STERE0 AMPLIFIER
A-443
A-443-S
A-333
A-333-S


<table>
<thead>
<tr>
<th>Type</th>
<th>Applicable model</th>
<th>Power requirement</th>
<th>Destination</th>
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<td>A-443</td>
<td>A-443-S</td>
<td>A-333</td>
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<td>HB</td>
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<td>HEZ</td>
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<td>o</td>
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<td>KC</td>
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<tr>
<td>SD</td>
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*Change the primary wiring of the power transformer.

- For the other types, refer to additional service manual.
- The A-443-S is silver versions of A-443.
- The A-333-S is silver versions of A-333.

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 505 Cochrane Drive, Markham, Ontario L3R 8E3 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Keetberglaan 1, 2740 Beveren, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: (03) 580-9911

SO MAY 1988 Printed in Japan
### 1. EXPLODED VIEW 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.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★ and △.
  - ★★ GENERALLY MOVES FASTER THAN △.
  - This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by "O" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

#### Parts List of Exterior

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<thead>
<tr>
<th>Mark</th>
<th>No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Mark</th>
<th>No.</th>
<th>Part No.</th>
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2. PACKING

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<td>4</td>
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External appearance of transistors and ICs

2SA933S
2SC1740S

2SA1302
2SA3281

2SA968
2SC2238

2SC1845

2SA979

2SK246

2SA1048
2SC2458

2SK369

2SA1115
2SC2603

M5218P
M5220P

2SA1145
2SC2705

PA0016
5. ELECTRICAL PARTS LIST

NOTES:
- Parts without part number cannot be supplied.
- Parts marked by "Ø" 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.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★★ and ★.
  ★★★ GENERALLY MOVES FASTER THAN ★.
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- 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 ±5% and ±10%).
560Ω  56×10¹  561 ......................................................... RD1/4PS 561 J
47kΩ  47×10⁴  474 ........................................................... RD1/4PS 474 J
0.5Ω  0R5 ................................................................. RN2H 0R5 K
0Ω  0 ................................................................. RS1P 0Ω K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors),
8.02kΩ  802×10³  8021 ...................................................... RN1/4SR 8021 K

Miscellaneous Parts

P. C. BOARD ASSEMBLY

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
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<tr>
<td>Tone assembly</td>
<td>AWZ1885</td>
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<tr>
<td>AF Complex assembly</td>
<td>AWZ1890</td>
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Phone amp assembly
Speaker switch assembly
Headphone assembly
LED assembly

OTHERS

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<td>★★ Q3, Q4</td>
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<td>★★ Q1, Q2</td>
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<tr>
<td>R1</td>
<td>RDR1/4PM6R8J</td>
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<td>C1</td>
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<td>△★ T1</td>
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<td>★★ S2</td>
<td>Rotary switch (REC SELECTOR)</td>
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<td>△★★ FU1</td>
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Tone assembly (AWZ1885)

SEMICONDUCTORS

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<td>★★ IC601, IC602</td>
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<td>★ Q601, Q602, Q603, Q604</td>
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<td>★ D601, D602</td>
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<tr>
<td>★ D603</td>
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<tr>
<td>★ D605−D608</td>
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<td>★ D505, D506</td>
<td>11E2 (S5566)</td>
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SWITCHES

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<td>★★ S601, S602, S603</td>
<td>Push switch (SUBSONIC, LOUDNESS, DIRECT)</td>
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<td>★★ S604</td>
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CAPACITORS

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### AF complex assembly (AWZ1890)

#### SEMICONDUCTORS

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#### SWITCHES AND RELAY

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#### CAPACITORS

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<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
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<tbody>
<tr>
<td>⬡</td>
<td>C507 (0.01/AC150)</td>
<td>ACGL005</td>
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<tr>
<td>⬡</td>
<td>C505, C506 (10000/50)</td>
<td>ACH1078</td>
</tr>
<tr>
<td>⬡</td>
<td>C201, C202 (2.2/50)</td>
<td>ACH1096</td>
</tr>
<tr>
<td>⬡</td>
<td>C203, C204, C227—C30</td>
<td>CCSSL101K500</td>
</tr>
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<td>⬡</td>
<td>C213—C216</td>
<td>CCSSL150K500</td>
</tr>
<tr>
<td>⬡</td>
<td>C205, C206</td>
<td>CCMSL101J50</td>
</tr>
<tr>
<td>⬡</td>
<td>C207</td>
<td>CCMSL470J50</td>
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<tr>
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<td>C221—C224</td>
<td>CCMSL680J50</td>
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<td>⬡</td>
<td>C306</td>
<td>CEAS010M100</td>
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<tr>
<td>⬡</td>
<td>C501, C502</td>
<td>CEAS010M50</td>
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<td>C305</td>
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<tr>
<td>⬡</td>
<td>C301, C302</td>
<td>CEAS2R2M50</td>
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<td>C247, C248</td>
<td>CEAS470M50</td>
</tr>
<tr>
<td>⬡</td>
<td>C217, C218, C303</td>
<td>CEAS471M6</td>
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<tr>
<td>⬡</td>
<td>C211, C212</td>
<td>CEYA221M16</td>
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<tr>
<td>⬡</td>
<td>C209, C210</td>
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<tr>
<td>⬡</td>
<td>C204, C275</td>
<td>CKCYF103250</td>
</tr>
<tr>
<td>⬡</td>
<td>C721</td>
<td>CKCYX104M25</td>
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<td>⬡</td>
<td>C724</td>
<td>CKDYF473250</td>
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### RESISTORS

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<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>⬧</td>
<td>R269, R270 Wire wound (0.33 0×2/5W)</td>
<td>ACN—139</td>
</tr>
<tr>
<td>⬧</td>
<td>R201—R204, R215—R218</td>
<td>RDR1/4PMФ20J</td>
</tr>
<tr>
<td>⬧</td>
<td>R503</td>
<td>RD1/4PMFL151J</td>
</tr>
<tr>
<td>⬧</td>
<td>R227—R230, R257—R268, R301, RD1/4PMФ20J</td>
<td>RDR1/4PMFL151J</td>
</tr>
<tr>
<td>⬧</td>
<td>R302, R283—R286, R295, R296, R308</td>
<td>RD1/4PMФ20J</td>
</tr>
<tr>
<td>⬧</td>
<td>R723, R309, R310, R316, R307, R709, R710, R713, R714, R717, R718, R726—R728</td>
<td>RD1/4PMФ20J</td>
</tr>
<tr>
<td>⬧</td>
<td>R241—R248 Other resistors</td>
<td>RFA1/4PSФ20J</td>
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#### OTHERS

<table>
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<th>Symbol &amp; Description</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>⬡</td>
<td>Terminal 4P (TAPE2, ADAPTOR)</td>
<td>AKB1007</td>
</tr>
<tr>
<td>⬡</td>
<td>Terminal 6P (PHONO, CD, TUNER)</td>
<td>AKB1008</td>
</tr>
<tr>
<td>⬡</td>
<td>Terminal 6P (LINE, TAPE1)</td>
<td>AKB1024</td>
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<tr>
<td>⬡</td>
<td>Terminal 8P (SPEAKER)</td>
<td>AKE1011</td>
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### Phono Amp Assembly

#### SEMICONDUCTORS

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<th>Part No.</th>
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<tr>
<td>⬡ ⬡</td>
<td>IC101</td>
<td>M5220P</td>
</tr>
<tr>
<td>⬡ ⬡</td>
<td>Q105, Q106</td>
<td>2SC2458</td>
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<tr>
<td>⬡</td>
<td>Q101—Q104</td>
<td>2SC1740S</td>
</tr>
<tr>
<td>⬡</td>
<td>D101, D102</td>
<td>2SC2603</td>
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<tr>
<td>⬡ ⬡</td>
<td>S101 Push switch (MM—MC)</td>
<td>ASG1012</td>
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#### SWITCHES

#### CAPACITORS

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>⬡</td>
<td>C103, C104</td>
<td>CCSSL221K500</td>
</tr>
<tr>
<td>⬡</td>
<td>C107</td>
<td>C108</td>
</tr>
<tr>
<td>⬡</td>
<td>C113, C114</td>
<td>CEANP101M10</td>
</tr>
<tr>
<td>⬡</td>
<td>C117, C118</td>
<td>CEANP220M10</td>
</tr>
<tr>
<td>⬡</td>
<td>C135, C136</td>
<td>CEAS101M25</td>
</tr>
<tr>
<td>⬡</td>
<td>C135, C136</td>
<td>CEAS470M10</td>
</tr>
<tr>
<td>⬡</td>
<td>C111, C112</td>
<td>CFTX183J50</td>
</tr>
<tr>
<td>⬡</td>
<td>C109, C110</td>
<td>CFTX483J50</td>
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<tr>
<td>⬡</td>
<td>C119, C120</td>
<td>CKCYF102350</td>
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<tr>
<td>⬡</td>
<td>C105, C106</td>
<td>CKDYG03250</td>
</tr>
<tr>
<td>⬡</td>
<td>C121, C122</td>
<td>CKDYG03250</td>
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<tr>
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<td>C115, C116</td>
<td>CQMA472K50</td>
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RESISTORS

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R101, R102, R107, R108, R119—R122, R133, R134 R104, R103 R145 Other resistors</td>
<td></td>
<td>RDR1/4PM100J RDR1/4PU100J RD1/4PM2R7J RD1/4PM3R7J</td>
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Speaker Switch Assembly

SWITCHES

<table>
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<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>Δ</td>
<td>S501 Push switch (POWER) S401 Push switch (SP, A—B)</td>
<td>ASG1006 SUL5MXBS</td>
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COILS

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<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>L401, L402 AF choke coil (0.7 μH)</td>
<td>ATH1004</td>
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CAPACITORS

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Δ</td>
<td>C510, C511 (0.01 μF/400V)</td>
<td>ACG1003 CFTX104J50</td>
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RESISTORS

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Δ</td>
<td>R405, R406 R401, R402, R407, R408 R403, R404</td>
<td>RD1/4PM681J RD1/4PMFL100J RS1LMF331J</td>
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Headphone Assembly

OTHERS

<table>
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<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
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<tbody>
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LED Assembly

SEMICONDUCTORS

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<tr>
<td>★</td>
<td>D640 LED assembly</td>
<td>AEL1004</td>
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# 6. FOR A-443/HB, HEZ AND A-443-S/HEZ TYPES

**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.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★. ★★ GENERALLY MOVES FASTER THAN ★.
- This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- Parts marked by "Ø" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The A-443/HB, HEZ and A-443-S/HEZ types are the same as the A-443/HE type with the exception of the following sections.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>A-443 HE type</th>
<th>A-443 HB type</th>
<th>A-443 HEZ type</th>
<th>A-443-S HEZ type</th>
<th>Remarks</th>
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<td>AF complex assembly</td>
<td>AWZ1890</td>
<td>AWZ1890</td>
<td>AWZ1884</td>
<td>AWZ1884</td>
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<td>Non supply</td>
<td>Non supply</td>
<td>Non supply</td>
<td>Non supply</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Speaker switch assembly</td>
<td>Non supply</td>
<td>Non supply</td>
<td>Non supply</td>
<td>Non supply</td>
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<tr>
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<td>AC power cord</td>
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<td>ADE051</td>
<td>ADE1019</td>
<td>ADE1019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FU1 Fuse (T2.5A/250V)</td>
<td>ABE-403</td>
<td>ABE-512</td>
<td>ABE-403</td>
<td>ABE-403</td>
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<tr>
<td></td>
<td>Headphone assembly</td>
<td>Non supply</td>
<td>Non supply</td>
<td>Non supply</td>
<td>Non supply</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knob (VOLUME)</td>
<td>AAB1064</td>
<td>AAB1064</td>
<td>AAB1064</td>
<td>AAB1065</td>
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<td>Knob</td>
<td>AAB1066</td>
<td>AAB1066</td>
<td>AAB1066</td>
<td>AAB1067</td>
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<td></td>
<td>Knob (BASS, TREBLE, BALANCE)</td>
<td>AAB1068</td>
<td>AAB1068</td>
<td>AAB1068</td>
<td>AAB1069</td>
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<tr>
<td></td>
<td>Knob B (SPEAKERS A, B)</td>
<td>AAD-418</td>
<td>AAD-418</td>
<td>AAD-418</td>
<td>AAD1368</td>
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<td>Knob (SUBSONIC, LOUDNESS, DIRECT)</td>
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<td>ANB1181</td>
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<td>RD/PM8R8J</td>
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<td>AZN1799</td>
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</table>
**AF COMPLEX ASSEMBLY (AWZ1884)**

The AF complex assembly (AWZ1884) for HEZ type is the same as the AF complex assembly (AWZ1890) for HE and HB types with the exception of the following sections.

<table>
<thead>
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<th>Symbol &amp; Description</th>
<th>Part No.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>AWZ1890 (HE and HB types)</td>
<td>AWZ1884 (HEZ type)</td>
</tr>
<tr>
<td>C215, C216</td>
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<td>CCCSL150K500</td>
<td>CQMXA472J100</td>
</tr>
<tr>
<td>C213, C214</td>
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<td>CCCSL150K500</td>
<td>CQMXA472J100</td>
</tr>
<tr>
<td>C239–C242</td>
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<td>......</td>
<td>CKMYB331K50</td>
</tr>
<tr>
<td>C245, C246</td>
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<td>......</td>
<td>CMRL270J50</td>
</tr>
<tr>
<td>C701, C702</td>
<td></td>
<td>......</td>
<td>CKMYB331K50</td>
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<tr>
<td>C703–C718</td>
<td></td>
<td>......</td>
<td>CMRL270J50</td>
</tr>
<tr>
<td>C719, C720</td>
<td></td>
<td>CKMYB331K50</td>
<td>CKMYB331K50</td>
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<td>C724</td>
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<td>CKMYB331K50</td>
<td>CKMYB331K50</td>
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<tr>
<td>C727, C728</td>
<td></td>
<td>CMRL270J50</td>
<td>CMRL270J50</td>
</tr>
<tr>
<td>C729, C730</td>
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<td>CMRL270J50</td>
<td>CMRL270J50</td>
</tr>
<tr>
<td>R231, R232</td>
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<td>RD3/PM221J</td>
<td>RD3/PM471J</td>
</tr>
<tr>
<td>R701, R702</td>
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<td>RD3/PM221J</td>
<td>RD3/PM471J</td>
</tr>
<tr>
<td>R703, R704</td>
<td></td>
<td>RD3/PM331J</td>
<td>RD3/PM331J</td>
</tr>
<tr>
<td>R709, R710, R713, R714, R717, R718</td>
<td>RD3/PM222J</td>
<td>RD3/PM182J</td>
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<tr>
<td>R711, R712, R715, R716, R719, R720</td>
<td>......</td>
<td>RD3/PM331J</td>
<td>LAU3P3K</td>
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<tr>
<td>L701, L702</td>
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<td>......</td>
<td>LAU3P3K</td>
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</tbody>
</table>

**PHONO AMP ASSEMBLY**

The phono amp assembly (for HEZ type) is the same as the phono amp assembly (for HE and HB types) with the exception of the following sections.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>For HE and HB types</td>
<td>For HEZ type</td>
</tr>
<tr>
<td>C103, C104</td>
<td></td>
<td>CCCSL221K500</td>
<td>CCCSL271K500</td>
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<tr>
<td>C115, C116</td>
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<td>CQMA472K50</td>
<td>CQMA222K50</td>
</tr>
<tr>
<td>C137, C138</td>
<td></td>
<td>......</td>
<td>CKMYB151K50</td>
</tr>
<tr>
<td>L101, L102, Coil (560 μH)</td>
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<td>......</td>
<td>ATH1024</td>
</tr>
<tr>
<td>R105, R106</td>
<td></td>
<td>......</td>
<td>RD3/PM472J</td>
</tr>
</tbody>
</table>
**SPEAKER SWITCH ASSEMBLY**
The Speaker switch assembly (for HEZ type) is the same as the Speaker switch assembly (for HE and HB types) with the exception of the following sections.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>For HE and HB types</td>
<td>For HEZ type</td>
</tr>
<tr>
<td>C403, C404</td>
<td></td>
<td>CFTXA104J50</td>
<td>CFTXA473J50</td>
</tr>
<tr>
<td>C405, C406</td>
<td></td>
<td>CFTXA104J50</td>
<td></td>
</tr>
<tr>
<td>L401, L402 AF choke coil</td>
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<td>ATH1004</td>
<td>ATH1009</td>
</tr>
<tr>
<td>R401, R402</td>
<td></td>
<td>RD%PMFL100J</td>
<td>RD%PMFL101J</td>
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<tr>
<td>R405, R408</td>
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<td>RD%PM881J</td>
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**HEADPHONE ASSEMBLY**
The Headphone assembly (for HEZ type) is the same as the Headphone assembly (for HE and HB types) with the exception of the following sections.

<table>
<thead>
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<th>Mark</th>
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<th>Part No.</th>
<th>Remarks</th>
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<tr>
<td></td>
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<td>For HE and HB types</td>
<td>For HEZ type</td>
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<tr>
<td>C401, C402</td>
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7. FOR A-333/HE, HB, HEZ AND A-333-S/HEZ TYPES

The A-333/HE, HB, HEZ and A-333-S/HEZ types are the same as the A-443/HE type with the exception of the following sections.

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<tr>
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<th>A-443 HE type</th>
<th>A-333 HE type</th>
<th>A-333 HB type</th>
<th>A-333 HEZ type</th>
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<td>Transistor assembly</td>
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<td>Non supply</td>
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<td>Q3, Q4</td>
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<td>2SA1264N</td>
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<td>Knob (POWER)</td>
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<td>BBZ30P060FZK</td>
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<td>Knob (REC SELECTOR, INPUT SELECTOR)</td>
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<td>Knob (BASS, TREBLE, BALANCE)</td>
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<td>AAB1068</td>
<td>AAB1068</td>
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<td>ASU1013</td>
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<td>ASU1015</td>
<td>ASU1015</td>
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<td>AC power cord</td>
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<td>ADG1019</td>
<td>ADG-051</td>
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7.1 ELECTRICAL PARTS LIST OF A-333/HE, HB AND HEZ types

- For A-333/HE and HB types

NOTES:
- Parts without part number cannot be supplied.
- Parts marked by "O" 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 impotence of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.
  ★★ GENERALLY MOVES FASTER THAN ★.
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- 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 580 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).
  560 Ω  56×10^5  561 ..............................................................RD1/4PS 561
  47k Ω  47×10^5  473 ..............................................................RD1/4PS 473
  0.5 Ω  0R5 ..............................................................RN2H 0R5
  1Ω  10 ..............................................................RS1P 10
  Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
  5.62k Ω  562×10^5  8621 ..............................................................RN1/4SR 562

Miscellaneous Parts
P. C. BOARD ASSEMBLIES

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>Tone assembly</td>
<td>AWZ1895</td>
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<td>AF complex assembly</td>
<td>AWZ1898</td>
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<tr>
<td>Phono amp assembly</td>
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<td></td>
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<tr>
<td>Transistor assembly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaker switch assembly</td>
<td></td>
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<td>Headphone assembly</td>
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<td>LED assembly</td>
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OTHERS

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<td>△★★</td>
<td>Q3, Q4</td>
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<tr>
<td>△★★</td>
<td>Q1, Q2</td>
<td>2SC3181N</td>
</tr>
<tr>
<td>△</td>
<td>C1</td>
<td>C0MXA473J100</td>
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<td>△</td>
<td>T1</td>
<td>Power transformer (AC220/240V)</td>
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<tr>
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<tr>
<td>★★</td>
<td>S2</td>
<td>Rotary switch (REC SELECTOR)</td>
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<tr>
<td>★★</td>
<td>S1</td>
<td>Rotary switch (INPUT SELECTOR)</td>
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<tr>
<td>△★★</td>
<td>FU1</td>
<td>Fuse (T1.6A/250V)</td>
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<td>△</td>
<td>Stain relief</td>
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Tone Assembly (AWZ1895)

SEMICONDUCTORS

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<td>★★</td>
<td>Q601 – Q604</td>
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<td>D602</td>
<td>AEL1004</td>
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<td>★</td>
<td>D603</td>
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<td>★</td>
<td>D605 – D608</td>
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<td>★</td>
<td>D505, D506</td>
<td>11E2 (S5566)</td>
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SWITCHES

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CAPACITORS

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<td>C619, C620</td>
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<td>C641, C642</td>
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<td>C509, C601, C602, C623, C624</td>
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<td>C617, C618, C629, C630</td>
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<td>C621, C622</td>
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<td>C611, C612</td>
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<td>C625, C626</td>
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<td>C607, C608</td>
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<td>C613, C614</td>
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<td>C645, C646</td>
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<td>C633, C634</td>
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<td>C545, C646</td>
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<td>C545, C646</td>
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<td>C561, C561</td>
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23
### Resistors

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<tr>
<td>★</td>
<td>VR603, VR604 Variable resistor (BASS, TREBLE: 100 kΩ×2)</td>
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<td>★</td>
<td>VR602 Variable resistor (BALANCE: 100 kΩ×2)</td>
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<td>★</td>
<td>VR601 Variable resistor (VOLUME: 100 kΩ×2)</td>
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<td>R517–R521, R522, R523, R651, R663, R664</td>
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AF Complex Assembly (AWZ1898)

### Semiconductors

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### Switch and Relay

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<td>★</td>
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<td>S701 Slide switch (REC SELECTOR)</td>
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### Capacitors

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<td>C505, C506</td>
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### Others

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<td>Terminal 6P (PHONO, CD, TUNER)</td>
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<td>Terminal 8P (LINE, TAPE1)</td>
<td>AKB1024</td>
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<tr>
<td></td>
<td>Terminal 8P (SPEAKER)</td>
<td>AKE1011</td>
</tr>
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</table>

### Phono Amp Assembly

### Semiconductors

<table>
<thead>
<tr>
<th>Mark</th>
<th>Symbol &amp; Description</th>
<th>Part No.</th>
</tr>
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<tbody>
<tr>
<td>★★</td>
<td>IC101</td>
<td>M5220P</td>
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</table>

### Capacitors

<table>
<thead>
<tr>
<th>Mark</th>
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<th>Part No.</th>
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<tbody>
<tr>
<td>C107, C108</td>
<td></td>
<td>CEAS101M10</td>
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<td>C117, C118</td>
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<td>CEAS101M25</td>
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<td>C113, C114</td>
<td></td>
<td>CEAS4R75M</td>
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<tr>
<td>C111, C112</td>
<td></td>
<td>CFTX1A83J50</td>
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<td>C109, C110</td>
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<td>CFTX683J50</td>
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<tr>
<td>C123, C124</td>
<td></td>
<td>CEAS100M50</td>
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<tr>
<td>C119, C120</td>
<td></td>
<td>CKCYF103250</td>
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<td>C103, C104</td>
<td></td>
<td>(CKDYM103250)</td>
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<tr>
<td>C121, C122</td>
<td></td>
<td>(CKMYB221K50)</td>
</tr>
<tr>
<td>C115, C116</td>
<td></td>
<td>CMIA122J50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CQMA472K50</td>
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</tbody>
</table>
**For A-333-HEZ and A-333-S-HEZ types.**

**AF COMPLEX ASSEMBLY (AWZ1894)**

The AF complex assembly (AWZ1894) for HEZ type is the same as the AF complex assembly (AWZ1898) for HE and HB types with the exception of the following sections.

**Mark** | **Symbol & Description** | **Part No.** | **Remarks**
--- | --- | --- | ---
010A | G3F 010A | 0203B08-123 | For HE and HB types
010B | G4F 010B | 0203B08-123 | For HE and HB types
011A | G5F 011A | 0203B08-123 | For HE and HB types
011B | G5F 011B | 0203B08-123 | For HE and HB types
011C | G5F 011C | 0203B08-123 | For HE and HB types
011D | G5F 011D | 0203B08-123 | For HE and HB types
012A | G6F 012A | 0203B08-123 | For HE and HB types
012B | G6F 012B | 0203B08-123 | For HE and HB types
013A | G7F 013A | 0203B08-123 | For HE and HB types
013B | G7F 013B | 0203B08-123 | For HE and HB types
014A | G8F 014A | 0203B08-123 | For HE and HB types
014B | G8F 014B | 0203B08-123 | For HE and HB types
015A | G9F 015A | 0203B08-123 | For HE and HB types
015B | G9F 015B | 0203B08-123 | For HE and HB types

**PHONO AMP ASSEMBLY**

The phono amp assembly (for HEZ type) is the same as the phono amp assembly (for HE and HB types) with the exception of the following sections.

**Mark** | **Symbol & Description** | **Part No.** | **Remarks**
--- | --- | --- | ---
020A | G10F 020A | 0203B08-123 | For HE and HB types
020B | G10F 020B | 0203B08-123 | For HE and HB types
021A | G11F 021A | 0203B08-123 | For HE and HB types
021B | G11F 021B | 0203B08-123 | For HE and HB types
022A | G12F 022A | 0203B08-123 | For HE and HB types
022B | G12F 022B | 0203B08-123 | For HE and HB types
023A | G13F 023A | 0203B08-123 | For HE and HB types
023B | G13F 023B | 0203B08-123 | For HE and HB types
024A | G14F 024A | 0203B08-123 | For HE and HB types
024B | G14F 024B | 0203B08-123 | For HE and HB types
025A | G15F 025A | 0203B08-123 | For HE and HB types
025B | G15F 025B | 0203B08-123 | For HE and HB types

**HEADPHONE ASSEMBLY**

The Headphone assembly (for HEZ type) is the same as the Headphone assembly (for HE and HB types) with the exception of the following sections.

**Mark** | **Symbol & Description** | **Part No.** | **Remarks**
--- | --- | --- | ---
030A | G16F 030A | 0203B08-123 | For HE and HB types
030B | G16F 030B | 0203B08-123 | For HE and HB types
031A | G17F 031A | 0203B08-123 | For HE and HB types
031B | G17F 031B | 0203B08-123 | For HE and HB types

**LED Assembly**

The LED assembly (for HEZ type) is the same as the LED assembly (for HE and HB types) with the exception of the following sections.

**Mark** | **Symbol & Description** | **Part No.** | **Remarks**
--- | --- | --- | ---
040A | G20F 040A | 0203B08-123 | For HE and HB types
040B | G20F 040B | 0203B08-123 | For HE and HB types
041A | G21F 041A | 0203B08-123 | For HE and HB types
041B | G21F 041B | 0203B08-123 | For HE and HB types
042A | G22F 042A | 0203B08-123 | For HE and HB types
042B | G22F 042B | 0203B08-123 | For HE and HB types
043A | G23F 043A | 0203B08-123 | For HE and HB types
043B | G23F 043B | 0203B08-123 | For HE and HB types

**RESISTORS**

The Speaker switch assembly (for HEZ type) is the same as the Speaker switch assembly (for HE and HB types) with the exception of the following sections.

**Mark** | **Symbol & Description** | **Part No.** | **Remarks**
--- | --- | --- | ---
050A | G24F 050A | 0203B08-123 | For HE and HB types
050B | G24F 050B | 0203B08-123 | For HE and HB types
051A | G25F 051A | 0203B08-123 | For HE and HB types
051B | G25F 051B | 0203B08-123 | For HE and HB types

**CAPACITORS**

For all sections, the capacitors (for HEZ type) are identical to the capacitors (for HE and HB types) with the exception of the following sections.

**Mark** | **Symbol & Description** | **Part No.** | **Remarks**
--- | --- | --- | ---
060A | G26F 060A | 0203B08-123 | For HE and HB types
060B | G26F 060B | 0203B08-123 | For HE and HB types
8. SPECIFICATIONS

• A-443

Amplifier Section
Continuous power output (both channels driven at 20 Hz to 20 kHz) **
  T.H.D. 0.008%, 8Ω ................. 60W + 60W *
  T.H.D. 0.02%, 4Ω .................. 80W + 80W *
DIN Continuous power output (both channels driven at 1 kHz)
  T.H.D. 1.0%, 8Ω .................... 70W + 70W
  T.H.D. 1.0%, 4Ω .................. 100W + 100W
Dynamic power output (on EIA dynamic test signal)
  8Ω ................................ 75W + 75W
  4Ω ................................. 110W + 110W
  2Ω ................................. 150W + 150W
Total harmonic distortion **
  20 Hz to 20 kHz, 60W, 8Ω ........... 0.008% *
  20 Hz to 20 kHz, 80W, 4Ω ........... 0.02% *
Input sensitivity/impedance
  PHONO (MM) .................. 2.5 mV/50 kΩ
  PHONO (MC) .................. 0.2 mV/100 kΩ
  CD, TUNER, LINE, TAPE .......... 150 mV/40 kΩ
PHONO overload level
  1 kHz, T.H.D. 0.008% (MM/VC) ... 150 mV/12 mV
Output level/impedance
  TAPE REC, ADAPTOR OUTPUT ...... 150 mV/2.2 kΩ
Frequency response
  PHONO (MM), 20 Hz to 20 kHz ...... ±0.3 dB
  PHONO (MC), 20 Hz to 20 kHz ...... ±0.5 dB
  CD, TUNER, LINE, TAPE 5Hz to 100 kHz ... +0 dB *
  ................................ -3 dB *
Tone control (volume control set at -40 dB position)
  BASS ............................. ±8 dB (100 Hz)
  TREBLE .......................... ±8 dB (10 kHz)
 Loudness contour (volume control set at -40 dB position)
  +5dB (100 Hz)/+3 dB (10 kHz)
Filter (SUBSONIC) .................. 17 Hz (12 dB/oct.)
Signal-to-Noise ratio (IHF short circuit, A network)
  PHONO (MM, 5 mV input/1C, 0.5 mV input) ......... 93 dB/74 dB ** *
  CD, TUNER, LINE, TAPE ........... 107 dB ** *
Signal-to-Noise ratio (DIN, continuous power/50 mW)
  PHONO (MM) .................. 74 dB/63 dB *
  CD, TUNER, LINE, TAPE .......... 87 dB/65 dB *

Power Supply/Miscellaneous
Power requirements
  U.K. model ...................... a.c. 240V, 50/60 Hz
  Other destination models ..... AC 110V/120—127V,
                              /220V/240V (switchable), 50/60 Hz
Power consumption ........... 550W
Dimensions .................... 420(W) x 348(D) x 126(H) mm
  16-1/2(W) x 13-11/16(D) x 4-15/16(H) in
Weight (without package) ....... 8.1 kg (17 lb 14 oz)

Accessories
Operating instructions ..................... 1

• Specifications and design subject to possible modification without notice, due to improvements.
  * Measured with the DIRECT switch set to ON.
  ** Measured by Audio Spectrum Analyzer.
Amplifier Section
Continuous power output (both channels driven at 20 Hz to 20 kHz) **
  T.H.D. 0.02%, 8Ω .................. 40W + 40W *
  T.H.D. 0.03%, 4Ω .................. 50W + 50W *
DIN Continuous power output (both channels driven at 1 kHz)
  T.H.D. 1.0%, 8Ω .................. 55W + 55W
  T.H.D. 1.0%, 4Ω .................. 72W + 72W
Dynamic power output (on EIA dynamic test signal)
  8Ω .................. 55W + 55W
  4Ω .................. 90W + 90W
  2Ω .................. 100W + 100W
Total harmonic distortion **
  20 Hz to 20 kHz, 40W, 8Ω .................. 0.02% *
  20 Hz to 20 kHz, 50W, 4Ω .................. 0.03% *
Input sensitivity/impedance
  PHONO (MM) .................. 2.5 mV/50 kΩ
  CD, TUNER, LINE, TAPE .................. 150 mV/40 kΩ
PHONO overload level
  1 kHz, T.H.D. 0.02% (MM) .................. 150 mV
Output level/impedance
  TAPE REC, ADAPTOR OUTPUT .................. 150 mV/2.2 kΩ
Frequency response
  PHONO (MM), 20 Hz to 20 kHz .................. ±0.3 dB
  CD, TUNER, LINE, TAPE 5Hz to 100 kHz .......... +0 dB *
  -3 dB *
Tone control (volume control set at −40 dB position)
  BASS .................. ±8 dB (100 Hz)
  TREBLE .................. ±8 dB (10 kHz)
Loudness contour (volume control set at −40 dB position)
  +5dB (100 Hz)/+3 dB (10 kHz)
Signal-to-Noise ratio (IHF short circuit, A network)
  PHONO (MM, 5 mV input) .................. 89 dB *
  CD, TUNER, LINE, TAPE .................. 107 dB *
Signal-to-Noise ratio (DIN, continuous power/50 mW)
  PHONO (MM) .................. 73 dB/63 dB *
  CD, TUNER, LINE, TAPE .................. 86 dB/65 dB *

Power Supply/Miscellaneous
Power requirements
  U.K. model .................. a.c. 240V, 50/60 Hz
Power consumption
  U.K. models .................. 410W
Dimensions .................. 420(W) × 348(D) × 126(H) mm
  16-1/2(W) × 13-11/16(D) × 4-15/16(H) in
Weight (without package) .................. 7.0 kg (17 lb 7 oz)

Accessories
Operating instructions .................. 1

* Specifications and design subject to possible modification without notice due to improvements.
** Measured with the DIRECT switch set to ON.
9. PANEL FACILITIES

The illustration shows model A-443.
Model A-333 is not equipped with 7, 8, and 11.

The U.K. models (A-443 and A-333) are not equipped with 33, 34.
[FRONT PANEL]

1 POWER switch/indicator
Press to turn power to the unit ON and OFF.

2 SPEAKERS A selector switch
Use this switch to listen to the speaker systems connected to the SPEAKERS A terminals.

ON (■) :
Depressed position: Sound is heard from the speaker systems.

OFF (■) :
Released position: No sound is heard from the speaker systems. Set to this position when listening with headphones.

3 SPEAKERS B selector switch
Use this switch to listen to the speaker systems connected to the SPEAKERS B terminals.

ON (■) :
Depressed position: Sound is heard from the speaker systems.

OFF (■) :
Released position: No sound is heard from the speaker systems. Set to this position when listening with headphones.

4 REC SELECTOR switch
When this switch is set to a position other than SOURCE or OFF, the equipment selected by the REC SELECTOR switch can be recorded from, irrespective of the settings of the INPUT SELECTOR and DIRECT switches.

TUNER:
To record from the equipment connected to TUNER terminals.

CD:
To record from the equipment connected to CD terminals.

OFF:
In this position, nothing from the REC terminals of DAT/TAPE 1 and TAPE 2 is output. Set to this position when not recording; the tape deck will be disconnected, improving sound quality.

SOURCE:
To record from the equipment selected by the INPUT SELECTOR switch.

TAPE:
1 ■ 2 — To record (copy) from the tape deck of DAT/TAPE 1 terminals, to the tape deck of TAPE 2 terminals.

2 ■ 1 — To record (copy) from the tape deck of TAPE 2 terminals, to the tape deck of DAT/TAPE 1 terminals.

5 INPUT SELECTOR switch
Use to select the playback source.

LINE:
For playback with a component connected to the LINE terminals.

TUNER:
For AM or FM broadcast reception with a tuner.

PHONO:
For record playback with a turntable.

CD:
For compact disc playback with a CD player.

DAT/TAPE 1:
For playback with a tape deck or digital audio tape deck connected to the DAT/TAPE 1 terminals.

TAPE 2:
For playback with a tape deck connected to the TAPE 2 terminals.

6 VOLUME control
Use to adjust the volume level.

NOTE:
This unit is equipped with a circuit that attenuates the LOUDNESS and TONE effect as volume is turned up.

7 PHONO SELECTOR switch (Model A-443 only)
Set in accordance with the type of cartridge used with your turntable.

MM (■) :
Set to this position when using a moving magnet cartridge, or a moving coil cartridge with a high output of 1 mV or more.

MC (■) :
Set to this position when using a moving coil cartridge.

8 MUTING switch (Model A-443 only)
Use to temporarily cut sound volume.

ON (■) :
The sound is cut off.

OFF (■) :
The sound will return to its previous volume.

9 DIRECT switch/indicator
Use this switch/indicator when you do not wish to pass the output from input terminal equipment through the various frequency adjusting circuits (SUBSONIC, BASS, TREBLE, BALANCE, LOUDNESS) and adaptor terminals (ADPT).

ON:
The indicator lights: The signals input through the input terminals are reproduced without passing through the various frequency adjusting circuits. This results in flat, pure sound which is a more faithful reproduction of the input source.
OFF:
The indicator goes out: The signal passes through the various frequency adjusting circuits.

10 LOUDNESS switch/indicator
Use when listening at low volume levels.

ON:
The indicator lights: Boosts low and high frequencies to give added punch to playback even at low volume levels.

OFF:
The indicator goes off: Should normally be left in this position.

NOTE:
This switch does not operate when the DIRECT switch is in the ON position.

11 SUBSONIC filter switch/indicator (Model A-443 only)
Use this switch when playing records with coarse grooves.

OFF:
Released position; leave in this position for normal playback.

ON:
Depressed position (the indicator lights). In this position, frequencies of 17 Hz and below are cut, eliminating super-low-frequency noise caused by coarse record grooves, and thus helping prevent sound distortion.

NOTE:
This switch does not operate when the DIRECT switch is in the ON position.

12 BALANCE control
Should normally be left in the center position. Adjust the balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the L(left) position and if the left side is louder, turn toward the R(right) position.

NOTE:
This control does not operate when the DIRECT switch is in the ON position.

13 TREBLE tone control
Use to adjust the high-frequency tone. The center position is the flat (normal) position. When turned to the right, high-frequency tones are emphasized; when turned to the left, high-frequency tones are de-emphasized.

NOTE:
- This control does not operate when the DIRECT switch is in the ON position.
- At volume levels lower than "4", the set tone control effect is obtained.
  At volume levels higher than "4", the effect becomes increasingly weaker.

14 BASS tone control
Use to adjust the low-frequency tone. The center position is the flat (normal) position. When turned to the right, low-frequency tones are emphasized; when turned to the left, low-frequency tones are de-emphasized.

NOTE:
- This control does not operate when the DIRECT switch is in the ON position.
- At volume levels lower than "4", the set tone control effect is obtained.
  At volume levels higher than "4", the effect becomes increasingly weaker.

15 PHONES jack
When using headphones, insert the plug into this jack.

[REAR PANEL]

16 PHONO terminals.
17 LINE terminals.
18 ADAPTOR OUT terminals.
19 ADAPTOR IN terminals.
20 DAT/TAPE 1 REC terminals.
21 DAT/TAPE 1 PLAY terminals.
22 SPEAKERS B terminals (right channel).
23 SPEAKERS B terminals (left channel).
24 Power cord.
Connect this cord to an AC wall socket, or the AC outlet of an audio timer.
25 SPEAKERS A terminals (left channel)
26 SPEAKERS A terminals (right channel)
27 TAPE 2 PLAY terminals.
28 TAPE 2 REC terminals.
29 Shorting bars.
30 CD terminals.
31 TUNER terminals.
32 Turntable ground terminal (GND).
33 AC OUTLETS
34 VOLTAGE SELECTOR