

# TECHNICAL INFORMATION



PRODUCT

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**Models No.** ▶ DF010D

**Description** ▶ 7.2V Cordless Driver Drill

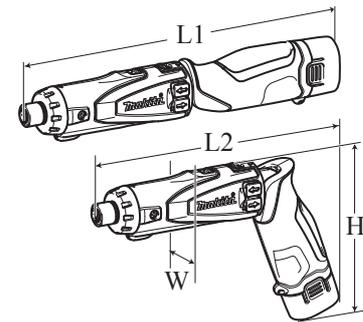
## CONCEPT AND MAIN APPLICATIONS

Model DF010D is a straight type cordless driver drill compact and lightweight for easy handling.  
Uses new 7.2V Li-ion battery of stick type as a power unit.  
Can be easily converted from straight- to pistol-type.

This product is available with the following model name.

Model No.	Battery BL7010	Charger DC07SA	Plastic carrying case
DF010DSE	Yes/ 2 pcs	Yes	Yes

The model also includes the accessories listed below in "Standard equipment".



Dimensions: mm (")		
Length	(L1)	279 (11)
	(L2)	224 (8-7/8)
Width (W)		43 (1-11/16)
Height (H)		141 (5-9/16)

(L1): Length in Straight form  
(L2): Length in Pistol form

## ► Specification

Battery	Cell	Li-ion	
	Voltage: V	7.2	
	Capacity: Ah	1.0	
Max. output: W		30	
No load speed: min-1 = rpm	Low	200	
	High	650	
Driving shank: mm (")		6.35 (1/4) Hex	
Capacities: mm (")	Steel	5 (3/16)	
	Wood	6 (1/4)	
Torque setting		21 stages + drill mode	
Clutch torque setting: N.m [kgf.cm]		0.3 - 3.0 [3.0 - 30]	
Lock torque: N.m (in.lbs)		5.0 (44)	
Max. fastening torque: N.m	Hard joint	5.6	
	Soft joint	3.6	
Electric brake		Yes	
Soft start		Yes	
Reverse switch		Yes	
LED job light		Yes	
Net weight: kg (lbs) [with battery BL7010]		0.55 (1.2)	

## ► Standard equipment

Phillips bit 1-50 (double-end) ..... 1 pc  
Phillips bit 2-50 (double-end) ..... 1 pc

**Note:** The standard equipment for the tool shown above may differ by country.

## ► Optional accessories

Driver bits, Socket bits, Hex shank drill bits for wood, Hex shank drill bits for steel,  
Charger DC07SA, Battery BL7010

## ► Repair

**CAUTION: Repair the machine in accordance with “Instruction manual” or “Safety instructions”.**  
**Remove the bit and the battery from the machine for safety before repair/ maintenance.**

### [1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R362	Retaining ring pliers with long bent nails	Removing/ Installing Bit sleeve

### [2] LUBRICATION

Apply Makita grease N No.2 to the following portions designated with the black triangle to protect parts and product from unusual abrasion.

Item No.	Description	Portion to lubricate	Amount
⑪ ⑳	Motor housing R and L	Each hinge portion that contacts Lock washer	a little

**Fig. 1** ▼ Makita grease N No.2

The diagram shows the motor housing (11) and handle (26) with lock washers. Arrows point to the hinge portions where Makita grease N No.2 should be applied.

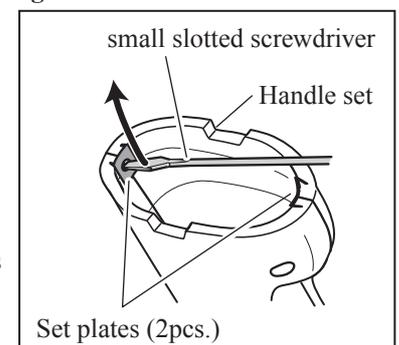
### [3] DISASSEMBLY/ASSEMBLY

#### [3]-1. DC motor, Gear assembly

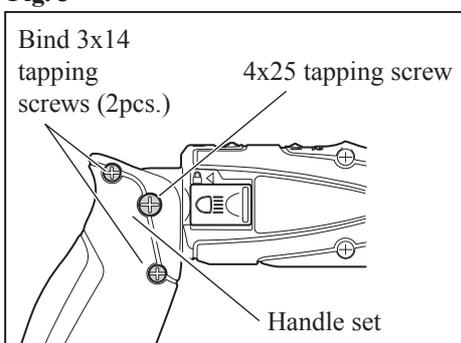
##### DISASSEMBLING

- (1) Remove two Set plates from Handle set as follows:  
 Insert a small slotted screwdriver through the punched hole of set plate and move Set plate in the direction of the arrow using the screwdriver while pushing Set plate against Handle set. **(Fig.2)**
- (2) Handle set can be removed from Motor housing by removing two Bind 3x14 tapping screws and one 4x25 tapping screw from Handle set. **(Fig. 3)**
- (3) Separate Housing R and Housing L by removing three Bind 3x14 tapping screws and two Bind PT3x8 tapping screws. **(Fig. 4)**

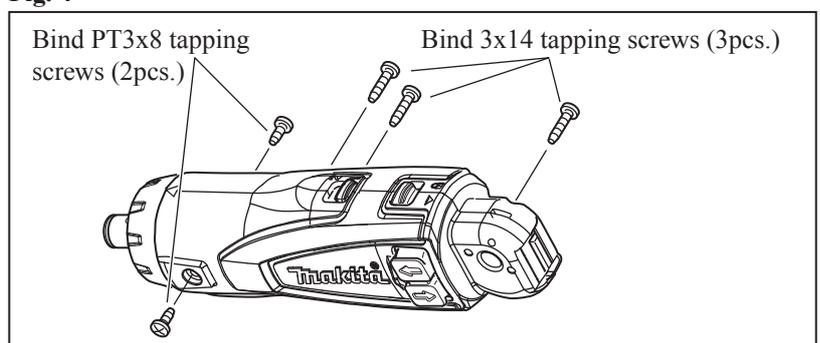
**Fig. 2**



**Fig. 3**



**Fig. 4**



► **Repair**

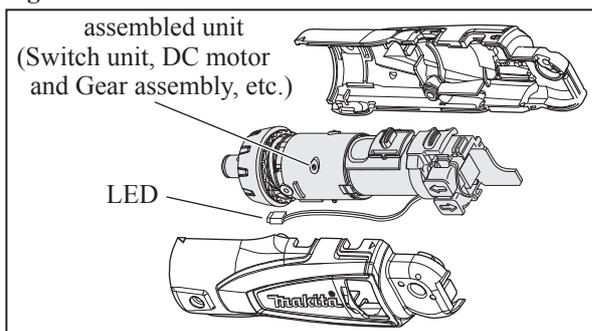
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. DC motor, Gear assembly (cont.)**

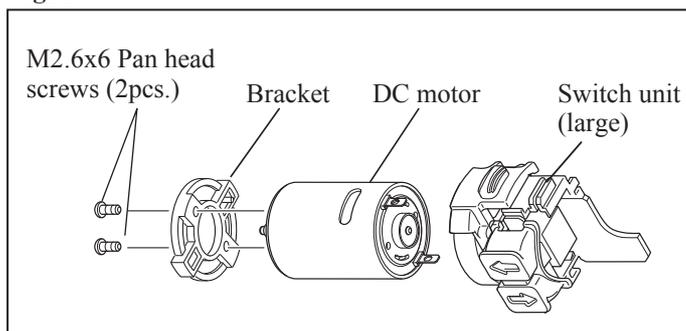
**DISASSEMBLING**

- (4) Separate LED from Housing, then remove a assembled unit that consists of Switch unit, DC motor and Gear assembly etc. (Fig. 5)
- (5) Remove Speed change lever assembly and Switch unit (microswitch / green color) from Gear assembly.
- (6) Remove Gear assembly from DC motor. Gear assembly can be replaced.
- (7) Pull out DC motor from Switch unit, then loosen two M2.6x6 pan head screws with which assemble Motor bracket to DC motor. DC motor can be replaced. (Fig. 6)

**Fig. 5**



**Fig. 6**



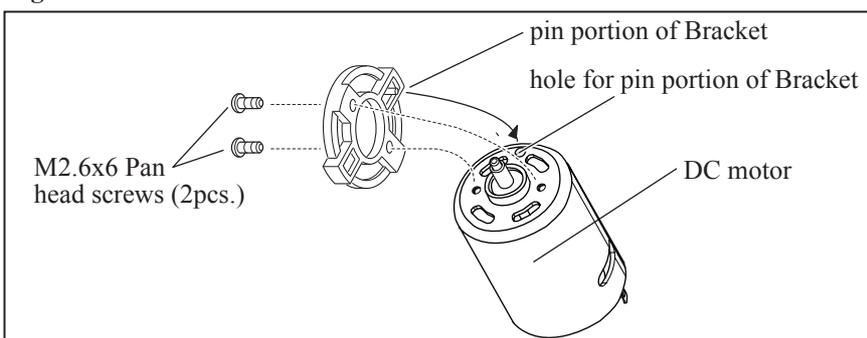
**ASSEMBLING**

- (1) Insert the pin portion of Bracket to the hole of DC motor and fix Bracket to DC motor with two M2.6x6 Pan head screws. (Fig. 7)
- (2) Assemble DC motor to Switch unit so that the red marking side of DC motor faces the positive pole of Switch unit (large). Refer to **Circuit diagram**.
- (3) Assemble Speed change lever assembly and Change lever to Gear assembly. (Fig. 8)  
Assemble Gear assembly to DC motor.

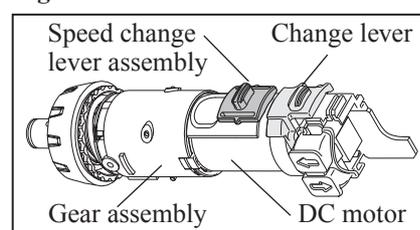
**Note:** Be sure to align their directions.

- (4) Install Switch unit (microswitch / green color) into Gear assembly.
- (5) Set Leaf spring into Motor housing so that the angle portion of Leaf spring attaches Gear assembly. (Fig. 9)
- (6) After connecting LED, assemble the assembled unit (Switch unit, DC motor and Gear assembly, etc.) to Motor housing. (Fig. 5)

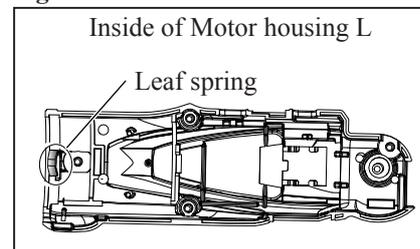
**Fig. 7**



**Fig. 8**



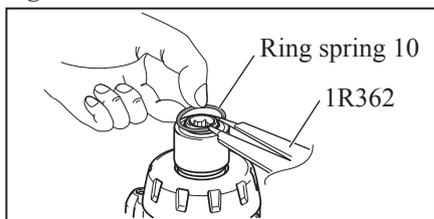
**Fig. 9**



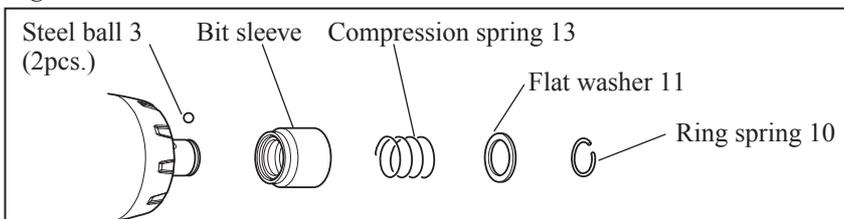
**[3]-2. Disassembling Bit sleeve**

- (1) Enlarge the opening of Ring spring 10 using 1R362 and slide the opposite side of the opening by hand carefully to the components of Bit sleeve section from popping. (Fig. 10)
- (2) After removing Ring spring 10, remove Flat washer 11, Compression spring 13, Bit sleeve and Steel ball 3 (2 pcs.) (Fig. 11)

**Fig. 10**



**Fig. 11**



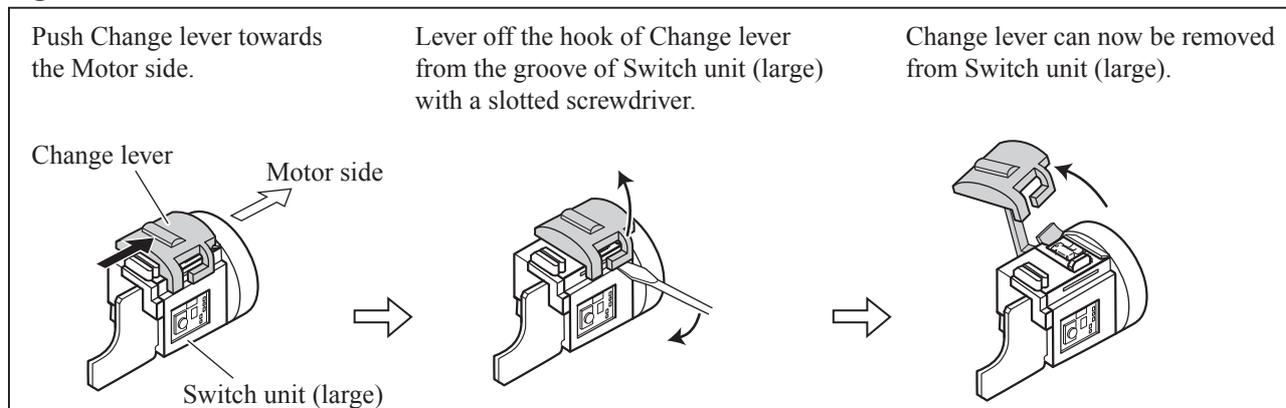
► **Repair**

**[3] DISASSEMBLY/ASSEMBLY**

**[3] -3. Disassembling Change lever**

Remove Change lever from Switch unit (large) as drawn in **Fig. 12**.

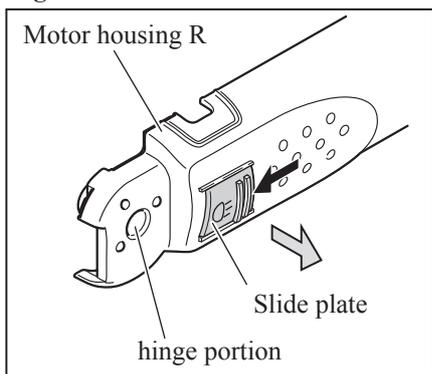
**Fig. 12**



**[3] -4. Disassembling Slide plate**

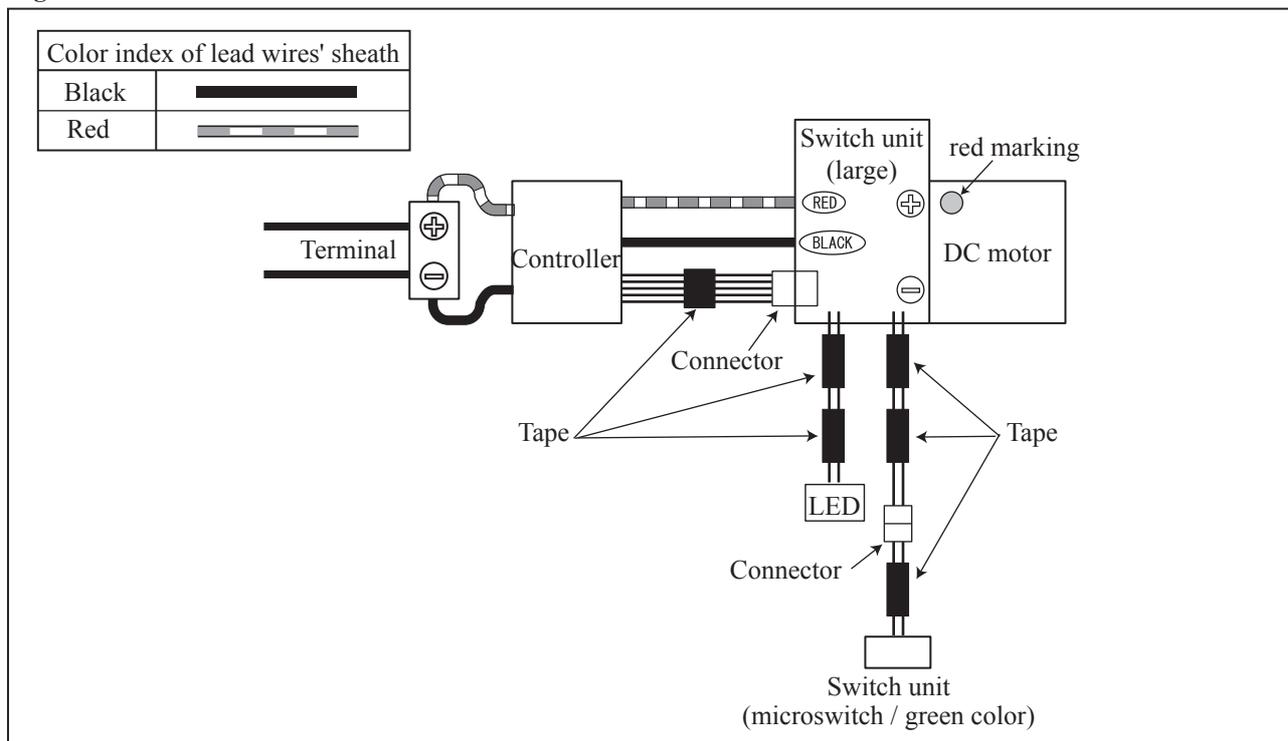
Push Slide plate towards the hinge portion of Motor housing R until it stops. Slide plate can be removed by pulling in the direction of the gray arrow. (**Fig. 13**)

**Fig. 13**



► **Circuit diagram**

**Fig. D-1**



► **Wiring diagram**

Fig. D-2

