

STEREO INTEGRATED AMPLIFIER

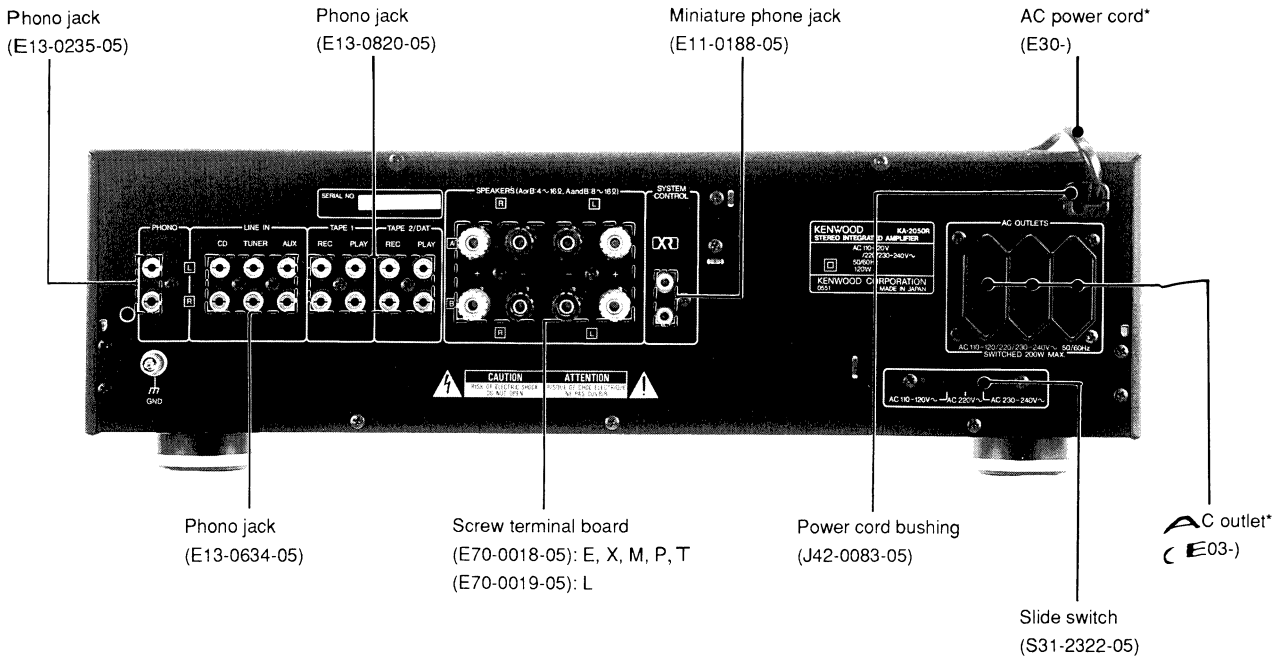
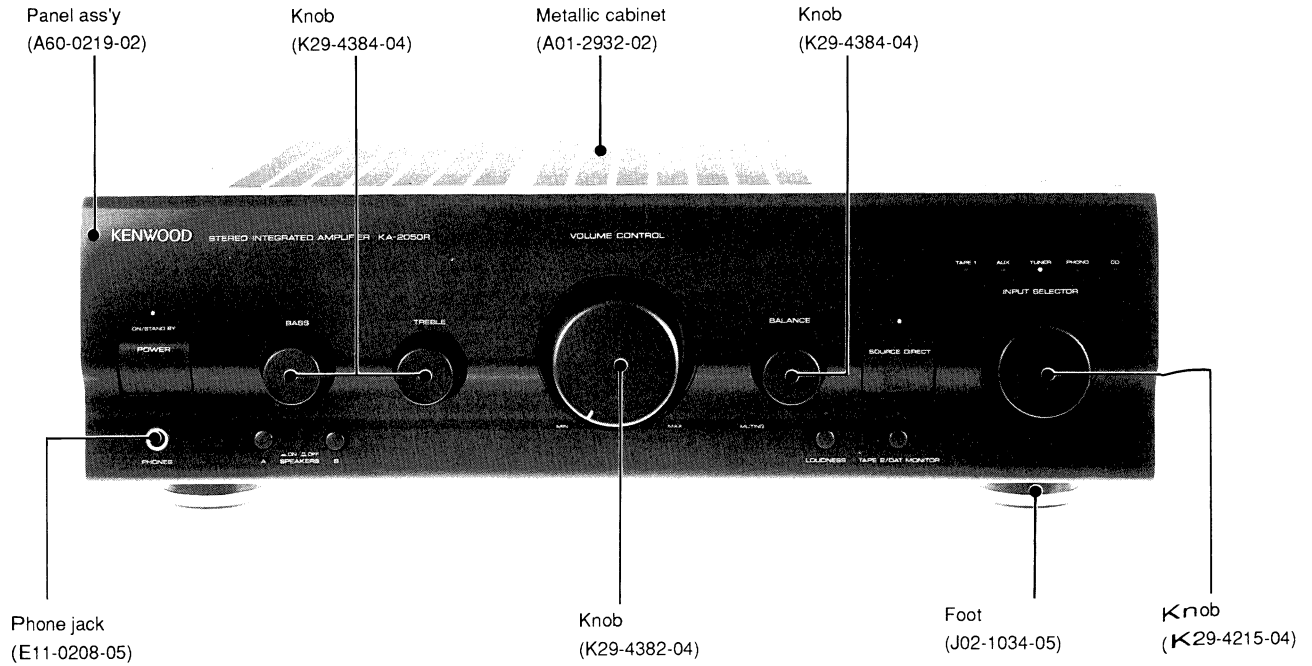
KA-2050R/3050R

SERVICE MANUAL

KENWOOD

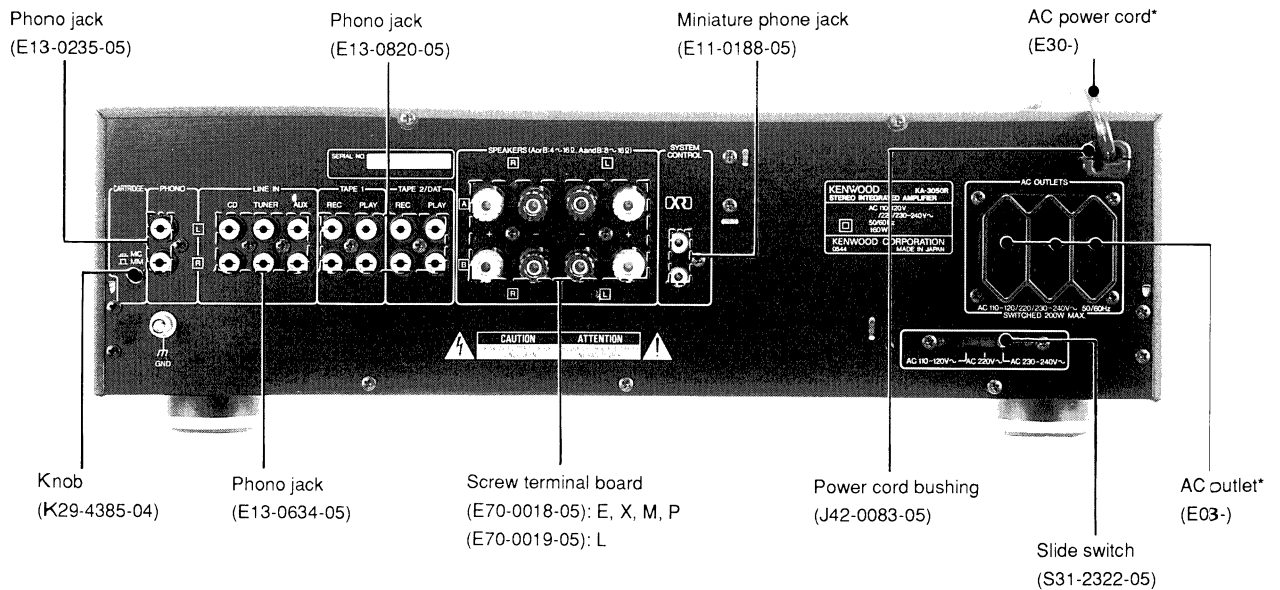
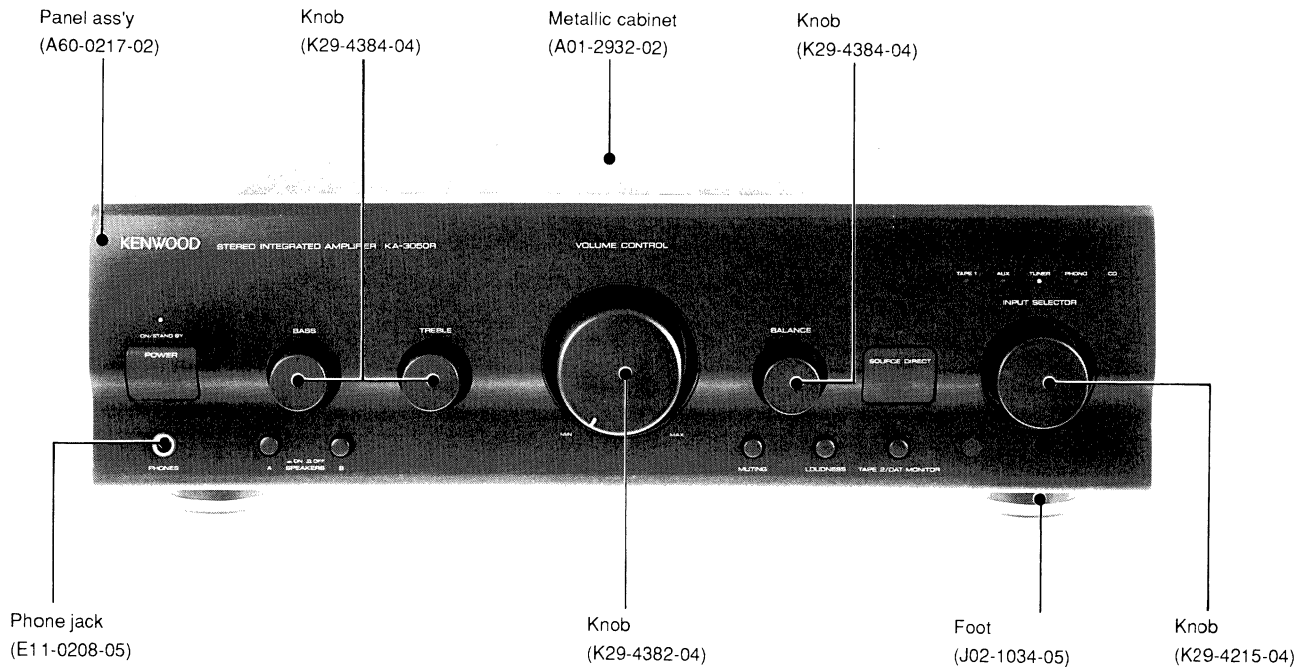
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B51-4546-00 (S) 2349

(KA-2050R)



* Refer to parts list on page 17.

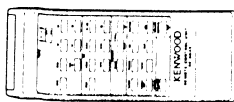
KA-2050R/3050R



* Refer to parts list on page 17.

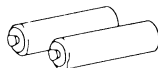
Accessories

- Remote control unit 1

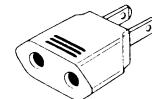


(A70-0597-05)
(A09-0094-08) : Battery cover

- Batteries (R03/UM-4/ 'AAA') 2



- AC plug adaptor 1
(Except for some areas)
For the unit with a European AC plug in areas other than Europe.



(E03-0115-05)

ADJUSTMENT/REGLAGES/ABGLEICH

ADJUSTMENT

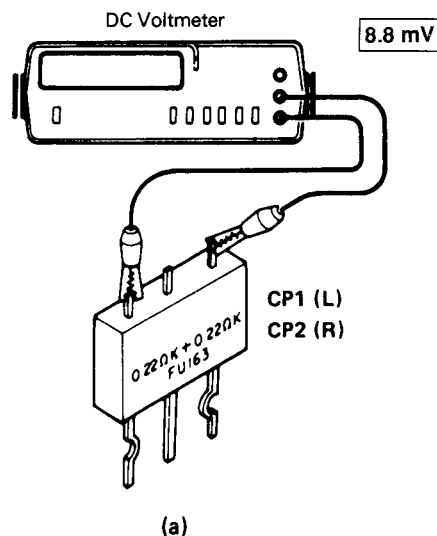
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTING	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified, set the respective switches as follows: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	IDLE CURRENT	-	Connect a DC voltmeter across CP1 (L) CP2 (R) (X09-)	VOLUME: 0	VR1 (L) VR2 (R) (X09-)	8.8 mV	(a)

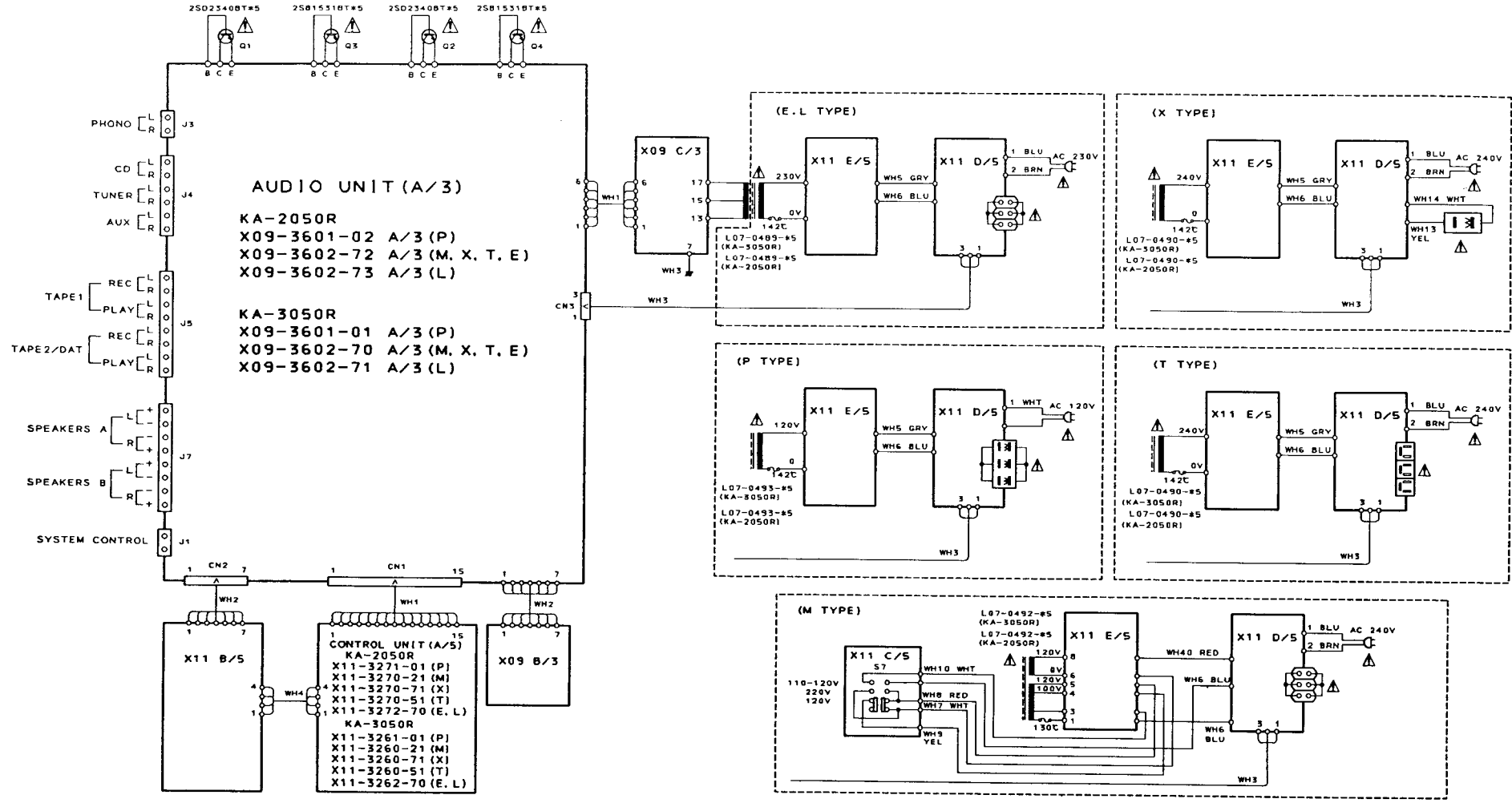
REGLAGES

N	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DE L'AMPLIFICATEUR	POINTS DE L'ALIGNMENT	ALIGNER POUR	FIG.
Sauf indication contraire, régler comme suit les commandes respectives: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	COURANT DE POLARISATION	-	Connecter un voltmètre de CC SUR CP1 (G) CP2 (D) (X09-)	VOLUME: 0	VR1 (G) VR2 (D) (X09-)	8.8 mV	(a)

ABGLEICH

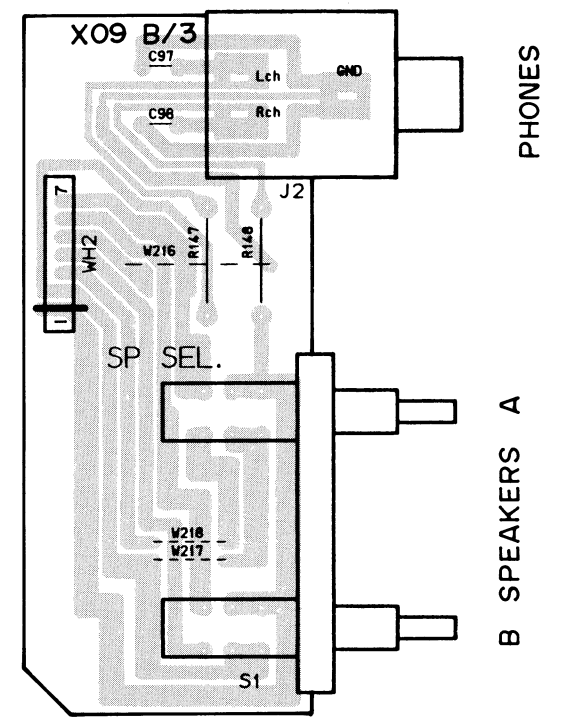
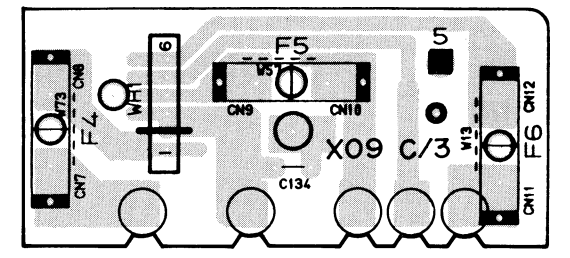
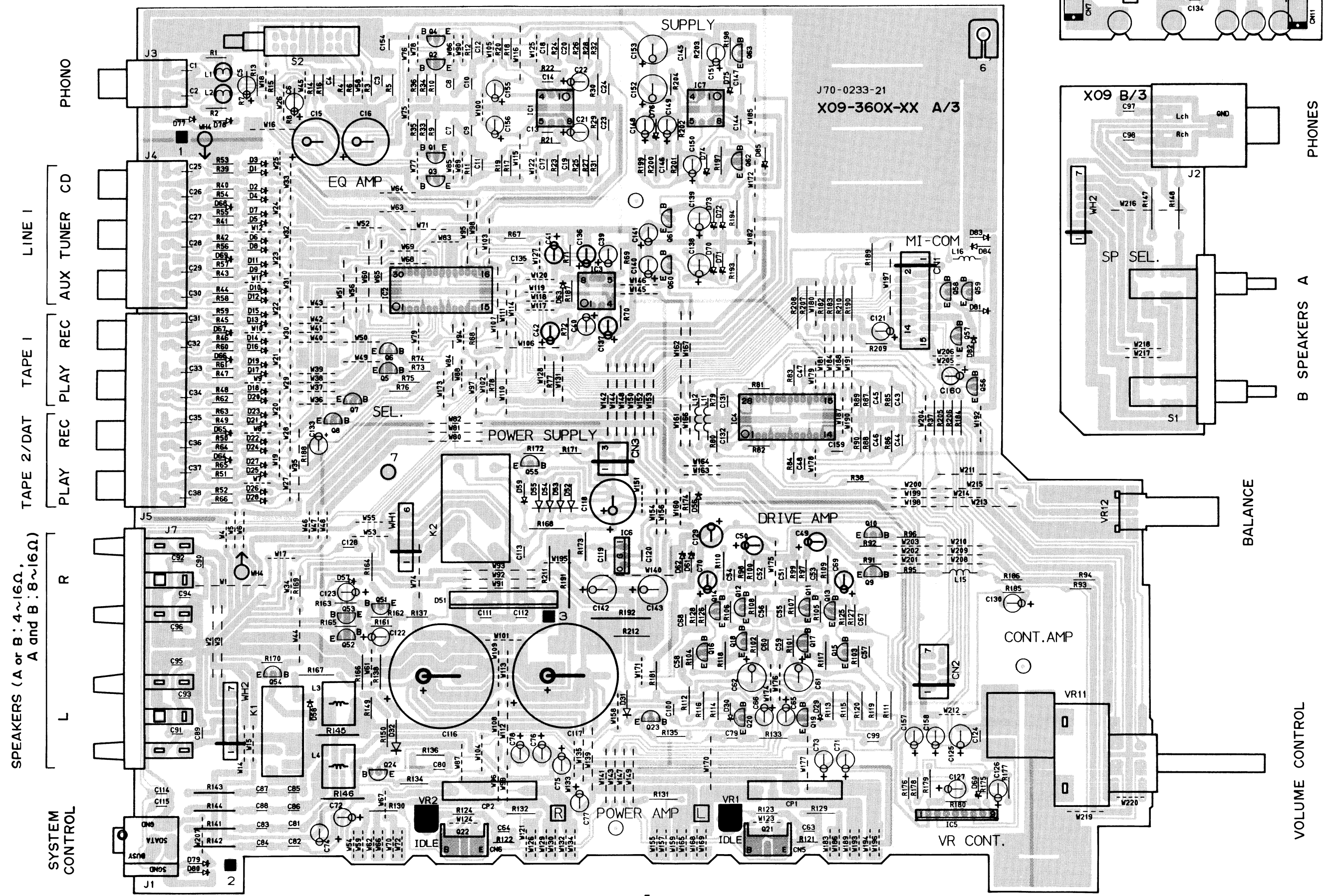
NR.	GENGENSTAND	EINGANGS-EINSTELLUNG	AUSANG-EINSTELLUNG	VORSTÄRKER-EINSTELLUNG	ABGLEICHE-PUNKTE	ABGLEICHEN FÜR	ABB.
Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: POWER: ON SPEAKER: B REC OUT: OFF SELECTOR: PHONO							
1	LEERLAUFSTROM	-	Einen Gleichspannungsmesser über CP1 (L) CP2 (R) anschließen. (X09-)	VOLUME: 0	VR1 (L) VR2 (R) (X09-)	8.8 mV	(a)





PC BOARD (Component side view)

AUDIO UNIT



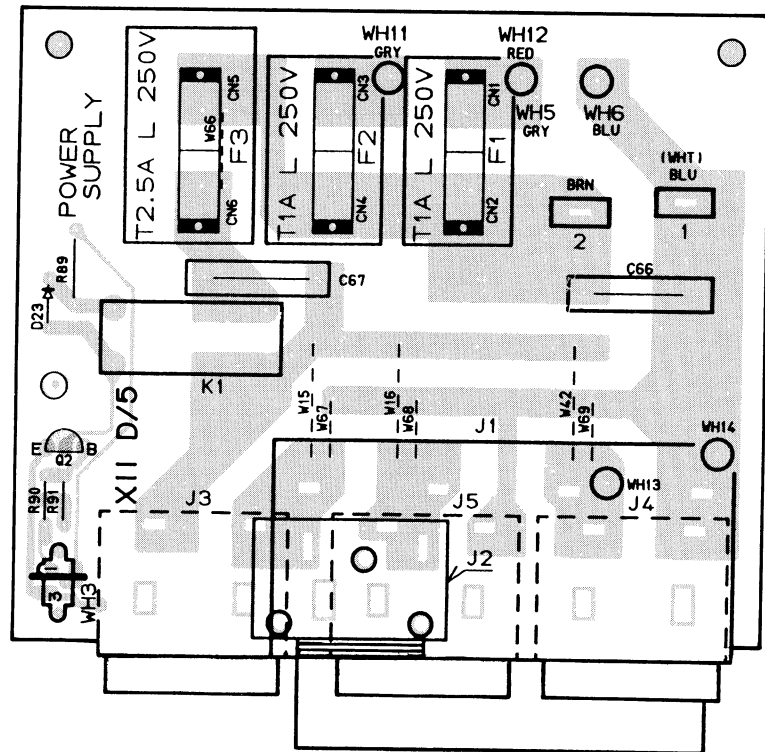
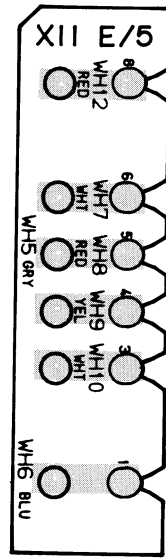
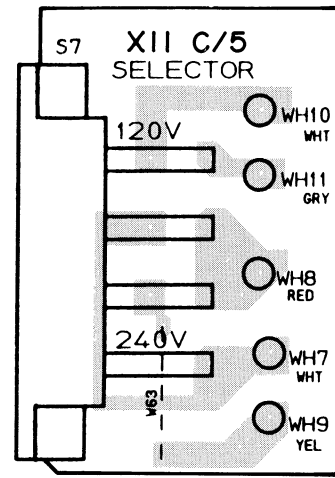
SPEAKERS (A or B : 4~16Ω,
A and B : 8~16Ω)

SYSTEM CONTROL
L R
TAPE 2/DAT TAPE 1 LINE 1 PHONO
PLAY REC PLAY REC AUX TUNER CD
EQ AMP
POWER SUPPLY
DRIVE AMP
CONT. AMP
VOLUME CONTROL
BALANCE
B SPEAKERS A
PHONES

PC BOARD (Component side view)

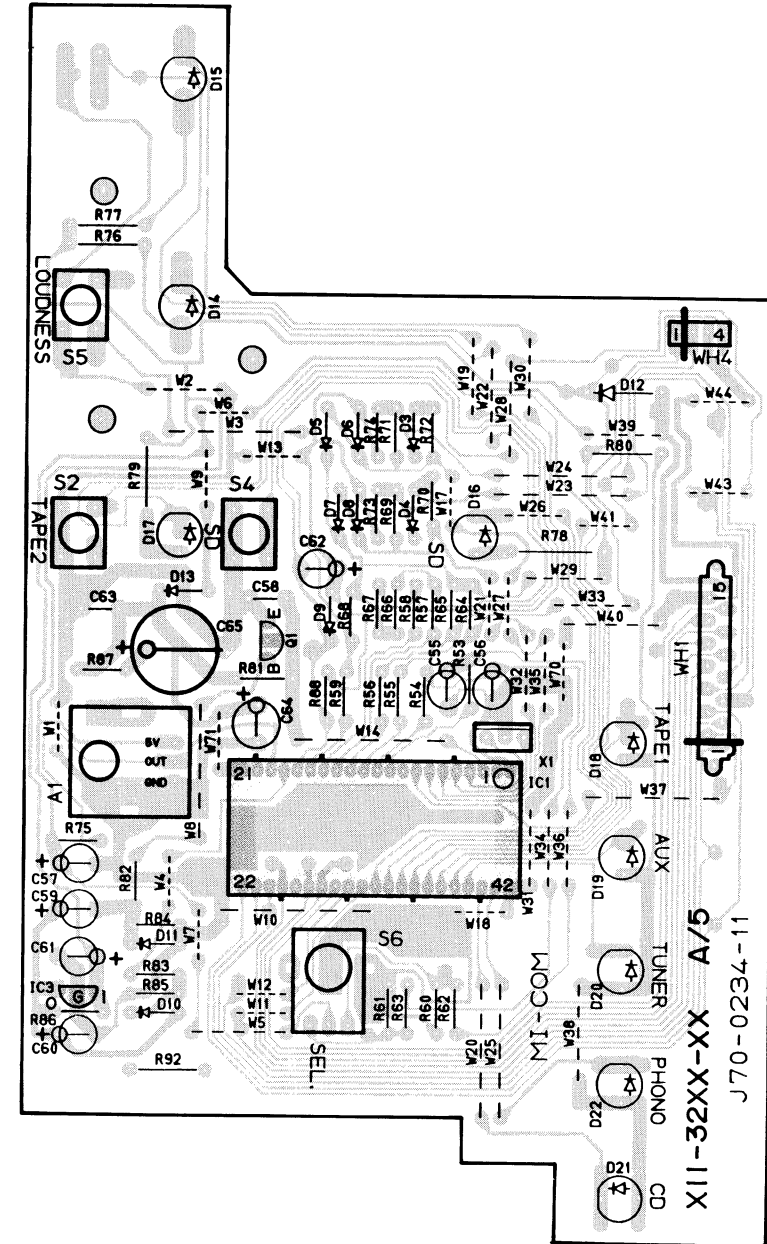
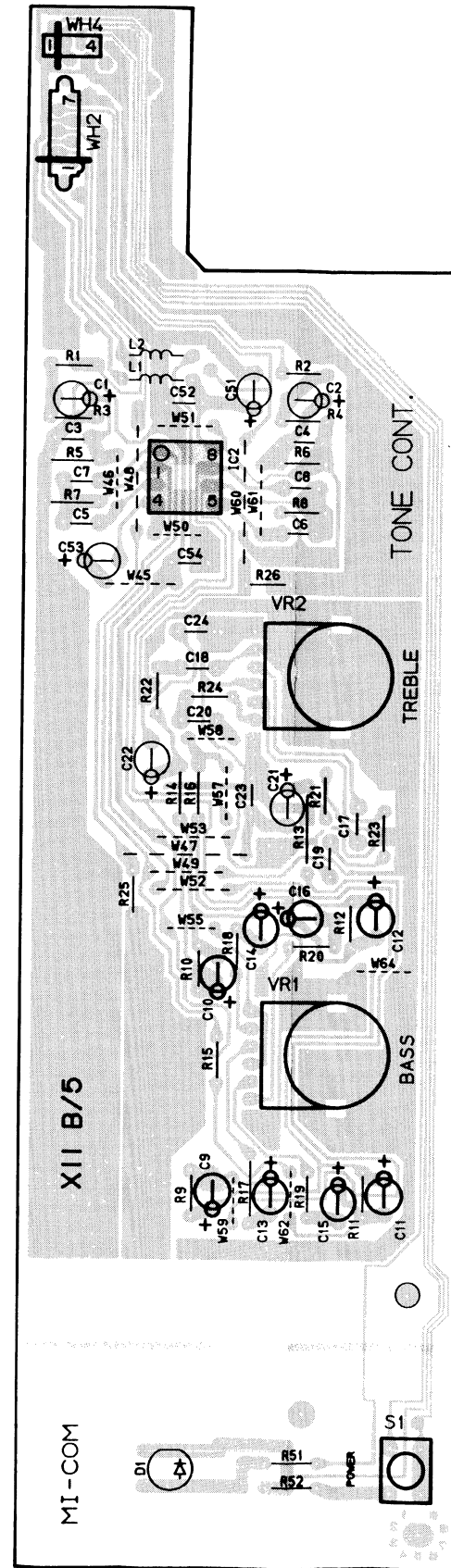
CONTROL UNIT

AC230-240V~ AC220V~ AC110-120V~



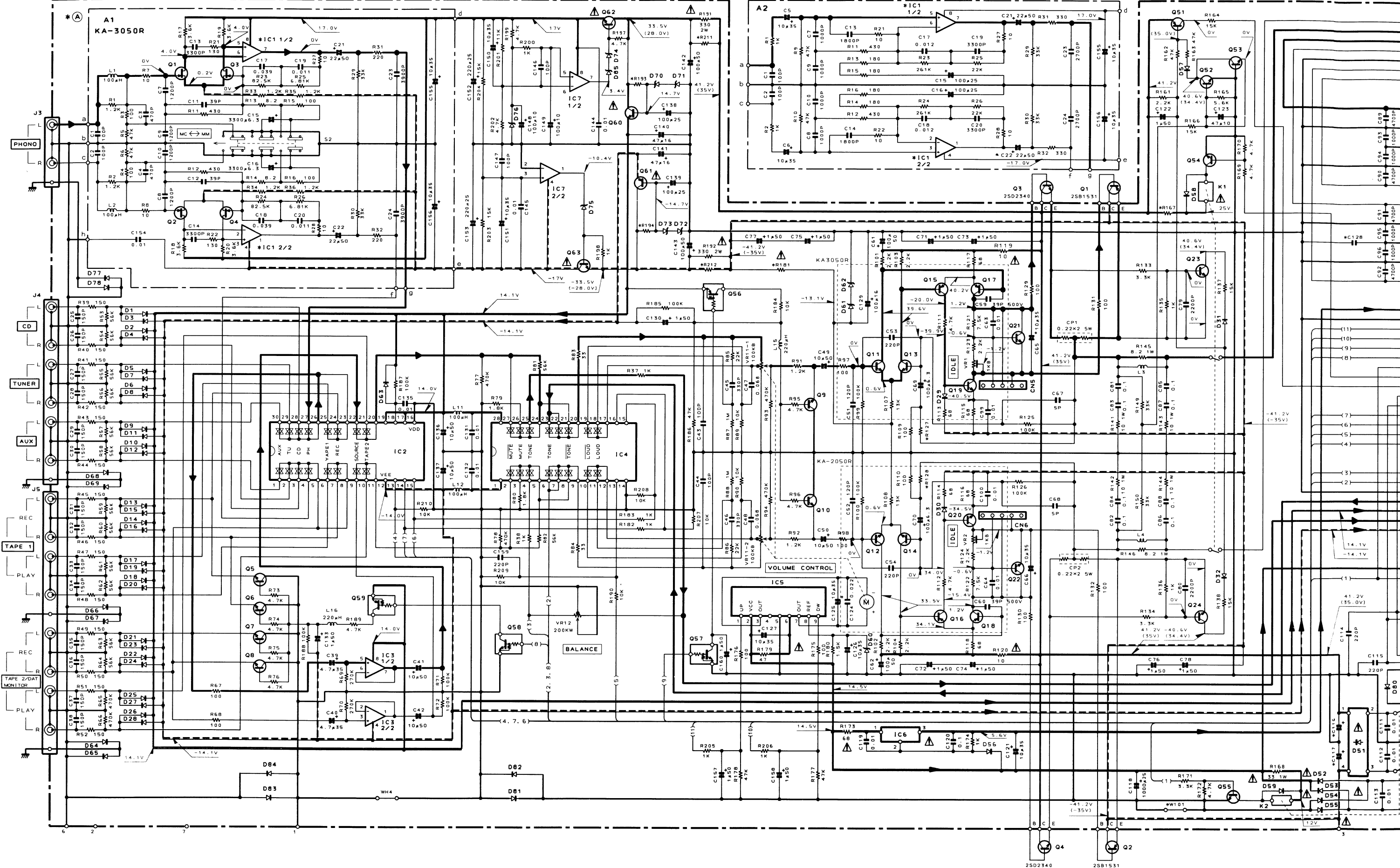
AC110-120/220/230-240V~ 50/60Hz
SWITCHED 200W MAX

AC OUTLETS



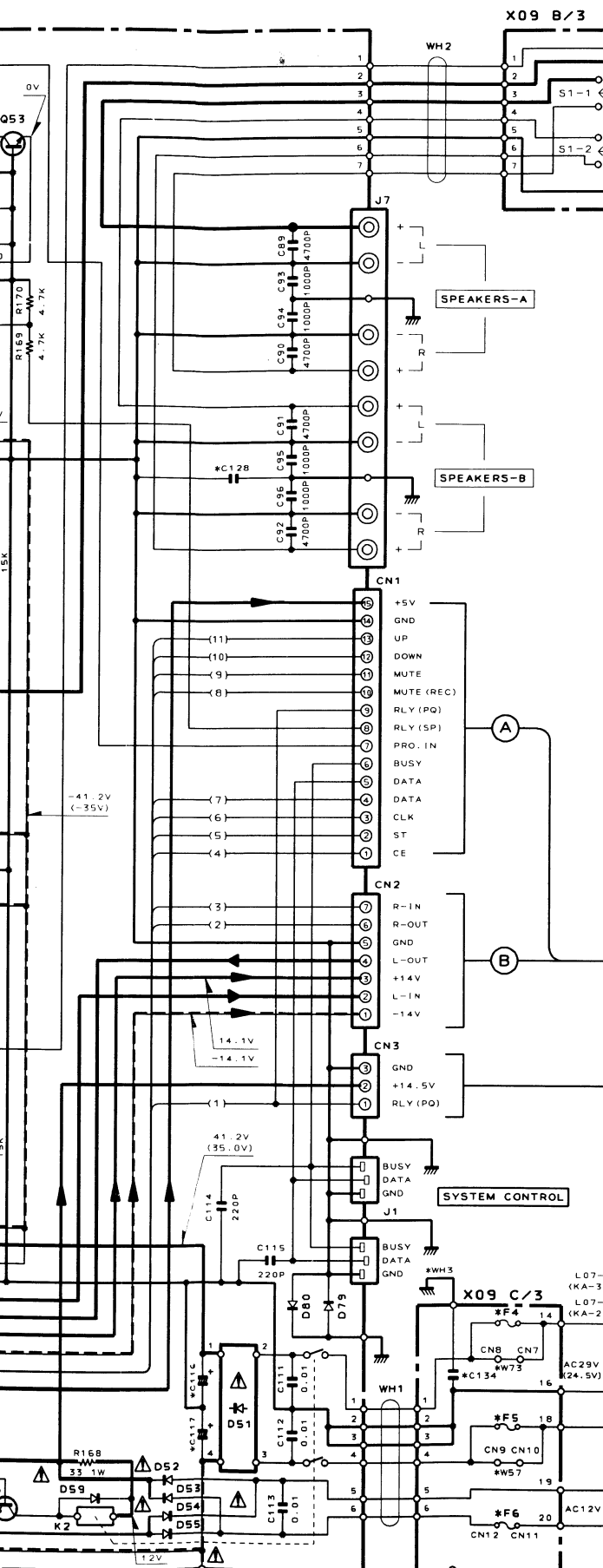
X11-32XX-XX A/5
J70-0234-11

Refer to the schematic diagram for the values of resistors and capacitors.



2
3
4
5
6
7

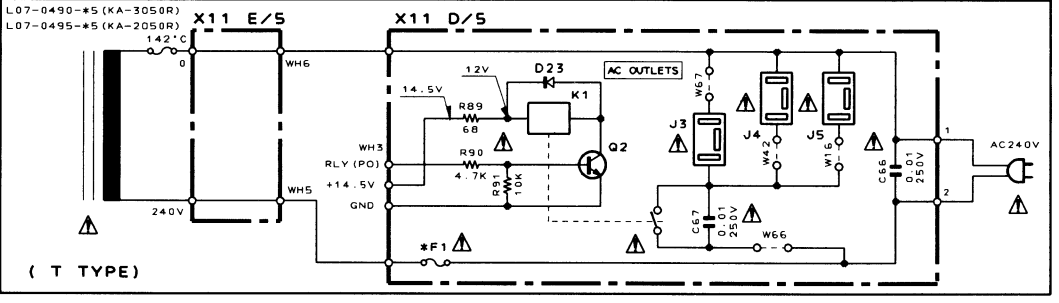
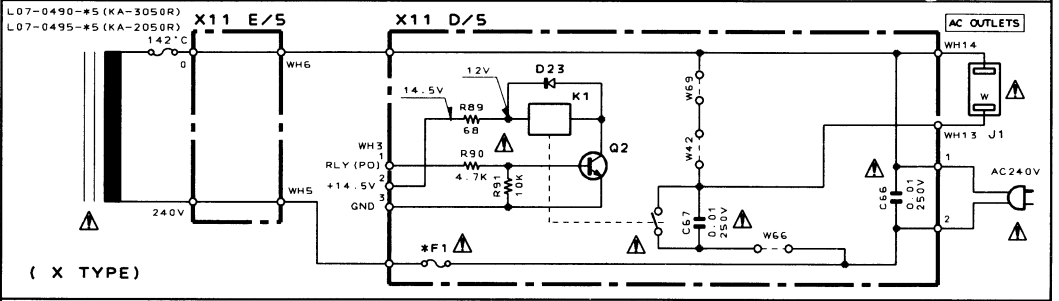
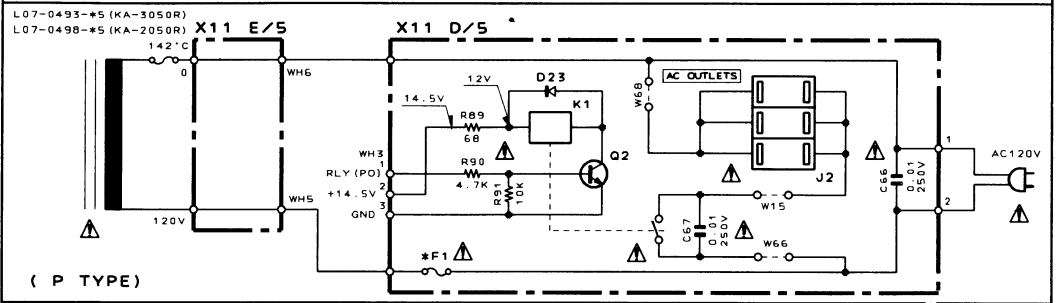
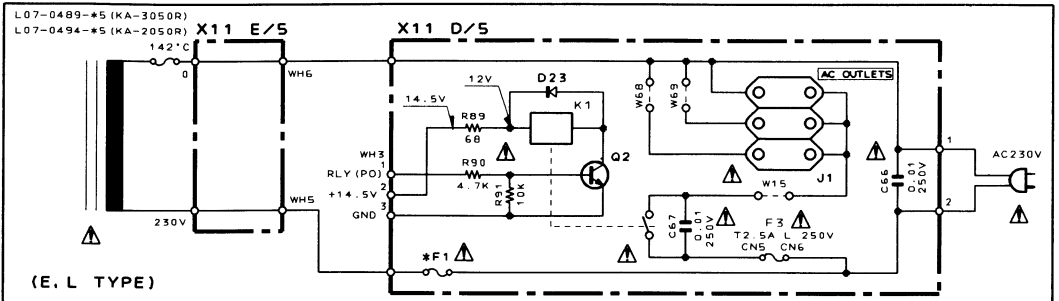
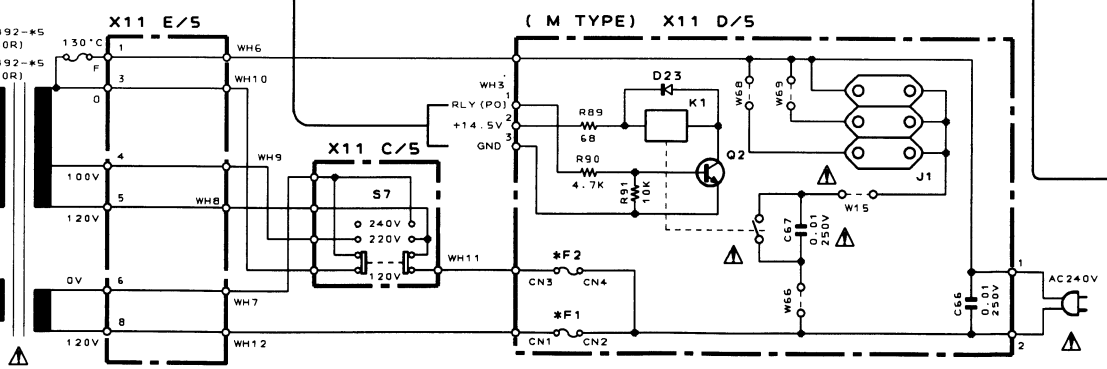
(11)
(10)
(9)
(8)
(7)
(6)
(5)
(4)
(3)
(2)
(1)



X09-360X-XX

COUNTRY	KA-3050R			KA-2050R		
	OTHER AREAS (M) AUSTRALIA (X) ENGLAND (T) EUROPE (E)	SCANDINAVIA (L)	CANADA (P)	OTHER AREAS (M) AUSTRALIA (X) ENGLAND (T) EUROPE (E)	SCANDINAVIA (L)	CANADA (P)
UNIT NAME	X09-3602-70	X09-3602-71	X09-3601-01	X09-3602-72	X09-3602-73	X09-3601-02
REF. NO						
(A)	A1	A1	A1	A2	A2	A2
IC1	NJM4565D	NJM4565D	NJM4565D	NJM4580D-D	NJM4580D-D	NJM4580D-D
C116, 117	6800µ50	6800µ50	6800µ50	5600µ42	5600µ42	5600µ42
C128, 134	0.01	0.01	NO	0.01	0.01	NO
R127, 128	11K	11K	11K	9.1K	9.1K	9.1K
R167	820 1W	820 1W	820 1W	470 1W	470 1W	470 1W
R181	3.9K	3.9K	3.9K	3.3K	3.3K	3.3K
R193, 194	4.7K	4.7K	4.7K	3.9K	3.9K	3.9K
R211, 212	820 1W	820 1W	820 1W	NO	NO	NO
F4, 5	NO	NO	6A 125V	NO	NO	5A 125V
F6	T1A L 250V	T1A L 250V	1A 250V	T1A L 250V	T1A L 250V	1A 250V
W18, 45, 58 75~78 89, 90, 115	YES	YES	YES	NO	NO	NO
W57, 73	YES	YES	NO	YES	YES	NO
W85, 86 122, 125	NO	NO	NO	YES	YES	YES
W101	NO	NO	YES	NO	NO	YES
WH3	YES	YES	NO	YES	YES	NO

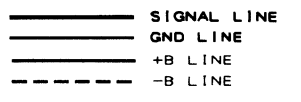
- X09-360X-XX
- IC1 : NJM4565D (3050R)
 IC2 : NJM4580D-D (2050R)
 IC3 : LC7821N
 IC4 : NJM4580D-D
 IC5 : TC9163N
- IC5 : TA8409S
 IC6 : PC7805AHF
 or TA7805S
 IC7 : NJM4565D-D
- Q1~4 : 2SK170 (BL.V)
 Q5~10 : 2SC2878 (B)
 Q11~14 : 2SC1845 (F.E)
 19, 20
 Q15~18 : 2SA992 (F.E)
 Q21, 22 : 2SC4137 (V.W)
 Q23, 24 : 2SC2458 (Y.GR)
 52, 53 or 2SC3311A (Q.R)
 Q51 : 2SA1048 (Y.GR)
 or 2SA1309A (Q.R)
 Q54, 55 : 2SC2003 (L.K)
 Q56, 59 : UN4112 or DTA124ES
 Q57, 58 : UN4212 or DTC124ES
 Q60, 62, 63 : 2SD863 (E.F)
 Q61 : 2SB764 (E.F)
- D1~30, 56 : 1SS133
 57, 63~69, 77~84 or HSS104
 D31, 32 : 1SS131
 58, 59 or HSS104A
 D51 : RBV-602LFA
 or D55BA20F03
 D52~55 : S5688B
 D60, 76 : RD5.1JS (B2)
 D61, 62 : RD7.5JS (B)
 70~74, 85 or HZS7.5S (B2)
 D75 : RD20JS (B)
 or HZS20S (B)



- X11-32XX-XX
- Q2 : 2SC2003 (L.K)
 D23 : 1SS133 or HSS104

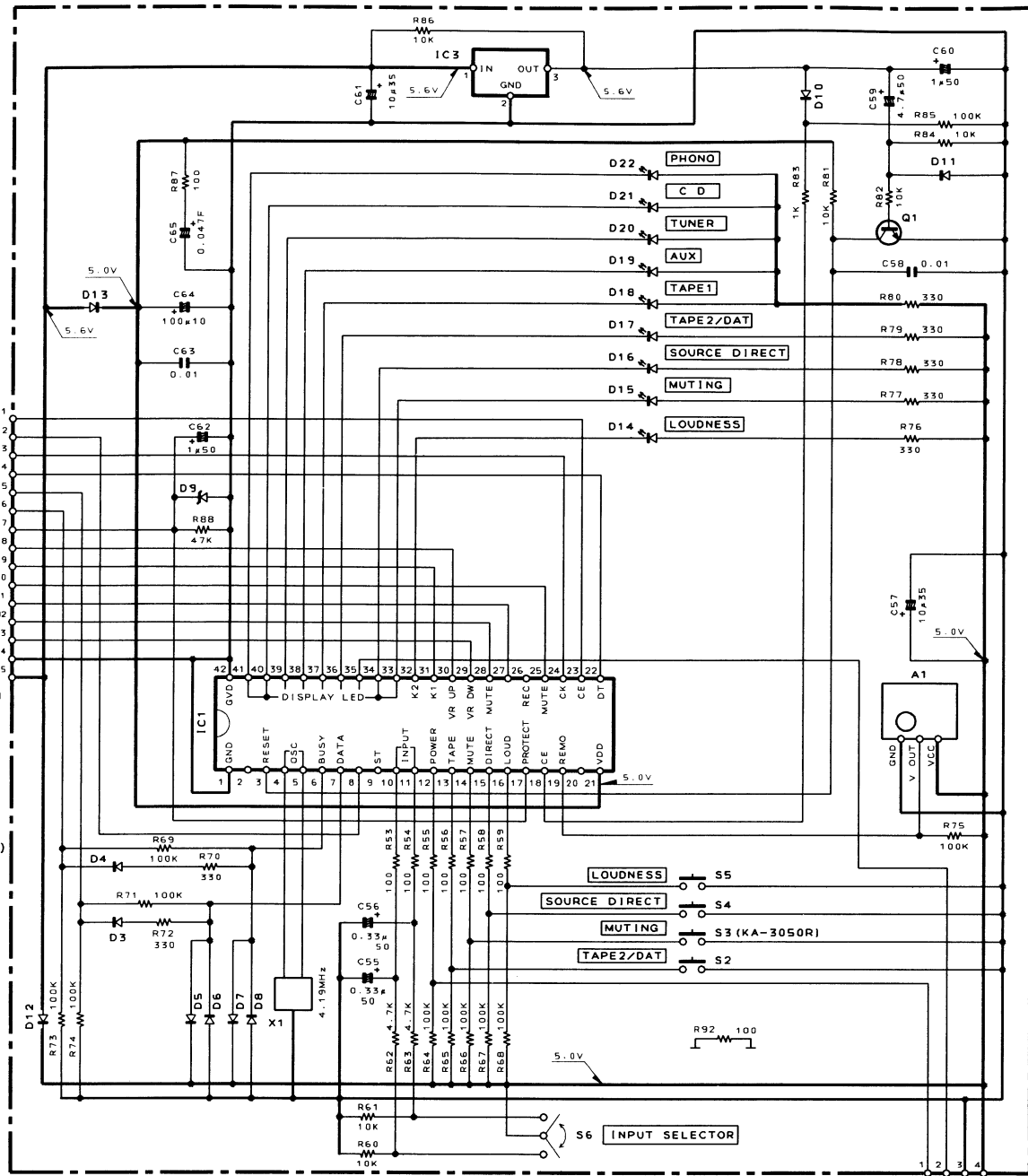
X11-32XX-XX

COUNTRY	ABB	KA-3050R			KA-2050R				
		UNIT NAME	REF. NO	F1	F2	UNIT NAME	REF. NO	F1	F2
CANADA	P	X11-3261-01	4A	125V	NO	X11-3271-01	2A	250V	NO
OTHER AREAS	M	X11-3260-21	T1.6A	L 250V	T1.6A	L 250V	X11-3270-21	T1A	L 250V
AUSTRALIA	X	X11-3260-71	T1.6A	L 250V	NO	X11-3270-71	T1A	L 250V	NO
ENGLAND	T	X11-3260-51	T1.6A	L 250V	NO	X11-3270-51	T1A	L 250V	NO
EUROPE, SCANDINAVIA	E.L	X11-3262-70	T1.6A	L 250V	NO	X11-3272-70	T1A	L 250V	NO



KA-2050R/3050R
 KENWOOD

X11-32XX-XX A/5

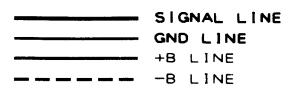
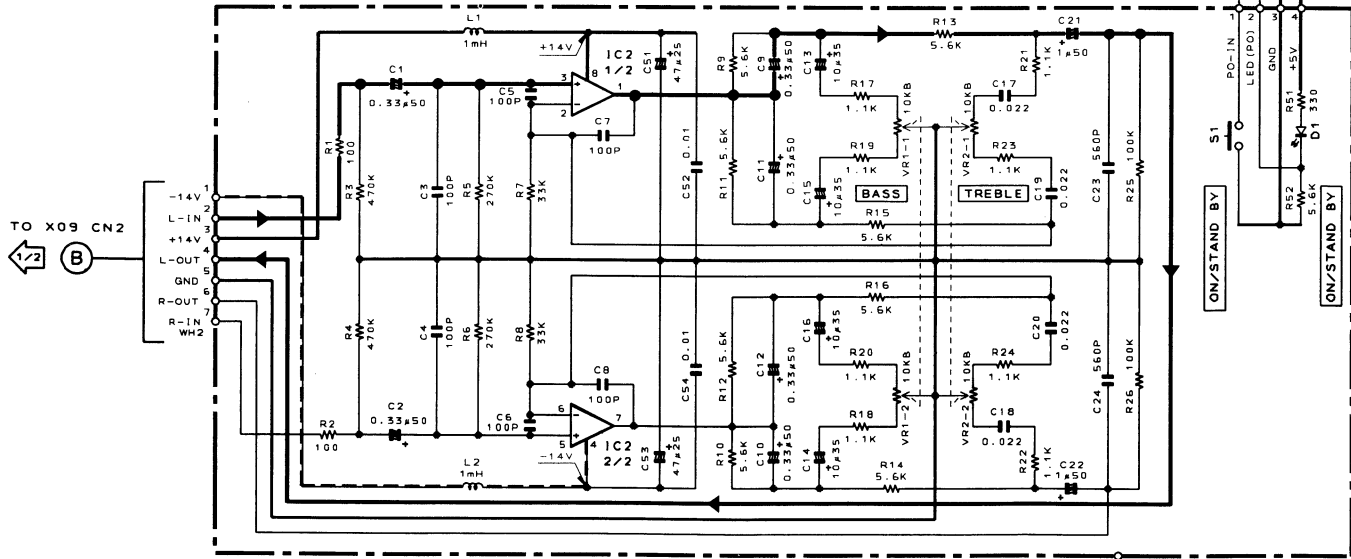


- X11-32XX-XX
 IC1 : PD75004CU-145
 IC2 : NJM4565D-D
 IC3 : PST529C

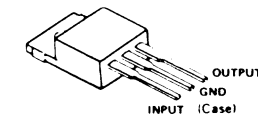
- Q1 : 2SC2458 (Y. GR)
 or 2SC3311A (Q. R)

- D1, 14-22 B30-1291-05
 D3-8 : 1SS133
 or HSS104
 D9 : RD5.1JS (B2)
 or HZS5.1S (B2)

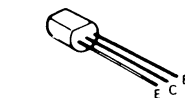
X11 B/5



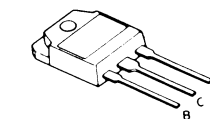
- HSS104
 HSS104A
 HZS5.1S
 RD5.1JS
 S5688B
 1SS131
 1SS133



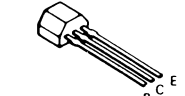
- 2SA992
 2SB764
 2SC1845
 2SC2003
 2SC2878
 2SD863



- 2SB1531BT*5
 2SD2340BT*5



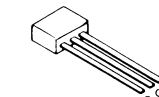
- DTA124ES
 DTC124ES
 UN4112
 2SA1048
 2SC2458



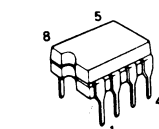
- 2SC4137



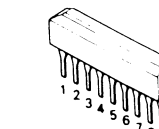
- UN4212
 2SA1309A
 2SC3311A



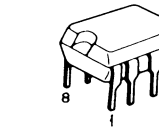
- NJM4565D
 NJM4565D-D



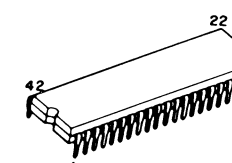
- TA8409S



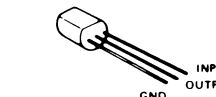
- NJM4580D-D



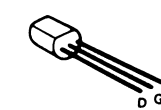
- UPD75004CU-145



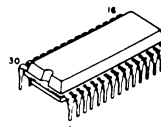
- PST529C



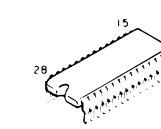
- 2SK170



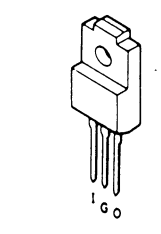
- LC7821N



- TC9163N



- TA7805S



DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

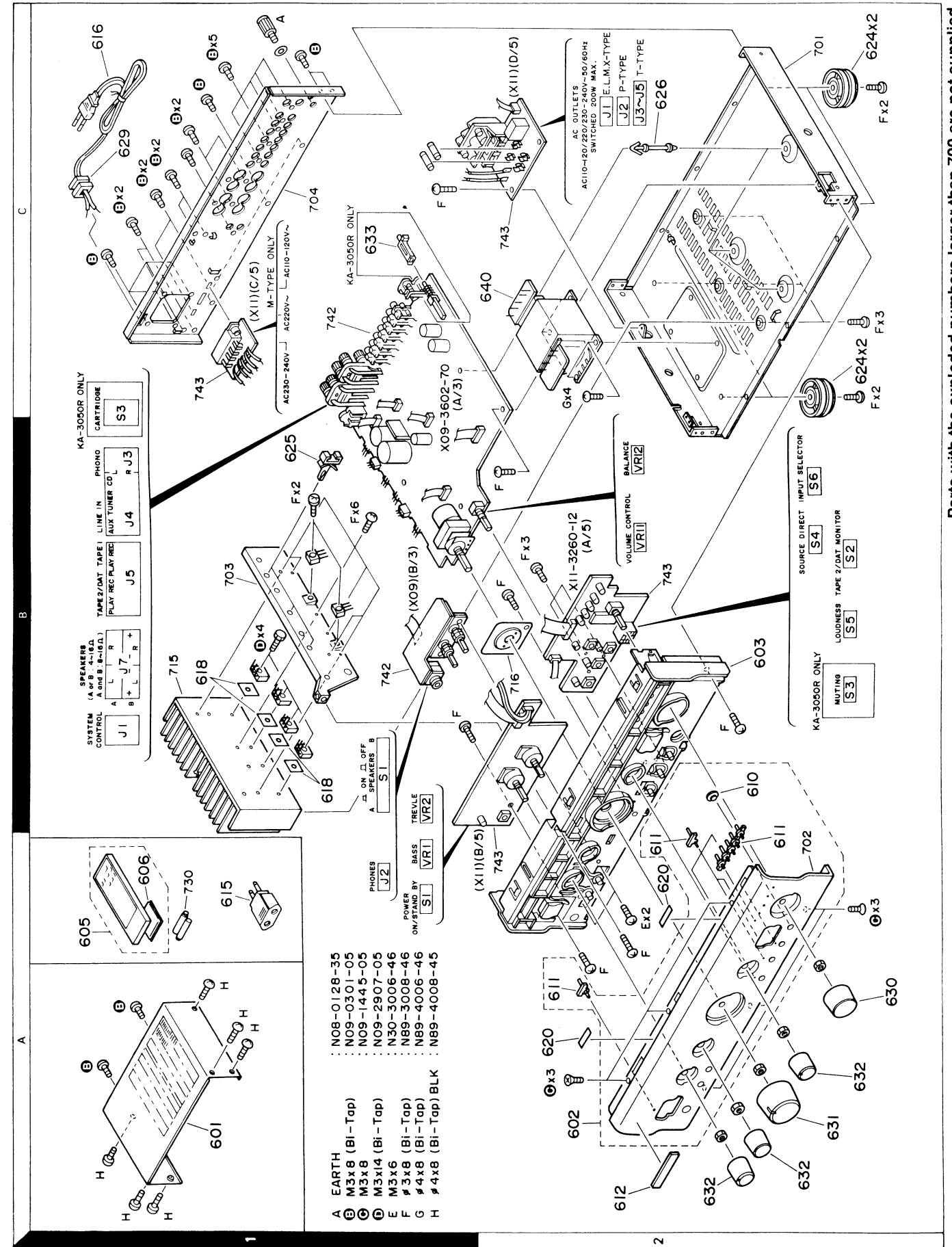
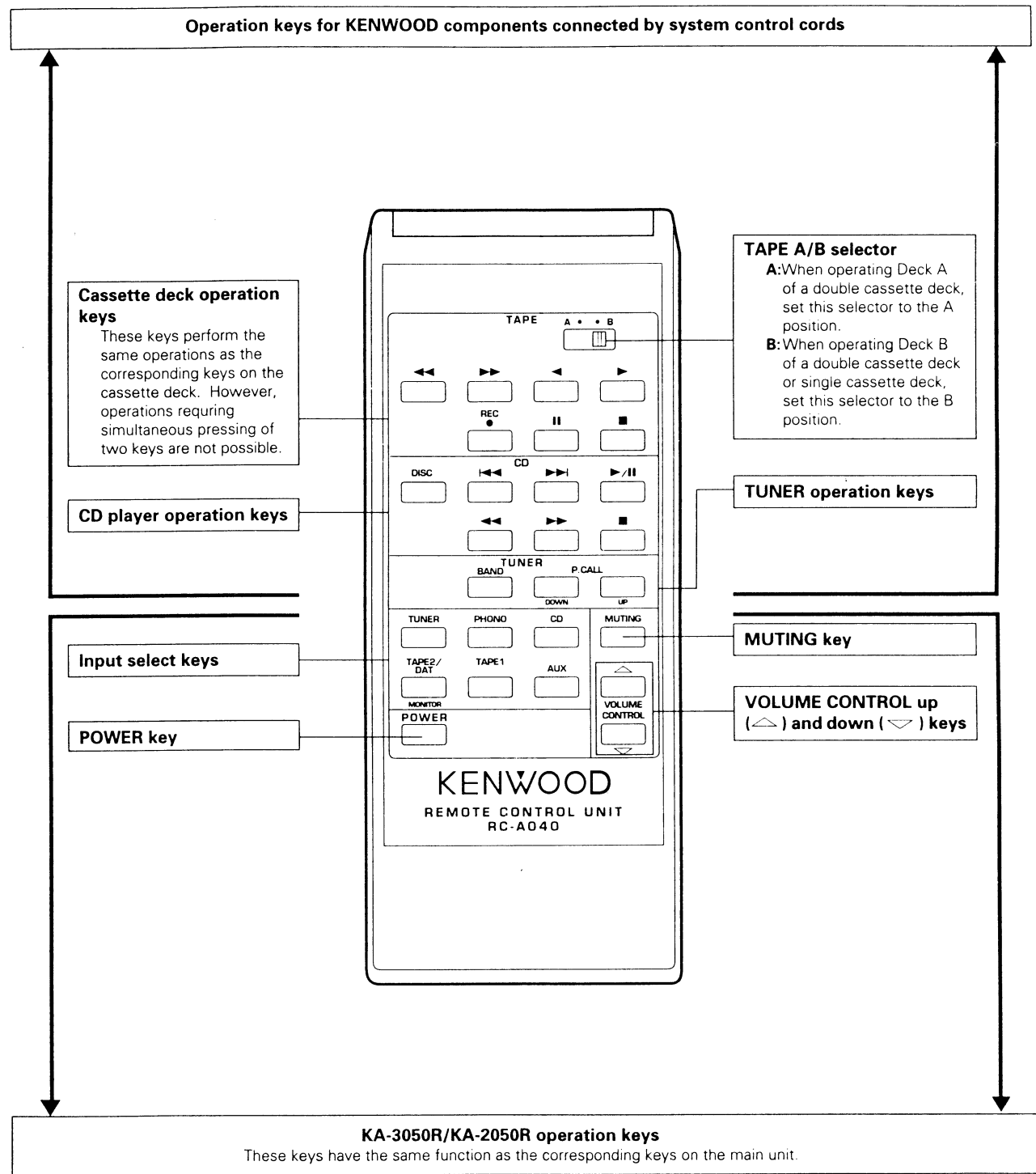
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). *A*: Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

REMOTE CONTROL OPERATION

EXPLODED VIEW



Parts with the exploded numbers larger than 700 are not supplied.

voltmeter.
individual
e à haute
u fait des
e mesure

mit einem
schwanken
einzelnen

050R
D

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No. 1

Ref. No.	Address	New	Parts No.	Description	Desti- nation	Re- marks
参照番号	位 置	新	部 品 番 号	部 品 名 / 規 格	仕 向	備 考
KA-2050R						
601	1A	*	A01-2932-02	METALLIC CABINET		
602	2A	*	A60-0219-02	PANEL ASSY		
603	2B	*	A22-1558-01	SUB PANEL		
605	1A	*	A70-0597-05	REMOTE CONTROLLER ASSY		
606	1A	*	A09-0094-08	BATTERY COVER		
610	2B		B11-0237-14	COLOR FILTER		
611	2A	*	B12-0196-04	INDICATOR		
612	2A		B43-0287-04	KENWOOD BADGE		
-	-		B46-0096-33	WARRANTY CARD	X	
-	-		B46-0121-13	WARRANTY CARD	P	
-	-		B46-0122-23	WARRANTY CARD	EL	
-	-		B46-0143-13	WARRANTY CARD	T	
-	-	*	B60-0835-00	INSTRUCTION MANUAL (ENGLISH)	ELP	
-	-	*	B60-0836-00	INSTRUCTION MANUAL (FRENCH)	EL	
-	-	*	B60-0837-00	INSTRUCTION MANUAL (GE,DU,IT)	EL	
-	-	*	B60-0965-00	INSTRUCTION MANUAL (CHINESE)	M	
-	-	*	B60-0966-00	INSTRUCTION MANUAL (SPANISH)	ELM	
△ 615	1A		E03-0115-05	AC PLUG ADAPTER	M	
△ 616	1C		E30-0459-05	AC POWER CORD	ELM	
△ 616	1C		E30-0974-05	AC POWER CORD	P	
△ 616	1C		E30-1341-05	AC POWER CORD	X	
△ 616	1C		E30-1416-05	AC POWER CORD	T	
△ J1	2C		E03-0114-05	AC OUTLET	X	
620	2A		G11-0153-04	SOFT TAPE (80X12X3)		
-	-	*	H50-0321-04	ITEM CARTON CASE		
-	-	*	H10-5296-02	POLYSTYRENE FOAMED FIXTURE		
-	-	*	H10-5297-02	POLYSTYRENE FOAMED FIXTURE		
-	-		H25-0225-04	PROTECTION BAG (850X450X0.03)	ELXMP	
-	-		H25-0232-04	PROTECTION BAG (235X350X0.03)	ELXMP	
-	-		H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-	-		H25-0654-04	PROTECTION BAG (0225 PRINTED)	T	
624	2C		J02-1034-05	FOOT		
625	1B		J61-0033-05	WIRE BAND		
626	1C		J19-3331-05	UNIT HOLDER		
△ 629	1C		J42-0083-05	POWER CORD BUSHING		
-	-		J61-0307-05	WIRE BAND		
630	2A		K29-4215-04	KNOB INPUT SELECTOR		
631	2A	*	K29-4382-04	KNOB VOLUME CONTROL		
632	2A	*	K29-4384-04	KNOB BASS, TREBLE, BALANCE		
△ 640	2C	*	L07-0494-05	POWER TRANSFORMER	EL	
△ 640	2C	*	L07-0495-05	POWER TRANSFORMER	TX	
△ 640	2C	*	L07-0497-05	POWER TRANSFORMER	M	
△ 640	2C	*	L07-0498-05	POWER TRANSFORMER	P	
A	1C		N08-0128-35	BINDING POST (EARTH)		
B	1A, 1C		N09-0301-05	TAPTITE SCREW (3X8)		
C	2A		N09-1445-05	SET SCREW (M3X8)		
D	1B	*	N09-2907-05	SEMS (TAPTITE SCREW)(3X14)		
E	2A		N30-3006-46	PAN HEAD MACHINE SCREW		
F	1A, 1B		N89-3008-46	BINDING HEAD TAPTITE SCREW		
G	2C		N89-4006-46	BINDING HEAD TAPTITE SCREW		

L:Scandinavia K:USA P:Canada
 Y:PX(Far East, Hawaii) T:England E:Europe
 Y:AAFES(Europe) X:Australia M:Other Areas

3 : KA-3050R
 2 : KA-2050R

△ indicates safety critical components.

AUDIO UNIT

X09-3601-01	KA-3050R P
X09-3601-02	KA-2050R P
X09-3602-70	KA-3050R M, X, T, E
X09-3602-71	KA-3050R L
X09-3602-72	KA-2050R M, X, T, E
X09-3602-73	KA-2050R L

CONTROL UNIT

X11-3260-21	KA-3050R M
X11-3260-51	KA-3050R T
X11-3260-71	KA-3050R X
X11-3261-01	KA-3050R P
X11-3262-70	KA-3050R E, L
X11-3270-21	KA-2050R M
X11-3270-51	KA-2050R T
X11-3270-71	KA-2050R X
X11-3271-01	KA-2050R P
X11-3272-70	KA-2050R E, L

PARTS LIST

KA-2050R/3050R

* New Parts
 Parts without Parts No. are not supplied.
 Les articles non mentionnés dans le Parts No. ne sont pas fournis.
 Teile ohne Parts No. werden nicht geliefert.

No. 6

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
IC3			NJM4580D-D	IC(OP AMP X2)		
IC4			TC9163N	IC(BILATERAL SWITCH X16)		
IC5			TA8409S	IC(MOTOR CONTROL)		
IC6			TA7805S	IC(VOLTAGE REGULATOR/ +5V)		
IC6			UPC7805AHF	IC(VOLTAGE REGULATOR/ +5V)		
IC7			NJM4565D-D	IC(OP AMP X2)		
Q1 -4			2SK170(BL)	FET		3
Q1 -4			2SK170(V)	FET		3
Q5 -10			2SC2878(B)	TRANSISTOR		
Q11 -14			2SC1845(F, E)	TRANSISTOR		
Q15 -18			2SA992(F, E)	TRANSISTOR		
Q19 ,20			2SC1845(F, E)	TRANSISTOR		
Q21 ,22			2SC4137(V, W)	TRANSISTOR		
Q23 ,24			2SC2458(Y, GR)	TRANSISTOR		
Q23 ,24			2SC3311A(Q, R)	TRANSISTOR		
Q51			2SA1048(Y, GR)	TRANSISTOR		
Q51			2SA1309A(Q, R)	TRANSISTOR		
Q52 ,53			2SC2458(Y, GR)	TRANSISTOR		
Q52 ,53			2SC3311A(Q, R)	TRANSISTOR		
Q54 ,55			2SC2003(L, K)	TRANSISTOR		
Q56			DTA124ES	DIGITAL TRANSISTOR		
Q56			UN4112	DIGITAL TRANSISTOR		
Q57 ,58			DTC124ES	DIGITAL TRANSISTOR		
Q57 ,58			UN4212	DIGITAL TRANSISTOR		
Q59			DTA124ES	DIGITAL TRANSISTOR		
Q59			UN4112	DIGITAL TRANSISTOR		
Q60			2SD863(B, F)	TRANSISTOR		
Q61			2SB764(B, F)	TRANSISTOR		
Q62 ,63			2SD863(B, F)	TRANSISTOR		
CONTROL UNIT (X11-32XX-XX)						
D1			B30-1291-05	LED(LN21CPSLX(V)-(TA4))		
D14 -22			B30-1291-05	LED(LN21CPSLX(V)-(TA4))		
C1 ,2			CE04KW1HR33M	ELECTRO 0.33UF 50WV		
C3 -8			CF92FV1H101K	MF 100PF K		
C9 -12		*	C90-1969-05	ELECTRO 0.33UF 50WV		
C13 -16		*	C90-1970-05	ELECTRO 10UF 35WV		
C17 -20		*	CF92FV1H223J	MF 0.022UF J		
C21 ,22			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C23 ,24			CF92FV1H561J	MF 560PF J		
C51			CE04KW1E470M	ELECTRO 47UF 25WV		
C52			CF92FV1H103J	MF 0.010UF J		
C53			CE04KW1E470M	ELECTRO 47UF 25WV		
C54			CF92FV1H103J	MF 0.010UF J		
C55 ,56			CE04KW1HR33M	ELECTRO 0.33UF 50WV		
C57			C90-3244-05	ELECTRO 10UF 35WV		
C58			CK45FF1H103Z	CERAMIC 0.010UF Z		
C59			C90-3256-05	ELECTRO 4.7UF 50WV		
C60			C90-3253-05	ELECTRO 1UF 50WV		
C61			C90-3244-05	ELECTRO 10UF 35WV		
C62			CE04KW1H010M	ELECTRO 1.0UF 50WV		
C63			CK45FF1H103Z	CERAMIC 0.010UF Z		
C64			CE04KW1A101M	ELECTRO 100UF 10WV		
C65			C90-1827-05	BACKUP 0.047F 5.5WV		
C66 ,67			C91-1439-05	FILM 0.01UF 250VAC		

L:Scandinavia K:USA P:Canada 3 : KA-3050R
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 △ indicates safety critical components.

* New Parts
 Parts without Parts No. are not supplied.
 Les articles non mentionnés dans le Parts No. ne sont pas fournis.
 Teile ohne Parts No. werden nicht geliefert.

No. 7

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
△ J1		*	E03-0131-05	AC OUTLET	ELM	
△ J2			E03-0111-05	AC OUTLET	P	
△ J3 -5			E03-0109-05	AC OUTLET	T	
△ F1			F04-2025-05	FUSE (UL) (250V 2A)	P	2
△ F1			F05-1623-05	FUSE (SEMKO) (250V T1.6A)	ELTX	3
△ F1			F05-4028-05	FUSE (UL) (125V 4A)	P	3
△ F1			F06-1022-05	FUSE (SEMKO) (250V T1A)	ELTX	2
△ F1 ,2			F05-1623-05	FUSE (SEMKO) (250V T1.6A)	M	3
△ F1 ,2			F06-1022-05	FUSE (SEMKO) (250V T1A)	M	2
△ F3			F05-2525-05	FUSE (SEMKO) (250V T2.5A)	EL	
CN1 -4			J13-0075-05	FUSE CLIP	M	
CN1 ,2			J13-0075-05	FUSE CLIP	ELTXP	
CN5 ,6			J13-0075-05	FUSE CLIP	EL	
L1 ,2			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)		
X1			L78-0209-05	RESONATOR 4.194MHZ		
R89			RD14AB2E680JTS	FL-PROOF RD 68 J 1/4W		
VR1 ,2			R06-3061-05	POTENTIOMETER BASS, TRESLE		
K1			S76-0009-05	MAGNETIC RELAY		
S1 -5			S40-1064-05	PUSH SWITCH KEY BOARD		3
S1 ,2			S40-1064-05	PUSH SWITCH POWER, TAPE2/DAT		2
S4 ,5			S40-1064-05	PUSH SWITCH SOURCE DIR, LOUDNES		2
△ S7			S31-2322-05	SLIDE SWITCH VOLTAGE SELECTOR	M	
S6		*	T99-0526-05	ROTARY ENCODER INPUT SELECTOR		
D3 -8			HSS104	DIODE		
D3 -8			1SS133	DIODE		
D9			HZS5.1S(B2)	ZENER DIODE		
D9			RD5.1JS(B2)	ZENER DIODE		
D10 -13			HSS104	DIODE		
D10 -13			1SS133	DIODE		
D23			HSS104	DIODE		
D23			1SS133	DIODE		
IC1		*	UPD75004CU-145	IC(MICROPROCESSOR)		
IC2			NJM4565D-D	IC(OP AMP X2)		
IC3			PST529C	IC(SYSTEM RESET)		
Q1			2SC2458(Y, GR)	TRANSISTOR		
Q1			2SC3311A(Q, R)	TRANSISTOR		
Q2			2SC2003(L, K)	TRANSISTOR		
A1			W02-1046-05	ELECTRIC CIRCUIT MODULE		

L:Scandinavia K:USA P:Canada 3 : KA-3050R
 Y:PX(Far East, Hawaii) T:England E:Europe 2 : KA-2050R
 Y:AAFES(Europe) X:Australia M:Other Areas
 △ indicates safety critical components.

SPECIFICATIONS (For U.K. and Europe)

KA-3050R

Continuous rated power output	
(DIN) 1 kHz, at 8 Ω	55 W + 55 W
at 4 Ω	70 W + 70 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	55 W + 55 W
at 4 Ω	70 W + 70 W
Dynamic power	65 W (8 Ω)
	70 W (6 Ω)
	85 W (4 Ω)
	100 W (2 Ω)
Damping factor	40 (50 Hz)
Total harmonic distortion	0.05%
	(20 Hz ~ 20,000 Hz, 45 W, 8 Ω)
	0.02% (1 kHz, 45 W, 8 Ω)
Intermodulation distortion	0.05% (45 W, 8 Ω)
	(70 Hz : 7 kHz = 4:1)
Frequency response	
CD	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM)	130 mV, 0.5% T.H.D. at 1 kHz
PHONO (MC)	10 mV, 0.5% T.H.D. at 1 kHz
Signal to noise ratio	
PHONO (MM)	87 dB (IHF '66)
	82 dB (IHF '78)
PHONO (MC)	67 dB (IHF '66)
	75 dB (IHF '78)
CD/TUNER/AUX/TAPE	101 dB (IHF '66)
	85 dB (IHF '78)
PHONO (MM)	60 dB (DIN, 50 mW output)
CD/TUNER/AUX/TAPE	60 dB (DIN, 50 mW output)
Input sensitivity/impedance	
PHONO (MM)	2.5 mV/47 kΩ
PHONO (MC)	0.2 mV/100 Ω
CD/TUNER/AUX/TAPE	200 mV/47 kΩ
Tone control	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)
Loudness control	
VOLUME at -30 dB level	+6 dB (100 Hz), +3 dB (10 kHz)
Output level/impedance	
TAPE REC	200 mV/1 kΩ
General	
Power consumption	160 W
AC outlets	
SWITCHED	3; (Total 200 W max.)
Dimensions	
	W: 440 mm (17-5/16")
	H: 136 mm (5-3/8")
	D: 350 mm (13-3/4")
Weight (net)	6.9 kg (15.2 lb)

KA-2050R

Continuous rated power output	
(DIN) 1 kHz, at 8 Ω	35 W + 35 W
at 4 Ω	45 W + 45 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	35 W + 35 W
at 4 Ω	40 W + 40 W
Dynamic power	45 W (8 Ω)
	50 W (6 Ω)
	60 W (4 Ω)
	70 W (2 Ω)
Damping factor	40 (50 Hz)
Total harmonic distortion	0.05%
	(20 Hz ~ 20,000 Hz, 30 W, 8 Ω)
	0.02% (1 kHz, 30 W, 8 Ω)
Intermodulation distortion	0.05% (30 W, 8 Ω)
	(70 Hz : 7 kHz = 4:1)
Frequency response	
CD	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB
Maximum input level	
PHONO (MM)	130 mV, 0.5% T.H.D. at 1 kHz
Signal to noise ratio	
PHONO (MM)	77 dB (IHF '66)
	80 dB (IHF '78)
CD/TUNER/AUX/TAPE	101 dB (IHF '66)
	85 dB (IHF '78)
PHONO (MM)	58 dB (DIN, 50 mW output)
CD/TUNER/AUX/TAPE	60 dB (DIN, 50 mW output)
Input sensitivity/impedance	
PHONO (MM)	2.5 mV/47 kΩ
CD/TUNER/AUX/TAPE	200 mV/47 kΩ
Tone control	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)
Loudness control	
VOLUME at -30 dB level	+6 dB (100 Hz), +3 dB (10 kHz)
Output level/impedance	
TAPE REC	200 mV/1 kΩ
General	
Power consumption	120 W
AC outlets	
SWITCHED	3; (Total 200 W max.)
Dimensions	
	W: 440 mm (17-5/16")
	H: 136 mm (5-3/8")
	D: 350 mm (13-3/4")
Weight (net)	6.0 kg (13.2 lb)

KA-2050R/3050R

SPECIFICATIONS (For other countries)

KA-3050R

Continuous rated power output

(IHF '66) From 20 Hz to 20,000 Hz 0.05% T.H.D.	
at 8 Ω	45 W + 45 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	55 W + 55 W
at 4 Ω	70 W + 70 W

Dynamic power	65 W (8 Ω)
	70 W (6 Ω)
	85 W (4 Ω)
	100 W (2 Ω)

Damping factor	40 (50 Hz)
Total harmonic distortion	0.05%

(20 Hz ~ 20,000 Hz, 45 W, 8 Ω)
0.02% (1 kHz, 45 W, 8 Ω)

Intermodulation distortion	0.05% (45 W, 8 Ω)
(70 Hz : 7 kHz = 4:1)	

Frequency response	
CD	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB

Maximum input level	
PHONO (MM)	130 mV, 0.5% T.H.D. at 1 kHz
PHONO (MC)	10 mV, 0.5% T.H.D. at 1 kHz

Signal to noise ratio	
PHONO (MM)	87 dB (IHF '66)
	82 dB (IHF '78)
PHONO (MC)	67 dB (IHF '66)
	75 dB (IHF '78)
CD/TUNER/AUX/TAPE	101 dB (IHF '66)
	85 dB (IHF '78)

Input sensitivity/impedance	
PHONO (MM)	2.5 mV/47 kΩ
PHONO (MC)	0.2 mV/100 Ω
CD/TUNER/AUX/TAPE	200 mV/47 kΩ

Tone control	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)

Loudness control	
VOLUME at -30 dB level	+6 dB (100 Hz), +3 dB (10 kHz)

Output level/impedance	
TAPE REC	200 mV/1 kΩ

General

Power consumption	160 W
AC outlets	
SWITCHED	3; (Total 200 W max.) For Australia 2; (Total 200 W max.)
Dimensions	W: 440 mm (17-5/16") H: 136 mm (5-3/8") D: 350 mm (13-3/4")
Weight (net)	6.9 kg (15.2 lb)

Kenwood follows a policy of continuous advancements in development.
For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement.
Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an.
Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the general market (M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KA-2050R

Continuous rated power output

(IHF '66) From 20 Hz to 20,000 Hz 0.05% T.H.D.	
at 8 Ω	30 W + 30 W
(IEC/NF) From 63 Hz to 12,500 Hz, 0.7% T.H.D.	
at 8 Ω	35 W + 35 W
at 4 Ω	40 W + 40 W

Dynamic power	45 W (8 Ω)
	50 W (6 Ω)
	60 W (4 Ω)
	70 W (2 Ω)

Damping factor	40 (50 Hz)
Total harmonic distortion	0.05%

(20 Hz ~ 20,000 Hz, 30 W, 8 Ω)
0.02% (1 kHz, 30 W, 8 Ω)

Intermodulation distortion	0.05% (30 W, 8 Ω)
(70 Hz : 7 kHz = 4:1)	

Frequency response	
CD	5 Hz ~ 90 kHz, +0 dB, -3 dB
PHONO 'RIAA' response	20 Hz ~ 20 kHz, +0.3 dB, -0.3 dB

Maximum input level	
PHONO (MM)	130 mV, 0.5% T.H.D. at 1 kHz

Signal to noise ratio	
PHONO (MM)	77 dB (IHF '66)
	80 dB (IHF '78)
CD/TUNER/AUX/TAPE	101 dB (IHF '66)
	85 dB (IHF '78)

Input sensitivity/impedance	
PHONO (MM)	2.5 mV/47 kΩ
CD/TUNER/AUX/TAPE	200 mV/47 kΩ

Tone control	
BASS	±10 dB (at 100 Hz)
TREBLE	±10 dB (at 10 kHz)

Loudness control	
VOLUME at -30 dB level	+6 dB (100 Hz), +3 dB (10 kHz)

Output level/impedance	
TAPE REC	200 mV/1 kΩ

General

Power consumption	120 W
AC outlets	
SWITCHED	3; (Total 200 W max.) For Australia 2; (Total 200 W max.)
Dimensions	W: 440 mm (17-5/16") H: 136 mm (5-3/8") D: 350 mm (13-3/4")
Weight (net)	6.0 kg (13.2 lb)

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