ECHNICAL INFORMATION



Models No. ► DF010D

Description > 7.2V Cordless Driver Drill

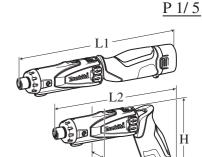
CONCEPT AND MAIN APPLICATIONS

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

	Cell			Li-ion	
Battery	Voltage: V			7.2	
	Capacity: Ah			1.0	
Max. outpu	Max. output: W			30	
No load en	No load speed: min-1 = rpm		Low	200	
140 load sp			High	650	
Driving sha	Driving shank: mm (")			6.35 (1/4) Hex	
Conscition	Capacities: mm (")	Steel		5 (3/16)	
Capacities.	mm ()	Wood		6 (1/4)	
Torque setting		21 stages + drill mode			
Clutch torque setting: N.m [kgf.cm] Lock torque: N.m (in.lbs)		0.3 - 3.0 [3.0 - 30]			
		5.0 (44)			
Max. faster	Max. fastening Hard joint		nt	5.6	
torque: N.m		Soft join	t	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: Remove the bit and the battery from the machine for safety before repair/ maintenance in accordance with the instruction manual!

[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.

	T		1
Item No.	Description	Portion to lubricate	Amount
11 26	Motor housing R and L	Each hinge portion that contacts Lock washer	a little
Fig. 1	(11)	Handle (F	Makita grease N No.2

[3] DISASSEMBLY/ASSEMBLY [3]-1. DC Motor, Gear Assembly

DISASSEMBLING

- 1) Remove two Set plates with which Handles (L) and (R) are assembled to one another 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 Handles (L) and (R). (Fig.2)
- 2) Handle (L) and (R) can now be removed from Motor housing by removing two Bind 3x14 tapping screws and one 4x25 tapping screw from Handles. (**Fig. 3**)
- 3) Separate Housings (R) and (L) by removing three Bind 3x14 tapping screws and two Bind PT3x8 tapping screws. (**Fig. 4**)

small slotted screwdriver

Handle (R)

Set plates (2pcs.) Handle (L)

Fig. 3

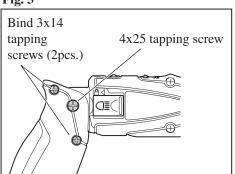


Fig. 4

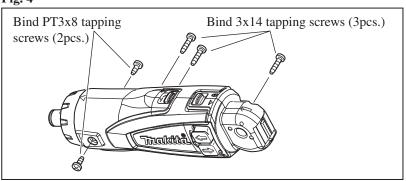


Fig. 2

Repair

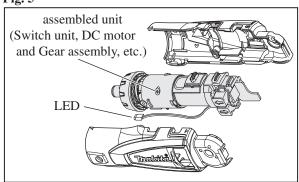
[3] DISASSEMBLY/ASSEMBLY

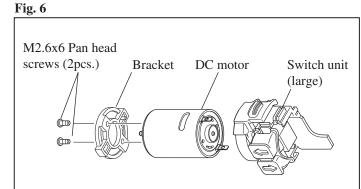
[3]-1. DC Motor, Gear Assembly (cont.)

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.
- 5) Remove Gear assembly from DC motor. Gear assembly can be replaced.
- 6) Pull out DC motor from Switch unit, then loosen two M2.6x6 pan head screws with which fix Motor bracket to DC motor. DC motor can be replaced. (**Fig. 6**)

Fig. 5

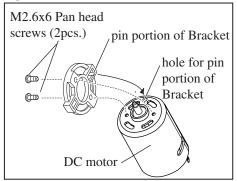


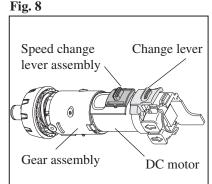


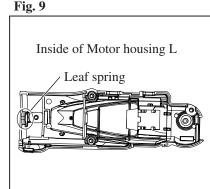
ASSEMBLING

- 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) Fix 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) Fix Speed change lever assembly and Change lever to Gear assembly. (**Fig. 8**) Fix Gear assembly with DC motor. **Note**: Be sure to align their directions.
- 4) Install Switch unit (microswitch / green color) into Gear assembly.
- 5) Fit Leaf spring into Motor housing so that the angle portion of Leaf spring attaches Gear assembly. (Fig. 9)
- 6) After connecting LED, fix the assembled unit (Switch unit, DC motor and Gear assembly, etc.) to Motor housing. (Fig. 5)

Fig. 7







[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

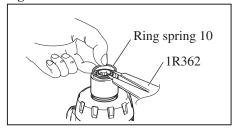
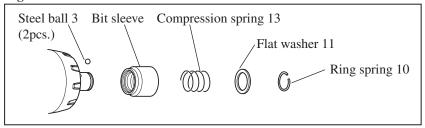


Fig. 11



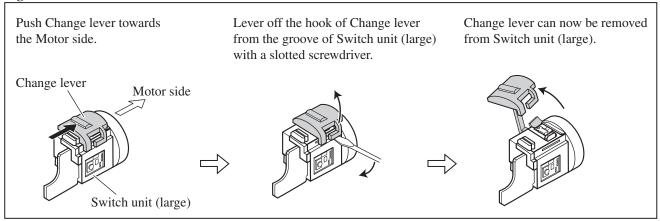
► Repair

[3] DISASSEMBLY/ASSEMBLY

[3] -3. Disassembling Change Lever

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

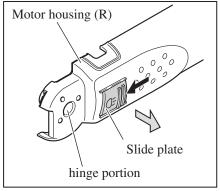
Fig. 12



[3] -4. Disassembling Slide Plate

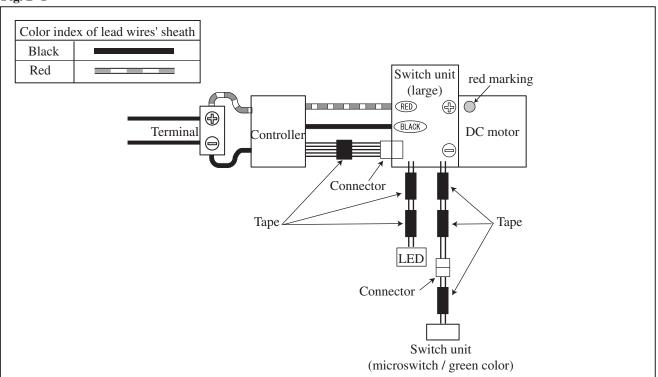
Push Slide plate towards the hinge portion of Motor housing (R) until it stops. Slide plate can now be removed by pulling in the direction of the gray arrow. (**Fig. 13**)

Fig. 13



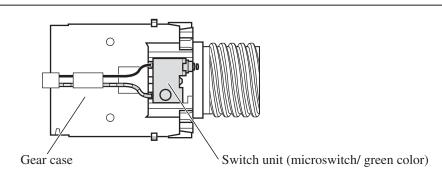
Circuit diagram

Fig. D-1

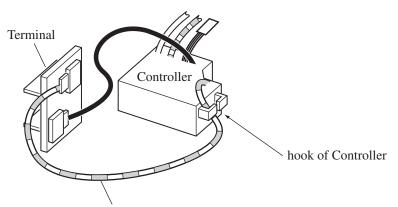


► Wiring diagram

Fig. D-2



Fix Switch unit (microswitch/ green color) to Gear case as illustrated above.



Route this Lead wire (red) through the hook of Controller.

