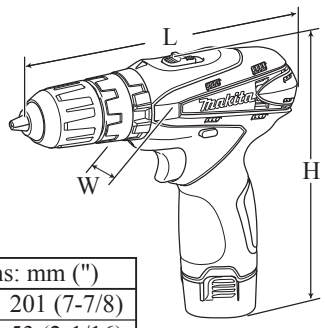
TECHNICAL INFORMATION

Models No. ► HP330D

Description ► 10.8V Cordless Hammer Driver Drill



Dimensions: mm (")	
Length (L)	201 (7-7/8)
Width (W)	53 (2-1/16)
Height (H)	183 (7-1/4)

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

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

► Specification

Battery	Type of cell		Li-ion
	Voltage: V		10.8*2, (10.8/12V max*3)
	Capacity: Ah		1.3
	Energy capacity: Wh		14
	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
Impacts per minute: min^{-1}=ipm		High	0 - 22,500
		Low	0 - 6,000
Capacity of drill chuck: mm (")			0.8 (1/32) - 10 (3/8)
Capacities: mm (")		Steel	10 (3/8)
		Wood	21 (13/16)
		Masonry	8 (5/16)
Torque adjustment			18 stages + drill mode
Clutch torque setting: N.m (in.lbs)			0.5 - 3.5 (4 - 30)
Max fastening torque: N.m (in.lbs)		Soft joint	12 (110)
		Hard joint	24 (210)
Max lock torque: N.m (in.lbs)			22 (200)
Electric brake			Yes
Variable speed 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)

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

► 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

Repair

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

[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R359	Drill chuck removing tool	(Use this tool if Drill chuck cannot be removed by the method of described in "[3]-1 Drill chuck disassembling".)
——	Hex wrench 8	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

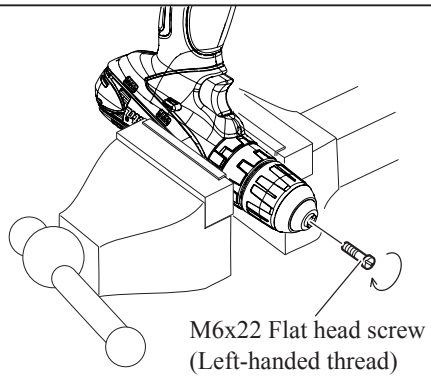
[3] -1. Drill chuck

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**)

Fig. 1



Open Keyless drill chuck fully and remove M6x22 Flat head screw by turning it **clockwise**.

Note: Use Impact driver to unscrew M6x22 Flat head screw if it could not be removed manually.

Fig. 2

Set Speed change lever to **Low speed mode** designated with 1.

Set F/R change lever to **Reverse (counterclockwise)** rotation.

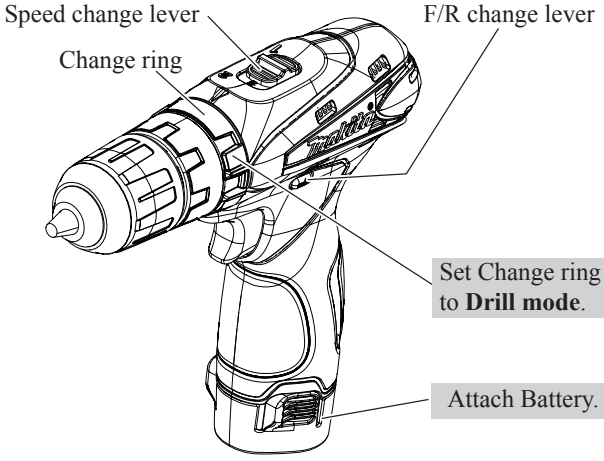
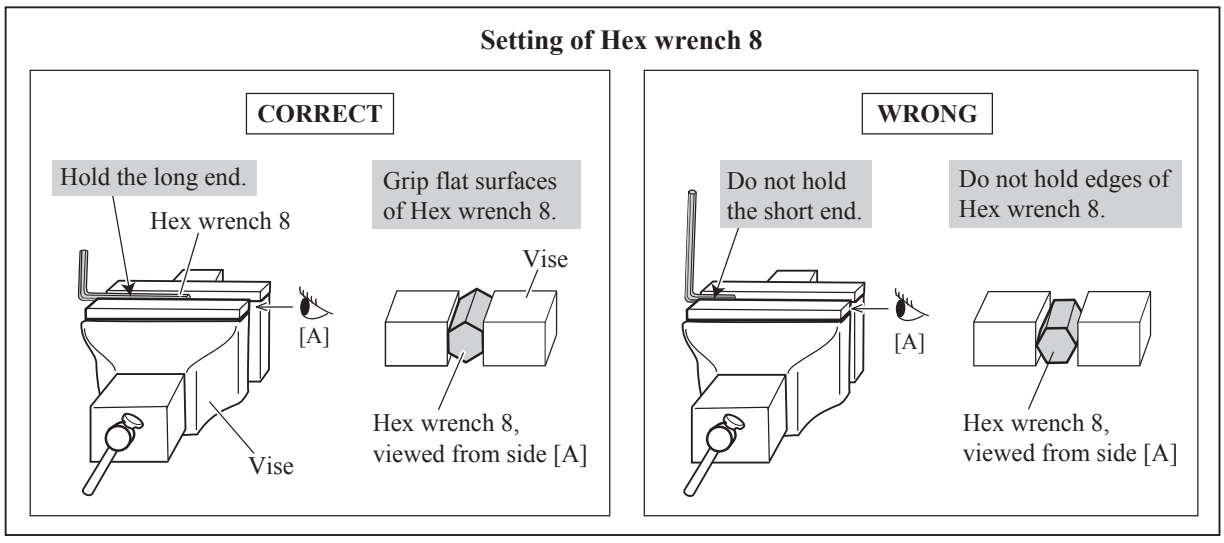


Fig. 3



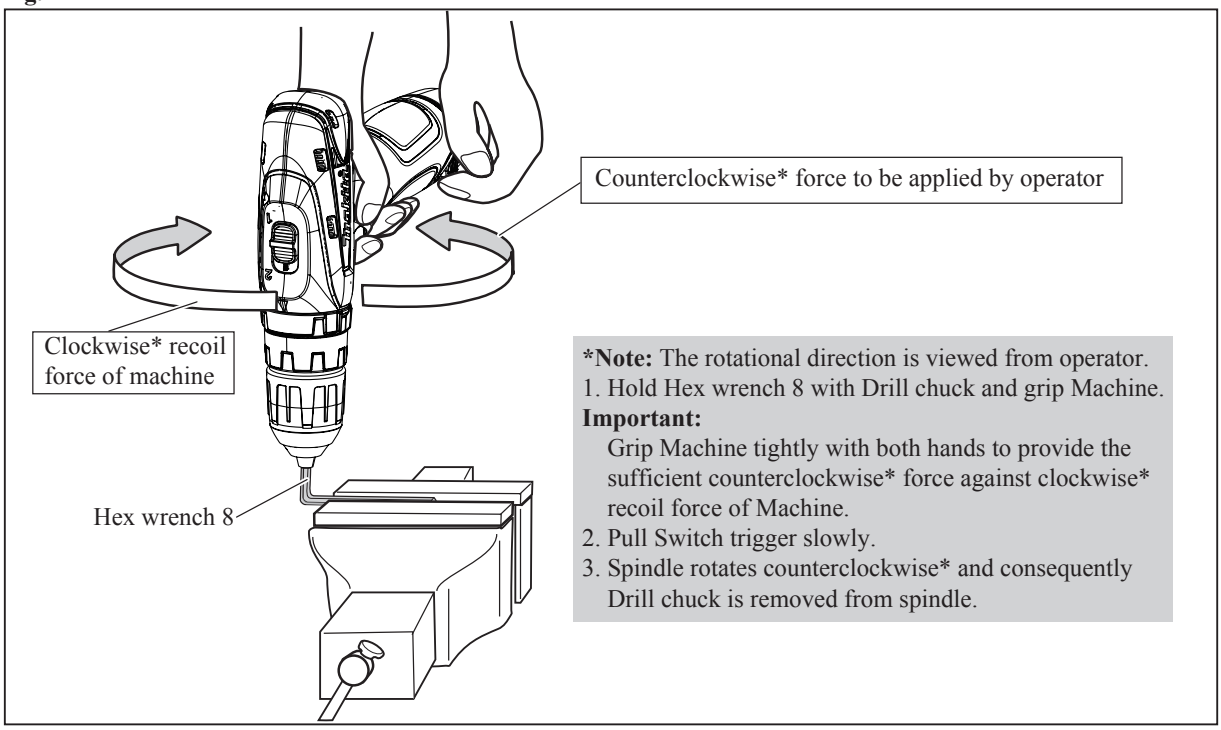
► Repair

[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**.

Fig. 5

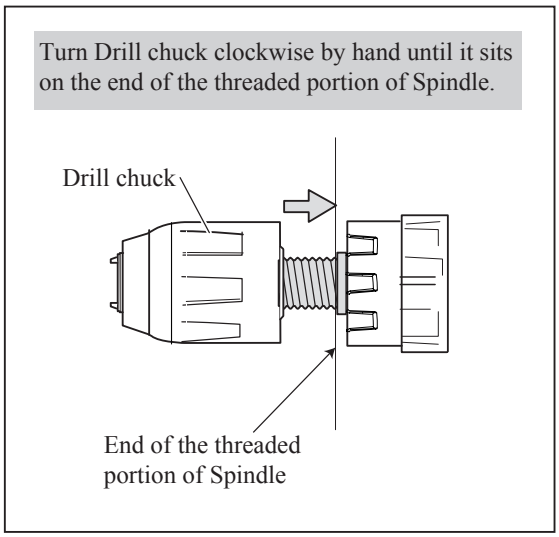
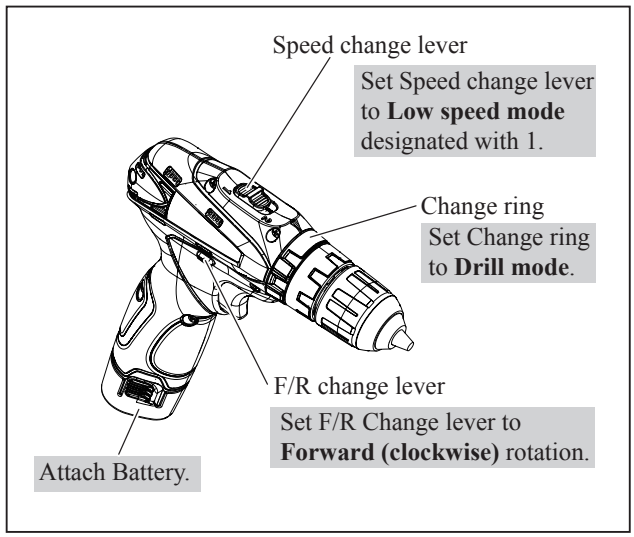


Fig. 6



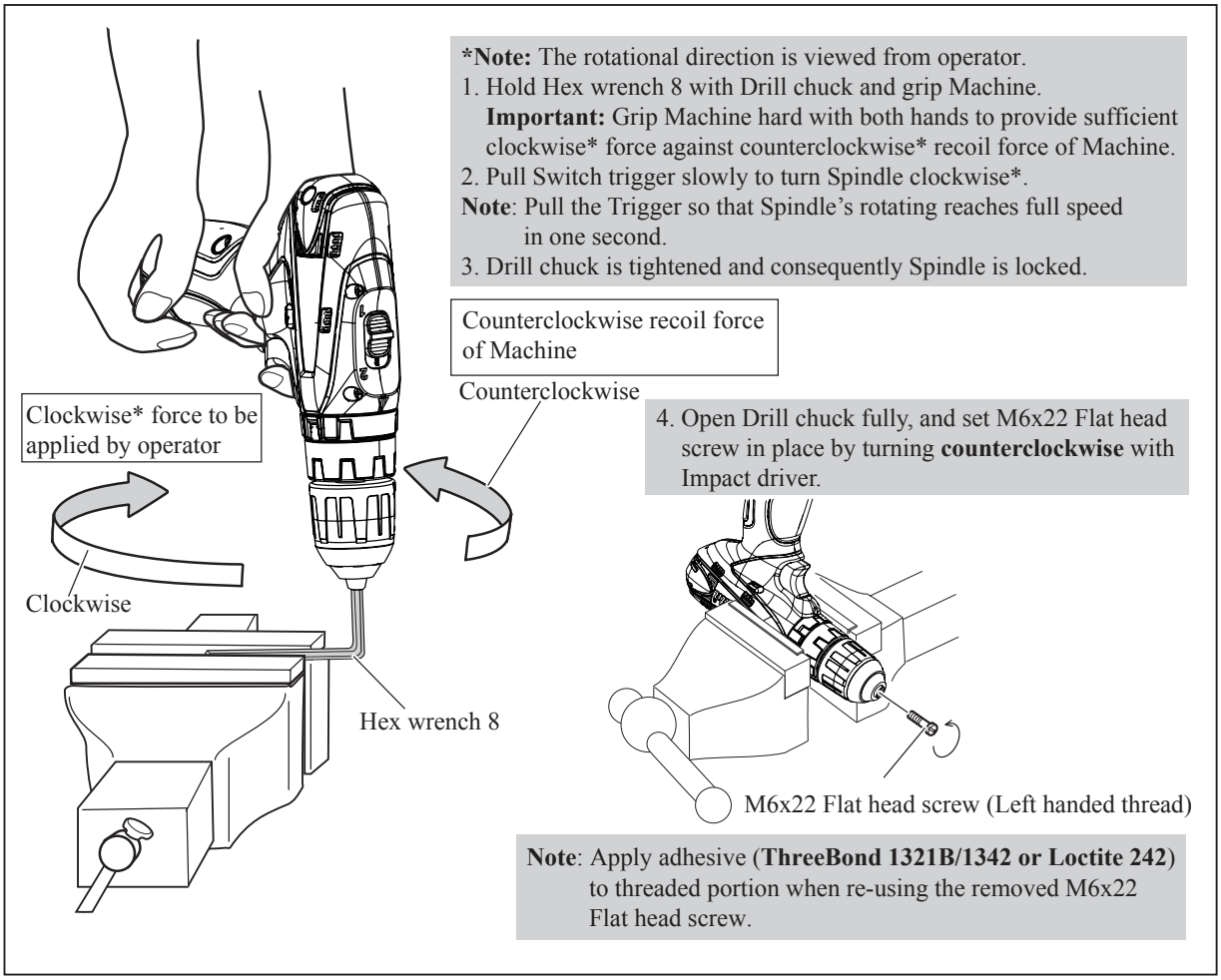
► Repair

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

ASSEMBLING

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

Fig. 7



Repair

[3] DISASSEMBLY/ASSEMBLY

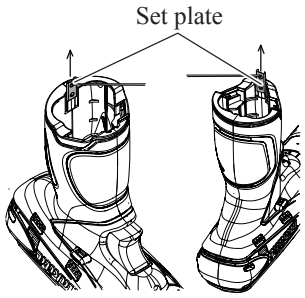
[3] -2. Gear assembly, Motor section

DISASSEMBLING

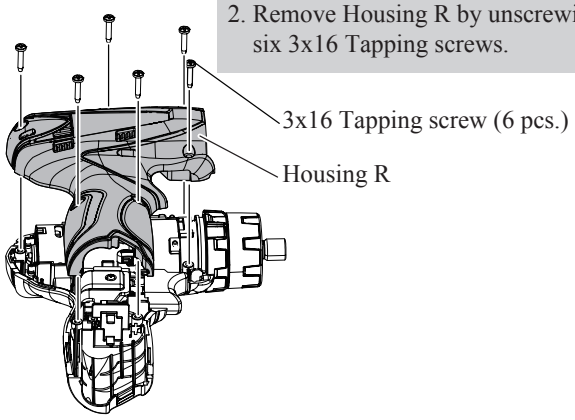
(1) Remove Drill chuck. (**Figs. 1**, **2**, **3**)
Note: It is not required to remove Drill chuck when replacing only DC motor.
(2) Remove Housing R from Housing L. (**Fig. 8**)

Fig. 8

1. Remove two Set plates by hooking the hole of Set plate using small slotted screwdriver.



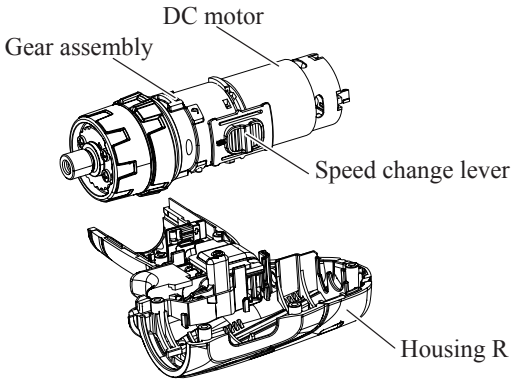
2. Remove Housing R by unscrewing six 3x16 Tapping screws.



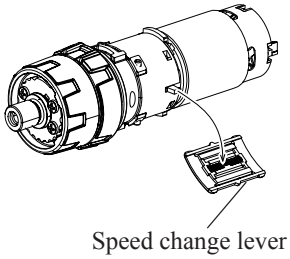
(3) Separate DC motor from Gear assembly. (**Fig. 9**)

Fig. 9

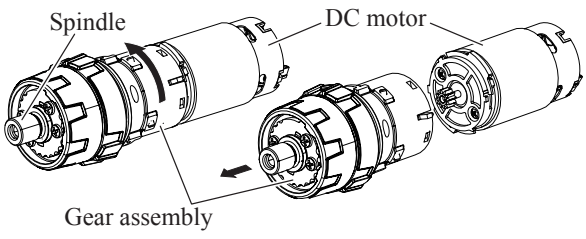
1. Remove Gear assembly, DC motor section and Speed change lever together from Housing L.



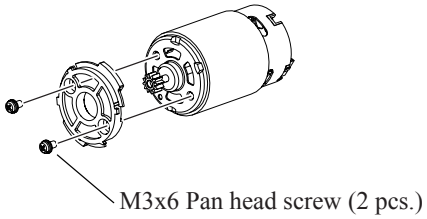
2. Separate Speed change lever assembly.



3. Pull off Gear assembly, turning it counterclockwise viewed from Spindle side.



4. Remove Motor bracket by unscrewing two M3x6 Pan head screws.



Repair

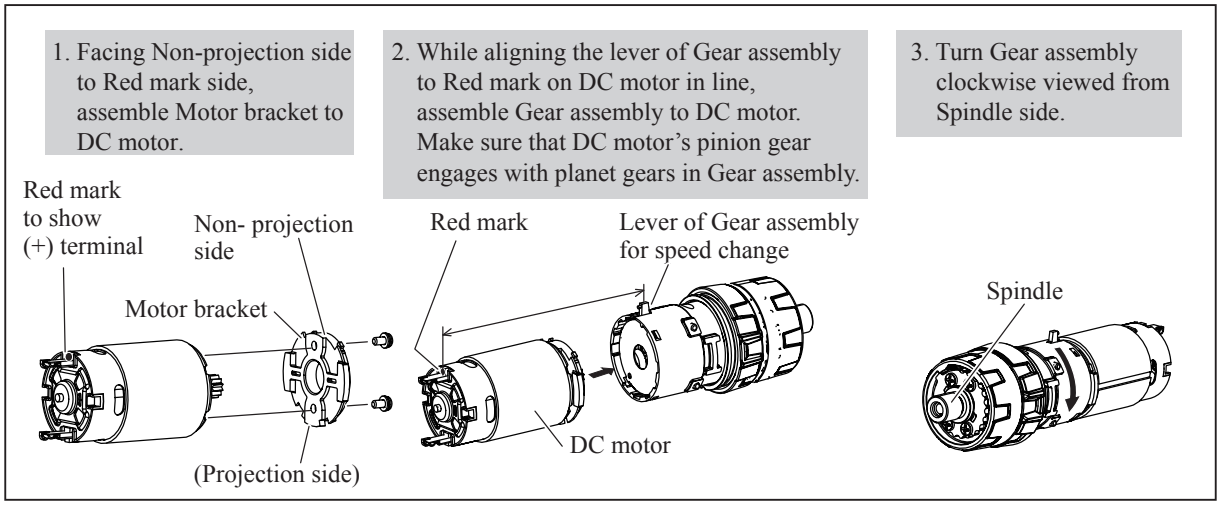
[3] DISASSEMBLY/ASSEMBLY

[3] -2. Gear assembly, Motor section (cont.)

ASSEMBLING

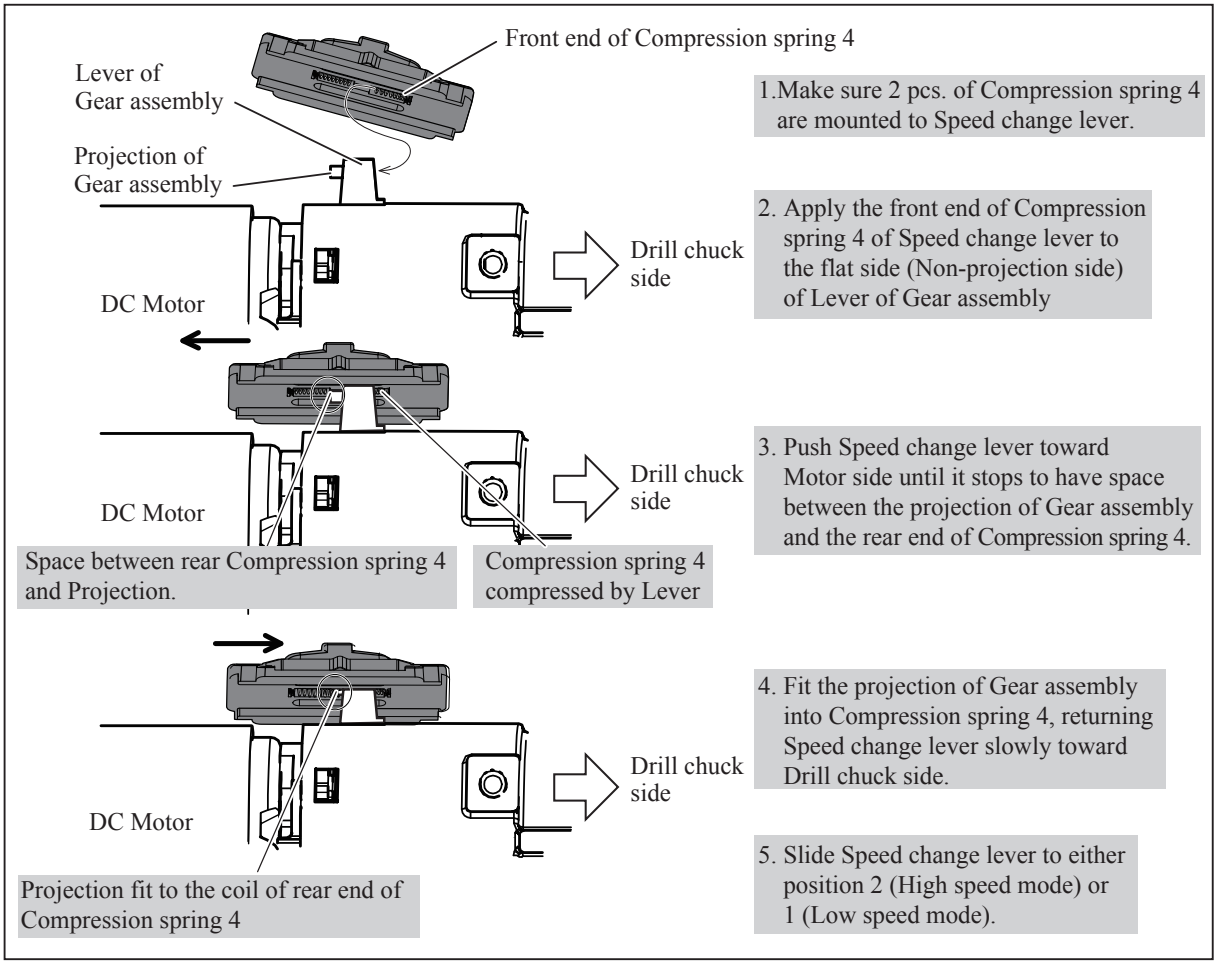
(1) Assemble Gear assembly to DC motor. (**Fig. 10**)

Fig. 10



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

Fig. 11



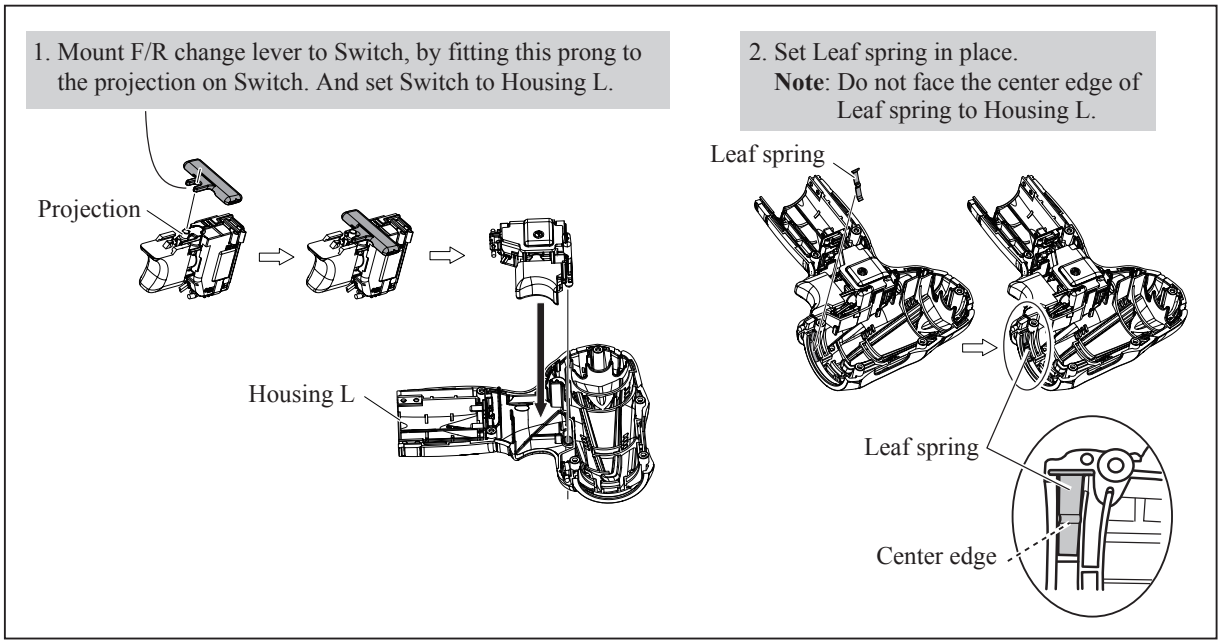
Repair

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

ASSEMBLING

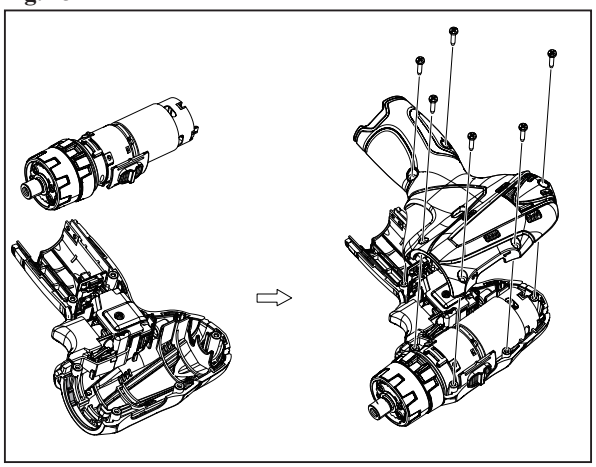
(3) Before setting Gear assembly and DC motor, take the following step in **Fig. 12**.

Fig. 12



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

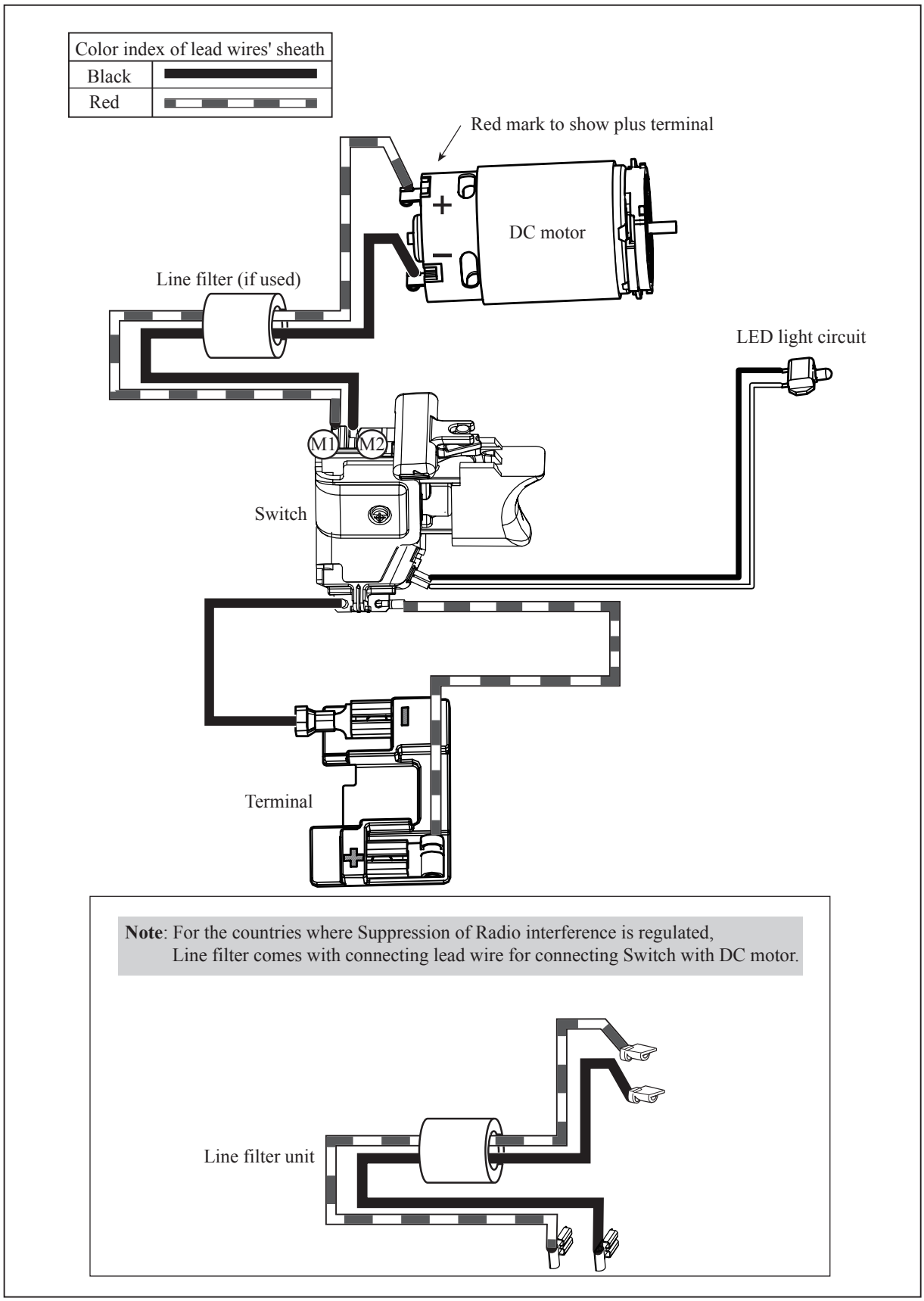
Fig. 13



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

Circuit diagram

Fig. D-1



Note: For the countries where Suppression of Radio interference is regulated,
Line filter comes with connecting lead wire for connecting Switch with DC motor.

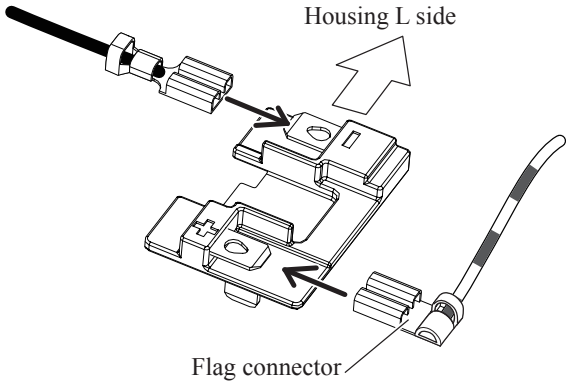
► Wiring diagram

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

Fig. D-2

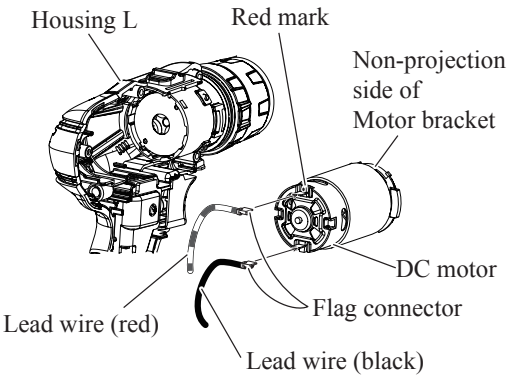
Wiring to Terminal

Flag connector with Lead wire (red) has to be connected to Terminal so that its Lead wire faces to Housing L side.

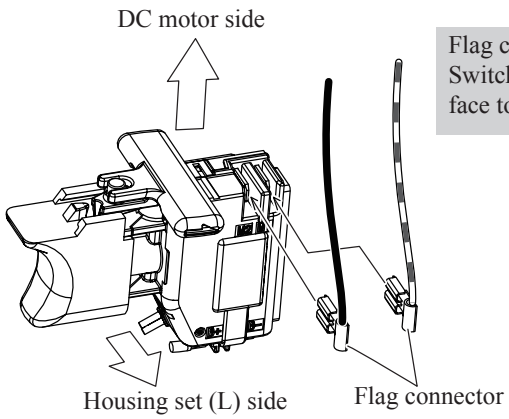


Wiring to DC motor

Flag connectors have to be connected to DC motor's terminal so that their Lead wires come to Housing L side.



Wiring to Switch

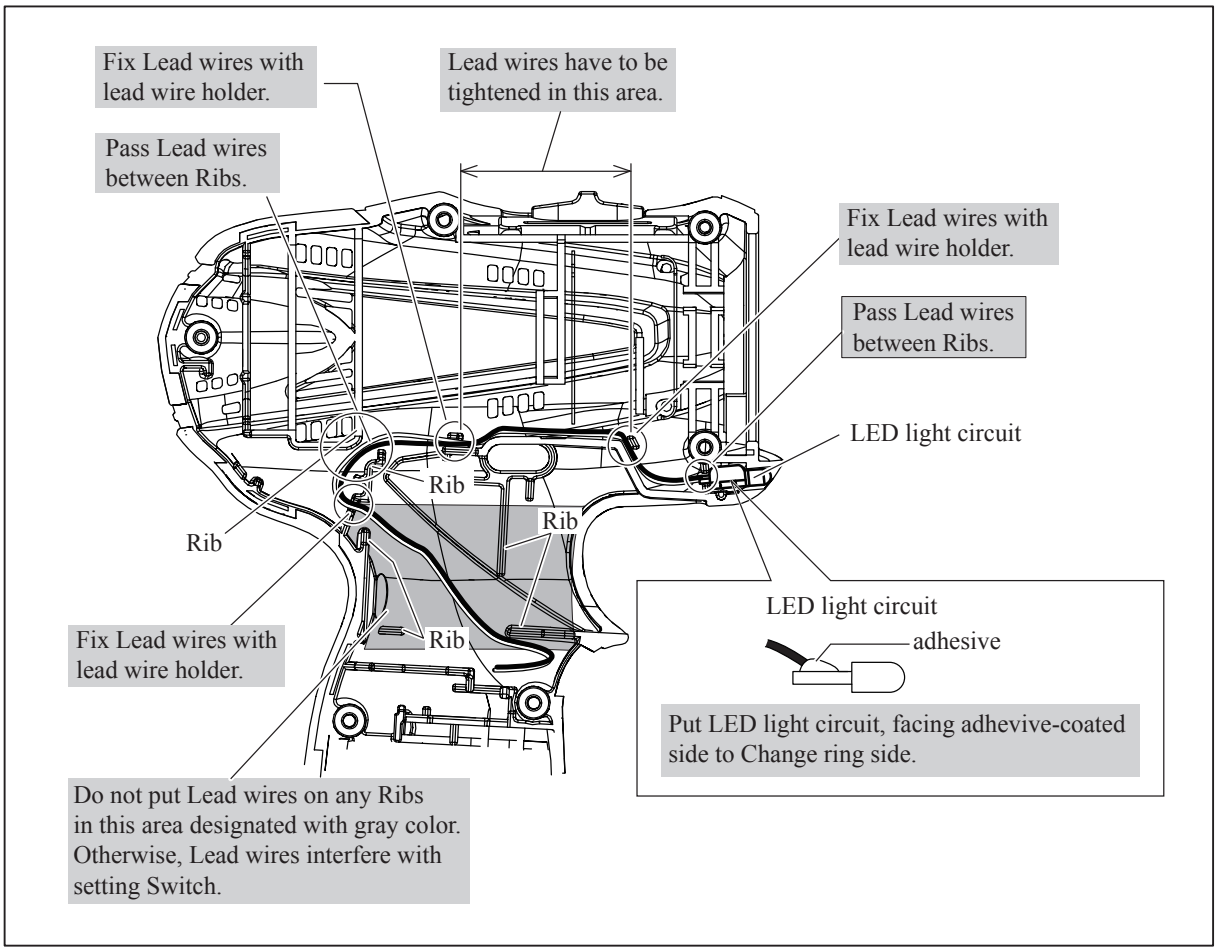


Flag connectors have to be connected to Switch's terminals so that their Lead wires face to DC motor side .

► Wiring diagram

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

Fig. D-3



► Wiring diagram

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

Fig. D-4