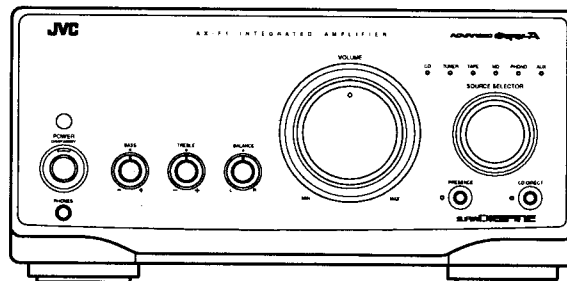
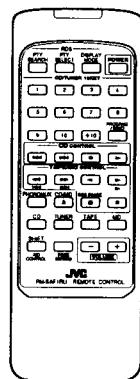


JVC

SERVICE MANUAL

AX-F1GD



Area Suffix

BS	....	the U.K.
EF	....	Continental Europe Except Germany and Italy
EN	....	Nordic Countris
G	....	Germany
GI	....	Italy
US	....	Singapore
UT	Taiwan
UB	Hong Kong
U	Other Area

COMPU LINK
Remote
Control Component

Contents

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		<i>Parts List</i>	Separate-volume Insertion

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

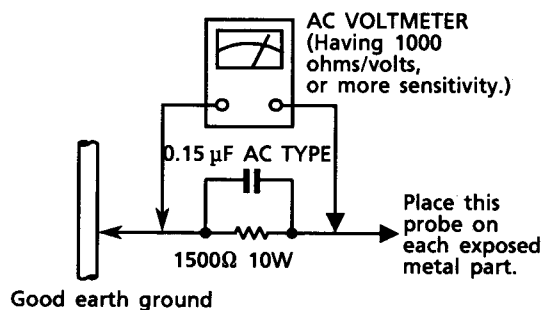
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Description of ICs

■ MN171202J6L (IC501) : SYSTEM CONTROLLER

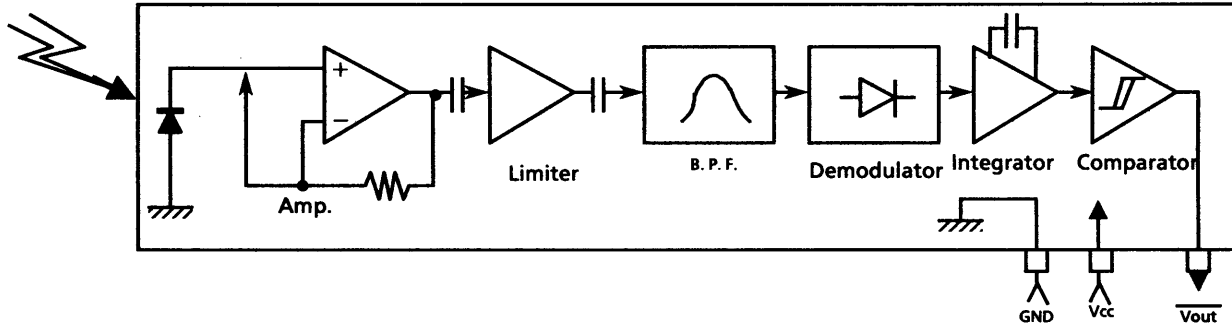
1. Terminal Layout

VDD	1	64	OSC IN
CD IND	2	63	OSC OUT
TUNER IND	3	62	GND
TAPE IND	4	61	
MD IND	5	60	
PHONO IND	6	59	
AUX IND	7	58	POWER ON
POWER ON IND	8	57	SPK-RELAY
VOLUME IND	9	56	MUTE
DIRECT IND	10	55	DIRECT ON/OFF
SOUND IND	11	54	SOUND ON/OFF
	12	53	VOL. DOWN
	13	52	VOL. UP
	14	51	H.P.IN
	15	50	
	16	49	
	17	48	
GND	18	47	
	19	46	PROTECT-IN
	20	45	INH
	21	44	RM-IN
	22	43	RESET
	23	42	DATA
	24	41	STB
	25	40	SCLK
	26	39	
DCS-IN	27	38	SOURCE SEL-2
DCS-OUT	28	37	SOURCE SEL-1
	29	36	
	30	35	
DIRECT KEY IN	31	34	
POWER KEY IN	32	33	SOUND KEY IN

2. Functions

Pin No.	Symbol	I/O	Function	Pin NO.	Symbol	I/O	Function
1	VDD	--	Power supply	33	SOUND KEY IN	I	SOUND key input
2	CD IND	O	CD indicator control	34		--	Connect to GND
3	TUNER IND	O	TUNER indicator control	35		--	Connect to GND
4	TAPE IND	O	TAPE indicator control	36		--	Connect to GND
5	MD IND	O	MD indicator control	37	SOURCE SEL-1	I	Source select control
6	PHONO IND	O	PHONO indicator control	38	SOURCE SEL-2	I	Source select control
7	AUX IND	O	AUX indicator control	39		--	Connect to GND
8	POWER ON IND	O	POWER ON indicator control	40	SCLK	O	Clock output for IC201
9	VOLUME IND	O	VOLUME indicator control	41	STB	O	Strobe signal for IC201
10	DIRECT IND	O	CD DIRECT indicator control	42	DATA	O	Data for IC201
11	SOUND IND	O	SOUND indicator control	43	RESET	I	Reset signal input
12		--	Pull up	44	RM-IN	I	Remote control signal input
13		--	Pull up	45	INH	I	Inhibit signal input
14		--	Pull up	46	PROTECT-IN	I	Detection for protector
15		--	Pull up	47		--	Connect to GND
16		--	Pull up	48		--	Connect to GND
17		--	Pull up	49		--	Connect to GND
18	GND	--	GND	50		--	Connect to GND
19		--	Pull up	51	H.P.IN	I	Headphone in signal input
20		--	Pull up	52	VOL. UP	O	Volume control signal
21		--	Pull up	53	VOL. DOWN	O	Volume control signal
22		--	Pull up	54	SOUND ON/OFF	O	Presence control signal
23		--	Pull up	55	DIRECT ON/OFF	O	CD direct control signal
24		--	Pull up	56	MUTE	O	Source mute control signal
25		--	Pull up	57	SPK-RELAY	O	Speaker relay control signal
26		--	Pull up	58	POWER ON	O	Regulator control signal
27	DCS-IN	I	Compulink signal input	59		--	Connect to GND
28	DCS-OUT	O	Compulink signal output	60		--	Connect to GND
29		--	Pull up	61		--	Not used
30		--	Pull up	62	GND	--	GND
31	DIRECT KEY IN	I	CD DIRECT key input	63	OSC OUT	O	Clock oscillator output
32	POWER KEY IN	I	POWER key input	64	OSC IN	I	Clock oscillator input

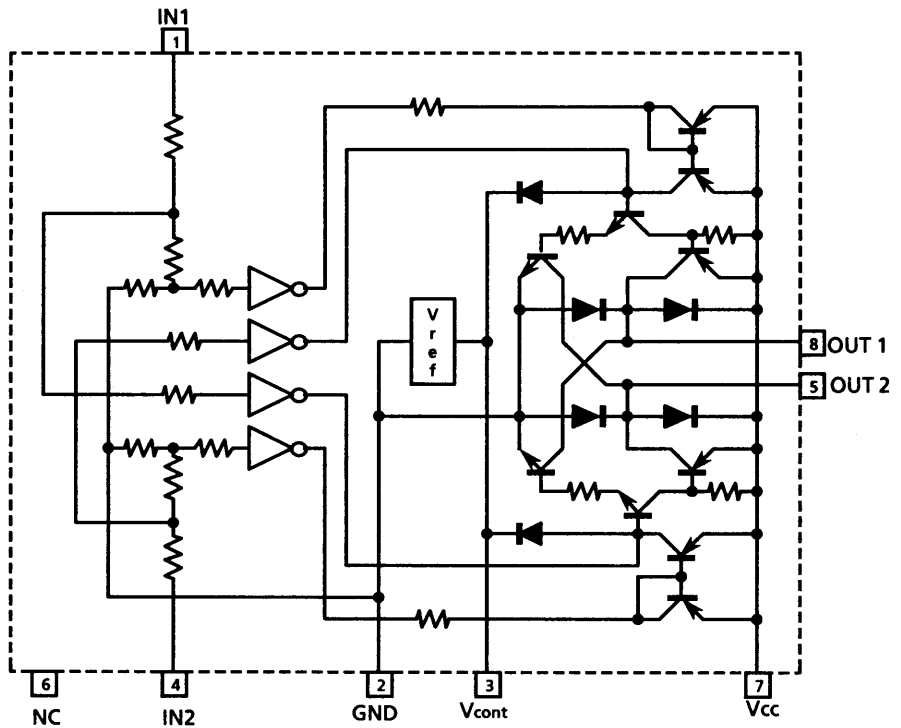
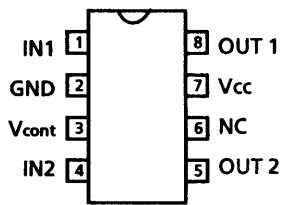
■ GP1U501X (IC502) : Receiver for remote controller



■ LB1639-CV (IC351) : Motor Driver

1. Terminal Layout

2. Block Diagram

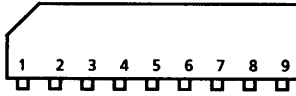


3. Functions

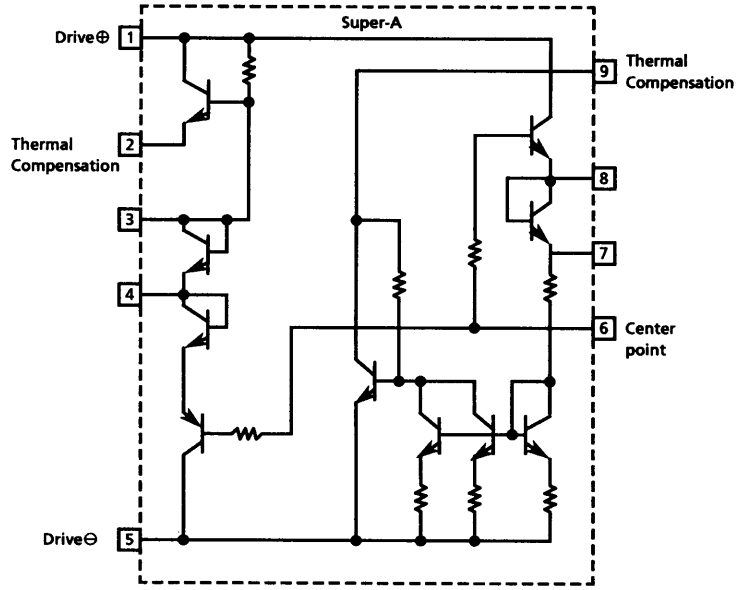
IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

■ VC5022-2 (IC751) : SUPER A

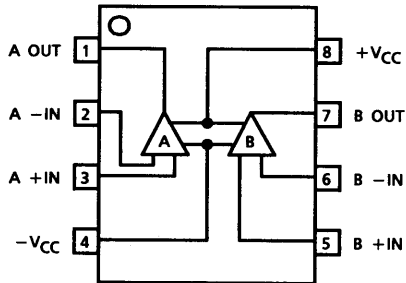
1. Terminal Layout



2. Block Diagram



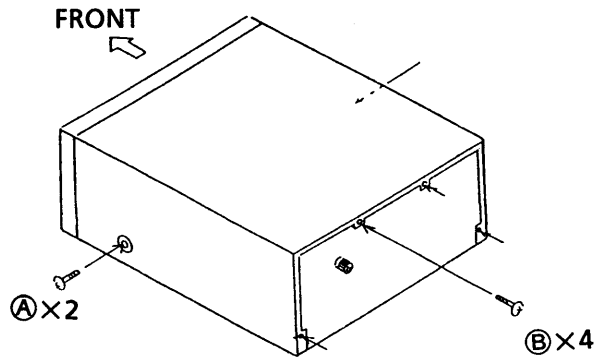
■ VC4580DD (IC101,231,361,301) : Dual OP amp.
 NJM4558 (IC362,363) : Dual OP amp.



Disassembly Procedures

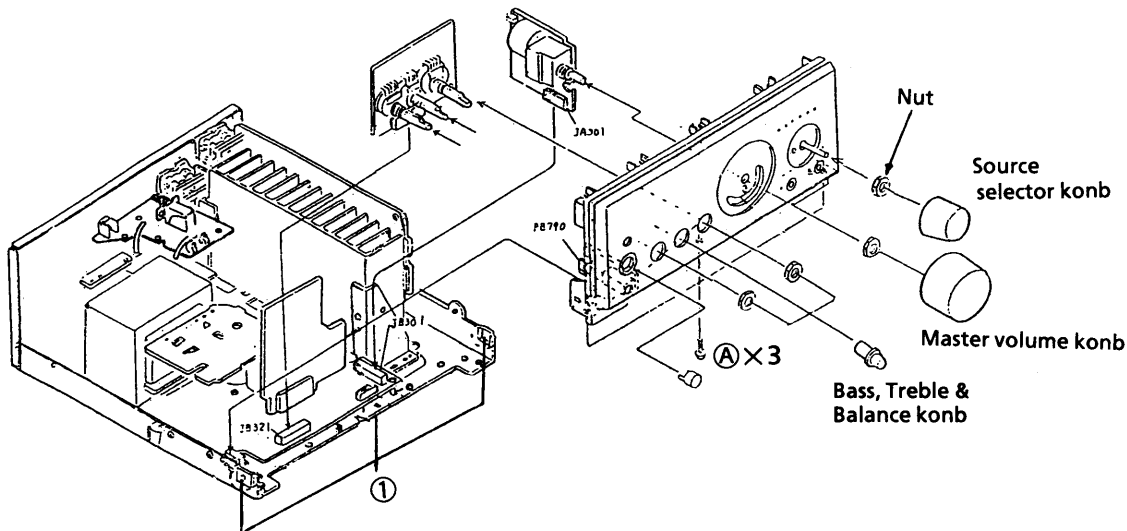
(1) Removing the top cover

1. Remove 2 screws **A** fastening both sides of top cover, and 4 screws **B** fastening the rear side.
2. Remove the top cover.



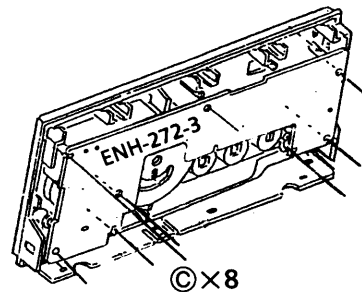
(2) Removing the Front Panel Assembly

1. Remove the top cover.
2. Disconnect the connector PA350.
3. Pull out the Master volume knob, Treble knob, Bass knob and Balance knob.
4. Remove the nut fastening the Master volume, Bass and Balance.
5. Disconnect the connectors (PA790, P202, P203, BC500)
6. Remove 3 screws **A** and 3 hook **1** fastening bottom of the front panel assembly.



(3) Removing the Control PCB (ENH-272-3)

1. Remove the top cover.
2. Remove the front panel assembly.
3. Pull out the source selector knob and remove the nut fastening the source selector.
4. Remove 8 screws **C** fastening the control PCB to remove it.



A .. SD5G3008N

B ... GB5G3008CC

C ... SDSF2608Z

(4) Removing the Input & Selector PCB (ENH-272-2)

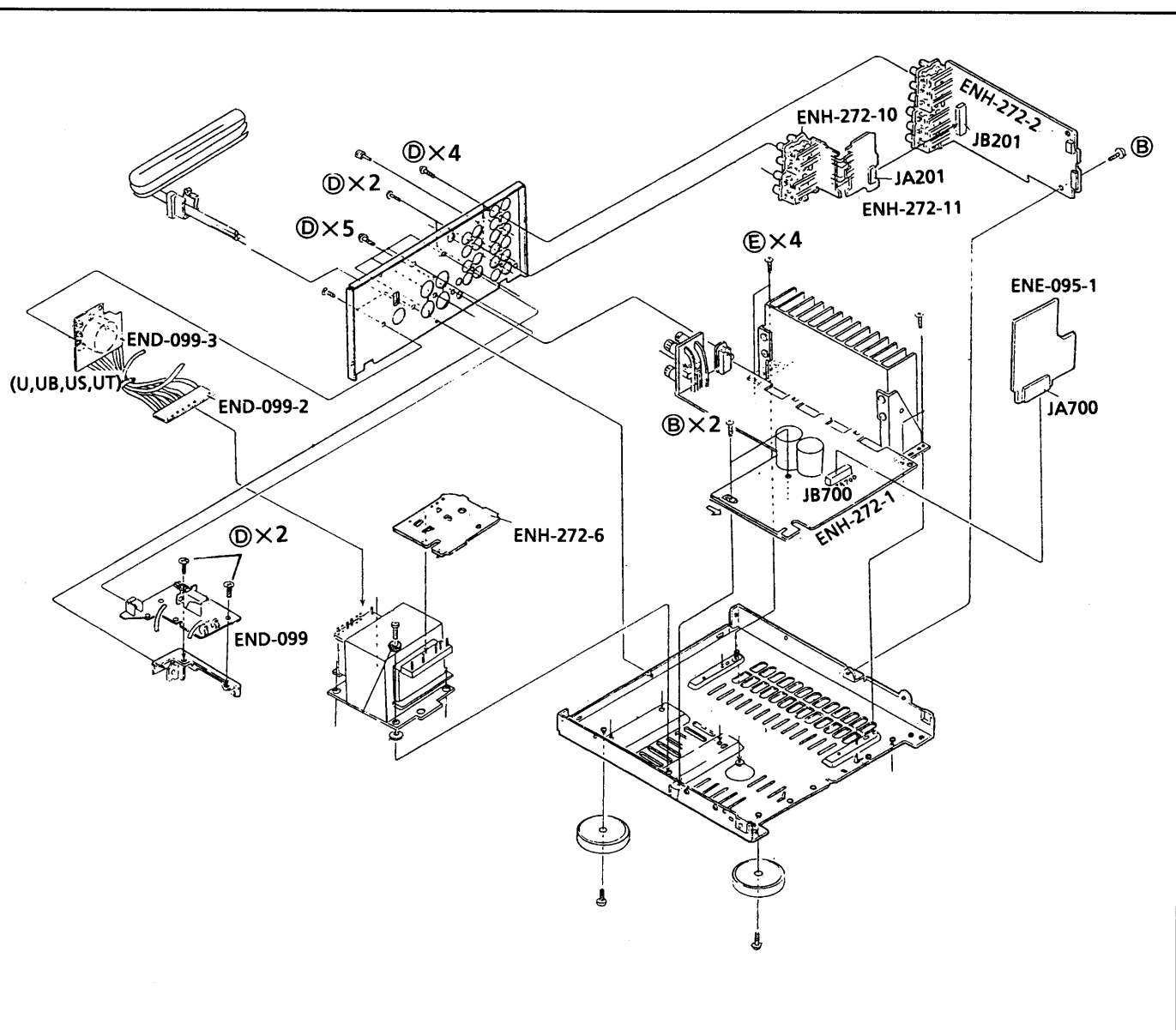
1. Remove the top cover.
2. Disconnect the connectors P202 and P203.
3. Remove 7 screws ② and ③ fastening the input & Selector PCB to remove it.

(5) Removing the Power supply PCB (END-099)

1. Remove the top cover.
2. Remove 3 screws ③ fastening the power supply PCB to remove it.

(6) Removing the Main PCB (ENH-272-1)

1. Remove the top cover.
2. Remove the front panel assembly.
3. Remove the volume PCB, balance PCB, power supply PCB and pre-driver PCB.
4. Remove 2 screws ② fastening the main PCB.
5. Remove 4 screws ④ fastening the heat sink.
6. Remove 2 screws ③.
7. Remove the main PCB with heat sink.



② .. GBSG3008CC

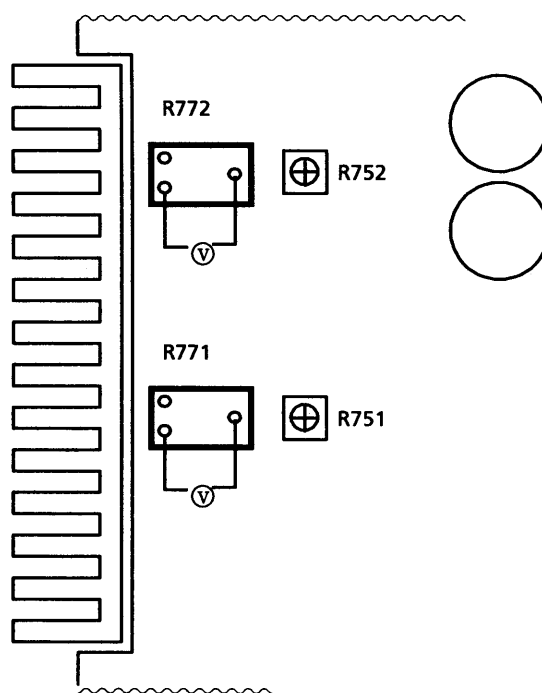
③ ... E73273-003

④ ... E74266-002

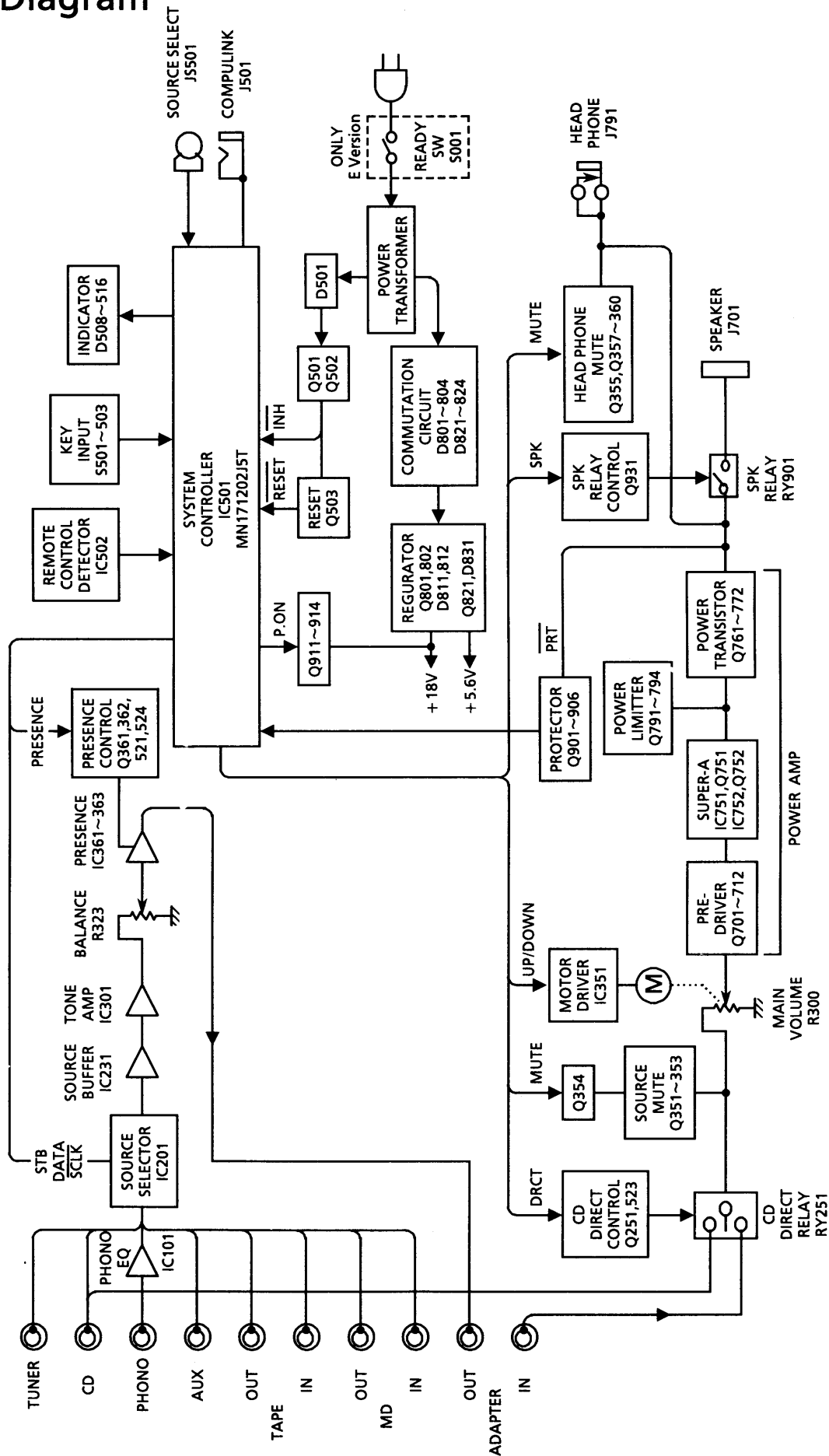
ADJUSTMENT PROCEDURES

■ Idling Current

- (1) Set the volume control to minimum during this adjustment.
- (2) Turn R751 and R752 fully counterclockwise before the power is switch on.
- (3) Always start from cold, and allow 5 minutes to warm up before adjustment.
If the heatsink is already warm from previous use the correct adjustment can not be made.
- (4) Connect a DC voltmeter to R771 resistor's leads for left channel, or to R772 for right channel.
- (5) Adjust R751 for left channel, or R752 for right channel, so that the DC voltmeter becomes 4.5 mV ~ 15mV.



Block Diagram



JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO - SHI, KANAGAWA - KEN, 242, JAPAN

