

MODEL DN 10DY

1. REPAIR GUIDE:

Without fail, remove the Model EB 9 Battery from the main body of the tool before attempting repair work. Because the tool is cordless, if the battery is left in and the switch is activated inadvertently, the motor will start rotating unexpectedly and could cause serious injury.

1-1. Directions and Precautions for Disassembly and Reassembly of the Main Body:

The circled numbers in the descriptions below correspond to the item numbers in the Part List and exploded assembly diagram for the Model DN 10DY.

1-1-1. Disassembly:

(1) Remove the Hook ②②.

Place your fingers inside the Hook ②②, and expand it outward enough so that it can be removed from the main body.

(2) Disassembly of Housing (B) :

Remove the seven D3 x 16 Tapping Screws ⑫ which fix the main body. Then grasp the lower portions of Housing (A) and Housing (B) where the battery is inserted, and gently separate them.

(3) Disassembly of the Motor, Switch and Terminals:

When Housing (B) has been removed, the Motor ⑧, DC Speed Control Switch ⑮, Terminals (B) ⑭ ⑯, and Terminal Support ⑰ can be taken out together in a single assembled unit. These assembled components can then be disassembled as follows:

With a soldering iron, disconnect Leadwires (A) ⑨ ⑩ and Terminals (B) ⑭ ⑯ of the Motor ⑧. Remove the single M3 x 7 Bind Screw ⑤, and disassemble the Fin ⑥ from the FET (Field Effect Transistor) of the DC Speed Control Switch ⑮.

[Note] Do not disconnect the three FET leadwires that are soldered to the DC Speed Control Switch ⑮.

(4) Removal of the 10TLRA-N Keyless Drill Chuck:

The 10TLRA-N Keyless Drill Chuck ③ can be removed from the Spindle ② as follows:

(a) Fully open the jaws of the keyless Drill Chuck ③.

(b) Fit a J-217 Spindle Lock Jig (Special Repair Tool, Code No. 970998) onto the flat surfaces provided on the Spindle ②, secure it in a vise, and remove the left-hand threaded M5 x 17 Flat Hd. Screw ④ by turning it clockwise (to the right) with a straight edge screwdriver.

(c) As illustrated in Fig. 1, fit an M10 hexagon bar wrench into the keyless Drill Chuck ③ and turn it counterclockwise (to the left) to loosen and remove the Drill Chuck.

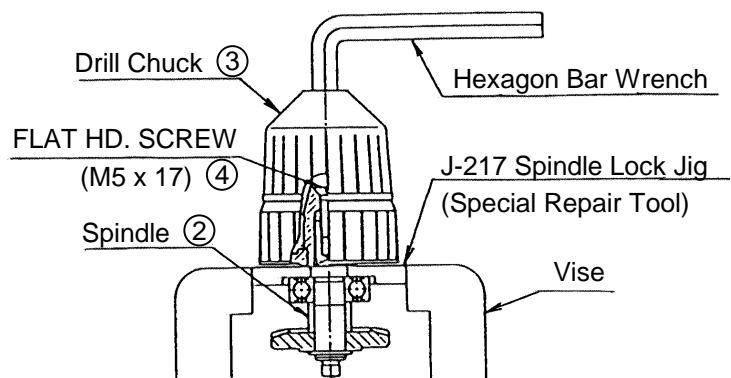


Fig. 1

1-1-2. Reassembly:

Reassembly can be accomplished by following the disassembly procedures in reverse. However, special attention should be given to the following points.

(1) Ensure that the wiring of the Model DN 10DY is connected as shown in the diagram in Fig. 2.

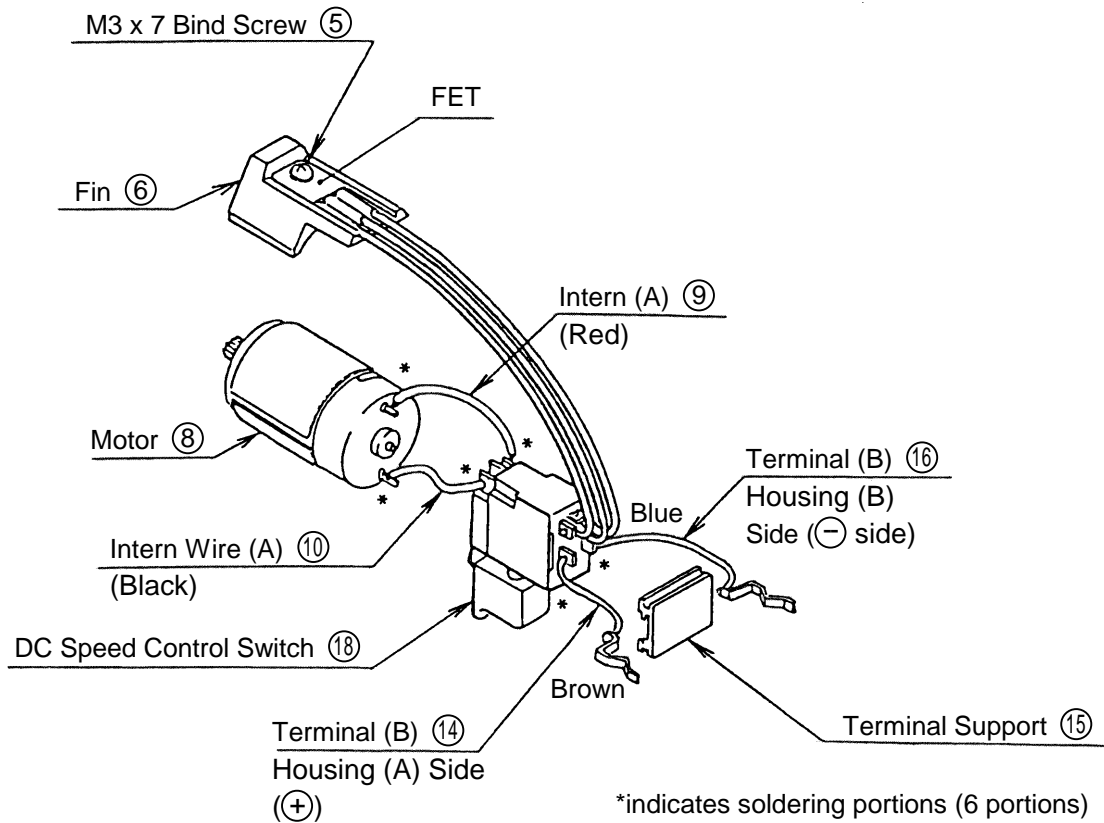


Fig. 2

(2) When soldering the Internal Wires (A) ⑨ (Red) and ⑩ (Black) onto the Motor ⑧, be very careful ensure correct Motor polarity. As illustrated in Fig. 3, there is a red mark close to the terminal which indicates the positive pole.

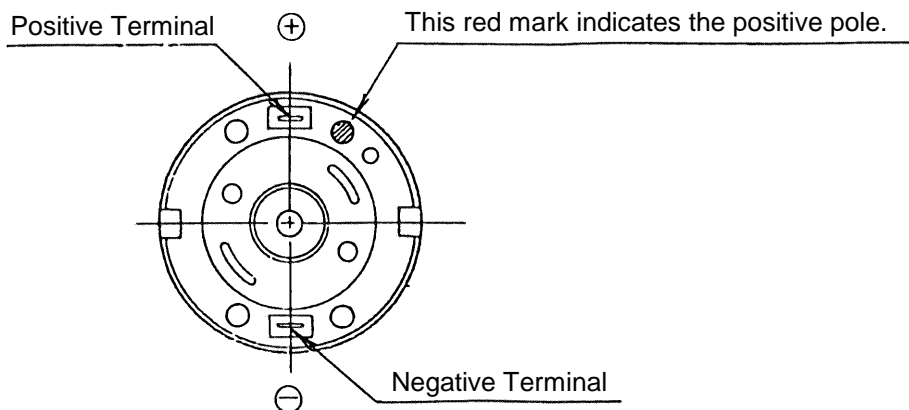


Fig. 3

(3) Be very careful not to bend or otherwise damage the base portions of the leadwires of the FET which are connected to the DC Speed Control Switch ⑱.

(4) When installing the Terminal ②④ (Brown) in Housing (A) ①⑨, pay particular attention to polarity. (See Fig. 5 or Fig. 6)

(5) Tighten each fastening screw with the appropriate tightening torque indicated below.

- D3 x 16 Tapping Screw ⑫..... 11 - 19 kgf-cm
- D3 x Bind Screw ⑤..... 3 - 5 kgf-cm
- 5 x 17 Flat Hd. Screw ④..... 30 - 40 kgf-cm
- Drill Chuck ③..... 130 - 170 kgf-cm

(6) Liberally coat grease (Hitachi Motor Grease, Code No. 930035, recommended) on all sliding and rotating portions, and on the gear teeth.

(7) Confirm that the rotation direction of the Spindle conforms to the rotation direction setting of the Pushing Button. When the Pushing Button is set to the "R" position, the Spindle must turn to the right (clockwise) when viewed from the tail end of the tool (the end opposite the drill chuck). With a $\phi 9$ mm test bar (Special Repair Tool J-223-3; Code No. 305-714 is available for supply.) mounted in the drill chuck, ensure that run-out is not more than 0.5 mm when measured at a distance of 85 mm from the end of the chuck.

1-2. Precautions on Disassembly and Reassembly of the Model UC 12Y Charger:

For details concerning the disassembly, reassembly and precautions in use of the Model UC 12Y Charger, please refer to the Technical Date and Service Manual (No. E830) for the Model UC 12Y Charger.

2. STANDARD REPAIR TIME SCHEDULES:

MODEL	Variable Fixed	10	20	30	40	50	60 min.
DN 10DY		Work Flow					
	Repair Operation		Housing (A) (B) Ass'y Motor DC Speed Control Switch				
	Fixed Time (min.) Keyless chuck : 0 Terminal : 0 Others : 20		Terminal (B) x 2 Keyless Chuck Metal x 2 Spindle Second Pinion				