

T ECHNICAL INFORMATION



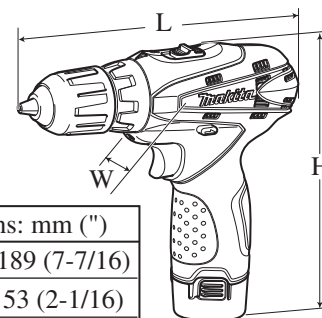
PRODUCT

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Models No. ▶ DF330D (FD02*)

Description ▶ 10.8V Cordless Driver Drill

* Model number for North and Central American countries except Mexico and Guam



Dimensions: mm (")	
Length (L)	189 (7-7/16)
Width (W)	53 (2-1/16)
Height (H)	183 (7-1/4)

CONCEPT AND MAIN APPLICATIONS

Model DF330D has been developed as a sister tool to Model DF030D, featuring 10mm (3/8") single sleeve keyless chuck instead of 6.35mm (1/4") Hex bit holder.

This product is available in the following variations.

Model No.	Housing color	Battery		Charger		Rechargeable flash light	Plastic carrying case	Offered to
		type	quantity	Model	Color			
DF330D	Makita-blue	BL1013 (Li-ion 1.3Ah)	2	DC10WA	Makita-blue	No	Yes	USA, Canada Mexico, Panama
DF330DW	white				black			
DF330DWE	Makita-blue				Makita-blue			
DF330DWEW	white				black			
DF330DWLE	Makita-blue				Makita-blue	ML100		Germany

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

► Specification

Battery	Type of cell	Li-ion	
	Voltage: V	10.8	
	Capacity: Ah	1.3	
	Charging time (approx.): min.	50 with DC10WA	
Max. output: W		115	
No load speed: min. ⁻¹ = rpm	High	0 - 1,300	
	Low	0 - 350	
Capacity of drill chuck: mm (")		0.8 (1/32) - 10 (3/8)	
Capacities: mm (")	Steel	10 (3/8)	
	Wood	21 (13/16)	
Max. fastening torque: N.m	Soft joint	14	
	Hard joint	24	
Torque adjustment		18 stages + drill mode	
Clutch torque setting: N.m (in.lbs)		0.5 - 3.5 (4 - 30)	
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	
Net weight [with battery BL1013]: kg (lbs)		1.0 (2.2)	

► Standard equipment

Phillips bit 2-50 (double-end) 1 pc (for countries using M-type spindle)
 Phillips bit 2-45 (double-end) 1 pc (for countries using N-type spindle)
 Holster 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 DC10WA, Battery BL1013

► Repair

CAUTION: Remove the battery and the bit from the machine for safety before repair/ maintenance in accordance with the instruction manual!

[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
—	Hex wrench 8	Removing / installing Drill chuck

[2] DISASSEMBLY/ASSEMBLY

[2] -1. Drill Chuck

DISASSEMBLING

Note: It is required to remove Drill chuck when replacing Gear assembly, but you need not when replacing only Housing.

- 1) Open the jaws of Drill chuck fully. Then remove M5x22 Pan head screw (left-handed and threadlocker coated) by turning **clockwise** using impact driver in Forward rotation mode with slotted bit. (**Fig. 1**)
- 2) Set Action mode change lever in Drill mode, Speed change lever in Low speed mode. (**Fig. 1**)
- 3) Fix the short leg of a hex wrench 8 in Drill chuck so that the long leg of the hex wrench 8 comes to the position that is easy to strike. (**Fig. 2**)
- 4) Hold the machine firmly on a workbench, and strike the long leg of hex wrench 8 to turn Drill chuck counterclockwise. (**Fig. 2**)

Note: If it is impossible to remove Drill chuck in the above way, use 1R359 (Chuck removing tool) to remove it. Refer to Makita repair tool list.

Fig. 1

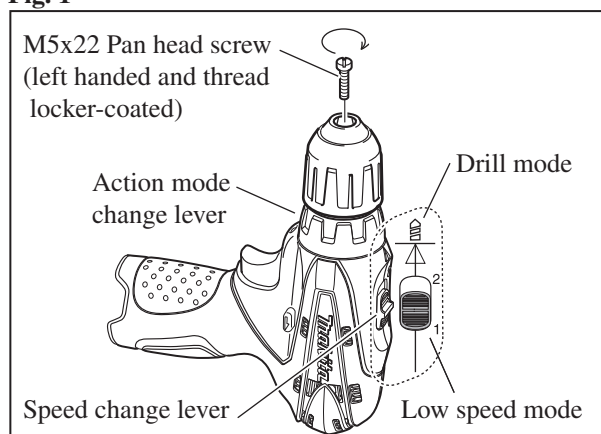
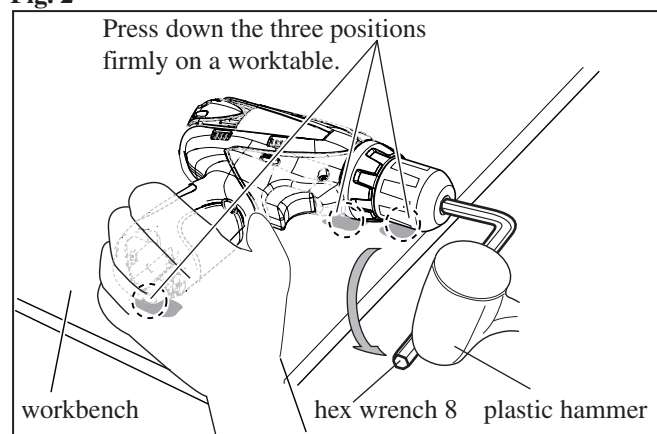


Fig. 2



ASSEMBLING

- 1) Turn Drill chuck clockwise until it stops by hand. (**Fig. 3**)
- 2) Clamp one leg of hex wrench 8 in vise. And fix the other leg of hex wrench 8 in Drill chuck. (**Fig. 4**)
- 3) Set Action mode change lever in Drill mode, Speed change lever in Low speed mode. (**Fig. 1**)
- 4) Set F/R change lever to clockwise rotation. Install Battery. (**Fig. 4**)
- 5) Pull Switch lever slowly to prevent the machine from having impacts. And fasten Drill chuck until the motor is locked.

Note: 1) Pull Switch lever slowly so that the rotation speed reaches the max level in approx. one second.
2) As soon as the motor is locked, release Switch trigger.
- 6) Set M5x22 left handed Pan head screw in place after applying ThreeBond 1321B/ 1342 or Loctite 242 to the threads of the screw.

Fig. 3

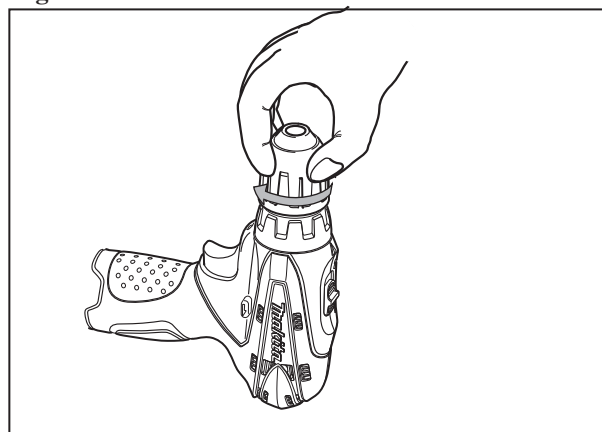
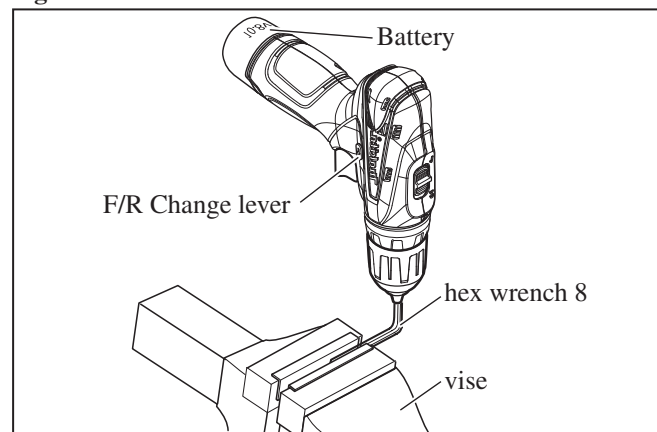


Fig. 4



► Repair

[2] DISASSEMBLY/ASSEMBLY

[2]-2. Gear Assembly, DC Motor

DISASSEMBLING

1) Remove Drill chuck. (Figs. 1 and 2)

Note: It is not required to remove Drill chuck when replacing only DC motor.

2) Remove two Set plates by hooking the hole of Set plate using small slotted screwdriver. (Fig. 5)

3) Remove Housing R from Housing L by removing Bind PT3x6 tapping screw (6pcs.).

4) Remove Gear assembly, DC motor section and Speed change lever together from Housing L, and then separate Speed change lever from Gear assembly. (Fig. 6)

5) When removing DC motor section from Gear assembly, take the steps as illustrated in Fig. 7.

6) Separate DC motor from Motor bracket by removing M3x6 Pan head screw (2 pcs.). (Fig. 8)

Fig. 5

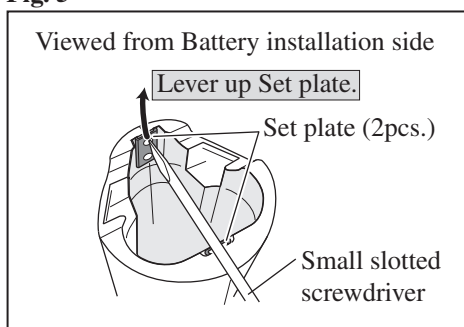


Fig. 6

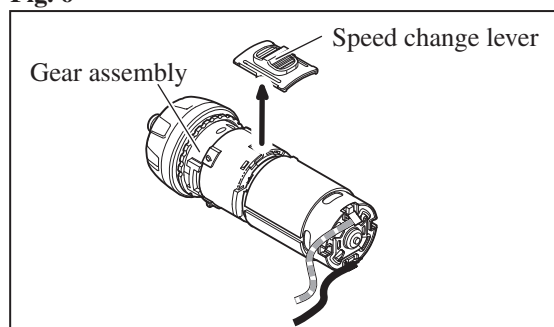


Fig. 7

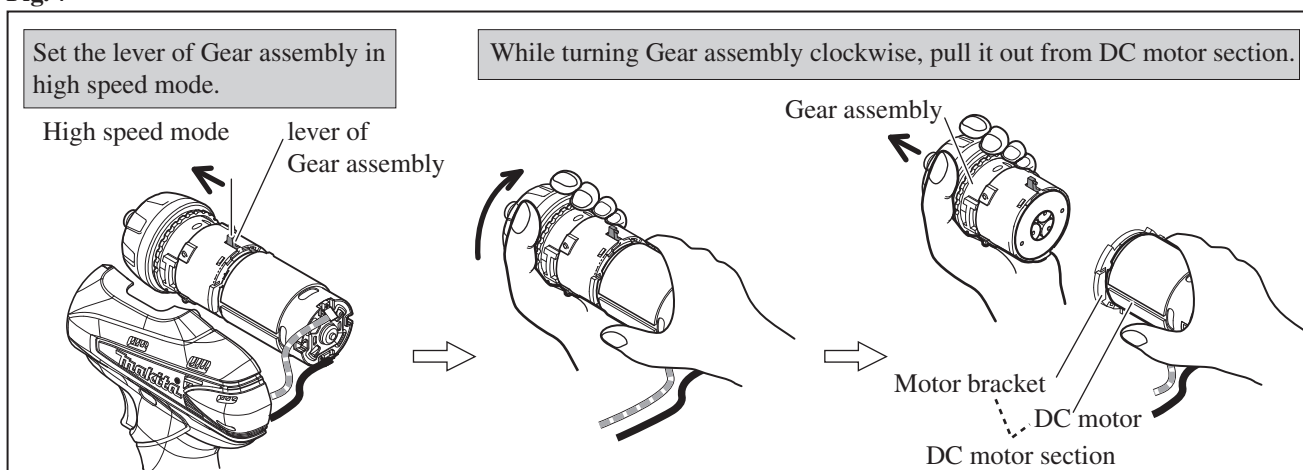
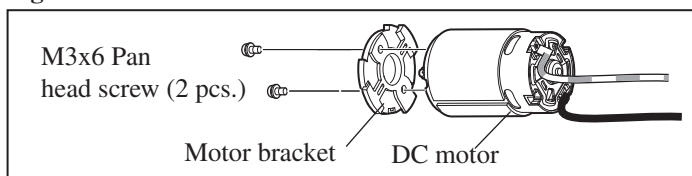


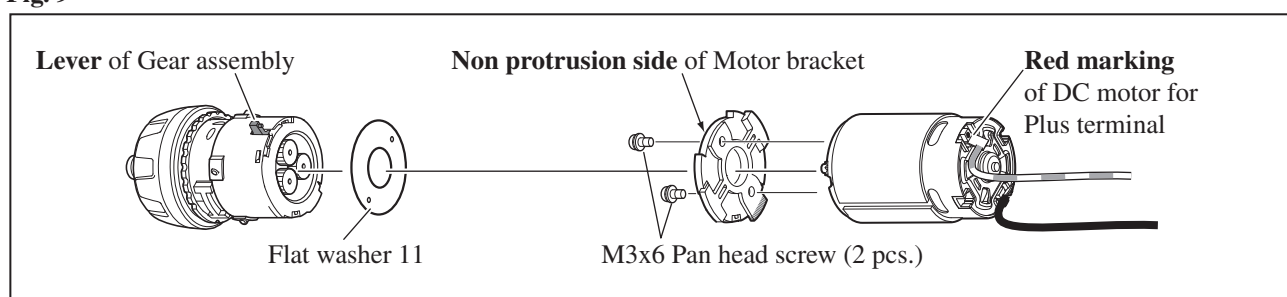
Fig. 8



ASSEMBLING

Align Lever of Gear assembly, Non protrusion side of Motor bracket and Red marking of DC motor. And then take the disassembling step in reverse. Be sure to face Lever, Non protrusion side and Red marking upward. (Fig. 9)

Fig. 9



► Repair

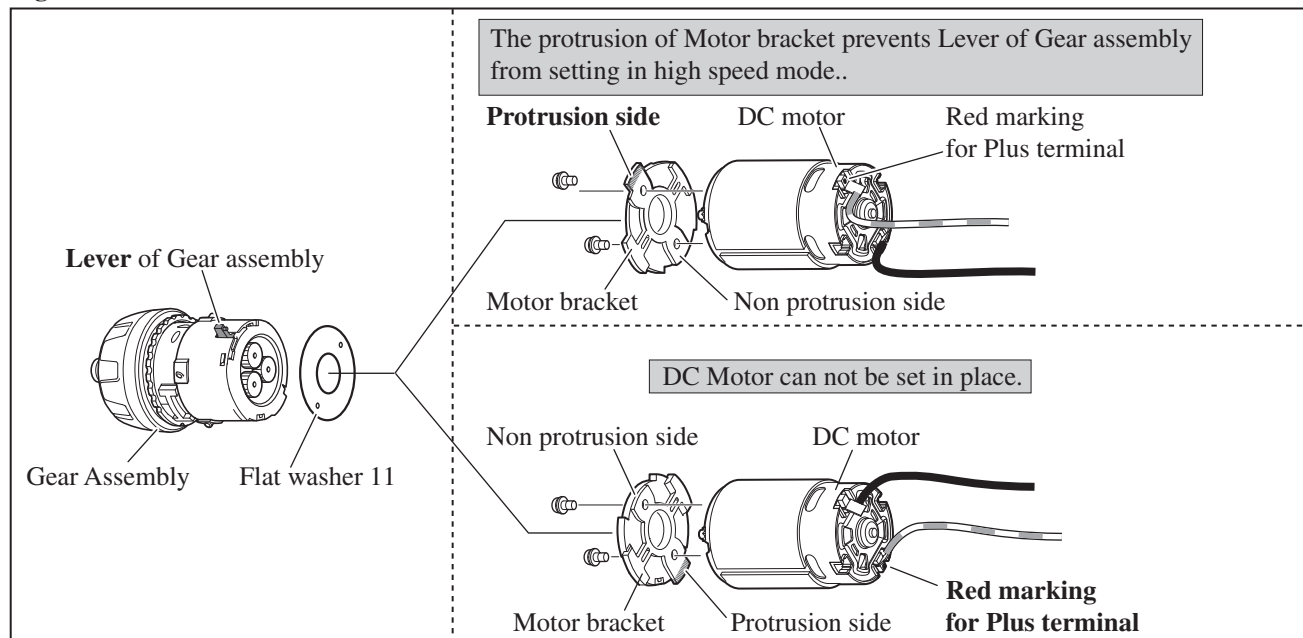
[2] DISASSEMBLY/ASSEMBLY

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

ASSEMBLING

Note: Do not take the wrong assembling illustrated in Fig. 10.

Fig. 10



[2]-3. Assembling Speed Change Lever Assembly

- 1) Check that two pieces of Compression spring 4 are set exactly in the grooves of Speed change lever assembly. (**Fig. 11**)
- 2) Fix Speed change lever assembly to Lever of Gear assembly. (**Fig. 12**)
Note: Put Lever of Gear assembly between two Compression springs 4, And insert the emboss of the lever of Gear assembly into one of Compression spring 4.
- (3) Shift Speed change lever assembly to either low speed position or high speed position.

Fig. 11

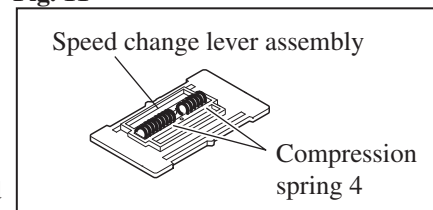
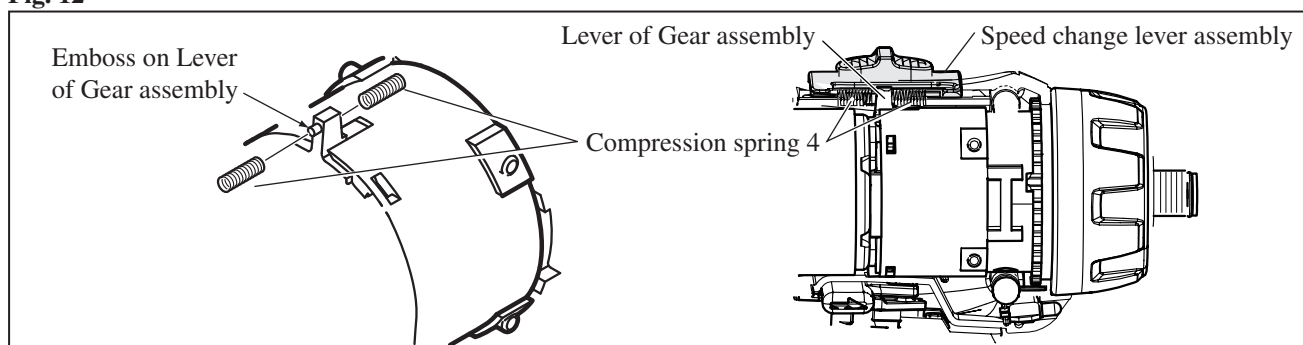


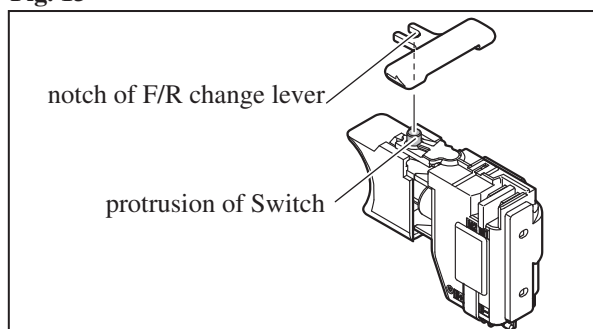
Fig. 12



[2]-4. Assembling F/R Change Lever

Link the notch of F/R change lever and the protrusion of Switch, then install them in Housing L. (**Fig. 13**)

Fig. 13



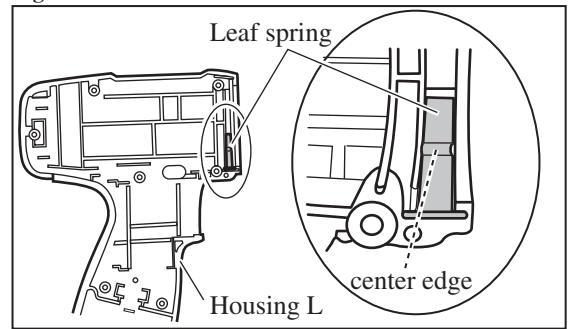
► **Repair**

[2]-5. **Assembling Leaf Spring**

Set Leaf spring in place. (Fig. 14)

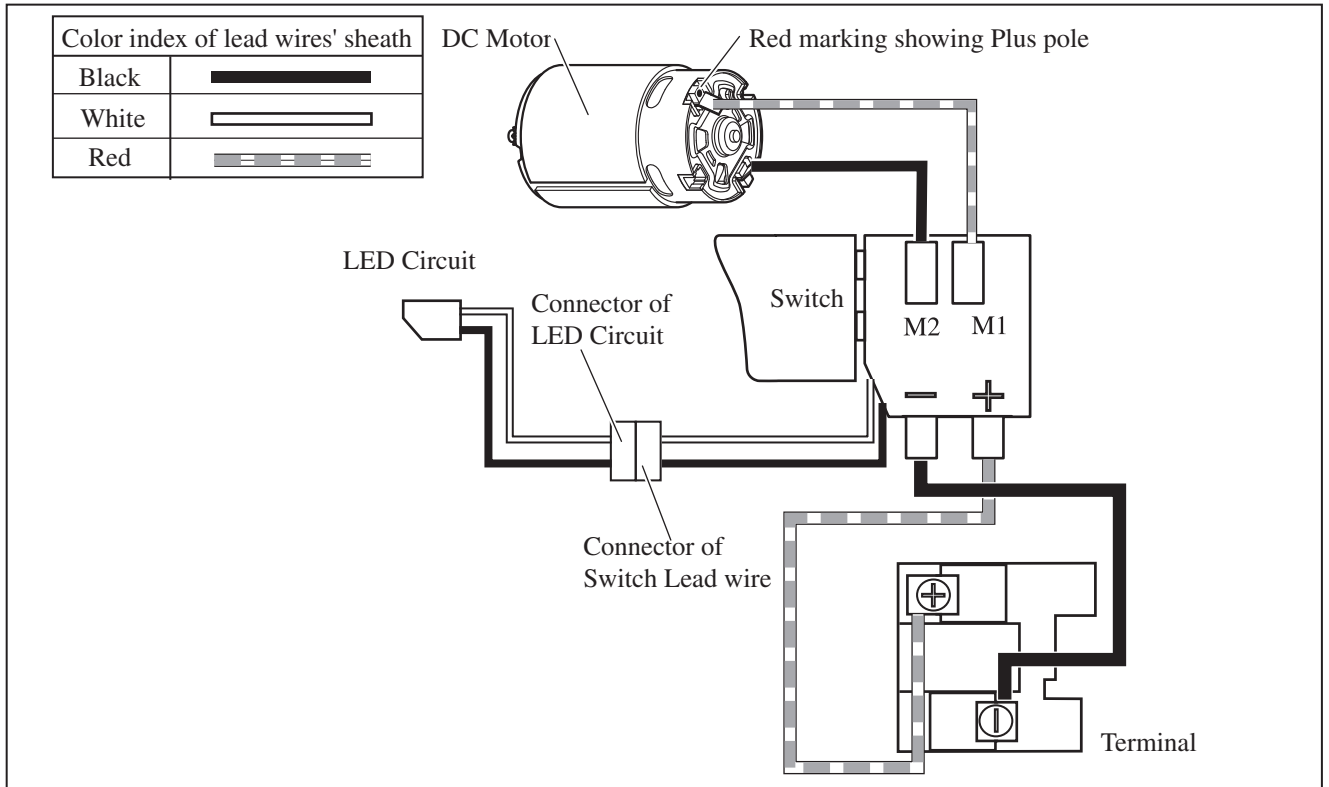
Note: Do not face the center edge of Leaf spring to Housing L.

Fig. 14



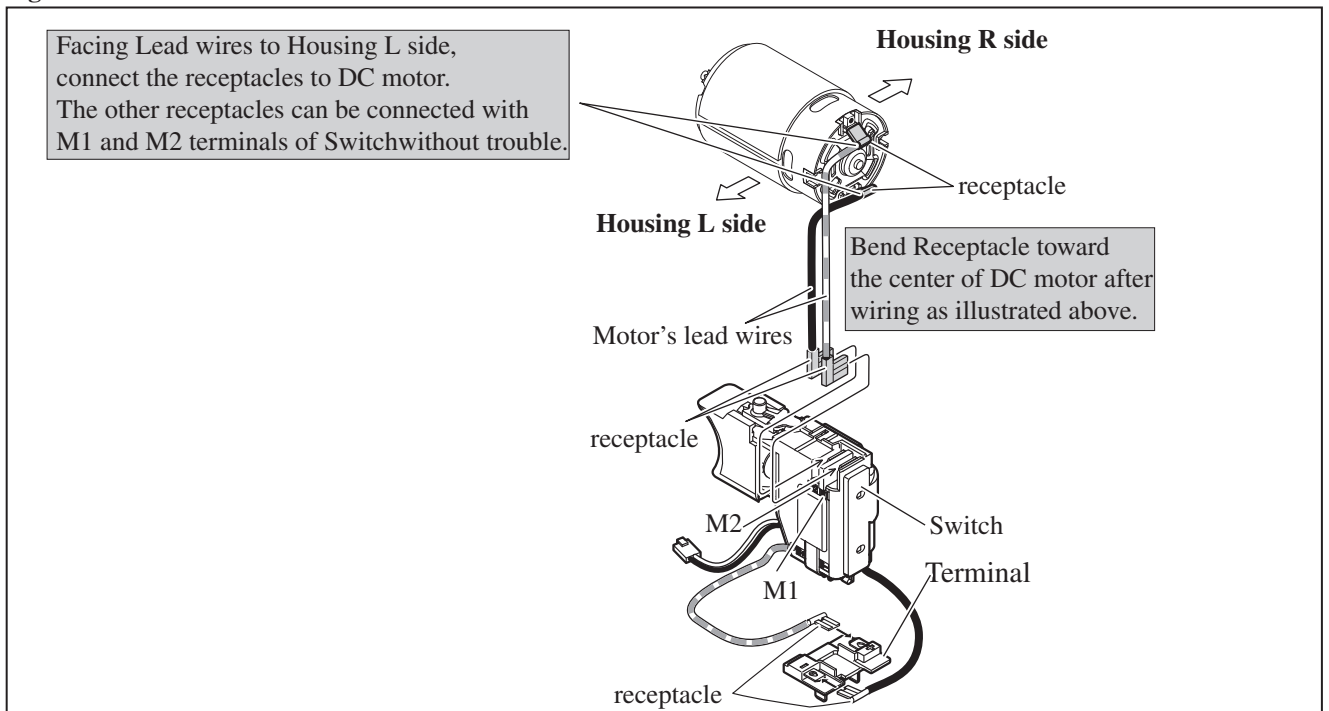
► **Circuit diagram**

Fig. D-1



► **Wiring diagram**

Fig. D-2



▶ **Wiring diagram**

Fig. D-3

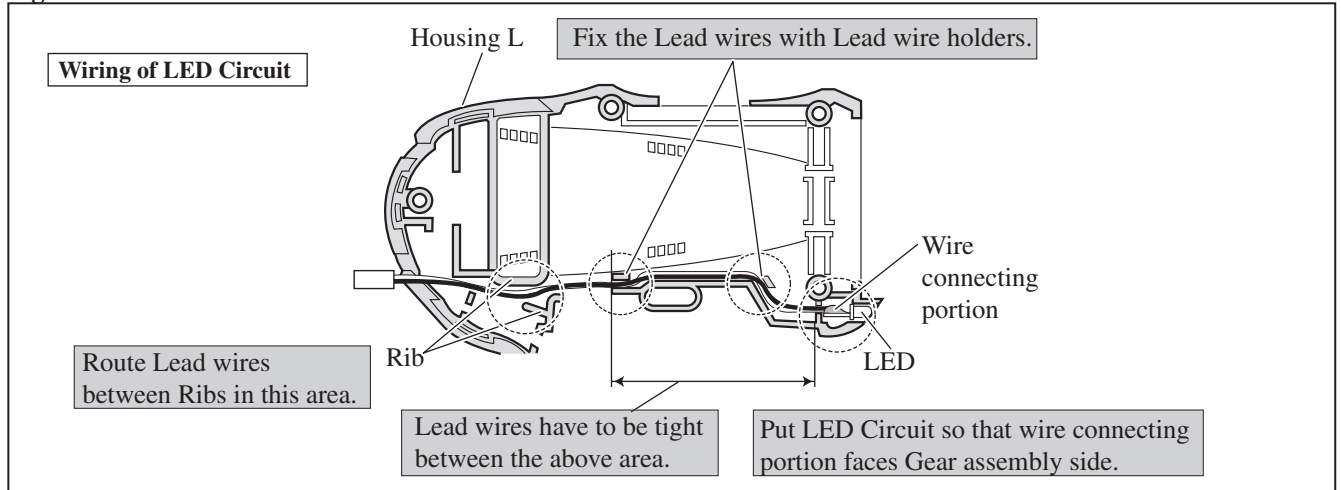


Fig. D-4

