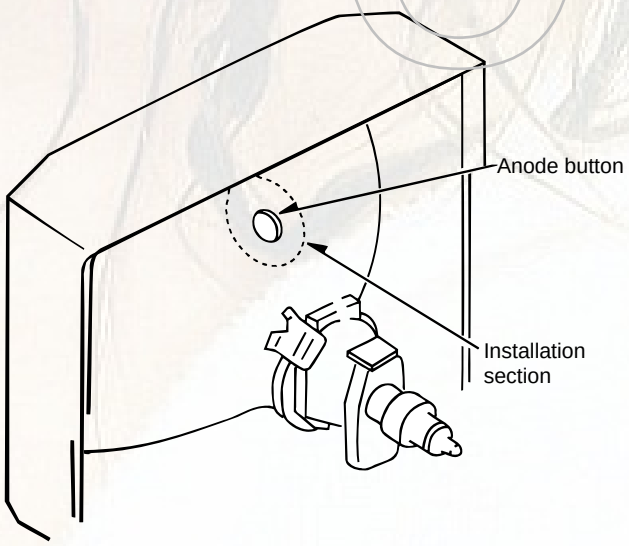


Figure 3-2

(3) Eliminate twisting, etc. of the high-voltage cable and arrange it so that no twisting occurs. (See Figure 3-3)
Caution : If the cable is not arranged correctly, the anode cap could turn and cause an installation defect.

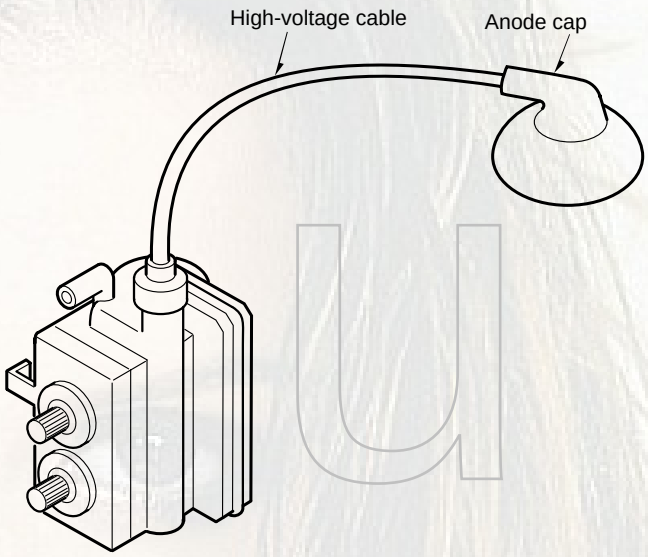


Figure 3-3

(4) Turn over the rubber cap symmetrically on the left and right. (See Figure 3-4)
Caution : Take great care not to damage the anode cap.

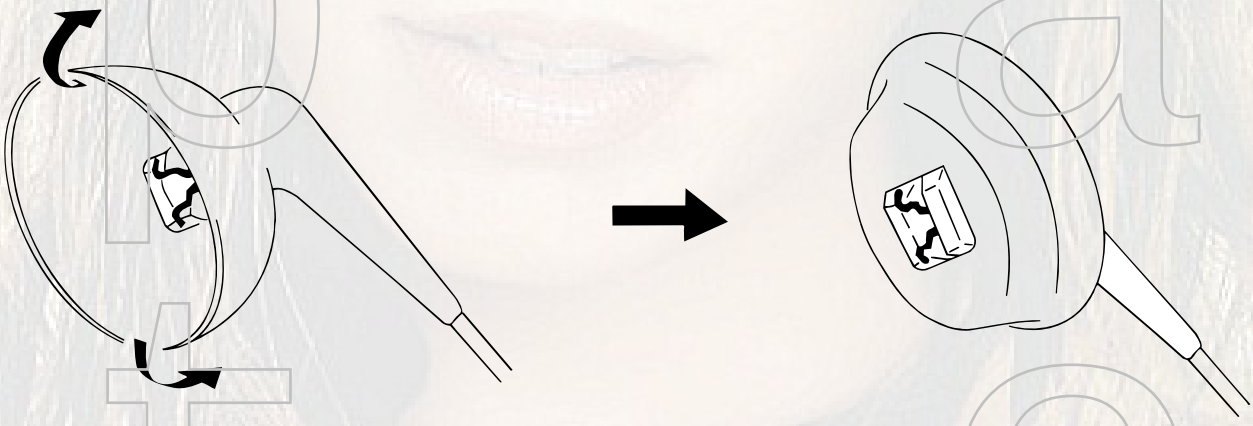


Figure 3-4

(5) Fit your forefinger over the projection at the center of the cap and hold the cap between your thumb and middle finger. (See Figure 3-5)

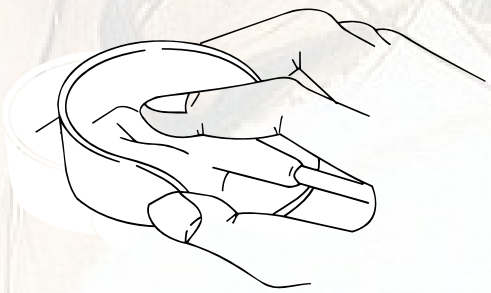
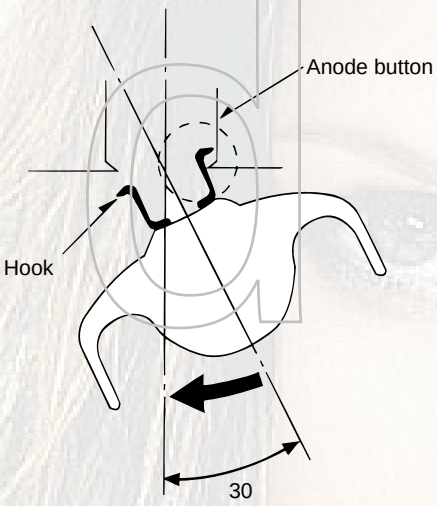


Figure 3-5

(6) Apply the hook on one side to the anode button as shown on the figure. (See Figure 3-6)
Caution : Check that the hook is held securely.
(7) Apply the hook on the other side to the anode button as shown in Figure 3-7.



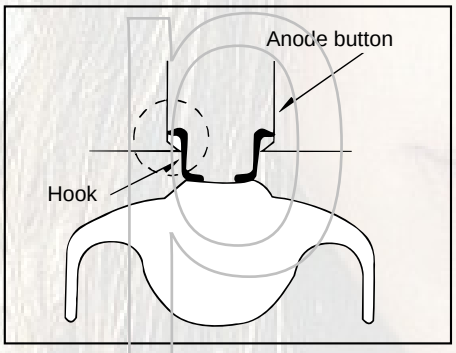


Figure 3-7

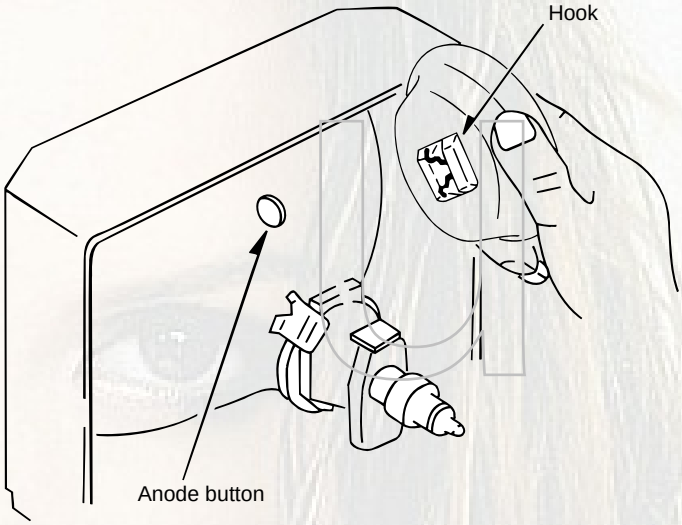


Figure 3-6

(8) Pull the anode cap slightly with the rubber cap turned over and visually check that the hook is engaged securely.
(9) Release your hand from the rubber cap of the anode cap.
Caution : Cover the anode cap so that it does not lift.
(10) Hold the skirt of the andoe cap slightly to improve the close contact between the cap and CRT.
(11) Check that the anode cap is in close contact with the CRT. (See Figure 3-8)

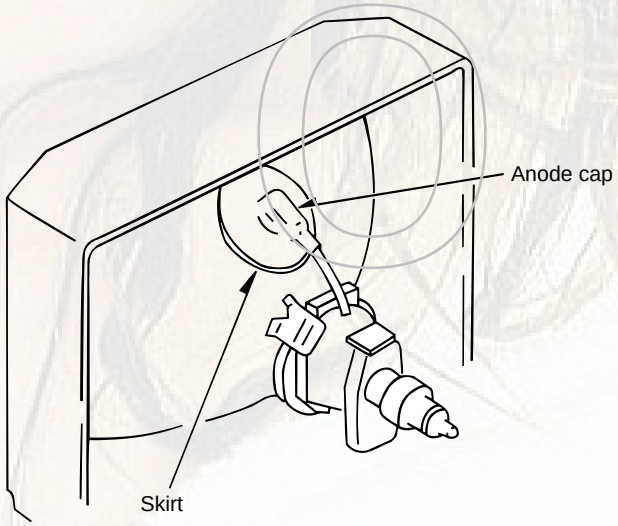


Figure 3-8

DISASSEMBLY-5/5

4. NK C.B REMOVAL
   (1) Disconnect CN903,CN906 (CRT GND).
   (2) Remove the NK C.B in the direction of arrow 1 .
   (See Figure 4-1)

5. MAIN C.B,AUDIO C.B REMOVAL
   (1) Remove connector (CN501).
   (2) Remove connector (CN802).
   (3) Remove connector (CN801).
   (4) Pull out the MAIN C.B in the direction of the arrow 2
   (See Figure 4-1).

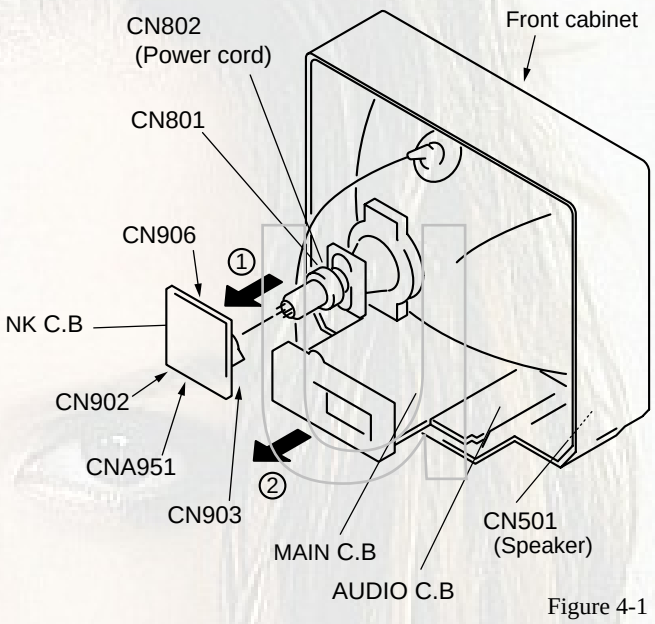


Figure 4-1

6. HOW TO ESTABLISH THE SERVICE POSITION
   (1) Disconnect CN501 (speaker).
   (2) Rotate the P.C.B. in the direction of “A” and establish the service position. (See Figure 5-1)

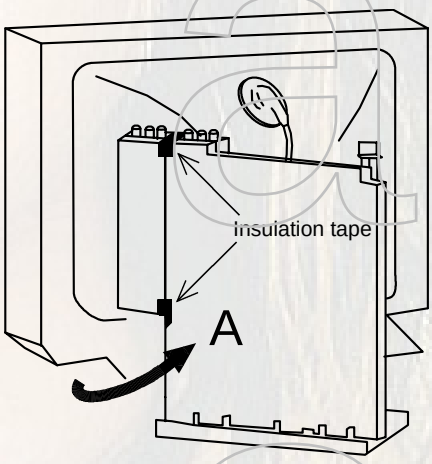


Figure 5-1

ELECTRICAL PARTS LIST -1/10

! = ⚠SAFTY PARTS
C = Components marked
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
AUDIO		O	C 0550	87-A10-891-080	CAP,E 4.7-25 SME(K)	a	b	c
AUDIO		O	C 0551	87-A10-891-080	CAP,E 4.7-25 SME(K)	a	b	c
AUDIO		O	C 0552	87-010-247-080	CAP,E 100-50 M SME	a	b	c
AUDIO		O	C 0553	87-010-126-080	CAP,E 470-50 M SME	a	b	c
AUDIO		O	C 0554	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
AUDIO		X	C 0555	88-707-939-810	CAP,M 0.22-50 J TF	a	b	c
AUDIO		X	C 0556	88-707-939-810	CAP,M 0.22-50 J TF	a	b	c
AUDIO		O	C 0557	87-A12-074-080	CAP,E 470-25 SMG	a	.	.
AUDIO		O	C 0557	87-010-387-080	CAP,E 470-25 M SME	.	b	c
AUDIO		O	C 0558	87-A12-074-080	CAP,E 470-25 SMG	a	.	.
AUDIO		O	C 0558	87-010-387-080	CAP,E 470-25 M SME	.	b	c
AUDIO		O	C 0559	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
AUDIO		O	C 0560	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
AUDIO		O	C 0561	87-A10-039-080	C-CAP,U 470P-50 J CH	a	b	c
AUDIO		O	C 0562	87-A10-039-080	C-CAP,U 470P-50 J CH	a	b	c
AUDIO		O	C 0563	87-A10-307-080	CAP,M 0.1-50 J	a	b	c
AUDIO		O	C 0564	87-A10-307-080	CAP,M 0.1-50 J	a	b	c
AUDIO		O	C 0565	87-A10-307-080	CAP,M 0.1-50 J	a	b	c
AUDIO		O	C 0566	87-010-406-080	CAP,E 22-50 M 11L SME	a	b	c
AUDIO		X	CLP0551	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
AUDIO		X	CLP0552	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
AUDIO		O	CN 0501	87-049-469-010	CONN,4P V WHT EH	a	b	c
AUDIO		O	CNA0505	8B-JET-659-010	CONN ASSY,6P VAUDIO JST	a	b	c
AUDIO		O	CNA0506	8B-JET-660-010	CONN ASSY,4P VA-POWER JST	a	b	c
AUDIO		O	CNA0509	8B-JET-654-110	CONN ASSY,10P V F-JACK	a	b	c
AUDIO		X	EY 0550	81-JT1-215-010	EYELET2.0-3.0	a	b	c
AUDIO		X	EY 0551	81-JT1-215-010	EYELET2.0-3.0	a	b	c
AUDIO		X	HT 0550	8E-JET-640-010	HT-SINK,AUDIO	a	.	.
AUDIO		X	HT 0550	8B-JET-217-010	HT-SINK,AUDIO	.	b	c
AUDIO		S	IC 0550	87-A21-283-010	IC,AN5277	a	b	c
AUDIO		O	J 0501	87-009-216-010	JACK,3.5 BLK ST W/SW	a	b	c
AUDIO		O	J 0502	87-A60-875-010	JACK,PIN 3P +S YKC22-0477	a	b	c
AUDIO		O	L 0550	87-003-149-080	COIL,47UH J LAL02	a	b	c
AUDIO		O	L 0551	87-003-149-080	COIL,47UH J LAL02	a	b	c
AUDIO		O	R 0551	87-A01-104-090	RES,M/F 390-1W J RSS1X	a	b	c
AUDIO		O	R 0552	87-A01-104-090	RES,M/F 390-1W J RSS1X	a	b	c
AUDIO		O	R 0553	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
AUDIO		O	R 0554	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
AUDIO		O	R 0555	88-108-563-080	C-RES,U 56K-1/16W J	a	b	c
AUDIO		O	R 0556	88-108-563-080	C-RES,U 56K-1/16W J	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
AUDIO		O	R 0557	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
AUDIO		X	R 0558	88-108-750-080	C-RES,U 75-1/16W J	a	b	c
AUDIO		O	R 0559	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
AUDIO		X	R 0560	88-108-750-080	C-RES,U 75-1/16W J	a	b	c
AUDIO		O	R 0561	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
AUDIO		X	R 0562	88-108-750-080	C-RES,U 75-1/16W J	a	b	c
AUDIO		O	R 0563	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
AUDIO		O	R 0564	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
AUDIO		X	R 0565	88-108-122-080	C-RES,U 1.2K-1/16W J	a	b	c
AUDIO		X	R 0566	88-108-122-080	C-RES,U 1.2K-1/16W J	a	b	c
AUDIO		S	R 0567	87-029-141-060	RES,FUSE 1-1/4W J	a	b	c
AUDIO		S	R 0568	87-029-141-060	RES,FUSE 1-1/4W J	a	b	c
AUDIO		O	R 0569	88-108-223-080	C-RES,U 22K-1/16W J	a	b	c
AUDIO		X	R 0572	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
AUDIO		X	R 0573	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
AUDIO		O	R 0576	88-108-822-080	C-RES,U 8.2K-1/16W J	a	b	c
AUDIO		O	R 0577	88-108-822-080	C-RES,U 8.2K-1/16W J	a	b	c
MAIN		O	C 0001	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0002	87-012-265-080	C-CAP,U 100P-50 J UJ	a	b	c
MAIN		O	C 0003	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0004	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0005	87-016-045-080	CAP,E 1000-6.3 M SMG	a	b	c
MAIN		O	C 0006	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0007	87-012-176-080	C-CAP,U 15P-50 J CH	a	b	c
MAIN		O	C 0008	87-012-176-080	C-CAP,U 15P-50 J CH	a	b	c
MAIN		O	C 0011	87-010-380-080	CAP,E 47-16 M 11L SME	a	b	c
MAIN		O	C 0012	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0013	87-010-112-080	CAP,E 100-16 M 11L SME	a	b	c
MAIN		O	C 0101	87-A12-310-080	C-CAP,U 0.01-50 K B	a	b	c
MAIN		O	C 0102	87-A12-088-080	CAP,E 2.2-50 SMG	a	.	.
MAIN		O	C 0102	87-010-402-080	CAP,E 2.2-50 M 11L SME	.	b	c
MAIN		O	C 0103	87-A12-310-080	C-CAP,U 0.01-50 K B	a	b	c
MAIN		O	C 0104	87-A12-066-080	CAP,E 47-16 SMG	a	.	.
MAIN		O	C 0104	87-010-380-080	CAP,E 47-16 M 11L SME	.	b	c
MAIN		O	C 0105	87-A12-310-080	C-CAP,U 0.01-50 K B	a	b	c
MAIN		O	C 0106	87-A12-310-080	C-CAP,U 0.01-50 K B	a	b	c
MAIN		O	C 0108	87-010-112-080	CAP,E 100-16 M 11L SME	a	b	c
MAIN		X	C 0301	88-707-938-810	CAP,M 0.22-50 J MT	a	b	c
MAIN		O	C 0302	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0303	87-A12-068-080	CAP,E 470-16 SMG	a	b	c

ELECTRICAL PARTS LIST -2/10

! = ⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	C 0304	83-707-938-810	CAP,M 0.22-50 J MT	a	b	c
MAIN		O	C 0305	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a	b	c
MAIN		O	C 0306	87-010-401-080	CAP,E 1-50 M 11L SME	a	b	c
MAIN		O	C 0307	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a	b	c
MAIN		O	C 0308	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a	b	c
MAIN		O	C 0310	87-010-401-080	CAP,E 1-50 M 11L SME	a	b	c
MAIN		O	C 0311	87-A10-307-080	CAP,M 0.1-50 J	a	b	c
MAIN		O	C 0312	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a	b	c
MAIN		O	C 0313	87-012-280-080	C-CAP,U 3300P-50 K B GRM	a	b	c
MAIN		O	C 0315	87-012-282-080	C-CAP,U 4700P-50 K B GRM	a	b	c
MAIN		O	C 0316	87-012-273-080	C-CAP,U 820P-50 K B GRM	a	b	c
MAIN		O	C 0317	87-A10-307-080	CAP,M 0.1-50 J	a	b	c
MAIN		O	C 0318	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0319	87-A12-068-080	CAP,E 470-16 SMG	a	b	c
MAIN		O	C 0320	87-A10-303-080	CAP,M 0.047-50 J	a	b	c
MAIN		O	C 0321	87-A10-283-080	CAP,M 1000P-50 J	a	.	.
MAIN		X	C 0321	88-700-610-810	CAP,M 1000P-50 J	.	b	c
MAIN		O	C 0322	87-010-402-080	CAP,E 2.2-50 M 11L SME	a	b	c
MAIN		O	C 0323	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a	b	c
MAIN		O	C 0324	87-A12-065-080	CAP,E 33-16 SMG	a	.	.
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0324	87-010-265-080	CAP,E 33-16 M 11L SME	.	b	c
MAIN		O	C 0326	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a	b	c
MAIN		O	C 0327	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a	b	c
MAIN		O	C 0328	87-012-188-080	C-CAP,U 47P-50 J CH GRM	a	b	c
MAIN		O	C 0333	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0334	87-019-131-080	CAP,TC U 1000P-50 K B UP050	a	b	c
MAIN		O	C 0336	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0337	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0338	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0340	87-010-404-080	CAP,E 4.7-50 M 11L SME	a	b	c
MAIN		O	C 0401	87-010-260-080	CAP,E 47-25 M 11L SME	a	b	c
MAIN		O	C 0410	87-010-404-080	CAP,E 4.7-50 M 11L SME	a	b	c
MAIN		O	C 0411	87-A12-088-080	CAP,E 2.2-50 SMG	a	.	.
MAIN		O	C 0411	87-010-402-080	CAP,E 2.2-50 M 11L SME	.	b	c
MAIN		O	C 0412	87-012-285-080	C-CAP,U 8200P-50 K B GRM	a	b	c
MAIN		O	C 0413	87-A11-228-080	C-CAP,U 0.027-25 K B	a	b	c
MAIN		O	C 0414	87-A12-087-080	CAP,E 1-50 SMG	a	.	.
MAIN		O	C 0414	87-010-401-080	CAP,E 1-50 M 11L SME	.	b	c
MAIN		O	C 0415	87-A12-088-080	CAP,E 2.2-50 SMG	a	.	.
MAIN		O	C 0415	87-010-402-080	CAP,E 2.2-50 M 11L SME	.	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0416	87-012-285-080	C-CAP,U 8200P-50 K B GRM	a	b	c
MAIN		O	C 0417	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0418	87-010-380-080	CAP,E 47-16 M 11L SME	a	b	c
MAIN		O	C 0419	87-A11-228-080	C-CAP,U 0.027-25 K B	a	b	c
MAIN		O	C 0420	87-A12-087-080	CAP,E 1-50 SMG	a	.	.
MAIN		O	C 0420	87-010-401-080	CAP,E 1-50 M 11L SME	.	b	c
MAIN		O	C 0421	87-A12-087-080	CAP,E 1-50 SMG	a	.	.
MAIN		O	C 0421	87-010-401-080	CAP,E 1-50 M 11L SME	.	b	c
MAIN		O	C 0422	87-A12-087-080	CAP,E 1-50 SMG	a	.	.
MAIN		O	C 0422	87-010-401-080	CAP,E 1-50 M 11L SME	.	b	c
MAIN		O	C 0431	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0439	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0440	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0441	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0442	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0443	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0444	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0449	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0501	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
MAIN		O	C 0502	87-012-274-080	C-CAP,U 1000P-50 K B GRM	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0503	87-010-393-080	CAP,E 100-35 M SME	a	b	c
MAIN		O	C 0504	87-010-393-080	CAP,E 100-35 M SME	a	b	c
MAIN		O	C 0505	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0508	87-012-278-080	C-CAP,U 2200P-50 K B GRM	a	b	c
MAIN		O	C 0510	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0511	87-010-545-080	CAP,E 0.22-50 M 11L SME	a	b	c
MAIN		X	C 0601	88-218-612-080	CAP,CER 1000P-50 K YB	a	b	c
MAIN		O	C 0603	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0604	87-A12-492-080	CAP,CER 1000P-500 K B Y5P	a	b	c
MAIN		O	C 0605	87-A11-335-090	CAP,M/P 8200P-1.6K H ECWH(VB)	a	.	.
MAIN		O	C 0605	87-A11-334-090	CAP,M/P 6800P-1.6K H ECWH(VB)	.	b	c
MAIN		O	C 0608	87-A10-857-090	CAP,CER 270P-2K K R	a	.	.
MAIN		O	C 0608	87-A10-864-090	CAP,CER 1200P-2K K R	.	b	c
MAIN		O	C 0617	87-010-963-080	CAP,E 2.2-160 M 11L SME	a	b	c
MAIN		O	C 0618	87-A10-674-090	CAP,M/P 0.47-250 J	a	.	.
MAIN		O	C 0618	87-A12-761-090	CAP,M/P 0.33-250 J PMS	.	b	c
MAIN		O	C 0619	87-A10-867-090	CAP,CER 2200P-2K K R	a	b	c
MAIN		O	C 0620	87-010-263-080	CAP,E 100-10 M 11L SME	a	b	c
MAIN		O	C 0622	87-A12-492-080	CAP,CER 1000P-500 K B Y5P	a	b	c
MAIN		O	C 0623	87-016-373-080	CAP,E 10-250 M SME	a	b	c

ELECTRICAL PARTS LIST -3/10

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						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0624	87-A12-492-080	CAP,CER 1000P-500 K B Y5P	a	b	c
MAIN		O	C 0625	87-A12-082-080	CAP,E 1000-35 SMG	a	b	c
MAIN		O	C 0626	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0627	87-A11-984-080	CAP,CER 270P-500 K B DD10	a	b	c
MAIN		O	C 0630	87-A12-082-080	CAP,E 1000-35 SMG	a	b	c
MAIN		O	C 0631	87-A12-492-080	CAP,CER 1000P-500 K B Y5P	a	b	c
MAIN		O	C 0652	87-010-263-080	CAP,E 100-10 M 11L SME	a	b	c
MAIN		O	C 0655	87-A11-354-090	CAP,E 100-160 M SMG	a	b	c
MAIN		O	C 0715	87-A10-924-080	CAP,E 47-16 BP SME	.	.	c
MAIN		O	C 0718	87-010-544-080	CAP,E 0.1-50 M 11L SME	a	b	c
MAIN		O	C 0719	87-018-209-080	CAP,TC U 0.1-50 Z F UP050	a	b	c
MAIN		O	C 0720	87-A12-376-080	CAP,M 0.1-100 J CP	a	b	c
MAIN		O	C 0721	87-A12-376-080	CAP,M 0.1-100 J CP	a	b	c
MAIN		O	C 0722	87-A12-376-080	CAP,M 0.1-100 J CP	a	b	c
MAIN		O	C 0726	87-A12-376-080	CAP,M 0.1-100 J CP	a	b	c
MAIN		O	C 0727	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0728	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0730	87-A12-376-080	CAP,M 0.1-100 J CP	a	b	c
MAIN		O	C 0733	87-010-831-080	C-CAP,U 0.1-16 Z F	a	b	c
MAIN		O	C 0734	87-012-197-080	C-CAP,U 150P-50 J CH	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0735	87-012-270-080	C-CAP,U 470P-50 K B GRM	a	b	c
MAIN		O	C 0736	87-012-197-080	C-CAP,U 150P-50 J CH	a	b	c
MAIN		O	C 0737	87-012-270-080	C-CAP,U 470P-50 K B GRM	a	b	c
MAIN		O	C 0740	87-010-221-080	CAP,E 470-10 M SME	a	b	c
MAIN		O	C 0741	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0742	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0743	87-010-263-080	CAP,E 100-10 M 11L SME	a	b	c
MAIN		O	C 0744	87-012-270-080	C-CAP,U 470P-50 K B GRM	a	b	c
MAIN		O	C 0745	87-012-270-080	C-CAP,U 470P-50 K B GRM	a	b	c
MAIN		O	C 0751	87-010-831-080	C-CAP,U 0.1-16 Z F	a	b	c
MAIN		O	C 0752	87-010-406-080	CAP,E 22-50 M 11L SME	a	b	c
MAIN	!	O	C 0801	87-010-787-080	C-CAP,U 0.022-25 K B GRM	a	b	c
MAIN	!	O	C 0802	87-010-407-080	CAP,E 33-50 M 11L SME	a	b	c
MAIN	!	X	C 0803	88-710-789-810	CAP,M 0.33-50 J TFL	a	b	c
MAIN	!	O	C 0804	87-A11-802-090	CAP,E 330-400 SMH	a	b	c
MAIN	!	O	C 0805	87-A10-474-090	CAP,PP 0.01-1.25K H PHS	a	b	c
MAIN	!	O	C 0808	87-A12-867-090	CAP,PP 2200P-1.25K J ECWH(V)	a	b	c
MAIN	!	O	C 0809	87-A10-517-090	CAP,CER 3300P-4K M E KX	a	b	c
MAIN	!	O	C 0811	87-010-759-080	C-CAP,U 0.1-25 Z F CM/CB	a	b	c
MAIN	!	O	C 0812	87-A10-833-090	CAP,CER 1000P-2K K R	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN	!	O	C 0814	87-012-195-080	C-CAP,U 100P-50 J CH GRM	a	b	c
MAIN	!	O	C 0815	87-A11-353-010	CAP,M/P 0.22-275 M ECQUL	a	b	c
MAIN		O	C 0818	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0819	87-010-263-080	CAP,E 100-10 M 11L SME	a	b	c
MAIN		O	C 0820	87-010-408-080	CAP,E 47-50 M 11L SME	a	b	c
MAIN		O	C 0830	87-A10-833-090	CAP,CER 1000P-2K K R	a	b	c
MAIN		O	C 0831	87-A10-731-090	CAP,E 220-160 M KMF	a	b	c
MAIN		O	C 0834	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	C 0838	87-A12-372-080	CAP,M 0.047-100 J CP	a	b	c
MAIN		O	C 0839	87-A12-952-090	CAP,E 1000-35 105 KY	a	b	c
MAIN		O	C 0840	87-A12-953-090	CAP,E 2200-25 105 KY	a	b	c
MAIN		O	C 0841	87-A12-954-080	CAP,E 470-35 M 105 KY	a	b	c
MAIN		O	C 0842	87-A12-935-080	CAP,M 0.012-250 J 0200	a	b	c
MAIN		O	C 0843	87-010-408-080	CAP,E 47-50 M 11L SME	a	b	c
MAIN		O	C 0844	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0845	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0846	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0847	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		O	C 0848	87-010-408-080	CAP,E 47-50 M 11L SME	a	b	c
MAIN		O	C 0849	87-010-408-080	CAP,E 47-50 M 11L SME	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	C 0851	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		X	C 0852	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		O	C 0853	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
MAIN		X	C 0854	88-108-000-080	C-JUMPER,U	a	b	c
MAIN	!	O	C 0861	87-A11-353-010	CAP,M/P 0.22-275 M ECQUL	a	b	c
MAIN		O	C 0870	87-010-406-080	CAP,E 22-50 M 11L SME	a	b	c
MAIN		O	CF 0702	87-A92-032-080	FLTR,TRAP TPSR5.5MB2	a	b	c
MAIN		O	CF 0703	87-A92-034-080	FLTR,TRAP TPSR6.5MB2	a	b	c
MAIN		O	CF 0704	87-A92-033-080	FLTR,TRAP TPSR6.0MB	.	.	c
MAIN		O	CF 0705	87-A92-026-080	FLTR,TRAP TPSR4.5MB2	.	.	c
MAIN		X	CLP0001	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
MAIN		X	CLP0005	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
MAIN		X	CLP0007	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
MAIN		X	CLP0008	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
MAIN		X	CLP0009	87-A60-884-010	PIN,DIA1 COATING-SHS	a	b	c
MAIN		O	CN 0001	87-099-407-010	CONN,7P V WHT EH	a	b	c
MAIN		O	CN 0301	87-009-195-010	CONN,5P V WHT EH	a	b	c
MAIN		O	CN 0302	87-009-038-010	CONN,10P V WHT PH	a	b	c
MAIN		O	CN 0601	87-099-762-010	CONN,5P V TBL-P BOSS	a	b	c
MAIN		O	CN 0702	87-099-186-010	CONN,6P V WHT EH	a	b	c

ELECTRICAL PARTS LIST -4/10

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All components used on this model at the production line are shown in this service manual.
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN	!	O	CN 0801	82-481-649-010	CONN,2P V VT-50P-02-B1	a	b	c
MAIN	!	O	CN 0802	87-099-674-010	CONN,2P V VA	a	b	c
MAIN		O	CN 0803	87-049-469-010	CONN,4P V WHT EH	a	b	c
MAIN		O	CNA0802	88-JE1-658-010	CONN ASSY,5P V+B JST	a	b	c
MAIN		S	D 0001	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0001	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		S	D 0002	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0002	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		O	D 0003	87-002-352-010	LED,SPR-39MVWF GRN/RED	a	b	c
MAIN		S	D 0004	87-A40-509-080	ZENER,MTZJ6.8C	a	.	.
MAIN		S	D 0004	87-A40-754-080	ZENER,UZ6.8BSC	.	b	c
MAIN		S	D 0102	87-070-444-080	ZENER,HZS33-1TA	a	b	c
MAIN		S	D 0103	87-070-345-080	DIODE,1N4148	.	.	c
MAIN		S	D 0306	87-A40-346-080	ZENER,MTZJ8.2C	a	.	.
MAIN		S	D 0306	87-A40-759-080	ZENER,UZ8.2BSC	.	b	c
MAIN		S	D 0401	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0401	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		S	D 0402	87-A40-763-080	ZENER,UZ10BSB	a	b	c
MAIN		S	D 0403	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0403	87-070-345-080	DIODE,1N4148	.	b	c

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		S	D 0501	87-A40-318-080	ZENER,RM26 V1	a	b	c
MAIN		S	D 0502	87-070-092-080	DIODE,S5566B	a	b	c
MAIN		S	D 0503	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0503	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		S	D 0610	87-A40-286-080	DIODE,RGP10JE-5025	a	b	c
MAIN		S	D 0612	87-A40-286-080	DIODE,RGP10JE-5025	a	b	c
MAIN		S	D 0620	87-A40-286-080	DIODE,RGP10JE-5025	a	b	c
MAIN		X	D 0646	88-100-000-010	PLATING-JW, 0.58 SN95	a	b	c
MAIN	!	S	D 0802	87-020-465-080	DIODE,1SS133	a	.	.
MAIN	!	S	D 0802	87-070-345-080	DIODE,1N4148	.	b	c
MAIN	!	S	D 0803	87-017-654-060	DIODE,GBU6JL6131	a	b	c
MAIN	!	S	D 0804	87-A40-856-080	DIODE,UF4007	a	b	c
MAIN	!	S	D 0805	87-A40-286-080	DIODE,RGP10JE-5025	a	b	c
MAIN	!	X	D 0806	88-100-000-010	PLATING-JW, 0.58 SN95	a	b	c
MAIN	!	O	D 0811	87-A41-108-080	DIODE,11EQS03L	a	b	c
MAIN		S	D 0830	87-A40-354-090	DIODE,UF3GL-6251	a	b	c
MAIN		S	D 0832	87-A40-762-080	ZENER,UZ9.1BSC	a	b	c
MAIN		O	D 0835	87-A41-107-010	DIODE,FSF05A20	a	b	c
MAIN		S	D 0836	87-A40-665-090	DIODE,UF3GL-5700	a	b	c
MAIN		S	D 0837	87-017-978-080	DIODE,1N4003	a	b	c

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		S	D 0841	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0841	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		S	D 0842	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0842	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		S	D 0844	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0844	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		S	D 0860	87-020-465-080	DIODE,1SS133	a	.	.
MAIN		S	D 0860	87-070-345-080	DIODE,1N4148	.	b	c
MAIN		X	EY 0501	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0502	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0601	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0602	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0603	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0604	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0609	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0610	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0615	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0616	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0617	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0618	81-JT1-215-010	EYELET2.0-3.0	a	b	c

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	EY 0619	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0620	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0621	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0622	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0623	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0624	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0628	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0629	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0630	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0631	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0634	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0635	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0636	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN	!	X	EY 0801	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0802	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0803	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0804	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0805	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0806	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0807	81-JT1-215-010	EYELET2.0-3.0	a	b	c

ELECTRICAL PARTS LIST -5/10

! = ⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN	!	X	EY 0808	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0809	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0810	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN	!	X	EY 0811	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN	!	X	EY 0812	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN	!	X	EY 0813	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN	!	X	EY 0814	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0815	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0817	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0818	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0824	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN	!	X	EY 0825	81-JT1-215-010	EYELET2.0-3.0	a	b	c
MAIN		X	EY 0830	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0831	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN		X	EY 0833	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0839	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0844	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0845	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0846	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0847	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN	!	X	EY 0848	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0849	81-JT1-216-010	EYELET,1.6-3.0	a	b	.
MAIN	!	X	EY 0850	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0851	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0852	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0853	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0854	81-JT1-216-010	EYELET,1.6-3.0	a	b	.
MAIN	!	X	EY 0855	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0856	81-JT1-216-010	EYELET,1.6-3.0	a	b	c
MAIN	!	X	EY 0857	81-JT1-216-010	EYELET,1.6-3.0	a	b	.
MAIN	!	X	EY 0858	81-JT1-216-010	EYELET,1.6-3.0	a	b	.
MAIN	!	S	F 0801	87-A91-218-010	FUSE,4A 250V T 50T	a	b	c
MAIN		O	FB 0601	87-003-223-080	F-BEAD, BL02RN2	a	b	c
MAIN		O	FB 0701	87-003-320-080	F-BEAD,-9.0 FBR07HA121NB-00	a	b	c
MAIN		O	FB 0702	87-003-320-080	F-BEAD,-9.0 FBR07HA121NB-00	a	b	c
MAIN		O	FB 0830	87-003-320-080	F-BEAD,-9.0 FBR07HA121NB-00	a	b	c
MAIN		O	FB 0831	87-003-320-080	F-BEAD,-9.0 FBR07HA121NB-00	a	b	c
MAIN		O	FB 0833	87-003-320-080	F-BEAD,-9.0 FBR07HA121NB-00	a	b	c
MAIN	!	O	FC 0801	87-033-213-080	FUSE CLAMP,PFC5000	a	b	c
MAIN	!	O	FC 0802	87-033-213-080	FUSE CLAMP,PFC5000	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	FL 0201	87-A92-060-010	FLTR,SAW TSF5376U INTER 38.0-B	a	b	.
MAIN		O	FL 0201	87-A92-076-010	FLTR,SAW TSF6363U INT 38.0-BGI	.	.	c
MAIN		O	FL 0204	87-010-405-080	CAP,E 10-50 M 11L SME	a	b	c
MAIN		O	FR 0608	87-A00-628-090	RES,FUSE 0.68-1W J RF 1SL12.5	a	b	c
MAIN		S	FR 0609	87-A00-476-090	RES,FUSE 1.5-1W J	a	b	c
MAIN		O	FR 0610	87-A00-628-090	RES,FUSE 0.68-1W J RF 1SL12.5	a	b	c
MAIN		O	FR 0613	87-029-168-060	RES,FUSE 100-1/2W J	a	b	c
MAIN		O	FR 0620	87-A00-628-090	RES,FUSE 0.68-1W J RF 1SL12.5	a	b	c
MAIN	!	O	FR 0802	87-A01-026-090	RES,FUSE 330-1W J RF1SL12.5	a	b	c
MAIN		O	HL 0001	84-LB3-216-010	HLDR,LED	a	b	c
MAIN		X	HT 0501	8B-JES-212-010	HT-SINK,ASSY V	a	.	.
MAIN		X	HT 0501	8B-JES-221-010	HT-SINK,ASSY V-OUT	.	b	c
MAIN		X	HT 0602	8B-JES-216-010	HT-SINK,ASSY H-OUT2	a	.	.
MAIN		X	HT 0602	8B-JES-223-010	HT-SINK,ASSY H-OUT	.	b	c
MAIN	!	X	HT 0801	8Z-JE7-210-010	HT-SINK,BRG	a	.	.
MAIN	!	X	HT 0801	8B-JET-216-010	HT-SINK,BRG	.	b	c
MAIN	!	X	HT 0802	8B-JES-214-010	HT-SINK,ASSYFET	a	.	.
MAIN	!	X	HT 0802	8B-JAU-211-010	HT-SINK,ASSY FET C	.	b	c
MAIN		X	HT 0803	8B-JET-211-010	HT-SINK,REG M ASSY	a	.	.
MAIN		X	HT 0803	8B-JBC-204-010	HT-SINK,REG C ASSY	.	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		S	IC 0001	87-A21-217-040	C-IC,S-24C08AFJA-TB-01	a	b	c
MAIN		O	IC 0002	87-A91-538-010	RCR UNIT,SBX1981-72P	a	b	c
MAIN		S	IC 0301	87-A21-979-010	IC,TDA9381PS	a	b	c
MAIN		S	IC 0402	87-A21-554-010	IC,TA1216AN	a	b	c
MAIN		S	IC 0501	87-A21-919-010	IC,AN5539N	a	b	c
MAIN		S	IC 0703	87-A21-220-010	IC,MM1311AD	a	b	c
MAIN	!	S	IC 0801	87-A22-015-010	IC,TEA1507P	a	b	c
MAIN		S	IC 0830	87-A20-649-080	IC,HA17431VP	a	b	c
MAIN		S	IC 0831	87-A22-087-080	IC,MM1180ZT	a	b	c
MAIN		O	IC 0833	87-070-427-080	IC,KIA78L05BP	a	b	c
MAIN		S	IC 0834	87-A21-788-010	IC,KIA7809API	a	b	c
MAIN		S	IC 0835	87-A21-787-010	IC,KIA7805API	a	b	c
MAIN		O	J 0701	87-A61-648-010	JACK,PIN 6P BLK W/SW HSP-266A1	a	b	c
MAIN		O	J 0703	87-A60-127-010	JACK,Y/CYKF51-5503	a	b	c
MAIN		X	JR 0101	88-108-000-080	C-JUMPER,U	a	b	.
MAIN		X	JR 0103	88-108-000-080	C-JUMPER,U	.	.	c
MAIN		X	JR 0104	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		X	JR 0108	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		X	JR 0209	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		O	JR 0701	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c

ELECTRICAL PARTS LIST -6/10

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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	JW 0197	83-121-273-080	RES,27K-1/8W J	a	b	c
MAIN		O	L 0001	87-003-152-080	COIL,100UH J LAL02	a	b	c
MAIN		O	L 0002	87-003-152-080	COIL,100UH J LAL02	a	b	c
MAIN		O	L 0003	87-003-152-080	COIL,100UH J LAL02	a	b	c
MAIN		O	L 0004	87-005-485-080	COIL,100UH J FLR50	a	b	c
MAIN		O	L 0005	87-003-152-080	COIL,100UH J LAL02	a	b	c
MAIN		O	L 0101	87-005-440-080	COIL,47UH K FLR50	a	b	c
MAIN		O	L 0103	87-005-718-080	COIL,1UH K SP02	a	b	c
MAIN		O	L 0301	87-005-485-080	COIL,100UH J FLR50	a	b	c
MAIN		O	L 0302	87-005-485-080	COIL,100UH J FLR50	a	b	c
MAIN		O	L 0401	87-005-437-080	COIL,27UH K FLR50	a	b	c
MAIN		O	L 0604	87-A50-750-080	COIL,4.7MH J LHL10	a	b	c
MAIN		O	L 0605	8B-JEV-620-010	COIL,HLC F21PF	a	b	c
MAIN		O	L 0701	87-005-728-080	COIL,6.8UH J SP02	a	b	c
MAIN		O	L 0702	87-005-730-080	COIL,10UH J SP02	a	b	c
MAIN		X	L 0703	88-100-000-010	PLATING-JW, 0.58 SN95	a	b	.
MAIN		O	L 0703	87-005-730-080	COIL,10UH J SP02	.	.	c
MAIN		O	L 0704	87-005-730-080	COIL,10UH J SP02	.	.	c
MAIN		O	L 0707	87-005-738-080	COIL,47UH J SP02	a	b	c
MAIN		O	L 0708	87-005-738-080	COIL,47UH J SP02	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	L 0711	87-005-485-080	COIL,100UH J FLR50	a	b	c
MAIN		O	L 0830	87-A50-176-080	COIL,33UH-PJ87	a	b	c
MAIN		O	L 0831	87-A50-176-080	COIL,33UH-PJ87	a	b	c
MAIN	!	O	LF 0801	87-A92-298-010	FLTR,LINE SS28H-20075	a	b	c
MAIN	!	O	LF 0802	87-A92-298-010	FLTR,LINE SS28H-20075	a	b	.
MAIN	!	S	PR 0601	87-A99-764-080	PROTECTOR,1.25A 60V491	a	b	c
MAIN	!	S	PR 0830	87-A91-937-080	PROTECTOR,1.5A 20P 60V	a	b	c
MAIN	!	S	PR 0831	87-A91-946-080	PROTECTOR,7A 20P 60V	a	b	c
MAIN	!	S	PR 0832	87-A91-941-080	PROTECTOR,3A 20P 60V	a	b	c
MAIN		X	PR 0833	88-100-000-010	PLATING-JW, 0.58 SN95	a	b	c
MAIN	!	O	PS 0801	87-A90-717-010	P-COUPLER,PC123FY2	a	b	c
MAIN	!	O	PT 0801	8B-JET-630-010	PT,SH SW BJE-T	a	b	c
MAIN		S	Q 0001	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0002	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0003	87-A30-087-080	C-FET,2SK2158	a	b	c
MAIN		S	Q 0004	87-A30-087-080	C-FET,2SK2158	a	b	c
MAIN		S	Q 0005	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0102	87-A30-087-080	C-FET,2SK2158	.	.	c
MAIN		S	Q 0103	89-327-143-080	C-TR,2SC2714O	a	b	c
MAIN		S	Q 0301	87-A30-289-040	C-TR,2SA1037AK(Q)	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		S	Q 0401	87-A30-087-080	C-FET,2SK2158	a	b	c
MAIN		S	Q 0402	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0405	87-A30-087-080	C-FET,2SK2158	a	b	c
MAIN		S	Q 0501	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0601	89-324-820-080	TR,2SC2482	a	b	c
MAIN		S	Q 0602	87-A30-637-010	TR,2SD2624	a	b	c
MAIN		S	Q 0710	87-A30-289-040	C-TR,2SA1037AK(Q)	.	.	c
MAIN		S	Q 0711	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0712	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0713	89-324-122-040	C-TR,2SC2412KR	.	.	c
MAIN		S	Q 0714	87-A30-087-080	C-FET,2SK2158	.	.	c
MAIN		S	Q 0717	89-110-154-080	TR,2SA1015Y	a	b	c
MAIN		S	Q 0718	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN		S	Q 0719	89-324-122-040	C-TR,2SC2412KR	a	b	c
MAIN	!	S	Q 0801	87-A30-648-010	FET,FS7KM16A	a	b	c
MAIN		S	Q 0802	89-112-964-080	TR,2SA1296Y	a	b	c
MAIN		S	Q 0803	87-A30-087-080	C-FET,2SK2158	a	b	c
MAIN		S	Q 0805	87-A30-289-040	C-TR,2SA1037AK(Q)	a	b	c
MAIN		S	Q 0830	87-A30-087-080	C-FET,2SK2158	a	b	c
MAIN		X	R 0001	88-108-122-080	C-RES,U 1.2K-1/16W J	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	R 0002	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		X	R 0003	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		X	R 0004	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		X	R 0005	88-108-331-080	C-RES,U 330-1/16W J	a	b	c
MAIN		X	R 0006	88-108-471-080	C-RES,U 470-1/16W J	a	b	c
MAIN		X	R 0007	88-108-681-080	C-RES,U 680-1/16W J	a	b	c
MAIN		X	R 0008	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		O	R 0009	88-108-223-080	C-RES,U 22K-1/16W J	a	b	c
MAIN		X	R 0010	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		X	R 0011	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		X	R 0012	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		O	R 0013	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0014	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		O	R 0016	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		O	R 0017	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		O	R 0018	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0019	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		X	R 0020	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		X	R 0021	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		O	R 0022	88-108-101-080	C-RES,U 100-1/16W J	a	b	c

ELECTRICAL PARTS LIST -7/10

! = ⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	R 0023	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0024	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		O	R 0025	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		O	R 0026	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		X	R 0028	88-108-682-080	C-RES,U 6.8K-1/16W J	a	b	c
MAIN		X	R 0029	88-121-472-080	RES,4.7K-1/8W J	a	b	c
MAIN		O	R 0030	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		X	R 0031	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		X	R 0032	88-108-105-080	C-RES,U 1M-1/16W J	a	b	c
MAIN		X	R 0033	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		O	R 0101	88-108-153-080	C-RES,U 15K-1/16W J	a	b	c
MAIN		O	R 0102	88-108-332-080	C-RES,U 3.3K-1/16W J	a	b	c
MAIN		O	R 0103	88-108-223-080	C-RES,U 22K-1/16W J	a	b	c
MAIN		X	R 0104	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		X	R 0105	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		X	R 0106	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		O	R 0107	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0108	88-108-561-080	C-RES,U 560-1/16W J	a	b	c
MAIN		X	R 0109	88-108-390-080	C-RES,U 39-1/16W J	a	b	c
MAIN		X	R 0110	88-108-682-080	C-RES,U 6.8K-1/16W J	.	.	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	R 0111	88-108-222-080	C-RES,U 2.2K-1/16W J	.	.	c
MAIN		X	R 0113	88-121-222-080	RES,2.2K-1/8W J	.	.	c
MAIN		O	R 0301	88-108-153-080	C-RES,U 15K-1/16W J	a	b	c
MAIN		X	R 0302	88-108-393-080	C-RES,U 39K-1/16W J	a	b	c
MAIN		X	R 0303	88-108-681-080	C-RES,U 680-1/16W J	a	b	c
MAIN		O	R 0304	88-108-272-080	C-RES,U 2.7K-1/16W J	a	b	c
MAIN		X	R 0305	88-108-681-080	C-RES,U 680-1/16W J	a	b	c
MAIN		X	R 0306	88-121-391-080	RES,390-1/8W J	a	b	c
MAIN		X	R 0308	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		O	R 0310	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		X	R 0311	88-108-561-080	C-RES,U 560-1/16W J	a	b	c
MAIN		X	R 0312	88-108-561-080	C-RES,U 560-1/16W J	a	b	c
MAIN		X	R 0313	88-108-561-080	C-RES,U 560-1/16W J	a	b	c
MAIN		O	R 0314	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		O	R 0315	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		O	R 0316	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		O	R 0317	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0318	88-108-122-080	C-RES,U 1.2K-1/16W J	a	b	c
MAIN		X	R 0336	88-121-273-080	RES,27K-1/8W J	a	b	c
MAIN		X	R 0413	88-121-222-080	RES,2.2K-1/8W J	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	R 0414	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		O	R 0415	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		O	R 0416	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN		X	R 0417	88-121-222-080	RES,2.2K-1/8W J	a	b	c
MAIN		X	R 0418	88-121-103-080	RES,10K-1/8W J	a	b	c
MAIN		X	R 0419	88-121-331-080	RES,330-1/8W J	a	b	c
MAIN		X	R 0420	88-121-331-080	RES,330-1/8W J	a	b	c
MAIN		X	R 0437	88-121-472-080	RES,4.7K-1/8W J	a	b	c
MAIN		X	R 0468	88-121-274-080	RES,270K-1/8W J	a	b	c
MAIN		X	R 0469	88-108-683-080	C-RES,U 68K-1/16W J	a	b	c
MAIN		X	R 0501	88-108-222-080	C-RES,U 2.2K-1/16W J	a	b	c
MAIN		X	R 0502	88-108-222-080	C-RES,U 2.2K-1/16W J	a	b	c
MAIN		O	R 0505	87-A00-989-090	RES,M/F 330-3W J RSF(S)	a	b	c
MAIN		O	R 0506	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		O	R 0507	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0508	88-108-392-080	C-RES,U 3.9K-1/16W J	a	b	c
MAIN		X	R 0509	88-108-392-080	C-RES,U 3.9K-1/16W J	a	b	c
MAIN		O	R 0510	87-A01-021-090	RES,M/F 0.82-1W J RSF(S)	a	.	.
MAIN		O	R 0510	87-A00-143-090	RES,M/F 1.0-1W J RSF(S)	.	b	c
MAIN		O	R 0511	87-A00-143-090	RES,M/F 1.0-1W J RSF(S)	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	R 0514	88-130-472-080	RES,4.7K-1/4W J	a	b	c
MAIN		X	R 0515	88-130-472-080	RES,4.7K-1/4W J	a	b	c
MAIN		X	R 0516	88-108-334-080	C-RES,U 330K-1/16W J	a	b	c
MAIN		X	R 0517	88-108-104-080	C-RES,U 100K-1/16W J	a	b	c
MAIN		X	R 0518	88-121-103-080	RES,10K-1/8W J	a	b	c
MAIN		O	R 0519	88-108-224-080	C-RES,U 220K-1/16W J	a	b	c
MAIN		O	R 0520	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0521	88-108-122-080	C-RES,U 1.2K-1/16W J	a	b	c
MAIN		X	R 0522	88-108-334-080	C-RES,U 330K-1/16W J	a	b	c
MAIN		X	R 0601	88-121-561-080	RES,560-1/8W J	a	b	c
MAIN		X	R 0602	88-108-152-080	C-RES,U 1.5K-1/16W J	a	b	c
MAIN		O	R 0604	87-A00-565-090	RES,M/F 1.2K-7W J RSU7	a	b	c
MAIN		X	R 0608	88-140-683-080	RES,68K-1/2W J	a	b	c
MAIN		X	R 0611	88-130-103-080	RES,10K-1/4W J	a	b	c
MAIN		X	R 0624	88-140-821-080	RES,820-1/2W J	a	b	c
MAIN		X	R 0625	88-140-102-080	RES,1K-1/2W J	a	b	c
MAIN		X	R 0626	88-140-272-080	RES,2.7K-1/2W J	a	b	c
MAIN		X	R 0629	88-140-222-080	RES,2.2K-1/2W J	a	b	c
MAIN		X	R 0701	88-108-680-080	C-RES,U 68-1/16W J	a	b	c
MAIN		X	R 0702	88-121-103-080	RES,10K-1/8W J	a	b	c

ELECTRICAL PARTS LIST -8/10

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						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	R 0725	88-108-271-080	C-RES,U 270-1/16W J	a	b	c
MAIN		X	R 0726	88-108-222-080	C-RES,U 2.2K-1/16W J	.	.	c
MAIN		O	R 0727	88-108-562-080	C-RES,U 5.6K-1/16W J	.	.	c
MAIN		X	R 0729	88-108-471-080	C-RES,U 470-1/16W J	.	.	c
MAIN		X	R 0730	88-108-221-080	C-RES,U 220-1/16W J	.	.	c
MAIN		X	R 0731	88-108-221-080	C-RES,U 220-1/16W J	a	b	c
MAIN		X	R 0732	88-108-181-080	C-RES,U 180-1/16W J	a	b	c
MAIN		X	R 0736	88-108-561-080	C-RES,U 560-1/16W J	a	b	c
MAIN		X	R 0738	88-108-471-080	C-RES,U 470-1/16W J	a	b	c
MAIN		X	R 0742	88-121-103-080	RES,10K-1/8W J	a	b	c
MAIN		O	R 0743	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0744	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0745	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		X	R 0746	88-130-121-080	RES,120-1/4W J	a	b	c
MAIN		O	R 0747	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0748	88-108-181-080	C-RES,U 180-1/16W J	a	b	c
MAIN		O	R 0749	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN		X	R 0750	88-108-181-080	C-RES,U 180-1/16W J	a	b	c
MAIN		O	R 0751	88-108-563-080	C-RES,U 56K-1/16W J	a	b	c
MAIN		O	R 0752	88-108-563-080	C-RES,U 56K-1/16W J	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		O	R 0753	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0754	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0755	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		X	R 0756	88-108-750-080	C-RES,U 75-1/16W J	a	b	c
MAIN		X	R 0757	88-108-750-080	C-RES,U 75-1/16W J	a	b	c
MAIN		X	R 0758	88-108-750-080	C-RES,U 75-1/16W J	a	b	c
MAIN		X	R 0780	88-108-561-080	C-RES,U 560-1/16W J	a	b	c
MAIN		X	R 0782	88-108-000-080	C-JUMPER,U	a	b	c
MAIN		O	R 0783	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN		O	R 0784	88-108-101-080	C-RES,U 100-1/16W J	a	b	c
MAIN	!	O	R 0801	88-108-102-080	C-RES,U 1K-1/16W J	a	b	c
MAIN	!	O	R 0802	87-A00-332-090	RES,CEM 1-10W J RGC	a	b	c
MAIN	!	O	R 0803	87-A00-633-090	RES,CEM 0.47-10W J RGC	a	b	c
MAIN	!	X	R 0804	88-108-394-080	C-RES,U 390K-1/16W J	a	b	c
MAIN	!	X	R 0805	88-108-105-080	C-RES,U 1M-1/16W J	a	b	c
MAIN	!	X	R 0806	88-130-151-080	RES,150-1/4W J	a	b	c
MAIN	!	O	R 0807	88-108-223-080	C-RES,U 22K-1/16W J	a	b	c
MAIN	!	O	R 0808	87-A00-933-050	RES,M/F 10-2W J	a	b	c
MAIN	!	X	R 0809	88-108-471-080	C-RES,U 470-1/16W J	a	b	c
MAIN		X	R 0810	88-108-104-080	C-RES,U 100K-1/16W J	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN	!	O	R 0811	87-A00-170-090	RES,M/F 82K-3W J RSF(S)	a	b	c
MAIN	!	O	R 0812	87-A00-708-090	RES,CEM 0.12-5W J RGC5	a	b	c
MAIN	!	X	R 0813	88-140-220-080	RES,22-1/2W J	a	b	c
MAIN	!	O	R 0815	87-A00-543-080	RES,SD 8.2M-1W J RCR60	a	b	c
MAIN		O	R 0816	88-108-473-080	C-RES,U 47K-1/16W J	a	b	c
MAIN		X	R 0817	88-108-472-080	C-RES,U 4.7K-1/16W J	a	b	c
MAIN		X	R 0818	88-121-221-080	RES,220-1/8W J	a	b	c
MAIN		X	R 0819	88-121-122-080	RES,1.2K-1/8W J	a	b	c
MAIN		O	R 0821	88-108-563-080	C-RES,U 56K-1/16W J	a	b	c
MAIN		X	R 0822	88-108-683-080	C-RES,U 68K-1/16W J	a	b	c
MAIN		X	R 0831	88-100-000-010	PLATING-JW, 0.58 SN95	a	b	c
MAIN		X	R 0833	88-121-332-080	RES,3.3K-1/8W J	a	b	c
MAIN		O	R 0838	88-108-153-080	C-RES,U 15K-1/16W J	a	b	c
MAIN		X	R 0839	88-130-122-080	RES,1.2K-1/4W J	a	b	c
MAIN		O	R 0841	87-A00-199-090	RES,M/F 12K-3W J RSF(S)	a	b	c
MAIN		O	R 0843	87-025-366-080	RES,M/F 820-1/6W F	a	b	c
MAIN		O	R 0844	87-025-369-080	RES,M/F 1.8K-1/6W F	a	b	c
MAIN		O	R 0845	88-108-224-080	C-RES,U 220K-1/16W J	a	b	c
MAIN		O	R 0847	87-025-408-080	RES,M/F 120K-1/6W F	a	b	c
MAIN		X	R 0858	88-108-184-080	C-RES,U 180K-1/16W J	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
MAIN		X	R 0859	88-108-683-080	C-RES,U 68K-1/16W J	a	b	c
MAIN		O	R 0860	88-108-563-080	C-RES,U 56K-1/16W J	a	b	c
MAIN		X	R 0861	88-108-683-080	C-RES,U 68K-1/16W J	a	b	c
MAIN		O	R 0863	87-A00-307-090	RES,M/F 22-3W J RSF(S)	a	b	c
MAIN		O	R 0866	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
MAIN	!	O	R 0899	87-A01-011-080	RES,SD 680K-1/2W J RCR50	a	b	c
MAIN		O	S 0007	87-A91-824-080	SW,TACT KSH0636BTS	a	b	c
MAIN		O	S 0008	87-A91-824-080	SW,TACT KSH0636BTS	a	b	c
MAIN		O	S 0009	87-A91-824-080	SW,TACT KSH0636BTS	a	b	c
MAIN		O	S 0010	87-A91-824-080	SW,TACT KSH0636BTS	a	b	c
MAIN		O	S 0011	87-A91-824-080	SW,TACT KSH0636BTS	a	b	c
MAIN		O	S 0012	87-A91-824-080	SW,TACT KSH0636BTS	a	b	c
MAIN	!	O	S 0801	87-A91-410-010	SW,AC PUSH 1-1-1 ESB92SH1B	a	b	c
MAIN	!	O	SCR0801	87-A91-897-090	VRIS,TNR10V471K	a	b	c
MAIN	!	O	T 0601	8B-JES-620-010	FBT, KFT3AA319X	a	b	c
MAIN	!	O	T 0602	85-JT2-653-010	PT,HDT-TV141-2	a	b	c
MAIN	!	O	TH 0801	87-A90-759-010	POS-THMS,PTH451C272BF300N270	a	b	c
MAIN		O	TU 0101	87-A92-322-010	TU UNIT, 115-B-8036SP LOT-A	a	b	c
MAIN		O	X 0301	87-A70-351-080	VIB,XTAL 12.0MHZ SAD-3.5	a	b	c
NK		O	C 0917	87-A10-825-010	CAP,CER 0.01-2K Z E	a	b	c

ELECTRICAL PARTS LIST -9/10

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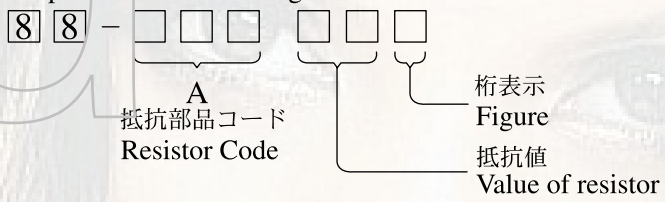
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
NK		O	C 0982	87-018-123-080	CAP,TC U 220P-50 K B UP050	a	b	c
NK		O	C 0984	87-010-384-080	CAP,E 100-25 M 11L SME	a	b	c
NK		O	C 0985	87-012-286-080	C-CAP,U 0.01-25 K B GRM	a	b	c
NK		O	C 0986	87-A12-188-080	CAP,E 4.7-250 M SMG	a	b	c
NK		O	CN 0902	87-009-195-010	CONN,5P V WHT EH	a	b	c
NK		O	CN 0903	87-A61-126-080	MALE, 1P TP42097	a	b	c
NK		O	CN 0904	87-A61-060-080	CONN,1P V RED TP00706	a	b	c
NK		O	CN 0906	87-A61-126-080	MALE, 1P TP42097	a	b	c
NK		O	CNA0951	83-JET-657-010	CONN ASSY,5P VRGB JST	a	b	c
NK		S	D 0984	87-020-465-080	DIODE,1SS133	a	.	.
NK		S	D 0984	87-070-345-080	DIODE,1N4148	.	b	c
NK		S	D 0985	87-020-465-080	DIODE,1SS133	a	.	.
NK		S	D 0985	87-070-345-080	DIODE,1N4148	.	b	c
NK		X	HT 0901	83-JET-210-010	HT-SINK,NK	a	.	.
NK		X	HT 0901	8A-JEV-203-010	HT-SINK,NK	.	b	c
NK		S	IC 0901	87-A21-895-010	IC,TDA6108JF	a	b	c
NK		S	Q 0984	87-A30-289-040	C-TR,2SA1037AK(Q)	a	b	c
NK		X	R 0987	88-144-222-080	RES,SD 2.2K-1/2W K	a	b	c
NK		X	R 0988	88-144-222-080	RES,SD 2.2K-1/2W K	a	b	c
NK		X	R 0989	88-144-222-080	RES,SD 2.2K-1/2W K	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
NK		X	R 0991	88-130-823-080	RES,82K-1/4W J	a	b	c
NK		X	R 0992	88-130-123-080	RES,12K-1/4W J	a	b	c
NK		X	R 0993	88-100-000-010	PLATING-JW, 0.58 SN95	a	b	c
NK		O	R 0994	88-108-103-080	C-RES,U 10K-1/16W J	a	b	c
NK		O	SO 0901	8A-JE7-670-010	SOCKET,CRT 11P HPS1521-013411	a	b	c

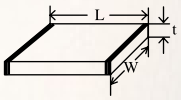
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

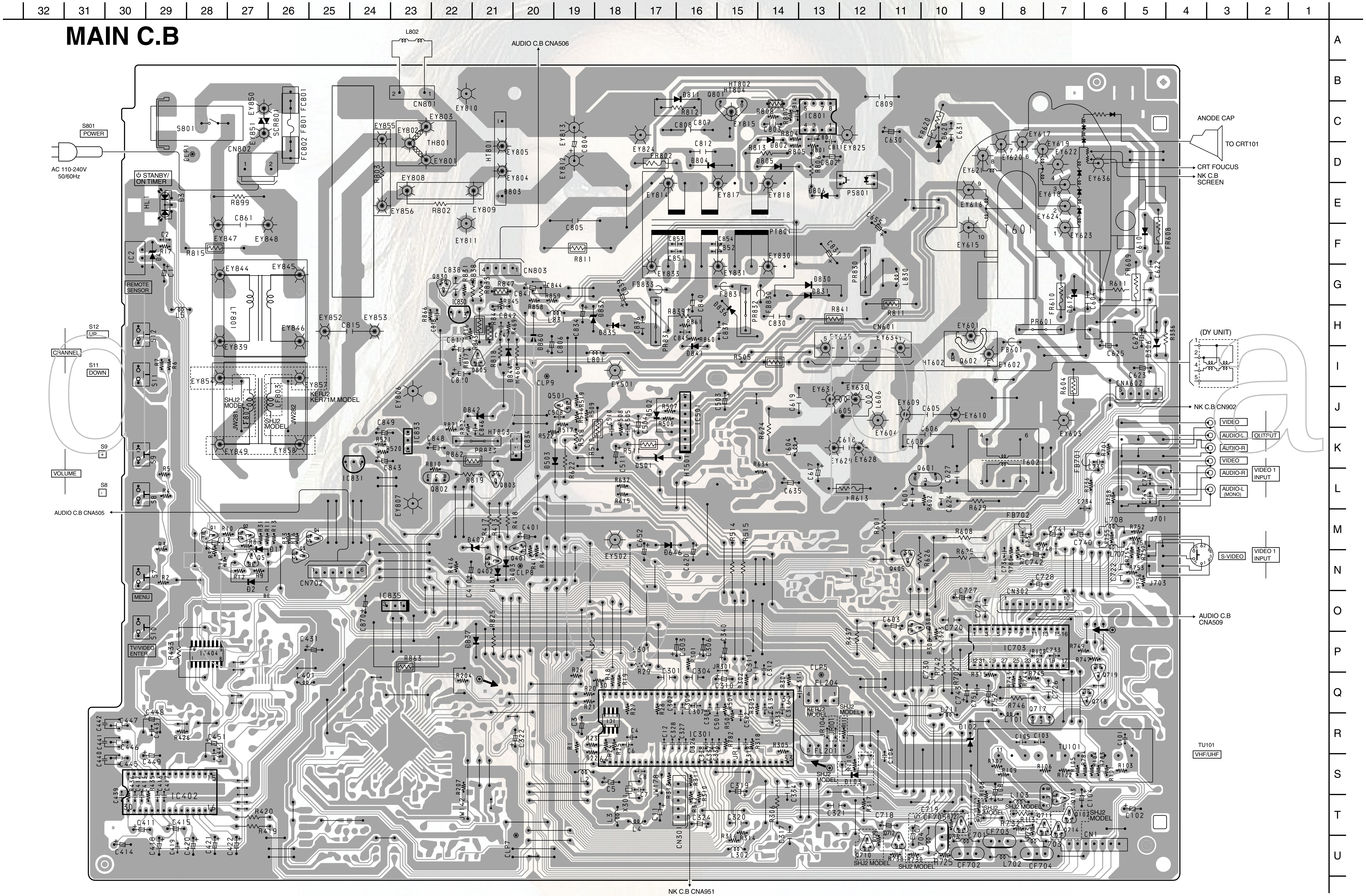
○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

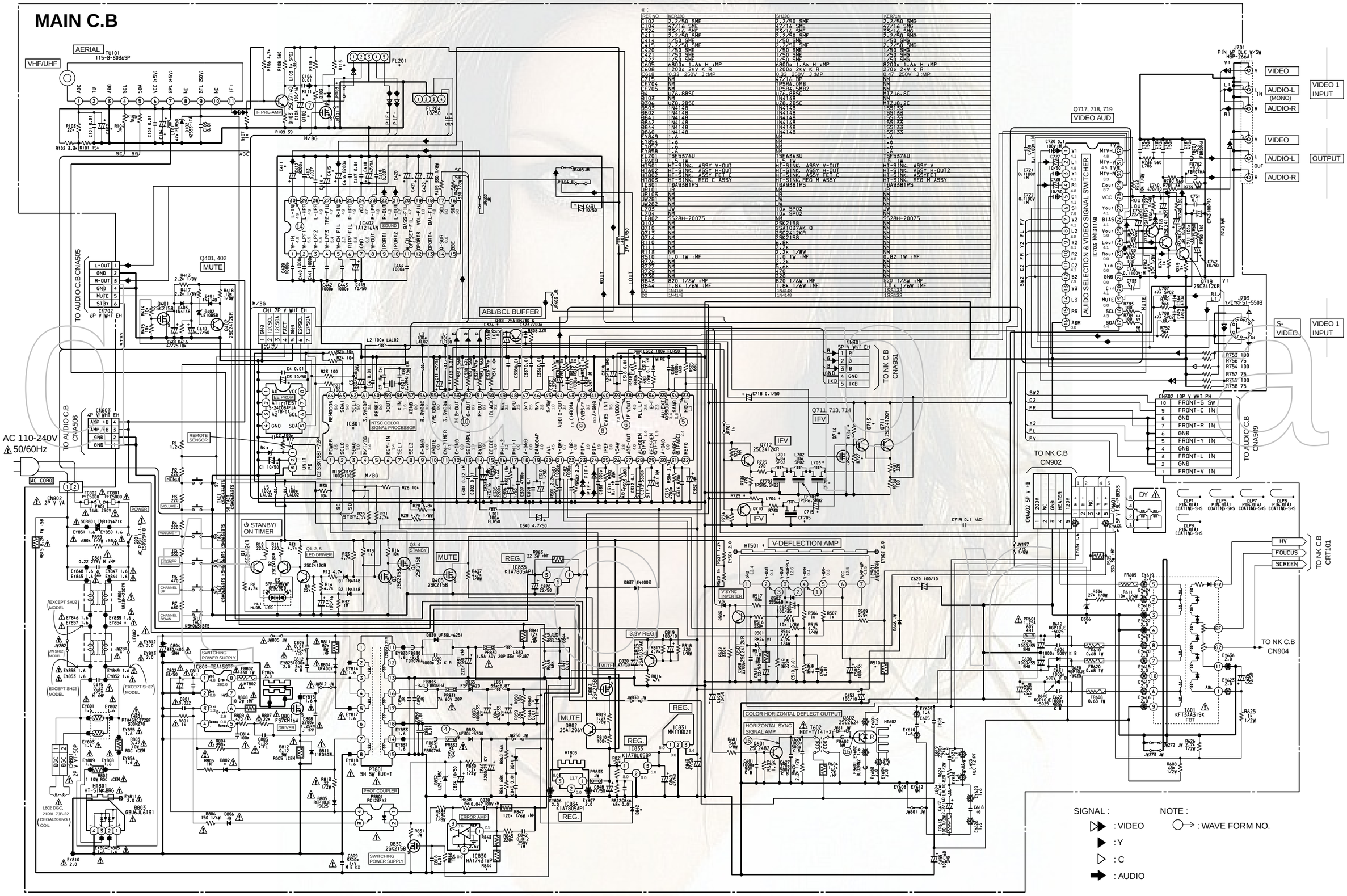


チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128


MAIN C.B
L802
AUDIO C.B CNA506
S801
POWER
AC 110-240V
50/60Hz
STANDBY/
ON TIMER
REMOTE
SENSOR
S12
UP
CHANNEL
S11
DOWN
S9
+
VOLUME
S8
-
AUDIO C.B CNA505
MENU
TV/VIDEO
ENTER
KERJ2
KER71M MODEL
SHJ2
MODEL
ANODE CAP
TO CRT101
CRT FOUCUS
NK C.B
SCREEN
(DY UNIT)
NK C.B CN902
VIDEO
AUDIO-L
AUDIO-R
OUTPUT
VIDEO 1
INPUT
(MONO)
S-VIDEO
AUDIO C.B
CNA509
TU101
VHF/UHF
NK C.B CNA951

SCHEMATIC DIAGRAM-1/3 (MAIN)

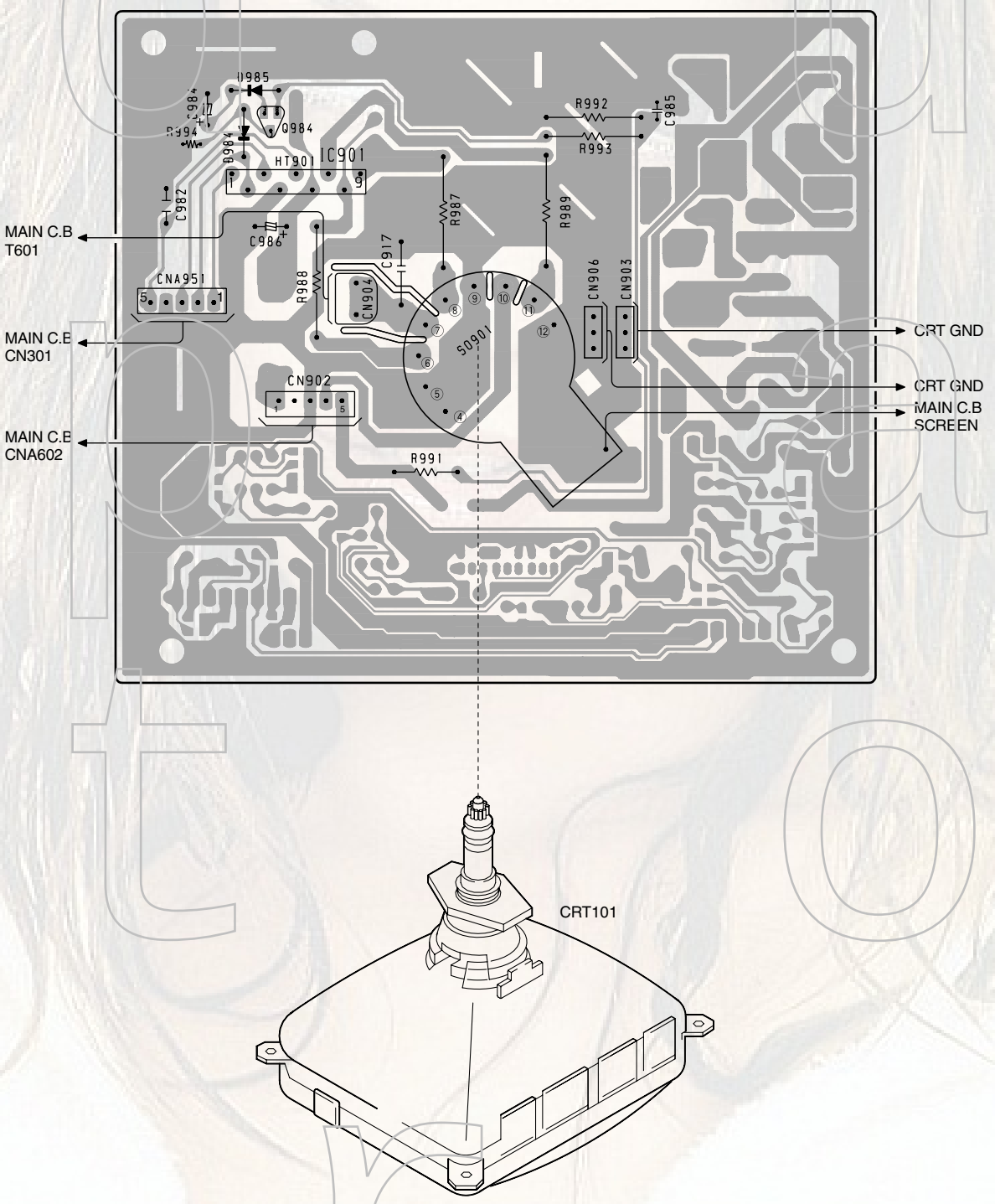


* :			
REF NO.	KER32C	SH32C	KER71M
C102	2.2/50 SME	2.2/50 SME	2.2/50 SMG
C104	47/16 SME	47/16 SME	47/16 SMG
C224	33/16 SME	33/16 SME	33/16 SMG
C411	2.2/50 SME	2.2/50 SME	2.2/50 SMG
C414	1/50 SME	1/50 SME	1/50 SMG
C415	2.2/50 SME	2.2/50 SME	2.2/50 SMG
C420	1/50 SME	1/50 SME	1/50 SMG
C421	1/50 SME	1/50 SME	1/50 SMG
C422	1/50 SME	1/50 SME	1/50 SMG
C605	6800p 1.6k H :MP	6800p 1.6k H :MP	8200p 1.6k H :MP
C608	12000p 2kV K R	12000p 2kV K R	270p 2kV K R
C618	0.33 250V J MP	0.33 250V J MP	0.47 250V J MP
C715	NM	47/16 BP	NM
CF702	NM	PSR6A-0MB	NM
CF705	NM	PSR6A-5MB2	NM
D4	UZ6.8BSC	UZ6.8BSC	MTZJ6.8C
D103	NM	1N4148	NM
D306	UZ8.2BSC	UZ8.2BSC	MTZJ8.2C
D503	1N4148	1N4148	1SS133
D802	1N4148	1N4148	1SS133
D841	1N4148	1N4148	1SS133
D842	1N4148	1N4148	1SS133
D844	1N4148	1N4148	1SS133
D860	1N4148	1N4148	1SS133
EY849	1.6	NM	1.6
EY854	1.6	NM	1.6
EY857	1.6	NM	1.6
EY858	1.6	NM	1.6
FL201	SF5376U	SF5636U	SF5376U
FR609	1.5 1W	1.5 1W	1.5 1W
HT501	HI-SINK. ASSY V-OUT	HI-SINK. ASSY V-OUT	HI-SINK. ASSY V
HT502	HI-SINK. ASSY H-OUT	HI-SINK. ASSY H-OUT	HI-SINK. ASSY H-OUT2
HT802	HI-SINK. ASSY FET C	HI-SINK. ASSY FET C	HI-SINK. ASSYFET
HT803	HI-SINK. REG C ASSY	HI-SINK. REG M ASSY	HI-SINK. REG M ASSY
IC301	TDA9381PS	TDA9381PS	TDA9381PS
JR101	JR	NM	JR
JR103	JR	JR	JR
JW281	NM	JW	NM
JW282	NM	JW	NM
L703	10+ SP02	10+ SP02	NM
L704	NM	10+ SP02	NM
LF602	528H-20075	NM	528H-20075
Q102	NM	2SK2158	NM
Q710	NM	2SA1037AK Q	NM
Q715	NM	2SC2412KR	NM
Q714	NM	2SK2158	NM
R110	NM	6.8k	NM
R111	NM	2.2k	NM
R113	NM	2.2k 1/8W	NM
R510	1.0 1W :MF	1.0 1W :MF	0.82 1W :MF
R726	NM	2.2k	NM
R727	NM	2.2k	NM
R729	NM	270	NM
R730	NM	220	NM
RB43	820 1/6W :MF	820 1/6W :MF	820 1/6W :MF
RB44	1.8k 1/6W :MF	1.8k 1/6W :MF	1.8 k 1/6W :MF
D1	1N4148	1N4148	1SS133
D2	1N4148	1N4148	1SS133

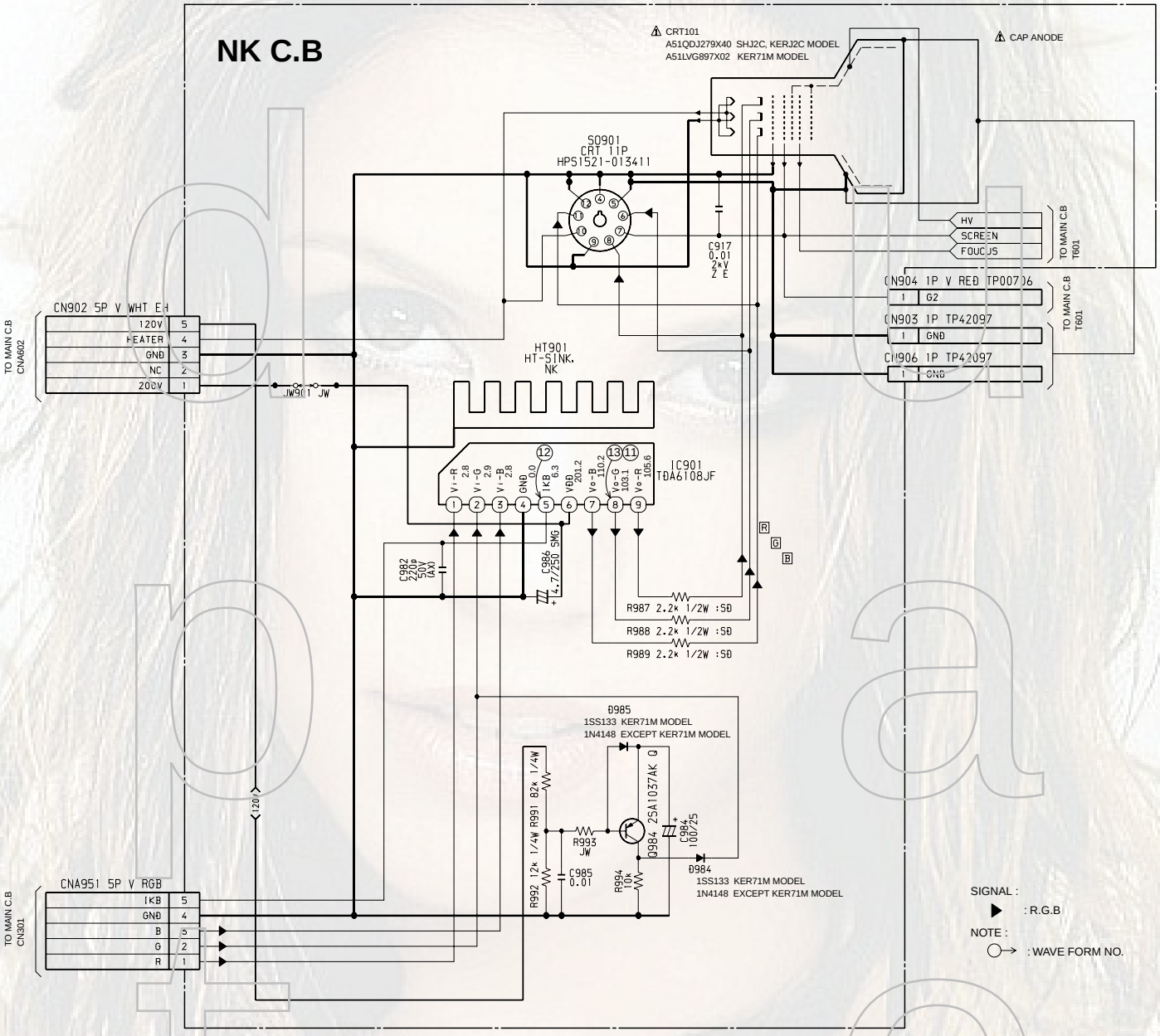
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

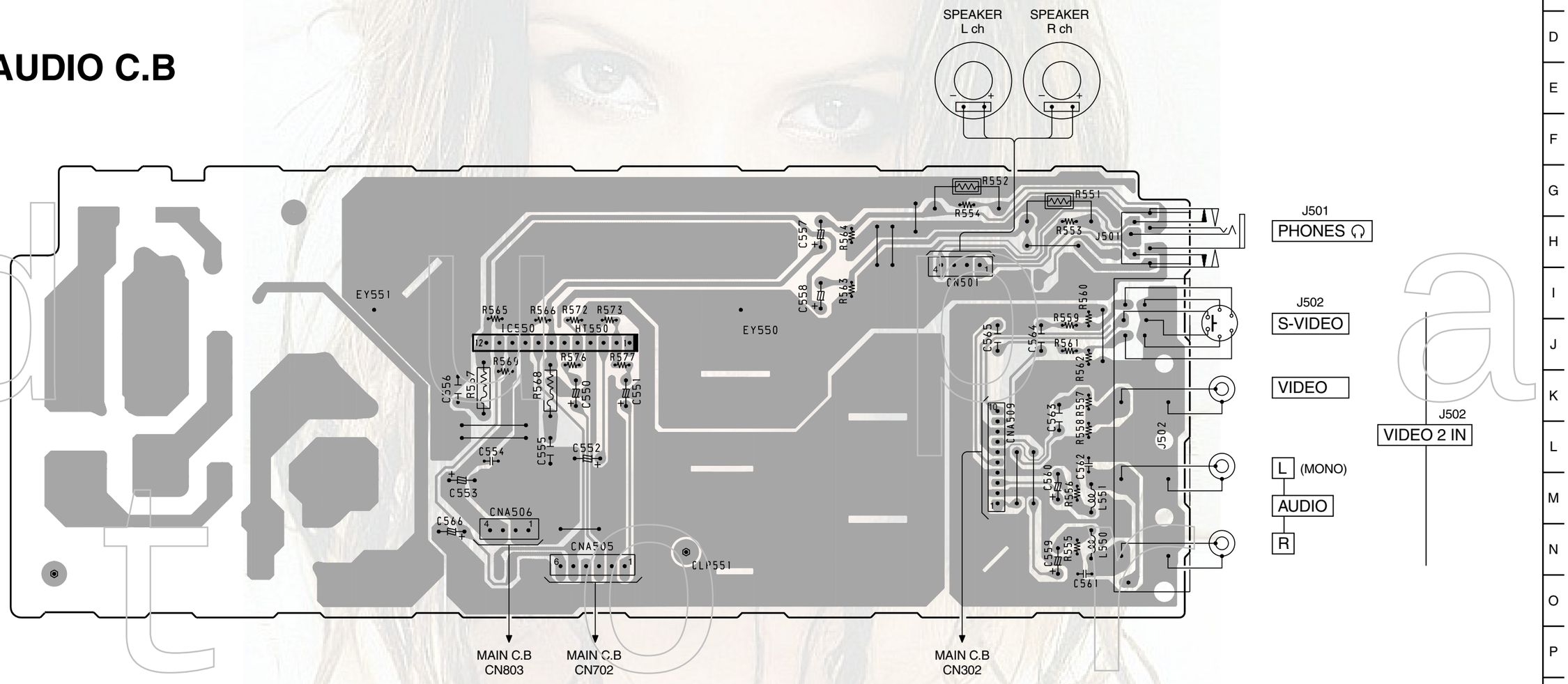
NK C.B



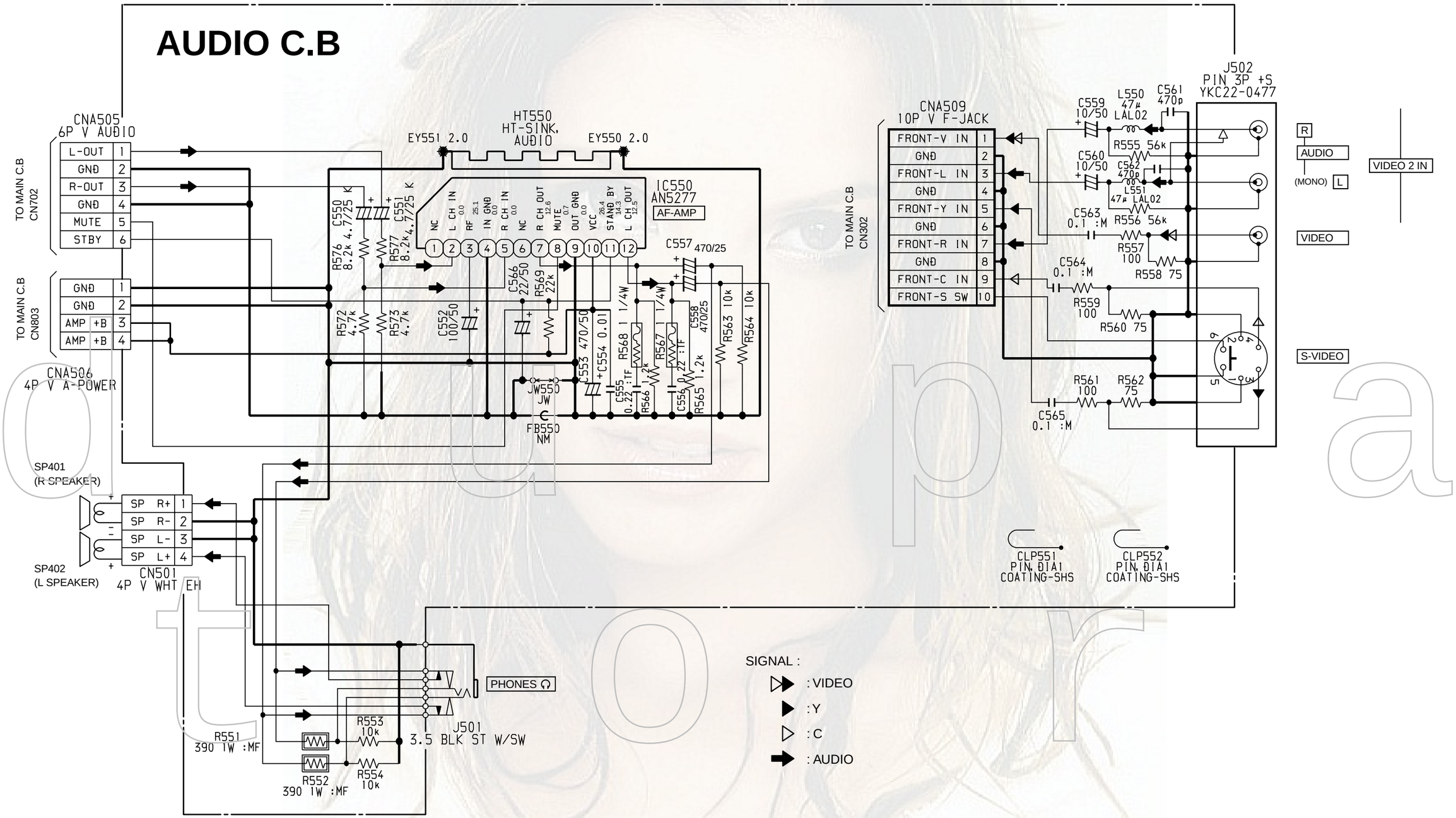
SCHEMATIC DIAGRAM-2/3 (NK)



AUDIO C.B


SPEAKER
L ch
SPEAKER
R ch
EY551
EY550
IC550
HT550
R565
R566
R572
R573
R569
R576
R577
R568
C556
R567
C550
C551
C554
C555
C552
C553
C566
CNA506
CNA505
CL1551
C557
R564
C558
R563
R552
R554
R551
R553
J501
CW501
C565
C564
R559
R560
R561
R562
CNA509
C563
R558
R557
C562
C560
R556
L561
C559
R555
L560
C561
J502
J501
PHONES
J502
S-VIDEO
VIDEO
L (MONO)
AUDIO
R
J502
VIDEO 2 IN
MAIN C.B
CN803
MAIN C.B
CN702
MAIN C.B
CN302

SCHEMATIC DIAGRAM-3/3 (AUDIO)



TRANSISTOR ILLUSTRATION-1/1

E C B

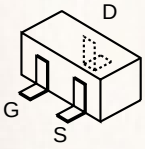
2SA1015Y
2SA1296
2SC2482

B C E

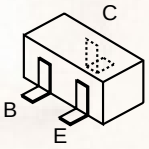
2SD2624

S D G

FS7KM16A



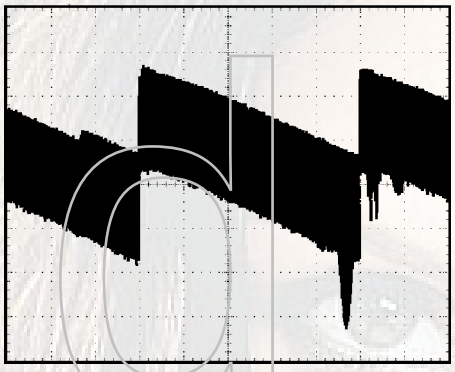
2SK2158



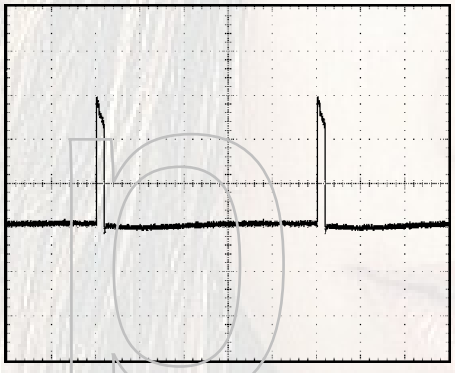
2SC2412
2SC2714
2SA1037

WAVEFORMS-1/2

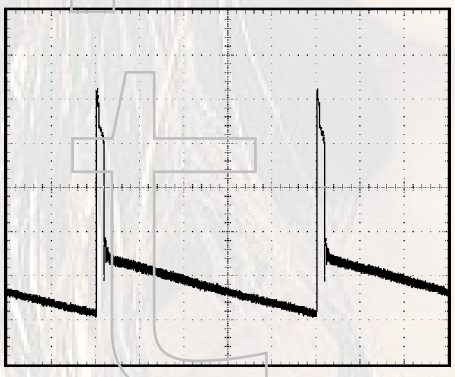
① IC501 Pin 4 (V-DR+)
VOLT/DIV: 20 mV
TIME/DIV: 4mS



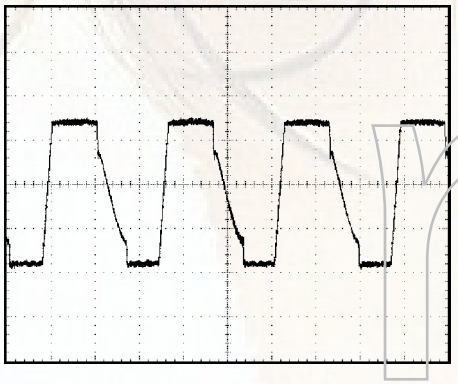
② IC501 Pin 3 (V-out V-SUPPLY)
VOLT/DIV: 1V
TIME/DIV: 4mS



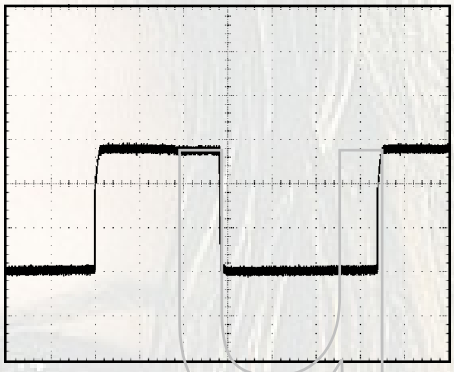
③ IC501 Pin 2 (V-out)
VOLT/DIV: 1V
TIME/DIV: 4mS



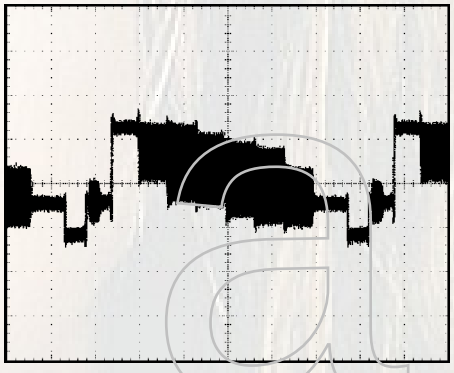
④ D836 Anode
VOLT/DIV: 10V
TIME/DIV: 4µS



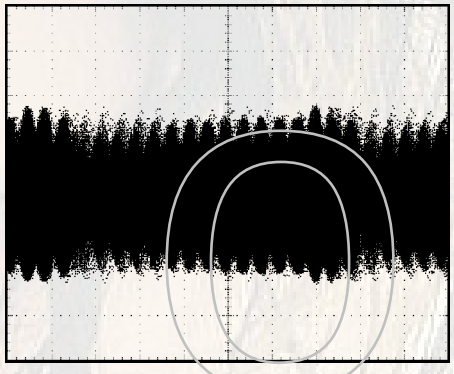
⑤ IC301 Pin33 (HOUT)
VOLT/DIV: 100mV
TIME/DIV: 10µS



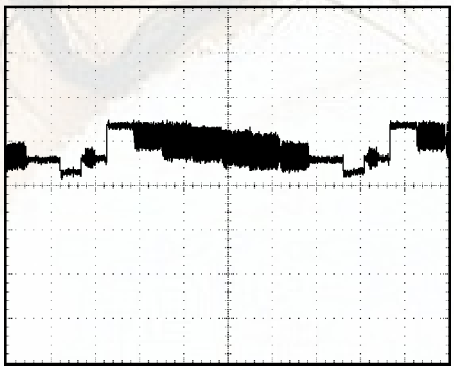
⑥ IC301 Pin38 (IF VOUT)
VOLT/DIV: 100mV
TIME/DIV: 10µS



⑦ Q103 Collector
VOLT/DIV: 20mV
TIME/DIV: 10µS



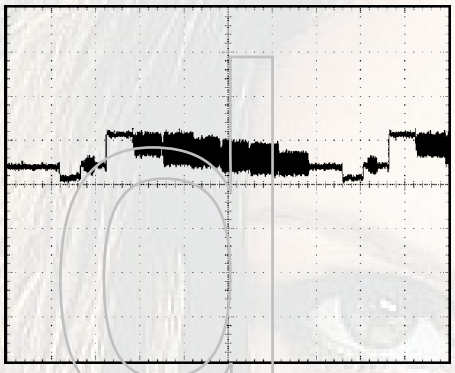
⑧ IC301 Pin40 (CVBS INT)
VOLT/DIV: 100mV
TIME/DIV: 10µS



WAVEFORMS-2/2

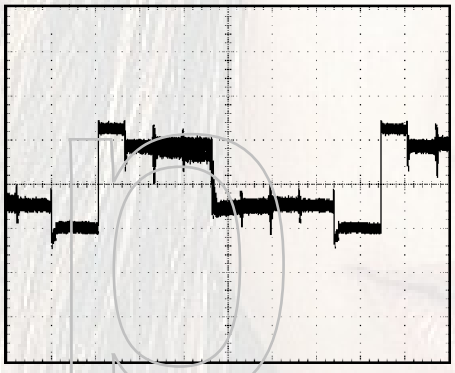
⑨ IC301 Pin42 (CVBS/Y)

VOLT/DIV: 100mV
TIME/DIV: 10µS



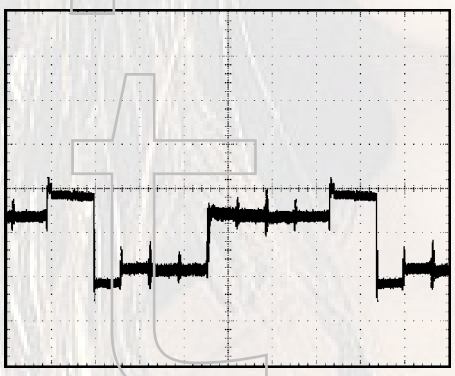
⑩ IC301 Pin52 (G-OUT)

VOLT/DIV: 100mV
TIME/DIV: 10µS



⑪ IC901 Pin8 (VO-G)

VOLT/DIV: 5V
TIME/DIV: 10µS

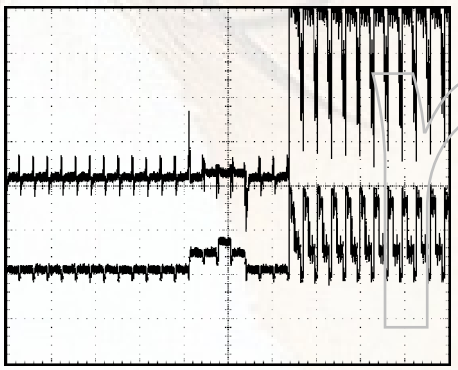


⑫ IC901 Pin5 (IKB)

VOLT/DIV: 100mV
TIME/DIV: 200µS

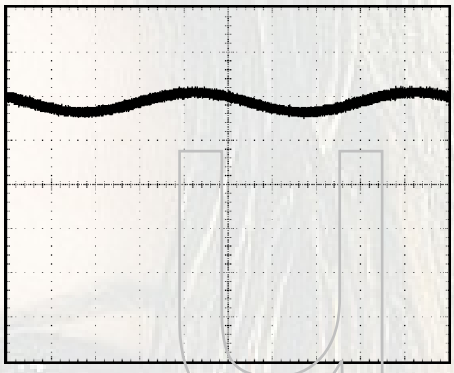
⑬ IC901 Pin8 (VO-G)

VOLT/DIV: 1V
TIME/DIV: 200µS



⑭ IC402 Pin30 (L-IN)

VOLT/DIV: 100mV
TIME/DIV: 200µS

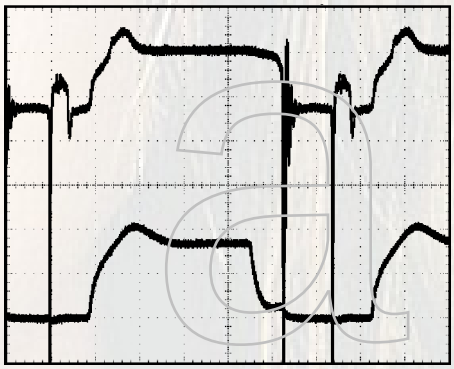


⑮ Q602 Base

VOLT/DIV: 2V
TIME/DIV: 10µS

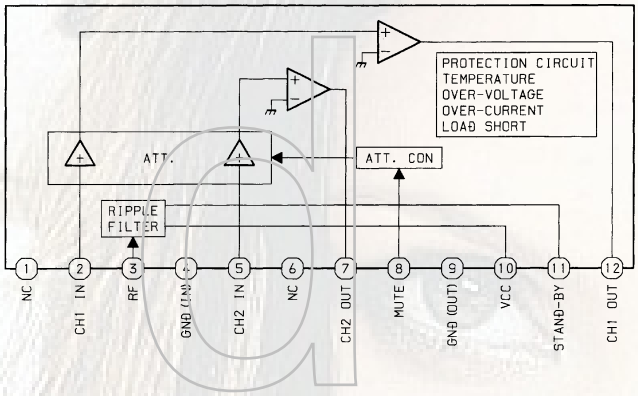
⑯ Q601 Collector

VOLT/DIV: 10V
TIME/DIV: 10µS

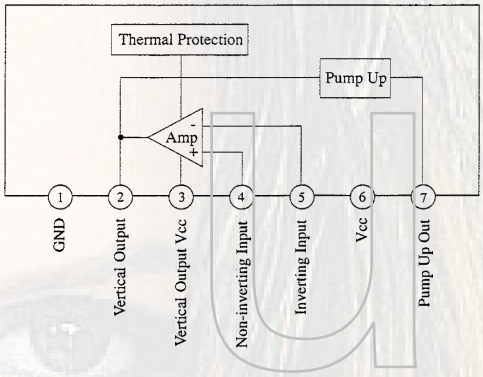


IC BLOCK DIAGRAM-1/2

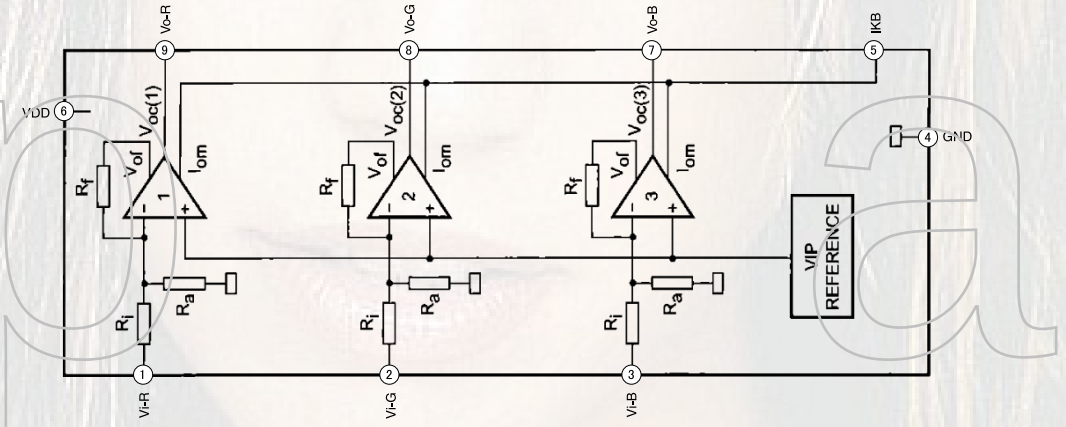
IC, AN5277



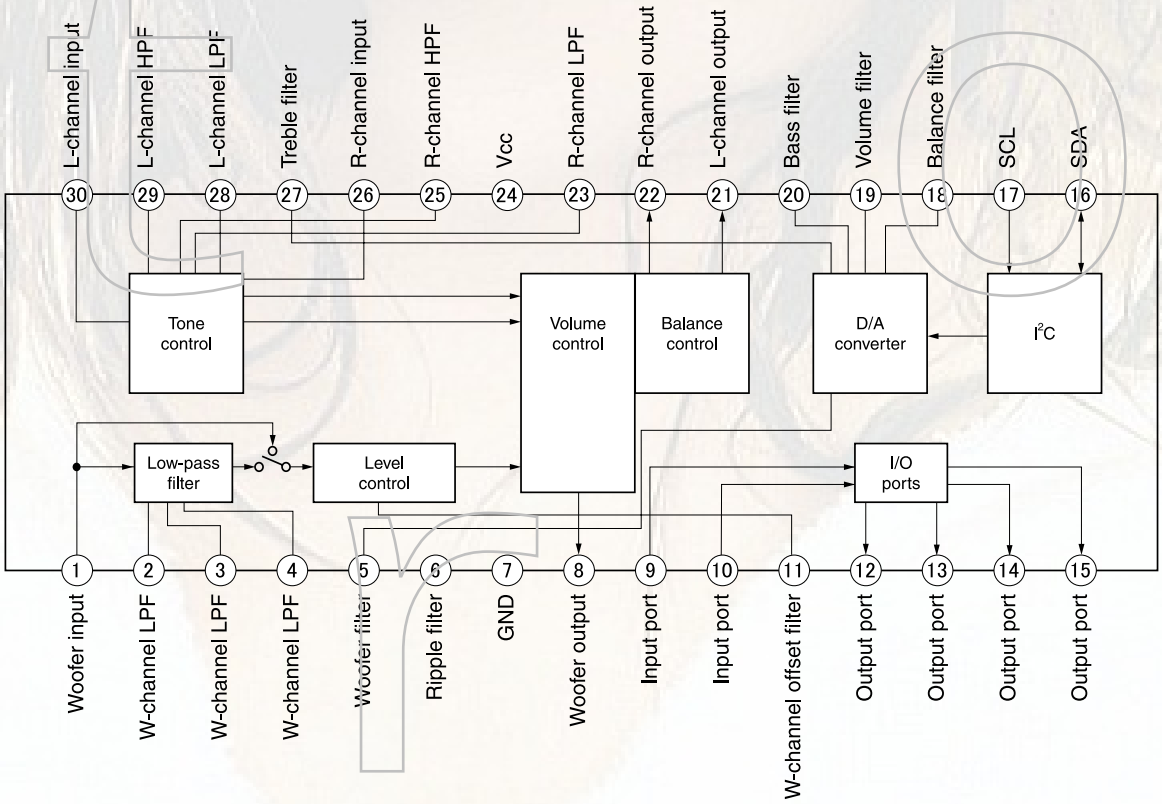
IC, AN5539N



IC, TDA6108JF

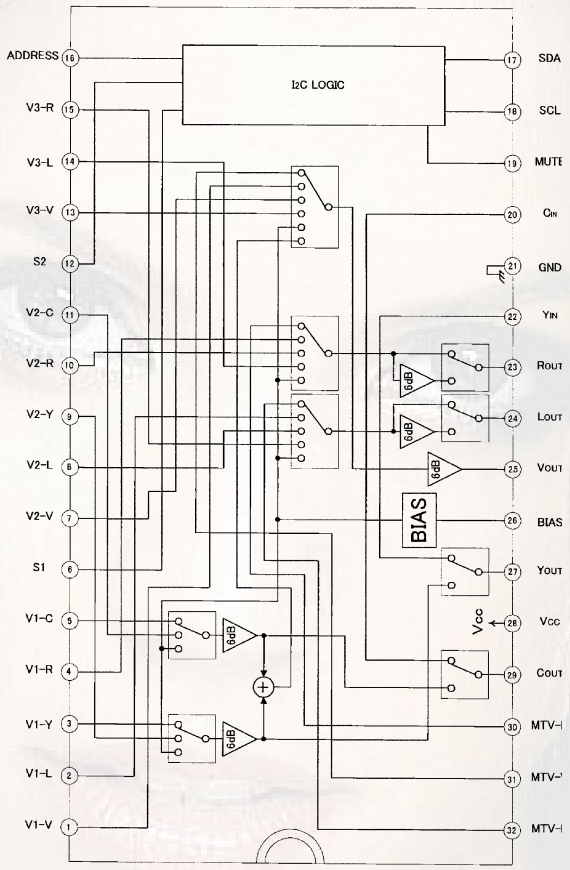


IC, TA1216AN

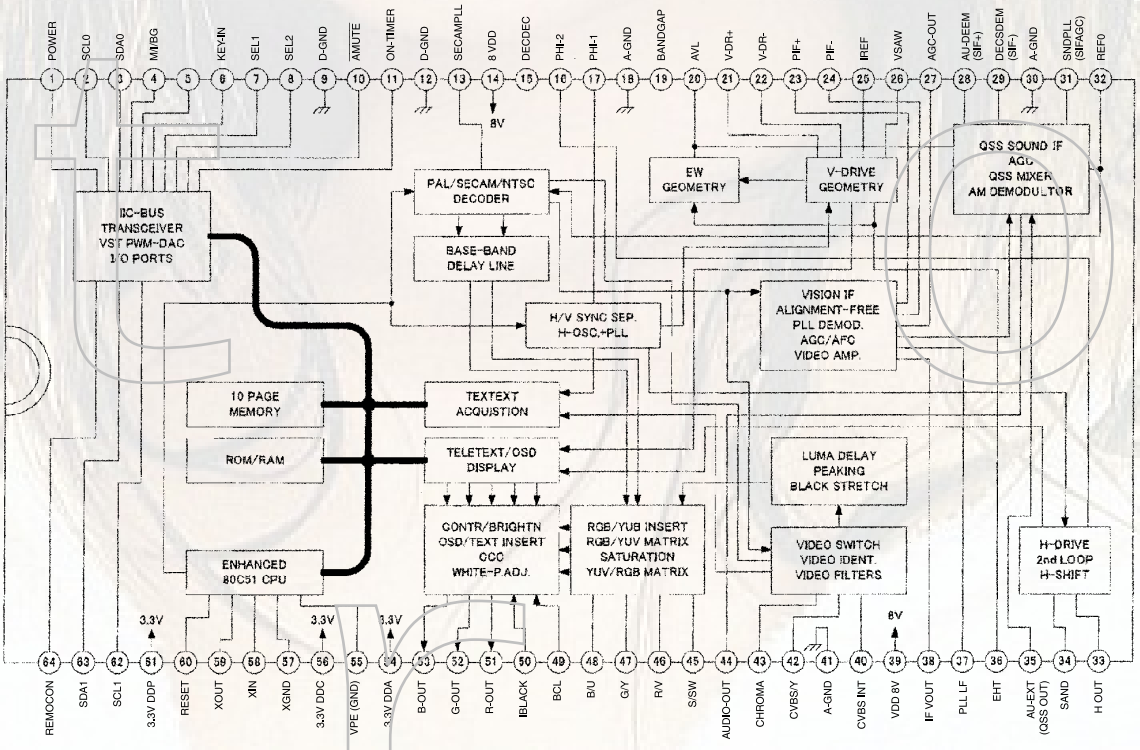


IC BLOCK DIAGRAM-2/2

IC, MM1311AD

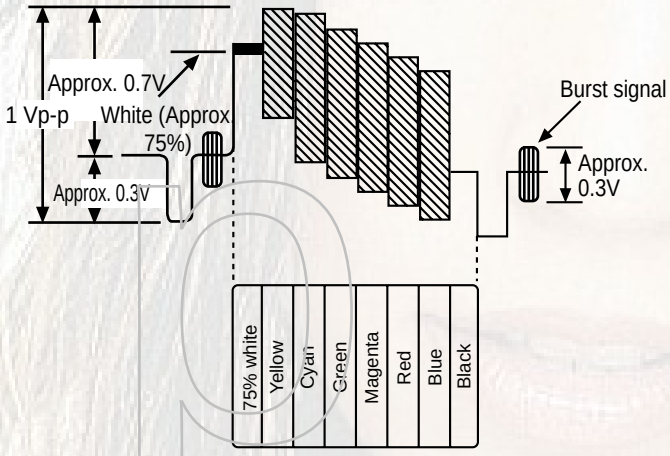


IC, TDA9381PS



SET-UP FOR ADJUSTMENT

Because the video signal output from a pattern generator is used as the adjustment signal input during adjustment, the video signal output from the pattern generator must conform with the specifications. Measure the output waveform across 75 load. Confirm that the synchronizing signal has an amplitude of about 0.3 V, the video signal portion has an amplitude of about 0.7 V and the burst signal has an amplitude of about 0.3 V with flat envelope. Confirm that ratio of the burst signal amplitude and the red signal amplitude is 0.30 : 0.66. If the output signal does not conform with the specifications, calibrate the pattern generator. (Refer to pattern generator operation manual.)
Use the LEADER: LCG 404 for the pattern generator.



TV display

Color bar signal of a pattern generator

PRECAUTIONS BEFORE STARTING ADJUSTMENT

Satisfy the following setting conditions before starting adjustment.

- Allow warm-up of 20 minutes or longer. (Do not turn off during warm-up.)
- Set all picture quality controls of users' setting to initial set-up, unless otherwise specified.
- Picture quality reset
  1. Select "Picture" on the screen menu and press enter button.
  2. Select "Normal" and press enter button.
  3. Select "Reset" and press enter button.
- Set the pattern generator's output level to 1.0Vp-p (across 75 load).

1. CRT ADJUSTMENT

1-1. Precautions

(1) Receive the white raster signal, and then perform aging for at least 20 minutes.
(2) Demagnetize the area surronding the CRT with a degausser before making adjustments.
(3) Set the picture quality for each mode to the factory setting.
(4) Position the front screen facing the east as much as possible.

1-2. Purpose

(1) Beam landing adjustment (purity magnet)

Set the left/right balance of beam landing. If there is a discrepancy in this adjustment, a color irregularity will occur. After completion of the landing adjustment, it is necessary to perform convergence adjustment.

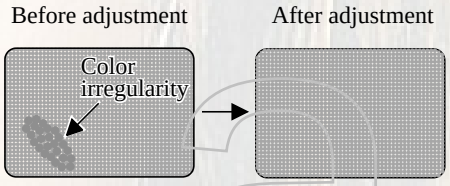
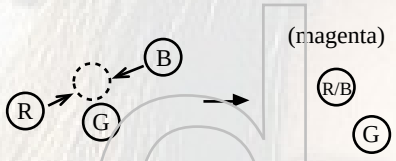


Fig. 1-1

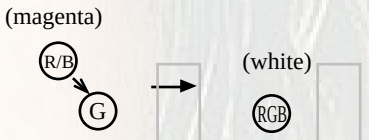
(2) Beam convergence adjustment (4-pole magnet)

Align the R beam with the B beam. The G beam does not move with this adjustment.



Align the R beam with the B beam
Fig. 1-2

(3) Beam convergence adjustment (6-pole magnet)
With a 4-pole magnet align the G beam with the already aligned R/B beam.



Align the G beam with the R/B beam
Fig. 1-3

(4) The composition of each magnet is as shown in Fig. 1-4.

In making adjustments, rotate the lock ring clockwise (looking from the CRT's back screen) and disengage.
Be careful not to loose the lock ring too much. If the magnet assembly has become shifted during adjustments, secure it to the position in Fig. 1-4.

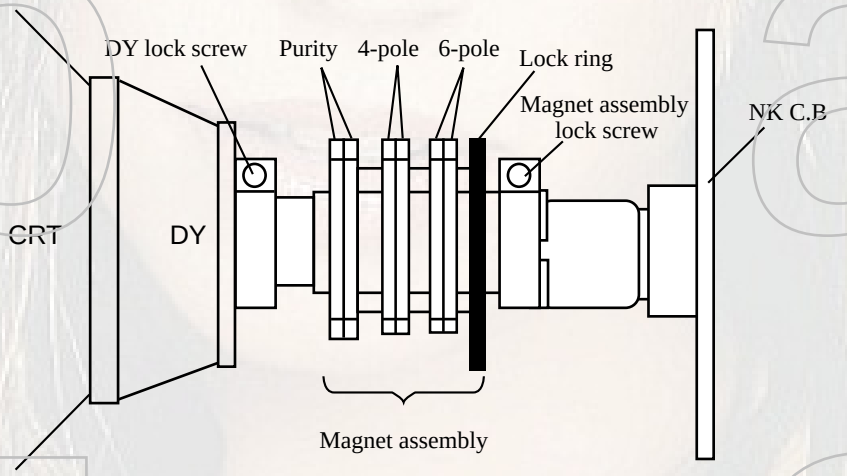


Fig 1-4

1-3. Beam Landing Adjustment

(1) Receive the green raster signal from the pattern generator.
(2) Loosen the magnet lock screw, and shift the magnet assembly backward (toward the neck).
(3) Loosen the DY lock screw, and shift the DY deflecting yoke backward (toward the neck).
(4) After opening the two purity magnets to the same angle, adjust the color width of the bands on both sides of the screen so that they are equal. (refer to Fig. 1-5 (a)).

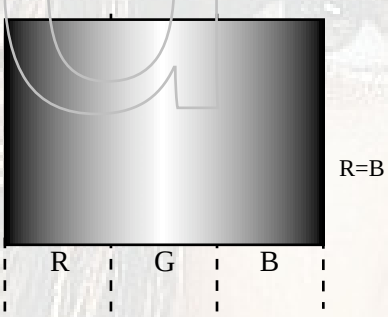


Fig 1-5 (a)

As shown in Fig. 1-5 (b), the purity magnet functions in relation to the electron beam.
(5) Gradually shift the deflecting yoke toward the front (toward the CRT funnel). Stop movement at the point when the screen has become completely green.

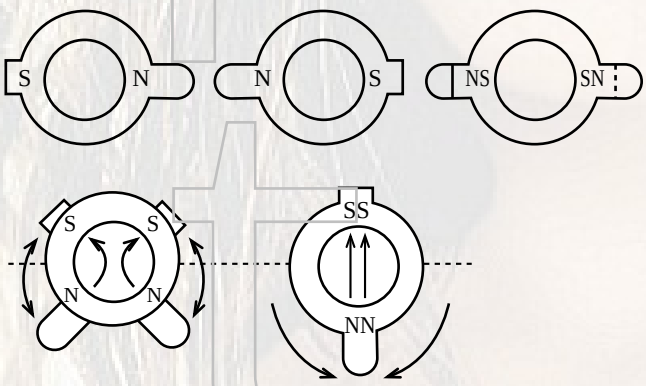


Fig 1-5 (b)

(6) Also, verify the respective monochromatics of red and blue.
(7) While looking at the screen, adjust the tilt of the deflecting yoke and tighten the DY lock screw.
(8) Shift the magnet assembly to the front (toward the CRT funnel), stop movement before the adjustment position and then tighten the magnet lock screw.
At this time, be careful not to shift the position of the purity magnet.

As there is occurrence of convergence distortion after completing the landing adjustments, be sure to carry out convergence adjustments.

If the color irregularities in the screen's corner section are not improved, correct them with the landing magnet. After using the landing magnet, be sure to demagnetize the CRT with degausser and verify that there is no occurrence of color irregularity. (refer to Fig. 1-6)

Landing magnet: 81-JTI-710-010
(two-sided adhesive tape) : 80-XVI-218-010 Cushion

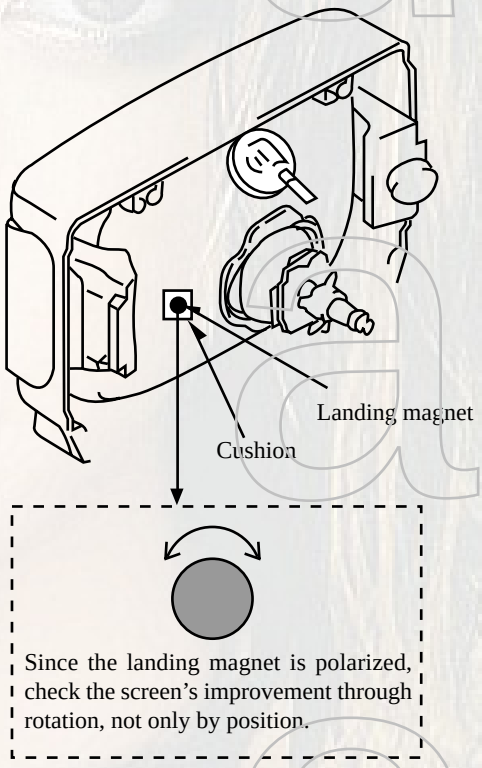


Fig 1-6

1-4. Beam Center Convergence Adjustment

Make adjustments on the convergence with 4-pole and 6-pole magnets. Operate each magnet in relation to the electron beam as shown in Figs. 1-7 and 1-8. When performing this adjustment, verify whether there is distortion in the focus adjustment. If necessary, carry out adjustments again.

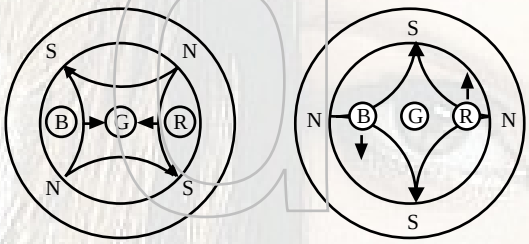


Fig 1-7

In Fig. 1-7, two 4-pole magnets are stacked together so as to be of the same polarity. Move the B and R beams to their respective direction, by rotating the two 4-pole magnets together. By adjusting the opening of the two magnets, it is possible to adjust the amount of the beam's movement.

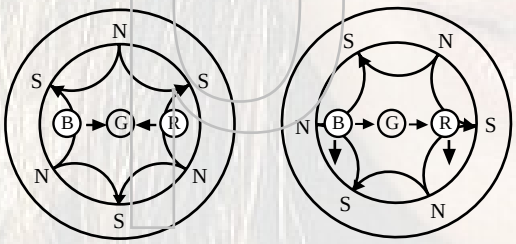


Fig 1-8

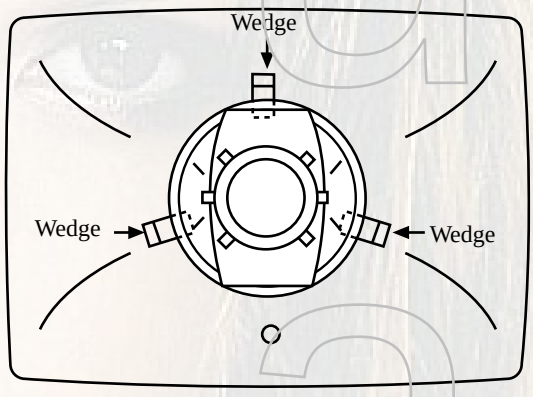
In Fig. 1-8, the two 6-pole magnets are stacked together so as to be of the same polarity. Move the B and R beams to their respective direction, by rotating the two 6-pole magnets together. By adjusting the opening of the two magnets, it is possible to adjust the amount of the beam's movement.

(1) Receive the dot pattern signal from the pattern generator.
(2) Pay attention to the center of the screen, and perform adjustments with two 4-pole magnets so that the R beam and B beam are perfectly aligned and become a magenta color. (Refer to Fig. 1-2)
(3) In the same way, pay attention to the screen, and perform adjustments with a 6-pole magnet so that the magenta beam and G beam are aligned and become a white dot. (Refer to Fig. 1-3)
(4) After adjustments are completed, secure all magnets with the lock link. (Refer to Fig. 1-4)

1-5. The Surrounding Convergence Adjustment

Perform this adjustment after completion of adjustment 1-4.

(1) Shake the deflecting yoke up, down to the right and left, and adjust any discrepancies in the screen's surroundings.
(2) Insert wedges in three locations in the gap between the deflecting yoke and the surface of the CRT funnel in order to secure the deflecting yoke. (Refer to Fig. 1-9)



Position of wedge

Fig. 1-9

ELECTRICAL ADJUSTMENT-1/13

The electrical adjustment procedure is described as follows:

1. How to Fabricate the Jig Remote Control

2. Aging Mode Screen

3. How to Operate the Adjustment Mode

4. Confirming and Setting the Initial Data

5. Electrical Adjustment List
   - 5-1. Screen Size and Screen Position Adjustments (for PAL)
     - 1-1. H POS 50
     - 1-2. V POS 50
     - 1-3. V SIZE 50
     - 1-4. V LINEA 50
     - 1-5. OSD H 50
     - 1-6. OSD V 50
   - 5-2. Screen Size and Screen Position Adjustments (for NTSC)
     - 2-1. H POS 60
     - 2-2. V POS 60
     - 2-3. V SIZE 60
     - 2-4. V LINEA 60
     - 2-5. OSD H 60
     - 2-6. OSD V 60
   - 5-3. Tuner Adjustment
     - 3-1. RF AGC
   - 5-4. Color and Brightness Adjustments
     - 4-1. SCREEN
     - 4-2. BRIGHT
     - 4-3. FOCUS
     - 4-4. TINT
     - 4-5. WHITE BALANCE
       - R CUT OFF
       - G CUT OFF
       - R GAIN
       - G GAIN
       - B GAIN

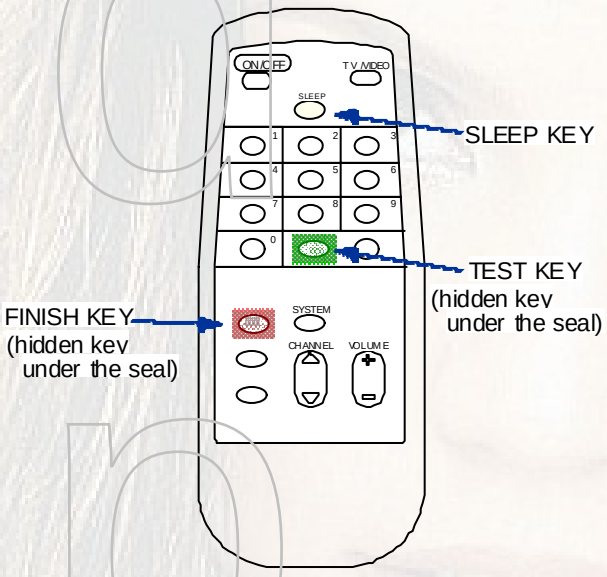
1. How to Fabricate the Jig Remote Control

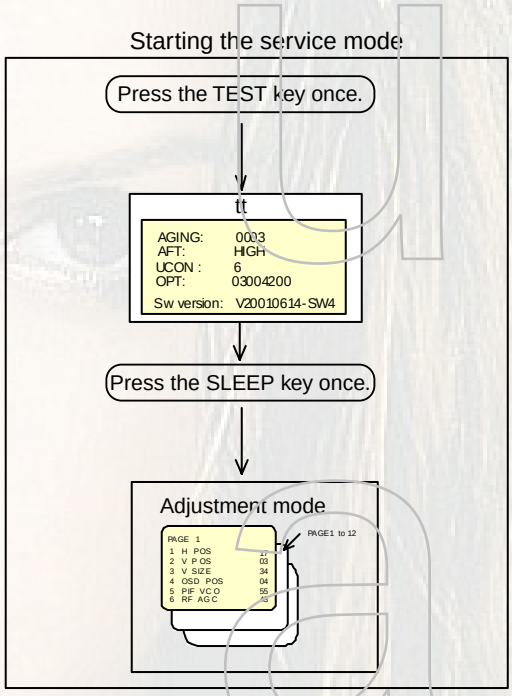
With this model, most parts of video and deflection blocks can be adjusted using a jig remote control.

Part name : RC-6VT06

Part No. : 86-LB4-951-010

Preparations : Modify the hidden keys on the RC-6VT06 jig remote control (TV-C142/86-LB4-951-010) so that they can easily be pressed. 2 keys to be modified (see the figure below):





Hidden key/FINISH

Pressing the "FINISH" key of the jig remote control will reset the accumulated hours in the aging mode.

∗ Do not press the "FINISH" key during normal servicing.

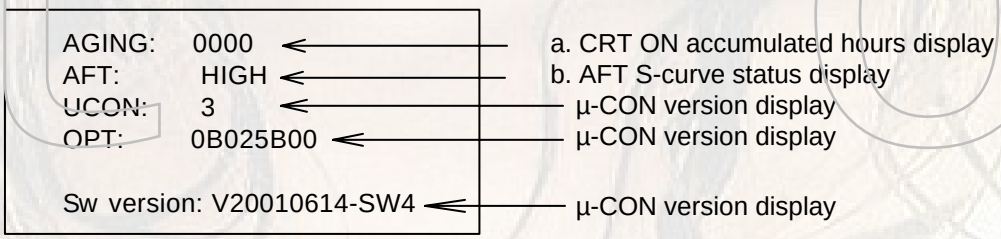
2. Aging Mode Screen

Press the "TEST" key once of the jig remote control to set the aging mode.

In the aging mode, the auto power-off function is released when no input is supplied.

Use this mode for aging (warming up) during CRT adjustment.

The following display appears on the CRT.



Description of the screen display

a. CRT ON accumulated hours display

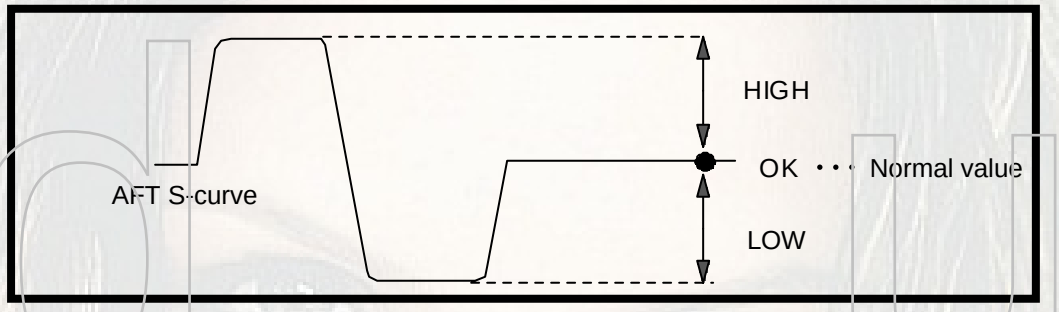
Operating hours of using the CRT are accumulated in units of hour, and are displayed using hexadecimal number.

Example : 1234=(1x16x16x16)+(2x16x16)+(3x16)+4=4,660 hours

When the accumulated hours exceed FFFF (35,535 hours), the display will be reset to "FFFF" fixed.

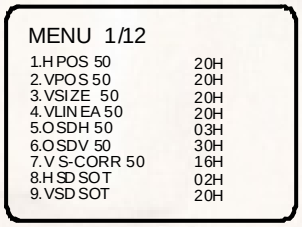
b. AFT S-curve status display (AFT OUT, AFT LOW, AFT IN, AFT HIGH)

HIGH, OK or LOW will appear to show whether the AFT S-curve is too high, optimum or too low.



3. How to operate the adjustment mode

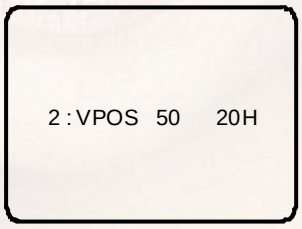
1. Press the [SLEEP] key once to move to MENU 1 of the adjustment mode in the aging mode.



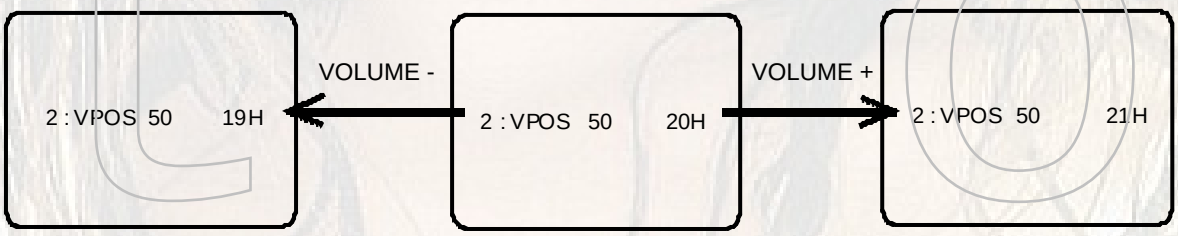
2. Press the [CHANNEL△ • ▽] key to move from MENU 1 to MENU 12.

3. To select the adjustment item, press the numerical key (1 to 9).

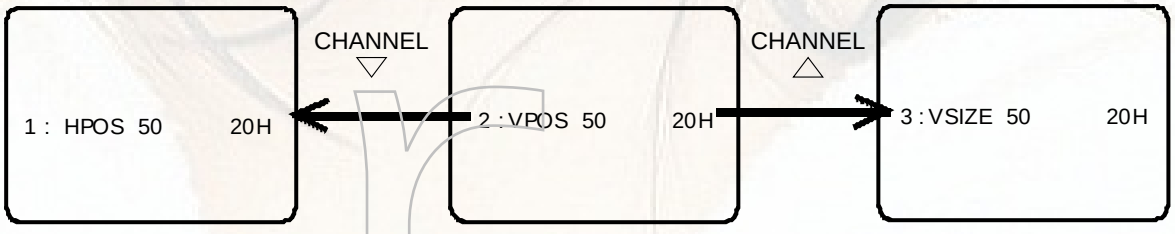
Example: If you want to select "2. V POS 50", press [2] key on the remote control with MENU 1 status.



4. To change data, press the [VOLUME +/-] key.



5. To move to the next or previous adjustment item, press the [CHANNEL •£/•¥] key with the adjustment value selected.



6. Press the [SLEEP] key once to return to the aging mode

4. Confirming and Setting the Initial Data

Before starting adjustment, confirm the initial data of each item. If the initial data is incorrect, correct it using the jig remote control.
The adjustment menu consists of MENU 1 to MENU 12. (Refer to the following tables.)

* The items other than the half-tone meshed items are the fixed adjustment values.
Enter the reference value in each adjustment item.
Setting the incorrect data may cause an error.

<MENU1>

No.	MENU	Contents of MENU	Reference value
1	H POS 50	50 Hz horizontal position	19H
2	V POS 50	50 Hz vertical position	2BH
3	V SIZE 50	50 Hz vertical size	20H
4	V LINEA 50	50 Hz vertical linearity	1EH
5	OSD H 50	50 Hz OSD horizontal position	01H
6	OSD V 50	50 Hz OSD vertical position	32H
7	VS CORR 50	50 Hz vertical S-shape correction	12H
8	HSD50T	50 Hz TEXT horizontal position	01H
9	VSD50T	50 Hz TEXT vertical position	28H

<MENU2>

No.	MENU	Contents of MENU	Reference value
1	H POS 60	60 Hz horizontal position	27H
2	V POS 60	60 Hz vertical position	21H
3	V SIZE 60	60 Hz vertical size	20H
4	V LINEA 60	60 Hz vertical linearity	1FH
5	OSD H 60	60 Hz OSD horizontal position	20H
6	OSD V 60	60 Hz OSD vertical position	05H
7	V S CORR 60	60 Hz vertical S-shape correction	20H
8	HSD60T	60 Hz TEXT horizontal position	02H
9	VSD60T	60 Hz TEXT vertical position	20H

<MENU3>

No.	MENU	Contents of MENU	Reference value
1	COLOR	COLOR center value	1AH
2	BRIGHT	BRIGHT center value	20H
3	CONT	CONTRAST center value	20H
4	TINT	TINT center value	20H
5	SHARP	PEAKING center value	20H
6	CD LVL	Cathode drive level	04H
7	Y SECAM	SECAM Y delay	07H
8	Y NTSC	NTSC Y delay	04H
9	Y PAL	PAL Y delay	04H
0	Y OTHER	Other Y delay	04H

<MENU4>

No.	MENU	Contents of MENU	Reference value
1	IF FREQ	IF frequency *1	03H
2	RF AGC	AGC TAKE OVER POINT	30H
3	A TRVAL	AGC ATSS THRESHOLD	00H
4	OSO	When discharging CRT during standby, the vertical deflection is fixed to the top of screen.	01H
5	EVG	Vertical protection (0: OFF, 1: ON)	01H
6	HCO	EHT (0: Vertical, 1: Horizontal/Vertical)	00H
7	AKB	AKB (0: Operate, 1: Stop)	00H

<MENU5>

No.	MENU	Contents of MENU	Reference value
1	R CUT OFF	Red cut off	25H
2	G CUT OFF	Green cut off	16H
3	R GAIN	Red drive	17H
4	G GAIN	Green drive	20H
5	B GAIN	Blue drive	20H
6	BKS	Black extension (0: OFF, 1: ON)	01H
7	ACL	COLOR LIMIT (0: OFF, 1: ON)	01H
8	FCON	COLOR KILLER (0: OFF, 1: ON)	00H
9	NTSC MAT	NTSC MATRIX (0: JPN, 1: USA)	00H
0	CMA	Forced PAL MATRIX (0: STANDARD, 1: PAL MATRIX)	00H

<MENU6>

No.	MENU	Contents of MENU	Reference value
1	EW AMP50	50 Hz horizontal size	20H
2	EW WID50	50 Hz pincushion (whole)	20H
3	EW UP50	50 Hz pincushion (upper)	20H
4	EW LOW50	50 Hz pincushion (lower)	20H
5	TRPEZ50	50 Hz trapezoidal distortion correction	20H
6	H PARA50	50 Hz parallelogram distortion correction	20H
7	H BOW50	50 Hz barrel distortion correction	20H
8	VPOS Z50	50 Hz zoom vertical position	20H
9	VSIZE Z50	50 Hz zoom vertical size	26H

<MENU7>

No.	MENU	Contents of MENU	Reference value
1	V POS Z 60	60 Hz zoom vertical position	20H
2	V SIZE Z 60	60 Hz zoom vertical size	26H
3	V POS 16 50	50 Hz 16 : 9 vertical position	20H
4	VSIZE 16 50	50 Hz 16 : 9 vertical size	00H
5	V POS 16 60	60 Hz 16 : 9 vertical position	20H
6	VSIZE 16 60	60 Hz 16 : 9 vertical size	00H
7	V POS GAM50	50 Hz GAME vertical position	20H
8	VSIZE GAM50	50 Hz GAME vertical size	1BH
9	V POS GAM60	60 Hz GAME vertical position	20H
0	VSIZE GAM60	60 Hz GAME vertical size	1BH

<MENU8>

No.	MENU	Contents of MENU	Reference value
1	VXM 16	16 : 9 of VX mode	20H
2	VXM Z	Zoom of VX mode	20H
3	VXM G	GAME position of VX mode	20H
4	EW AMP 60	60 Hz horizontal size	20H
5	EW WID 60	60 Hz pincushion (whole)	20H
6	EW UP 60	60 Hz pincushion (upper)	20H
7	EW LOW 60	60 Hz pincushion (lower)	20H
8	TRPEZ 60	60 Hz trapezoidal distortion correction	20H
9	H PARA 60	60 Hz parallelogram distortion correction	20H
0	H BOW 60	60 Hz barrel distortion correction	20H

<MENU9>

No.	MENU	Contents of MENU	Reference value
1	FM VOL	NICAM output level (FM)	20H
2	AM VOL	NICAM output level (AM)	20H
3	VOL74	NICAM output level (NICAM)	20H
4	NERL	NICAM ERROR RATE LOWER	80H
5	NERH	NICAM ERROR RATE HIGHER	80H
6	AVL74	AUTO VOLUME LEVEL ∗2	00H
7	GAIN73	GAIN TDA9873 (0 : REDUCE GAIN, 1 : NORMAL GAIN)	01H
8	GAIN ST	STEREO GAIN	20H
9	AVL UOC	AUTO VOLUME LEVEL inside UOC	00H
0	DEF VOL	Volume level of default setting when shipped from the factory	0AH

<MENU10>

No.	MENU	Contents of MENU	Reference value
1	OP SYS	System setting ∗3 KER SH	 03H 02H
2	OP ST	Audio Volume control (0: absence, 1: presence)	01H
3	OP BBE	BBE (0: absence, 1: presence)	00H
4	OP QSUR	Q surround (0: absence, 1: presence)	00H
5	OP WOFR	Sub woofer (0: absence, 1: presence)	00H
6	OP MSP	MSP option (0: absence, 1: presence)	00H
7	OP VOL	Volume type setting (0: 3W, 1: 5 W, 2 : 7 W)	02H
8	OP TXT	TEXT control (0: absence, 1: presence)	00H
9	OP MOD	Demodulation (0: FM, 1: TDA 9873, 2: TDA9874)	00H
0	OP ROT	Rotation (0: absence, 1: presence)	00H

<MENU11>

No.	MENU	Contents of MENU	Reference value
1	OP VM	VM circuit (0: absence, 1: presence)	00H
2	OP YUV	YUV input (0: absence, 1: presence)	00H
3	OP YC	S input (0: absence, 1: presence)	01H
4	OP MUTE	Tuner mute (0: absence, 1: presence)	01H
5	OP ATSS	ATSS (0: absence, 1: presence)	00H
6	OP TONE	Tone control (0: absence, 1: presence)	01H
7	OP MM1311	AV switch (0: absence, 1: presence)	01H
8	OP M62332	D/A converter (0: absence, 1: presence)	00H
9	OP LANGP	OSD language setting ∗4	01H

<MENU12>

No.	MENU	Contents of MENU	Reference value
1	OP NVMMAP	E^2PROM MAP Ver (0: 100 ch, 1: 210 ch 8 KE^2PROM specifications)	00H
2	OP VIRGIN	E^2PROM initialization (0: Normal, 1: Initializing E^2PROM when leaving the aging mode.)	00H

∗ 1 IF FREQ → 0:Europe38.9MHz,1:FranceA 33.4MHz, 2:FranceB33.9MHz,3:China38.0MHz
4:Japan 58.75MHz,5:USA45.75MHz
∗ 2 AVL74 → 0:AdapttoStandard,1 ShortDelay,2:MediumDelay,3:LongDelay
∗ 3 OP SYS → 0:PAL ／ SECAM ／ NTSC-B ／ G,D ／ K,I,L ／ L'
1:PAL-I (LINEINPUT:PAL ／ NTSC)
2:PAL ／ SECAM ／ NTSC-B ／ G,D ／ K,I,M
3:PAL ／ SECAM-B ／ G,D ／ K (LINEINPUT:PAL ／ SECAM ／ NTSC)
4:PAL-B ／ G (LINEINPUT:PAL ／ NTSC)
5:PAL-B ／ G,I (LINEINPUT:PAL ／ NTSC)
∗ 4 OP LANGP → 0:European specifications,1 EAPM,2:E,3:ETM,4:EC
(E:ENGLISH, A:ARABIC, P:PERSIAN, M:MALAYSIAN, T:THAI, C:CHINA)

5. Electrical Adjustment List

(Adjustment Menu Screen) : During normal servicing, check the applicable items, and adjust them if necessary.

Precautions before starting adjustment

- In the adjustment using the monoscope signal, if a monoscope signal generator is not available, use the video signals that either the test tape TTV-06T (PAL 625 lines) or TTV-N06T (NTSC 525 lines) is played back on the VCR. At that time, be careful of the color system of the input signal (VCR output signal).
- This manual shows the two types of the adjustment values of the screen size when a monoscope signal (PAL and NTSC) is used. One is the value that is measured using the Shibasoku monoscope signal. The other is the value when the screen size is converted into a percentage.
  When you are going to use the monoscope other than that of Shibasoklu, be sure to let it have a compatibility by converting the scale reading into a percentage.
- For the simplified adjustment value of the screen size using a pattern generator, this manual shows the value when either Leader LCG-404 (PAL/SECAM) or the LCG-401 (NTSC) is used.

5-1. Screen Size and Screen Position Adjustments (PAL)

1-1. H POS 50 PAL horizontal position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU1–1
INPUT SIGNAL	PAL monoscope
SPEC	The numbers of horizontal scales of the monoscope signal are equal in both right and left on the monitor.
MODE	VIDEO

1. Use the monoscope and input the LION mark.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that the numbers of horizontal scales of the monoscope signal are equal in both right and left on the monitor. (Fig. 1-1)

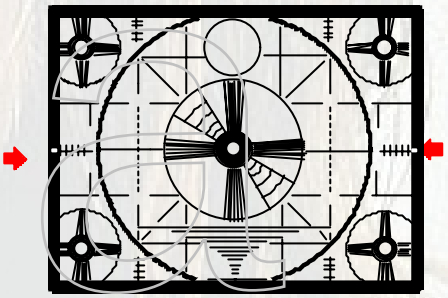


Fig.1-1 PAL monoscope

[Setting TV/measuring equipment] H POS 50 simplified adjustment

ADJUSTMENT MENU No.	MENU1–1
INPUT SIGNAL	PAL CONVERGENCE
SPEC	A=B
MODE	VIDEO

1. Use the pattern generator and input the CONVERGENCE signal.
2. Use the [VOLUME +/-] of the jig remote control and adjust so that the dot mark at the center of crosshatch screen is positioned at the center mark on CRT and the numbers of squares of the crosshatch signal are equal in the right and left on the monitor (A=B). (Fig. 1-2.)

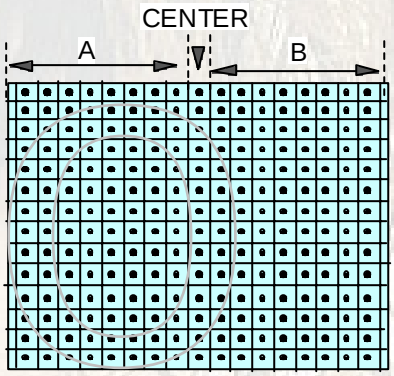


Fig.1-2 PAL CONVERGENCE

1-2. V POS 50 PAL vertical position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU1–2
INPUT SIGNAL	PAL monoscope
SPEC	CRT center = Monoscope center line
MODE	VIDEO

1. Use the monoscope and input the LION mark.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that the center lines of the right and left edges of the monoscope screen agree with the center marks of the CRT. (Fig. 1-3)

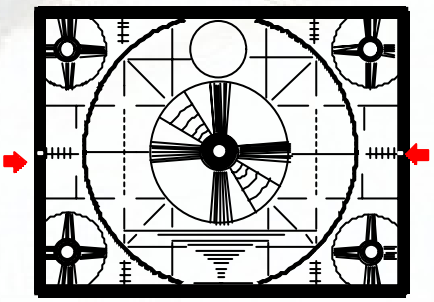


Fig.1-3 PAL monoscope

[Setting TV/measuring equipment] V POS 50 simplified adjustment

ADJUSTMENT MENU No.	MENU1–2
INPUT SIGNAL	PAL CONVERGENCE
SPEC	The center of crosshatch matches with the center of CRT.
MODE	VIDEO

1. Use the pattern generator and input the CONVERGENCE signal.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that the dot mark at the center of crosshatch screen is positioned at the center mark of CRT. (Fig. 1-4.)

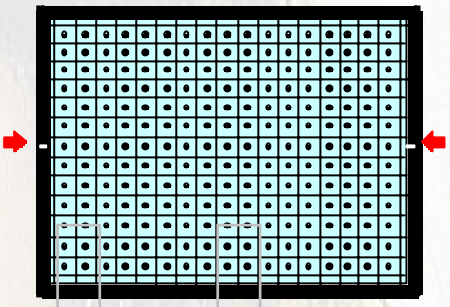


Fig.1-4 PAL CONVERGENCE

1-3. V SIZE 50 PAL vertical size adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU1–3
INPUT SIGNAL	PAL monoscope
SPEC	Vertical graduation is 3.5 to 4.5 (90% to 94%)
MODE	VIDEO

1. Use the monoscope and input the LION mark.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that the numbers of vertical scales in the upper and the lower parts of screen satisfy the specifications. (Fig. 1-5.)

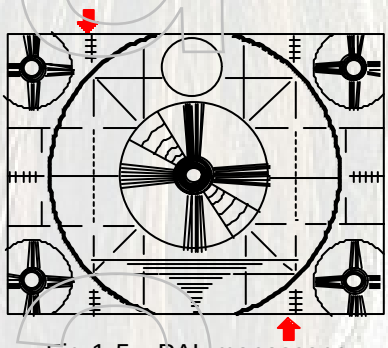


Fig.1-5 PAL monoscope

[Setting TV/measuring equipment] V SIZE 50 simplified adjustment

ADJUSTMENT MENU No.	MENU1–3
INPUT SIGNAL	PAL CONVERGENCE
SPEC	The number of squares must be 13 to 13.25.
MODE	VIDEO

1. Use the pattern generator and input the CONVERGENCE signal.
2. Use the [VOLUME +/-] key of the jig remote control and adjust until the numbers of squares in the upper and the lower parts of screen satisfy the specification. (Fig. 1-6.)

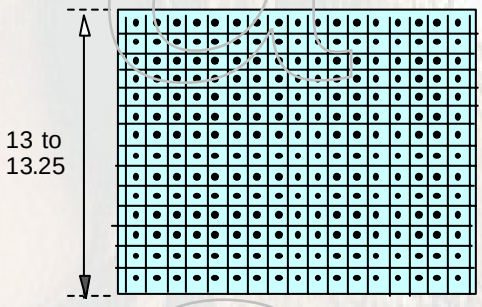


Fig.1-6 PAL CONVERGENCE

1-4. V LINEA 50 PAL vertical linearity adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU1–4
INPUT SIGNAL	PAL monoscope
SPEC	True circle
MODE	VIDEO

1. Use the monoscope and input the LION mark.
2. Use the [VOLUME +/-] key of the jig remote control and set the value to either 1D, 1E or 1F. Check that the six circles are true circles. (Fig. 1-7.)

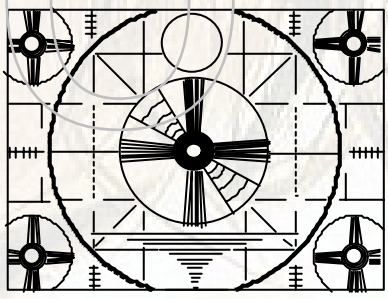


Fig.1-7 PAL monoscope

Note : Upon completion of adjustment, check **V POS 50 (MENU 1 to 2) and V SIZE 50 (MENU 1 to 3)**. If they do not satisfy the specifications, re-adjust them.

[Setting TV/measuring equipment] V LINE 50 simplified adjustment

ADJUSTMENT MENU No.	MENU1–4
INPUT SIGNAL	PAL CONVERGENCE
SPEC	Regular square
MODE	VIDEO

1. Use the pattern generator and input the CONVERGENCE signal.
2. Use the [VOLUME +/-] key of the jig remote control and set the value to either 1D, 1E or 1F, and confirm that the crosshatch square is a regular square. (Fig. 1-8)

Note : Upon completion of adjustment, check **V POS 50 (MENU 1 to 2) and V SIZE 50 (MENU 1 to 3)**. If they do not satisfy the specifications, re-adjust them.

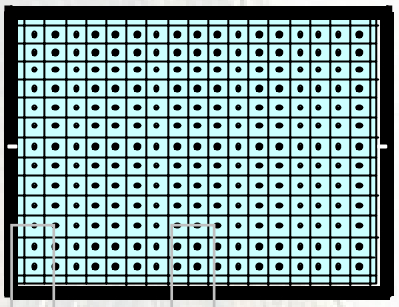


Fig.1-8 PAL CONVERGENCE

1-5. OSD H 50 PAL OSD horizontal position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU1–5
INPUT SIGNAL	PAL CONVERGENCE
SPEC	A = B
MODE	VIDEO

1. Use the pattern generator and input the CONVERGENCE signal.
2. Adjust each distance of A (from ■ to left edge on screen) and B (from ■ to right edge on screen) so that they are equal. (Fig. 1-9)

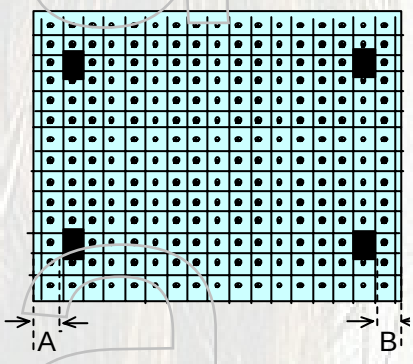


Fig.1-9 PAL CONVERGENCE

1-6. OSD V 50 PAL OSD vertical position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU1–6
INPUT SIGNAL	PAL CONVERGENCE
SPEC	A = B
MODE	VIDEO

1. Use the pattern generator and input the CONVERGENCE signal.
2. Adjust each distance of A (from ■ to top edge on screen) and B (from ■ to bottom edge on screen) so that they are equal. (Fig. 1-10)

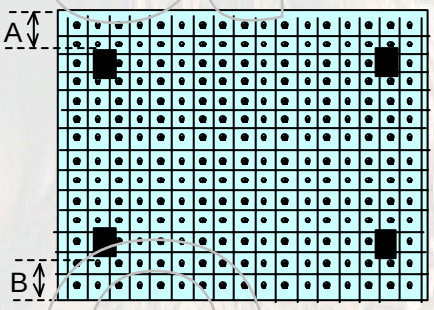


Fig.1-10 PAL CONVERGENCE

5-2. Screen Size and Screen Position Adjustments

2-1. H POS 60 NTSC horizontal position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU2–1
INPUT SIGNAL	NTSC monoscope
SPEC	The numbers of horizontal scales in the right and left on the screen are equal.
MODE	VIDEO

1. Use the monoscope and input the LION mark signal.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that both right and left horizontal graduations are equal. (Fig. 2-1)

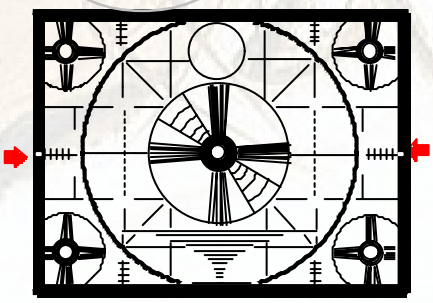


Fig.2-1 NTSC monoscope

[Setting TV/measuring equipment] H POS 60 simplified adjustment

ADJUSTMENT MENU No.	MENU2–1
INPUT SIGNAL	NTSC crosshatch
SPEC	A=B
MODE	VIDEO

1. Use the pattern generator and input the crosshatch signal.
2. Use the [VOLUME +/-] of the jig remote control and adjust so that the dot mark at the center of crosshatch screen is positioned at the center mark on CRT and the numbers of squares in the right and left on the screen are equal (A=B). (Fig. 2-2.)

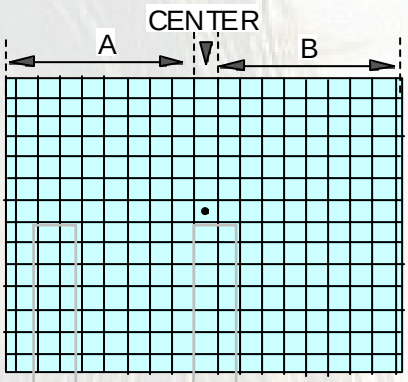


Fig.2-2 NTSC cross hatch

2-2. V POS 60 NTSC vertical position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU2–2
INPUT SIGNAL	NTSC monoscope
SPEC	CRT center = monoscope center line
MODE	VIDEO

1. Use the monoscope and input the LION mark.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that the center lines of the right most and left most edges on the monoscope screen match with the center mark on CRT. (Fig. 2-3)

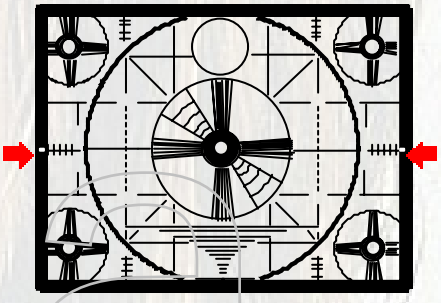


Fig.2-3 NTSC monoscope

[Setting TV/measuring equipment]V POS 60 simplified adjustment

ADJUSTMENT MENU No.	MENU2–2
INPUT SIGNAL	NTSC crosshatch
SPEC	The center on CRT matches with the center of crosshatch.
MODE	VIDEO

1. Use the pattern generator and input the crosshatch signal.
2. Use the [VOLUME +/-] key of the jig remote control and adjust so that the dot mark at the center of crosshatch matches with the center mark on CRT. (Fig. 2-4)

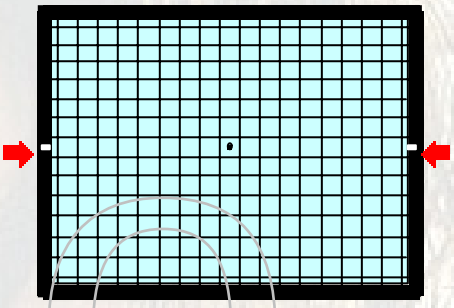


Fig.2-4 NTSC cross hatch

2-3. V SIZE 60 NTSC vertical size adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU2–3
INPUT SIGNAL	NTSC monoscope
SPEC	Vertical graduation is 3.5 to 4.5 (90% to 94%)
MODE	VIDEO

1. Use the monoscope and input the LION mark.
2. Use the [VOLUME +/-] key of the jig remote control and adjust until the number of vertical scale in both top and bottom of screen satisfy the specification. (Fig. 2-5)

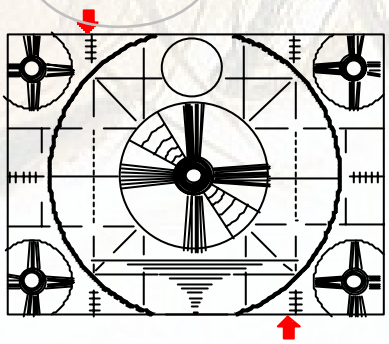


Fig.2-5 NTSC monoscope

[Setting TV/measuring equipment] V SIZE 60 simplified adjustment

ADJUSTMENT MENU No.	MENU2–3
INPUT SIGNAL	NTSC crosshatch
SPEC	The number of squares must be 6 to 6.5.
MODE	VIDEO

1. Use the pattern generator and input the crosshatch signal.
2. Use the [VOLUME +/-] key of the jig remote control and adjust until the numbers of squares in both upper and lower halves of screen satisfy the specification. (Fig. 2-6)

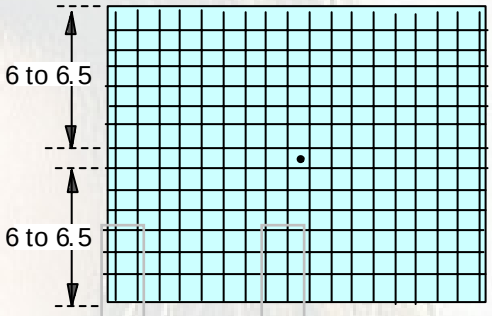


Fig.2-6 NTSC cross hatch

2-4. V LINEA 60 NTSC vertical linearity adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU2–4
INPUT SIGNAL	NTSC monoscope
SPEC	True circle
MODE	VIDEO

1. Use the monoscope and input the LION mark signal.
2. Use the [REMOTE +/-] key of the jig remote control and set the value to either 1E, 1F or 20, and confirm that six circles are true circles. (Fig. 2-7)

Note : Upon completion of adjustment, check **V POS 60 (MENU 2-2 and V SIZE 60 (MENU 2-3)**. If they do not satisfy the specifications, re-adjust them.

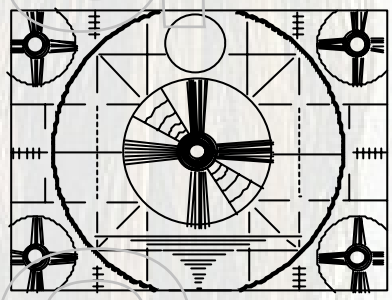


Fig.2-7 NTSC monoscope

[Setting TV/measuring equipment] V LINEA 60 simplified adjustment

ADJUSTMENT MENU No.	MENU2–4
INPUT SIGNAL	NTSC crosshatch
SPEC	Regular square
MODE	VIDEO

1. Use the pattern generator and input the crosshatch signal.
2. Use the [VOLUME +/-] key of the jig remote control and set the value to either 1E, 1F or 20, and confirm that the squares are regular squares. (Fig. 2-8)

Note : Upon completion of adjustment, check V POS 60 (MENU 2-2 and V SIZE 60 (MENU 2-3). If they do not satisfy the specifications, re-adjust them.

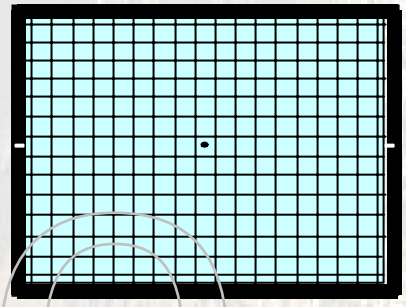


Fig.2-8 NTSC cross hatch

2-5. OSD H 60 NTSC OSD horizontal position adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU2–5
INPUT SIGNAL	NTSC crosshatch
SPEC	A = B
MODE	VIDEO

1. Use the pattern generator and input the crosshatch signal.
2. Adjust each distance of A (from ■ to left end on screen) and B (from ■ to right end on screen) so that they are equal. (Fig. 2-9)

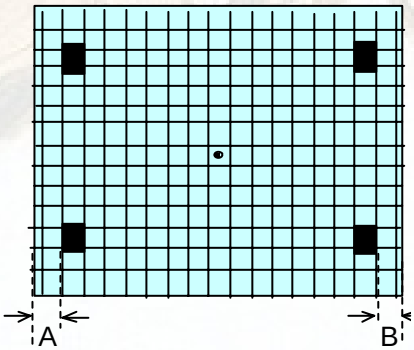


Fig.2-9 NTSC cross hatch

2-6. OSD V 60 NTSC OSD vertical position adjustment
[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU2–6
INPUT SIGNAL	NTSC crosshatch
SPEC	A = B
MODE	VIDEO

1. Use the pattern generator and input the crosshatch signal using a pattern generator.
2. Adjust each distance of A (from ■ to top end on screen) and B (from ■ to bottom end on screen) so that they are equal. (Fig. 2-10)

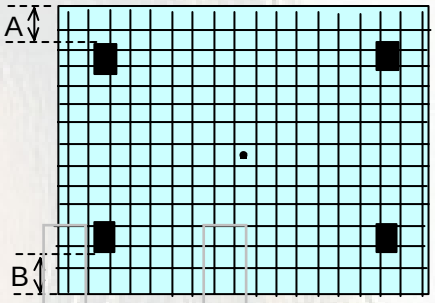


Fig.2-10 NTSC cross hatch

5-3. Tuner GAIN Adjustment

3-1. RF AGC RF AGC adjustment
[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU4–2
INPUT SIGNAL	PAL color bar (Full-field) Input level : 57± 1.0 dBµV Channel : 471.25 MHz
TEST POINTS	TU101 1pin/C102 + side
SPEC	3.4± 0.4 VDC
MODE	TUNER

1. Connect the digital voltage meter to the test points.
2. Input the specified input signal to RF ANT to receive 471.25 MHz.
3. Measure the voltage value of the test points.
   If the voltage value is 3.8 V or less, use the [VOLUME +/-] key of the jig remote control and adjust for 3.8 V or more (approx. 4.0 V).
4. Use the [VOLUME +/-] key of the jig remote control and increase the value. The adjustment ends when the voltage value becomes 0.2 V less than that of the initial measurement.

[Setting TV/measuring equipment] RF-AGC simplified adjustment

ADJUSTMENT MENU No.	MENU4–2
INPUT SIGNAL	PAL color bar (Full-field) Channel : 471.25 MHz
TEST POINTS	TU101 1pin/C102 + side
SPEC	1.75 to 2.50 VDC

1. Connect the digital voltage meter to the test points.
2. Measure the electric field strength of the pattern generator owned by you.
3. Use the [VOLUME +/-] key of the jig remote control and adjust so that each voltage value is close to the corresponding electric field strengths referring to Fig. 3-1.

Electric field strength	Voltage value
65dBµV	2.50V
70dBµV	2.20V
75dBµV	1.90V
80dBµV	1.75V

Fig.3-1

5-4. Color and Brightness Adjustments

4-1. SCREEN Screen adjustment
[Setting TV/measuring equipment] RF-AGC simplified adjustment

ADJUSTMENT MENU No.	MENU3–2
INPUT SIGNAL	PAL CONVERGENCE
ADJUSTMENT LOCATION	T601 (Lower SFR of FBT)
SPEC	WBC : 04H HBC : 02H
MODE	VIDEO

1. Use the jig remote control and set to the adjustment mode screen.
2. Set the value of MENU3-2 BRIGHT to 32 H.
3. Press the [SLEEP] key of the jig remote control once to enter the AGING mode.
4. Press the [10] key of the jig remote control once and show the SCREEN adjustment screen. (Fig. 4-1)
5. Adjust the lower SFR of FBT until each value satisfies the specifications.
6. Set the value of MENU3-2 BRIGHT to 20 H.

Note : Upon completion of adjustment, be sure to adjust **BRIGHT (MENU3-2)**.

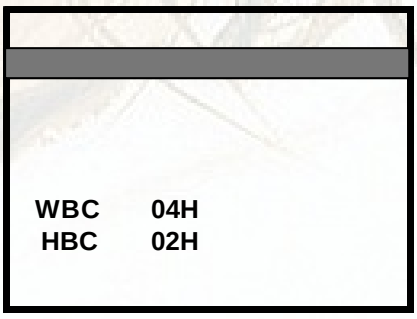


Fig.4-1 PAL CONVERGENCE

4-2. BRIGHT Brightness adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU3–2
INPUT SIGNAL	PAL stair-step
MODE	VIDEO

1. Use the pattern generator and input the stair-step signal.
2. Use the [VOLUME +/-] key of the jig remote control and adjust until the second step from the right just starts to appear. (Fig. 4-2)

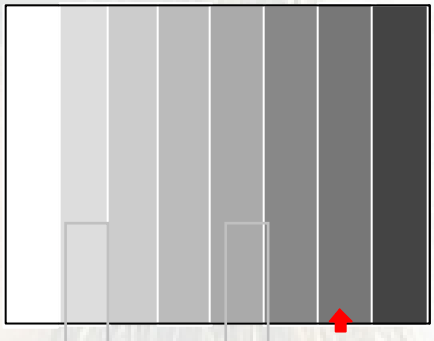


Fig.4-2 PAL stair-step

4-3. FOCUS Focus adjustment

[Setting TV/measuring equipment]

INPUT SIGNAL	PAL dot pattern
ADJUSTMENT LOCATION	T601 (Upper SFR of FBT)
MODE	VIDEO

1. Use the pattern generator and input the dot pattern signal.
2. Adjust the upper SFR of FBT until focus of the dots of the dot pattern is optimum.

4-4. TINT Sub-tint adjustment

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU3–4
INPUT SIGNAL	NTSC color bar (Full-field, White 75%)
TEST POINTS	CN301 3pin/BOUT
SPEC	STRAIGHT
MODE	VIDEO

1. Connect the oscilloscope to the test points.
2. Input the specified input signal.
3. Use the [VOLUME +/-] key of the jig remote control and adjust so that the top edges of waveform are in a straight line. (Fig. 4-3)

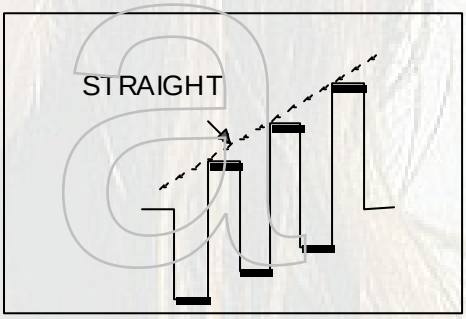


Fig.4-3

4-5. WHITE BALANCE White balance adjustment

In this adjustment, use CA-100 (CRT COLOR ANALIZER).

[Setting TV/measuring equipment]

ADJUSTMENT MENU No.	MENU5–1 /R CUTOFF MENU5–2 /G CUTOFF MENU5–3 /R GAIN MENU5–4 /G GAIN MENU5–5 /B GAIN
INPUT SIGNAL	PAL white raster
SPEC	X = 0.274, Y = 0.286 Color temperature = 11000˚ ±1%
MODE	VIDEO

∗ Perform aging for at least 20 minutes before starting adjustment.

1. Set CA-100. (Fig. 4-4)
2. Adjust each CUT OFF and each GAIN so that X values and Y values satisfy the specifications.
3. Upon completion of adjustment, confirm that the color temperature is 11000° ± 1 %.

CA-100 setting

SYNC		PAL
CH		00
CAL :	X Y	0.274 0.286
RANGE	X Y	1.0% 1.0%

Fig.4-4

Note : After adjustment, be sure to adjust **BRIGHT (MENU3-2)**.

[Setting TV/measuring equipment] WHITE BALNCE simplified adjustment

ADJUSTMENT MENU No.	MENU5–1 /R CUTOFF MENU5–2 /G CUTOFF MENU5–3 /R GAIN MENU5–4 /G GAIN MENU5–5 /B GAIN
INPUT SIGNAL	PAL white raster
SPEC	WHITE
MODE	VIDEO

∗ Perform aging for at least 20 minutes before starting adjustment.
∗ Repeat all processes (1 to 6) of adjustment several times.

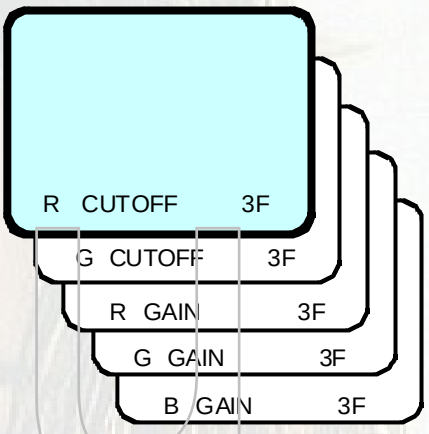


Fig.4-5

Cutoff adjustment (LOW LIGHT) :

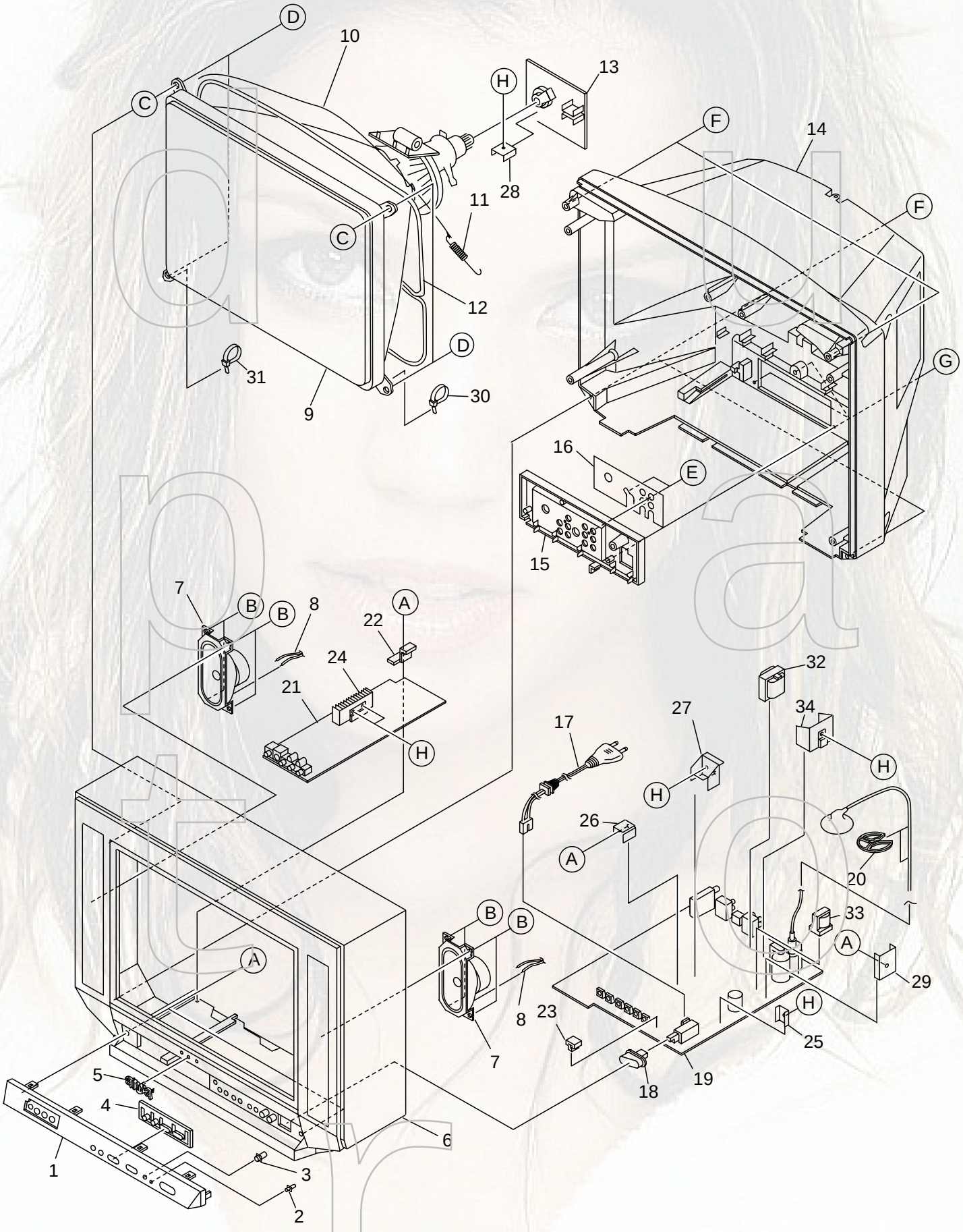
1. Use the pattern generator and input the white raster signal.
2. Fix the cutoff value to “20” color that looks most intense. Use the [VOLUME +/-] key of the jig remote control and adjust cutoff of the other two values so that the screen becomes white.

GAIN adjustment (HIGH LIGHT) :

3. Use the [VOLUME +/-] key of the jig remote control and increase the R GAIN value so that the picture becomes reddish.
4. Decrease the value gradually until red disappears.
5. Use the [VOLUME +/-] key of the jig remote control and increase the G GAIN value so that the picture becomes greenish.
6. Decrease the value gradually until green disappears.
7. Use the [VOLUME +/-] key of the jig remote control and increase the B GAIN value so that the picture becomes bluish.
8. Decrease the value gradually until blue disappears.
9. Perform steps 1 to 8 several times so that a white picture appears. (Fig. 4-5)

Note : After adjustment, be sure to adjust **BRIGHT (MENU3-2)**.

MECHANICAL EXPLODED VIEW-1/1



MECHANICAL PARTS LIST -1/1

! = ⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		O	MC1001	8B-JEU-001-010	PANEL,MAIN SH	a	.	.
		O	MC1001	8B-JEU-002-010	PANEL,MAIN KER	.	b	c
		O	MC1002	8Z-JE7-005-010	LENS,LED	a	b	c
		O	MC1003	8B-JEV-007-010	LENS,RC CL	a	b	c
		O	MC1004	8A-JET-003-110	KEY,MAIN	a	b	c
		O	MC1005	87-B00-035-010	BADGE,AIWA 52.5 SIL GRAY	a	b	c
		O	MC1006	8B-JEV-001-010	CABI,FR MS328E	a	b	c
		O	MC1007	8B-JBF-621-010	SPKR,6*12 8OHM 10W (NOM.5W)	a	b	.
		O	MC1007	8Z-JB3-620-010	SPKR,6*12 8OHM 15W	.	.	c
		O	MC1008	8B-JET-662-010	CONN ASSY,4P SP-21 STRIPPED	a	b	c
	!	O	MC1009	8B-JES-609-010	CRT,A51QDJ279X40(0.35) P/F	.	.	c
	!	O	MC1009	8B-JEU-610-010	CRT,A51QDJ279X40(0.0) P/F	.	b	.
	!	O	MC1009	8B-JEU-611-010	CRT,A51LXR195X	a	.	.
		O	MC1010	8B-JET-661-010	CONN ASSY,2P CRT-GND	a	b	c
		O	MC1011	8B-JT1-217-010	SPR-E,EARTH	a	b	c
	!	O	MC1012	87-JBN-630-010	DGC,21PAL 7JB-22	a	b	c
		X	MC1013	8B-JET-603-110	PWB,COMB NK	a	b	c
		O	MC1014	8B-JEV-004-010	CABI,REAR DC BLK C	a	b	.
		O	MC1014	8A-JED-006-010	CABI,REAR DC BLK	.	.	c
		O	MC1015	8B-JEV-003-010	PANEL,REAR SH	a	b	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		O	MC1016	8B-JEV-011-010	PLATE,REAR SH	a	b	c
	!	O	MC1017	8Z-JB4-695-010	AC CORD SET,EH BLK	a	b	c
		O	MC1018	8A-JEH-004-010	BTN,POWER 2	a	b	c
		X	MC1019	8B-JET-601-110	PWB,MAIN FTV	a	b	c
	!	O	MC1020	87-A90-332-010	HLDR,SF-2001 HV CABLE	a	b	c
		X	MC1021	8B-JET-604-110	PWB,COMB AUDIO	a	b	c
		O	MC1022	8Z-JBR-205-110	HLDR,PCB 3	a	b	c
		O	MC1023	84-LB3-216-010	HLDR,LED	a	b	c
		X	MC1024	8B-JET-217-010	HT-SINK,AUDIO	a	b	.
		X	MC1024	8B-JET-640-010	HT-SINK,AUDIO	.	.	c
		X	MC1025	8B-JET-216-010	HT-SINK,BRG	a	b	.
		X	MC1025	8Z-JE7-210-010	HT-SINK,BRG	.	.	c
		X	MC1026	8B-JBC-204-010	HT-SINK,REG C ASSY	a	b	.
		X	MC1026	8B-JET-211-010	HT-SINK,REG M ASSY	.	.	c
		X	MC1026a	8B-JBC-205-010	HT-SINK,REG C	a	b	.
		X	MC1026a	8B-JET-212-010	HT-SINK,REG M	.	.	c
		X	MC1026b	8Z-JBR-218-010	PLATE,FOOT	a	b	.
		X	MC1026b	8Z-JE7-212-010	PLATE,FOOT	.	.	c
		X	MC1027	8B-JES-221-010	HT-SINK,ASSY V-OUT	a	b	.
		X	MC1027	8B-JES-212-010	HT-SINK,ASSY V	.	.	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		X	MC1027a	8B-JES-222-010	HT-SINK,V-OUT	a	b	.
		X	MC1027a	8B-JES-211-010	HT-SINK,V-OUT	.	.	c
		X	MC1027b	8Z-JBR-218-010	PLATE,FOOT	a	b	.
		X	MC1027b	8Z-JE7-212-010	PLATE,FOOT	.	.	c
		X	MC1028	8A-JEV-203-010	HT-SINK,NK	a	b	.
		X	MC1028	8B-JET-210-010	HT-SINK,NK	.	.	c
		X	MC1029	8B-JES-223-010	HT-SINK,ASSY H-OUT	a	b	.
		X	MC1029	8B-JES-216-010	HT-SINK,ASSY H-OUT2	.	.	c
		X	MC1029a	8B-JES-224-010	HT-SINK,H-OUT	a	b	.
		X	MC1029a	8B-JES-215-010	HT-SINK,H-OUT2	.	.	c
		X	MC1029b	8Z-JBR-218-010	PLATE,FOOT	a	b	.
		X	MC1029b	8Z-JE7-212-010	PLATE,FOOT	.	.	c
		O	MC1030	87-A90-193-010	HLDR,CV100 (B)	a	b	.
		O	MC1030	87-069-033-010	CABLE,TIE	.	.	c
		X	MC1031	87-A92-387-010	CABLE TIE,TG-160M/MC	a	b	.
		X	MC1031	87-069-036-010	CABLE,TIE 146(N)	.	.	c
	!	O	MC1032	85-JT2-653-010	PT,HDT-TV141-2	a	b	c
	!	O	MC1033	8B-JET-630-010	PT,SH SW BJE-T	a	b	c
		X	MC1034	8B-JAU-211-010	HT-SINK,ASSY FET C	a	b	.
		X	MC1034	8B-JES-214-010	HT-SINK,ASSYFET	.	.	c
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		X	MC1034a	8B-JAU-210-010	HT-SINK,FET C	a	b	.
		X	MC1034a	8B-JES-213-010	HT-SINK,FET	.	.	c
		X	MC1034b	8Z-JBR-218-010	PLATE,FOOT	a	b	.
		X	MC1034b	8Z-JE7-212-010	PLATE,FOOT	.	.	c
		O	MC1A	87-067-680-010	BVIT3B+3-10	a	b	c
		O	MC1B	87-078-070-010	BVIT3B+4-12	a	b	c
		O	MC1C	8Z-JBS-205-010	W-G,10-20-2	a	b	c
		O	MC1D	86-LBB-206-010	S-SCREW,ASSY TV5-40 W20	a	b	c
		O	MC1E	87-B10-311-010	BVIT3B-3-10 BLK	a	b	c
		O	MC1F	87-067-766-010	BVT2+4-16	a	b	c
		O	MC1G	87-B10-071-010	BVT2+3-16 W/O SLOT BLK	a	b	c
		O	MC1H	87-067-579-010	BVT2+3-8 W/O SLOT	a	b	c

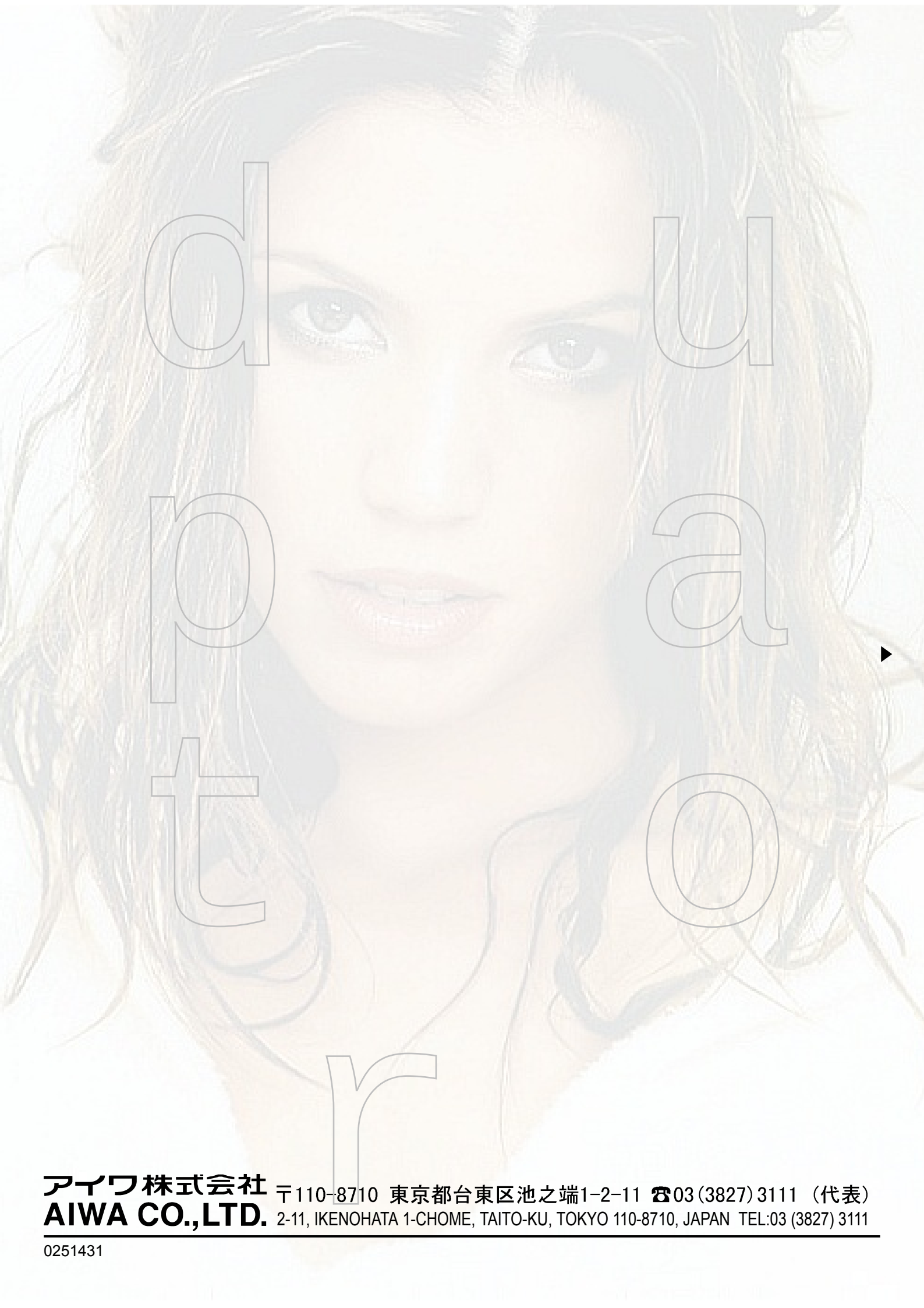
COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green	HT	Transparent Gray
HM	Metallic Gray	NH	Champagne Gold	M	Wood Pattern

OTHER PARTS LIST -1/1

! = ⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL		
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		X		87-JB8-203-010	CLOTH,10-30-0.5 M	a	b	c
		X		86-LBR-203-010	CLOTH,15-300-0.5	a	b	c
		X		83-JEV-200-010	SH,5-15-1.0	a	b	.
		X		8A-JEH-221-010	CLOTH,15-300-0.9	a	b	c
		X		86-LBR-205-010	CLOTH,15-95-0.5	a	b	c
		X		87-B40-281-010	LBL,BAR-CODE A 35X8	a	b	c
		X		8B-JEU-010-010	LBL,SPEC SH	a	.	.
		X		8B-JEU-013-010	LBL,CPA	.	b	.
		X		8B-JEU-011-010	LBL,SPEC KER	.	b	.
		X		83-JEU-201-010	SH,5-15-1.0 M	.	.	c
		X		87-059-033-010	LBL, JBE	.	.	c
		X		87-059-032-010	LBL, SIRIM	.	.	c
		X		8B-JEU-012-010	LBL,SPEC KER7	.	.	c
		X		86-LBR-204-010	TAPE,100-19	a	b	.
		X		87-B40-329-010	BAG,FOAMED 0.31-1250-900	a	b	c
		X		87-066-133-010	BAG,PV 0.04-75-280	a	b	c
		X		87-B40-085-010	BAG,PV 0.04-200-350 PL	a	b	c
		X		87-B50-079-010	LIST,FACILITY(B)-0007	a	b	c
		X		8B-JEU-971-010	LBL,POP KER	a	b	.
		X		8B-JEU-853-010	CTN,PRINTED KER71M	a	.	.
						TV-FA2110 KER71M	TV-FA2110 KERJ2C	TV-FA2110 SHJ2C
		X		8Z-JE7-852-010	CUSHION,BOTTOM M	a	.	.
		X		8Z-JE7-853-010	CUSHION,TOP M	a	.	.
		X		8B-JEU-907-010	WARR-CARD,TOURIST TV-FA2110 -M	a	.	.
		X		8B-JEV-852-010	CUSHION,BOTTOM C	.	b	c
		X		8B-JEV-851-010	CUSHION,TOP C	.	b	c
		X		8B-JEU-902-010	WARR-CARD,TOURIST TV-FA2110 -C	.	b	c
		X		83-JEU-851-010	CTN,PRINTED KERJ2C	.	b	.
		X		8E-JEU-852-010	CTN,PRINTED SHJ2C	.	.	c
		X		87-JB8-972-010	LBL,POP NO.1	.	.	c
		X		8B-JEU-970-010	LBL,POP SHJ	.	.	c



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