

Service Manual

ORDER NO.
ARP2034

STEREO AMPLIFIER

A-656 MARK II

HEWZ, HE, HB

A-656 MARK II-S

HEWZ

- Refer to the service manual ARP1817, A-656/HEZ type.
- This manual is applicable to the A-656 mark II /HEWZ, HE, HB and A-656 mark II -S/HEWZ types.

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- Parts without part number cannot be supplied.
- 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.

The A-656 mark II / HEWZ, HE, HB and A-656 mark II -S/HEWZ types are the same as the A-656/HEZ type with the exception of the following sections.

Mark	Symbol & Description	Part No.					Remarks
		A-656/ HEZ type	A-656mark II /HEWZ type	A-656mark II /HE type	A-656mark II /HB type	A-656mark II -S/HEWZtype	
	REC OUT assembly	Non supply	Non supply	Non supply	Non supply	Non supply	
	INPUT SELECTOR assembly	AWZ2351	AWZ2351	AWZ2459	AWZ2459	AWZ2351	
	HEAD PHONE assembly	Non supply	Non supply	Non supply	Non supply	Non supply	
	POWER AMP assembly	AWZ2335	AWZ2335	AWZ2454	AWZ2454	AWZ2335	
	POWER SUPPLY assembly	AWZ2336	AWZ2336	AWZ2455	AWZ2455	AWZ2336	
	SPEAKER TERMINAL assembly	AWZ2337	AWZ2337	AWZ2456	AWZ2456	AWZ2337	
	PHONO AMP assembly	AWZ2338	AWZ2338	AWZ2457	AWZ2457	AWZ2338	
Δ	T1 Power transformer	ATS1210	ATS1287	ATS1287	ATS1287	ATS1287	
Δ	FU1 Fuse (T2.5A/250V)	AEK-403	AEK-403	AEK-403	AEK-512	AEK-403	
	C2 Ceramic capacitor	.....	CKDYB472K50	.....	.....	CKCYB472K50	
	C1 Ceramic capacitor	CKDYB472K50	CKDYB472K50	.....	.....	CKDYB472K50	
	C3	ACH1043	ACH1155	ACH1155	ACH1155	ACH1155	
	R1	RD1/4PM4R7J	RD1/4PM4R7J	.....	.....	RD1/4PM4R7J	
	R2	RD1/4PM220J	RD1/4PM220J	.....	.....	RD1/4PM220J	
Δ	AC Power cord	ADG1049	ADG1049	ADG1049	ADG1052	ADG1049	
	Front panel	ANB1295	ANB1378	ANB1378	ANB1378	ANB1379	
	Panel base	AMB1200	AMB1628	AMB1628	AMB1628	AMB1629	
	Rotary knob L	AAB1107	AAB1126	AAB1126	AAB1126	AAB1150	
	Rotary knob M	AAB1108	AAB1127	AAB1127	AAB1127	AAB1149	
	Rotary knob S	AAB1109	AAB1143	AAB1143	AAB1143	AAB1144	
	Push knob	AAD1536	AAD1536	AAD1536	AAD1536	AAD1538	
	Direct knob	AAD1560	AAD1560	AAD1560	AAD1560	AAD1562	
	Power knob	AAD1561	AAD1561	AAD1561	AAD1561	AAD1563	
	Bonnet case	ANE1075	ANE1075	ANE1075	ANE1075	ANE1076	
	Screw (BONNET)	FBT40P080FZK	FBT40P080FZK	FBT40P080FZK	FBT40P080FZK	FBT40P080FCR	
	Screw (EARTH)	ABA1047	ABA1047	.....	.....	ABA1047	

Mark	Symbol & Description	Part No.					Remarks
		A-656/ HEZ type	A-656mark II /HEWZ type	A-656mark II /HE type	A-656mark II /HB type	A-656mark II -S/HEWZ type	
	Packing case	AHD1633	AHD1816	AHD1816	AHD1816	AHD1817	
	Operating instructions (German)	ARC1146	ARC1184	.....	.....	ARC1184	
	Operating instructions (English/German/French/Italian/ Swedish/Dutch/Spanish/ Portuguese)	.....	.....	ARE1148	.....	.....
	Operating instructions (English)	.....	.....	.....	ARB1229	.....

REC OUT assembly
The REC OUT assembly (HE, HB types) is the same as the REC OUT assembly (HEZ, HEWZ types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HEWZ, HEZ types	HE, HB types	
	C803-C810	CKCYB331K50	.....
	R803-R806	RD1/4PM182J	RD1/4PM222J	
	R807, R808	RD1/8PM182J	RD1/8PM222J	
	R809, R810	RD1/8PM221J	.....

INPUT SELECTOR assembly (AWZ2459)
The INPUT SELECTOR assembly (AWZ2459) is the same as the INPUT SELECTOR assembly (AWZ2351) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2351	AWZ2459	
	C701-C710	CKCYB331K50	.....

HEAD PHONE assembly
The HEAD PHONE assembly (HE, HB types) is the same as the HEAD PHONE assembly (HEZ, HEWZ types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HEWZ, HEZ types	HE, HB types	
	C951, C952	CKCYB392K50	.....

POWER AMP assembly (AWZ2454)
The POWER AMP assembly (AWZ2454) is the same as the POWER AMP assembly (AWZ2335) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2335	AWZ2454	
	L101-L104	.....	ATX1012	
	C105, C106	CKCYB122K50	CKCYB152K50	
	C109, C110	CMA080D500	CMA150J500	
	C111, C112	.....	CMA150J500	
	C141, C142	CCCSL121J50	.....
	C155	CCCSL151J50	.....
	C157, C158	CKCYB331K50	.....
	R123, R124	RD1/4PM560J	RD1/4PM101J	
	R245, R246	RD1/4PM100J	.....

POWER SUPPLY assembly (AWZ2455)
The POWER SUPPLY assembly (AWZ2455) is the same as the POWER SUPPLY assembly (AWZ2336) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2336	AWZ2455	
⚠	C615 C625	CQMXA104J100 CKCYB472K50	ACG1005	

SPEAKER TERMINAL assembly (AWZ2456)
The SPEAKER TERMINAL assembly (AWZ2456) is the same as the SPEAKER TERMINAL assembly (AWZ2337) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2337	AWZ2456	
	C905-C908	CQMXA472J100	.....
	C909, C910	CCDSL101K500	.....
	R901, R902	RS1LMF101J	RS1LMF100J	
	R905, R906	.....	RS1PMF681J	
	SPEAKER TERMINAL	AKE1015	AKE1017	

PHONO AMP assembly (AWZ2457)
The PHONO AMP assembly (AWZ2457) is the same as the PHONO AMP assembly (AWZ2338) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2338	AWZ2457	
	L501, L502 (270μH) L503, L504 (2.2μH)	ATH1010 LAU2R2M	..... .....
	C505, C506	CCCSL221J50	CCCSL271J50	
	C523, C524	CCCSL390J50	.....
	R505, R506	RD1/8PM272J	.....

Line Voltage Selection

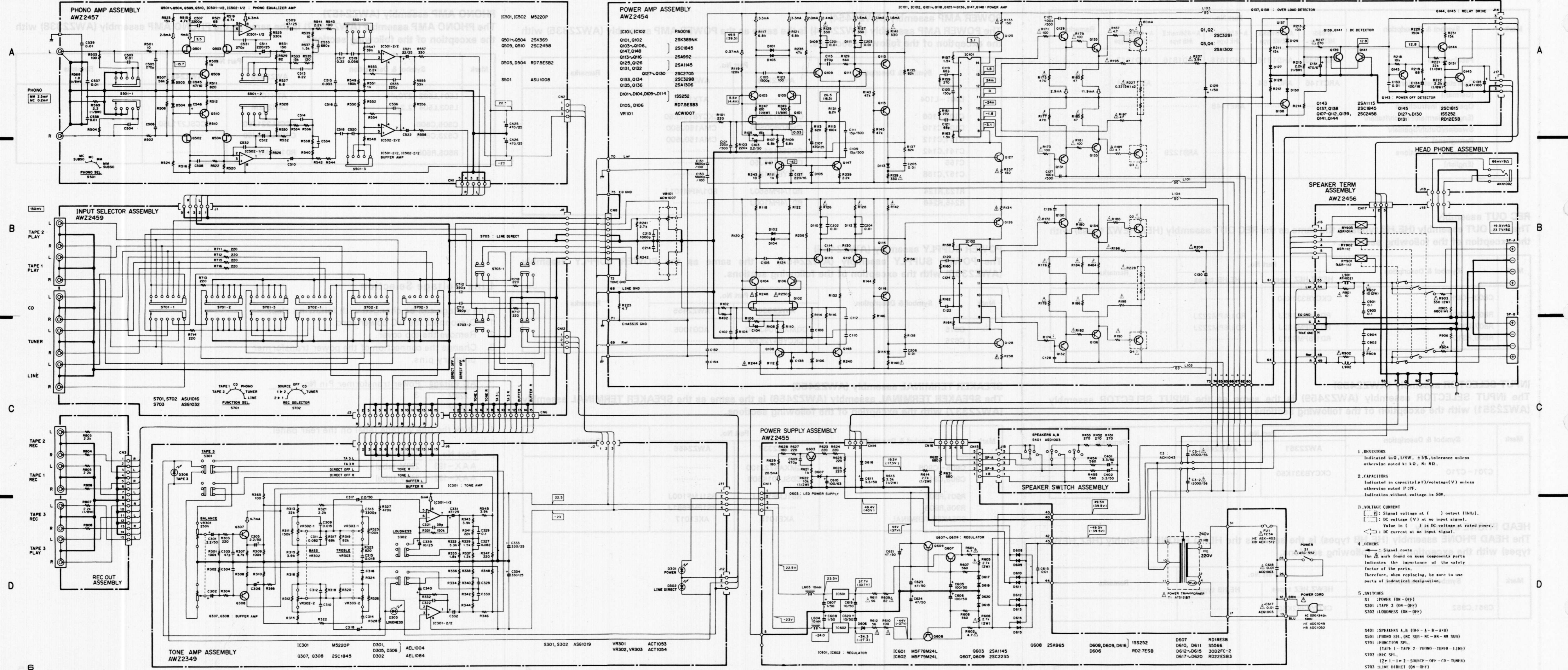
- Line voltage can be changed with following steps.
1. Disconnect the AC power cord.
 2. Remove the top cover.
 3. Change the connection of the power transformer primary pins.

AC voltage	Power transformer Pin No.
220V	3
240V	5

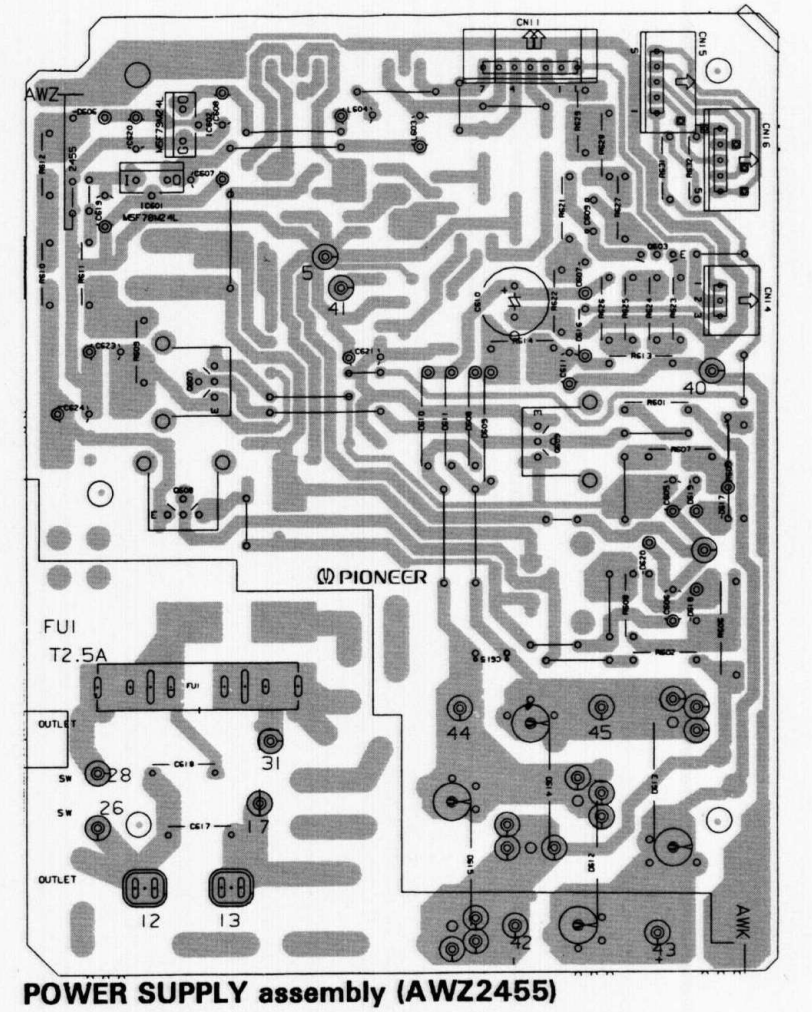
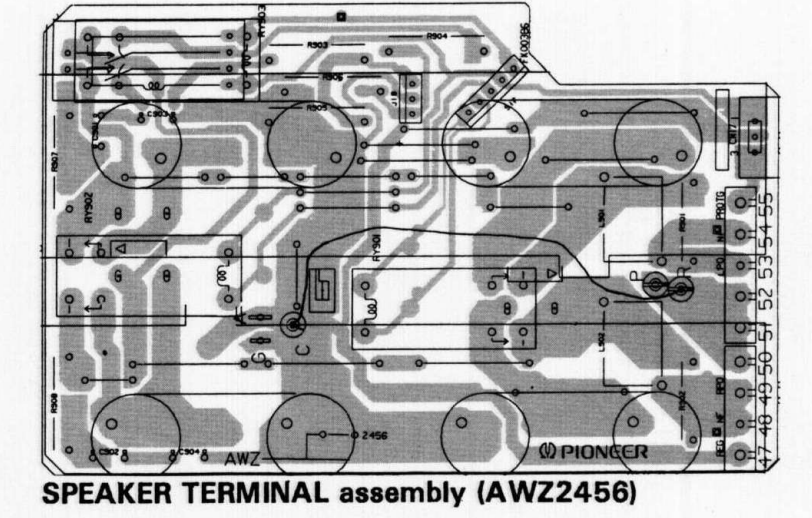
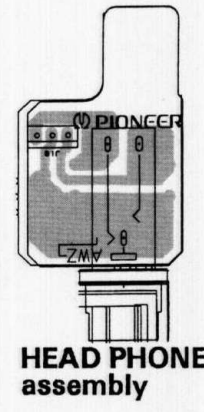
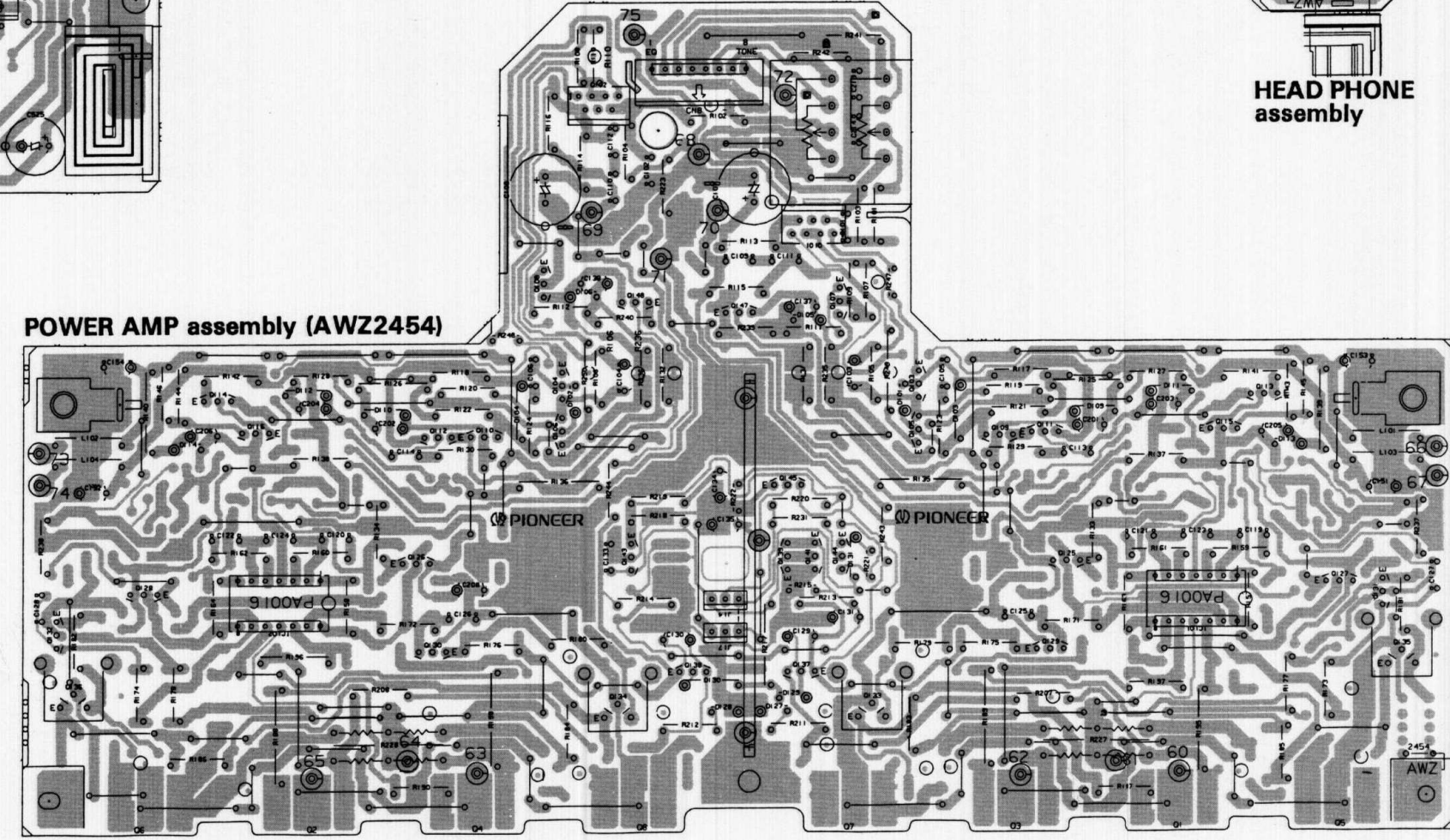
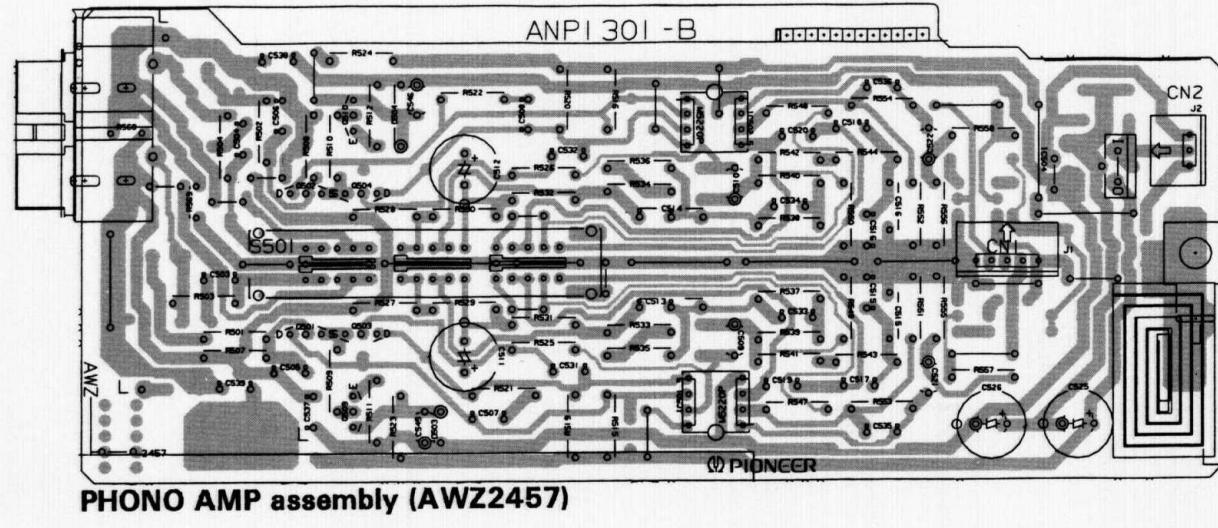
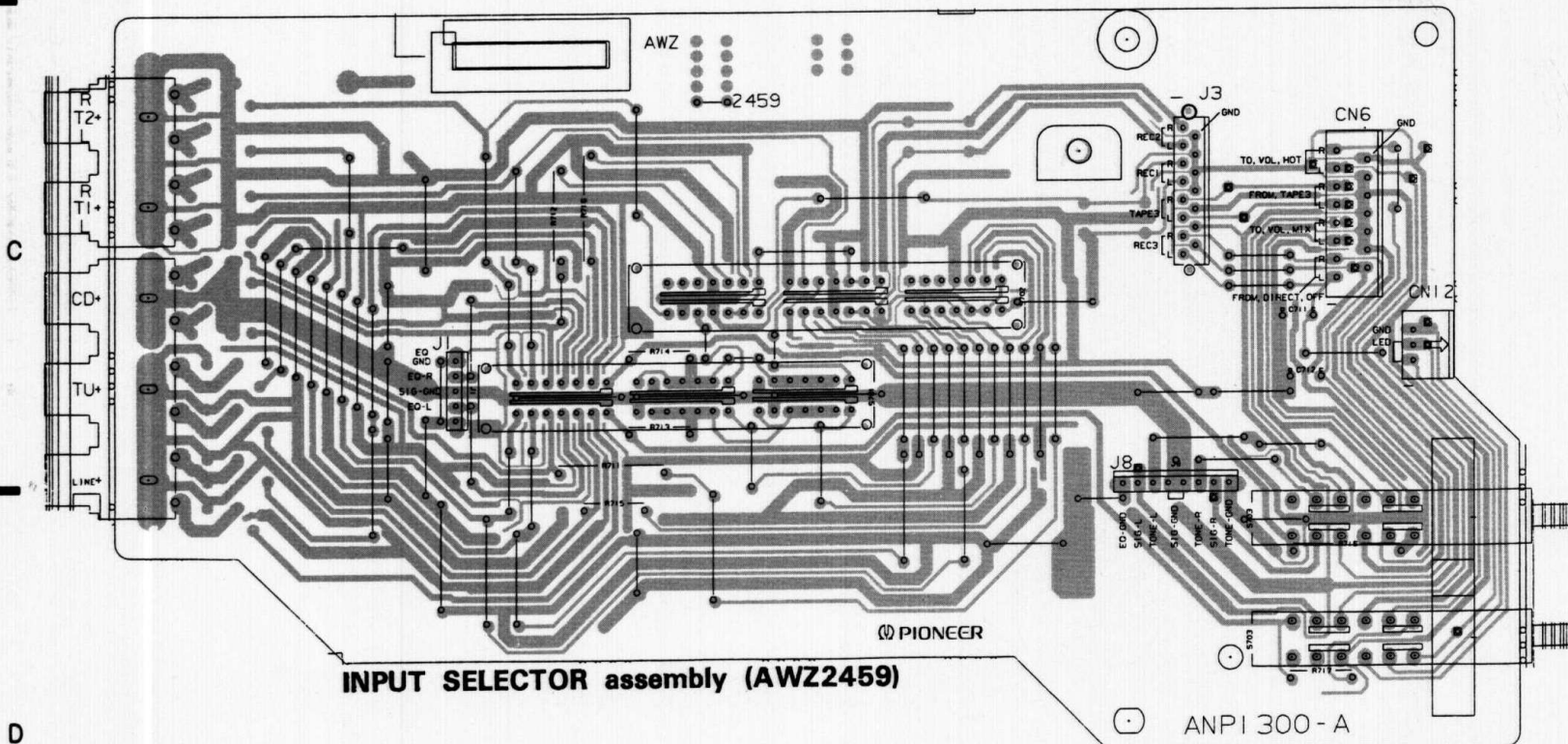
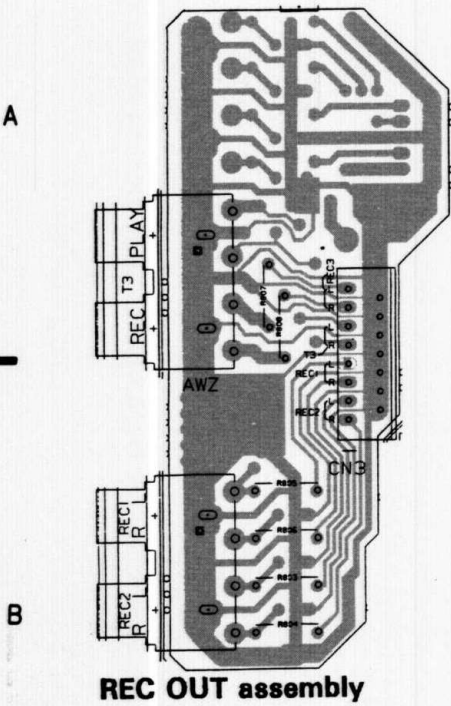
4. Stick the line voltage label on the rear panel.

Part No.	Description
AAX-193	220V label
AAX-192	240V label

2. SCHEMATIC AND P.C. BOARDS DIAGRAM



1 2 3 4 5 6 7 8



Q132 Q136 Q128 Q114 Q116 IC102 D112 C204 D110 Q126 Q130 Q108 D104 Q112 Q110 Q106 Q104 Q102 Q100 Q148 Q102 Q102 Q106 Q134 Q143 Q147 Q139 Q138 Q145 Q130 Q141 Q128 Q144 Q127 Q131 Q133 Q101 D105 Q107 D101 Q103 Q105 D103 Q109 Q111 Q109 Q129 Q125 D111 IC101 Q115 Q113 D113 Q127 Q131 Q135

NOTE

- This P.C.B. connection diagram is viewed from the parts mounted side.
- The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

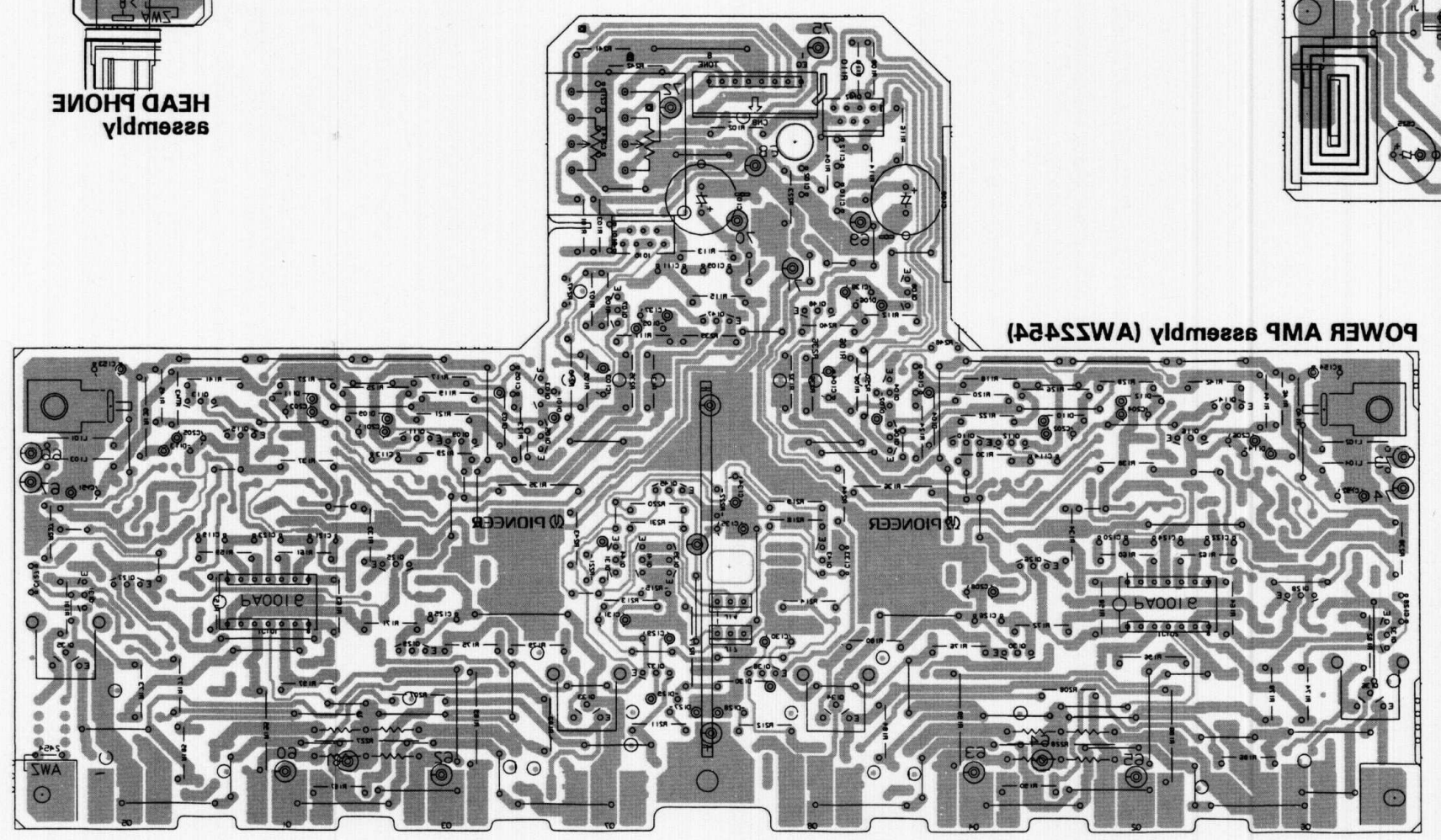
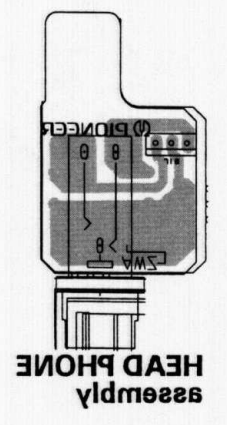
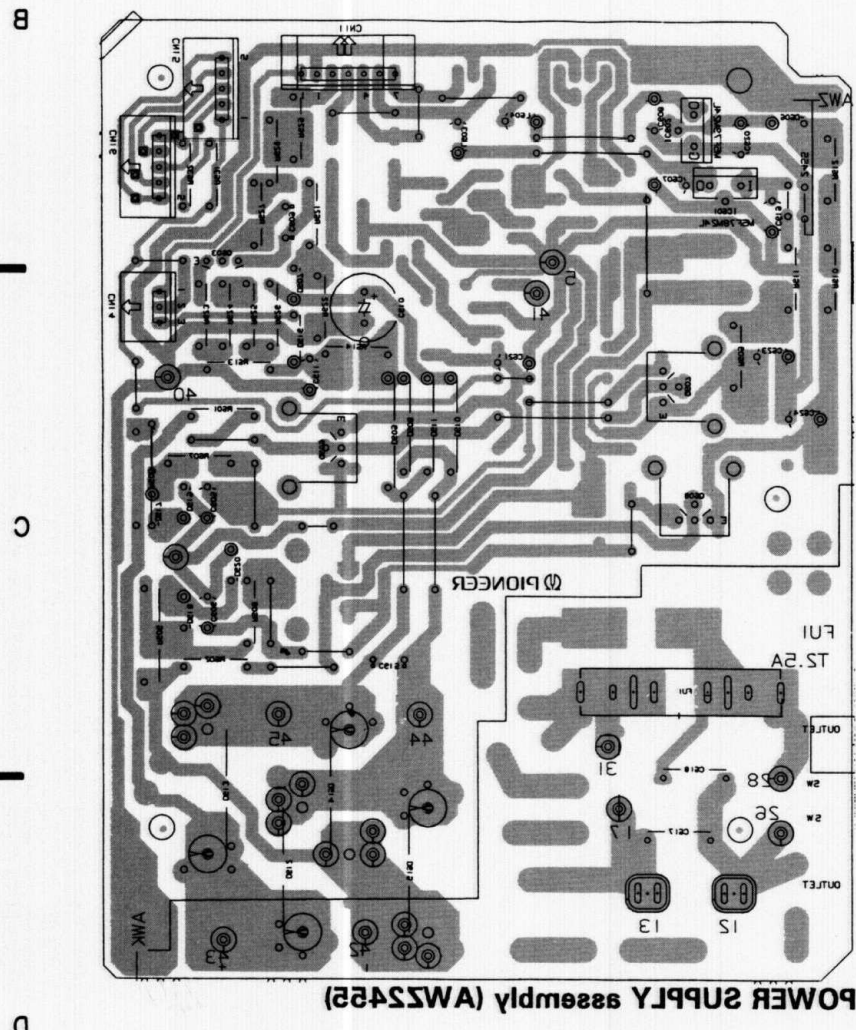
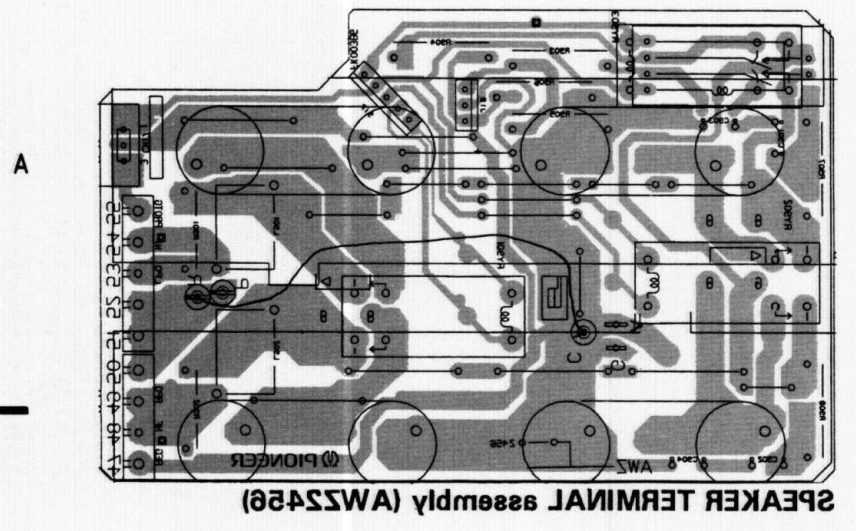
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

- The capacitor terminal marked with @ (double circles) shows negative terminal.
- The diode terminal marked with @ (double circles) shows cathode side.
- The transistor terminal to which E is affixed shows the emitter.

1 2 3 4 5 6 7 8 9



0135 0136 DIS8
 0114 0115 DIS8
 IC05 CS04
 0116 0117 DIS10
 0118 0119 DIS10
 0120 0121 DIS10
 0122 0123 DIS10
 0124 0125 DIS10
 0126 0127 DIS10
 0128 0129 DIS10
 0130 0131 DIS10
 0132 0133 DIS10
 0134 0135 DIS10
 0136 0137 DIS10
 0138 0139 DIS10
 0140 0141 DIS10
 0142 0143 DIS10
 0144 0145 DIS10
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 0148 0149 DIS10
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 0152 0153 DIS10
 0154 0155 DIS10
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 0162 0163 DIS10
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 0166 0167 DIS10
 0168 0169 DIS10
 0170 0171 DIS10
 0172 0173 DIS10
 0174 0175 DIS10
 0176 0177 DIS10
 0178 0179 DIS10
 0180 0181 DIS10
 0182 0183 DIS10
 0184 0185 DIS10
 0186 0187 DIS10
 0188 0189 DIS10
 0190 0191 DIS10
 0192 0193 DIS10
 0194 0195 DIS10
 0196 0197 DIS10
 0198 0199 DIS10
 0200 0201 DIS10

NOTE:
 This picture shows the foil side of the printed circuit.

