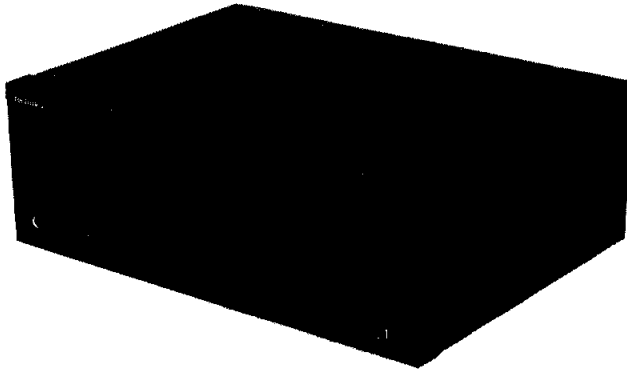


Service Manual

Amplifier

SU-X120

Stereo Integrated Amplifier

Simplified


Colour

(K) Black Type

Areas

| Suffix for Model No. | Area | Colour |
|----------------------|-------------------|--------|
| (E) | Europe | (K) |
| (EB) | Great Britain | |
| (EG) | Germany and Italy | |
| (GN) | Oceania | |

- Please file and use this manual together with the Service Manual for Model No. SU-X102, Order No. AD9103049C8.
- This service manual indicates the main differences between Original SU-X102 (E).

LINE-UP OF COMPONENTS

| System Name | Unit |
|--------------|---|
| SC-X120 (E) | ST-X302LA (E) : Tuner |
| | SU-X120 (E) : Amplifier |
| | RS-X120 (EG) : Cassette Deck |
| | — : CD Player |
| | SL-J110R (E) : Turntable |
| | SB-CS55 (E) : Speaker (Made in PAES) |
| SC-X120 (EB) | ST-X302LA (EB) : Tuner |
| | SU-X120 (EB) : Amplifier |
| | RS-X120 (EG) : Cassette Deck |
| | SL-PJ28A (EB) : CD Player (Made in MBV) |
| | SL-J110R (EB) : Turntable |
| | SB-CS55 (E) : Speaker (Made in PAES) |
| SC-X120 (EF) | ST-X302LA (EF) : Tuner (Made in PFS) |
| | SU-X120 (E) : Amplifier |
| | RS-X120 (EG) : Cassette Deck |
| | SL-PJ28A (E) : CD Player (Made in MBV) |
| | SL-J110R (E) : Turntable |
| | SB-CS55 (E) : Speaker (Made in PAES) |

| System Name | Unit |
|--------------|---|
| SC-X120 (EG) | ST-X302LA (EG) : Tuner |
| | SU-X120 (EG) : Amplifier |
| | RS-X120 (EG) : Cassette Deck |
| | SL-PJ28A (EG) : CD Player (Made in MBV) |
| | SL-J110R (EG) : Turntable |
| | SB-CS55 (E) : Speaker (Made in PAES) |
| SC-X120 (EI) | ST-X302LA (EI) : Tuner (Made in PFS) |
| | SU-X120 (EG) : Amplifier |
| | RS-X120 (EG) : Cassette Deck |
| | SL-PJ28A (EG) : CD Player (Made in MBV) |
| | SL-J110R (EG) : Turntable |
| | SB-CS55 (E) : Speaker (Made in PAES) |
| SC-X120 (GN) | ST-X302LA (GN) : Tuner |
| | SU-X120 (GN) : Amplifier |
| | RS-X120 (GC) : Cassette Deck |
| | SL-PJ28 (GN) : CD Player |
| | SL-J110R (GN) : Turntable |
| | SB-CD120 (GC) : Speaker |

Technics

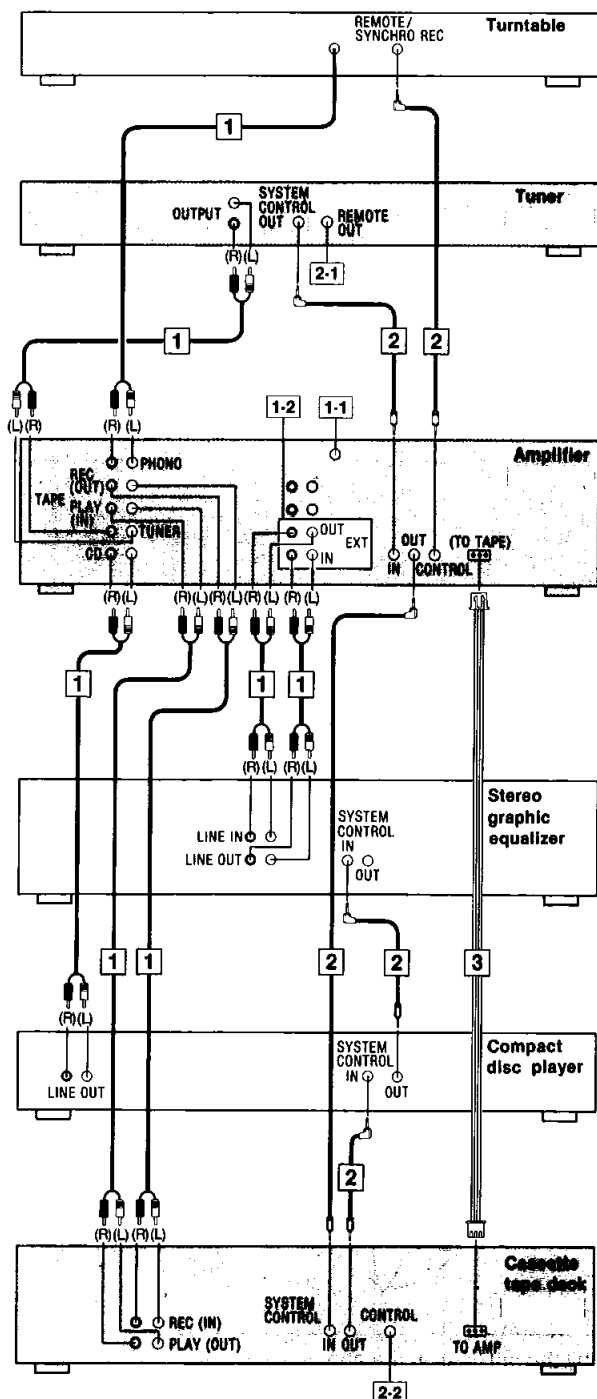
■ CHANGE IN REPLACEMENT PARTS LIST

SU-X102 (Pages 30~33, 36 of service manual.)

| Ref. No. | Part Number | | Description | Remarks |
|-----------------------|--------------|----------------------------|----------------------|---------------|
| | SU-X102 (E) | SU-X120 (E, EB, EG, GN) | | |
| TRANSISTOR(S) | | | | |
| Q504 | — | 2SC3311AQSTA | TRANSISTOR | (EB) |
| Q505 | — | 2SA1309AQSTA | TRANSISTOR | (EB) |
| DIODE(S) | | | | |
| D501, 502 | — | MA167TA | DIODE | (EB) |
| D504 | — | MA4051MTA | DIODE | (EB) |
| TRANSFORMER(S) | | | | |
| T1 | RTP1M5E008-V | RTP1M5B002-V | POWER TRANSFORMER | △ (EB, GN) |
| FUSE(S) | | | | |
| F2 | XBA2C08TB0 | — | FUSE | △ (GN) |
| CONNECTOR(S) | | | | |
| J551 | — | SJT3213 | CONNECTOR (2P) | (EB) Type (B) |
| JACK(S) | | | | |
| JK901 | SJS9231-1B | SJS9234B | AC INLET | △ (GN) |
| JK902 | SJS9333B | SJS9332B | AC OUTLET | △ (EB) |
| | | — | AC OUTLET | △ (GN) |
| FUSE HOLDER(S) | | | | |
| FC 3, 4 | SJT388 | — | FUSE HOLDER | △ (GN) |
| RESISTORS | | | | |
| R515, 516 | — | ERDS2TJ223T | RESISTOR ¼ W 22K | (EB) |
| R517 | — | ERDS2TJ563T | RESISTOR ¼ W 56K | (EB) |
| R520 | — | ERDS2TJ153T | RESISTOR ¼ W 15K | (EB) |
| R521 | — | ERDS2TJ103T | RESISTOR ¼ W 10K | (EB) |
| R522 | — | ERDS1FVJ680T | RESISTOR ½ W 68 | △ (EB) |
| R543 | — | ERDS1FVJ560T | RESISTOR ½ W 56 | △ (EB) |
| CAPACITORS | | | | |
| C513 | — | ECEA1CKA100B | CAPACITOR 16 V 10 μ | (EB) |
| C709 | ECEA1HKA2R2B | ECEA1HKN2R2B | CAPACITOR 50 V 2.2 μ | |
| CABINET PARTS | | | | |
| 3 | SJP9205-2Y | SJP9205-2T | CABINET | |
| 5 | SJS9231A | SJS9234A | AC INLET COVER | (GN) |
| 6 | SJS9333A | SJS9332A | AC OUTLET COVER | (EB) |
| | | RJS1A4602 | AC OUTLET COVER | (GN) |
| 7 | RGR0105K-A1 | RGR0105K-C1 | REAR PANEL | (E) |
| | | RGR0105T-B | REAR PANEL | (EB) Type (A) |
| | | RGR0105F-D1 | REAR PANEL | (EB) Type (B) |
| | | RGR0105K-D1 | REAR PANEL | (EG) |
| | | RGR0105M-A1 | REAR PANEL | (GN) |
| 19 | RGU0591A-K | RGU0591B-K | BUTTON, SUPER BASS | |
| 20 | RFKGUX102E | RFKGUX120E-K | FRONT PANEL ASS'Y | |
| 25 | — | REM0020-1 | FAN MOTOR ASS'Y | (EB) Type (A) |
| | | SYE1128-4 | FAN MOTOR ASS'Y | (EB) Type (B) |
| 25-1 | — | SHE232-1 | FAN | (EB) Type (A) |
| | | SHE232 | FAN | (EB) Type (B) |
| 25-2 | — | SUS271 | SPRING | (EB) |
| 25-3 | — | RMQ0209-K | FAN CASE | (EB) Type (A) |
| | | SHE233-1 | FAN CASE | (EB) Type (B) |
| 25-4 | — | MDN-4RB4MRC | MOTOR | (EB) |
| 25-5 | — | RMQ0208-K | CAP | (EB) Type (A) |
| | | SHE234 | CAP | (EB) Type (B) |
| 25-6 | — | SJT783 | TERMINAL | (EB) Type (B) |
| 25-7 | — | SJS5215 | CONNECTOR (2P) | (EB) Type (B) |
| 25-8 | — | RMQ0212-K | TERMINAL CAP | (EB) Type (A) |
| 36 | — | RJS1A7402 | CONNECTOR (2P) | (EB) Type (A) |
| 37 | — | XTBS3+8JFZ1 | SCREW | (EB) Type (A) |

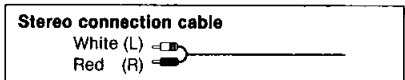
| Ref. No. | Part Number | | Description | Remarks |
|--------------------------|--------------|-------------------------|---------------------------|----------|
| | SU-X102 (E) | SU-X120 (E, EB, EG, GN) | | |
| PACKING MATERIALS | | | | |
| P1 | RPG0838 | RPG1208 | PACKING CASE | |
| P3 | SPSD152 | — | ACCESSORIES BOX | |
| ACCESSORIES | | | | |
| A1 | RQF1081 | — | INSTRUCTIONS MANUAL ASS'Y | |
| A1-1 | RQA0013 | RQX7433ZA | WARRANTY CARD | (GN) |
| A1-3 | RFKSUX102E-K | RFKSCX120E-K | INSTRUCTIONS MANUAL | (E) |
| | | RQT1498-B | INSTRUCTIONS MANUAL | (EB, GN) |
| | | RQT1497-D | INSTRUCTIONS MANUAL | (EG) |
| A2 | SJA187 | — | AC POWER SUPPLY CORD | △ |

■ CONNECTIONS OF EACH UNIT



Connection diagrams shown are for connections to a Technics hi-fi component system. Make connections in the numbered sequential order.

- 1 Connect the stereo connection cables** (included with the turntable, tuner, stereo graphic equalizer, and cassette tape deck).

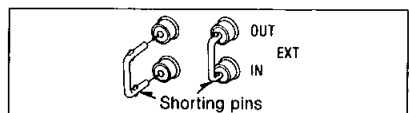


- 1-1 "GND" terminal of the amplifier**

This terminal is for use with a turntable which has a ground wire.

- 1-2 "EXT" terminals of the amplifier**

When these terminals are not in use, be sure to insert the "shorting" pins (included).



- 2 Connect the L-type cables** (included with the turntable, tuner, stereo graphic equalizer, compact disc player, and cassette tape deck).

- 2-1 "REMOTE OUT" terminal**

This terminal is used to connect to the "REMOTE IN" terminal of the Technics multi-compact disc player (not included).

- 2-2 "CONTROL" terminal**

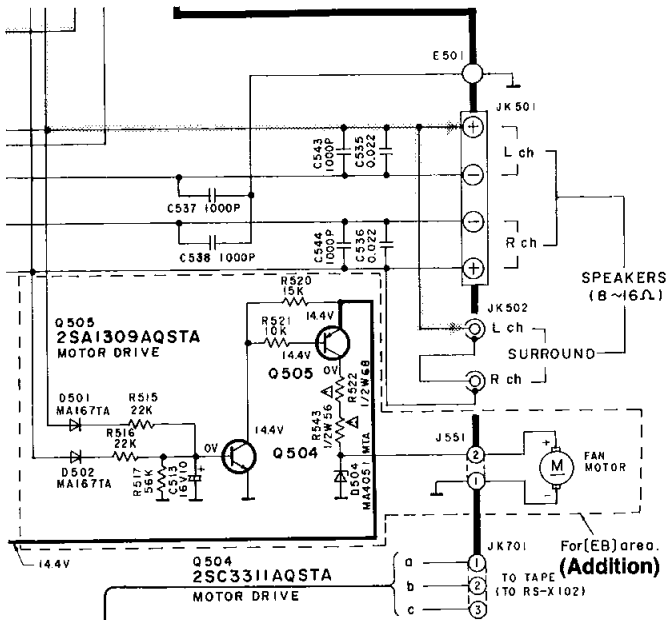
Make a connection from this terminal to the "CONTROL" terminal for a cassette deck on a Technics multi compact disc player (SL-PK26). (For detailed information, refer to the operating instructions of the Technics multi compact disc player.)

- 3 Connect the 3-core flat cable** (included with the cassette tape deck).

- Connect the AC power supply cords and AC outlet**
(See page 3 of service manual RS-X120, Order No. AD9203066A8.)

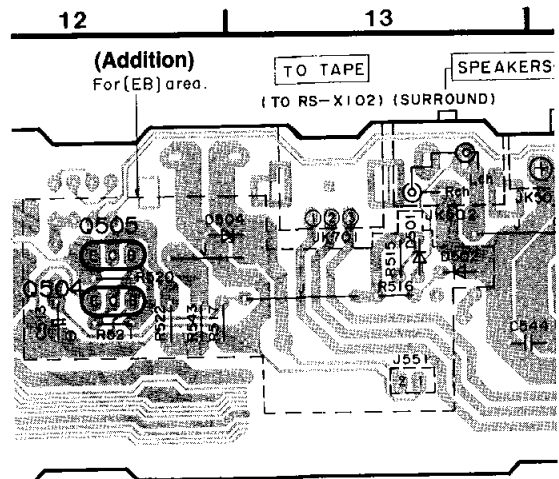
■ SCHEMATIC DIAGRAM

(EB) area only
 SU-X102 (Page 18 of service manual.)

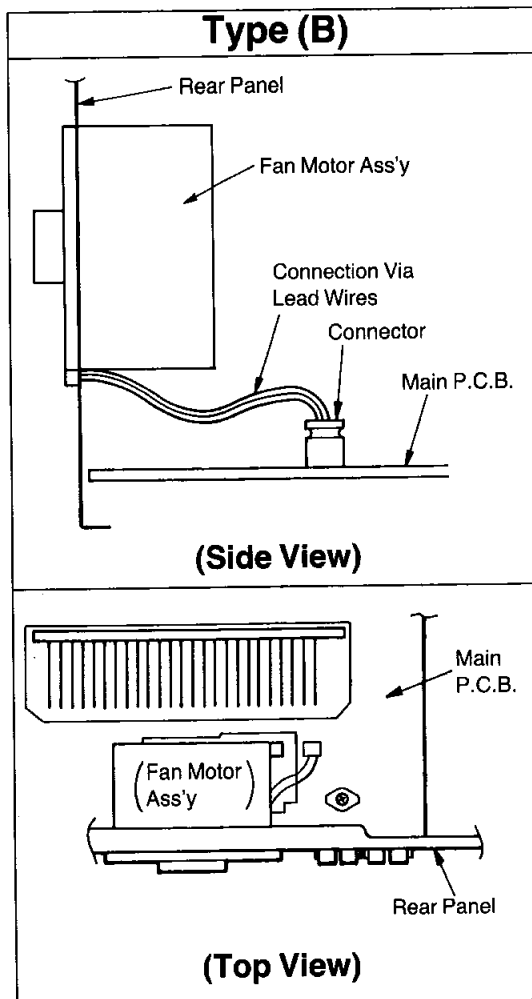
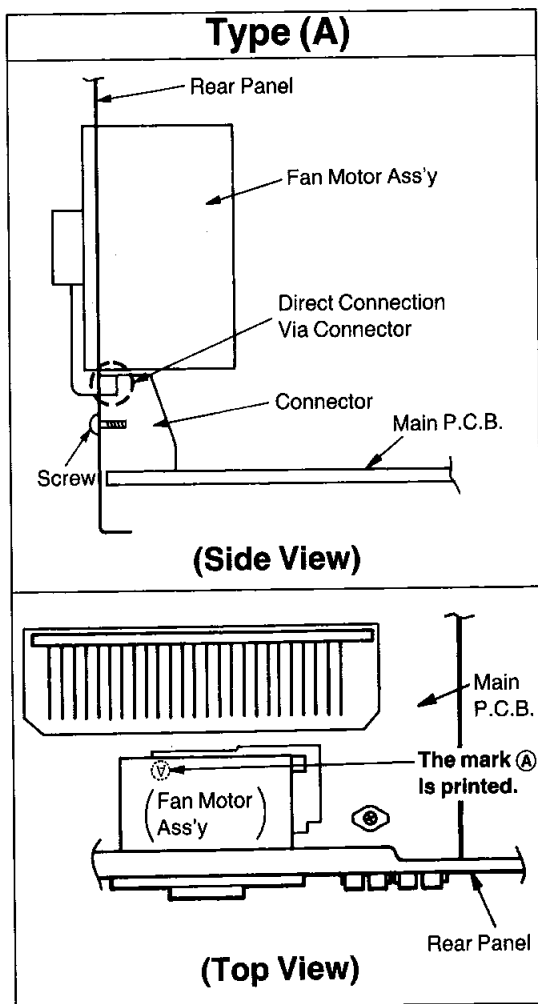


■ PRINTED CIRCUIT BOARD

(EB) area only
 SU-X102 (Page 22 of service manual)



- There are two types of the fan motor, i.e.: Types A and B.
 - Type A...The fan motor terminal is a connector type.
 - The "mark (A)" is printed on the main P.C.B. of type A. (Refer to the diagram below.)
 - Type B...The fan motor terminal is a lead wire type.
 - Refer to the diagram below to distinguish type A from type B.



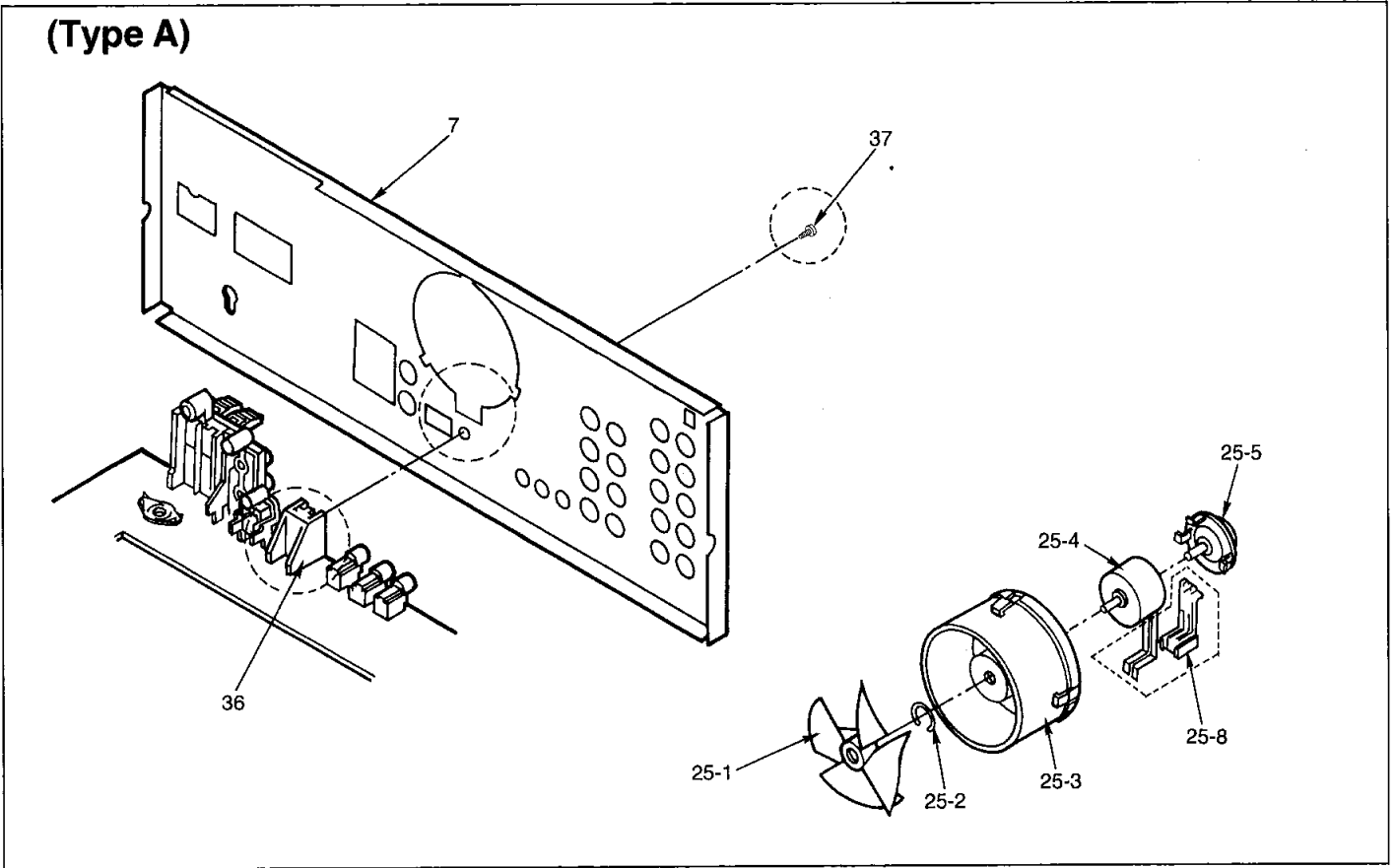
DISASSEMBLY INSTRUCTIONS

(EB) area only

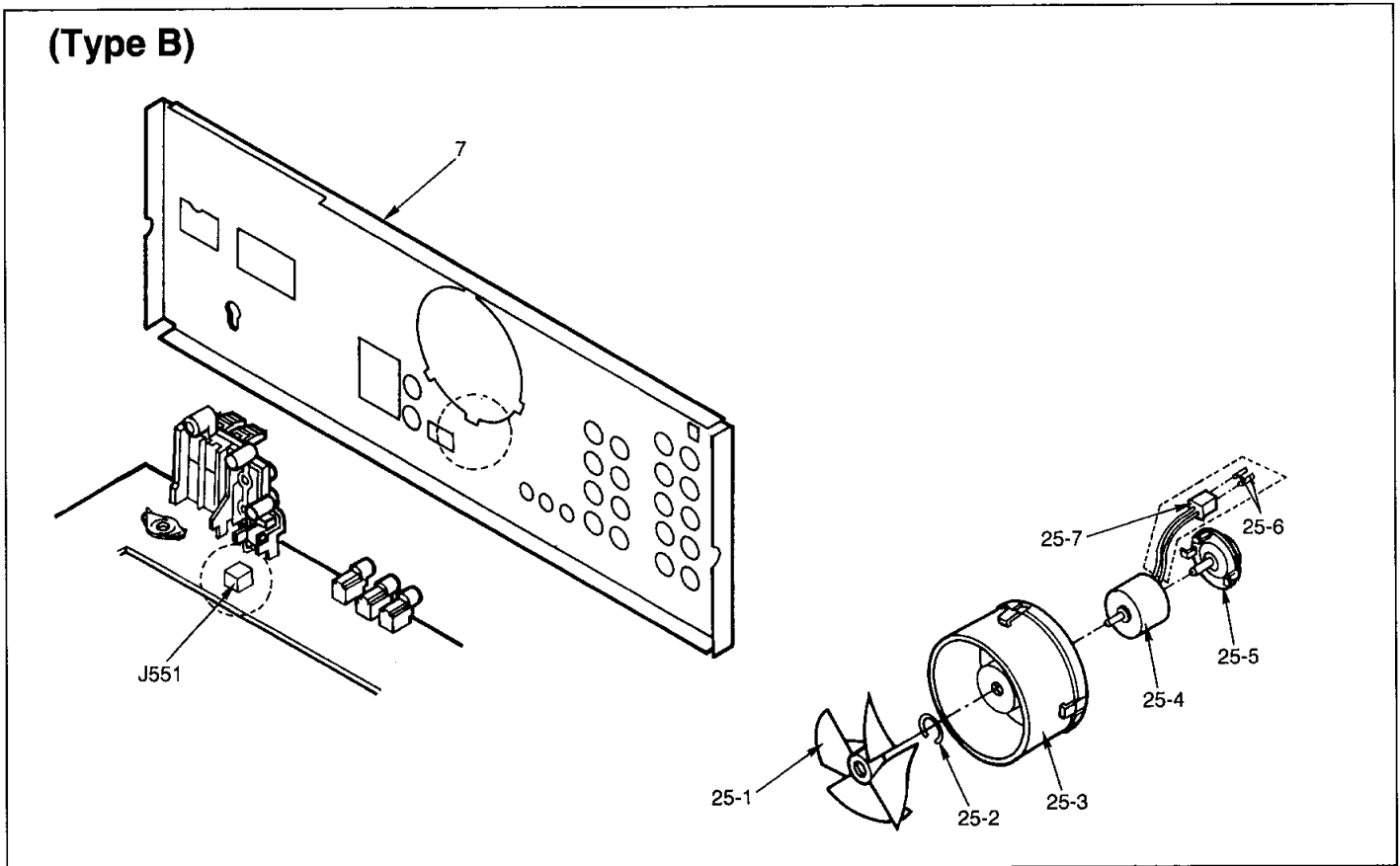
| | | |
|------------------------------------|--|--|
| <p>Ref No. 13</p> | <p>Removal of the Fan Motor Ass'y (Type A)</p> | |
| <p>Procedure 1→7→13</p> | <ol style="list-style-type: none"> 1. Release the 3 claws. (See Fig. 1.) 2. Insert a screwdriver at the root of the fan. Force it out of the motor shaft. (See Fig. 2.) 3. Remove the cap by using ⊖ screwdriver. (See Fig. 3.) 4. Remove the terminal cap in the direction of arrow. (See Fig. 4.) 5. Remove the motor from the fan case. (See Fig. 5.) 6. When mounting the motor, align the fan casing's projection with the hole of the motor. (See Fig. 6.) | |
| <p>Ref No. 13</p> | <p>Removal of the Fan Motor Ass'y (Type B)</p> | |
| <p>Procedure 1→7→13</p> | <ol style="list-style-type: none"> 1. Remove the 1 connector (J551). 2. Release the 3 claws. (See Fig. 1.) | <ol style="list-style-type: none"> 3. Insert a screwdriver at the root of the cooling fan. Force it out of the motor shaft. (See Fig. 2.) 4. Remove the cap by using ⊖ screwdriver. (See Fig. 3.) 5. Remove the motor from the fan casing. (See Fig. 4.) 6. When mounting the motor fan, align the fan casing's projection with the hole of the motor. (See Fig. 5.) |

■ CABINET PARTS LOCATION (EB) area only

(Type A)



(Type B)



Note: The different parts between type A and type B are enclosed by the dot lines in the above diagrams.