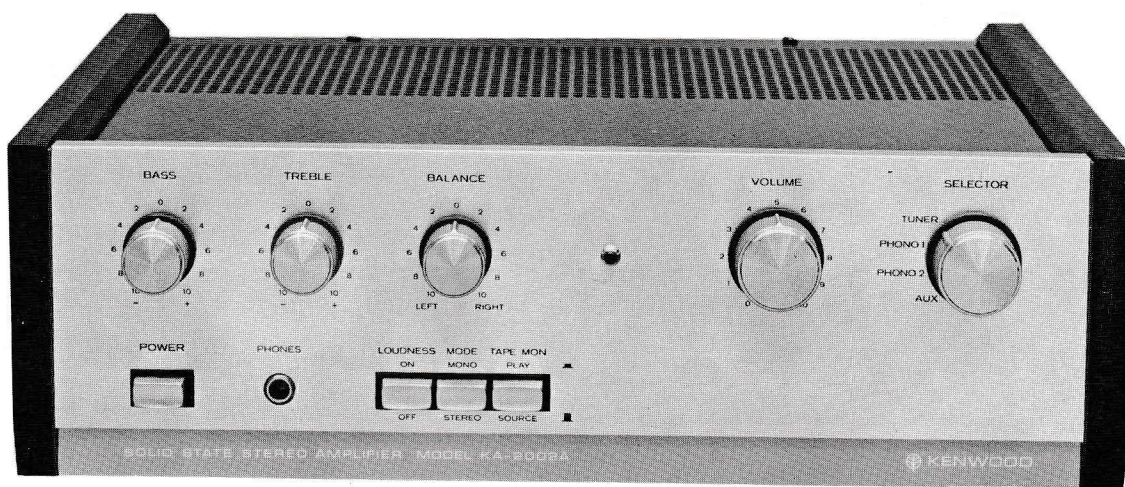


KENWOOD
HI/FI STEREO COMPONENTS

SERVICE MANUAL

KA-2002A

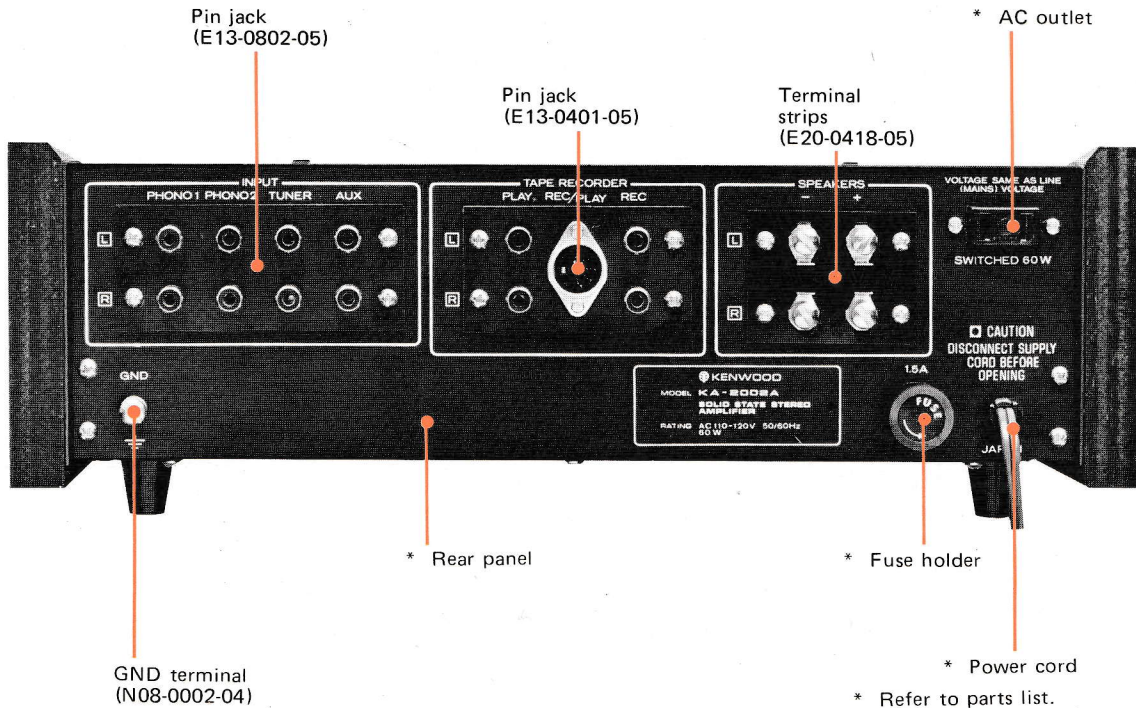
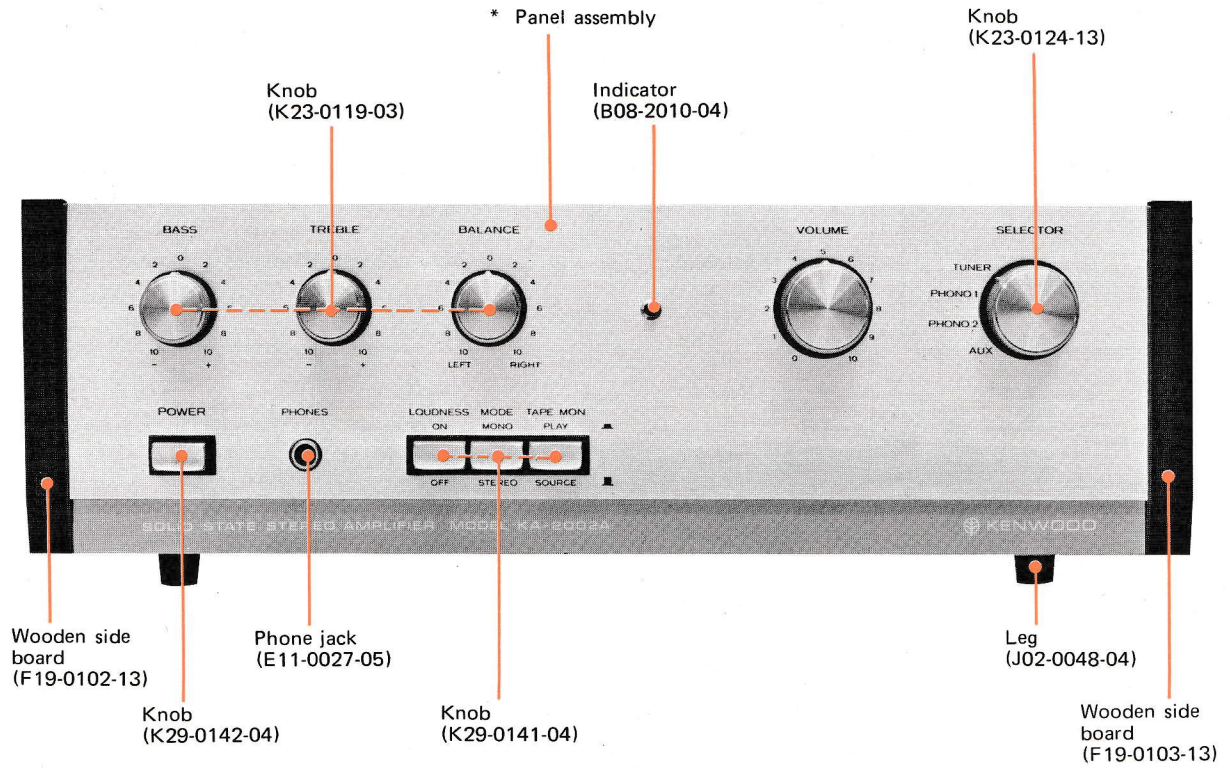


STEREO AMPLIFIER

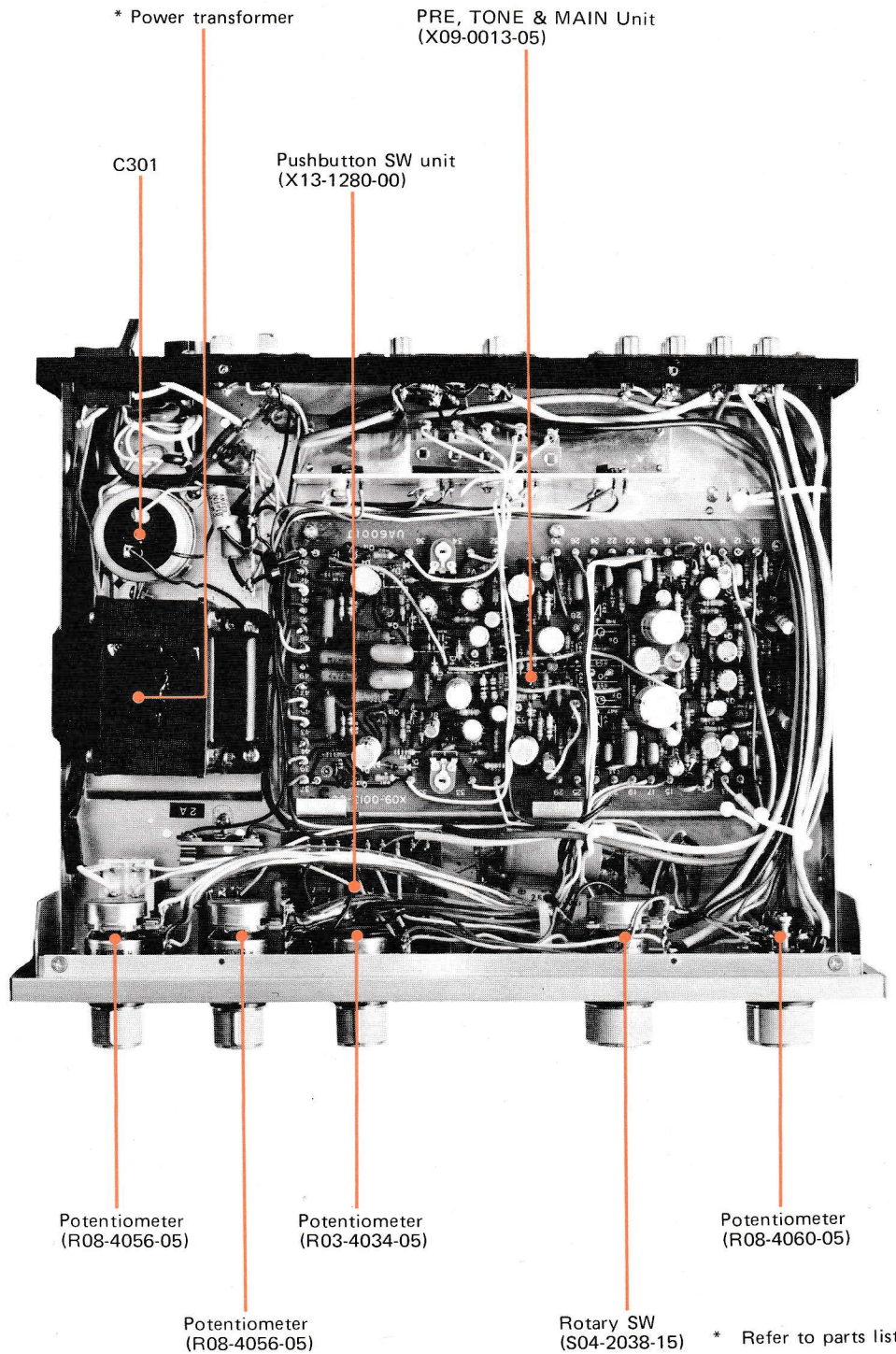
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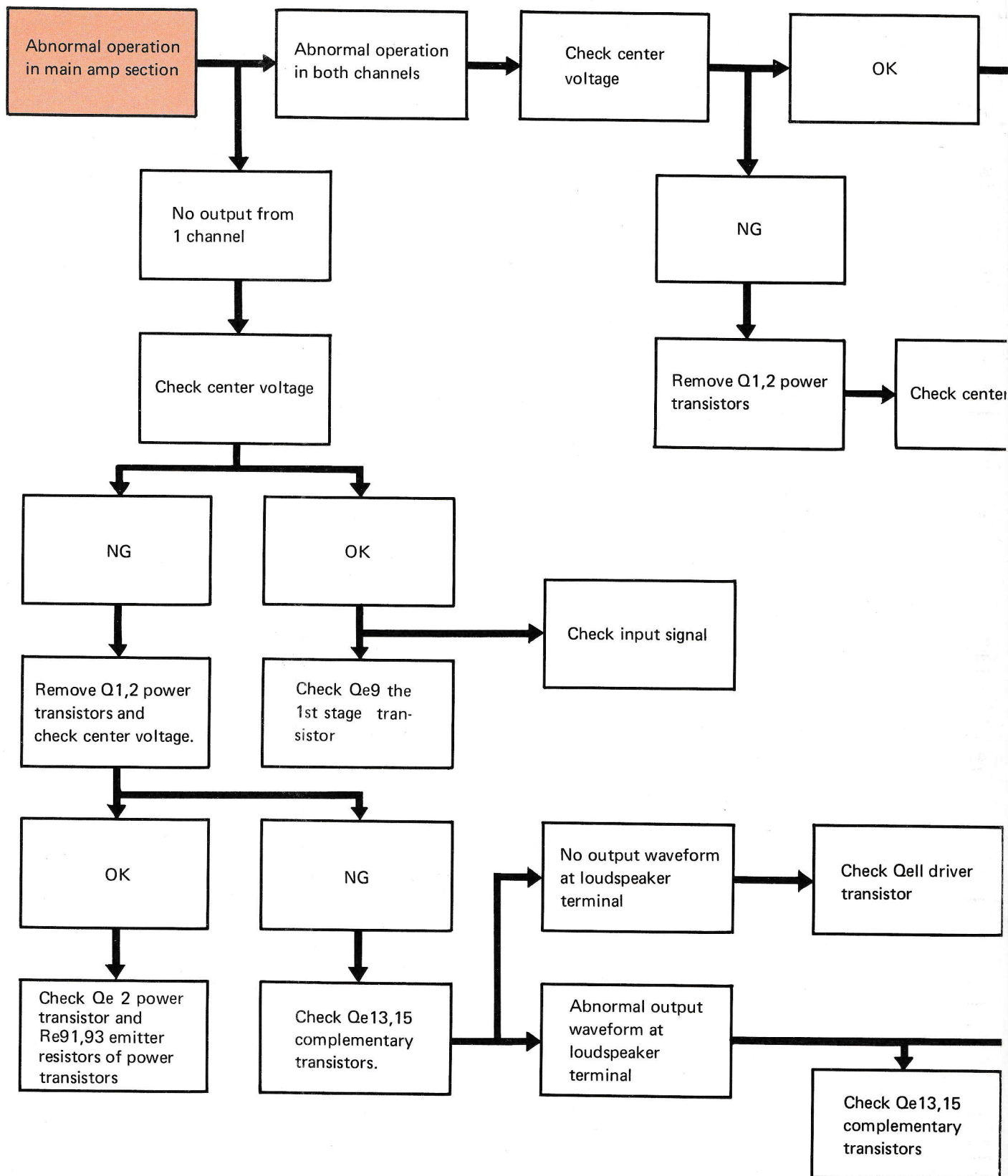
EXTERNAL VIEW



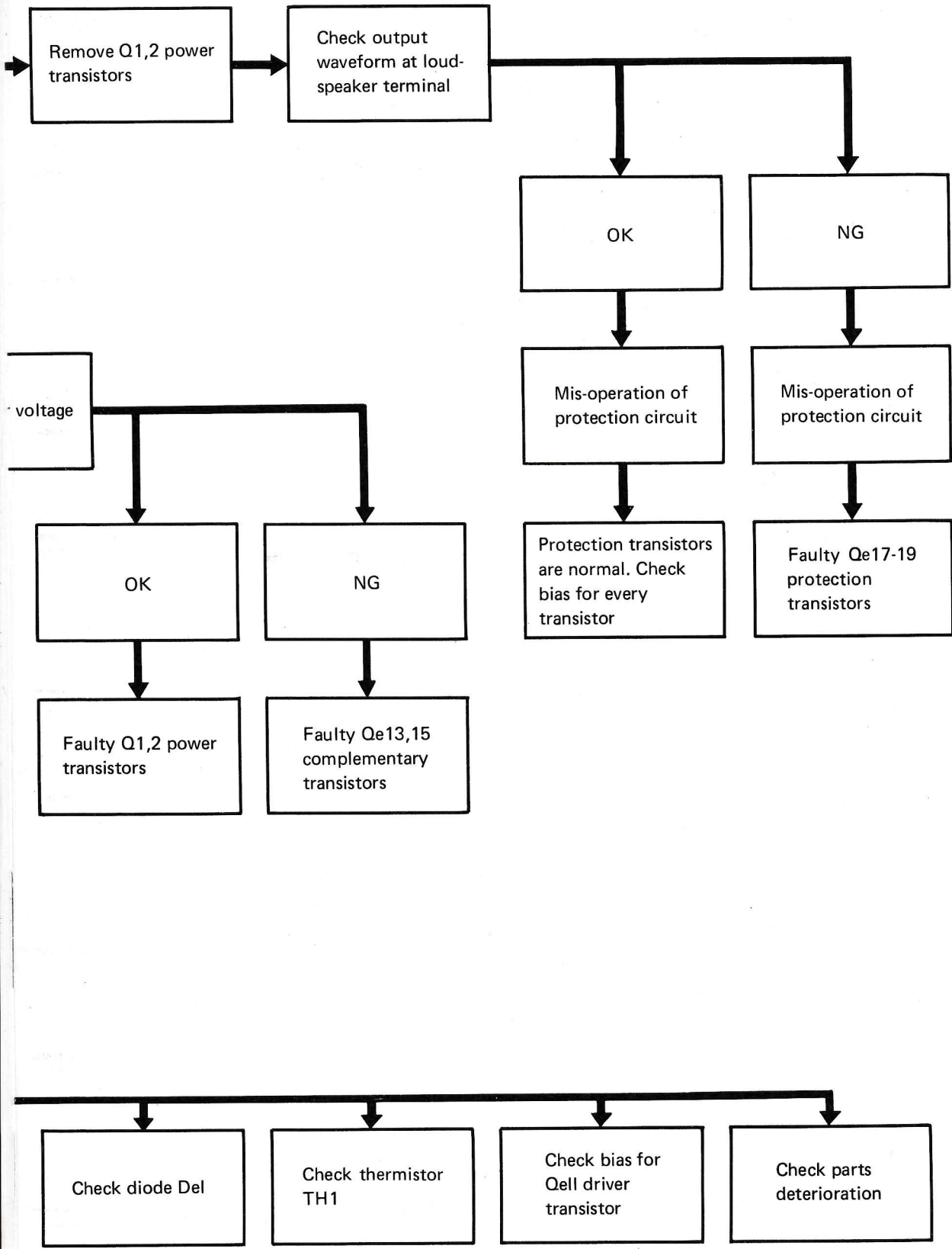
TOP CHASSIS VIEW



TROUBLESHOOTING



ROOTING



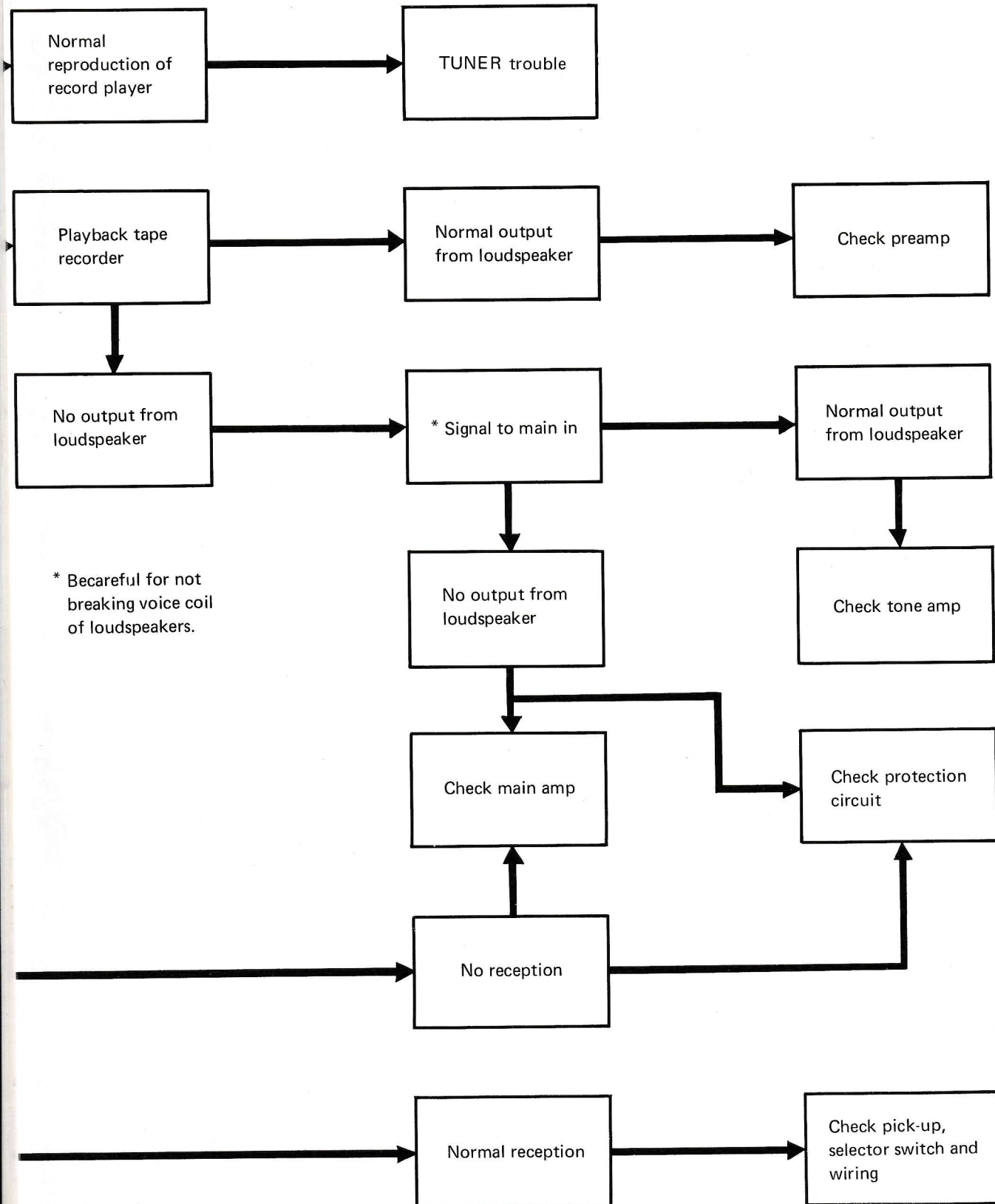
(only one channel)

No reception
(when connect
TUNER)

No reproduction
of record player

No reproduction of
record player
(when connect
PLAYER)

TROUBLESHOOTING

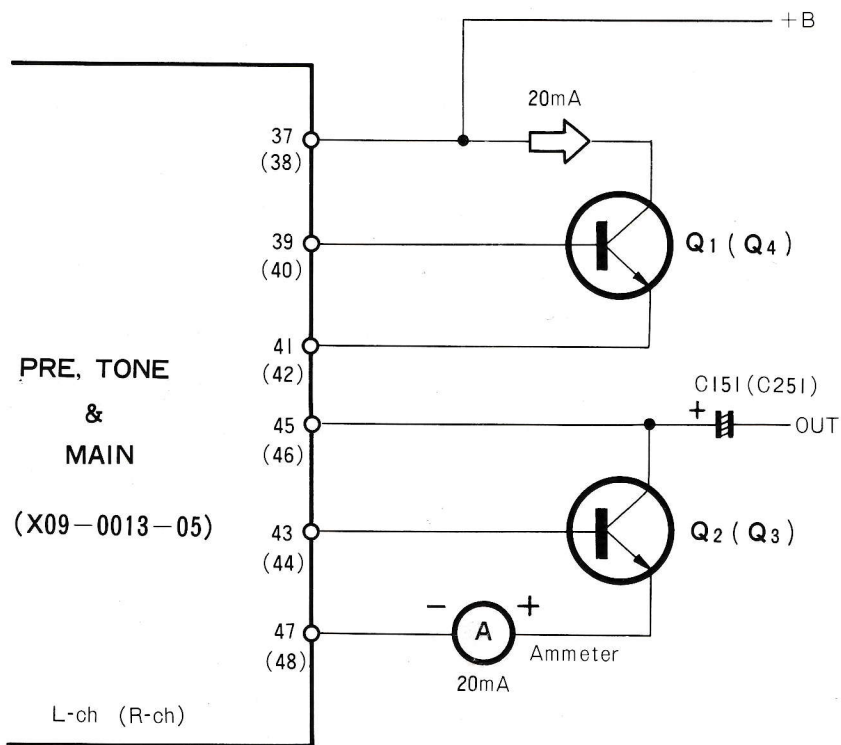


ADJUSTMENT

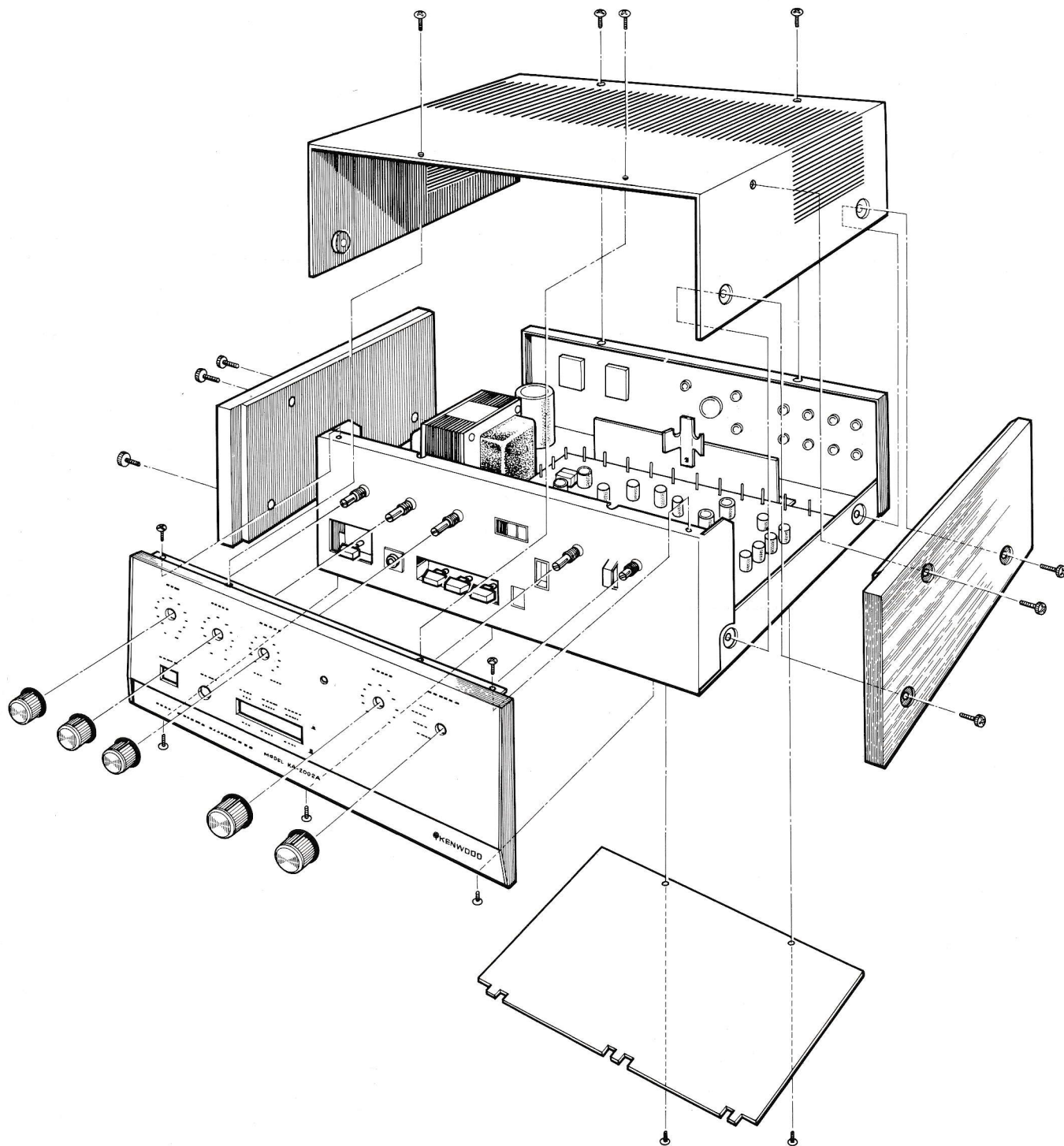
BIAS ADJUSTMENT

WHEN USING TESTER AS AMMETER

1. Set pc trimmer potentiometer VRe1, 2 to its min..
2. Couple tester (as ammeter) to emitter of power transistor Q2 and terminal 47 of PRE, TONE & MAIN (X09-0013-05) unit.
3. Adjust pc trimmer potentiometer VRe1 so that tester reading is 20mA.
4. Remove tester to emitter of power transistor Q3 and terminal 48 of that.
5. Adjust pc trimmer potentiometer VRe2 so that tester reading is 20mA.
6. Check output waveform hasn't distortion.
7. If not, check MAIN amp section.



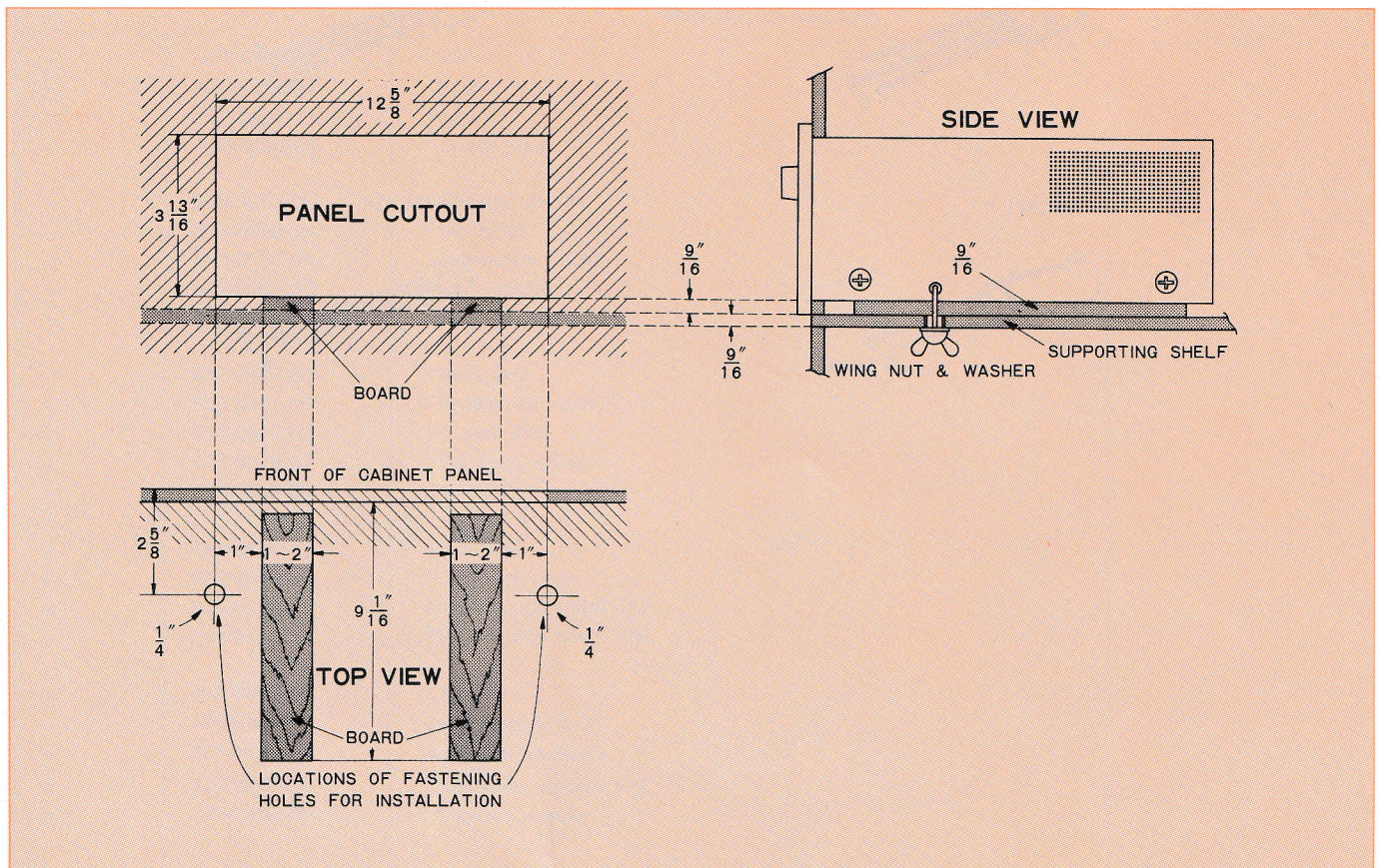
DISASSEMBLY OF KA-2002A



MOUNTING TEMPLATE

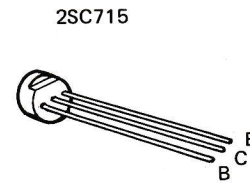
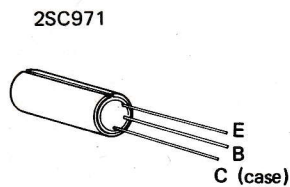
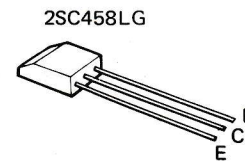
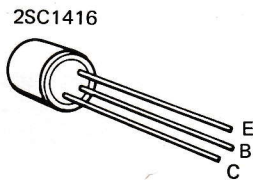
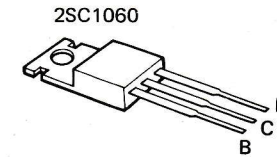
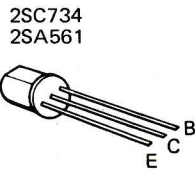
DIRECTIONS FOR PANEL MOUNTING

1. First remove the wooden side boards which are attached to both sides of the amplifier's metal enclosure. This can be done by removing three screws from each side board. Put these long screws away until such time as you may wish to reattach the side boards later. They are not required for panel mounting.
2. The 4 short screws which are supplied with this unit are now used to join the amp chassis and its metal enclosure. Screw them into the two lower holes on each side of the metal enclosure. Never use the long screws that were removed with the side boards as this may damage the amplifier.
3. Locate the supporting shelf at the height you wish the amplifier positioned.
4. Remove the four bottom legs.
5. An air space must be made between the bottom of the set and the supporting shelf to assure good ventilation and cool operation. This space can be made by placing two boards which measure $\frac{9}{16}$ " thick by 1" to 2" width between chassis and the supporting shelf.
6. Cut out the cabinet panel in the dimensions of $3\text{-}\frac{13}{16}$ " x $12\text{-}\frac{5}{8}$ " as shown in below Panel Cutout. The bottom of the cutout should be flush with the bottom plate of the amplifier, as shown in the side view. The distance between the bottom of the cutout and the top of the supporting shelf is $\frac{9}{16}$ ".
7. The amplifier is held in place by two bolts. The holes must be made in the shelf to correspond with the holes in the amplifier. Use the "Top View" template to locate these holes on the supporting shelf. The holes should be made $\frac{1}{4}$ " in diameter or somewhat larger.



SUBSTITUTION TRANSISTOR/TRANSISTOR LEADS

Tr. NAME	SUBSTITUTION Tr.
(X09-0013-05)	
2SA561 (O) or (Y)	2SA673A (B) or (C), 2SA565 (B) or (C)
2SC458LG (B) or (C)	2SC1000GR, 2SC1416A, (GR) 2SC1345 (D)
2SC715 (E) or (F)	2SC458 (C)
2SC734 (O) or (Y)	2SC1213A (B) or (C), 2SC984 (B) or (C)
2SC971	2SC1061 (B) or (C)
2SC1416A (GR) or (BL)	2SC1000GR or BL, 2SC1345 (D) or (E)
2SC1060 (B) or (C)	—



PARTS LIST

Ref. No.	Parts No.	Description	Remarks
CAPACITOR			
C151, 251, C301	CE02W1E102	Electrolytic 1000 μ F 25WV	
C302, 303 C304	CE62AW1H222	Electrolytic 2200 μ F 50WV	
	CP02B2J103M	Oil filled 0.01 μ F \pm 20%	
	C90-0145-05	Polyester 0.01 μ F \pm 20%	
RESISTOR			
R101	PD14BY2E104J	Carbon 100k Ω \pm 5% 1/4W	
R102	PD14BY2E394J	Carbon 390k Ω \pm 5% 1/4W	
R151	RC05GF2H331K	Carbon 330 Ω \pm 10% 1/2W	
R201	PD14BY2E104J	Carbon 100k Ω \pm 5% 1/4W	
R202	PD14BY2E394J	Carbon 390k Ω \pm 5% 1/4W	
R251	RC05GF2H331K	Carbon 330 Ω \pm 10% 1/2W	
SEMICONDUCTOR			
Q1~4 D1 TH1, 2		2SC1060 (B) or (C) 10DC-1 5T-31L	
POTENTIOMETER			
VR1	R08-4060-05	Potentiometer (VOLUME)	
VR2	R03-4034-05	Potentiometer (BALANCE)	
VR3	R08-4056-05	Potentiometer (BASS)	
VR4	R08-4056-05	Potentiometer (TREBLE)	
SWITCH			
S1	S04-2038-15	Rotary (SELECTOR)	
MISCELLANEOUS			
-	A01-0129-22	Case	
-	A10-0348-31	Chassis	
-	A20-0603-12	Panel	
-	A40-0062-04	Bottom plate	
-	B08-2010-04	Indicator (Red)	
-	B30-0029-15	Pilot lamp	
-	B41-0138-04	Fuse sticker (2A)	
-	B42-0009-04	Passed sticker	
-	B52-0147-00	Schematic diagram	
-	E11-0027-05	Phone jack	
-	E13-0401-05	Pin jack (4P, DIN)	
-	E13-0802-05	Pin jack (8P)	
-	E15-0010-05	Pilot lamp socket	
-	E20-0418-05	Terminal strips (4P)	
-	F01-0076-13	Heat sink	
-	F07-0010-04	Pilot lamp cover	
-	F19-0102-13	Wooden side board (L)	
-	F19-0103-13	Wooden side board (R)	
-	J02-0048-04	Leg x 4	
-	J21-0192-04	Amp stopper x 2	
-	J21-0438-04	Indicator hardware	
-	J21-0546-04	Thermistor stopper x 2	
-	J30-0028-04	PC board stopper	

PARTS LIST

Ref. No.	Parts No.	Description	Remarks
-	K23-0119-03	Knob (BASS, TREBLE, BALANCE)	
-	K23-0124-13	Knob (VOLUME, SELECTOR)	
-	K29-0141-04	Knob (3 pushbutton) x 3	
-	K29-0142-04	Knob (POWER)	
-	X09-0013-05	PRE, TONE & MAIN Unit	
-	X13-1400-00	Pushbutton SW Unit	

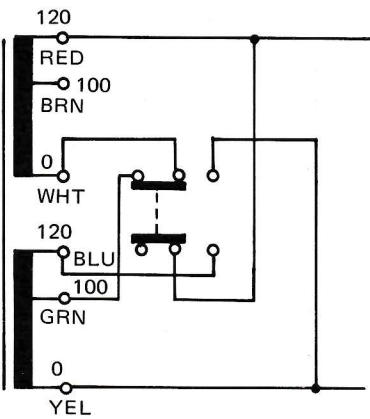
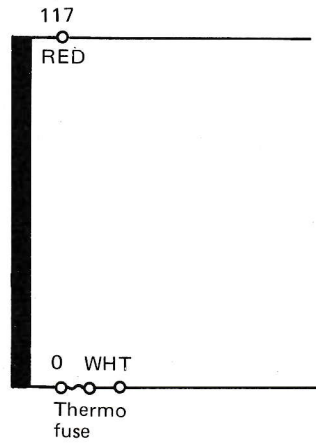
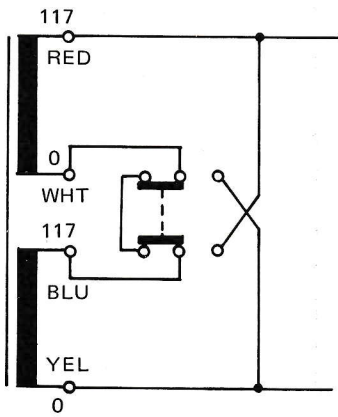
SUB PARTS

Caution: Append the following parts to every area.

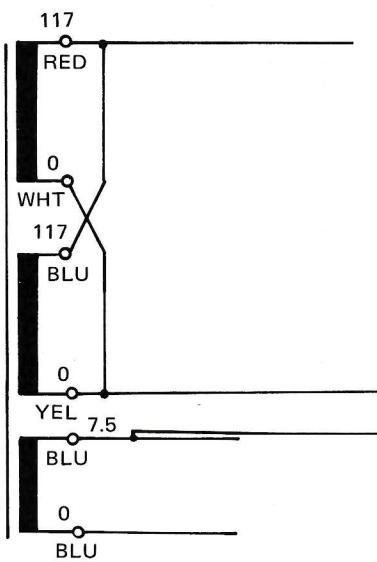
Ref. No.	U. S. A.	Canada	PX	Australia	Europe
-	A20-0602-02	A20-0602-02	A20-0602-02	A20-0602-02	A20-0602-02
-	A21-0121-03	A21-0121-03	A21-0121-03	A21-0121-03	A21-0121-03
-	A23-0371-12	A23-0371-12	A23-0372-02	A23-0372-02	A23-0390-02
-	-	B40-0760-04	-	-	-
-	-	-	-	-	B41-0133-04 (x2)
-	-	-	-	-	-
-	-	-	-	-	B42-0024-04
-	-	-	-	-	B42-0262-14
-	B42-0359-04 (x2)	B42-0359-04	-	-	-
-	-	-	-	-	B44-0001-04
-	B46-0002-00	B46-0021-00	B46-0022-00	-	-
-	-	-	B46-0023-00	-	-
-	B50-0926-00	B50-0926-00	B50-0927-00	B50-0927-00	B50-0927-00
-	-	-	-	B58-0003-00	-
-	B58-0043-00	B58-0043-00	-	-	-
-	-	-	-	B58-0101-00	-
-	-	-	-	B58-0108-00	B58-0108-00
-	-	-	B58-0139-00	-	-
-	-	-	B58-0144-00	-	-
-	-	-	B58-0146-00	-	-
-	-	-	-	-	B58-0156-00
-	-	-	-	-	B58-0157-00
-	-	-	D32-0021-04	D32-0021-04	D32-0021-04
-	E08-0221-05	E08-0221-05	E08-0205-15	E08-0205-15	E08-0205-15
-	E30-0181-05	E30-0181-05	E30-0034-05	E30-0185-05	E30-0176-05
-	-	-	F05-1023-05	F05-1023-05	F06-1022-05 (x3)
-	F05-1521-05	F05-1521-05	F05-1521-05	F05-1521-05	-
-	-	-	-	-	F05-1622-05
-	F05-2023-05	F05-2023-05	F05-2023-05	F05-2023-05	F05-2029-05
-	-	-	-	-	F07-0296-04
-	-	F20-0003-04 (x2)	-	-	-
-	H01-0895-04	H01-0895-04	H01-0895-04	H01-0895-04	H01-0895-04
-	H03-0208-04	H03-0208-04	-	H03-0208-04	H03-0216-04
-	J13-0033-15	J13-0033-15	J13-0033-15	J13-0033-15	J13-0031-05
-	J13-0023-05	J13-0023-05	J13-0023-05	J13-0023-05	J13-0027-05 (x3)
-	L03-0042-25	L05-0005-25	L03-0042-25	L03-0042-25	L06-0017-05
S7	S39-2002-05	S39-2002-05	S39-2003-05	S39-2003-05	S39-2003-05
S8	-	-	S31-2001-05	S31-2001-05	S31-2001-05
-	-	-	-	-	X00-1280-00

UB PARTS LIST

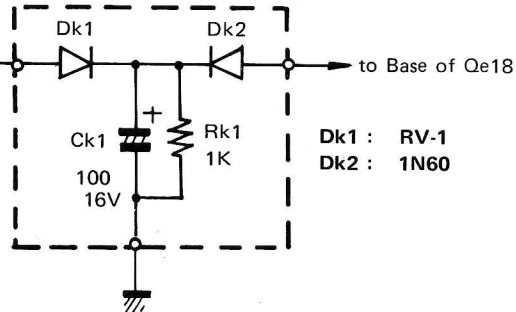
Europe	England	South Africa	Other area	Description
20-0602-02	A20-0601-02	—	A20-0602-02	Panel assembly
21-0121-03	A21-0120-03	—	A21-0121-03	Dress panel
23-0390-02	A23-0373-02	—	A23-0373-02	Rear panel
—	B40-0761-04	—	B40-0759-04	Model name plate
41-0133-04 (x2)	—	—	—	Fuse sticker (1AT)
—	—	—	B41-0134-04	Fuse sticker (1A)
42-0024-04	—	—	—	SEV sticker
42-0262-14	—	—	—	SEV sticker
—	—	—	—	UL caution card
44-0001-04	—	—	—	GND mark sticker
—	—	—	—	Warranty card
—	—	—	—	Warranty card
50-0927-00	B50-0928-00	—	B50-0927-00	Instruction manual
—	B58-0003-00	—	B58-0003-00	Power supply caution card
—	—	—	—	Carton case caution card
—	B58-0101-00	—	B58-0101-00	Power voltage selector caution card
58-0108-00	B58-0108-00	—	B58-0108-00	Spare fuse caution card
—	—	—	—	Power supply caution card
—	—	—	—	Power voltage selector caution card
—	—	—	—	Spare fuse caution card
58-0156-00	—	—	—	Power supply caution card
58-0157-00	—	—	—	Power voltage selector caution card
32-0021-04	D32-0021-04	—	D32-0021-04	Switch stopper
08-0205-15	E08-0205-15	—	E08-0205-15	AC outlet
30-0176-05	—	—	E30-0034-05	Power cord
06-1022-05 (x3)	F05-1023-05	—	F05-1023-05	Fuse (1A)
—	F05-1521-05	—	F05-1521-05	Fuse (1.5A)
05-1622-05	—	—	—	Fuse (1.6A)
05-2029-05	F05-2023-05	—	F05-2023-05	Fuse (2A)
07-0296-04	—	—	—	AC outlet cover
—	—	—	—	Insulator x 2
01-0895-04	H01-0894-04	—	H01-0895-04	Carton case
03-0216-04	H03-0209-04	—	H03-0208-04	Carton case
13-0031-05	J13-0033-15	—	J13-0033-15	Fuse holder
13-0027-05 (x3)	J13-0023-05	—	J13-0023-05	Fuse holder
06-0017-05	L03-0042-05	—	L03-0042-25	Power transformer
39-2003-05	S39-2003-05	—	S39-2003-05	Pushbutton switch (power)
31-2001-05	S31-2001-05	—	S31-2001-05	Slide switch (power voltage selector)
00-1280-00	—	—	—	Power supply unit



Caution : Set for Europe provides power supply unit.



POWER SUPPLY (X00-1280-00)



POWER SUPPLY (X00-1280-00) PARTS LIST

Caution : For Europe

Ref. No.	Parts No.	Description	Remarks
CAPACITOR			
Ck1	CE04W1C101	Electrolytic 100 μ F 16WV	
RESISTOR			
Rk1	RC05GF2H102K	Carbon 1k Ω \pm 10% 1/2W	
SEMICONDUCTOR			
Dk1 Dk2		RV-1 1N60	
MISCELLANEOUS			
-	J21-0737-04	L shaped hardware x 3	

PRE, TONE & MAIN (X09-0013-05) PARTS LIST

Ref. No.	Parts No.	Description	Remarks
CAPACITOR			
Ce1, 2	CS04D0J3R3MorX	Tantalum 3.3 μ F 6.3WV	
Ce5, 6	CK94YY1H561M	Ceramic 560pF \pm 20%	
Ce7~10	CE04W1E100	Electrolytic 10 μ F 25WV	
Ce11, 12	CE04W0F101	Electrolytic 100 μ F 3.15WV	
Ce13, 14	CC94SL1H101K	Ceramic 100pF \pm 10%	
Ce15, 16	CE04W1E100	Electrolytic 10 μ F 25WV	
Ce21, 22	CQ93M1H103K	Mylar 0.01 μ F \pm 10%	
Ce23, 24	CQ93M1H272K	Mylar 0.0027 μ F \pm 10%	
Ce25, 26	CS04D1E010M	Tantalum 1 μ F 25WV	
Ce27, 28	CE04W1E100	Electrolytic 10 μ F 25WV	
Ce29, 30	CQ93M1H103K	Mylar 0.01 μ F \pm 10%	
Ce31, 32	CQ93M1H104K	Mylar 0.1 μ F \pm 10%	
Ce33, 34	CC94SL1H101K	Ceramic 100pF \pm 10%	
Ce35, 36	CQ93M1H102K	Mylar 0.001 μ F \pm 10%	
Ce37, 38	CQ93M1H393K	Mylar 0.039 μ F \pm 10%	
Ce39, 40	CQ93M1H222K	Mylar 0.0022 μ F \pm 10%	
Ce45, 46	CE04W1H010	Electrolytic 1 μ F 50WV	
Ce47, 48	CE04W0J471	Electrolytic 470 μ F 6.3WV	
Ce49, 50	CE04W1E100	Electrolytic 10 μ F 25WV	
Ce51, 52	CE04W1H100	Electrolytic 10 μ F 50WV	
Ce53, 54	CC94SL1H151K	Ceramic 150pF \pm 10%	
Ce55, 56	CE04W0F470	Electrolytic 47 μ F 3.15WV	
Ce57, 58	CE04W1H470	Electrolytic 47 μ F 50WV	
Ce59, 60	CQ93M1H224M	Mylar 0.22 μ F \pm 20%	
Ce61	CE04W1H470	Electrolytic 47 μ F 50WV	
Ce62	CE04W0J470	Electrolytic 47 μ F 6.3WV	
Ce63	CE04W1E101	Electrolytic 100 μ F 25WV	
Ce64	CE04W1H221	Electrolytic 220 μ F 50WV	
Ce65	CE04W1V221	Electrolytic 220 μ F 35WV	
Ce66	CE04W1E101	Electrolytic 100 μ F 25WV	
Ce67, 68	CE04W0F470	Electrolytic 47 μ F 3.15WV	
Ce69, 70	CE04W1H100	Electrolytic 10 μ F 50WV	
Ce71, 72	CC94SL1H101K	Ceramic 100pF \pm 10%	
Ce75, 76	CC94SL1H330K	Ceramic 33pF \pm 10%	
Ce80, 81	CC45SL1H470K	Ceramic 47pF \pm 10%	
RESISTOR			
Re1, 2	PD14BY2E222J	Carbon 2.2k Ω \pm 5% 1/4W	
Re3, 4	PD14BY2E683J	Carbon 68k Ω \pm 5% 1/4W	
Re5, 6	PD14BY2E471J	Carbon 470 Ω \pm 5% 1/4W	
Re7, 8	PD14BY2E103J	Carbon 10k Ω \pm 5% 1/4W	
Re9, 10	PD14BY2E474J	Carbon 470k Ω \pm 5% 1/4W	
Re11, 12	PD14BY2E561J	Carbon 560 Ω \pm 5% 1/4W	
Re13, 14	PD14BY2E562J	Carbon 5.6k Ω \pm 5% 1/4W	
Re15~20	PD14BY2E563J	Carbon 56k Ω \pm 5% 1/4W	
Re25, 26	PD14BY2E394J	Carbon 390k Ω \pm 5% 1/4W	
Re27, 28	PD14BY2E273J	Carbon 27k Ω \pm 5% 1/4W	
Re29, 30	PD14CY2E154J	Carbon 150k Ω \pm 5% 1/4W	
Re31, 32	PD14BY2E564J	Carbon 560k Ω \pm 5% 1/4W	
Re33, 34	PD14BY2E271J	Carbon 270 Ω \pm 5% 1/4W	
Re35, 36	PD14CY2E562J	Carbon 5.6k Ω \pm 5% 1/4W	
Re37, 38	PD14BY2E562J	Carbon 5.6k Ω \pm 5% 1/4W	
Re39, 40	PD14BY2E563J	Carbon 56k Ω \pm 5% 1/4W	
Re41, 42	PD14BY2E122J	Carbon 1.2k Ω \pm 5% 1/4W	
Re43, 44	PD14BY2E103J	Carbon 10k Ω \pm 5% 1/4W	

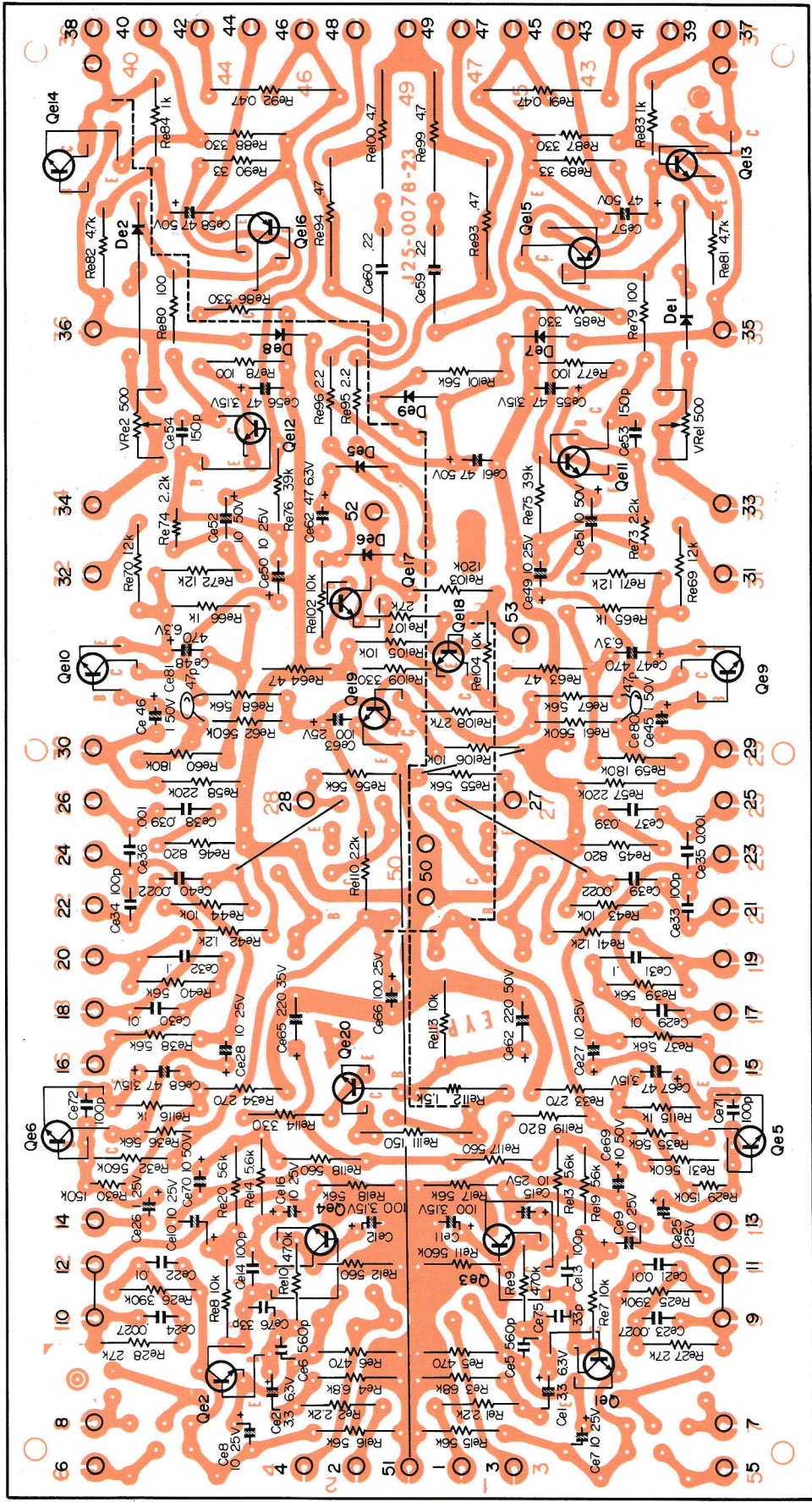
PRE, TONE & MAIN (X09-0013-05) PARTS LIST

Ref. No.	Parts No.	Description	Remarks
Re45, 46	PD14BY2E821J	Carbon 820Ω ±5% 1/4W	
Re55, 56	PD14BY2E273J	Carbon 27kΩ ±5% 1/4W	
Re57, 58	PD14BY2E224J	Carbon 220kΩ ±5% 1/4W	
Re59, 60	PD14BY2E184J	Carbon 180kΩ ±5% 1/4W	
Re61, 62	PD14BY2E564J	Carbon 560kΩ ±5% 1/4W	
Re63, 64	PD14BY2E470J	Carbon 47Ω ±5% 1/4W	
Re65, 66	PD14BY2E102J	Carbon 1kΩ ±5% 1/4W	
Re67, 68	PD14BY2E562J	Carbon 5.6kΩ ±5% 1/4W	
Re69~72	PD14BY2E123J	Carbon 12kΩ ±5% 1/4W	
Re73, 74	PD14CY2E222J	Carbon 2.2kΩ ±5% 1/4W	
Re75, 76	PD14BY2E393J	Carbon 39kΩ ±5% 1/4W	
Re77~ 80	PD14BY2E101J	Carbon 100Ω ±5% 1/4W	
Re81, 82	PD14BY2E472J	Carbon 4.7kΩ ±5% 1/4W	
Re83, 84	PD14BY2E102J	Carbon 1kΩ ±5% 1/4W	
Re85~ 88	PD14BY2E331J	Carbon 330Ω ±5% 1/4W	
Re89, 90	PD14BY2E330J	Carbon 33Ω ±5% 1/4W	
Re91~ 94	RN14AB3DR47K	Metal film 0.47Ω ±10% 2W	
Re95, 96	RC05GF2H2R2K	Carbon 2.2Ω ±10% 1/2W	
Re99, 100	RN14AB3D4R7K	Metal film 4.7Ω ±10% 2W	
Re101	PD14BY2E563J	Carbon 56kΩ ±5% 1/4W	
Re102	PD14BY2E103J	Carbon 10kΩ ±5% 1/4W	
Re103	PD14BY2E124J	Carbon 120kΩ ±5% 1/4W	
Re104~106	PD14BY2E103J	Carbon 10kΩ ±5% 1/4W	
Re107, 108	PD14BY2E273J	Carbon 27kΩ ±5% 1/4W	
Re109	PD14BY2E331J	Carbon 330Ω ±5% 1/4W	
Re110	PD14BY2E222J	Carbon 2.2kΩ ±5% 1/4W	
Re111	PD14BY2E151J	Carbon 150Ω ±5% 1/4W	
Re112	PD14BY2E152J	Carbon 1.5kΩ ±5% 1/4W	
Re113	PD14BY2E103J	Carbon 10kΩ ±5% 1/4W	
Re114	RC05GF2H331K	Carbon 330Ω ±10% 1/2W	
Re115, 116	PD14BY2E102J	Carbon 1kΩ ±5% 1/4W	
Re117, 118	PD14BY2E561J	Carbon 560Ω ±5% 1/4W	
Re119	PD14BY2E821J	Carbon 820Ω ±5% 1/4W	
Re121	PD14BY2E103J	Carbon 10kΩ ±5% 1/4W	
SEMICONDUCTOR			
Qe1, 2		2SC1416AGR	
Qe3, 4		2SC1416A (GR) or (BL)	
Qe5, 6		2SC458LG (B) or (C)	
Qe9, 10		2SC458LG (B) or (C)	
Qe11, 12		2SC734Y	
Qe13, 14		2SC734 (O) or (Y)	
Qe15, 16		2SA561 (O) or (Y)	
Qe17, 18		2SC715 (E) or (F)	
Qe19		2SC734 (O) or (Y)	
Qe20		2SC971	
De1, 2		MV-13	
De5, 6		1S2076	
De7, 8		1S1554	
De9		V06B	
POTENTIOMETER			
VRe1, 2	R12-0039-05	PC trimmer 500Ω (B) BIAS ADJ.	

PUSHBUTTON SW (X13-1400-00) PARTS LIST

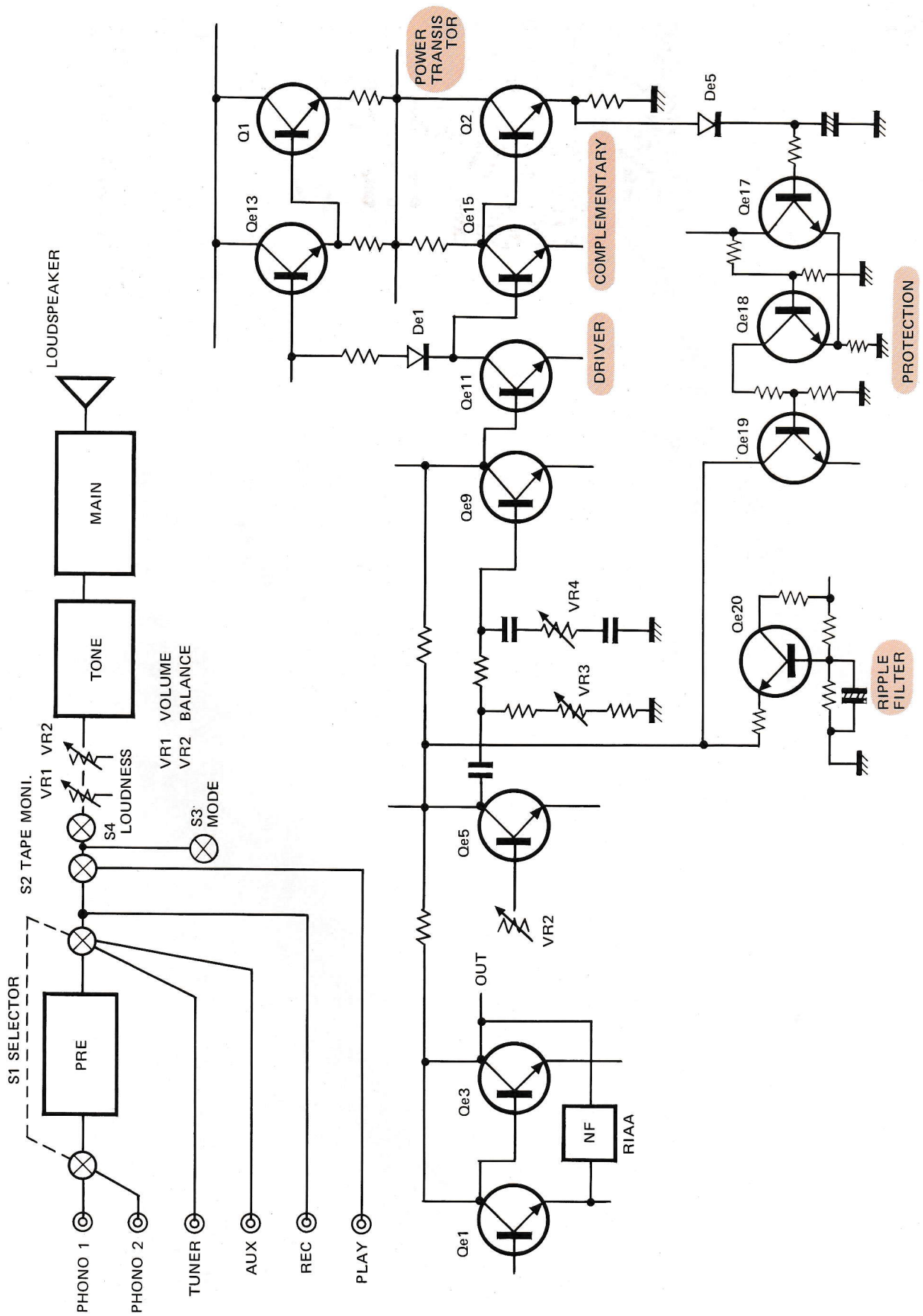
Ref. No.	Parts No.	Description	Remarks
CAPACITOR			
Ch111	CK45D1H102M	Ceramic 0.001 μ F \pm 20%	
Ch112	CQ93M1H104M	Mylar 0.1 μ F \pm 20%	
Ch211	CK45D1H102M	Ceramic 0.001 μ F \pm 20%	
Ch212	CQ93M1H104M	Mylar 0.1 μ F \pm 20%	
RESISTOR			
Rh111	PD14BY2E103J	Carbon 10k Ω \pm 5% 1/4W	
Rh112	PD14BY2E822J	Carbon 8.2k Ω \pm 5% 1/4W	
Rh113	PD14BY2E472J	Carbon 4.7k Ω \pm 5% 1/4W	
Rh211	PD14BY2E103J	Carbon 10k Ω \pm 5% 1/4W	
Rh212	PD14BY2E822J	Carbon 8.2k Ω \pm 5% 1/4W	
Rh213	PD14BY2E472J	Carbon 4.7k Ω \pm 5% 1/4W	
SWITCH			
S2~4	S40-3004-05	Pushbutton (3 keys)	

► PRE, TONE &
MAIN AMP
(X09-0013-05)

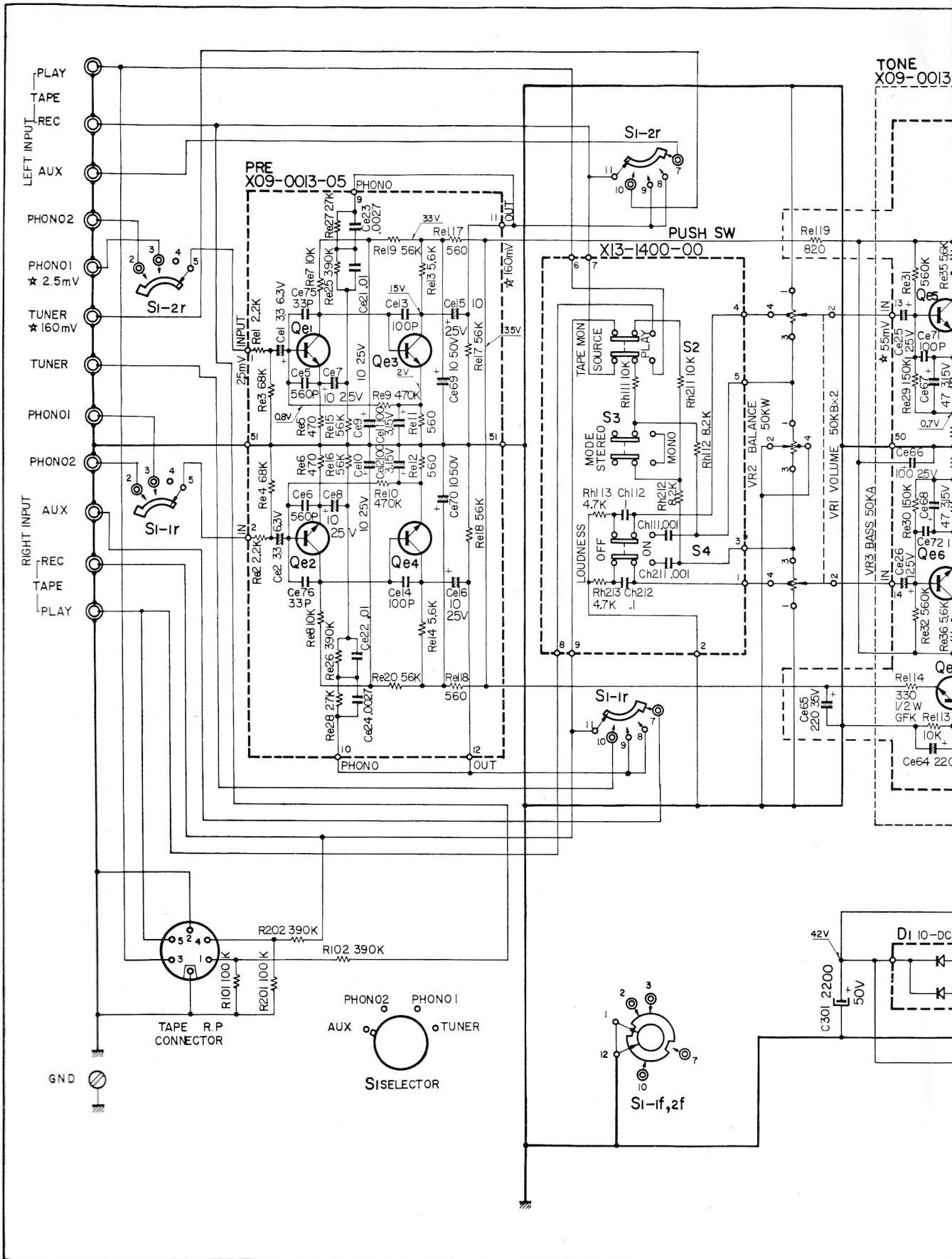


Qe1, 2	2SC1416AGR	Qe11, 12	2SC734Y	Qe19	2SC734 (O) or (Y)	De7, 8	1S1554
Qe3, 4	2SC1416A (GR) or (BL)	Qe13, 14	2SC734 (O) or (Y)	Qe20	2SC971	De9	V06B
Qe5, 6	2SC458LG (B) or (C)	Qe15, 16	2SA561 (O) or (Y)	De1, 2	MV-13		
Qe9, 10	2SC458LG (B) or (C)	Qe17, 18	2SC715 (E) or (F)	De5, 6	1S2076		

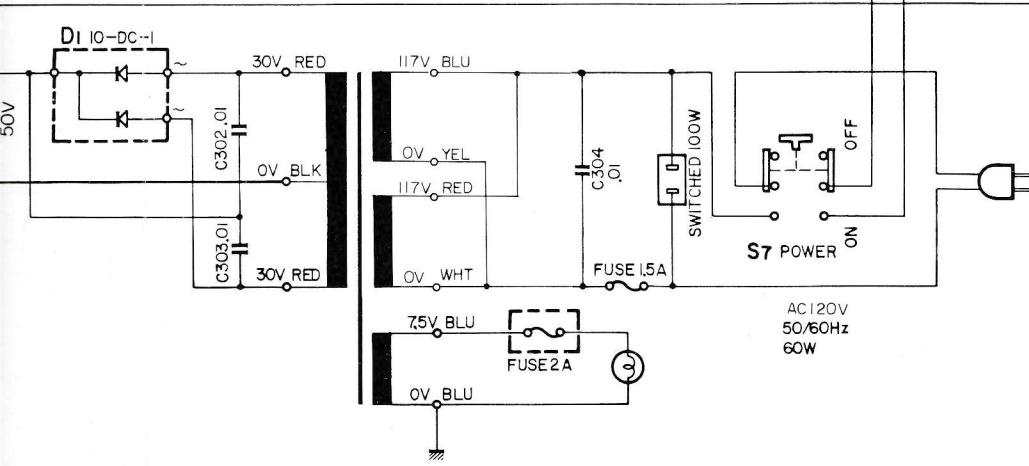
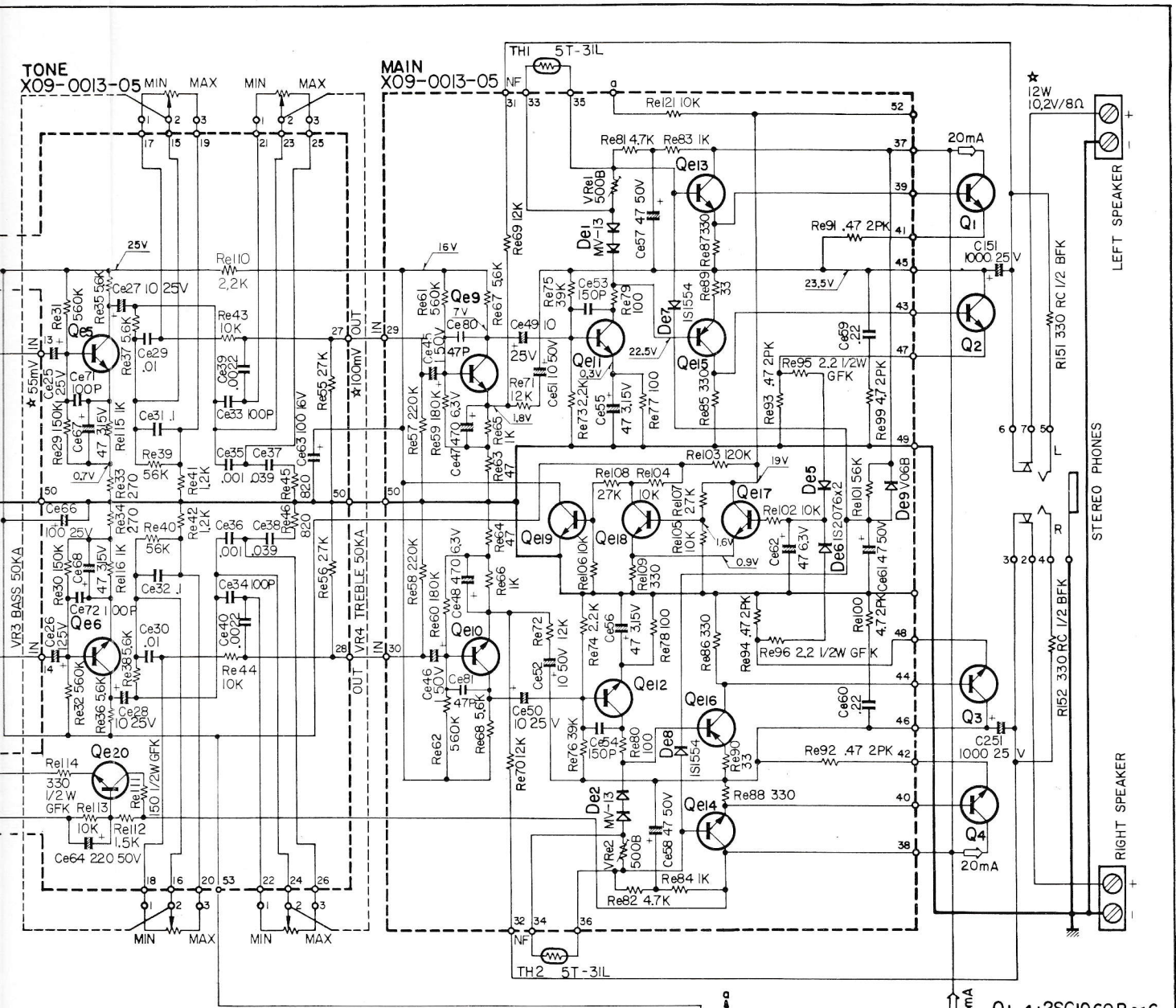
BLOCK DIAGRAM



SCHEMATIC



SCHEMATIC DIAGRAM



- Qe1,2 : 2SC1416A GR
- Qe3,4 : 2SC1416A GR or BL
- Qe5,6,9,10 : 2SC458LG B or C
- Qe11,12 : 2SC734Y
- Qe13,14 : 2SC7340 or Y
- Qe15,16 : 2SB56A
- Qe17,18 : 2SC715 E or F
- Qe19 : 2SC734
- Qe20 : 2SC971

KA-2002A

SPECIFICATIONS

MAIN AMPLIFIER SECTION

IHF Dynamic Power	:	46 w	4 ohms Load
	:	38 w	8 ohms Load
RMS Output Power			
One channel operating into 4 ohms at 1,000 Hz	:	19 w	x 2
One channel operating into 8 ohms at 1,000 Hz	:	17 w	x 2
Both channel operating into 4 ohms at 1,000 Hz	:	15 w	x 2
Both channel operating into 8 ohms at 1,000 Hz	:	13 w	x 2
Total Harmonic Distortion	:	Less than 0.8%	at rated output 8 ohms/2 ch.
	:	Less than 0.2%	at -3 dB rated output 8 ohms/2 ch.
Inter Modulation Distortion	:	Less than 0.8%	at rated output 8 ohms/2 ch.
	:	Less than 0.2%	at -3 dB rated output 8 ohms/2 ch.
Power Bandwidth	:	20 Hz - 30,000 Hz	
Frequency Response	:	20 Hz - 30,000 Hz	
Damping Factor	:	50	at 8 ohms Load
Speaker Impedance	:	Accept 4 ohms to 16 ohms	Load

PRE-AMPLIFIER SECTION

Input Sensitivity (Input Impedance)			
Phono 1, 2	:	2 mV	(50 Kohms)
Tuner	:	150 mV	(50 Kohms)
Aux	:	150 mV	(50 Kohms)
Tape Play	:	150 mV	(50 Kohms)
Recording Output			
Tape Rec	:	150 mV	
Din Connector	:	30 mV	
Signal to Noise Ratio			
Phono 1, 2	:	60 dB	
Tuner	:	70 dB	
Aux	:	70 dB	
Tape Play	:	70 dB	
Tone Control			
Bass	:	±10 dB	at 100 Hz
Treble	:	±10 dB	at 10,000 Hz
Loudness Control (-30 dB)	:	+ 8 dB	at 100 Hz
	:	+ 4 dB	at 10,000 Hz

GENERAL

Switches	:	SELECTOR (Aux, Tuner, Phono 1, Phono 2) MODE TAPE MONITOR LOUDNESS
AC Outlets	:	Switched 1
Power Consumption	:	60 w at full Power 8 w at no Signal
Dimensions	:	13" (W) x 4" (H) x 9" (D)
Net Weight	:	11.9 lbs. (5.4 Kg)

KENWOOD ELECTRONICS, INC.

- 15777 SOUTH BROADWAY, GARDENA, CALIFORNIA 90248
- 72-02 51ST AVENUE, WOODSIDE, N.Y. 11377

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