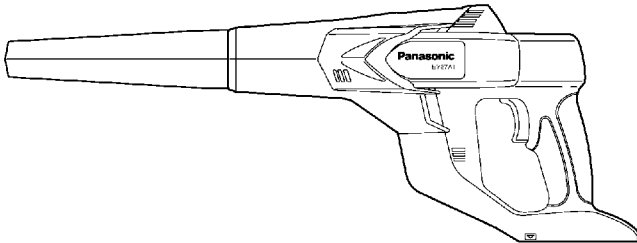


Service Manual

Blower

Model No. **EY37A1**

Europe
Oceania



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by **⚠** in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

TABLE OF CONTENTS

| | PAGE | PAGE |
|---|-----------|------|
| 1 Warning ----- | 2 | |
| 2 Specifications ----- | 2 | |
| 3 Troubleshooting Guide ----- | 3 | |
| 4 Disassembly and Assembly Instructions ----- | 6 | |
| 5 Wiring Connection Diagram ----- | 12 | |
| 6 Schematic Diagram ----- | 12 | |
| 7 Exploded View and Replacement Parts List ----- | 13 | |

1 Warning

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 750 ± 20°F (400 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100°F / 600°C).

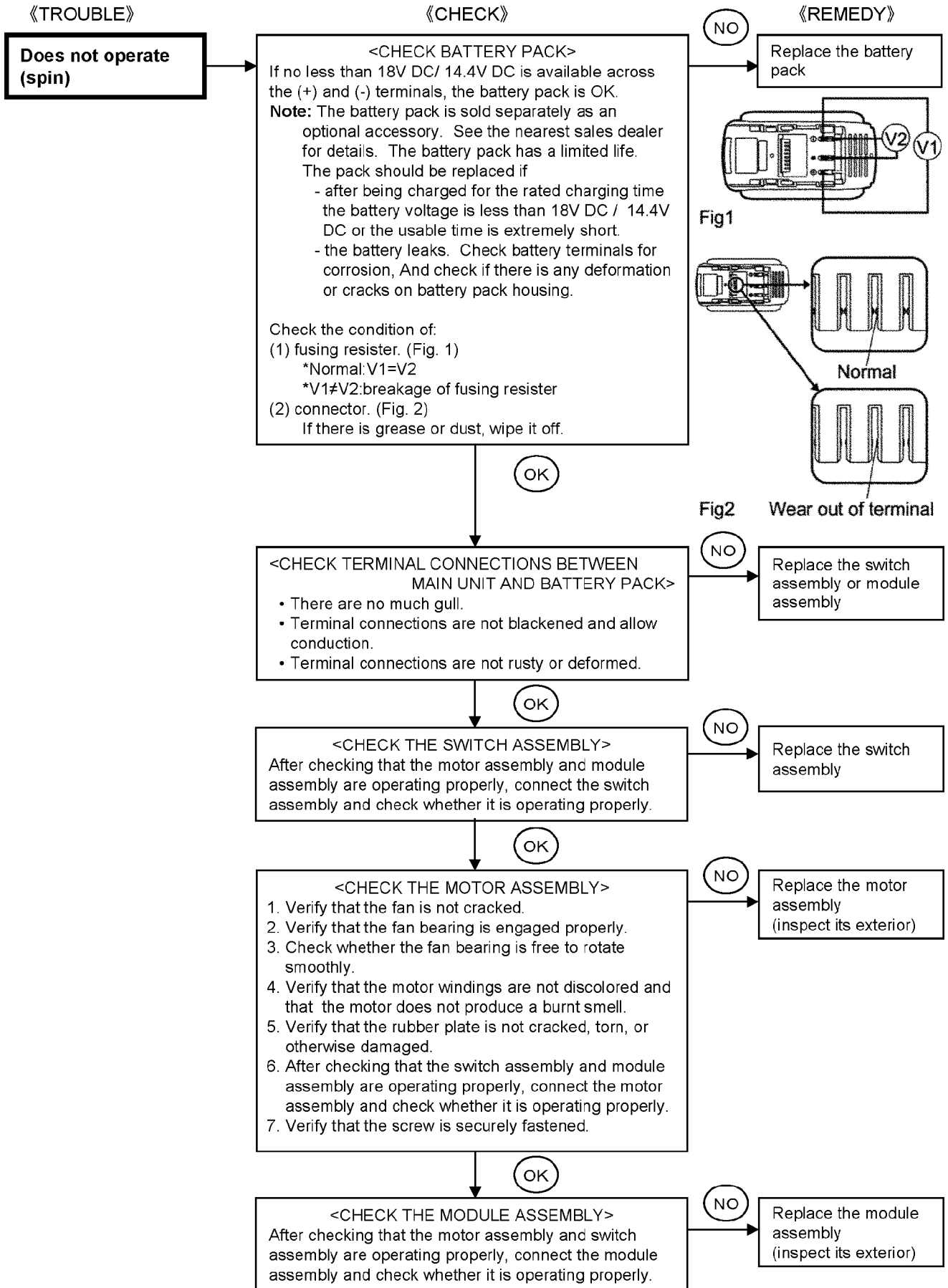
2 Specifications

2.1 Main Unit

| | | | | | | |
|------------------|---|--------|--------|----------------------------|--------|--------|
| Model no. | EY37A1 | | | | | |
| Voltage | DC 14.4 V | | | DC 18 V | | |
| Air volume | 0~2.6 m ³ /min. | | | 0~3.0 m ³ /min. | | |
| Wind speed | 60 m/s | | | 70 m/s | | |
| Size | 370 mm × 213 mm × 148 mm (14 9/16" × 8 3/8" × 5 13/16") | | | | | |
| Weight | 1.2 kg (main unit only) | | | | | |
| Battery packs | Li-ion battery packs | | | | | |
| | EY9L41 | EY9L42 | EY9L44 | EY9L45 | EY9L50 | EY9L51 |
| Battery voltage | DC 14.4 V | | | DC 18 V | | |
| Noise, Vibration | Typical Noise Emission Values according to EN 60745; Sound Pressure Level (L _{pA}); 78.3 dB (A) Sound Power Level (L _{WA}); 89.3 dB (re1pw) Uncertainty (K): 3 dB Typical Vibration according to EN 60745; 1.46 m/s ² Uncertainty (K): 1.5 m/s ² | | | | | |

3 Troubleshooting Guide

3.1. Troubleshooting Guide

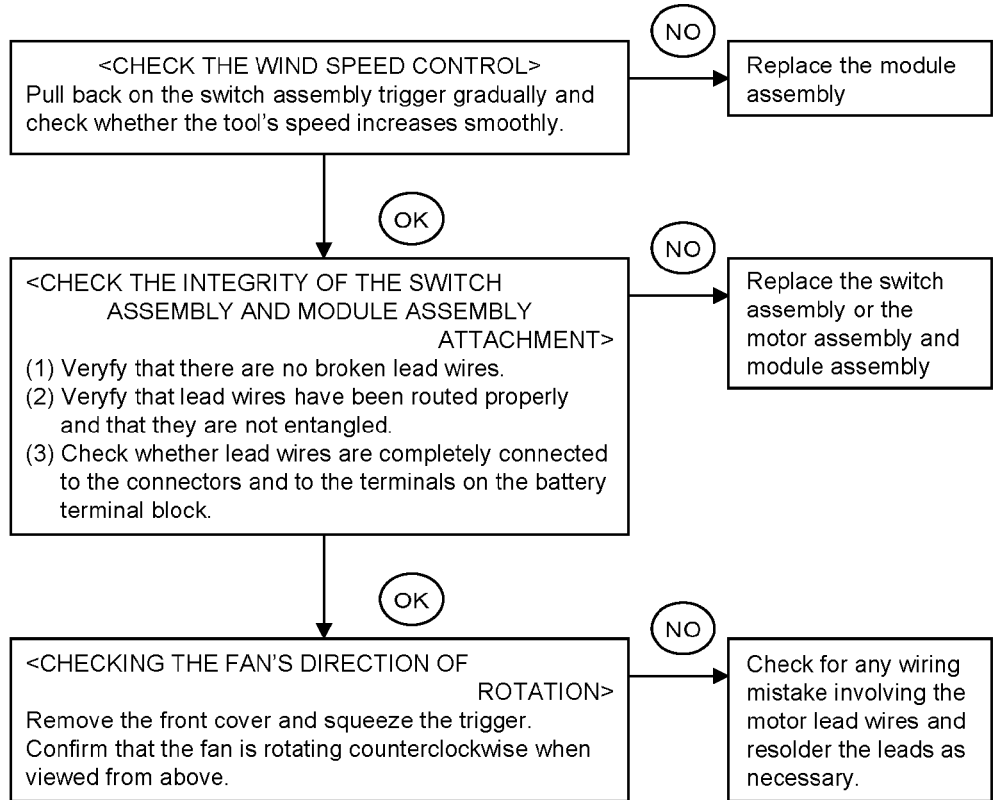


《TROUBLE》

Cannot be controlled

《CHECK》

《REMEDY》



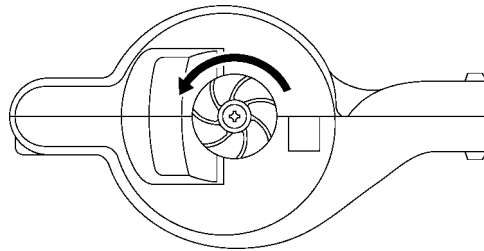
3.2. Trial Operation (after checking Troubleshooting Guide)

3.2.1. Assembly

- Confirm if there is no gap between housing A and B by pinching lead wires.
- Confirm that the front cover has been installed so that its edge is aligned with the housing AB groove and that it is not protruding from the groove.
- Confirm that the tool's battery terminal connections are not misshapen, dirty (covered with a thin film), or otherwise in need to repair.

3.2.2. Operation

- Confirm that the trigger operates properly.
- Confirm that the fan's direction of rotation is correct (counterclockwise) before attaching the front cover.



- Confirm that as the trigger is gradually pulled, the fan speed increases smoothly and that the speed of the airflow changes.
- Confirm that the tool produces the proper amount of airflow after repair and assembly.

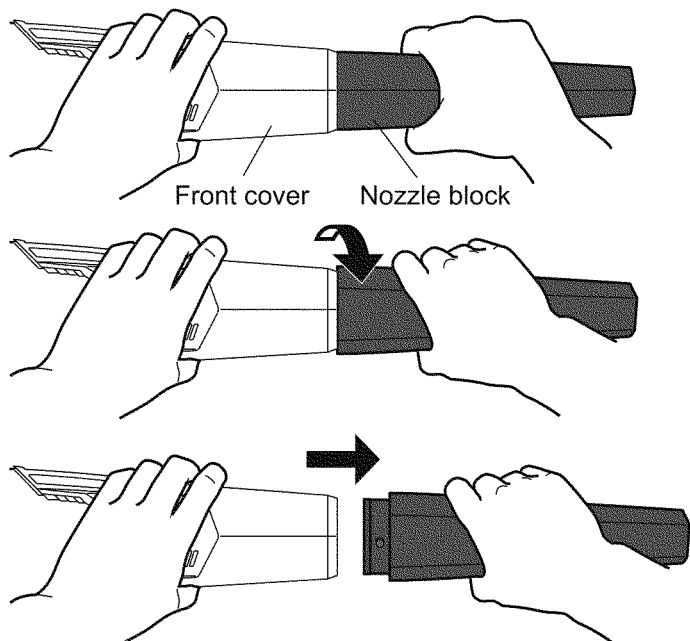
3.2.3. Integrity

- With the switch activated, shake the tool back and forth and up and down and verify that its sound does not change excessively.
- Check for the presence of any dirt or foreign matter from the repair process on the outside of the tool.

4 Disassembly and Assembly Instructions

*To assemble the tool, start with 4.6 and proceed to 4.1

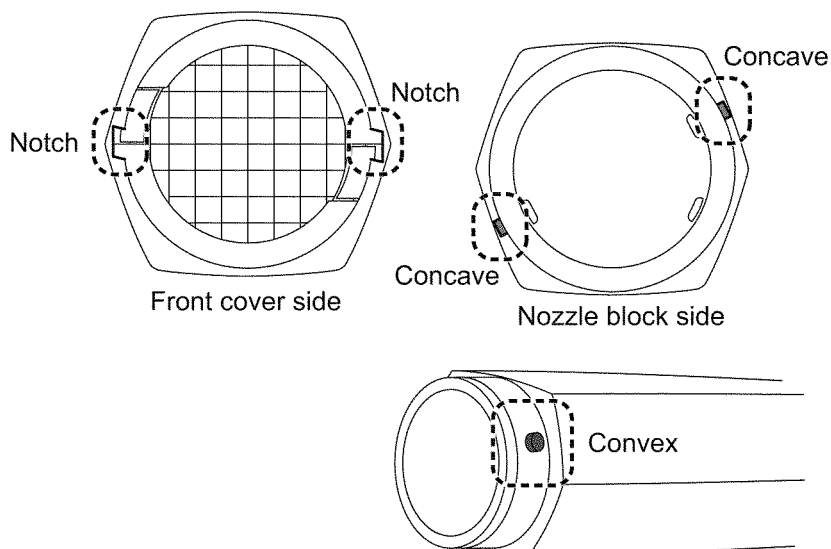
4.1. How to remove the housing B



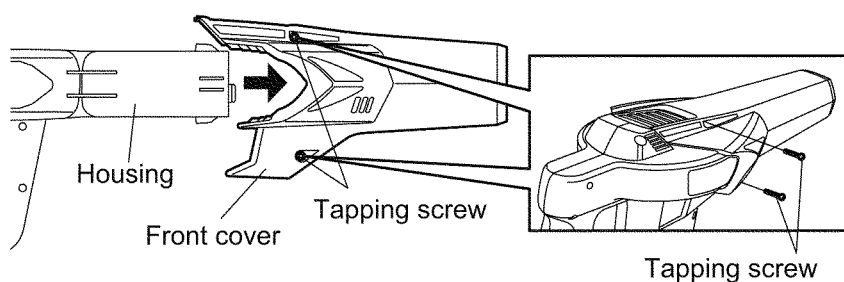
1. Hold the front cover in place with one hand and grip the nozzle block with the other.

2. Pull the nozzle block forward until you hear a clicking sound.

3. Remove the nozzle block.



*When attaching the nozzle block. Insert the protruding parts of the nozzle block into the corresponding notches on the front cover and rotate the nozzle block in the opposite direction until you hear a clicking sound.

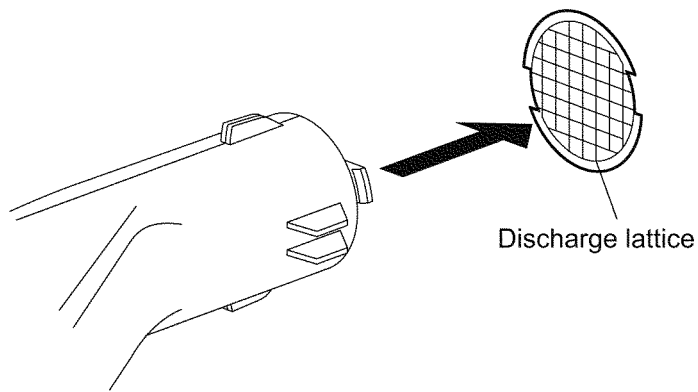


4. Remove the 2 tapping screws holding the front cover.

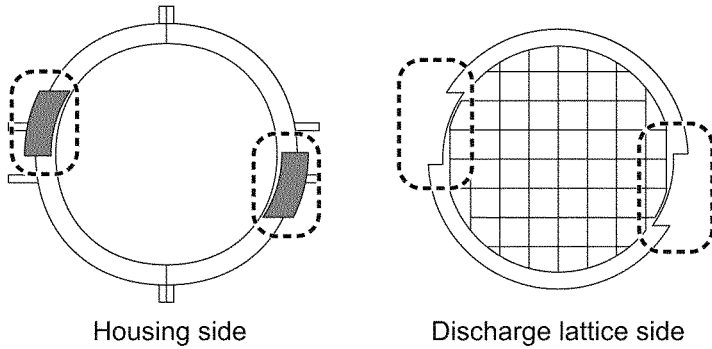
5. Remove the front cover from housing.

*When attaching the front cover. Attach the front cover so that its edge is aligned with the housing AB groove and so that it does not protrude from the groove.

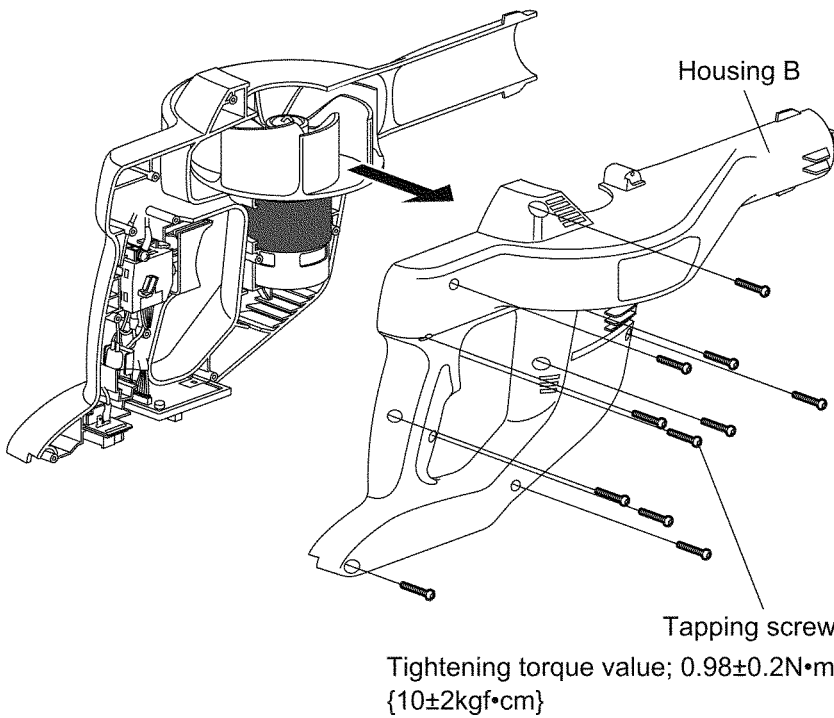
Tightening torque value; $0.98 \pm 0.2N \cdot m$
 $\{10 \pm 2kgf \cdot cm\}$



6. Remove the discharge lattice from the housing.



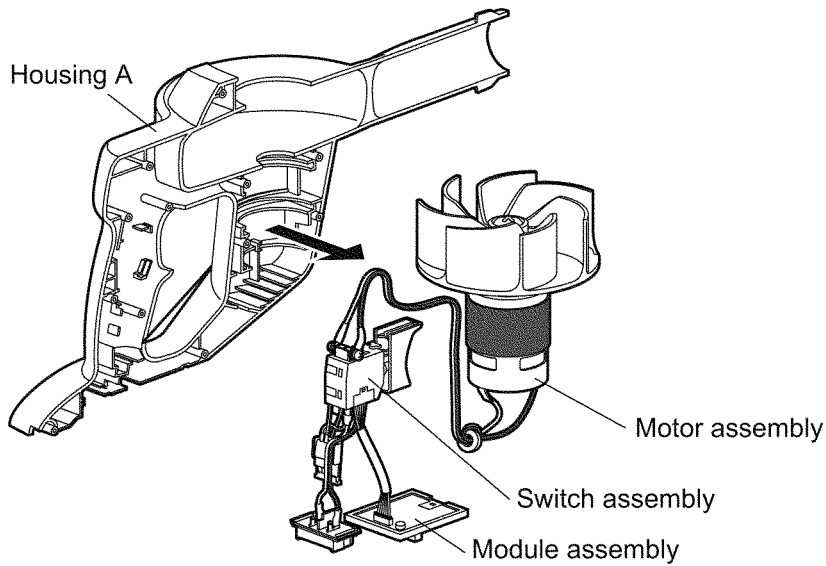
*When attaching the discharge lattice.
 1. Exercise care not to deform or rip the lattice.
 2. Attach the discharge lattice, positioning it so that its cutouts are aligned with the protrusions on the housing.



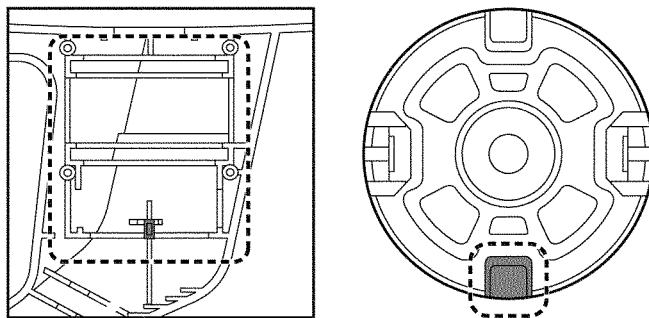
7. Remove 11 screws.
 8. Remove the housing B.

Tapping screw
 Tightening torque value; $0.98 \pm 0.2 \text{ N} \cdot \text{m}$
 $\{10 \pm 2 \text{ kgf} \cdot \text{cm}\}$

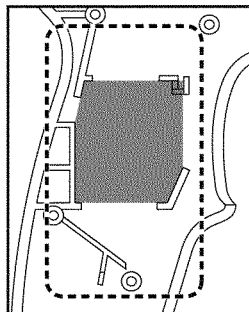
4.2. Removing the motor assembly, switch assembly, and module assembly



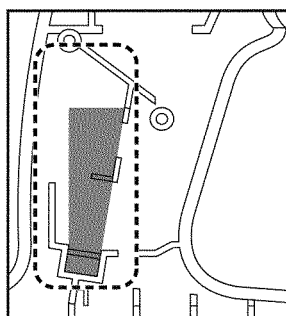
Remove the motor block, switch assembly, and module assembly from the housing A.



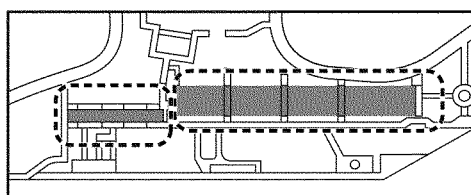
*When attaching the motor assembly to housing A, position it so that it fits securely with its groove aligned with the rib on the housing.



*When attaching the switch assembly to housing A, ensure that it fits snugly inside the ribs on the housing.

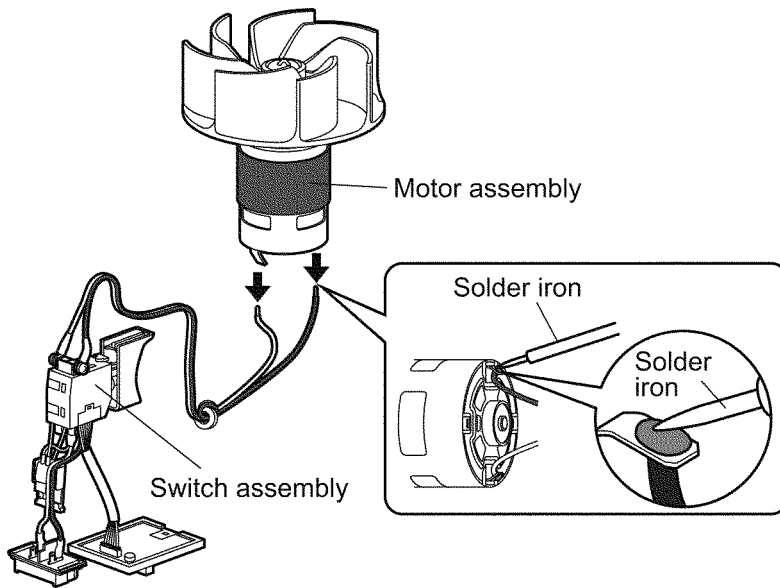


*When attaching the FET and cooling plate to housing A, ensure that they fit snugly inside the ribs on the housing.



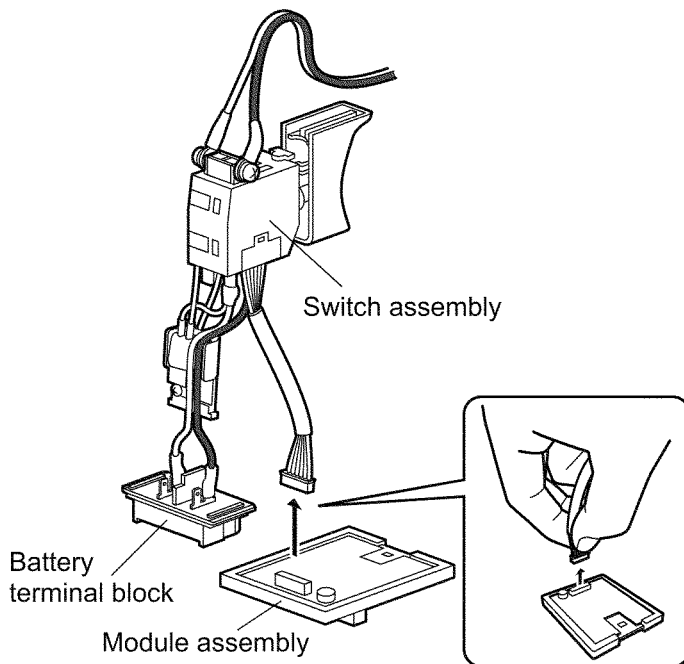
*When attaching the main circuit assembly and battery terminal block to housing A, ensure they fit snugly inside the ribs on the housing.

4.3. Remove the switch assembly and module assembly from the motor assembly



Remove the two soldered switch assembly lead wires to the motor assembly terminals.

4.4. Remove the module assembly from the switch assembly

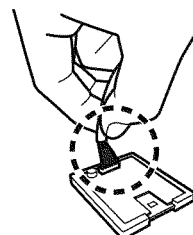
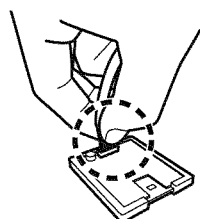


Disconnect the switch assembly's 7-pin connector from the module assembly.

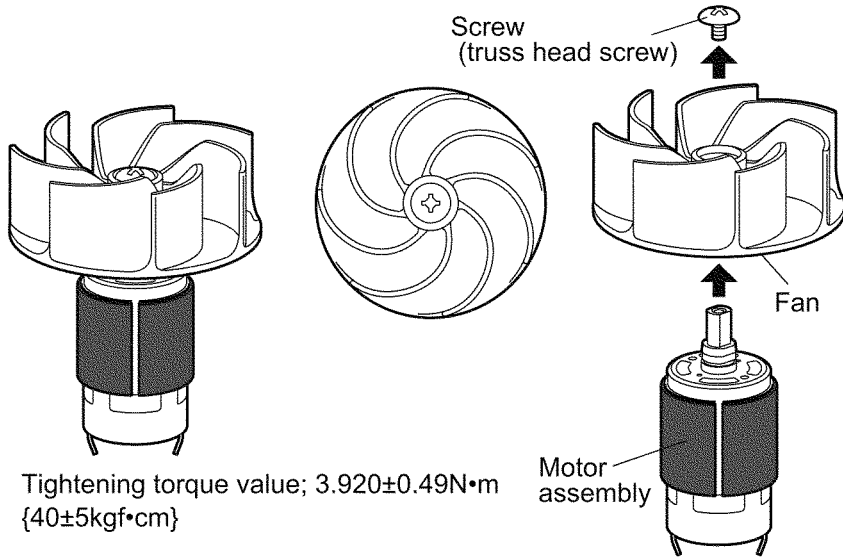
Connecting and disconnecting the connector

○ Grip the connector at its base and pull it out.

✗ Pulling on the lead wires will break the wires.

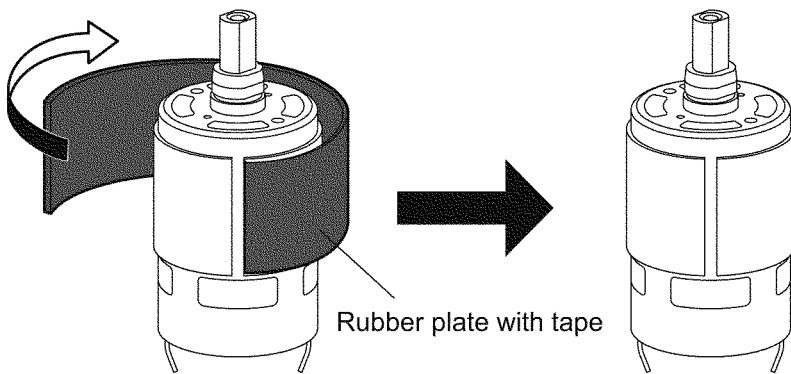


4.5. Important note regarding the installation of motor block or the switch assembly and module assembly

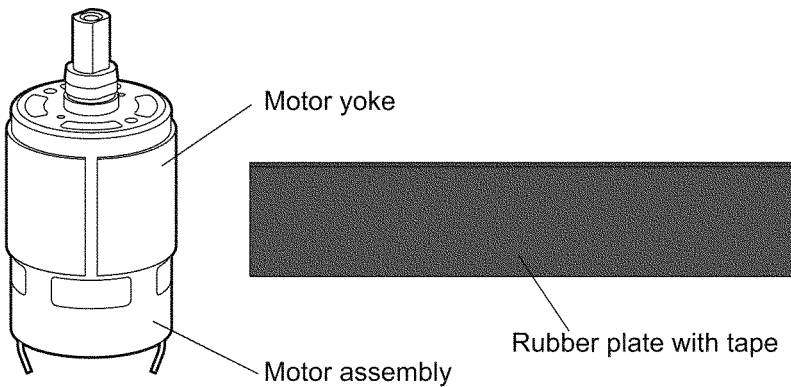


1. Remove the screw.
Note: The truss head screw cannot be reused (because it is coated with adhesive).

2. Remove the fan from the motor.

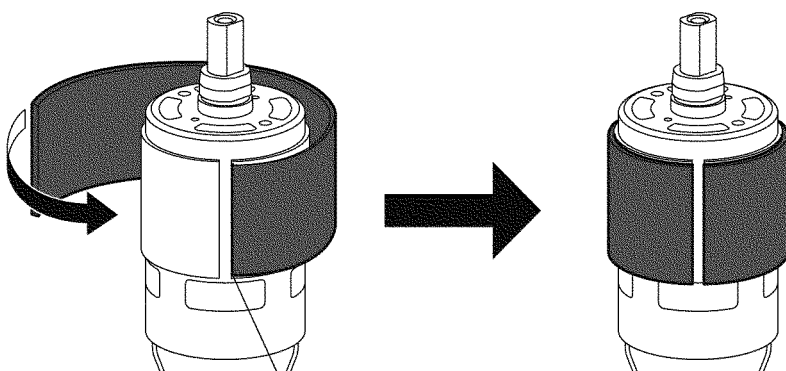


3. Remove the rubber plate with tape from the motor.



*When attaching the rubber plate with tape to the motor.

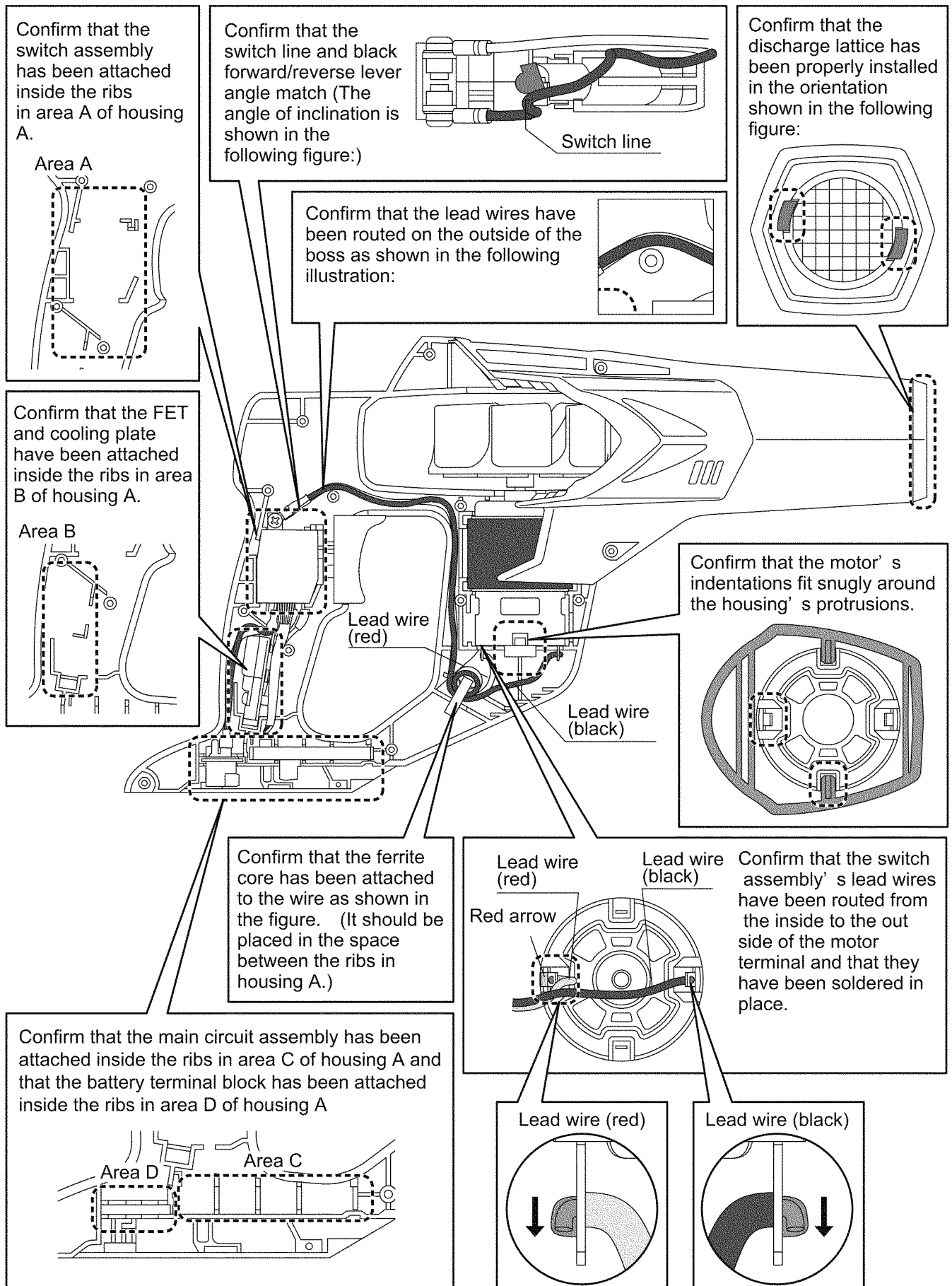
1. Apply it by wrapping it around the motor, starting at the edge of the motor yoke.



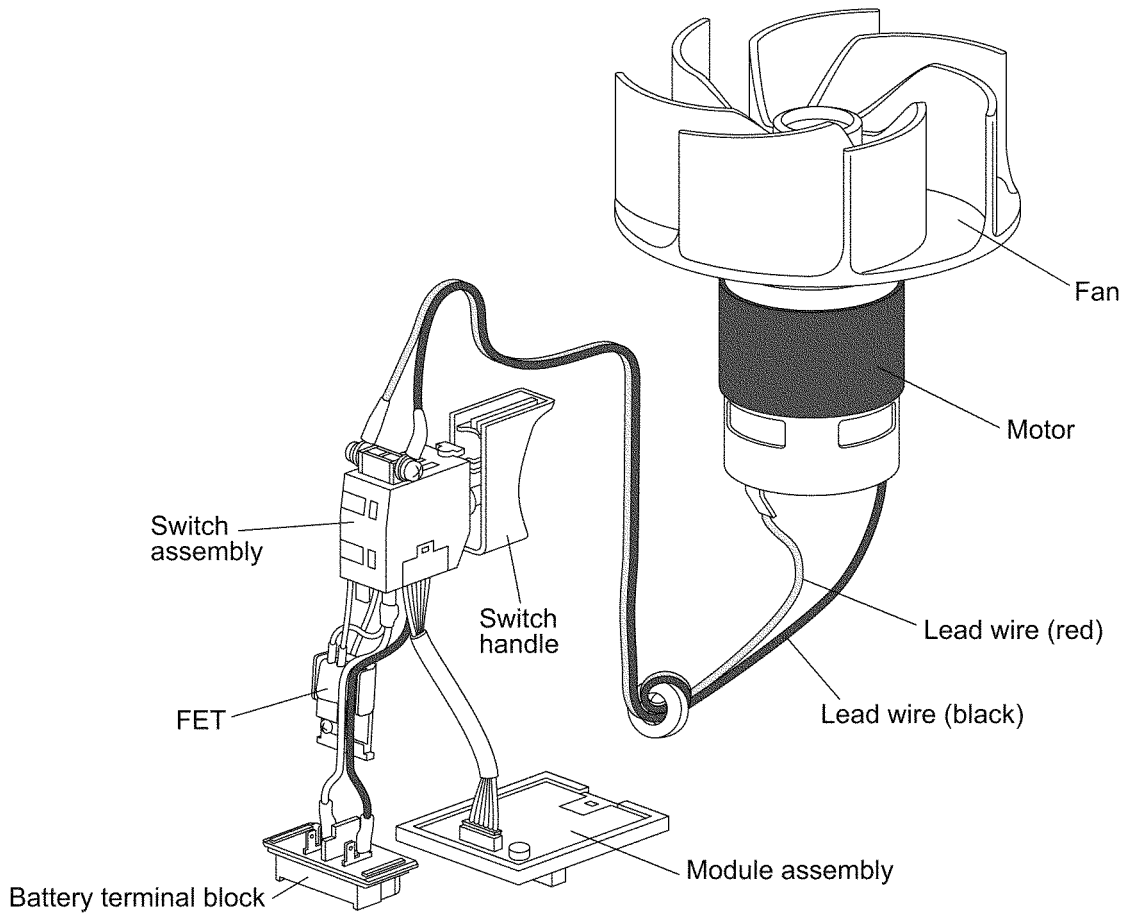
2. Confirm that the rubber plate with tape is not protruding from the motor yoke.

Align with this line and start applying here.

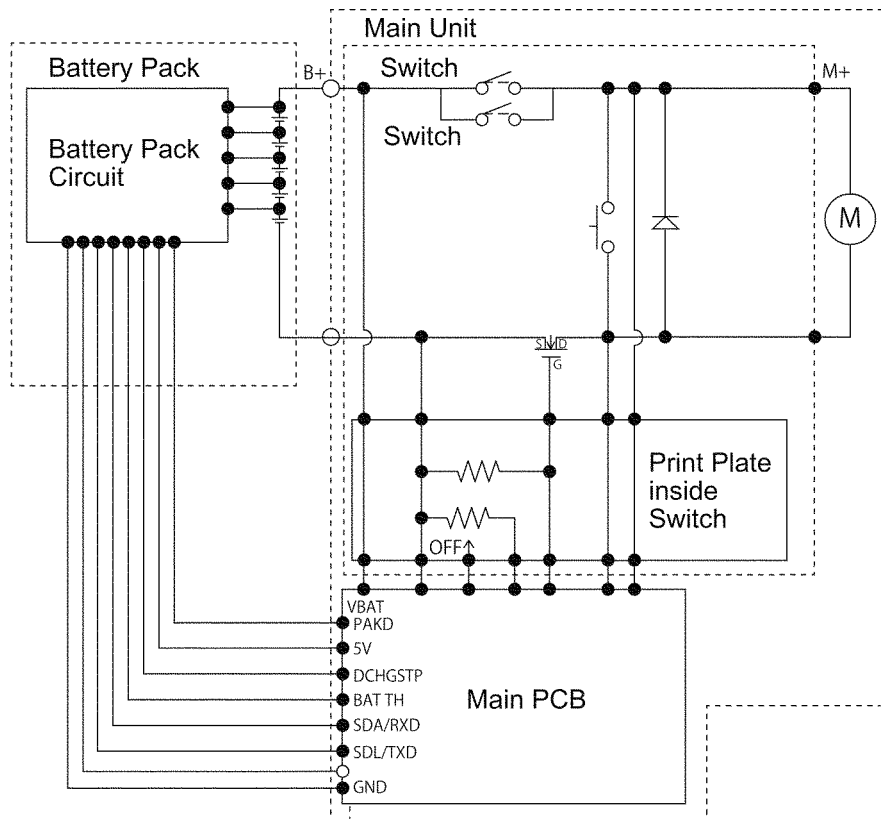
4.6. Wiring and assembly Points



5 Wiring Connection Diagram

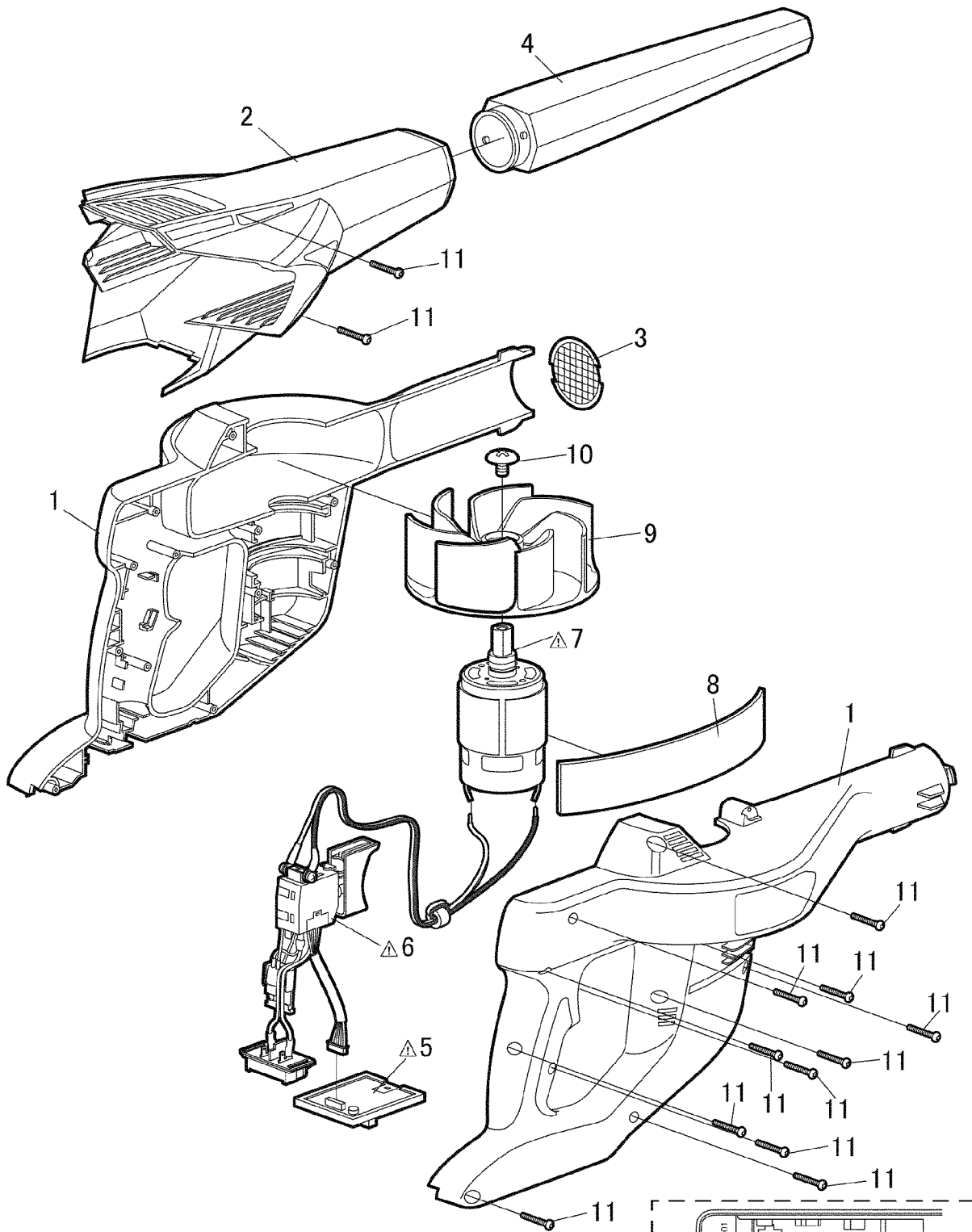


6 Schematic Diagram



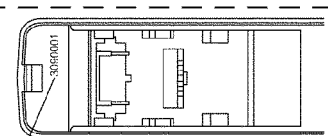
7 Exploded View and Replacement Parts List

7.1. Exploded View



*Battery Pack is available as an optional accessory. See the nearest sales dealer for details.

*For replacement parts of charger, see the charger service manual. Charger complete set is available as an optional accessory. See the nearest sales dealer for details.



Production making 7 digits

3 09 0001

— Serial Number
— Month
— Year (Last 1 digit)

7.2. Replacement Parts List

| Safety | Ref. No. | Part No. | Part Name & Description | Quantity | Remarks |
|--------|----------|--------------|-------------------------|----------|---------------|
| | 1 | WEY37A1K3078 | HOUSING AB SET | 1 | (for EUROPE) |
| | 1 | WEY37A1K3079 | HOUSING AB SET | 1 | (for OCEANIA) |
| | 2 | WEY37A1H3107 | FRONT COVER | 1 | |
| | 3 | WEY37A1K0157 | DISCHARGE LATTICE | 1 | |
| | 4 | WEY37A1K7577 | NOZZLE BLOCK | 1 | |
| | 5 | WEY37A1L2107 | MODULE ASSEMBLY | 1 | |
| | 6 | WEY3743L9217 | SWICH ASSEMBLY | 1 | |
| | 7 | WEY37A1L1007 | MOTOR ASSEMBLY | 1 | |
| | 8 | WEY37A1K0327 | RUBBER PLATE WITH TAPE | 1 | |
| | 9 | WEY3743L4058 | FAN | 1 | |
| | 10 | WEY3780L0517 | SCREW | 1 | (M6*8) |
| | 11 | WEY37A1K9037 | TAPPING SCREW | 13 | (K3*20) |
| | - | WEY37A1K8108 | OPERATING INSTRUCTIONS | 1 | |