

Service Manual

 **PIONEER**[®]
The Art of Entertainment

ORDER NO.
RRV1913

STEREO AMPLIFIER **A-107**

● Refer to the service manual RRV1935 for A-207/MLXJ.

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

| Type | Model | Power Requirement | Remarks |
|---------|-------|-------------------|---------|
| | A-107 | | |
| MLXJ | ○ | AC220-230V | |
| MYXJ/EW | ○ | AC220-230V | |
| MYXJ/GR | ○ | AC220-230V | |
| MVXJ | ○ | AC220-230V | |
| YPWXJ | ○ | AC240V | |

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1. CONTRAST OF MISCELLANEOUS PARTS

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.

● Reference Nos. indicate the pages and Nos. in the service manual for the base model.

● 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%).

560 Ω \rightarrow 56 \times 10¹ \rightarrow 561 RD1/4PU $\begin{matrix} \boxed{5} & \boxed{6} & \boxed{1} \end{matrix}$ J

47k Ω \rightarrow 47 \times 10³ \rightarrow 473 RD1/4PU $\begin{matrix} \boxed{4} & \boxed{7} & \boxed{3} \end{matrix}$ J

0.5 Ω \rightarrow R50 RN2H $\begin{matrix} \boxed{R} & \boxed{5} & \boxed{0} \end{matrix}$ K

1 Ω \rightarrow 1R0 RS1P $\begin{matrix} \boxed{1} & \boxed{R} & \boxed{0} \end{matrix}$ K

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

5.62k Ω \rightarrow 562 \times 10¹ \rightarrow 5621 RN1/4PC $\begin{matrix} \boxed{5} & \boxed{6} & \boxed{2} & \boxed{1} \end{matrix}$ F

■ CONTRAST TABLE

A-107/MLXJ, MYXJ/EW, MYXJ/GR and A-207/MLXJ are constructed the same except for the following:

| Ref. No. | Mark | Symbol and Description | Part No. | | | | Remarks |
|------------------|----------|---|----------|--------------|--------------|--------------|---------|
| | | | A-207 | A-107 | | | |
| | | | MLXJ | MLXJ | MYXJ/EW | MYXJ/GR | |
| P5 - 2 P5 - 1 | NSP | PCB ASSEMBLIES | | | | | |
| | | CONTROL ASSY | AWG7012 | AWG7011 | AWG7011 | AWG7011 | |
| | | ├ FRONT R ASSY | AWX7121 | AWX7121 | AWX7121 | AWX7121 | * |
| └ FRONT L ASSY | AWX7122 | AWX7120 | AWX7120 | AWX7120 | | | |
| P5 - 6 P5 - 4 | NSP | AF COMPLEX ASSY | AWM7355 | AWM7353 | AWM7353 | AWM7353 | |
| | | ├ VOLUME ASSY | AWX7112 | AWX7112 | AWX7112 | AWX7112 | |
| P5 - 5 P5 - 7 | NSP | ├ AC PRIMARY ASSY | AWX7113 | AWX7113 | AWX7113 | AWX7113 | |
| | | ├ HEADPHONE ASSY | AWX7114 | AWX7114 | AWX7114 | AWX7114 | |
| P5 - 7 | NSP | └ AF ASSY | AWX7116 | AWX7111 | AWX7111 | AWX7111 | * |
| | | PACKING | | | | | |
| P3 - 1 | | Operating Instructions (English/Spanish/Chinese) | ARE7158 | ARE7158 | Not used | Not used | |
| P3 - 1 | | Operating Instructions (English) | Not used | Not used | ARB7137 | Not used | |
| P3 - 1 | | Operating Instructions (German) | Not used | Not used | ARC7178 | ARC7178 | |
| P3 - 1 | | Operating Instructions (French/Spanish/Italian/Dutch/ Swedish/Portuguese) | Not used | Not used | ARC7179 | Not used | |
| | | Packing Case | AHD7562 | AHD7560 | AHD7559 | AHD7559 | |
| P3 - 5 | NSP | Warranty Card | Not used | Not used | ARY7009 | ARY7009 | |
| | | EXTERIOR SECTION | | | | | |
| P5 - 8 | Δ | Fuse (FU1 : 1.25A) | REK1023 | Not used | Not used | Not used | |
| P5 - 8 | Δ | Fuse (FU1 : 0.8A) | Not used | REK1021 | REK1021 | REK1021 | |
| P5 - 11 | Δ | Power Transformer | ATS7190 | ATS7192 | ATS7192 | ATS7192 | |
| | | (T1 : AC220-230V) | | | | | |
| P5 - 13 | | Rear Panel | ANC7642 | ANC7637 | ANC7620 | ANC7620 | |
| P5 - 14 | | Insulator | AMR7198 | AMR7198 | PNW2766 | PNW2766 | |
| P5 - 16 | | Screw | ABA1027 | BBZ30P080FZK | BBZ30P080FZK | BBZ30P080FZK | |
| P5 - 38 | | Front Panel | AMB7492 | AMB7491 | AMB7491 | AMB7491 | |

Note *: Refer to “ ■ CONTRAST OF PCB ASSEMBLIES ” and “ 2. SCHEMATIC DIAGRAM ”.

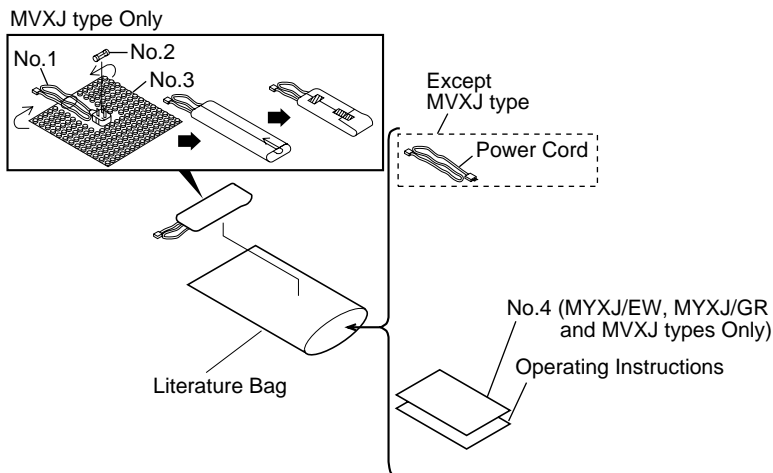
A-107/MVXJ, YPWXJ, and A-207/MLXJ are constructed the same except for the following:

| Ref. No. | Mark | Symbol and Description | Part No. | | | Remarks |
|---|------------------|--|---|---|---|----------|
| | | | A-207 | A-107 | | |
| | | | MLXJ | MVXJ | YPWXJ | |
| P5 - 2 P5 - 1 | NSP | PCB ASSEMBLIES CONTROL ASSY └ FRONT R ASSY └ FRONT L ASSY | AWG7012 AWX7121 AWX7122 | AWG7011 AWX7121 AWX7120 | AWG7011 AWX7121 AWX7120 | *1 |
| P5 - 6 P5 - 4 P5 - 5 P5 - 7 | NSP | AF COMPLEX ASSY └ VOLUME ASSY └ AC PRIMARY ASSY NSP └ HEADPHONE ASSY └ AF ASSY | AWM7355 AWX7112 AWX7113 AWX7114 AWX7116 | AWM7353 AWX7112 AWX7113 AWX7114 AWX7111 | AWM7353 AWX7112 AWX7113 AWX7114 AWX7111 | *1 |
| P3 - 1 | | PACKING Operating Instructions (English/Spanish/Chinese) | ARE7158 | Not used | Not used | |
| P3 - 1 P3 - 5 P3 - 9 | | Operating Instructions (English) Packing Case Power Cord | Not used AHD7562 ADG1154 | ARB7137 AHD7559 Not used | ARB7137 AHD7560 ADG1160 | |
| | ⚠ | Power Cord with Fuse | Not used | ADG1156 | Not used | *2, No.1 |
| | ⚠ | Fuse (T5A) | Not used | AEK1046 | Not used | *2, No.2 |
| | NSP | Air Cap | Not used | AHG1087 | Not used | *2, No.3 |
| | NSP | Warranty Card | Not used | ARY7009 | PRY1003 | *2, No.4 |
| P5 - 8 P5 - 8 P5 - 11 P5 - 11 P5 - 13 | ⚠ ⚠ ⚠ ⚠ | EXTERIOR SECTION Fuse (FU1 : 1.25A) Fuse (FU1 : 0.8A) Power Transformer (T1 : AC220-230V) Power Transformer (T1 : AC240V) Rear Panel | REK1023 Not used ATS7190 Not used ANC7642 | Not used REK1021 ATS7192 Not used ANC7620 | Not used REK1021 Not used ATS7193 ANC7638 | |
| P5 - 14 P5 - 16 P5 - 38 | | Insulator Screw Front Panel | AMR7198 ABA1027 AMB7492 | PNW2766 BBZ30P080FZK AMB7491 | AMR7198 BBZ30P080FZK AMB7491 | |

Note *1: Refer to “ ■ CONTRAST OF PCB ASSEMBLIES ” and “ 2. SCHEMATIC DIAGRAM ”.

*2: Refer to “ ■ EXPLODED VIEWS ”.

■ EXPLODED VIEWS



■ CONTRAST OF PCB ASSEMBLIES

DF AF ASSY

AWX7111 and AWX7116 are constructed the same except for the following:

| Mark | Symbol and Description | Part No. | | Remarks |
|--------|---|---|--|---------|
| | | AWX7116 | AWX7111 | |
| ⚠ | Q335, Q336 D402 D451 RY402 C301, C302, C305, C306 | DTC143ES 1SS355 D5SBA20 ASR7014 CEBA100M50 | Not used Not used D3SBA20 Not used CEAT100M50 | |
| ⚠ ⚠ | C307, 308 C331 C332 C451 | CEBA221M25 CCCS101K2H CKCYB331K2H ACH7080 (6800µF/42V) | CEAT221M25 Not used Not used ACH7082 (4700µF/42V) | |
| | C452 | ACH7081 (6800µF/42V) RDR1/4VM240J RDR1/4VM561J Not used | ACH7083 (4700µF/42V) Not used Not used RS1/10S240J | |
| | R301, R302 R303, R304 R313, R314 | Not used AKE1011 (8P) ANH1021 | RS1/10S561J AKE1054 (4P) Not used | |
| | R315, R316 401 SPERKER TERMINAL HEAT SINK | | | |

EF FRONT L ASSY

AWX7120 and AWX7122 are constructed the same except for the following:

| Mark | Symbol and Description | Part No. | | Remarks |
|------|--|--|--|---------|
| | | AWX7122 | AWX7120 | |
| | Q703 D702 D703, D705 S701 S703, S704 | DTC124EK Not used SLP9118C51H Not used ASG1034 | Not used SLP9118C51H Not used ASG1034 Not used | |
| | R705 | RS1/10S271J | Not used | |

2. SCHEMATIC DIAGRAM

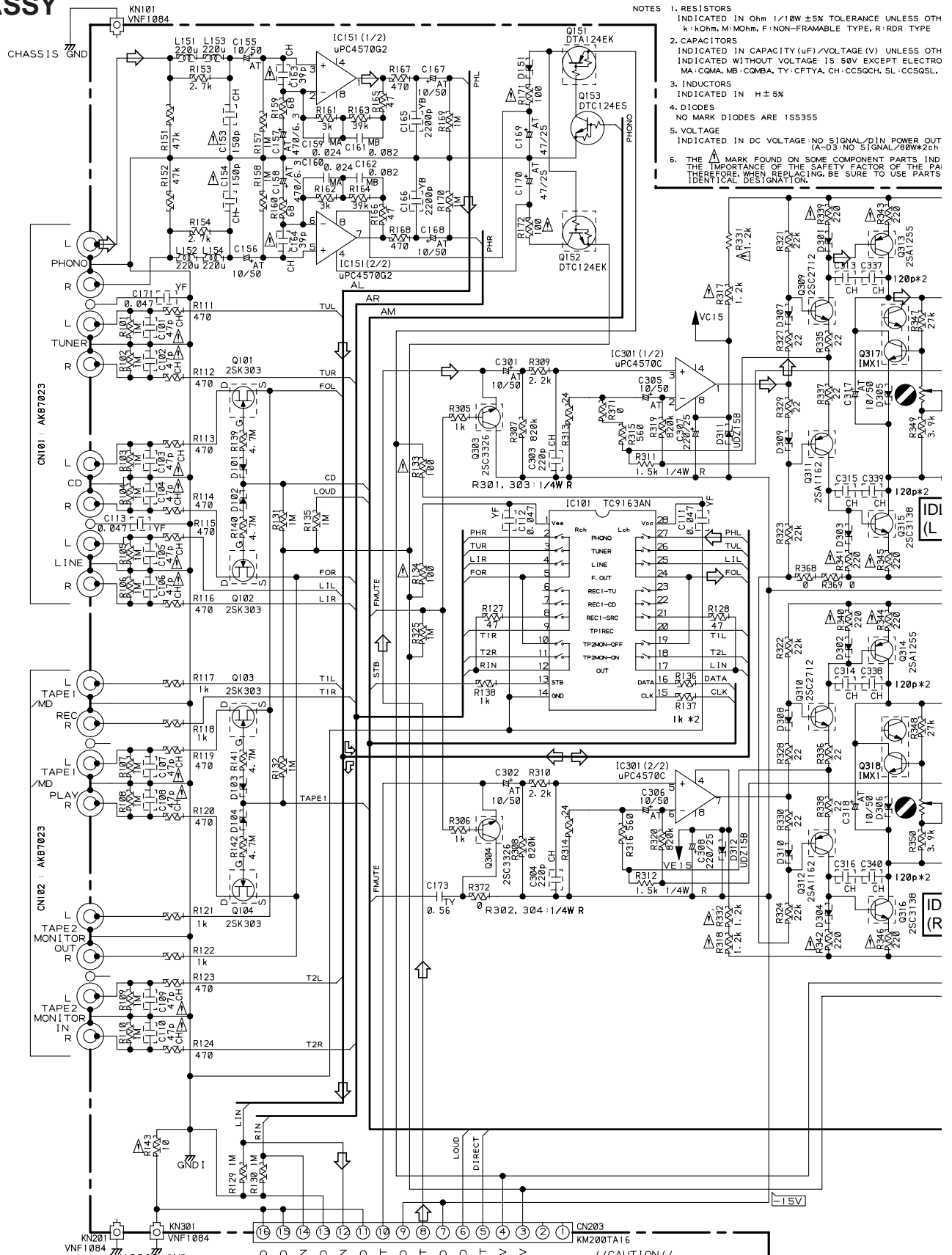
2.1 AF ASSY

A

B

C

D



- NOTES
1. RESISTORS INDICATED IN Ohm 1/10W ±5% TOLERANCE UNLESS OTHERWISE INDICATED. k=KOhm, M=MOhm, F=NON-FRAMABLE TYPE, R=RDR TYPE
 2. CAPACITORS INDICATED IN CAPACITY (uF) VOLTAGE (V) UNLESS OTHERWISE INDICATED WITHOUT VOLTAGE IS 50V EXCEPT ELECTROLYTIC MA=ALUM, MB=COBBA, TY=CFTVA, CH=CC50CH, SL=CC50SL.
 3. INDUCTORS INDICATED IN H ±5%
 4. DIODES NO MARK DIODES ARE 1SS355
 5. VOLTAGE INDICATED IN DC VOLTAGE-NO SIGNAL/DIN POWER OUT (A-D3=NO SIGNAL/80W*2CH)
 6. 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 IDENTICAL DESIGNATION.

//CAUTION//
HEATSINKS (Q323-326)
DC LEVEL IS EQUAL TO
+B OR -B.
DON'T TOUCH OR YOU WILL
BE ELECTRICAL SHOCKED.

A CN501



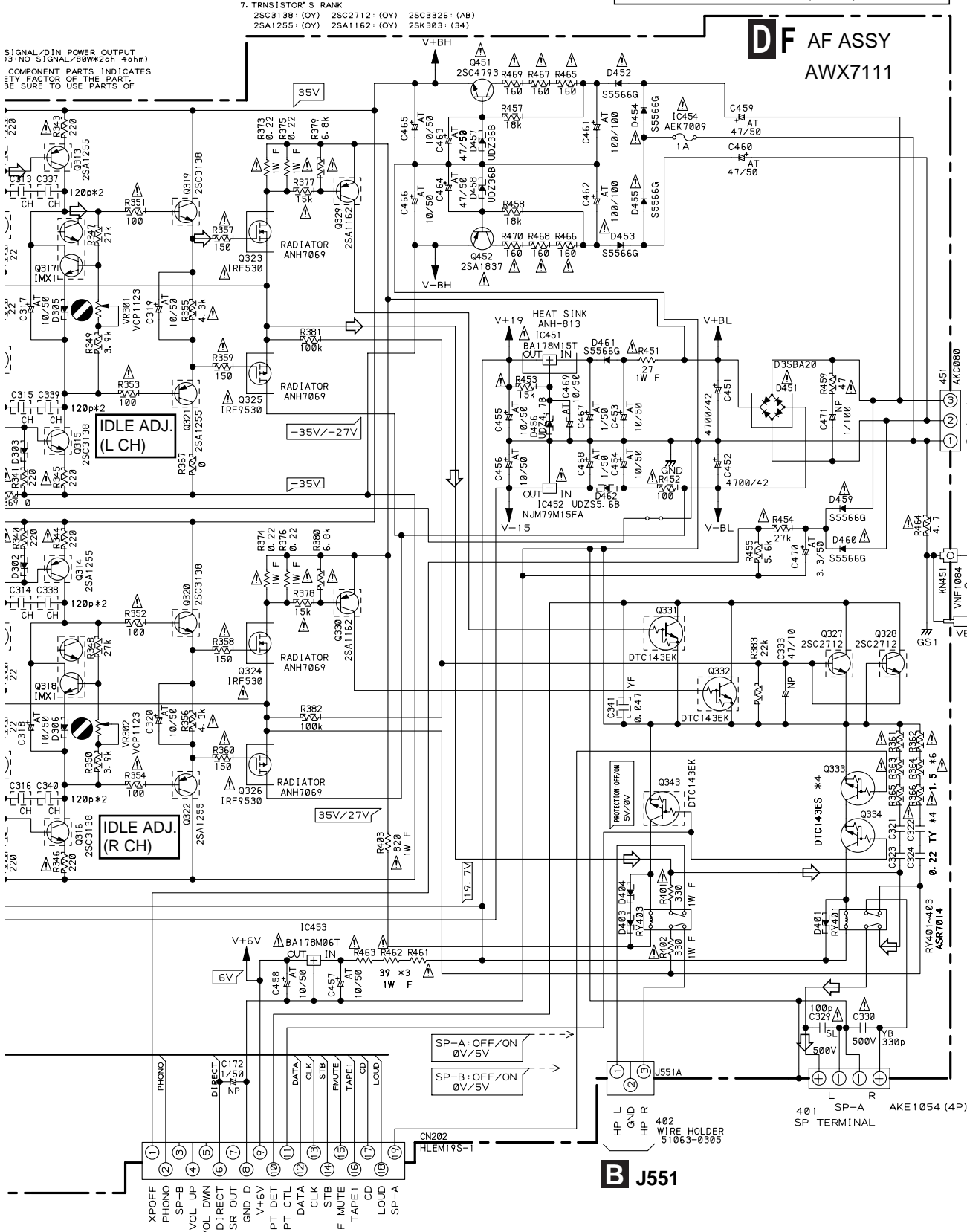
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

TOLERANCE UNLESS OTHERWISE NOTED
L TYPE, R/RDR TYPE

⇒ : AUDIO SIGNAL ROUTE

VOLTAGE (V) UNLESS OTHERWISE NOTED
5.0V EXCEPT ELECTROLYTIC CAPACITOR.
CH : CCSGCH, CL : CCSGL, YB : CKSQYB, YF : CKSQYF

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE ONLY WITH SAME TYPE NO. 491001 MFD, BY
LITTELFUSE INC. FOR IC454(AEK7009).



DF AF ASSY
AWX7111

TO POWER TRANSFORMER

SIGNAL/DIN POWER OUTPUT
SIGNAL/NO SIGNAL 80Wx2ch 4ohm

COMPONENT PARTS INDICATES
STRENGTH FACTOR OF THE PART.
BE SURE TO USE PARTS OF

7. TRANSISTOR'S RANK
25C313B : (OY) 25C2712 : (OY) 25C3326 : (AB)
25A1255 : (OY) 25A1162 : (OY) 25K303 : (34)

Q317 IMX1
Q319 IMX1
Q323 RF530
Q324 RF530
Q325 IRF9530
Q326 IRF9530
Q327 DTC143EK
Q328 25C2712
Q331 DTC143EK
Q332 DTC143EK
Q333 25C2712
Q334 25C2712

CHASSIS GND

VNF1084

VEF1040

GS1

ASR7014

VEF1040

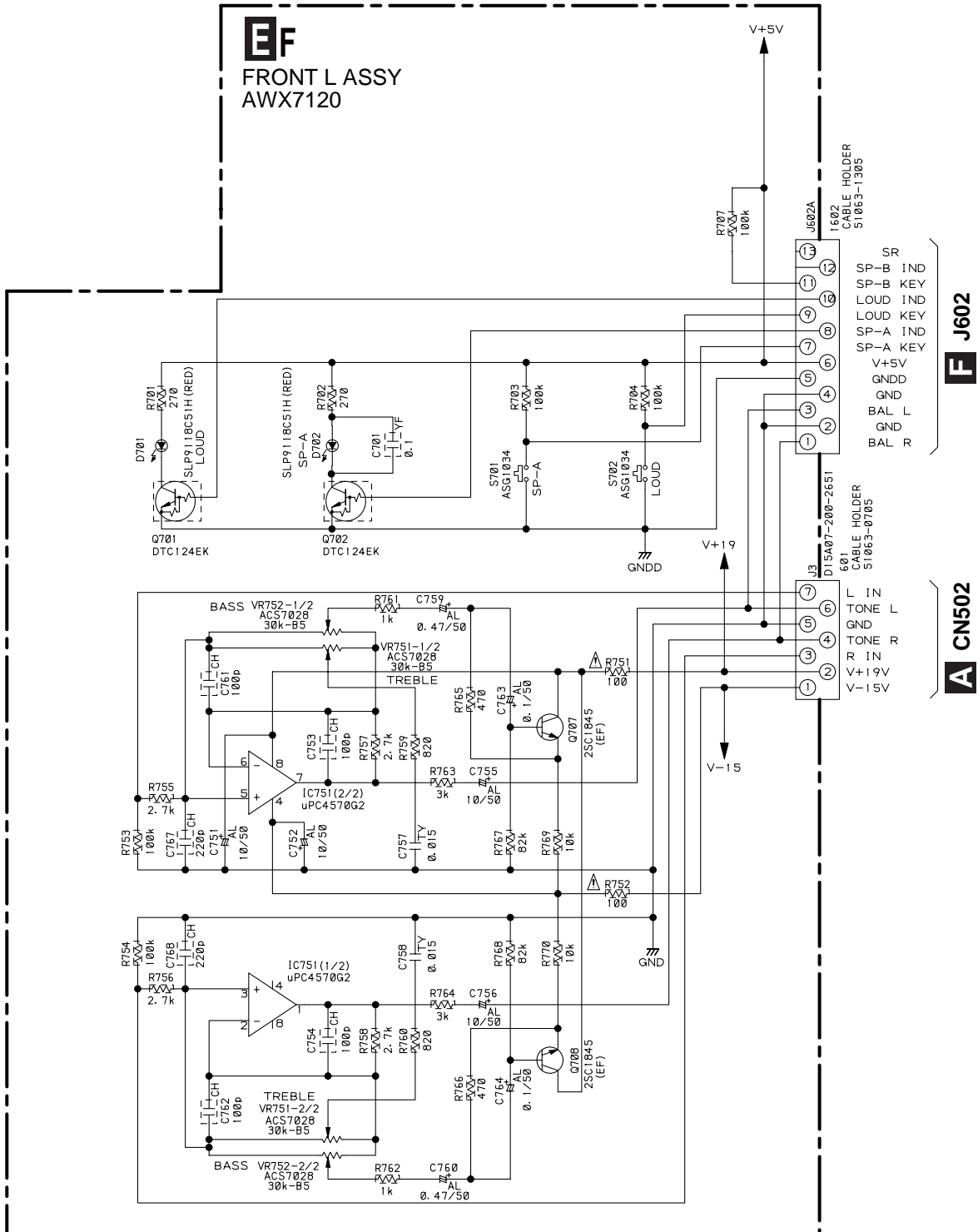
401 SP-A AKE1054 (4P)

B J551

F CN601

DF

2.2 FRON L ASSY



FRONT L ASSY
S701 : SPEAKER A
S702 : LOUDNESS

