

Service Manual

ORDER NO.
RRV 1621

STEREO FILE-TYPE CD CASSETTE DECK RECEIVER **XR-J2500F**

● Refer to the service manual RRV1549 for XR-J2500F.



THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	The voltage can be converted by the following method.
	XR-J2500F		
NVXJ	○	AC230V	_____
MYIXJ	○	AC220 - 230V	_____
MYXJ/EA	○	AC220 - 230V	_____
MYXJ/EB	○	AC220 - 230V	_____
YPWXJ	○	AC240V	_____
DDXJ	○	AC110 - 127V/220 - 230V/240V	With the voltage selector
DDXJ/NC	○	AC110 - 127V/220 - 230V/240V	With the voltage selector

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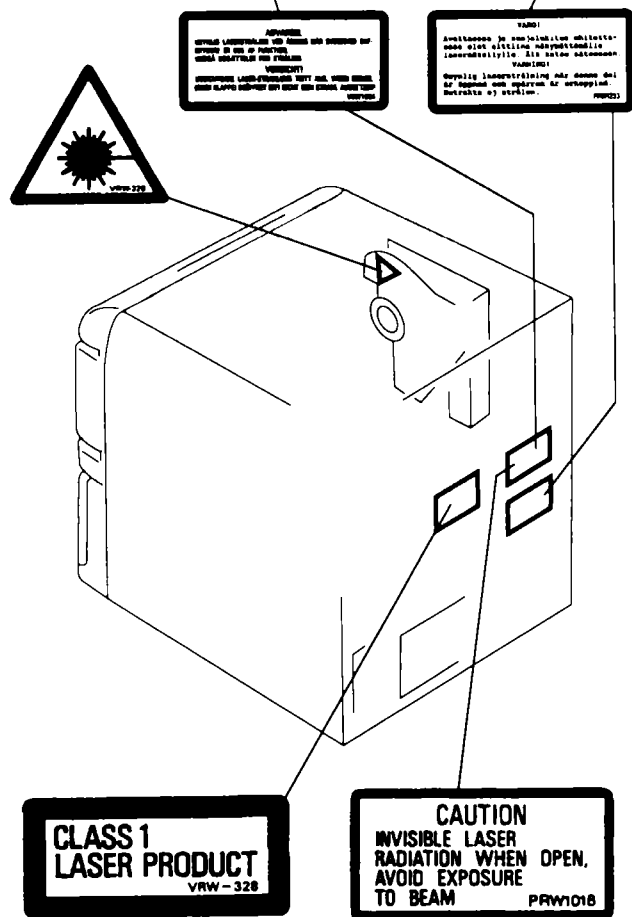
1. SAFETY INFORMATION

<p>VARO! AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.</p>	 LASER Kuva 1 Lasersäteilyn varoitusmerkki	<p>WARNING! DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.</p>	 LASER Picture 1 Warning sign for laser radiation
<p>ADVERSEL: USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING.</p>			
<p>VARNING! OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.</p>			
<p>IMPORTANT THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1. SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.</p>			
<p>LASER DIODE CHARACTERISTICS MAXIMUM OUTPUT POWER: 5 mw WAVELENGTH: 780-785 nm</p>			

LABEL CHECK (for NVXJ, MYIXJ, MYXJ/EA, MYXJ/EB and YPWXJ types)

MYIXJ, MYXJ/EA and MYXJ/EB types

MYXJ/EA and MYXJ/EB types



Additional Laser Caution

1. Laser Interlock Mechanism

The position of the switch (S601) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S601) is not on CLMP terminal side (CLMP signal is OFF or high level).

Thus, the interlock will no longer function if the switch (S601) is deliberately set to CLMP terminal side. (low level)

The interlock also does not function in the test mode*. Laser diode oscillation will continue, if pin 1 of M51593FP (IC101) on the PRE-AMP BOARD ASSY mounted on the pickup assembly is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

*: Refer to page 52 in the service manual RR1549.

YPWXJ and NVXJ types

2. CONTRAST OF MISCELLANEOUS PATS

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	→	56 × 10 ¹	→	561	RD1/4PU561J
47kΩ	→	47 × 10 ³	→	473	RD1/4PU473J
0.5Ω	→	0R5			RN2H0R5K
1Ω	→	1R0			RS1P1R0K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	→	562 × 10 ¹	→	5621	RN1/4PC5621F
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■ CONTRAST OF NVXJ, MYXJ, MYXJ/EA, MYXJ/EB, YPWXJ, DDXJ AND DDXJ/NC TYPES

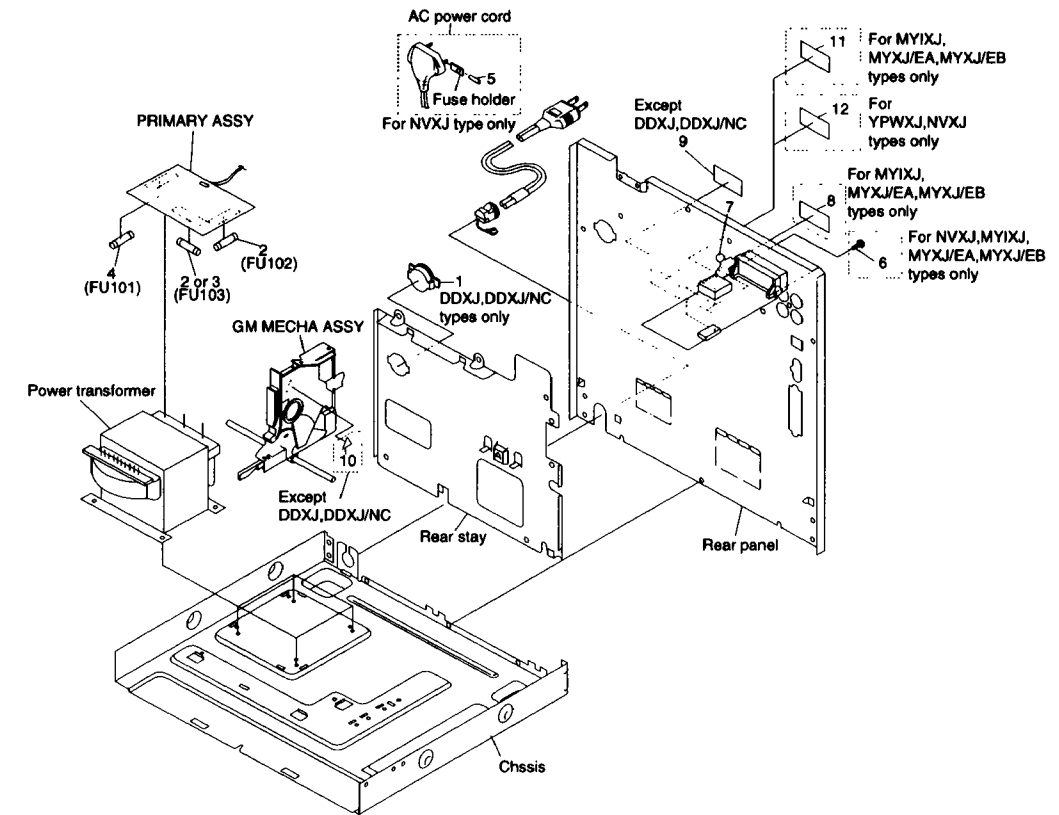
NVXJ, MYXJ, MYXJ/EA, MYXJ/EB, YPWXJ, DDXJ, DDXJ/NC and KUXJ types have the same construction except for the following:

Mark	Symbol & Description	Part No.								Remarks
		KUXJ TYPE	NVXJ TYPE	MYXJ TYPE	MYXJ/EA TYPE	MYXJ/EB TYPE	YPWXJ TYPE	DDXJ TYPE	DDXJ/NC TYPE	
NSP NSP	AF Assy	AWZ8236	AWZ8237	AWZ8237	AWZ8237	AWZ8237	AWZ8238	AWZ8238	AWZ8238	*1
	AMP Assy	AWZ8243	AWZ8244	AWZ8244	AWZ8244	AWZ8244	AWZ8245	AWZ8245	AWZ8245	
	SECONDARY Assy	AWZ8259	AWZ8260	AWZ8260	AWZ8260	AWZ8260	AWZ8261	AWZ8261	AWZ8261	
	PRIMARY Assy	AWZ8252	AWZ8253	AWZ8253	AWZ8253	AWZ8253	AWZ8377	AWZ8254	AWZ8254	
	GM - CD Assy	AWZ8267	AWZ8268	AWZ8268	AWZ8268	AWZ8268	AWZ8269	AWZ8269	AWZ8269	
Δ	VR Assy	AWZ8274	AWZ8275	AWZ8275	AWZ8275	AWZ8275	AWZ8276	AWZ8276	AWZ8276	*3
	FRONT Assy	AWZ8281	AWZ8282	AWZ8282	AWZ8282	AWZ8282	AWZ8283	AWZ8283	AWZ8283	
Δ	FM/AM TUNER MODULE	AXQ3112	AXQ3114	AXQ3114	AXQ3114	AXQ3114	AXQ3112	AXQ3112	AXQ3112	*4. No.1
	AC power cord	PDG1057	PDG1055	PDG1058	PDG1058	PDG1058	ADG1159	ADG1157	ADG1157	
Δ	Voltage Selector (AC110 - 127V/220 - 230V/240V)	Not used	Not used	Not used	Not used	Not used	Not used	AKX7002	AKX7002	*4. No.1
	Power Transformer (AC120V)	ATS7099	Not used	Not used	Not used	Not used	Not used	Not used	Not used	
	Power Transformer (AC240V)	Not used	Not used	Not used	Not used	Not used	AT57123	Not used	Not used	
	Power Transformer (AC220 - 230V)	Not used	ATS7103	ATS7103	ATS7103	ATS7103	Not used	Not used	Not used	
	Power Transformer (AC110 - 127V/220 - 230V/240V)	Not used	Not used	Not used	Not used	Not used	Not used	ATS7104	ATS7104	
Δ	Fuse (T1.25A, FU102, FU103)	Not used	Not used	Not used	Not used	Not used	Not used	AEK1055	AEK1055	*4. No.2
	Fuse (T1.25A, FU103)	Not used	Not used	Not used	Not used	Not used	Not used	AEK1055	Not used	*4. No.3
	Fuse (T1.25A, FU101)	Not used	AEK1055	AEK1055	AEK1055	AEK1055	Not used	Not used	Not used	*4. No.4
	Fuse (4A, FU101)	REK1082	Not used	Not used	Not used	Not used	Not used	Not used	Not used	*4. No.4
	Fuse (T5A) (For AC Power cord)	Not used	PEK1003	Not used	Not used	Not used	Not used	Not used	Not used	*4. No.5
Δ	Strain relief	CM - 22C	CM - 22B	CM - 22B	CM - 22B	CM - 22B	CM - 22B	CN - 22B	CN - 22B	*4. No.6 *4. No.7 *4. No.8 *4. No.9 *4. No.10 *4. No.11 *4. No.12
	Rear Panel	ANC7313	ANC7379	ANC7372	ANC7366	ANC7366	ANC7365	ANC7363	ANC7364	
	Screw	Not used	ABA1047	ABA1047	ABA1047	ABA1047	Not used	Not used	Not used	
	C1 Ceramic capacitor	Not used	CKDYB102K50	CKDYB102K50	CKDYB102K50	CKDYB102K50	Not used	Not used	Not used	
	Caution label (HE)	Not used	Not used	Not used	PRW1233	PRW1233	Not used	Not used	Not used	
	Caution label (F)	Not used	VRW - 328	VRW - 328	VRW - 328	VRW - 328	VRW - 328	Not used	Not used	
	Caution label (G)	Not used	VRW - 329	VRW - 329	VRW - 329	VRW - 329	VRW - 329	Not used	Not used	
	Caution label	Not used	Not used	VRW1094	VRW1094	VRW1094	Not used	Not used	Not used	
	Caution label	Not used	PRW1018	Not used	Not used	Not used	Not used	PRW1018	Not used	
	65 Label	ORW1069	Not used	Not used	Not used	Not used	Not used	Not used	Not used	
	Packing Case	AHD7239	AHD7259	AHD7259	AHD7259	AHD7259	AHD7258	AHD7256	AHD7257	
	Polyethylene Bag	AHG7030	AHG7032	AHG7032	AHG7032	AHG7032	AHG7032	AHG7032	AHG7032	
Caution 220V Label	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Not used		
Rear Spacer	Not used	AHA7130	Not used	Not used	Not used	Not used	Not used	Not used		
FM Antenna	ADH1017	ADH1019	ADH1019	ADH1019	ADH1019	ADH1017	ADH1017	ADH1017		
Operating Instructions (English)	Operating Instructions (English/Spanish/Chinese)	ARB7084	ARB7084	Not used	Not used	ARB7084	ARB7084	Not used	Not used	
	Operating Instructions (German/Italian/French/Dutch)	Not used	Not used	Not used	ARC7098	Not used	Not used	Not used	Not used	
	Operating Instructions (German/Italian)	Not used	Not used	ARC7099	ARC7099	Not used	Not used	Not used	Not used	
Operating Instructions (French/Swedish/Spanish/Portuguese)	Not used	Not used	Not used	Not used	ARC7127	Not used	Not used	Not used		

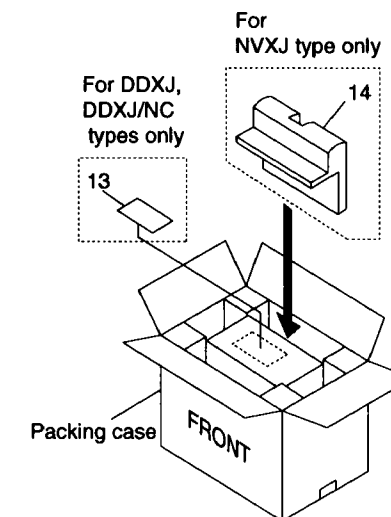
Note *1 : Although AWZ8260,AWZ8261 and AWZ8259 are different in part number they consist of the same components.
 *2 : Although AWZ8268,AWZ8269 and AWZ8267 are different in part number they consist of the same components.
 *3 : Although AWZ8275,AWZ8276 and AWZ8274 are different in part number they consist of the same components.
 *4 : The numbers in the remarks column correspond to the numbers on the exploded views.

■ EXPLODED VIEWS

Exterior section

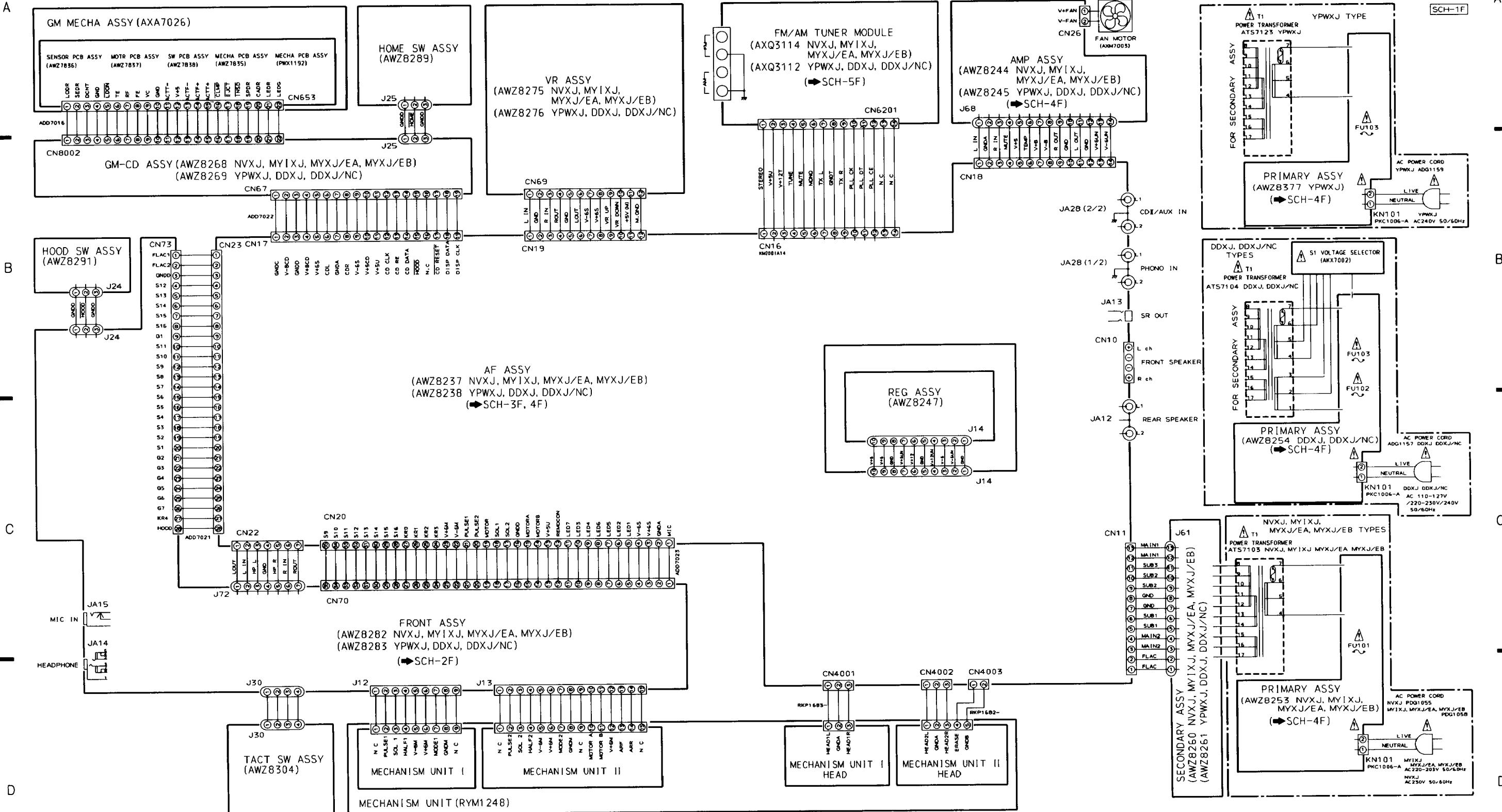


Packing section



3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

3.1 OVERALL SCHEMATIC DIAGRAM



OVERALL SCHEMATIC DIAGRAM

SCH-1F

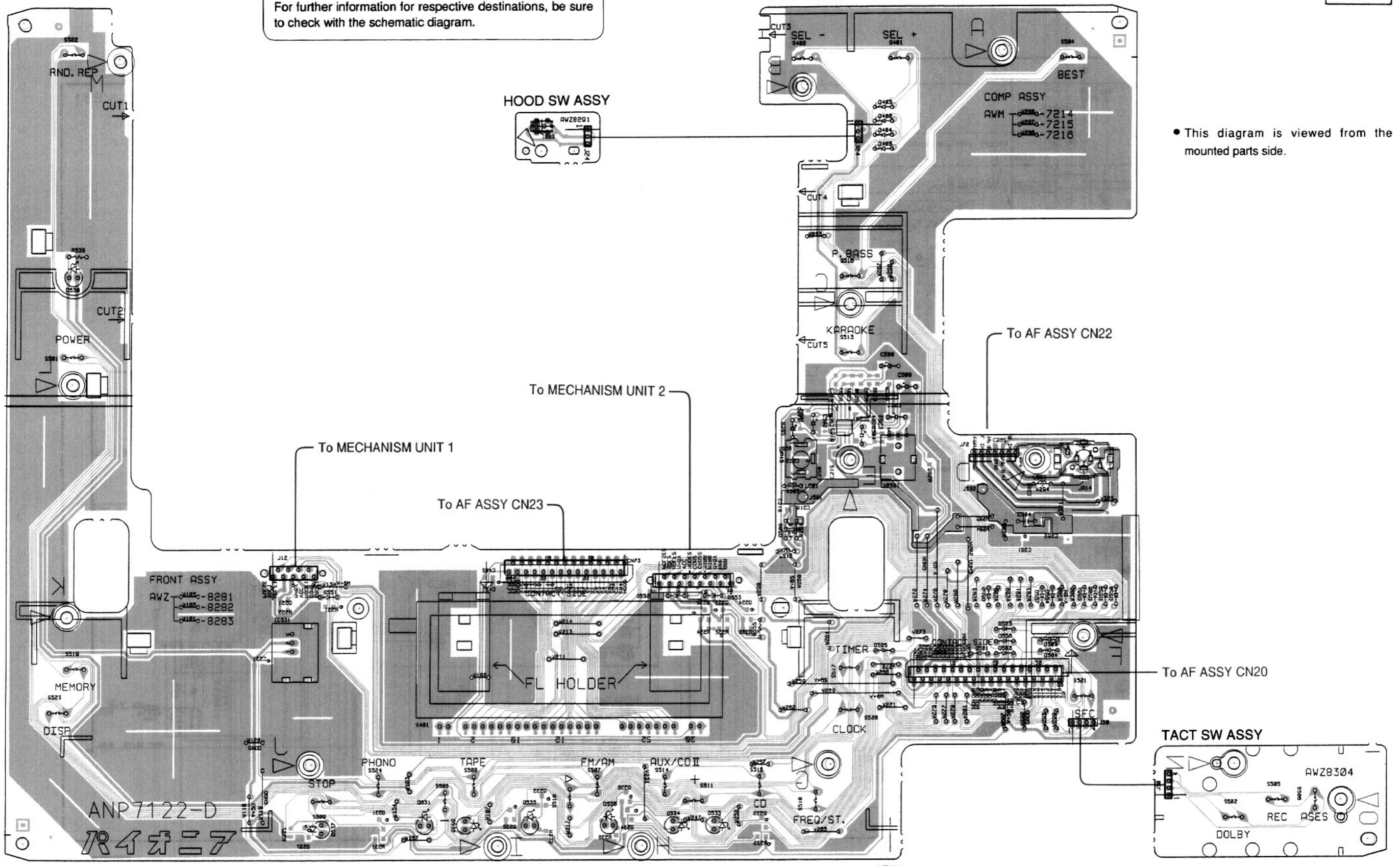
OVERALL SCHEMATIC DIAGRAM

SCH-1F

PCB-1F

The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.

• This diagram is viewed from the mounted parts side.



Q551	Q531	Q532	Q535	Q536	Q534	Q552 - Q554	IC501
Q537						Q533	

3.3 AF, AMP, PRIMARY AND SECONDARY ASSEMBLIES

● AF ASSEMBLY (1/2)

TO AF ASSY (2/2)
SCH-4F

A

B

C

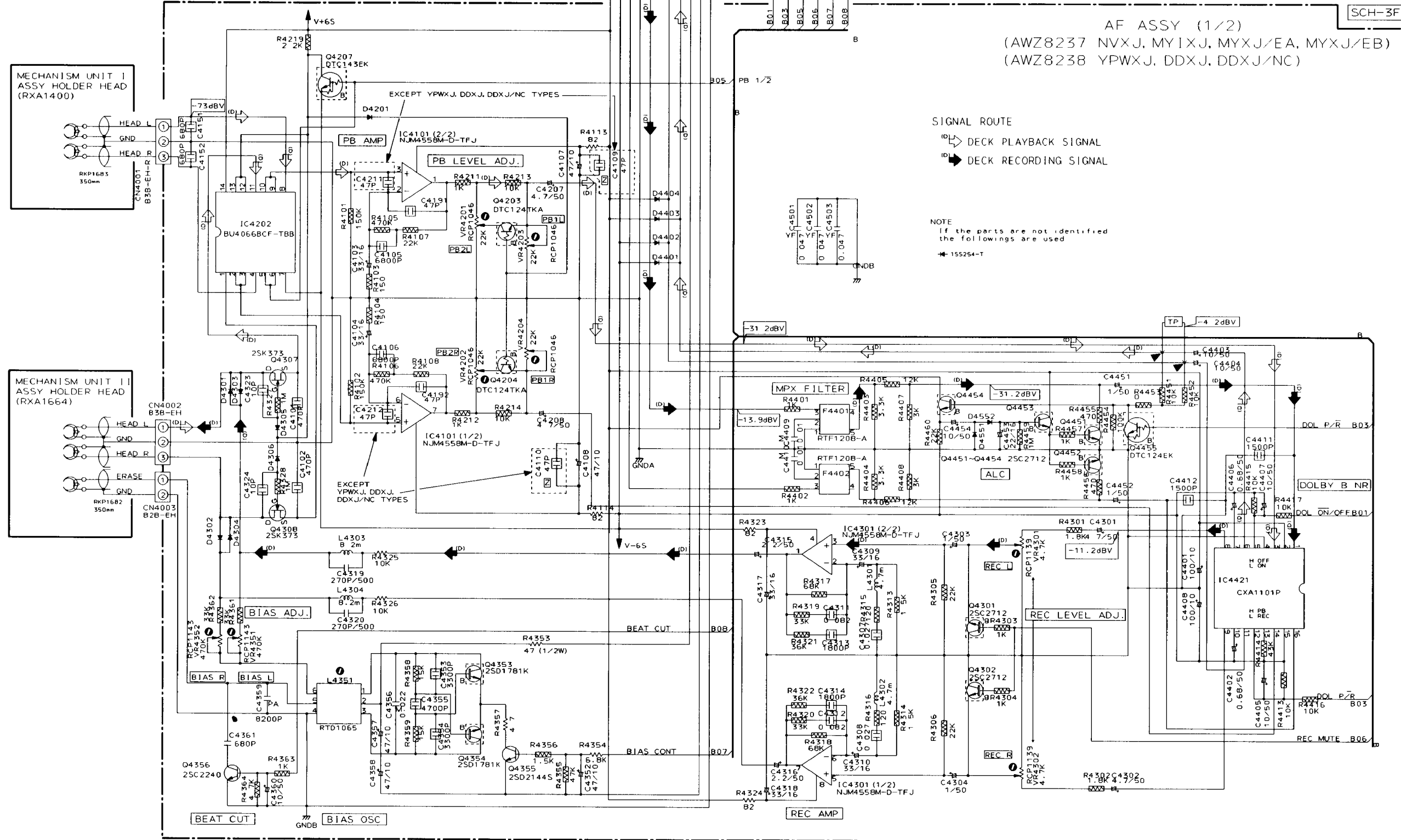
D

A

B

C

D



SCH-3F

AF ASSY (1/2)

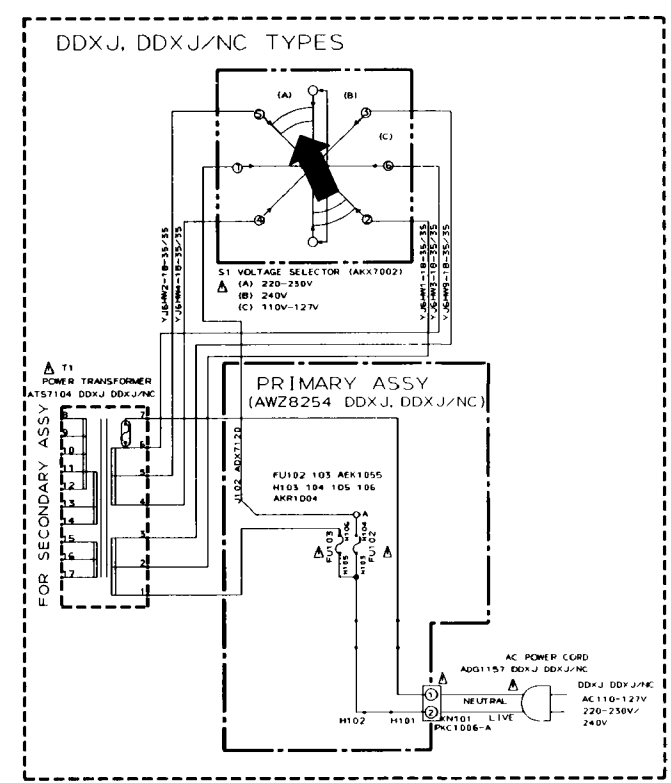
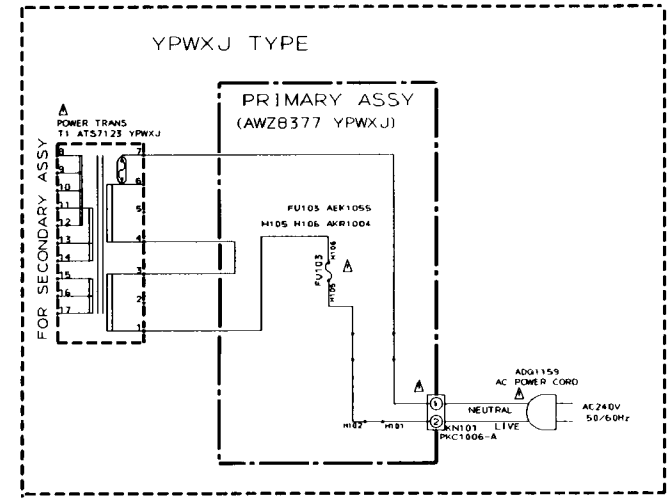
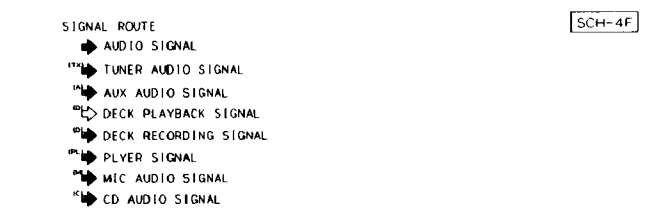
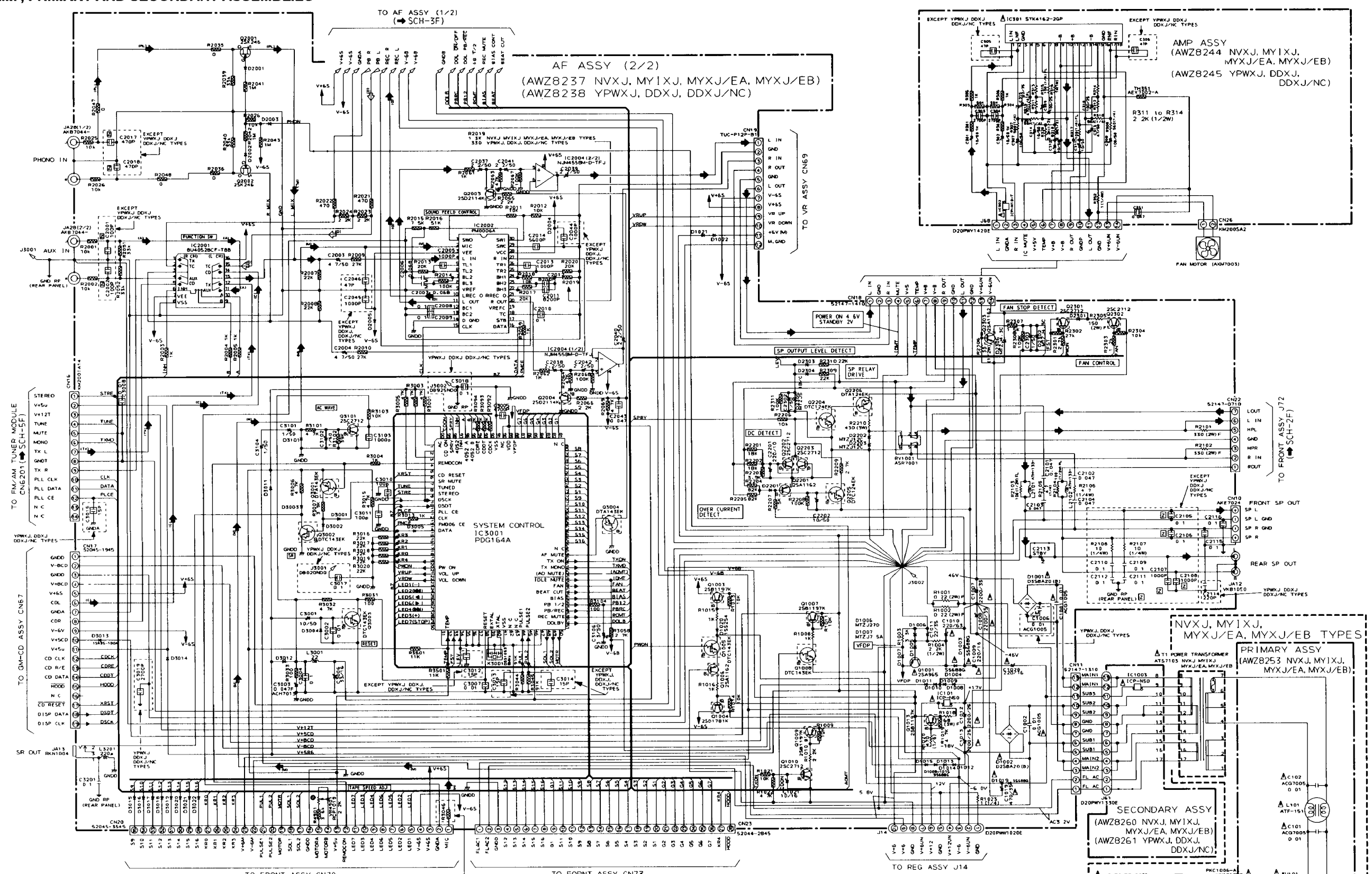
AF ASSY (1/2)

SCH-3F

● AF (2/2), AMP, PRIMARY AND SECONDARY ASSEMBLIES

A
B
C
D

A
B
C
D



● NOTE FOR FUSE REPLACEMENT
CAUTION—FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY

SCH-4F
AF ASSY (2/2), AMP ASSY,
PRIMARY ASSY, SECONDARY ASSY

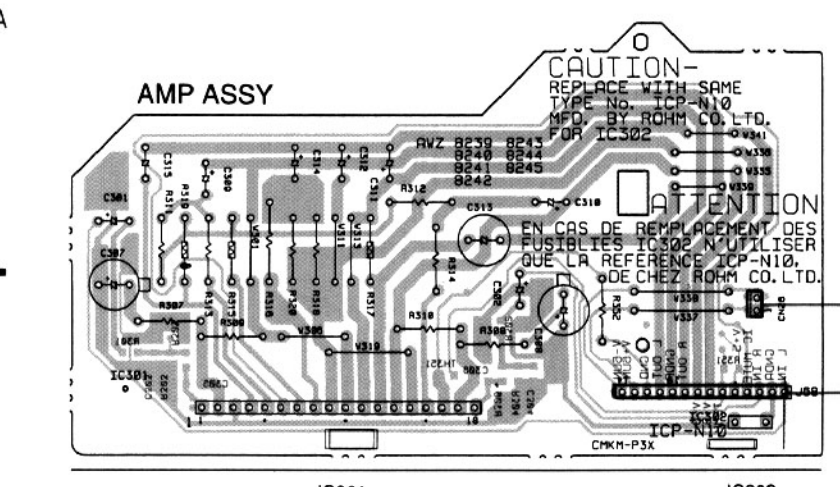
AF ASSY (2/2), AMP ASSY,
PRIMARY ASSY, SECONDARY ASSY
SCH-4F

NOTE
If the parts are not identified
the followings are used
— 155254-T

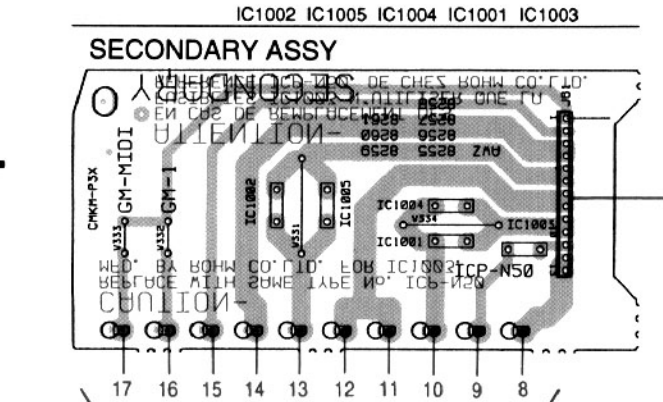
AC POWER CORD
P001055 NVXJ
P001056 MYXJ/EA MYXJ/EB
NVXJ AC220V 50/60Hz
MYXJ/EA MYXJ/EB MYXJ AC220-230V 50/60Hz

TO AF ASSY (1/2) (SCH-3F)
TO VR ASSY CN69
TO FRONT ASSY CN70 (SCH-2F)
TO FRONT ASSY CN73 (SCH-2F)
TO REG ASSY J14

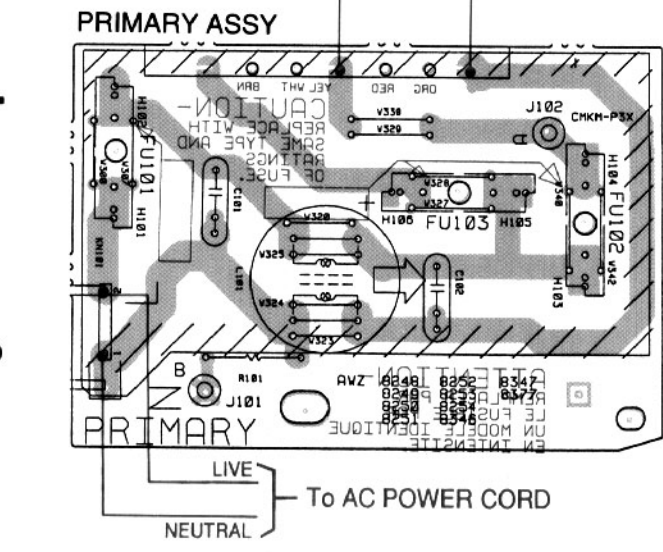
• This diagram is viewed from the mounted parts side.



To FAN MOTOR
To GM- CD ASSY CN67

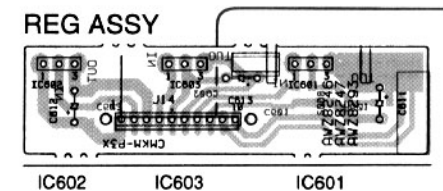
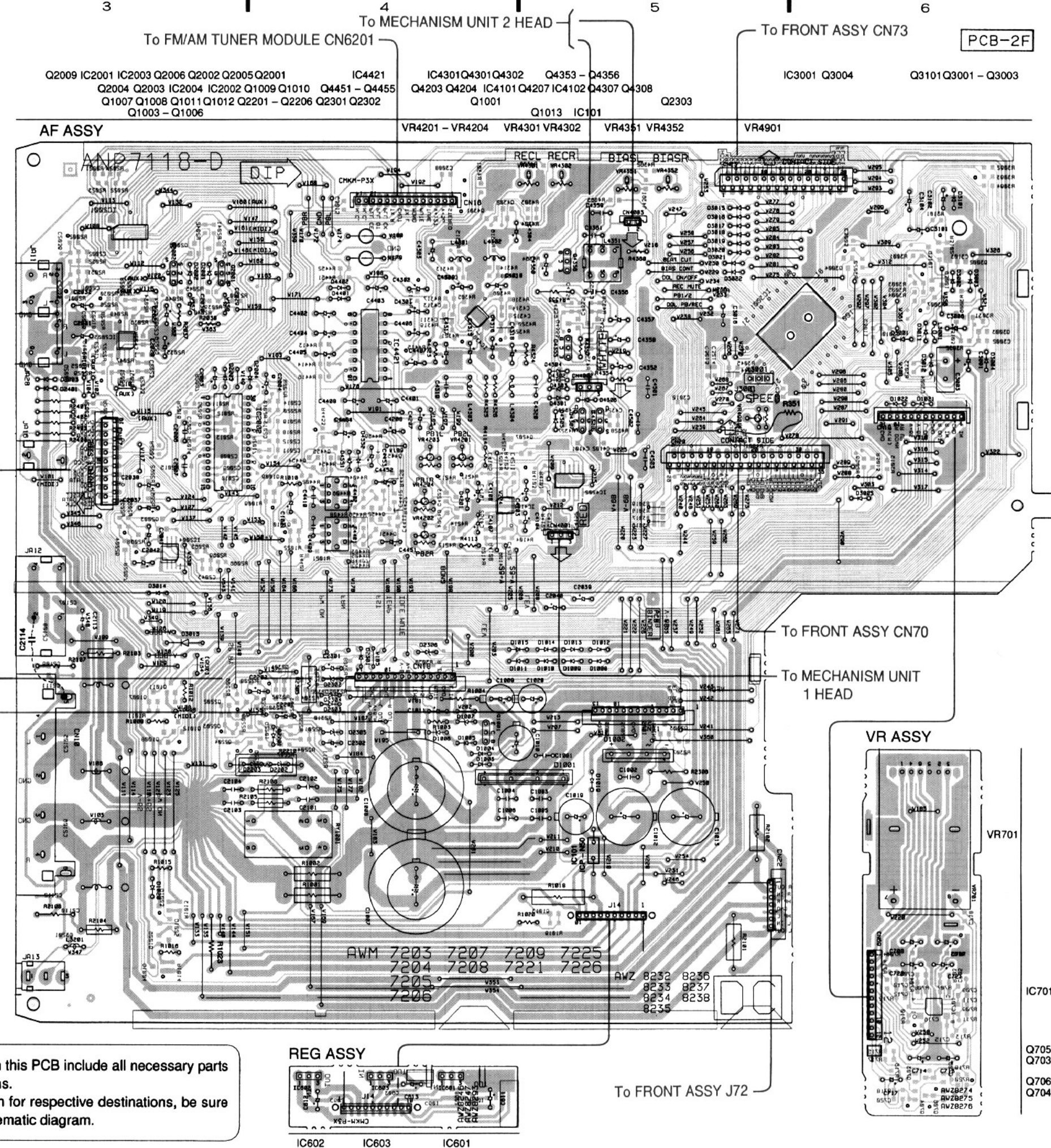


To POWER TRANSFORMER



To AC POWER CORD
LIVE
NEUTRAL

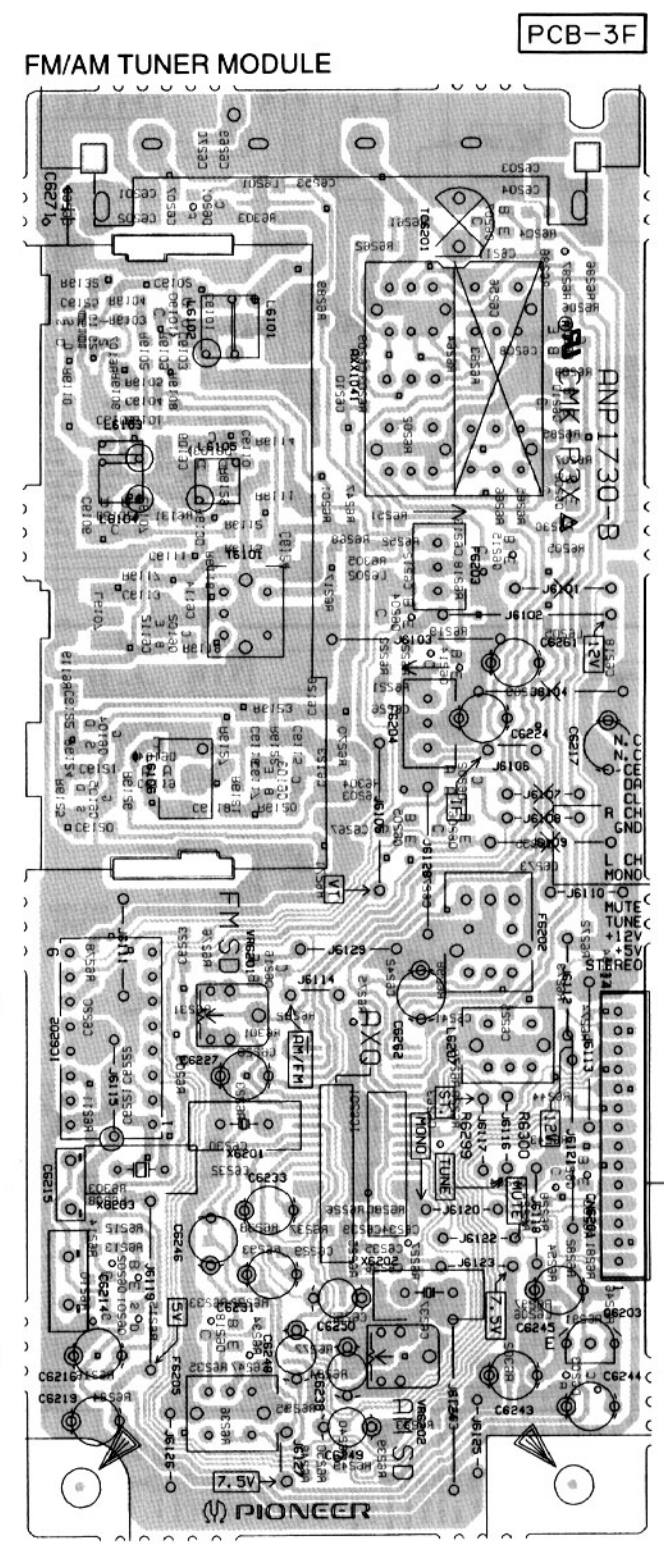
The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.



To FRONT ASSY J72

3.4 FM/AM TUNER MODULE

• This diagram is viewed from the mounted parts side.



The parts mounted on this PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

NOTE FOR PCB DIAGRAMS:
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Diode
		Capacitor (Polarized)

3. The transistor terminal marked with E or C shows the emitter.
4. The diode terminal marked with C or P shows cathode side.
5. The capacitor terminal marked with @ or L shows negative terminal.

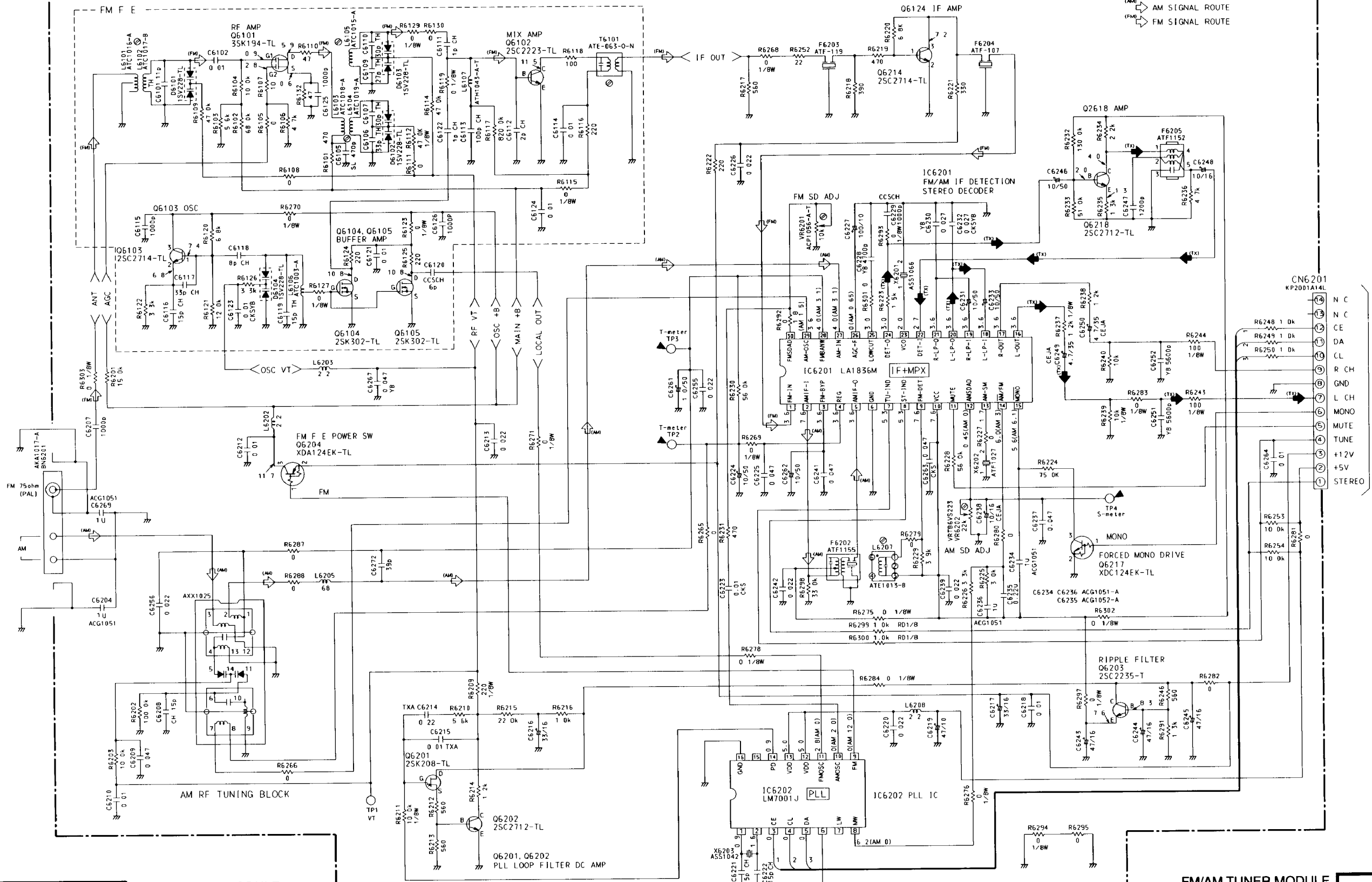
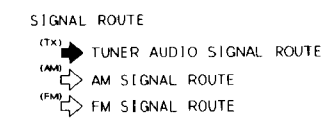
NOTE FOR PCB DIAGRAMS:
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

To AF ASSY CN16

SCH-5F

FM/AM TUNER MODULE (AXQ3114)



To AF ASSY (2/2) CN16 (SCH-4F)

SCH-5F FM/AM TUNER MODULE

SCH-5F FM/AM TUNER MODULE

4. ADJUSTMENTS

4.1 TUNER SECTION

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1-1.

Step No.	Adjustment Title	FM SG (1kHz, ±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98 Non modulation	80 or more	98MHz	L6207	Adjust so that the DC voltage between IC6201-Pin 4 and Pin 28 (or ⊕ leads of C6224 and C6261) becomes 0V±50mV.
2	Front End Sencitivity	106	0-30	106MHz	L6104 L6105 L6102 T6101	After adjusting L6104 and L6105 so that the DC voltage between LC6201-Pin12 and GND (or ⊕ leads of C6238 and GND) becomes at maximum level, adjust T6101 and L6102.
3	Stereo Distortion	98	80	98MHz	T6101	Minimize the distortion with 1/8 rotation of the core.
4	TUNED IND. Lighting Level	98	15±2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. starts to light up.

- Notes:
- Before adjusting, make sure there is no gap between L6101 and L6102 and between L6103 and L6104. If there is a gap between them, bring them into contact with each other first, and then make adjustments.
 - Make indicator adjustments in order of AM → FM.
 - Adjustment sequence: L6104 → L6105 → L6102 → T6101

■ AM Tuner Section

- Set the mode selector to AM BAND.
- Connect the wiring as shown in Fig. 1-1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting Level	999 *1	47±2	999kHz *1	VR6202	Adjust so that the indicator of TUNED IND. starts to light up.

- Notes:
- *1: For the area using 10kHz step, frequencies should be 1000 kHz

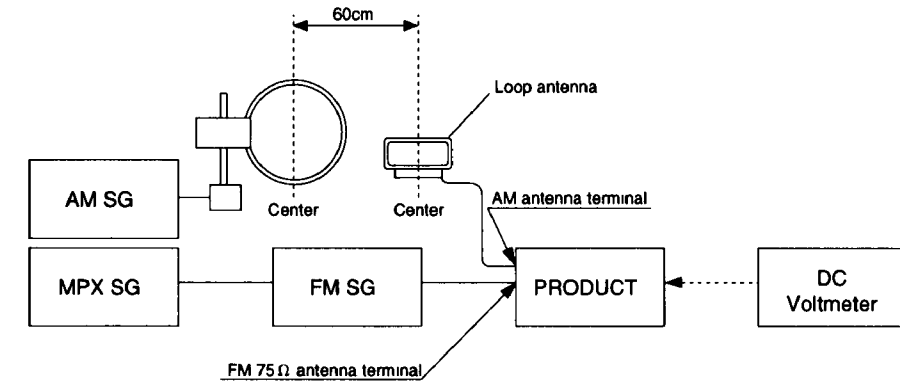


Fig. 1-1 AM and FM Adjustment Wiring Diagram

FM/AM TUNER MODULE (AXQ3114)

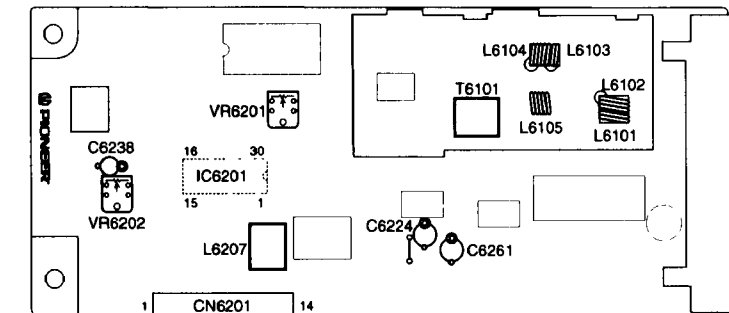


Fig. 1-2 Adjustment Points