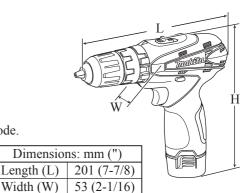
# ECHNICAL INFORMATION

Models No. ) ► HP330D

Description > 10.8V Cordless Hammer Driver Drill

# **C**ONCEPT AND MAIN APPLICATIONS

Model HP330D is Makita first 10.8V cordless hammer driver drill. It is ideal specially for drilling holes into mortar by using hammer drill mode. LED job light with pre-grow function is adapted. (DF330D: after-grow) The others except above are the same as DF330D.



This product is available in the following variations.

Model No.	Housing color	Battery		Charger		Rechargeable	Plastic	Offered to
		type	q'ty	Model	Color	flash light	carrying case	Offered to
HP330DZ	Makita-blue	BL1013 (Li-ion 1.3Ah)				No	No	All countries
HP330DWE			2	DC10WA	Makita-blue		Yes	except below countries
HP330DWLE						ML100		
		BL1014 (Li-ion 1.3Ah)				No	No	North and Central American countries except Mexico and Guam
			2	DC10WB	Black		Yes	
							No	
	winte		2	DC10WB	Black		Yes	

Width (W)

Height (H)

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

#### Specification

-	Type of cell		Li-ion		
Battery	Voltage: V		10.8*2, (10.8/12V max*3)		
	Capacity: Ah		1.3		
	Energy capacity: Wh		1/		
	Charging time (approx	.): min.	50 with DC10WA*2, (DW10WB*3)		
Max output	:: W		140		
No load speed: min-1= rpm		High	0 - 1,500		
		Low	0 - 400		
		High	0 - 22,500		
		Low	0 - 6,000		
Capacity of	drill chuck: mm (")	0.8 (1/32) - 10 (3/8)			
		Steel	10 (3/8)		
		Wood	21 (13/16)		
		Masonry	8 (5/16)		
Torque adju	istment	18 stages + drill mode			
Clutch torqu	ue setting: N.m (in.lbs)	0.5 - 3.5 (4 - 30)			
Max fastening torque: N.m (in.lb		Soft joint	12 (110)		
		Hard joint	24 (210)		
Max lock to	orque: N.m (in.lbs)	22 (200)			
Electric brake			Yes		
Variable spe	eed control by trigger	Yes			
Mechanical 2-speed			Yes		
Reverse switch			Yes		
LED job light			Yes (single LED)		
Weight according to EPTA-Procedure 01/2003*4: kg (lbs)			1.1 (2.3)		

\*2 For all countries except North and Central American countries (Mexico and Guam are included.) \*3 For North and Central American countries except Mexico and Guam \*4 with battery

#### **Standard equipment**

+ bit 2-65	1
Holster	1
Aluminum case assembly	1
(for some country only)	

#### ► Optional accessories

Driver bits, Socket bits, Drill bits for wood, Drill bits for steel, Drill bits for masonry, Charger DC10WA\*2, Charger DC10WB\*3, Battery BL1013\*2, Battery BL1014\*3

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**OFFICIAL USE** 

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

#### CAUTION: Repair the machine in accordance with "Instruction manual" or "Safety instructions".

#### [1] NECESSARY REPAIRING TOOLS

	Code No.	Description	Use for		
			(Use this tool if Drill chuck cannot be removed by the method of described in "[3]-1 Drill chuck disassembling".)		
			removing/ mounting Drill chuck		

#### [2] LUBRICATION

It is not required to lubricate the gear section because the portion is replaced as a factory-assembled gear unit.

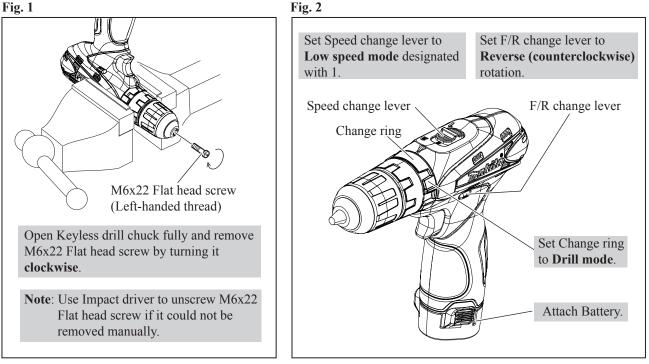
### [3] DISASSEMBLY/ASSEMBLY

#### [3] -1. Drill chuck

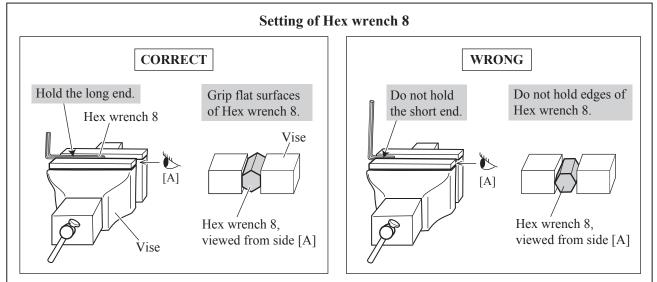
#### DISASSEMBLING

#### Note: It is required to remove Drill chuck when replacing Gear assembly, but you need not when replacing the parts that are independent of Gear assembly.

(1) Set the machine and repairing tools. (Figs. 1, 2, 3)





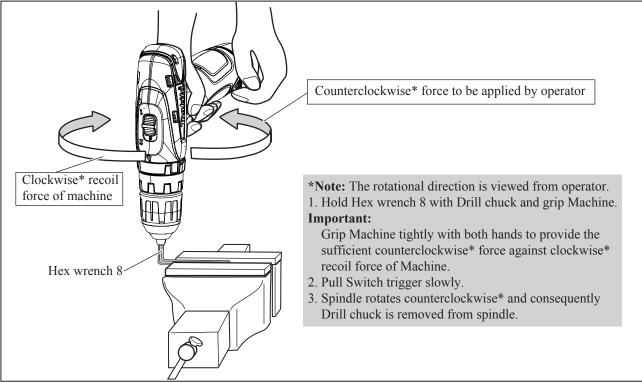


#### [3] DISASSEMBLY/ASSEMBLY [3] -1. Drill Chuck (cont.)

DISASSEMBLING

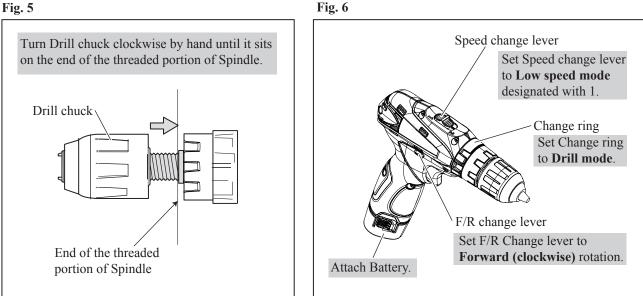
(2) Remove Drill chuck. (Fig. 4)

#### Fig. 4



#### ASSEMBLING

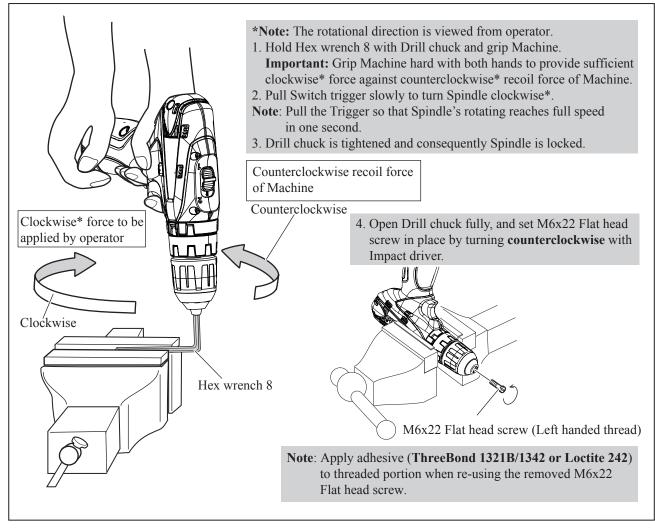
- (1) Set the machine. (Fig. 5 and 6)
- (2) Set Hex wrench 8 to vise and described in Fig. 3.



# [3] DISASSEMBLY/ASSEMBLY[3] -1. Drill chuck (cont.)

ASSEMBLING

(3) Set Drill chuck in place. (Fig. 7)

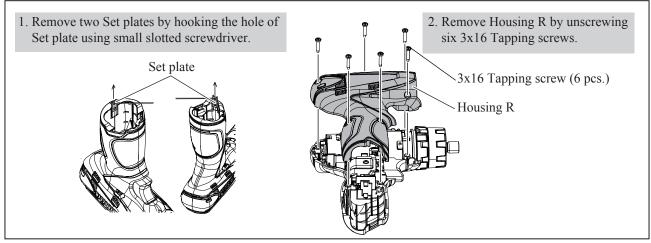


# [3] DISASSEMBLY/ASSEMBLY[3] -2. Gear assembly, Motor section

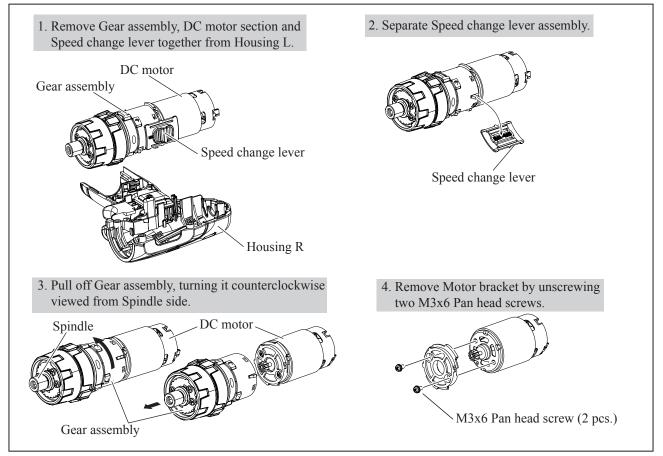
#### DISASSEMBLING

(1) Remove Drill chuck. (Figs. 1, 2, 3)
Note: It is not required to remove Drill chuck when replacing only DC motor.
(2) Remove Housing R from Housing L. (Fig. 8)

#### Fig. 8



(3) Separate DC motor from Gear assembly. (Fig. 9)

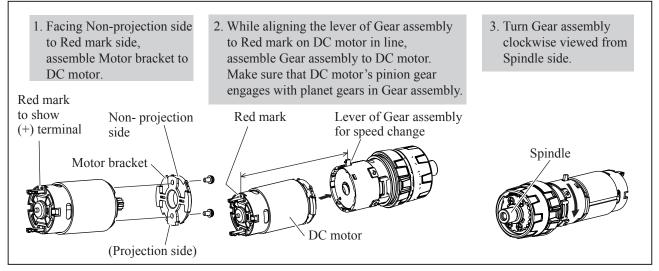


# [3] DISASSEMBLY/ASSEMBLY[3] -2. Gear assembly, Motor section (cont.)

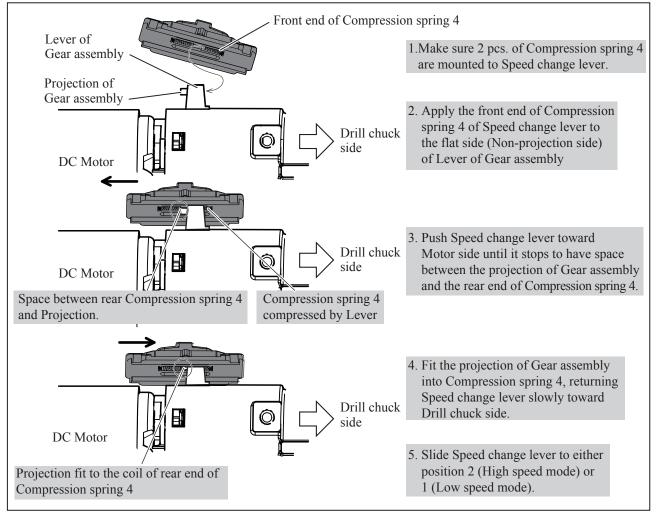
ASSEMBLING

(1) Assemble Gear assembly to DC motor. (Fig. 10)

#### Fig. 10



(2) Assemble Speed change lever to Lever of Gear assembly. (Fig. 11)

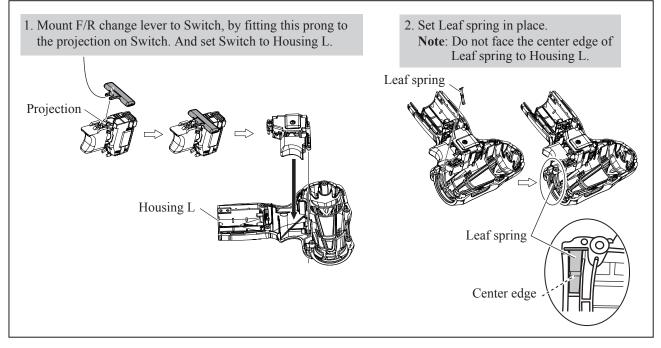


# [3] DISASSEMBLY/ASSEMBLY[3] -2. Gear assembly, Motor section (cont.)

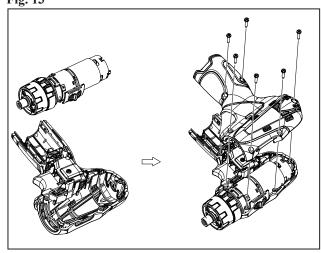
#### ASSEMBLING

(3) Before setting Gear assembly and DC motor, take the following step in Fig. 12.

#### Fig. 12

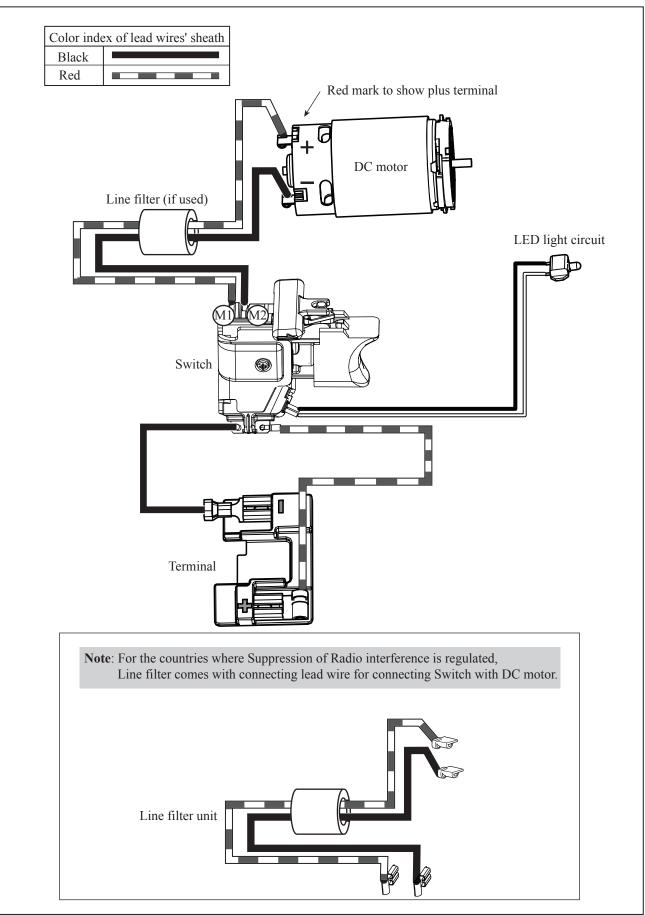


(4) Setting Gear assembly and DC motor to Housing L, fasten Housing R with six 3x16 Tapping screws. (Fig. 13) Fig. 13



(5) Set Drill chuck in place. (Figs. 5, 6, 7)

# ► Circuit diagram

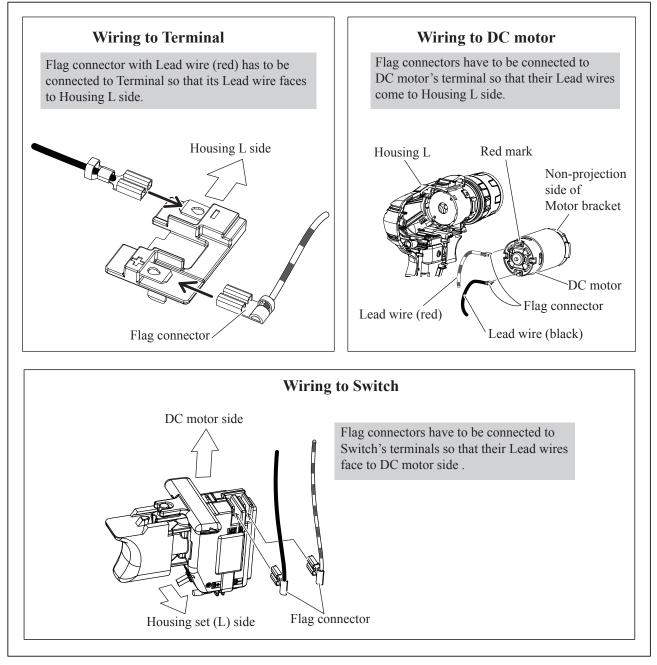


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# ► Wiring diagram

Flag connectors have to be connected to the electrical parts as drawn in Fig. D-2.

#### Fig. D-2

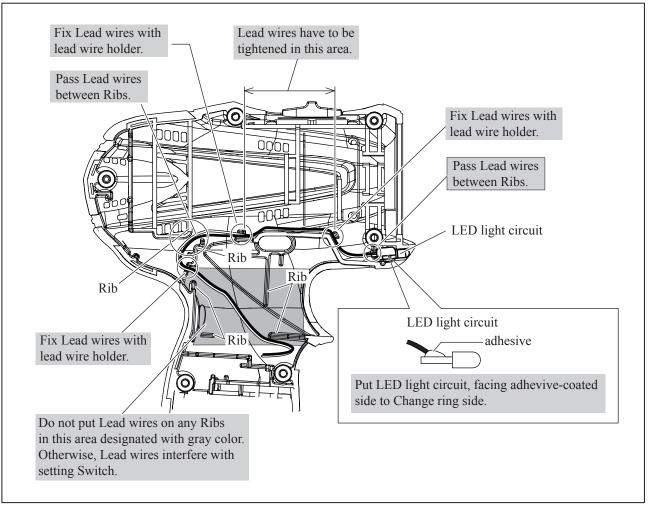


#### <u>P 10/ 11</u>

# ► Wiring diagram

Route LED lead wires in Housing set (L) as drawn in Fig. D-3.

#### Fig. D-3



#### <u>P 11/ 11</u>

# ► Wiring diagram

Route lead wires except for LED in Housing L. ( Fig. D-4)

#### Fig. D-4

