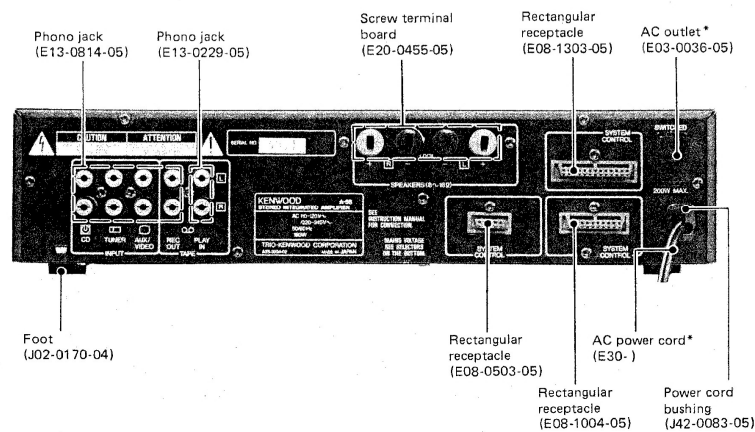
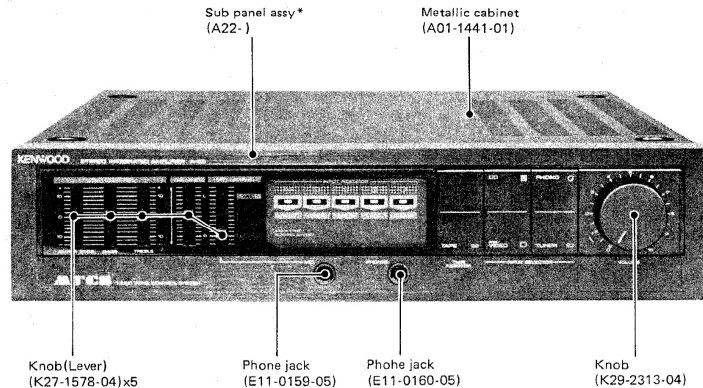


Rx8
432

SERVICE MANUAL

KENWOOD A-5S

STEREO INTEGRATED AMPLIFIER



Caution When a repair to MIDI M-3S is requested, be sure to advise the customer to ship together with amplifier A-5S.

* Refer to parts list on page 6.

CAUTION/DISASSEMBLY FOR REPAIR

PRECAUTIONS FOR REPAIR

MIDI M-3S has a power supply unit only in amplifier A-5S and power transformers are not incorporated in other sets (tuner, cassette tape deck, etc.). At the occasion of repair to a set that is other than the amplifier, use the power supply unit of amplifier A-5S, and supply power to another set using a system control connection cord.

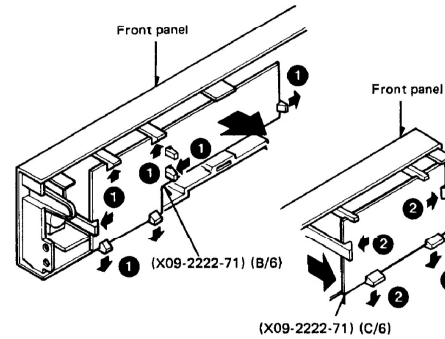
The combination of MIDI M-3S is as follows. When a repair to MIDI M-3S is requested, be sure to advise the customer to ship together with amplifier A-5S.

System name	Amplifier	Tuner	Cassette tape deck	Turntable
MIDI M-3S	A-5S	T-3S/T-3LS	X-3WS	P-3S

DISASSEMBLY FOR REPAIR

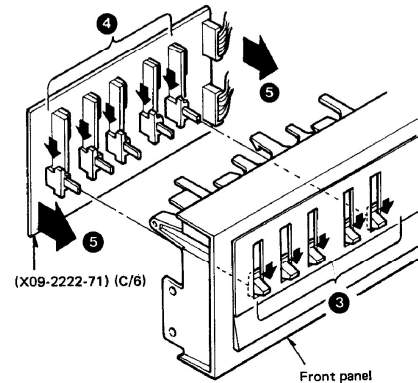
REMOVING THE PC BOARD (X09-2222-71) (B/6)

- Pressing the pawls of the front panel which are securing the PC board in the directions of arrows, remove the PC board (1).



REMOVING AND REINSTALLING THE TONE UNIT (X09-2222-71) (C/6)

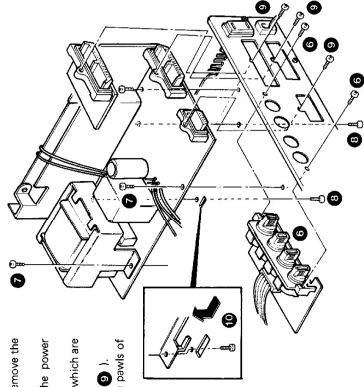
- Pressing the pawls of the front panel which are securing the PC board in the directions of arrows, remove the PC board (2).
 - When reinstalling the PC board, lower each knob on the panel side to the lowest position (3), and move the shaft of each slide variable resistor to the lowest position (4). Press the PC board horizontally from the rear of the panel so that the pawls will catch it (5).
- After reinstalling the PC board, confirm that the shafts of all the slide variable resistors are fixed to the knobs.



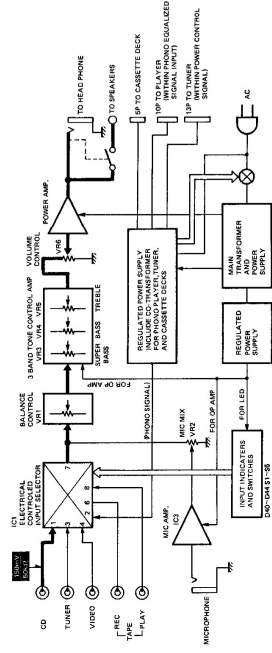
DISASSEMBLY FOR REPAIR/BLOCK LEVEL DIAGRAM

REMOVING THE POWER SUPPLY

1. Remove the two screws from the rear side to remove the main amplifier unit (1).
2. Remove the two screws from the top of the power supply (2).
3. Remove the two screws from the bottom plate which are securing the radiator panel (3).
4. Remove the three screws from the rear panel (4).
5. Lift the power supply paying attention to the pawls of the radiator panel (5).



BLOCK LEVEL DIAGRAM



CIRCUIT DESCRIPTION/ADJUSTMENT/REGLAGE/ABGLEICH

Description of Components
POWER SUPPLY UNIT X09-2372-71

Components	Application/function	Operation/condition/compatibility
C1	Resistor	
C2	Power supply choke	To which the allow flow of current of only 5A when ON.
C3	Error amplification for ±18V	Controlled C3, C4 by reference voltage based on D12.
C4	+18V constant voltage power supply	Definition connection with Q4.
C5	+18V constant voltage power supply	Definition connection with Q3.
C6	+18V constant voltage power supply	
IC1	+5V constant voltage power supply	3-terminal regulator 5V

AUDIO UNIT X09-2222-71

Components	Application/function	Operation/condition/compatibility
Q1, Q2	Muting	Controls with IC1. Shorts input unit of main amplifier.
Q3, Q4	For bias current	For Q3-Q12 bias current.
Q5	Current driver	Main amplifier current amplifier unit.
Q6-Q12	Emitter follower	Main amplifier current amplifier unit.
Q13	+8.8V constant voltage	
Q16	+18V constant voltage	
IC1	Input selector	Electronic input selection. Used at ±18V.
IC2	Tone control amplifier	Used at ±18V.
IC3	Microphone amplifier	Used at ±18V.

ADJUSTMENT

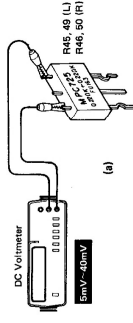
No.	ITEM	ADJUSTMENT SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	INPUT CURRENT	Set the controls and switches as follows: POWER, ON Connect a DC voltmeter across CP1 (C), CP2 (C) *If meter reads 18 high, cut resistor R45(R45) *If meter reads 18 low, cut resistor R46(R46)	VOLUME: 0 845.45 (L) 846.50 (R)	50V~400V	(a)

REGLAGE

N°	ITEM	REGLAGE DE LA SORTIE LA SOURCE	POINTS D'ALIGNEMENT	ALIGNER POUR	FIG.
1	REGLER LE COURANT D'ENTREE <td>Configurez les commandes et les interrupteurs comme suit: VOLUME: 0 CP1 (C) CP2 (C) * Si l'aiguille indique 18 de haut, coupez la résistance R45 (R45) * Si l'aiguille indique 18 de bas, coupez la résistance R46 (R46)</td> <td>845.45 (L) 846.50 (R)</td> <td>50V~400V</td> <td>(a)</td>	Configurez les commandes et les interrupteurs comme suit: VOLUME: 0 CP1 (C) CP2 (C) * Si l'aiguille indique 18 de haut, coupez la résistance R45 (R45) * Si l'aiguille indique 18 de bas, coupez la résistance R46 (R46)	845.45 (L) 846.50 (R)	50V~400V	(a)

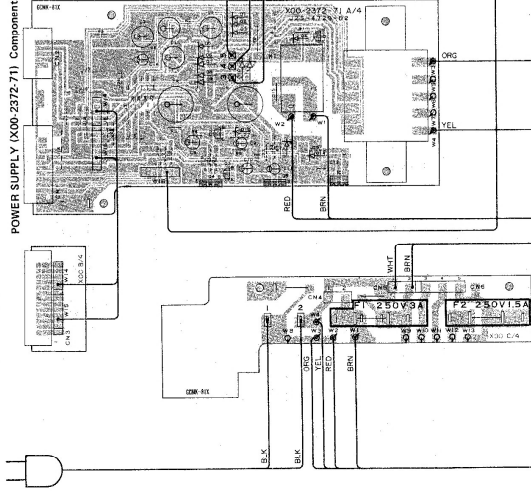
ABGLEICH

Nr.	GEGENSTAND	EINSTELLUNG	MESSSTÄNDE	ABGLEICH	ABGLEICHEN FÜR	ABR.
1	Die Bedienelemente und Schalter für die Einstellung:	POWER, ON Eingang des DC Voltmeters an CP1 (C), CP2 (C) * Wenn die Skala 18 nach oben zeigt, wird Widerstand R45 (R45) entfernt. * Wenn die Skala 18 nach unten zeigt, wird Widerstand R46 (R46) entfernt.	VOLUME: 0 845.45 (L) 846.50 (R)	50V~400V	(a)	

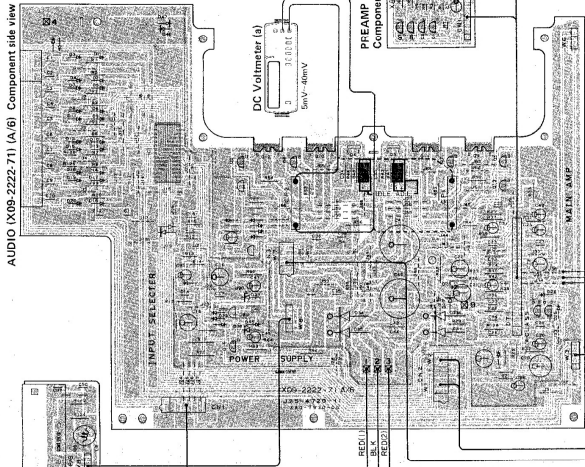


A-55 A-55 PC BOARD

POWER SUPPLY (X00-2372-71) Component side view



AUDIO (X08-2222-71) (A/B) Component side view



(X00-2372-71)

S	C	E
01	0.6V	0V
02	1.6V	-
03	-	-1.6V
04	-	-1.6V
05	-	-1.6V
IC1	5V	10V

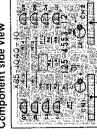
(X08-2222-71)

S	C	E
01	0V	0V
02	0.6V	1.2V
03	0.6V	1.2V
04	0.6V	1.2V
05	0.6V	1.2V
06	0.6V	1.2V
07	0.6V	1.2V
08	0.6V	1.2V
09	0.6V	1.2V
10	0.6V	1.2V
11	0.6V	1.2V
12	0.6V	1.2V
13	0.6V	1.2V
14	0.6V	1.2V
15	0.6V	1.2V

IC1

1	0V	16	0V
2	0V	17	-
3	0V	18	1.6V
4	0V	19	1.6V
5	0V	20	-
6	0V	21	0V
7	0V	22	1.6V
8	0V	23	0V
9	1.6V	24	0V
10	1.6V	25	0V
11	1.6V	26	0V
12	1.6V	27	0V
13	1.6V	28	0V
14	1.6V	29	0V
15	1.6V	30	0V

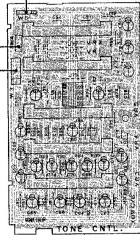
PREAMP (X85-1040-10) Component side view



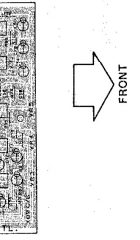
IC2 (C3)

1	0V	5	0V
2	0V	6	0V
3	0V	7	0V
4	1.6V	8	1.6V

AUDIO (X09-2222-71) (E/B) Foil side view



AUDIO (X09-2222-71) (E/B) Foil side view



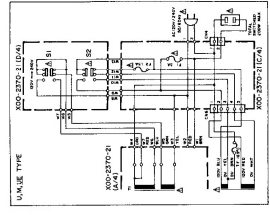
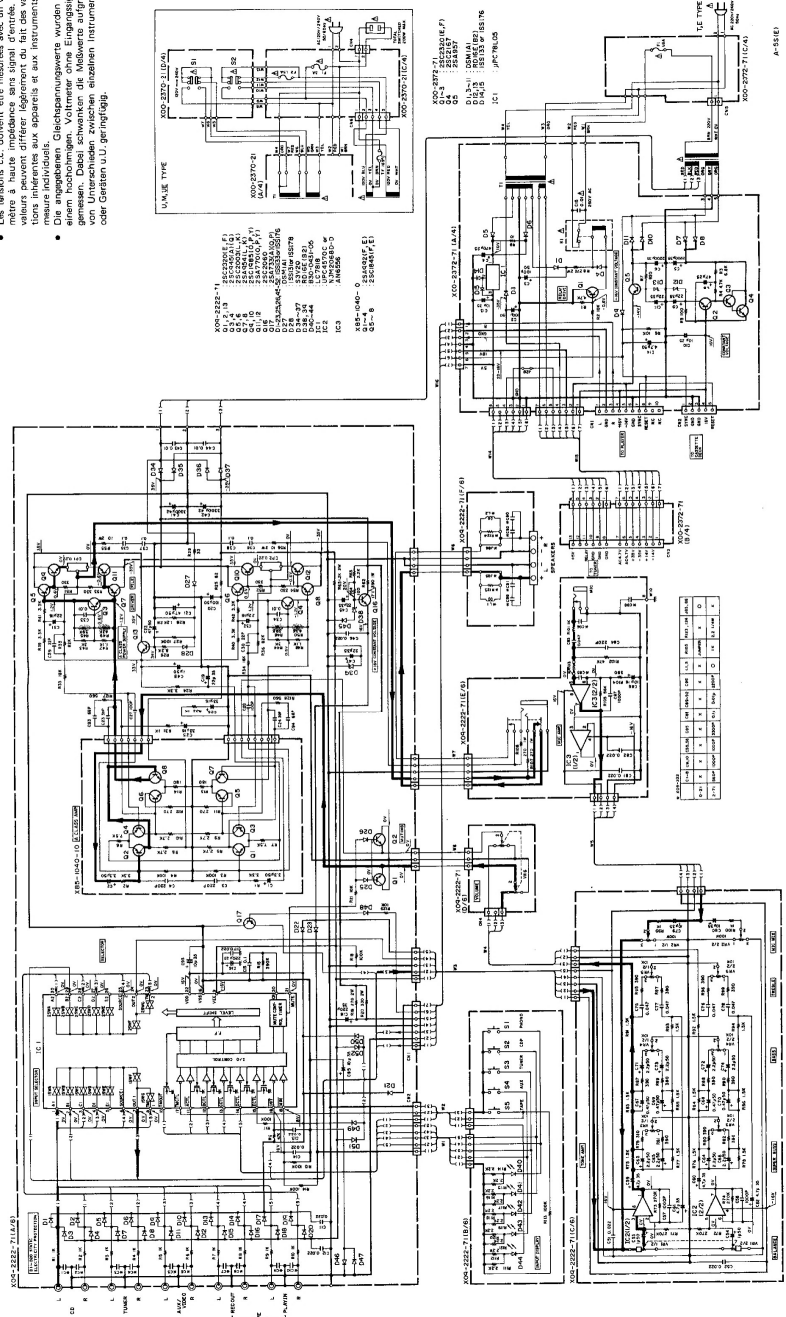
Refer to the schematic diagram for the values of resistors and capacitors.

A B C D E F G H I J

IDLE CURRENT ADJUSTMENT

If meter reads is high, cut resistor R49 (R60).
If meter reads is low, cut resistor R45 (R46).

- DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments.
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent varier légèrement d'un appareil à un instrument de mesure individuel.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter ohne Signal gemessen. Dabei schwanken die Messwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.



010 2 733	2522001 (F)
010 2 734	2522001 (F)
010 2 735	2522001 (F)
010 2 736	2522001 (F)
010 2 737	2522001 (F)
010 2 738	2522001 (F)
010 2 739	2522001 (F)
010 2 740	2522001 (F)
010 2 741	2522001 (F)
010 2 742	2522001 (F)
010 2 743	2522001 (F)
010 2 744	2522001 (F)
010 2 745	2522001 (F)
010 2 746	2522001 (F)
010 2 747	2522001 (F)
010 2 748	2522001 (F)
010 2 749	2522001 (F)
010 2 750	2522001 (F)
010 2 751	2522001 (F)
010 2 752	2522001 (F)
010 2 753	2522001 (F)
010 2 754	2522001 (F)
010 2 755	2522001 (F)
010 2 756	2522001 (F)
010 2 757	2522001 (F)
010 2 758	2522001 (F)
010 2 759	2522001 (F)
010 2 760	2522001 (F)
010 2 761	2522001 (F)
010 2 762	2522001 (F)
010 2 763	2522001 (F)
010 2 764	2522001 (F)
010 2 765	2522001 (F)
010 2 766	2522001 (F)
010 2 767	2522001 (F)
010 2 768	2522001 (F)
010 2 769	2522001 (F)
010 2 770	2522001 (F)
010 2 771	2522001 (F)
010 2 772	2522001 (F)
010 2 773	2522001 (F)
010 2 774	2522001 (F)
010 2 775	2522001 (F)
010 2 776	2522001 (F)
010 2 777	2522001 (F)
010 2 778	2522001 (F)
010 2 779	2522001 (F)
010 2 780	2522001 (F)
010 2 781	2522001 (F)
010 2 782	2522001 (F)
010 2 783	2522001 (F)
010 2 784	2522001 (F)
010 2 785	2522001 (F)
010 2 786	2522001 (F)
010 2 787	2522001 (F)
010 2 788	2522001 (F)
010 2 789	2522001 (F)
010 2 790	2522001 (F)
010 2 791	2522001 (F)
010 2 792	2522001 (F)
010 2 793	2522001 (F)
010 2 794	2522001 (F)
010 2 795	2522001 (F)
010 2 796	2522001 (F)
010 2 797	2522001 (F)
010 2 798	2522001 (F)
010 2 799	2522001 (F)
010 2 800	2522001 (F)

- 25A733 25C2003
- 25A734 25C2004
- 25A894 25C1865
- 25C2200 25C2167
- 25C1845 25C345

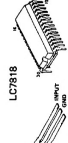
NJM2088D-D

AM8556

µPC570C

µPC78L05

LC7918



CAUTION: For continued safety, replace safety critical components (marked with a triangle) with original or equivalent parts (list). **Δ** Indicates safety critical components. To reduce the risk of electric shock, leakage current or resistance to ground, safety critical components must be replaced by insulated from the safety circuit before the appliance is returned to the customer.



A-55167