Service Manual

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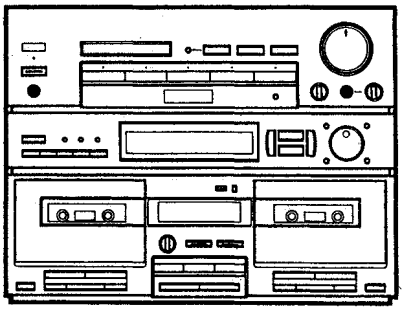
The Art of Entertainment



ORDER NO.
ARP2169

STEREO DOUBLE CASSETTE DECK AMPLIFIER

DC-Z84

DC-Z84 HAS THE FOLLOWING :

Type	Power Requirement	Remarks
SD	AC110V, 120V-127V, 220V, 240V (Switchable)	
YPW	AC240V only	

- **This manual is applicable to the DC-Z84/SD and YPW types.**
- **As to the YPW type, refer to pages 51-54.**
- **This product is a component of a system. As to the system composition, refer to the system manual.**
- **For adjustment refer to ADJUSTMENTS FOR XD-Z54T, XD-Z84T, DC-Z94, DC-Z84 and DC-Z74 (ARP2140).**

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ 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.*

1.1 EXTERIOR AND PACKING

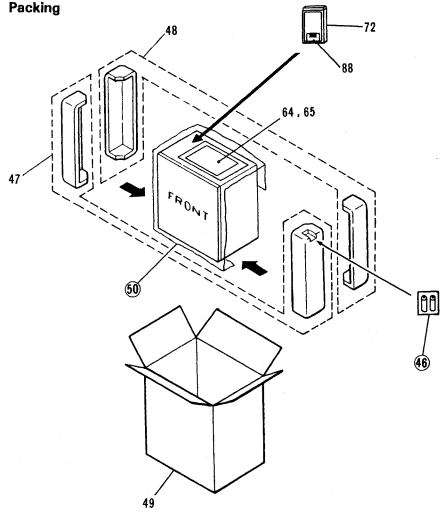
Parts list of Exterior and Packing

Mark	No.	Description	Parts No.
	1	ROTARY KNOB (BALANCE, MIC LEVEL, DOLBY NR)	AAB1136
	2	VOL KNOB (VOLUME)	AAB1200
	3	ROTARY KNOB (SOUND JOG)	AAB1202
	4	POWER BUTTON	AAD1674
	5	KIN BUTTON (MEMORY, LOUDNESS)	AAD1682
	6	FUNCTION BUTTON	AAD1894
	7	REC. COPY BUTTON	AAD1895
	8	DECK PLAY BUTTON	AAD1896
	9	EJECT BUTTON L	AAD1898
	10	GEQ BUTTON	AAD1899
	11	CURSOR BUTTON	AAD1900
	12	AI BUTTON	AAD1901
	13	EJECT BUTTON R	AAD1922
	14	LENS (POWER IND.)	AAK1800
	15	FILTER (REMOTE SENSOR)	AAK1812
	16	DECORATIVE PLATE (DOOR)	AAK2065
	17	DECORATIVE PLATE A	AAK2071
	18	DECORATIVE PLATE B	AAK2072
	19	AI DECORATIVE PLATE	AAK2073
	20	DECORATIVE PLATE (GEQ)	AAK2074
	21	INDICATOR LENS	AAK2075
⊙	22	AF ASSEMBLY	AWZ3338
	23	CASSETTE DOOR R	AAN1250
	24	CASSETTE DOOR L	AAN1251
	25	COUNTER	AAW1009
⊙	26	GEQ ASSEMBLY	AWX1048
	27	VR ASSEMBLY	
	28	HEAD PHONE ASSEMBLY	
	29	FABEL (PAPER)	AAX1301
	30	SCREW	ABA−298
	31	SCREW (STEEL)	ABA1009
	32	SCREW (STEEL)	ABA1011
	33	SCREW	ABA1018
	34	SCREW	ABA1082
	35	SCREW (STEEL)	ABA1095
	36	DOOR SPRING L	ABH1068
	37	DOOR SPRING R	ABH1069
	38	KEEP PLATE	ABK1016
	39	NUT	ABN1016
⚠	40	AC POWER CORD	ADG1051

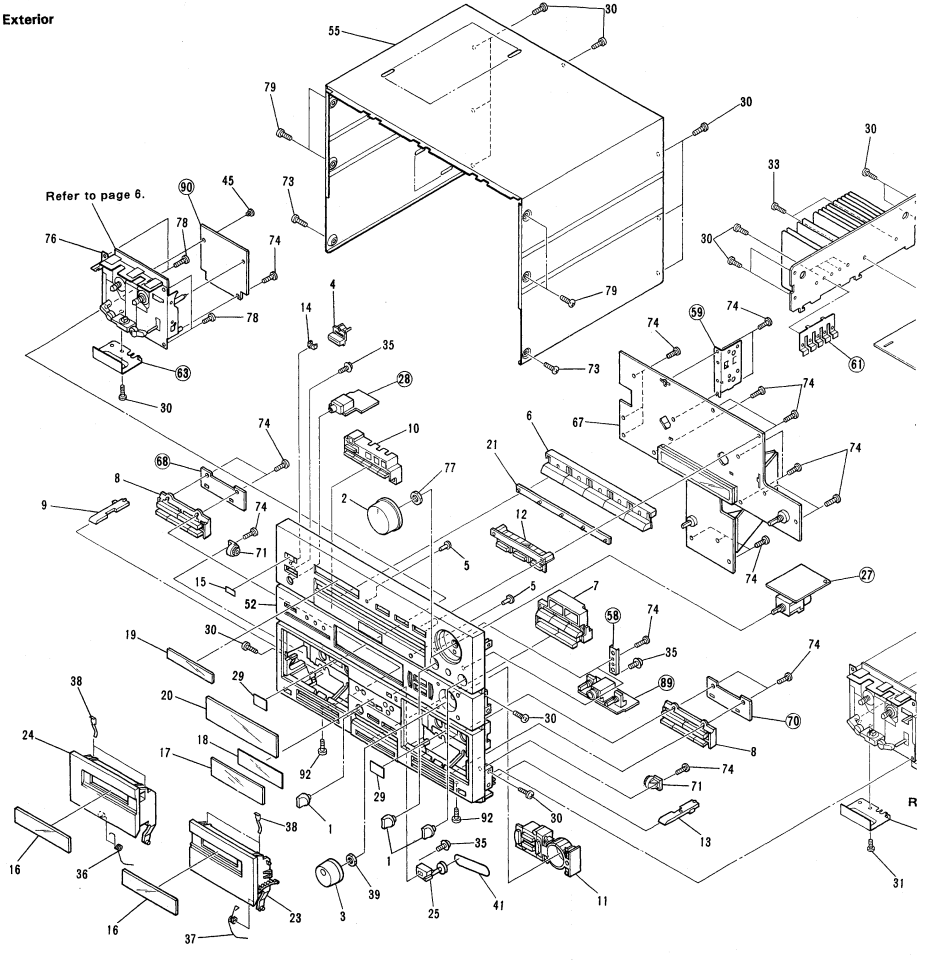
Mark	No.	Description	Parts No.
	41	COUNTER BELT	AEB1161
	42	NYLON BINDER	
	43	LEG ASSEMBLY	AEC−847
	44	STRAIN RELIEF	AEC−882
	45	NYLON RIVET	AEC1160
	46	DRY CELL BATTERY (R03, AAA)	
	47	FRONT PAD L, R	AHA1404
	48	REAR PAD L, R	AHA1405
	49	PACKING CASE	AHD1966
	50	SHEET	
	51	TERMINAL SCREW	
	52	FRONT PANEL	AMB1743
	53	CHASSIS	
	54	REAR PANEL	
	55	BONNET	ANE1298
	56	PACK HOLDER	
	57	HEAT SINK HOLDER B	
	58	PRESSURE METAL	
	59	HEAT SINK HOLDER A	
	60	PCB HOLDER	
	61	HOLDER	
	62	HEAT SINK	
	63	SHIELD PLATE (MECHA)	
	64	OPERATING INSTRUCTIONS (ENGLISH)	ARB1281
	65	OPERATING INSTRUCTIONS (SPANISH)	ARC1234
	66	TRANS CONNECT ASSEMBLY	
⊙	67	DISPLAY ASSEMBLY	AWZ3351
	68	1 MECHA SW ASSEMBLY	
⊙	69	SUB TRANS ASSY	AWR1058
	70	2 MECHA SW ASSEMBLY	
	71	DAMPER ASSEMBLY	AXA1008
	72	REMOTE CONTROL UNIT (CU−DC022)	AXD1183
	73	SCREW	BBZ30P080FZK
	74	SCREW	BPZ26P080FMC
	75	2 MECHA UNIT	EXK2010
	76	1 MECHA UNIT	EXK2020
	77	NUT	NK90FUC
	78	SCREW	VPZ30P080FMC

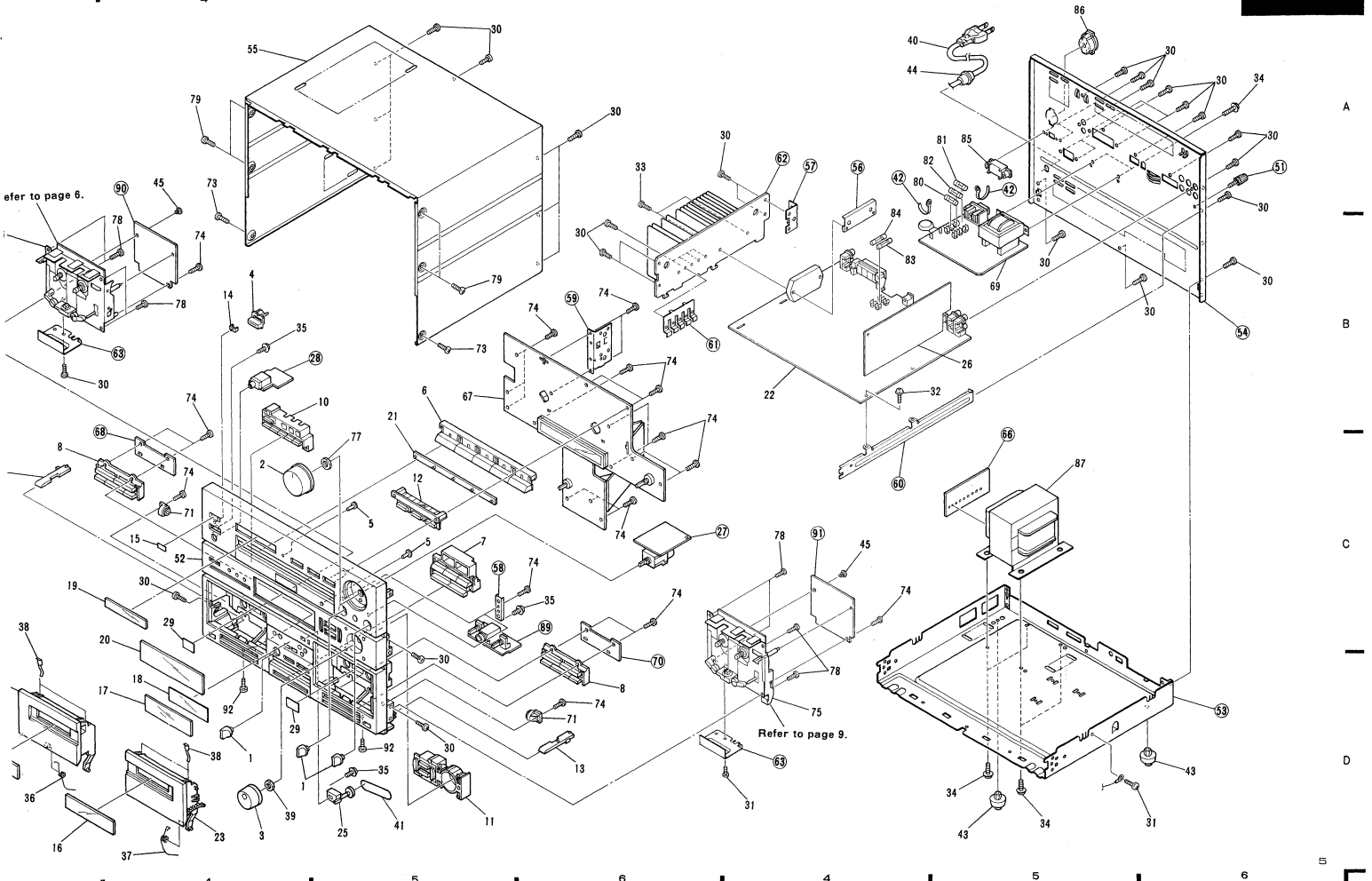
Mark	No.	Description	Parts No.
	79	SCREW	VPZ30P080FZK
⚠	80	FUSE (T4A, FU101)	AEK−400
⚠	81	FUSE (T1.6A, FU102)	AEK−405
⚠	82	FUSE (T1.6A, FU103)	AEK−405
⚠	83	FUSE (T800mA, FU151)	AEK−031
⚠	84	FUSE (T800mA, FU152)	AEK−031
⚠	85	VOLTAGE SELECTOR (S101)	AKX1004
⚠	86	VOLTAGE SELECTOR (S102)	AKX−507
⚠	87	POWER TRANSFORMER (T2001)	ATS1319
	88	BATTERY COVER	AZN1846
	89	MIC BALANCE ASSEMBLY	
	90	1 MECHA ASSEMBLY	
	91	2 MECHA ASSEMBLY	
	92	SCREW	BBZ30P060FZK

Packing



Exterior



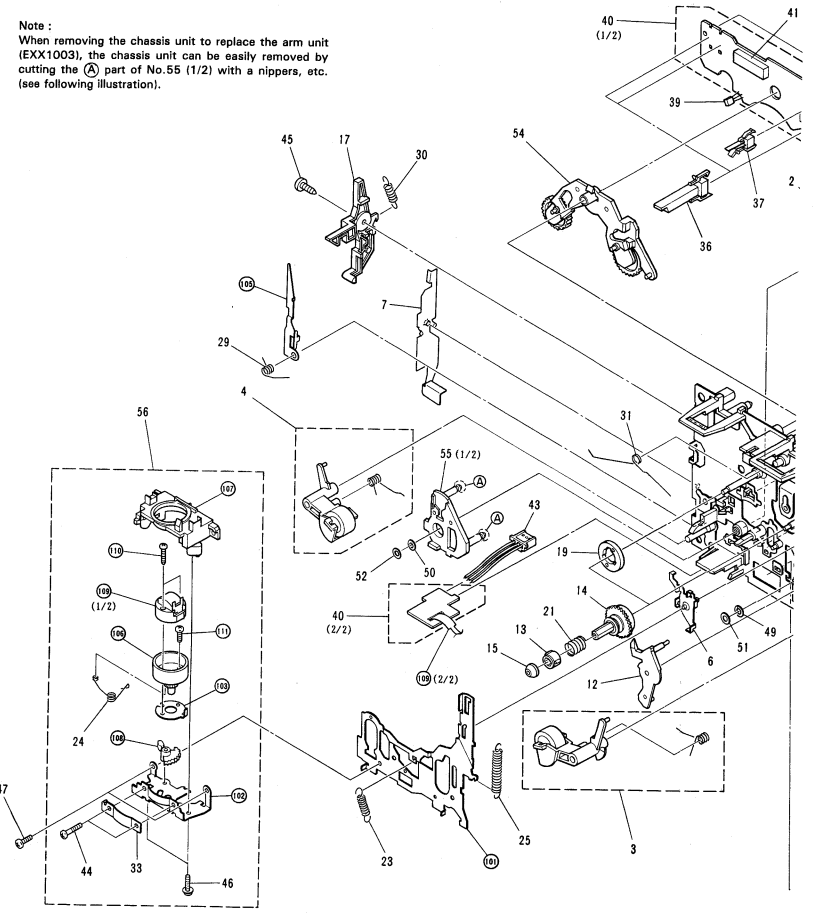

Refer to page 6.
Refer to page 9.

1.2 1 MECHA UNIT (EXK2020)

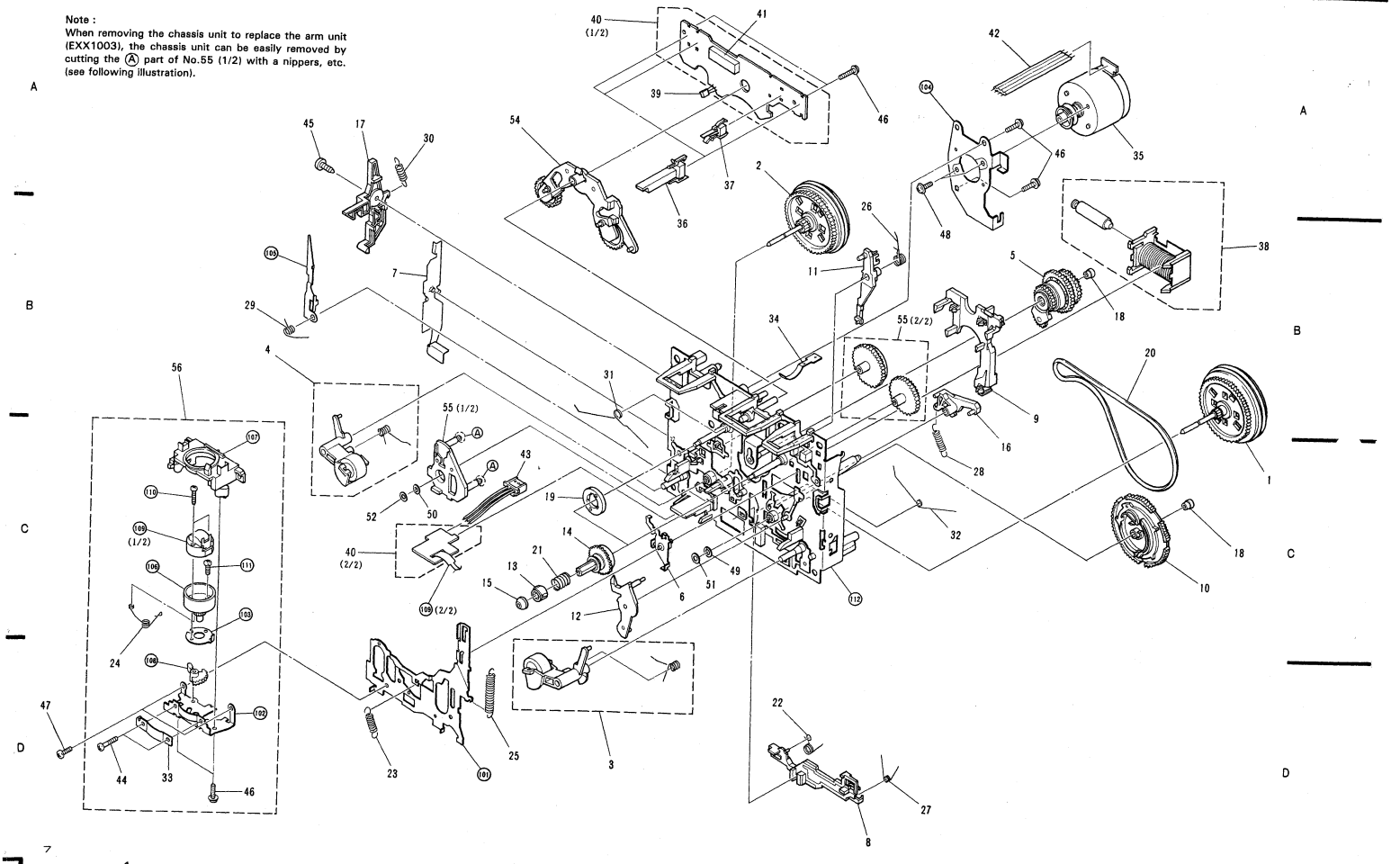
Parts list of 1 Mecha unit

Mark	No.	Description	Parts No.
	1	FLYWHEEL UNIT (FWD)	EXA1102
	2	FLYWHEEL UNIT (RVS)	EXA1103
	3	ROLLER UNIT (FWD)	EXA1104
	4	ROLLER UNIT (RVS)	EXA1105
	5	LIMITER UNIT	EXA1106
	6	LEVER UNIT	EXA1107
	7	ARM	AZN2063
	8	NR LEVER	ENV1155
	9	BRAKE	ENV1157
	10	CAM GEAR	ENV1158
	11	LOCK ARM	ENV1159
	12	NR ARM	ENV1163
	13	REEL COLLAR	ENV1164
	14	REEL	ENV1170
	15	REEL BUSH	ENV1178
	16	ARM	ENV1181
	17	ARM	AZN2069
	18	BUSH	ENV1184
	19	MAGNET	ENV1185
	20	BELT	ENT1015
	21	SPRING	EBH1201
	22	SPRING	EBH1202
	23	SPRING	EBH1203
	24	SPRING	EBH1204
	25	SPRING	EBH1208
	26	SPRING	EBH1209
	27	SPRING	EBH1210
	28	SPRING	EBH1211
	29	SPRING	EBH1255
	30	SPRING	EBH1213
	31	SPRING	EBH1220
	32	SPRING	EBH1256
	33	SPRING	EBL1013
	34	SPRING	EBL1014
	35	MOTOR UNIT	EXA1108
	36	SWITCH (Detect)	ESN1003
	37	SWITCH (Mode)	ESN1004
	38	SOLENOID	EXP1005
	39	HALL IC	DN6847SE
	40	P.C.BOARD	ENX1002
	41	CONNECTOR	EKS1013
	42	LEAD WIRE	EDD1003
	43	CONNECTOR	EDE1009
	44	SCREW	EBA1020
	45	SCREW	EBA1021
	46	SCREW (M2×8)	ATZ20P080FMC
	47	SCREW	BSZ20P050FMC
	48	SCREW	PMS26P025FCU
	49	WASHER	EBF1008
	50	WASHER	EBF1009
	51	WASHER	EBF1010
	52	WASHER	EBF1011
	53	.....	.....
	54	ARM UNIT	EXX1002
	55	ARM UNIT	EXX1003
	56	P HEAD ASSEMBLY	EXX1005
	101	HEAD BASE	
	102	BRACKET	
	103	PLATE	
	104	BRACKET	
	105	ARM	
	106	HOLDER	
	107	HOLDER	
	108	GEAR	
	109	P HEAD UNIT	
	110	SCREW	
	111	SCREW	
	112	CHASSIS UNIT	

Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).



Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).

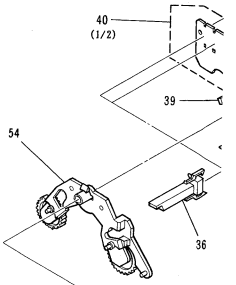


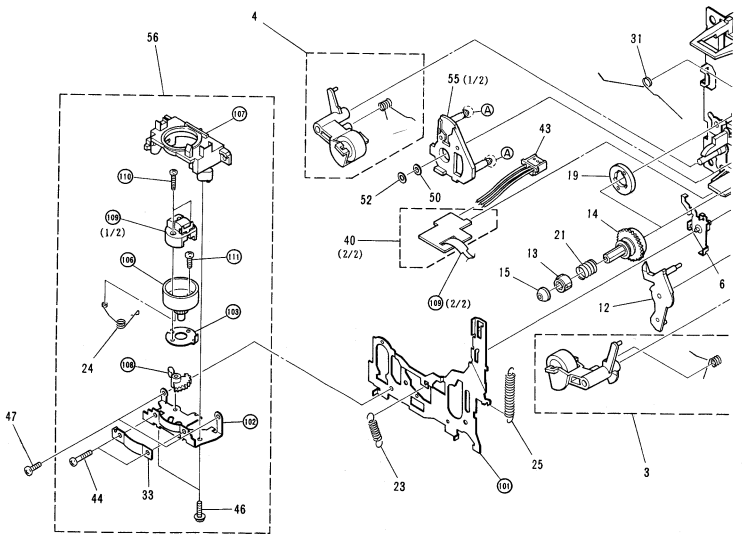
1.3 2 MECHA UNIT (EXK2010)

Parts list of 2 Mecha unit

Mark	No.	Description	Parts No.
	1	FLYWHEEL UNIT (FWD)	EXA1102
	2	FLYWHEEL UNIT (RVS)	EXA1103
	3	ROLLER UNIT (FWD)	EXA1104
	4	ROLLER UNIT (RVS)	EXA1105
	5	LIMITER UNIT	EXA1106
	6	LEVER UNIT	EXA1107
	7	ARM	AZN2064
	8	NR LEVER	ENV1155
	9	BRAKE	ENV1157
	10	CAM GEAR	ENV1158
	11	LOCK ARM	ENV1159
	12	NR ARM	ENV1163
	13	REEL COLLAR	ENV1164
	14	REEL	ENV1170
	15	REEL BUSH	ENV1178
	16	ARM	ENV1181
	17	ARM	AZN2070
	18	BUSH	ENV1184
	19	MAGNET	ENV1185
	20	BELT	ENT1015
	21	SPRING	EBH1201
	22	SPRING	EBH1202
	23	SPRING	EBH1203
	24	SPRING	EBH1204
	25	SPRING	EBH1208
	26	SPRING	EBH1209
	27	SPRING	EBH1210
	28	SPRING	EBH1211
	29	SPRING	EBH1254
	30	SPRING	EBH1213
	31	SPRING	EBH1220
	32	SPRING	EBH1256
	33	SPRING	EBL1013
	34	SPRING	EBL1014
	35	MOTOR UNIT	EXA1108
	36	SWITCH (Detect)	ESN1003
	37	SWITCH (Mode)	ESN1004
	38	SOLENOID	EXP1005
	39	HALL IC	DN6847SE
	40	P.C.BOARD	ENX1002
	41	CONNECTOR	EKS1012
	42	LEAD WIRE	EDD1003
	43	CONNECTOR	EDE1008
	44	SCREW	EBA1020
	45	SCREW	EBA1021
	46	SCREW (M2 × 8)	ATZ20P080FMC
	47	SCREW	BSZ20P050FMC
	48	SCREW	PMS26P025FCU
	49	WASHER	EBF1008
	50	WASHER	EBF1009
	51	WASHER	EBF1010
	52	WASHER	EBF1011
	53	.....	.....
	54	ARM UNIT	EXX1002
	55	ARM UNIT	EXX1003
	56	R/P HEAD ASSEMBLY	EXX1004
	101	HEAD BASE	
	102	BRACKET	
	103	PLATE	
	104	BRACKET	
	105	ARM	
	106	HOLDER	
	107	HOLDER	
	108	GEAR	
	109	R/P HEAD UNIT	
	110	SCREW	
	111	SCREW	
	112	CHASSIS UNIT	

Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).

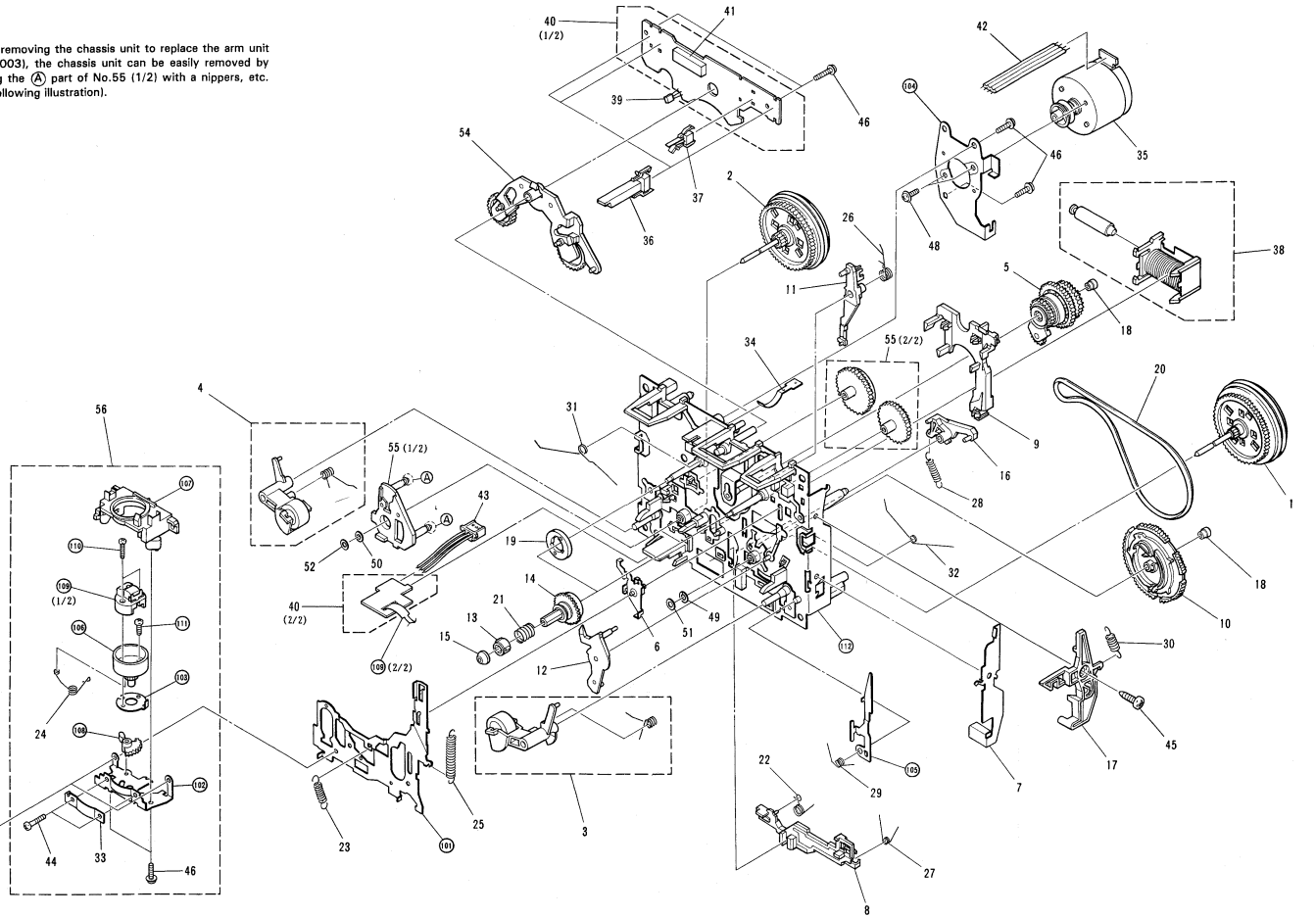




Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).

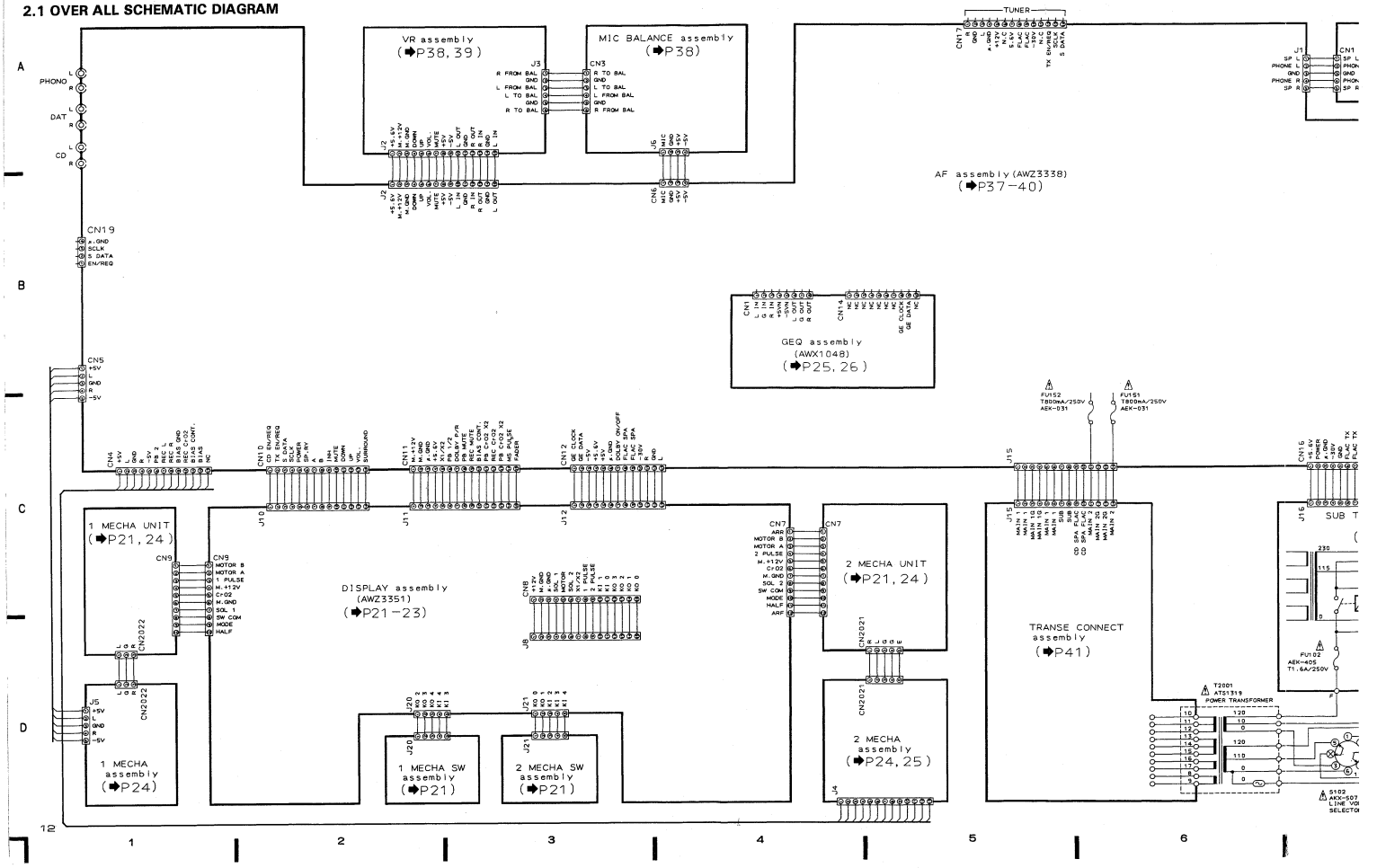
s No.

1010
1011
1002
1003
1004

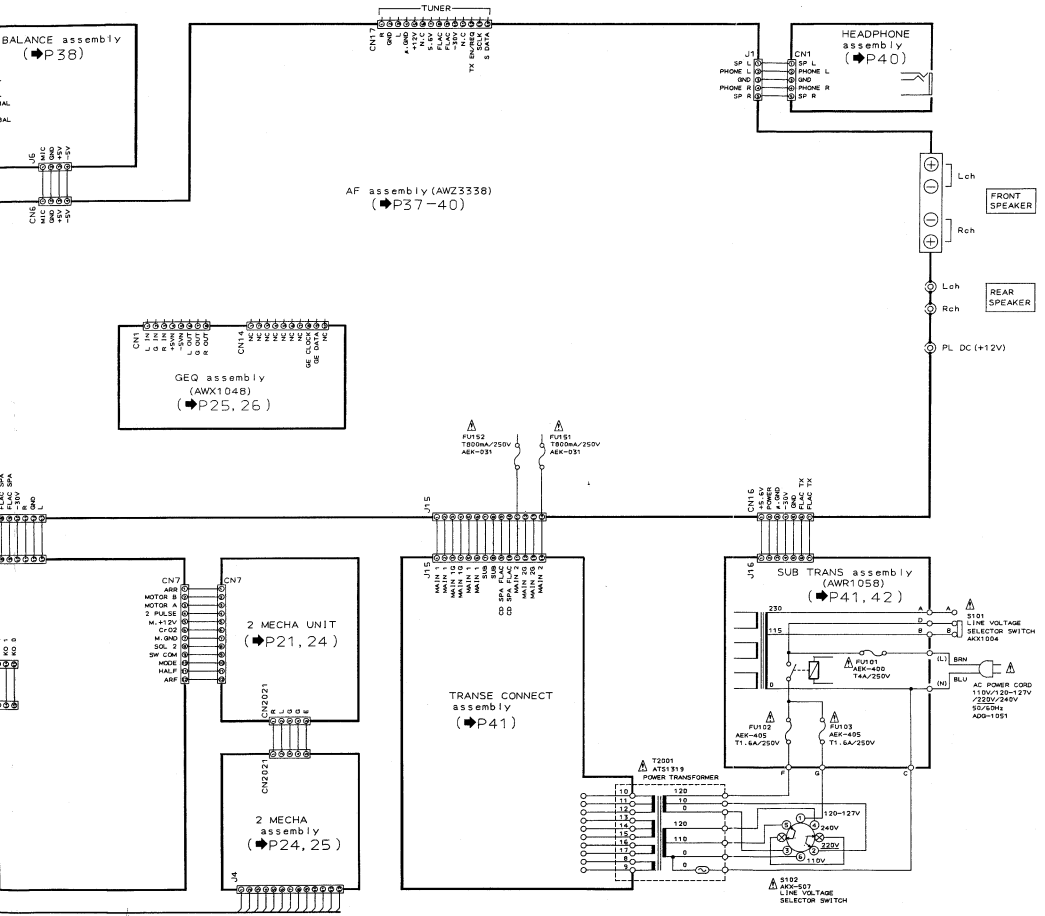


2. SCHEMATIC DIAGRAM AND P.C.BOARDS CONNECTION DIAGRAM

2.1 OVER ALL SCHEMATIC DIAGRAM



AM



1. RESISTORS:
Indicated in Ω, ¼W, ⅓W. ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
: Signal voltage at (45 W + 45 W 8Ω)output (1kHz)
: DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ 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.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

SWITCHES:

LINE VOLTAGE SELECTOR SWITCH
S101 AKX1004
S102 AKX-507

DISPLAY assembly
S1504 POWER
S1505 VIDEO
S1506 CD DIRECT
S1507 FADE/ZINE
S1510 AI MEMO
S1511 AI BGM
S1512 PHONO
S1513 2 REC MUTE
S1514 DISCO
S1516 SURR
S1517 TAPE
S1518 2 REC
S1519 X2 COPY
S1522 CD
S1523 TX
S1524 2 PAUSE
S1525 X1 COPY
S1528 DOLBY NR ON/OFF
S1529 COM-A-B
S1530 MILD
S1531 VIVID
S1532 PLAY
S1533 /D
S1534 /B
S1535 MEMOLY
S1536 DIGITAL SURR
S1537 EQ ON/OFF
S1538 LEVEL UP
S1539 F DOWN
S1540 WARM
S1541 SHARP
S1542 /E
S1543 /C
S1544 /A
S1546 PGM/PRESET
S1547 F UP
S1548 LEVEL DOWN
S1549 ACTIVE LOUNDNESS

1 MECH SW assembly
S1551 1 REV
S1552 1 PLAY
S1553 1 STOP
S1554 1 REW
S1555 1 FF

2 MECH SW assembly
S1556 2 STOP
S1557 2 REV
S1558 2 PLAY
S1559 2 REW
S1560 2 FF

This P.C.B. connection diagram is viewed from the foil side.

2.2 DISPLAY (AWZ3409), 1 MECHA SW, 2 MECHA SW assembly, 1 MECHA UNIT (EXK2020) and 2 MECHA UNIT (EXK2010)

2.2 DISPLAY (AWZ3409), 1 MECHA SW, 2 MECHA SW assembly, 1 MECHA UNIT (EXK2020) and 2 MECHA UNIT (EXK2010)

NOTE

1. The P.C.B connection diagram is viewed from the parts mounted side.
2. 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
0504 E C B	E C B or E C B	Transistor
0215		Radiator type transistor
0203	0203	Diode
R237	R237	Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

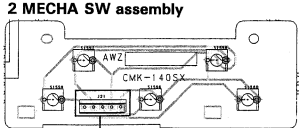
Others

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

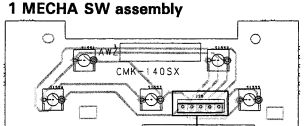
3. The capacitor terminal marked with ⊖(double circles) shows negative terminal.
4. The diode terminal marked with ⊖(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

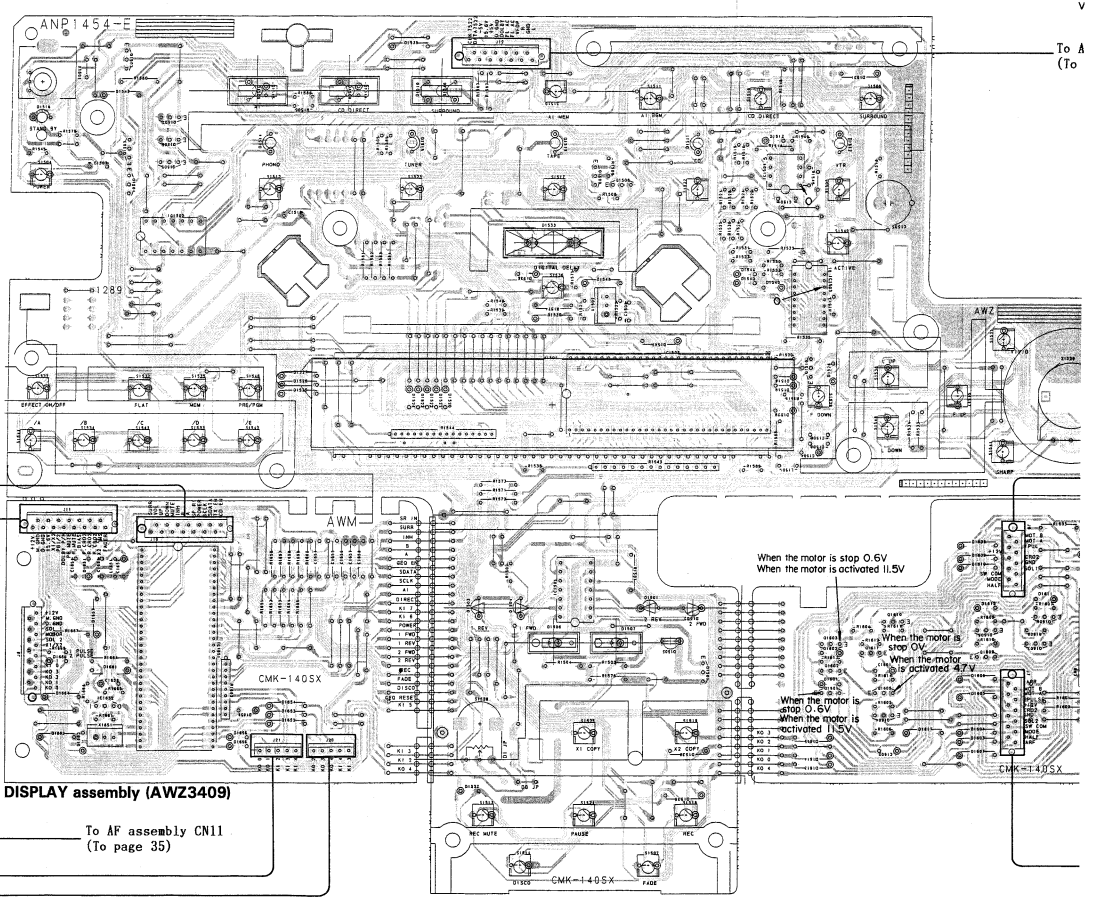
To AF assembly CN10 (To page 35)

2 MECHA SW assembly



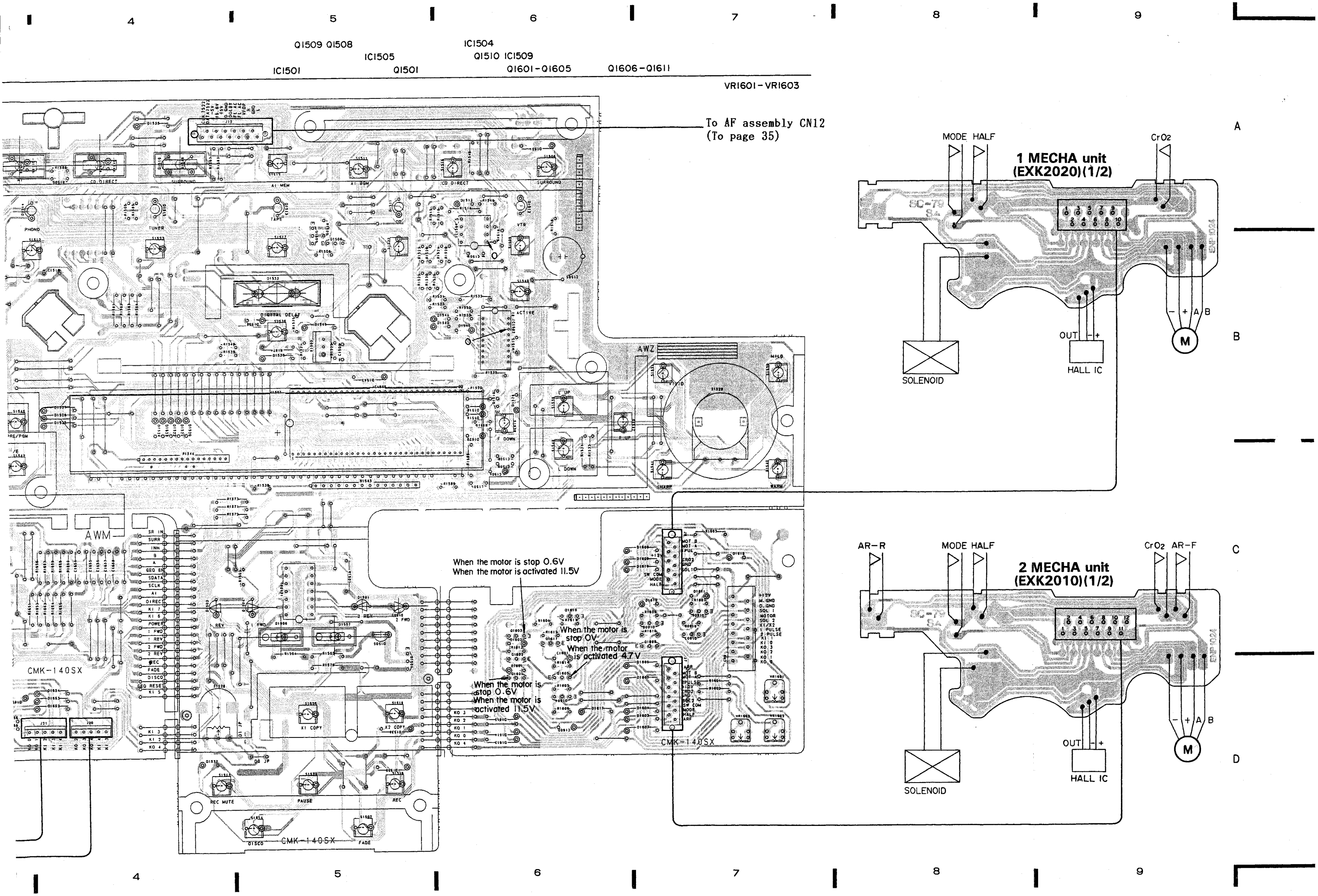
1 MECHA SW assembly



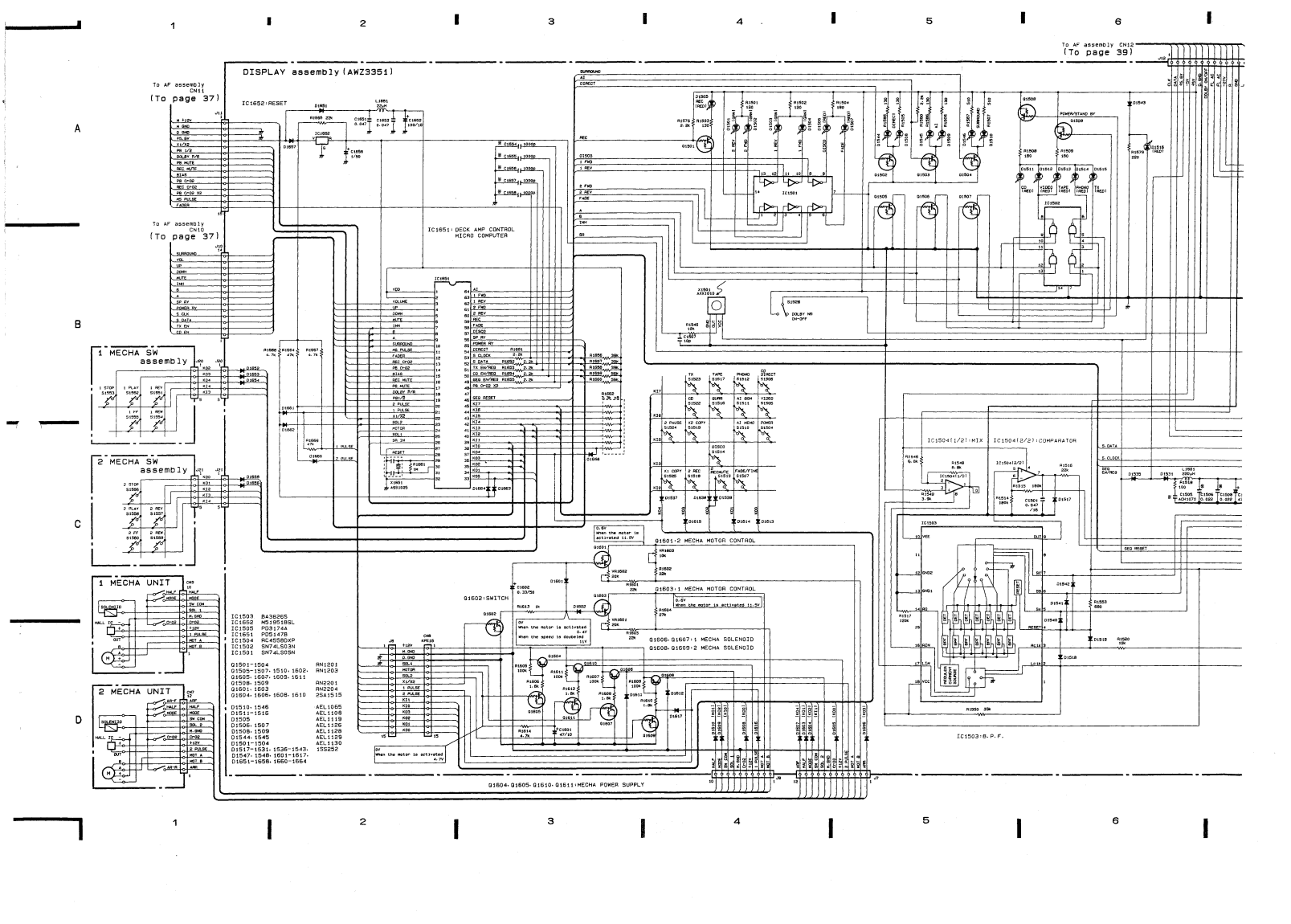


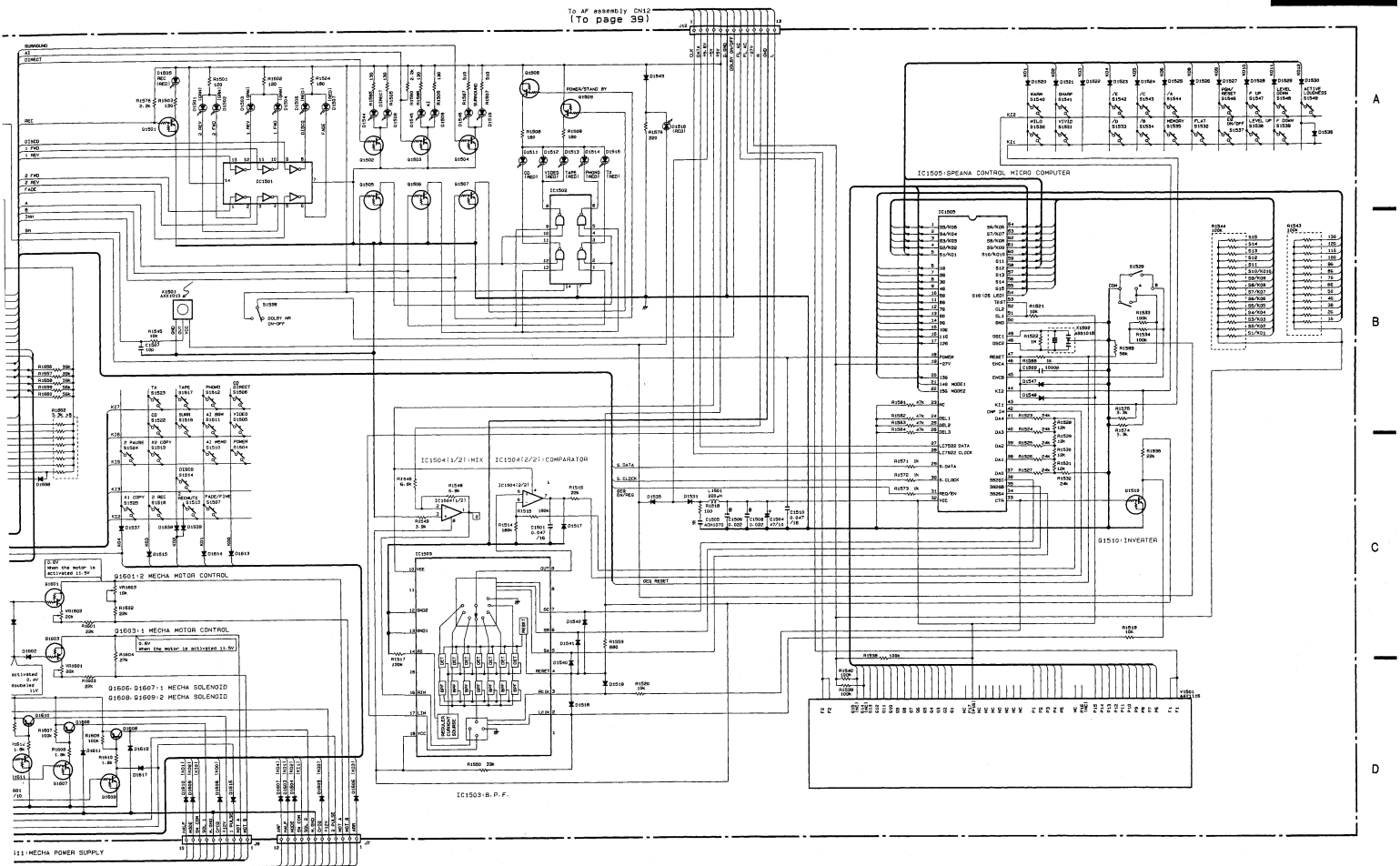
DISPLAY assembly (AWZ3409)

To AF assembly CN11 (To page 35)

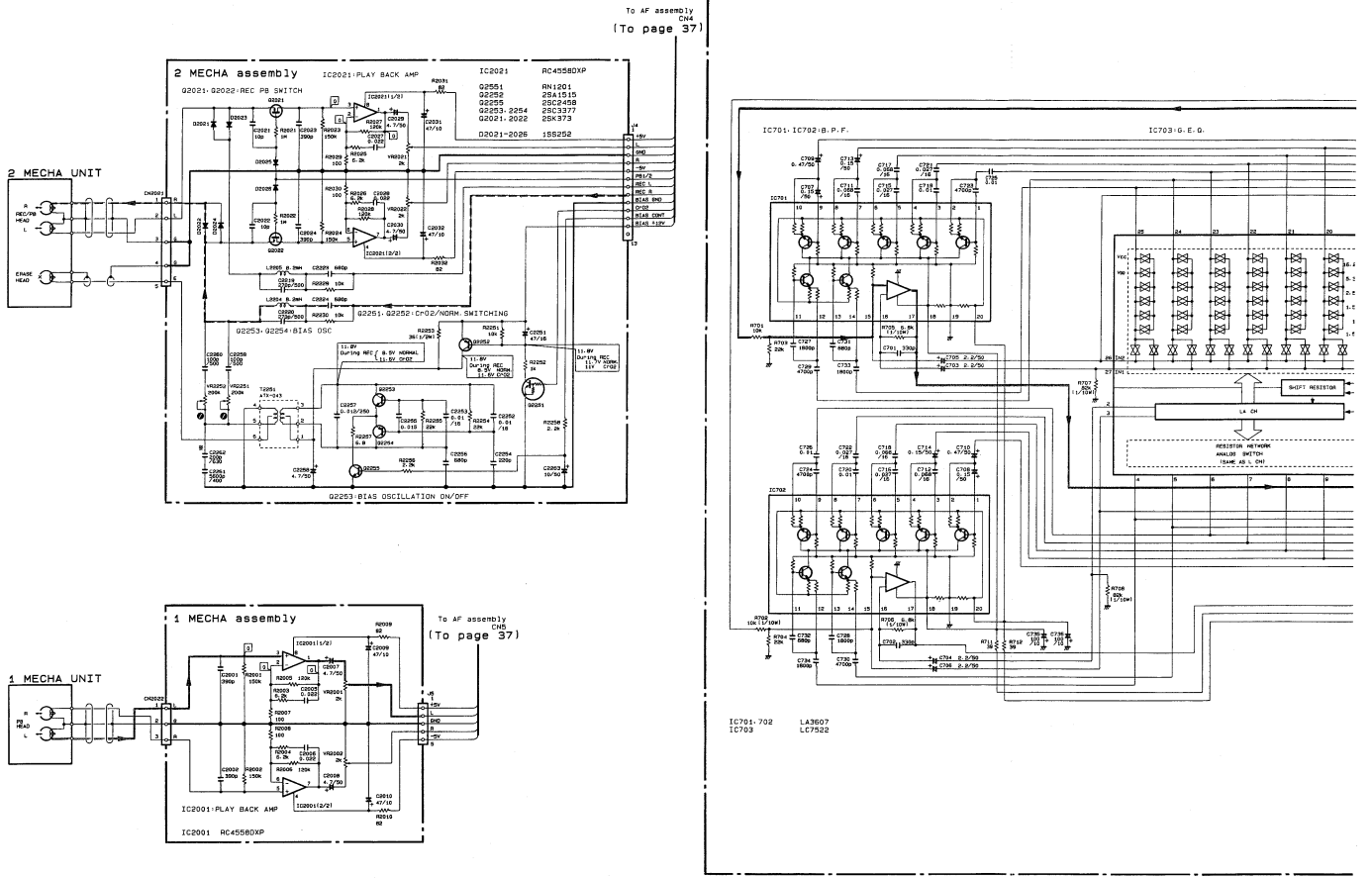


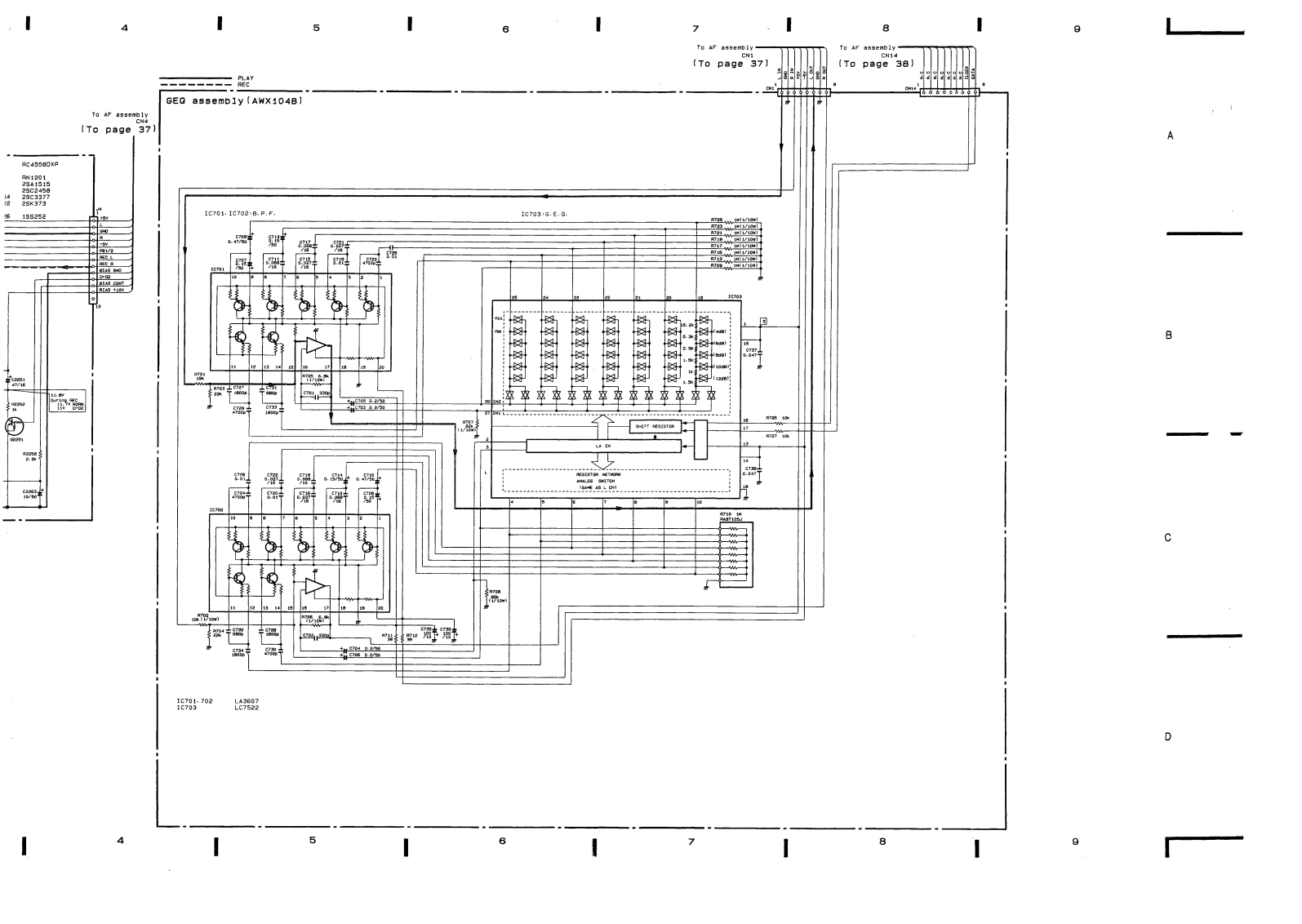
Q1509 Q1508
IC1505
IC1501
Q1501
IC1504
Q1510 IC1509
Q1601-Q1605
Q1606-Q1611
VR1601-VR1603
To AF assembly CN12
(To page 35)
1 MECHA unit
(EXK2020)(1/2)
MODE HALF
CrO2
SOLENOID
OUT
HALL IC
M
2 MECHA unit
(EXK2010)(1/2)
AR-R
MODE HALF
CrO2 AR-F
SOLENOID
OUT
HALL IC
M
AWZ
AWM
CMK-140SX
When the motor is stop 0.6V
When the motor is activated 11.5V
When the motor is stop 0V
When the motor is activated 4.7V
When the motor is stop 0.6V
When the motor is activated 11.5V
CMK-140SX
CMK-140SX


DISPLAY assembly (AWZ3351)
To AF assembly CN11 (To page 37)
To AF assembly CN10 (To page 37)
To AF assembly CN12 (To page 39)
IC1652:RESET
IC1651:DECK AMP CONTROL MICRO COMPUTER
1 MECHA SW assembly
2 MECHA SW assembly
1 MECHA UNIT
2 MECHA UNIT
Q1601·2:MECHA MOTOR CONTROL
Q1602:SWITCH
Q1603·1:MECHA MOTOR CONTROL
Q1606·Q1607·1:MECHA SOLENOID
Q1608·Q1609·2:MECHA SOLENOID
Q1604·Q1605·Q1610·Q1611:MECHA POWER SUPPLY
IC1504(1/2):MIX
IC1504(2/2):COMPARATOR
IC1503:B.P.F.
IC1503 BA3826S
IC1652 MB39189SL
IC1505 PQ317AA
IC1651 PQ5147B
IC1504 NJC4558DVP
IC1502 SN74LS03N
IC1501 SN74LS05N
Q1501·1504 RN1201
Q1505·1507·1510·1602 RN1203
Q1502·1506·1509·1511 RN2201
Q1601·1603 RN2204
Q1604·1606·1608·1610 2SA1515
D1519·1546 AEL1065
D1511·1516 AEL1108
D1505 AEL1119
D1506·1507 AEL1126
D1508·1509 AEL1128
D1544·1545 AEL1129
D1501·1504 AEL1130
D1517·1531·1536·1543·1547·1548·1601·1617·1651·1656·1660·1664 1SS252

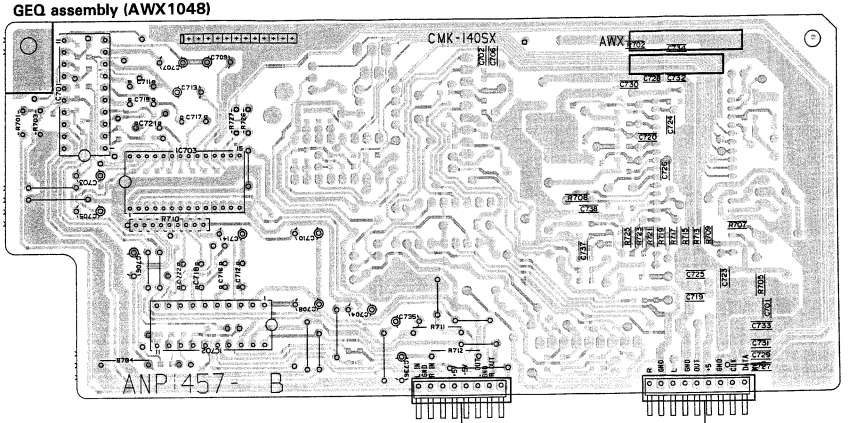

To AF assembly CN12
(To page 39)
IC1505:SPEANA CONTROL MICRO COMPUTER
IC1504(1/2):MIX
IC1504(2/2):COMPARATOR
IC1503:B.P.F.
Q1601:2 MECHA MOTOR CONTROL
Q1603:1 MECHA MOTOR CONTROL
Q1606·Q1607:1 MECHA SOLENOID
Q1608·Q1609:2 MECHA SOLENOID
i11:MECHA POWER SUPPLY
G1510:INVERTER
SURROUND
DIRECT
REC
2 FWD
2 REV
FADE
DOLBY NR ON-OFF
POWER/STAND BY
S.DATA
S.CLOCK
DCC RESET
When the motor is activated 11.5V
When the motor is activated 11.5V
activated 0.4V doubled 11V

2.3 GEQ (AWX1048), 1 MECHA and 2 MECHA assembly




PLAY
REC
GEQ assembly(AWX1048)
To AF assembly CN4 (To page 37)
To AF assembly CN1 (To page 37)
To AF assembly CN14 (To page 38)
IC701·IC702-B.P.F.
IC703-G.E.Q.
SHIFT REGISTOR
LA CH
RESISTOR NETWORK
ANALOG SWITCH
(SAME AS L CH)
IC701·702 LA3607
IC703 LC7522

GEQ assembly (AWX1048)



NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. 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
Q504	Q504 or	Transistor
Q215	Q215 or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	C513	Capacitor (Polarity)
C518	C518	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

3. The capacitor terminal marked with ⓒ(double circles) shows negative terminal.
4. The diode terminal marked with ⓓ(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

To AF assembly (To page 35)

To AF assembly (To page 35)

To AF assembly CN4 (To page 35)

To AF assembly CN5 (To page 35)

1 MECHA unit (EXK2020)(2/2)

HEAD

Rch

Lch

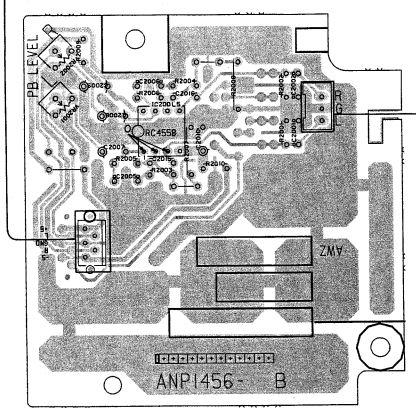
HEAD

E

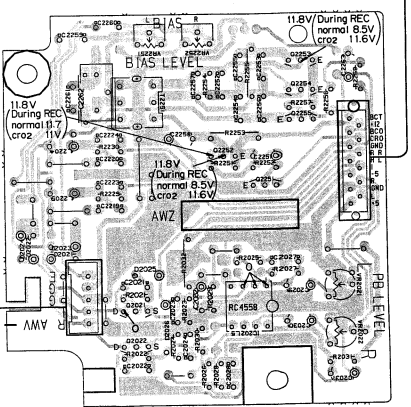
Rch

Lch

2 MECHA unit (EXK2010)(2/2)



1 MECHA assembly



2 MECHA assembly

GEO assembly (AWX1048)

To AF assembly CN4
(To page 35)

To AF assembly
(To page 35)

To AF assembly
(To page 35)

1 MECHA unit
(EXK2020)(2/2)

2 MECHA unit
(EXK2010)(2/2)

To AF assembly CN5
(To page 35)

1 MECHA assembly

2 MECHA assembly

To TRANS CONNECT assembly 115
(To page 43)
To DISPLAY assembly 110
(To page 18)
To MECHA assembly 14
(To page 28)
To GEO assembly
(To page 28)
To GEO assembly
(To page 28)
To IMECHA assembly 15
(To page 27)
To DISPLAY assembly 111
(To page 18)
VR assembly
MIC BALANCE assembly
0V
When the
remote control
is up 5V
0V
When the
remote control
is up 4.7V
0V
When the
remote control
is down 4.7V

2.4 AF (AWZ3338), HEAD PHONE, VR and MIC BALANCE assembly

2.4 AF (AWZ3338), HEAD PHONE, VR and MIC BALANCE assembly

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. 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
Q504		Transistor
Q215		Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513		Capacitor (Polarity)
C548		Capacitor (Non-polarity)

Others

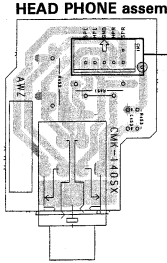
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

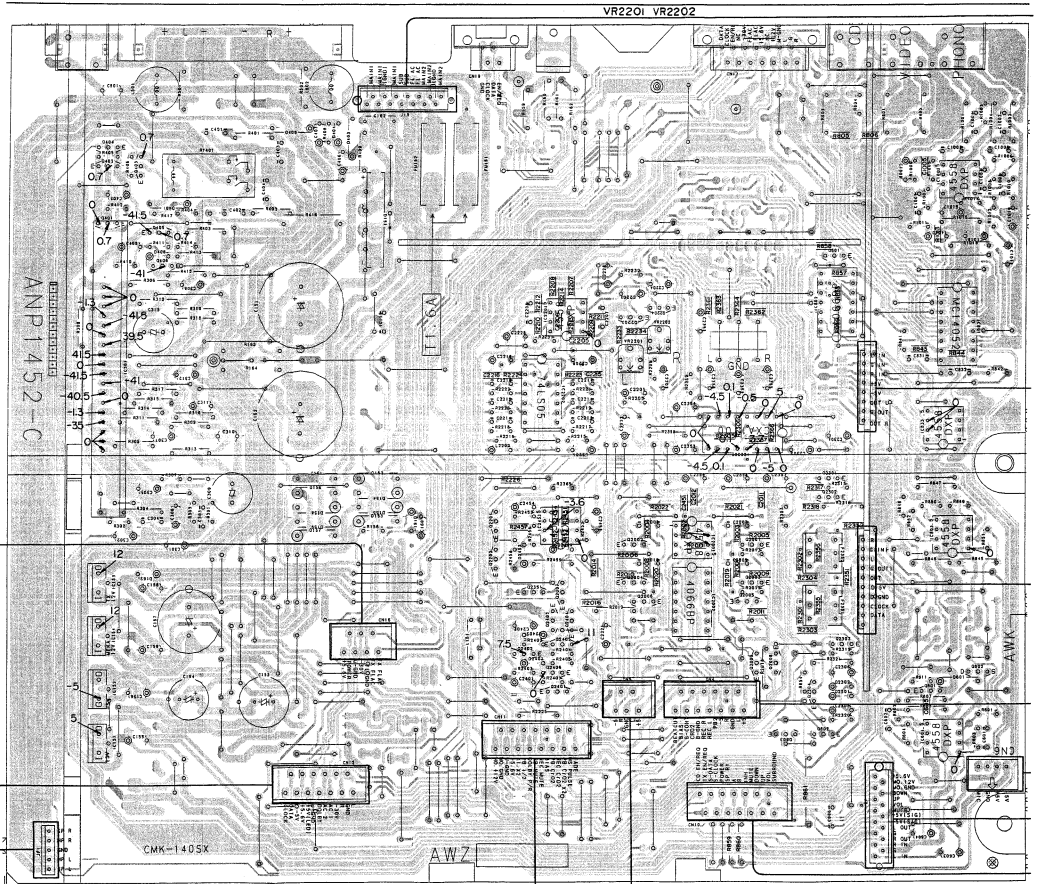
3. The capacitor terminal marked with ⊖(double circles) shows negative termianl.
4. The diode terminal marked with ⊖(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

To SUB TRANS assembly CN16
(To page 43)

To DISPLAY assembly J12
(To page 19)

HEAD PHONE assembly

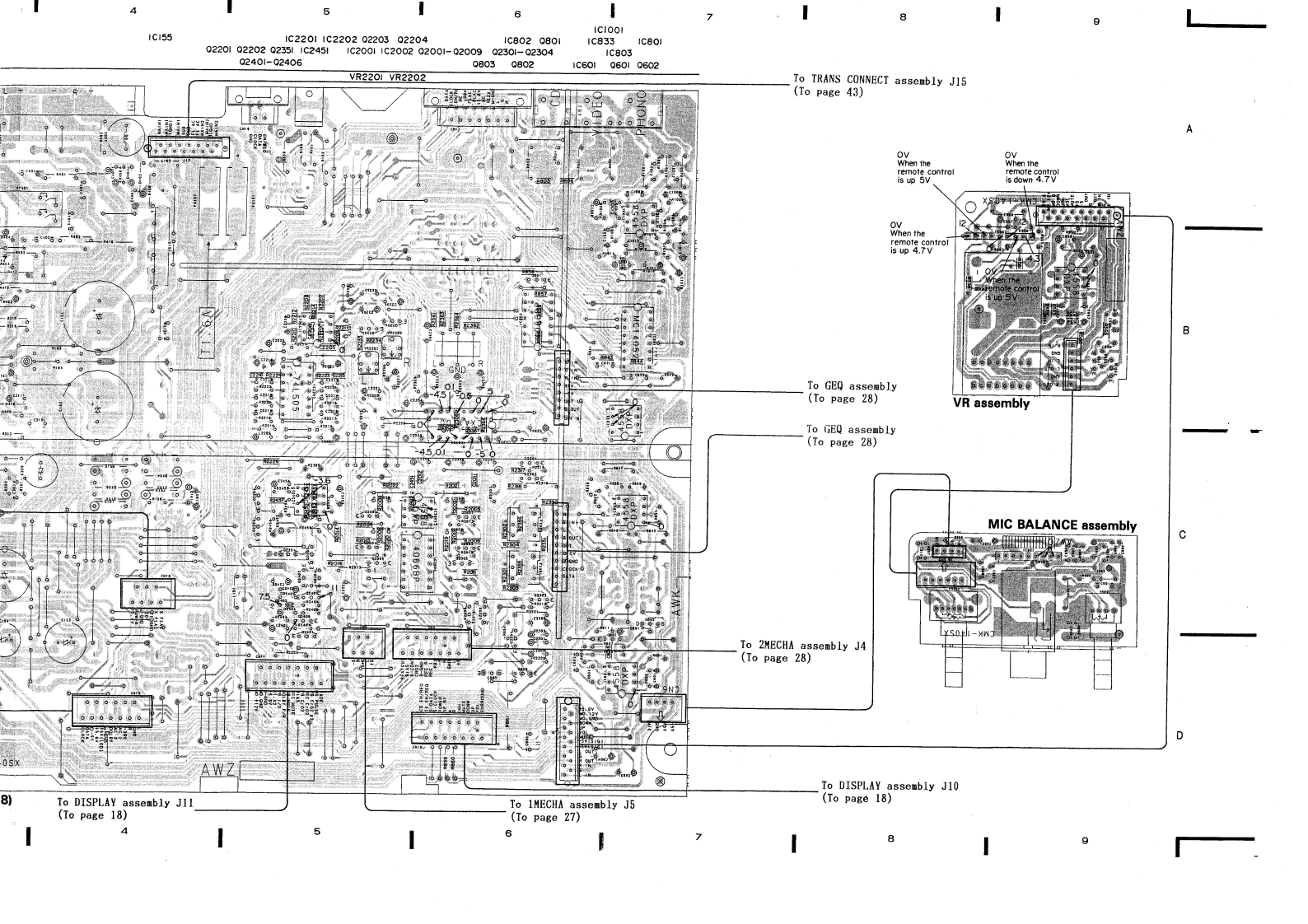


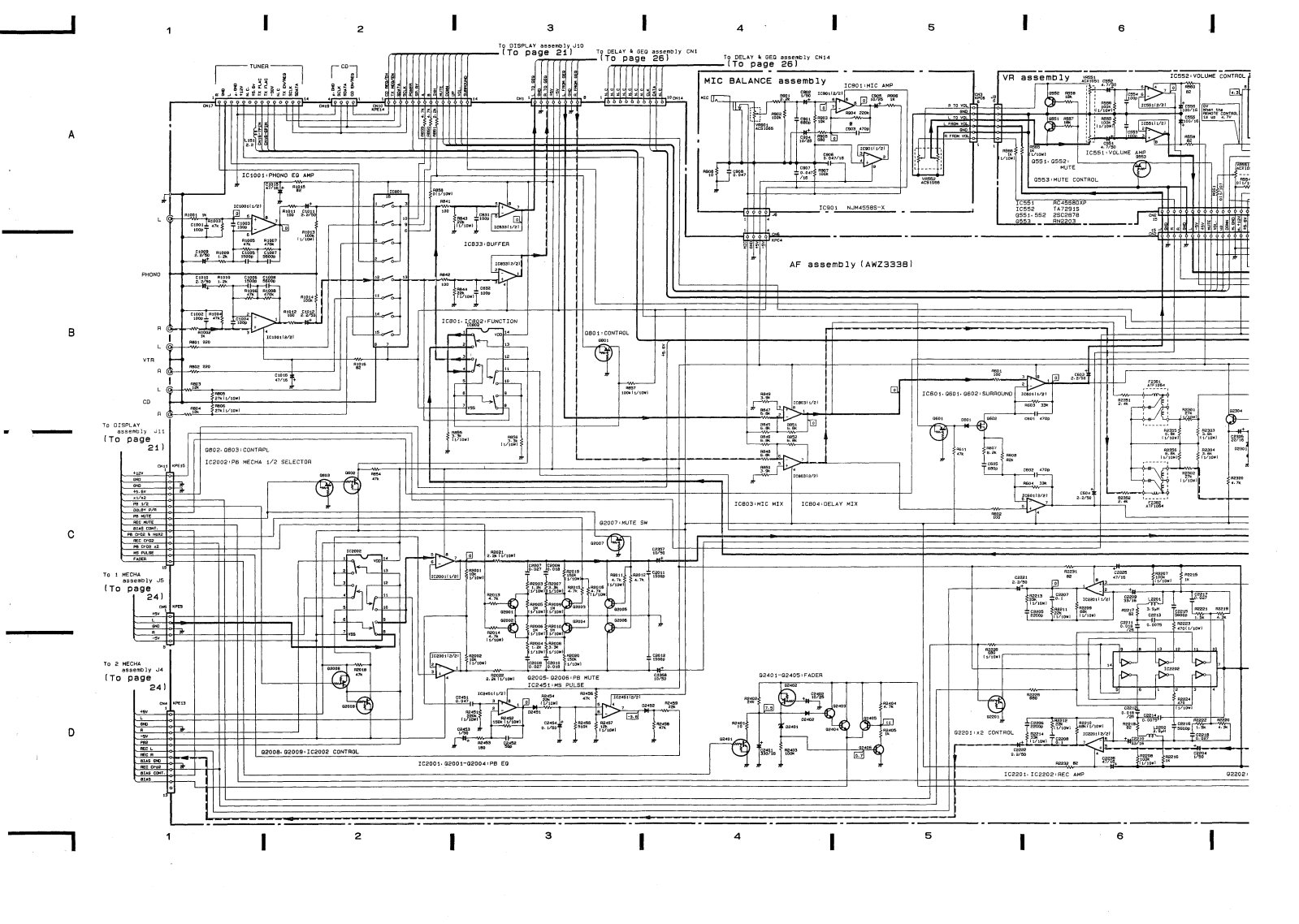


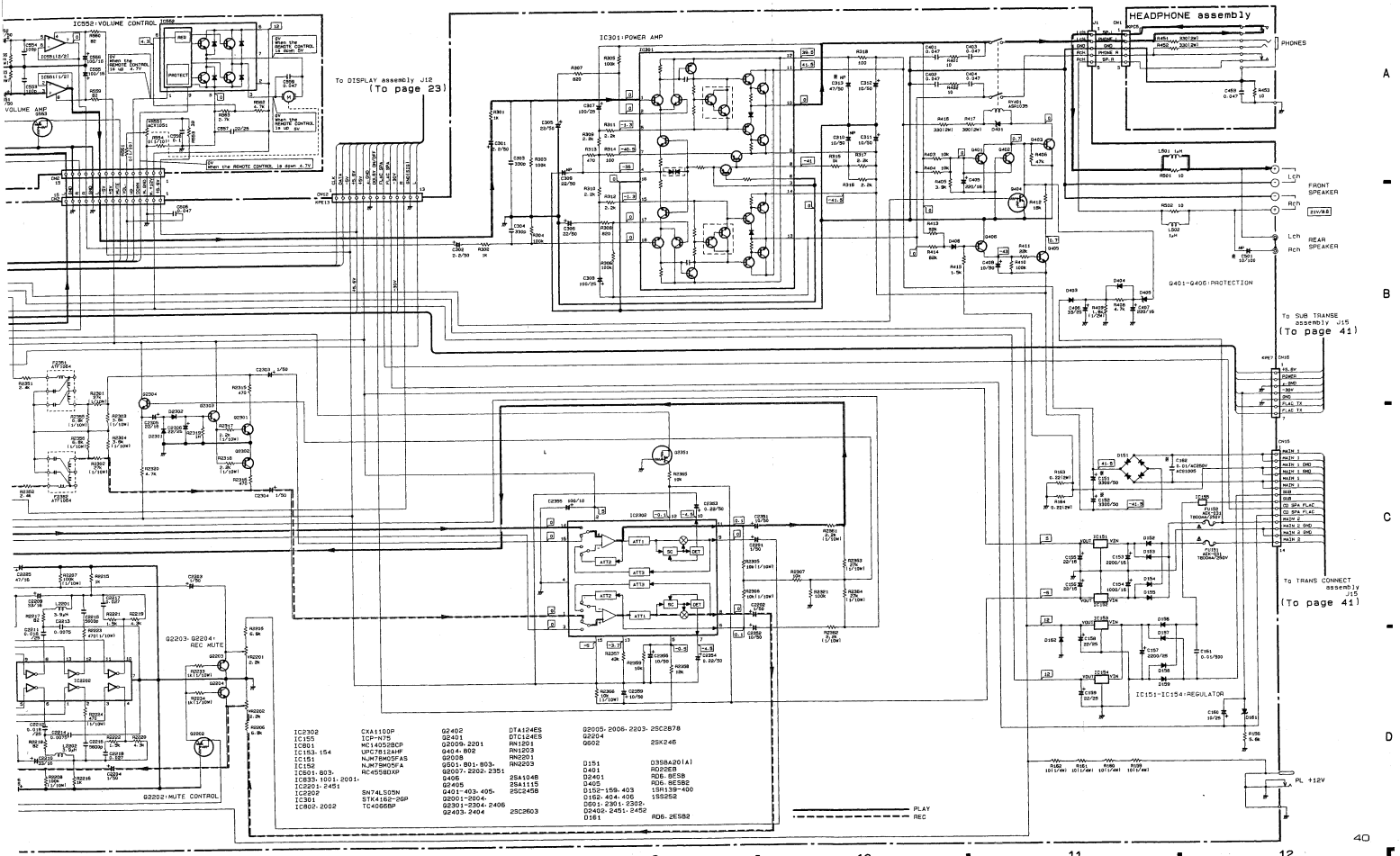
AF assembly (AWZ3338)

To DISPLAY assembly J11
(To page 18)

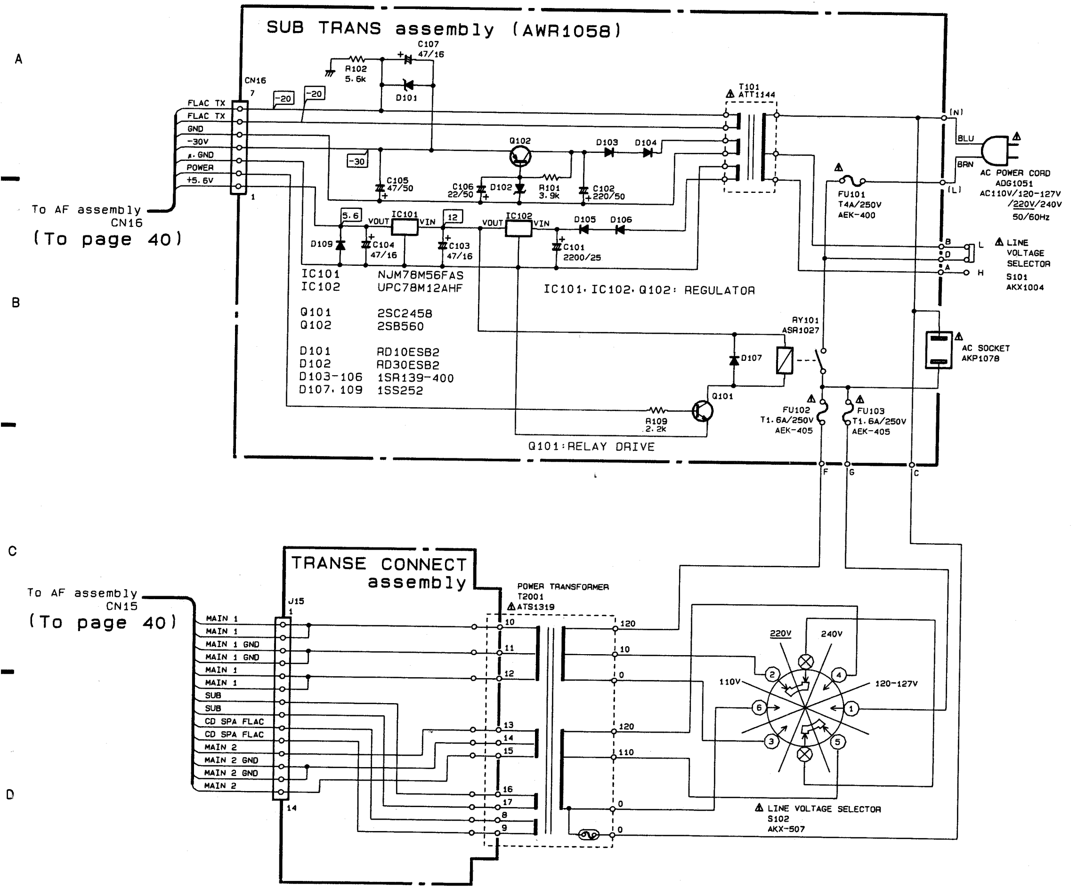
To MECHA assembly J5
(To page 27)


IC155
IC2201 IC2202 Q2203 Q2204
Q2201 Q2202 Q2351 IC2451
IC2001 IC2002 Q2001-Q2009 Q2301-Q2304
Q2401-Q2406
IC802 Q801
Q803 Q802
IC1001
IC833 IC801
IC803
IC601 Q601 Q602
VR2201 VR2202
To TRANS CONNECT assembly J15
(To page 43)
OV When the remote control is up 5V
OV When the remote control is down 4.7V
OV When the remote control is up 4.7V
OV When the remote control is up 5V
VR assembly
To GEQ assembly
(To page 28)
To GEQ assembly
(To page 28)
MIC BALANCE assembly
To 2MECHA assembly J4
(To page 28)
To DISPLAY assembly J10
(To page 18)
To DISPLAY assembly J11
(To page 18)
To 1MECHA assembly J5
(To page 27)
A
B
C
D
4
5
6
7
8
9


To DISPLAY assembly J10 (To page 21)
To DELAY & SEQ assembly CN1 (To page 26)
To DELAY & SEQ assembly CN14 (To page 26)
MIC BALANCE assembly
IC901:MIC AMP
IC901 NJM4558S-X
VR assembly
IC552:VOLUME CONTROL
IC551:VOLUME AMP
Q551・Q552: MUTE
Q553:MUTE CONTROL
IC551 RC4558DXP
IC552 T472915
Q551・552 2SC2878
Q553 RN2203
AF assembly (AWZ3338)
TUNER
CD
IC1001:PHONO EQ AMP
IC833:BUFFER
IC801:IC802:FUNCTION
Q801:CONTROL
IC801・Q801・Q802:SURROUND
IC803:MIC MIX
IC804:DELAY MIX
PHONO
VTR
CD
To DISPLAY assembly J11 (To page 21)
Q802・Q803:CONTAPL
IC2002:PB MECHA 1/2 SELECTOR
Q2007:MUTE SW
To 1 MECHA assembly J5 (To page 24)
To 2 MECHA assembly J4 (To page 24)
Q2005・Q2006:PB MUTE
IC2451:MS PULSE
Q2008・Q2009:IC2002 CONTROL
IC2001・Q2001・Q2004:PB EQ
Q2401・Q2405:FADER
Q2201:x2 CONTROL
IC2201・IC2202:REC AMP
Q2202


IC552:VOLUME CONTROL
VOLUME AMP
To DISPLAY assembly J12
(To page 23)
IC301:POWER AMP
HEADPHONE assembly
PHONES
FRONT SPEAKER
REAR SPEAKER
Q401-Q406:PROTECTION
To SUB TRANSE assembly J15
(To page 41)
To TRANS CONNECT assembly J15
(To page 41)
IC151-IC154:REGULATOR
PL +12V
Q2203-Q2204:MUTE
Q2202:MUTE CONTROL
IC2302 CXA1100P
IC155 ICP-N78
IC801 MC14053BCP
IC153.154 UPC7812AHF
IC151 NJM78M05FAS
IC152 NJM79M05FA
IC601.803 RC4558NXP
IC833.1001.2001.
IC2201.2451
IC2202 SN74LS05N
IC301 STK4162-20P
IC802.2002 TC4066BP
Q2402 DTA124ES
Q2403 DTC124ES
Q2009.2201 RN1201
Q404.802 RN1203
Q2008 RN2201
Q501.801.803. RN2203
Q2007.2202.2351
Q405 2SA1048
Q2405 2SA1115
Q401-403.405. 2SC2458
Q2001-2004.
Q2301-2304.2406
Q2403.2404 2SC2603
Q2005.2006.2203. 2SC2878
Q2204
Q602 2SK246
D151 D35BA20(A)
D401 RD22EB
D2401 RD6.8ESB
D405 RD6.8ES82
D152-159.403 1SR139-400
D162-404.406 1SS252
D601-2301-2302.
D2402-2451-2452
D161 RD6.2ES82
PLAY
REC

2.5 SUB TRANS (AWR1058) and TRANS CONNECT assembly



NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. 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.

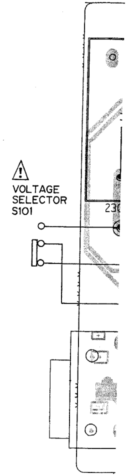
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

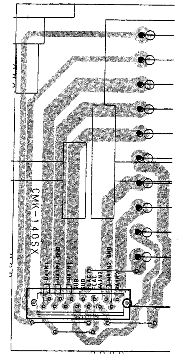
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

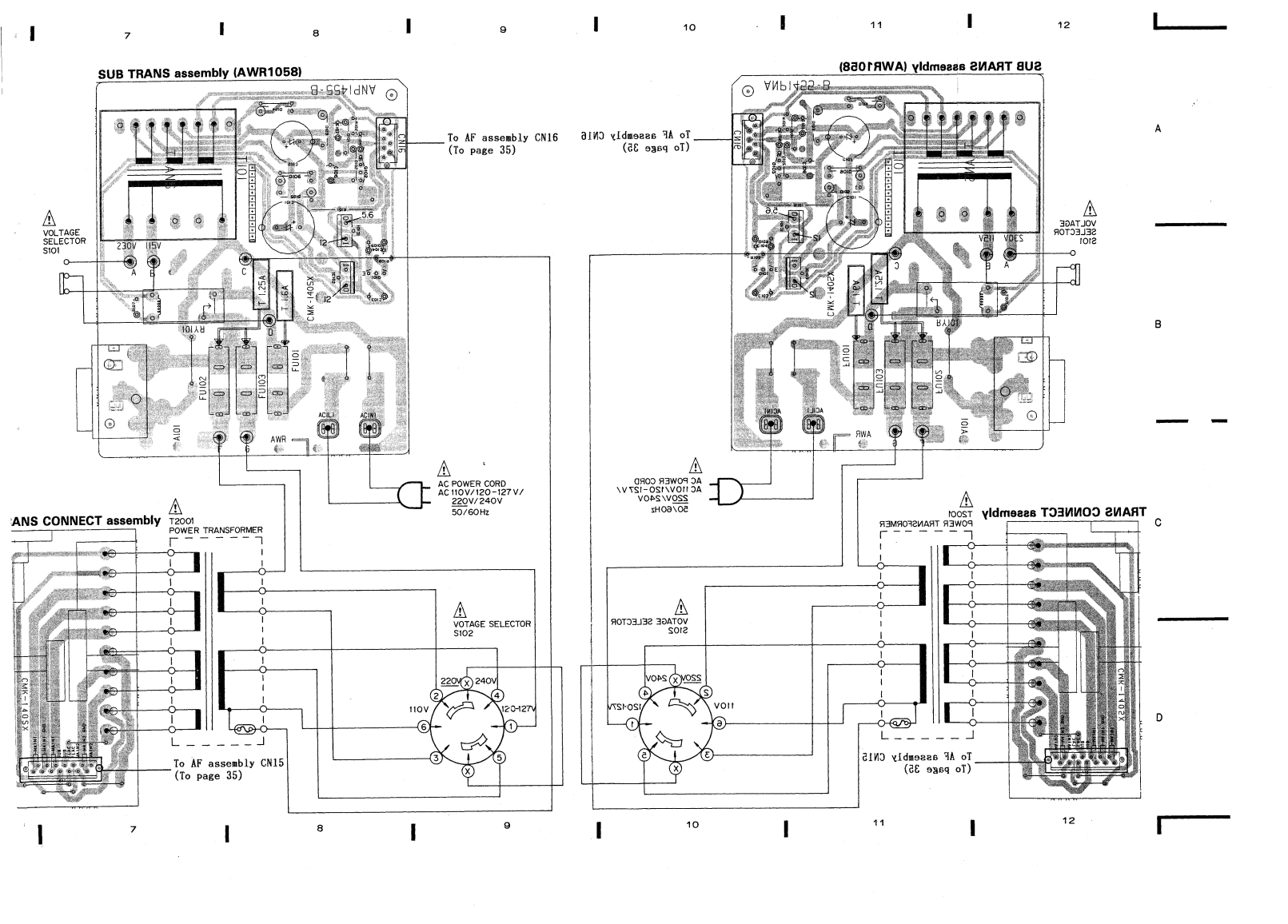
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

SUB



TRANS CONNECT asse




SUB TRANS assembly (AWR1058)
To AF assembly CN16
(To page 35)
VOLTAGE
SELECTOR
S101
230V
115V
AC POWER CORD
AC 110V/120-127V/
220V/240V
50/60Hz
TRANS CONNECT assembly
T2001
POWER TRANSFORMER
VOTAGE SELECTOR
S102
220V
240V
110V
120-127V
To AF assembly CN15
(To page 35)
SUB TRANS assembly (AWR1058)
To AF assembly CN16
(To page 35)
VOLTAGE
SELECTOR
S101
230V
115V
AC POWER CORD
AC 110V/120-127V/
220V/240V
50/60Hz
TRANS CONNECT assembly
T2001
POWER TRANSFORMER
VOTAGE SELECTOR
S102
220V
240V
110V
120-127V
To AF assembly CN15
(To page 35)

3. P.C.B 's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ 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.*
- *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 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

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

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Mark No.	Description	Parts No.
◉ AF assembly (AWZ3338)		
SEMICONDUCTORS		
IC1001	OP−AMP IC	RC4558DXP
IC151	REGULATOR IC	NJM78M05FAS
IC152	REGULATOR IC	NJM79M05FA
IC153, 154	REGULATOR IC	UPC7812AHF
IC155	IC PROTECTOR	ICP−N75
IC2001	OP−AMP IC	RC4558DXP
IC2002	LOGIC IC	TC4066BP
IC2201	OP−AMP IC	RC4558DXP
IC2202	LOGIC IC	SN74LS05N
IC2302	DOLBY−B IC	CXA1100P
IC2451	OP−AMP IC	RC4558DXP
IC301	AUDIO IC	STK4162−2GP
IC601	OP−AMP IC	RC4558DXP
IC801	LOGIC IC	MC14052BCP
IC802	LOGIC IC	TC4066BP
IC803, 833	OP−AMP IC	RC4558DXP
Q2001−2204	TRANSISTOR	2SC2458
Q2005, 2006	TRANSISTOR	2SC2878
Q2007	TRANSISTOR	RN2203
Q2008	TRANSISTOR	RN2201
Q2009, 2201	TRANSISTOR	RN1201
Q2202	TRANSISTOR	RN2203
Q2203, 2204	TRANSISTOR	2SC2878
Q2301−2304	TRANSISTOR	2SC2458
Q2351	TRANSISTOR	RN2203
Q2401	TRANSISTOR	DTC124ES
Q2402	TRANSISTOR	DTA124ES
Q2403, 2404	TRANSISTOR	2SC2603
Q2405	TRANSISTOR	2SA1115
Q2406	TRANSISTOR	2SC2458
Q401−403	TRANSISTOR	2SC2458
Q404	TRANSISTOR	RN1203
Q405	TRANSISTOR	2SC2458
Q406	TRANSISTOR	2SA1048
Q901	TRANSISTOR	RN2203
Q602	N−FET	2SK246
Q801	TRANSISTOR	RN2203
Q802	TRANSISTOR	RN1203
Q803	TRANSISTOR	RN2203
D151	DIODE	D3SBA20 (A)
D152−159	DIODE	1SR139−400
D161	ZENER DIODE	RD6.2ESB2
D162	DIODE	1SS252
D2301, 2302	DIODE	1SS252
D2401	ZENER DIODE	RD6.8ESB
D2402	DIODE	1SS252
D2451, 2452	DIODE	1SS252
D401	ZENER DIODE	RD22EB
D403	DIODE	1SR139−400
D404	DIODE	1SS252
D405	ZENER DIODE	RD6.8ESB2
D406, 601	DIODE	1SS252
RELAY		
RY401	RELAY	ASR1035
COILS		
F2351, 2352	DOLBY FILTER	ATF1064
L151	AXIAL INDUCTOR	LAU2R2K
L2201, 2202	INDUCTOR	LTA392J
L501, 502	COIL	ATH−133
CAPACITORS		
C1001−1004	CERAMIC CAPACITOR	CCCSL101J50
C1005	CERAMIC CAPACITOR	CKSQYB152K50
C1006	CERAMIC CAPACITOR	CKDYB152K50
C1007, 1008	CERAMIC CAPACITOR	CKDYB562K50

Mark No.	Description	Parts No.
C1009－1012	ELECTR.CAPACITOR	CEAS2R2M50
C1015, 1016	ELECTR.CAPACITOR	CEAS470M16
C151, 152	ELECTROLYTIC CAPACIT (3300/50)	ACH1017
C153	ELECTR.CAPACITOR	CEAS222M16
C154	ELECTR.CAPACITOR	CEAS102M16
C155, 156	ELECTR.CAPACITOR	CEAS220M16
C157	ELECTR.CAPACITOR	CEAS222M25
C158, 159	ELECTR.CAPACITOR	CEAS220M25
C160	ELECTR.CAPACITOR	CEAS100M25
C161	CERAMIC CAPACITOR	CKDYB103K500
C162	CKA (0.01/AC250V)	ACG1005
C2007, 2008	MYLOR FILM CAPACITOR	CQMA273J50
C2009, 2010	MYLOR FILM CAPACITOR	CQMA183J50
C2011, 2012	CERAMIC CAPACITOR	CKSQYB152K50
C2201－2204	ELECTR.CAPACITOR	CEAS010M50
C2205, 2206	CHIP CAPACITOR	CKSQYB222K50
C2207, 2208	AUDIO FILM CAPACITOR	CFTXAF04J50
C2209, 2210	ELECTR.CAPACITOR	CEAS330M16
C2211, 2212	CERAMIC CAPACITOR	CKCYX183M25
C2213, 2214	MYLOR FILM CAPACITOR	CQMA752J50
C2215, 2216	CERAMIC CAPACITOR	CKSQYB562K50
C2217, 2218	MYLOR FILM CAPACITOR	CQMA273J50
C2221, 2222	ELECTR.CAPACITOR	CEAS2R2M50
C2225, 2226	ELECTR.CAPACITOR	CEAS470M16
C2303, 2304	ELECTR.CAPACITOR	CEAS010M50
C2305	ELECTR.CAPACITOR	CEAS220M16
C2306	ELECTR.CAPACITOR	CEAS220M25
C2351, 2352	ELECTR.CAPACITOR	CEAS100M50
C2353, 2354	ELECTR.CAPACITOR	CEASR22M50
C2355	ELECTR.CAPACITOR	CEAS101M10
C2356－2359	ELECTR.CAPACITOR	CEAS100M50
C2401	ELECTR.CAPACITOR	CEAS331M16
C2402	ELECTR.CAPACITOR	CEAS100M25
C2451	CERAMIC CAPACITOR	CKSQYB473K50
C2452	CERAMIC CAPACITOR	CCSQCH560J50
C2453	ELECTR.CAPACITOR	CEAS010M50
C2454	ELECTR.CAPACITOR	CEAS0R1M50
C301, 302	ELECTR.CAPACITOR	CEAS2R2M50
C303, 304	CERAMIC CAPACITOR	CKMYB331K50
C305, 306	ELECTR.CAPACITOR	CEAS220M50
C307, 308	ELECTR.CAPACITOR	CEAS101M25
C309	ELECTR.CAPACITOR	CEANP220M50
C310	ELECTR.CAPACITOR	CEANP100M50
C311, 312	ELECTR.CAPACITOR	CEAS100M50
C313	ELECTROLYTIC CAPACIT (47/50)	ACH1143
C401－404	CERAMIC CAPACITOR	CKCYF473Z50

Mark No.	Description	Parts No.
C405	ELECTR.CAPACITOR	CEAS221M16
C406	ELECTR.CAPACITOR	CEAS330M25
C407	ELECTR.CAPACITOR	CEAS221M16
C408	ELECTR.CAPACITOR	CEAS100M50
C501	ELECTR.CAPACITOR (10/100)	ACH1144
C601, 602	CERAMIC CAPACITOR	CKMYB471K50
C603, 604	ELECTR.CAPACITOR	CEAS2R2M50
C605	CERAMIC CAPACITOR	CKSQYB681K50
C606	CERAMIC CAPACITOR	CKCYF473Z50
C831, 832	CERAMIC CAPACITOR	CCCSL101J50
RESISTORS		
VR2201, 2202	VR	VRTB6VS222
R1013	CHIP RESISTOR	RS1/10S104J
R159－162	CARBON FILM RESISTOR	RD1/4PM100J
R163, 164	METAL OXIDE RESISTOR	RS2LMFR22J
R2001, 2002	CHIP RESISTOR	RS1/10S103J
R2003, 2004	CHIP RESISTOR	RS1/10S122J
R2005, 2006	CHIP RESISTOR	RS1/10S105J
R2007, 2008	CHIP RESISTOR	RS1/10S332J
R2009, 2010	CHIP RESISTOR	RS1/10S105J
R2011, 2014	CHIP RESISTOR	RS1/10S472J
R2016	CHIP RESISTOR	RS1/10S472J
R2019, 2020	CHIP RESISTOR	RS1/10S154J
R2021, 2022	CHIP RESISTOR	RS1/10S222J
R2207, 2208	CHIP RESISTOR	RS1/10S104J
R2209, 2210	CHIP RESISTOR	RS1/10S683J
R2211, 2212	CHIP RESISTOR	RS1/10S223J
R2213, 2214	CHIP RESISTOR	RS1/10S333J
R2223, 2224	CHIP RESISTOR	RS1/10S471J
R2226	CHIP RESISTOR	RS1/10S681J
R2233, 2234	CHIP RESISTOR	RS1/10S102J
R2301, 2302	CHIP RESISTOR	RS1/10S273J
R2303, 2304	CHIP RESISTOR	RS1/10S362J
R2305, 2306	CHIP RESISTOR	RS1/10S103J
R2317, 2318	CHIP RESISTOR	RS1/10S222J
R2351, 2352	CHIP RESISTOR	RS1/10S242J
R2355, 2356	CHIP RESISTOR	RS1/10S682J
R2357	CHIP RESISTOR	RS1/10S433J
R2361, 2362	CHIP RESISTOR	RS1/10S222J
R2363, 2364	CHIP RESISTOR	RS1/10S273J
R2366	CHIP RESISTOR	RS1/10S103J
R2451	CHIP RESISTOR	RS1/10S224J
R2452	CHIP RESISTOR	RS1/10S154J
R2454	CHIP RESISTOR	RS1/10S223J
R2457	CHIP RESISTOR	RS1/10S123J
R305, 306	CARBON FILM RESISTOR	RD1/4PM104J

Mark No.	Description	Parts No.
R309–312	CARBON FILM RESISTOR	RD1/4PM222J
R313	CARBON FILM RESISTOR	RD1/4PMFL471J
R314	CARBON FILM RESISTOR	RD1/4PMFL101J
R315	CARBON FILM RESISTOR	RD1/4PM102J
R316, 317	CARBON FILM RESISTOR	RD1/4PMFL222J
R318	CARBON FILM RESISTOR	RD1/4PMFL101J
R401, 402	CARBON FILM RESISTOR	RD1/4PM100J
R409	CARBON FILM RESISTOR	RD1/2PM182J
R416	METAL OXIDE RESISTOR	RS2LMF331J
R417	METAL OXIDE RESISTOR	RS2LMF391J
R501, 502	CARBON FILM RESISTOR	RD1/4PMFL100J
R805, 806	CHIP RESISTOR	RS1/10S273J
R843, 844	CHIP RESISTOR	RS1/10S223J
R855, 856	CHIP RESISTOR	RS1/10S332J
R857	CHIP RESISTOR	RS1/10S104J
R858	CHIP RESISTOR	RS1/10S000J
	Other resistors	RD1/8PM□□□J
OTHERS		
CN10	CONNECTOR (14P)	KPE14
CN11	CONNECTOR (15P)	KPE15
CN12	CONNECTOR (13P)	KPE13
CN16	CONNECTOR (7P)	KPE7
CN4	CONNECTOR (13P)	KPE13
CN5	CONNECTOR (5P)	KPE5
CN6	CONNECTOR (4P)	KPC4
	PIN JACK (6P)	AKB1121
	PIN JACK (2P)	AKB1146
	SPEAKER TERMINAL 4–P	AKE–109
	JACK	AKN–203
	SOCKET (14P)	AKP1048
	SOCKET (4P)	AKP1046
	GEQ assembly	AWX1048

Mark No.	Description	Parts No.
⊙ GEQ assembly (AWX1048)		
The GEQ assembly (AWX1048) is a part of AF assembly (AWZ3338).		
SEMICONDUCTORS		
IC701, 702	GEQ IC	LA3607
IC703	GEQ EVR IC	LC7522
CAPACITORS		
C701, 702	CERAMIC CAPACITOR	CCSQSL331J50
C703–706	ELECTR.CAPACITOR	CEAS2R2M50
C707, 708	ELECTROLYTIC CAPACIT	CEASR15M50
C709, 710	ELECTR.CAPACITOR	CEASR47M50
C711, 712	CERAMIC CAPACITOR	CKCYX683M16
C713, 714	ELECTROLYTIC CAPACIT	CEASR15M50
C715, 716	CERAMIC CAPACITOR	CKCYX273M16
C717, 718	CERAMIC CAPACITOR	CKCYX683M16
C719, 720	CERAMIC CAPACITOR	CKSQYB103K50
C721, 722	CERAMIC CAPACITOR	CKCYX273M16
C723, 724	CERAMIC CAPACITOR	CKSQYB472K50
C725, 726	CERAMIC CAPACITOR	CKSQYB103K50
C727, 728	CERAMIC CAPACITOR	CKSQYB182K50
C729, 730	CERAMIC CAPACITOR	CKSQYB472K50
C731, 732	CERAMIC CAPACITOR	CKSQYB681K50
C733, 734	CERAMIC CAPACITOR	CKSQYB182K50
C735, 736	ELECTR.CAPACITOR	CEAS101M10
C737, 738	CERAMIC CAPACITOR	CKSQYB473K50
RESISTORS		
R701	CARBONFILM RESISTOR	RD1/8PM103J
R703, 704	CARBONFILM RESISTOR	RD1/8PM223J
R710	RESISTOR ARRAY (1M)	RA8T105J
R711, 712	CARBON FILM RESISTOR	RD1/4PM390J
R726, 727	CARBONFILM RESISTOR	RD1/8PM103J
	Other resistors	RS1/10S□□□J
VR assembly		
SEMICONDUCTORS		
IC551	OP–AMP IC	RC4558DXP
IC552	MECHANISM DRIVER IC	TA7291S
Q551, 552	TRANSISTOR	2SC2878
Q553	TRANSISTOR	RN2203

Mark No.	Description	Parts No.
CAPACITORS		
C551, 552	ELECTR.CAPACITOR	CEAS4R7M50
C553, 554	CHIP CAPACITOR	CCSQCH101J50
C555, 556	ELECTR.CAPACITOR	CEAS101M16
C557	ELECTR.CAPACITOR	CEAS220M25
C558	CERAMIC CAPACITOR	CKSQYF104Z50
C559	CERAMIC CAPACITOR	CKCYF473Z50
RESISTORS		
VR551	VARIABLE RESISTOR	ACX1051
R554	CHIP RESISTOR	RS1/10S000J
R555, 556	CHIP RESISTOR	RS1/10S104J
R561	CHIP RESISTOR	RS1/10S000J
R565, 566	CHIP RESISTOR	RS1/10S102J
	Other resistors	RD1/8PM□□□J

HEAD PHONE assembly

CAPACITOR		
C453	CERAMIC CAPACITOR	CKDYF473Z50
RESISTORS		
R451, 452	METAL OXIDE RESISTOR	RS2LMF331J
R453	CARBONFILM RESISTOR	RD1/8PM100J
OTHERS		
CN1	JACK (HEAD PHONE) CONNECTOR (5P)	AKN1010 KPC5

TRANS CONNECT assembly

No parts are supplied with the TRANS CONNECT assembly.

⊙ DISPLAY assembly (AWZ3351)

SEMICONDUCTORS		
IC1501	LOGIC IC	SN74LS05N
IC1502	LOGIC IC	SN74LS03N
IC1503	GEQ–BPF IC	BA3826S
IC1504	OP–AMP IC	RC4558DXP
IC1505	SPECTRUM ANALYZER CONTROL μ–COM	PD3174A
IC1651	SYSTEM CONTROL μ–COM	PD5147B
IC1652	RESET IC	M51951BSL

Mark No.	Description	Parts No.
Q1501–1504	TRANSISTOR	RN1201
Q1505–1507	TRANSISTOR	RN1203
Q1508, 1509	TRANSISTOR	RN2201
Q1510	TRANSISTOR	RN1203
Q1601	TRANSISTOR	RN2204
Q1602	TRANSISTOR	RN1203
Q1603	TRANSISTOR	RN2204
Q1604	TRANSISTOR	2SA1515
Q1605	TRANSISTOR	RN1203
Q1606	TRANSISTOR	2SA1515
Q1607	TRANSISTOR	RN1203
Q1608	TRANSISTOR	2SA1515
Q1609	TRANSISTOR	RN1203
Q1610	TRANSISTOR	2SA1515
Q1611	TRANSISTOR	RN1203
D1501–1504	LED (GREEN)	AEL1130
D1505	LED (RED)	AEL1119
D1506, 1507	LED (RED)	AEL1126
D1508, 1509	LED	AEL1128
D1510	LED (RED)	AEL1065
D1511–1516	LED (RED)	AEL1108
D1517–1531	DIODE	1SS252
D1535–1543	DIODE	1SS252
D1544, 1545	LED (GREEN)	AEL1129
D1546	LED (RED)	AEL1065
D1547, 1548	DIODE	1SS252
D1601–1617	DIODE	1SS252
D1651–1658	DIODE	1SS252
D1660–1664	DIODE	1SS252
SWITCHES		
S1504–1507	SWITCH	ASG1034
S1510–1514	SWITCH	ASG1034
S1516–1519	SWITCH	ASG1034
S1522–1525	SWITCH	ASG1034
S1528	SWITCH	ASD1012
S1529	ROTARY ENCODER	ASX1009
S1530–1535	SWITCH	ASG1034
S1537–1544	SWITCH	ASG1034
S1546–1549	SWITCH	ASG1034
COILS		
L1501	AXIAL INDUCTOR	LAU221K
L1651	AXIAL INDUCTOR	LAU220K
CAPACITORS		
C1501	CERAMIC CAPACITOR	CKDYX473M16
C1504	ELECTR.CAPACITOR	CEJA470M10
C1505	CEA (47000/5.5V)	ACH1070
C1506	CERAMIC CAPACITOR (0.022)	ACG1022
C1507	CERAMIC CAPACITOR	CCDSL100D50

Mark No.	Description	Parts No.
C1508	CERAMIC CAPACITOR	ACG1022
C1509	CERAMIC CAPACITOR	CKMYB102K50
C1510	CERAMIC CAPACITOR	CKDYX473M16
C1601	ELECTR.CAPACITOR	CEAS470M10
C1602	ELECTR.CAPACITOR	CEASR33M50
C1651	CERAMIC CAPACITOR	CKCYF473Z50
C1652	ELECTR.CAPACITOR	CEAS101M16
C1653	CERAMIC CAPACITOR	CKCYF473Z50
C1654−1658	CERAMIC CAPACITOR (1000p)	ACG1020
C1659	ELECTR.CAPACITOR	CEAS010M50
RESISTORS		
VR1601, 1602	VR	VRTM6V203
VR1603	VR	VRTM6V103
R1543	RESISTOR ARRAY (100k)	RA13S104J
R1544	RESISTOR ARRAY (100k)	RA15T104J
R1662	RESISTOR ARRAY (3.3K)	RA8T332J
	Other resistors	RD1/8PM□□□J
OTHERS		
V1501	FL TUBE	AAV1116
X1502	CERAMIC RESONATOR	ASS1018
X1651	CERAMIC RESONATOR	ASS1025
	REMOTE RECEIVER UNIT	AXX1010
CN8	CONNECTOR (15P)	KPE15

1 MECHA SW assembly

SWITCHES

S1551−1555	SWITCH	ASG1034

2 MECHA SW assembly

SWITCHES

S1556−1560	SWITCH	ASG1034

MIC BALANCE assembly

SEMICONDUCTORS

IC901	OP−AMP IC	NJM4558S−X

Mark No.	Description	Parts No.
CAPACITORS		
C901	CERAMIC CAPACITOR	CKMYB681K50
C902	ELECTR.CAPACITOR	CEAS010M50
C903	CERAMIC CAPACITOR	CKMYB471K50
C904, 905	ELECTR.CAPACITOR	CEAS100M25
C906, 907	CERAMIC CAPACITOR	CKDYX473M16
C908	CERAMIC CAPACITOR	CKDYF473Z50
RESISTORS		
VR552	VARIABLE RESISTOR	ACS1066
VR901	VARIABLE (10K−X1)	ACS1065
	Other resistors	RD1/8PM□□□J
OTHERS		
CN3	JUMPER CONNECTOR JACK (MIC)	KPC6 AKN1017

⊙ SUB TRANS assembly (AWR1058)

SEMICONDUCTORS

IC101	REGULATOR IC	NJM78M56FAS
IC102	REGULATOR IC	UPC78M12AHF
Q101	TRANSISTOR	2SC2458
Q102	TRANSISTOR	2SB560
D101	ZENER DIODE	RD10ESB2
D102	ZENER DIODE	RD30ESB2
D103−106	DIODE	1SR139−400
D107, 109	DIODE	1SS252
RELAY		
RY101	RELAY	ASR1027
TRANSFORMER		
⚠ T101	POWER TRANSFORMER	ATT1144
CAPACITORS		
C101	ELECTR.CAPACITOR	CEAS222M25
C102	ELECTR.CAPACITOR	CEAS221M50
C103, 104	ELECTR.CAPACITOR	CEAS470M16
C105	ELECTR.CAPACITOR	CEAS470M50
C106	ELECTR.CAPACITOR	CEAS220M50
C107	ELECTR.CAPACITOR	CEAS470M16
RESISTORS		
R101	CARBON FILM RESISTOR	RD1/4PMF392J
	Other resistors	RD1/8PM□□□J
OTHERS		
	AC socket (OUTLET 1P)	AKP1078

Mark No.	Description	Parts No.
1 MECHA assembly		
CAPACITORS		
C2001, 2002	CERAMIC CAPACITOR	CKMYB391K50
C2005, 2006	AUDIO FILM CAPACITOR	CFTXA223J50
C2007, 2008	ELECTR.CAPACITOR	CEAS4R7M50
C2009, 2010	ELECTR.CAPACITOR	CEAS470M10
RESISTORS		
VR2001, 2002	VR	VRTM6H202
	Other resistors	RD1/8PM□□□J

Mark No.	Description	Parts No.
RESISTORS		
VR2021, 2022	VR	VRTM6V202
VR2251, 2252	VR	VRTM6H204
R2253	CARBON FILM RESISTOR	RD1/2PM360J
	Other resistors	RD1/8PM□□□J

2 MECHA assembly		
SEMICONDUCTORS		
IC2001, 2021	OP−AMP IC	RC4558DXP
Q2021, 2022	N−FET	2SK373
Q2251	TRANSISTOR	RN1201
Q2252	TRANSISTOR	2SA1515
Q2253, 2254	TRANSISTOR	2SC3377
Q2255	TRANSISTOR	2SC2458
D2021−2026	DIODE	1SS252
COILS & TRANSFORMERS		
L2204, 2205	INDUCTOR	LTA822J
T2251	OSC TRANSFORMER	ATX−043
CAPACITORS		
C2021, 2022	CERAMIC CAPACITOR	CCMSL100D50
C2023, 2024	CERAMIC CAPACITOR	CKMYB391K50
C2027, 2028	AUDIO FILM CAPACITOR	CFTXA223J50
C2029, 2030	ELECTR.CAPACITOR	CEAS4R7M50
C2031, 2032	ELECTR.CAPACITOR	CEAS470M10
C2219, 2220	CERAMIC CAPACITOR	CCDSL271K500
C2223, 2224	CERAMIC CAPACITOR	CKDYB681K50
C2251	ELECTR.CAPACITOR	CEAS470M16
C2252, 2253	CERAMIC CAPACITOR	CGMYX103M16
C2254	CERAMIC CAPACITOR	CKMYB221K50
C2255	MYLOR FILM CAPACITOR	CQMA153K50
C2256	CERAMIC CAPACITOR	CKMYB681K50
C2257	MYLOR FILM CAPACITOR	CQMA123K250
C2258	ELECTR.CAPACITOR	CEAS4R7M50
C2259, 2260	CERAMIC CAPACITOR	CCCSL101K500
C2261	MYLOR FILM CAPACITOR	CQMA562K400
C2262	CQPA (2000P/630V)	ACE1020
C2263	ELECTR.CAPACITOR	CEAS100M50

4. FOR YPW TYPE

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ 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.*

4.1 CONTRAST OF MISCELLANEOUS PARTS

The DC−Z84/YPW type is the same as the DC−Z84/SD type with the exception of the following sections.

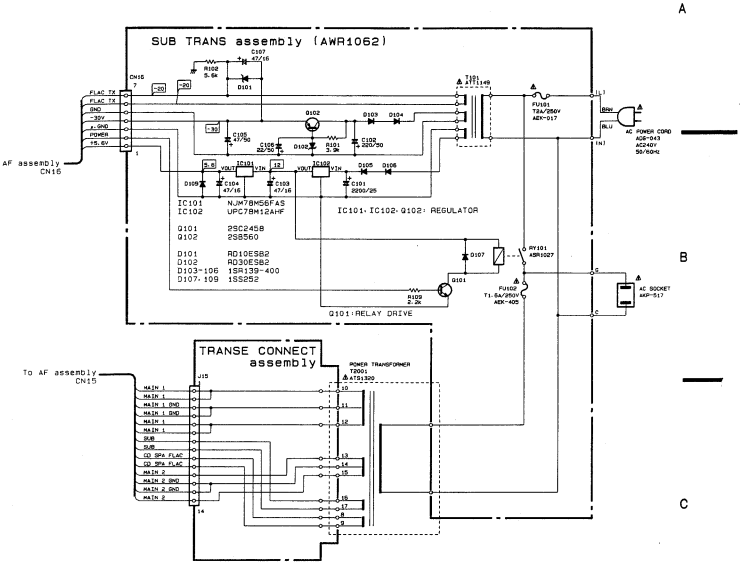
Mark	Symbol & Description	Part No.		Remarks
		DC−Z84/SD type	DC−Z84/YPW type	
⊙	SUB TRANS assembly	AWR1058	AWR1062	
⚠	S101 Line voltage selector switch	AKX1004	.....	
⚠	S102 Line voltage selector switch	AKX−507	.....	
⚠	T2001 Power transformer	ATS1319	ATS1320	
⚠	FU101 (T4A/250V)	AEK−400	.....	
⚠	FU101 (T2/250V)	.....	AEK−017	
⚠	FU103 (T1.6A/250V)	AEK−405	.....	
⚠	AC Power cord	ADG1051	ADG−043	
⚠	AC socket (OUTLET 1P)	.....	AKP−517	
	Operating instructions (Spanish)	ARC1234	.....	

4.2 SUB TRANS assembly (AWR1062)

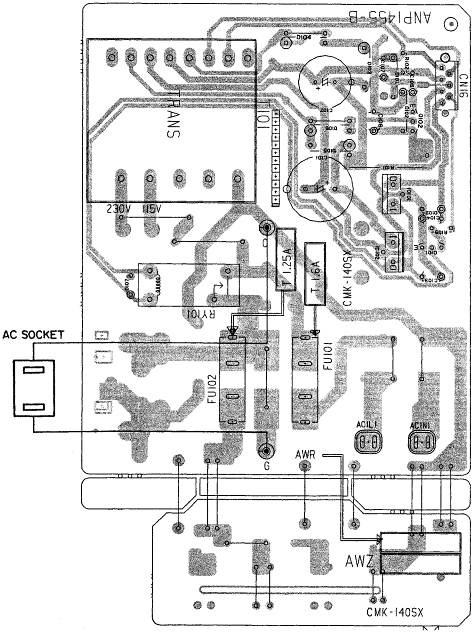
The SUB TRANS assembly (AWR1062) is the same as the SUB TRANS assembly (AWR1058) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWR1058	AWR1062	
⚠	T101 Power transformer	ATT1144	ATT1149	
⚠	AC socket (OUTLET 1P)	AKP1078	.....	

4.3 SCHEMATIC AND P.C.BOARD DIAGRAM



SUB TRANS assembly (AWR1062)



NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. 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
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

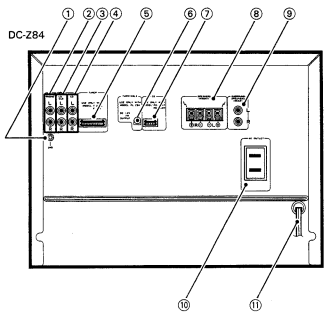
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

SUB TRANS assembly (AWR1082)

5. PANEL FACILITIES

REAR PANEL FACILITIES



① Ground terminal (GND)
Connect this to the ground terminal on the turntable (except for PL-Z94).

② PHONO input jacks
Connect the audio cord of the turntable to these jacks.

③ LD/VCR jacks
Connect to audio output jacks of LD player or VCR, etc.

④ CD input jacks
Connect to output jacks of a CD player.

⑤ TUNER jacks
Connect the tuner cord here.

⑥ TURNTABLE (DC 12 V OUTPUT) jack
This jack supplies power to the turntable PL-Z94.
Connect the power supply cord of the turntable to this jack.

⑦ CD jacks
Connect to a compact disc player PD-Z74T or PD-Z84M flat cable.

⑧ SPEAKERS terminals
L: Connect the left speaker system as seen from the listening position.
R: Connect the right speaker system as seen from the listening position.

NOTE:
Connect a speaker system having a nominal impedance ranging from 6 Ω to 16 Ω.

⑨ SURROUND SPEAKERS jacks
Connect the surround speaker systems.

NOTE:
Connect a speaker system having a nominal impedance of 16 Ω or more.

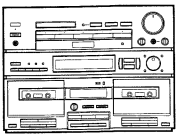
⑩ AC OUTLET (SWITCHED 50 W MAX)
Power supplied through this outlet is turned on and off by the cassette deck amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W.

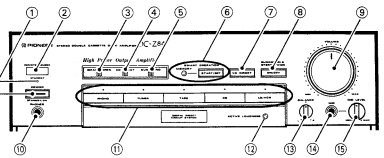
NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire hazard.
This can cause the cassette deck amplifier to malfunction.

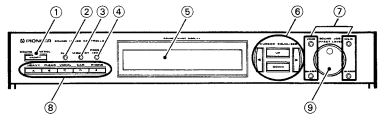
⑪ Power cord
Connect this to the household electrical outlet.

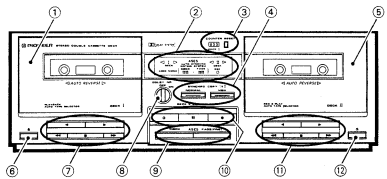
FRONT PANEL FACILITIES

DC-Z84









- This unit has an automatic tape type selector.
- Tapes can be played back on deck I; tapes can be played back and recorded on deck II.
- Sound can be recorded as adjusted by the sound image controller.
- Use a normal or chrome position tape.

Amplifier section

① POWER STANDBY/ON switch /STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
When the STANDBY indicator is on, the unit is in STANDBY.

② REMOTE SENSOR window

③ SMART OPER. (OPERATION) indicator

This lights when smart operation is on.
It goes out after about 30 seconds.

④ CD DIRECT indicator

This lights when CD DIRECT is on.

⑤ SURROUND indicator

This lights when SURROUND & STEREO WIDE is on.

⑥ SMART OPERATION buttons

[START/SET]
Use when programming memory and operating SMART OPERATION.
[MEMORY]
Use when programming SMART OPERATION into memory.

⑦ CD DIRECT button

Press this button to listen to a CD without passing the signal through sound quality adjustment circuits.

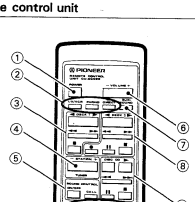
⑧ SURROUND & STEREO WIDE button

By turning this switch ON, you can enjoy surround reproduction when rear speakers are used.
By turning this switch ON, you can enjoy STEREO WIDE reproduction with greater left-right spread when rear speakers are not used.

NOTE:

- *In the case of monaural source, SURROUND & STEREO WIDE effects cannot be obtained.*
- *SURROUND & STEREO WIDE functions do not operate if CD DIRECT is on.*

Remote control unit



① POWER button

② Function buttons

LD/VCR ..... Sets function to LD/VCR.
PHONO ..... Sets function to PHONO.
CD DIRECT ..... Sets function to CD DIRECT.

③ DECK I operation buttons:

Same as Deck I operation buttons on the cassette deck amplifier.

④ TUNER STATION button

- Before operation, memorize broadcast stations in the STATION CALL buttons.

+ ..... Stations change in order in the upward direction
– ..... Stations change in order in the downward direction.

⑤ SOUND CONTROL operation buttons

ON/OFF: Turns the sound image controller on and off.
CALL: Recalls the preset equalizing curves (PRESET) and memorized sound control (PROGRAM) in sequence.

⑥ VOLUME + (UP)/– (DOWN) button

When pressed, VOLUME on the amplifier is actually moved by a motor.

⑦ SURROUND button

Turns SURROUND & STEREO WIDE on and off.

⑧ Deck II operation button:

Same as Deck II operation buttons and DECK II CONTROL buttons on the cassette deck amplifier (except MUTE).

⑨ CD operation buttons

Perform the connections so that the CD player is operated by the remote control unit.

► ..... Play
DISC..... DISC selection
■ ..... Stop
❚❚ ..... Pause
⏮, ⏭ ..... Track search

NOTE:
Note that the DISC selector button on the remote control unit may not operate, depending on the CD player used.

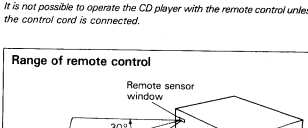
⑩ Timer operation buttons

SLEEP: Sets the sleep timer.
WAKE-UP: Timer playback setting/cancellation can be performed when the timer playback time has been set. This is shown in the tuner display section.
SNOOZE: Turns off power if pressed after timer playback begins. Timer playback begins again approx. 5 minutes later.

The amplifier input selector automatically switches to the music source being operated when you press the CD playback (►), cassette deck playback (◄, ►), or tuner station controls.

NOTE:
It is not possible to operate the CD player with the remote control unless the control cord is connected.

Range of remote control



When the remote control unit is pointed at the remote sensor window on the amplifier section and any of its buttons is pressed, the tuner and other components can be operated by remote control.
Distance: Within a range of approx. 7 meters (23 feet) from the remote sensor window.
Angle: Within approx. 30 degrees from the center of the remote sensor window.
Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window.
Performance of the remote control unit is adversely affected in the presence of strong fluorescent light. Keep such lights away, especially from the sensor window.

6. SPECIFICATIONS

Amplifier Section

Continuously Average Power Output is 37 Watts* per channel, min., at 8 ohms from 40 Herz to 20,000 Herz, with no more than 0.4 % total harmonic distortion.**

** Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.*

Music power (DIN) ..... 80 W + 80 W (1 kHz, T.H.D. 1 %, 8 Ω)
Continuous Power Output (DIN) ..... 45 W + 45 W
(1 kHz, T.H.D. 1 %, 8 Ω)
Peak music power output ..... 500 W
Graphic equalizer frequency band..... 60 Hz, 150 Hz,
400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz, ±5.5 dB
Total Harmonic Distortion
(40 Hz to 20,000 Hz, 22.5 W, 8 Ω)**..... No more than 0.2 %

Cassette Deck Section

Systems..... 4 track, 2-channel stereo
Heads..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor..... DC servo 2 speed motor x 2
Wow and Flutter..... No more than 0.09 % (WRMS)
Fast Winding Time ..... Approximately 105 seconds
(C-60 tape)
Frequency Response (– 20 dB recording):
Normal tape ..... 35 Hz to 14,000 Hz ±6 dB
CrO_2 tape ..... 35 Hz to 15,000 Hz ±6 dB
Signal-to-Noise ratio
Dolby NR OFF..... 56 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)

Furnished Parts

Operating Instructions 1
Remote Control Unit 1
Dry Cell Batteries..... 2

Miscellaneous

Power requirements
Australian model..... a.c. 240 Volts~, 50/60 Hz
Other destination models
..... AC 110/120–127/220/240 V (switchable) 50/60 Hz
Power Consumption ..... 336 W
Dimensions ..... 360 (W) x 271 (H) x 309 (D) mm
14-3/16 (W) x 10-11/16 (H) x 12-3/16 (D) in
Weight (without package)..... 8 kg (17 lb 11 oz)

Accessories

EP Adapter..... 1

- *Specifications and design subject to possible modification without notice due to improvement.*

*** Measured By Audio Spectrum Analyzer.*