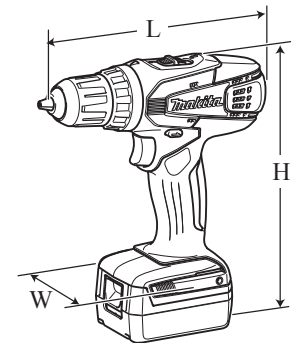




TECHNICAL INFORMATION

PRODUCT
P 1/6

- Model No.** ▶ DF347D/ DF457D
HP347D/ HP457D
- Description** ▶ Cordless Driver Drills 14.4V/ 18V
Cordless Hammer Driver Drills 14.4V/ 18V



(model DF347D)

CONCEPT AND MAIN APPLICATIONS

These models have been developed to use 1.1Ah Li-ion batteries (BL1411G/ BL1811G) and charger (DC18WA) newly designed to provide cost-competitive advantage to Makita brand cordless tools.

The specification difference between these models are:

- DF347D/ 14.4V Cordless driver drill
- DF457D/ 18V Cordless driver drill
- HP347D/ 14.4V Cordless hammer driver drill
- HP457D/ 18V Cordless hammer driver drill

Dimensions: mm (")				
Model No.	DF347D	DF457D	HP347D	HP457D
Length (L)	198 (7-3/4)	221 (8-3/4)	216 (8-1/2)	239 (9-3/8)
Length (L)*2		228 (9)		246 (9-11/16)
Width (W)	83 (3-1/4)		83 (3-1/4)	
Height (H)	235 (9-1/4)	240 (9-1/2)	235 (9-1/4)	240 (9-1/2)

*2 Length for North and Central American countries

Specification

Specification		Model No.	DF347D	DF457D	HP347D	HP457D
Battery	Voltage: V		14.4	18	14.4	18
	Capacity: Ah		1.1			
	Cell		Li-ion			
	Charging time (approx.): min.		60 with DC18WA			
Chuck capacity: mm (")			10 (3/8)	13 (1/2)	10 (3/8)	13 (1/2)
No load speed: min-1=rpm		Low/ High	0 - 400/ 0 - 1,400			
Impacts per min.: min-1=ipm		Low/ High	N/A		0 - 6,000/ 0 - 21,000	
Capacity: mm (")	Steel		10 (3/8)	13 (1/2)	10 (3/8)	13 (1/2)
	Wood		25 (1)	36 (1-7/16)	25 (1)	36 (1-7/16)
	Masonry		N/A		10 (3/8)	13 (1/2)
Torque setting			16 stage + drill mode			
Clutch torque setting: N.m (in.lbs)			1.0 - 4.0 (9 - 35)			
Max. fastening torque: N.m (in.lbs)	Hard joint		30 (270)	42 (370)	30 (270)	42 (370)
	Soft joint		15 (130)	24 (210)	15 (130)	24 (210)
Lock torque: N.m (in.lbs)			23 (200)	38 (340)	23 (200)	38 (340)
Electric brake			Yes			
Mechanical speed control			Yes (2 speed)			
Variable speed control			Yes			
Reversing switch			Yes			
Weight according to EPTA-Procedure 01/2003: kg (lbs)			1.4 (3.2)*3	1.7 (3.7)*4	1.5 (3.3)*3	1.7 (3.8)*4

*3 with Battery BL1411G

*4 with Battery BL1811G

Standard equipment

- Battery BL1411G for DF347D/ HP347D
- Battery BL1811G for DF457D/ HP457D
- Charger DC18WA
- Battery cover
- +/- Bit 2-65
- Plastic carrying case

Optional accessories

- Charger DC18WA
- Battery BL1411G for DF347D/ HP347D
- Battery BL1811G for DF457D/ HP457D
- Drill bits for wood
- Drill bits for steel
- Drill bits for masonry for HP347D/ HP457D
- Driver bits

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

► Repair

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

[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
—	Hex wrench 8	removing / assembling Drill chuck
—	Plastic hammer	removing Drill chuck
1R359	Chuck removing tool	removing Drill chuck (when the following way is not effective)

[2] DISASSEMBLY/ASSEMBLY

[2]-1. Single sleeve 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) Open the jaws of Drill chuck fully, and turn M6x22 - Flat head screw (left-handed and threadlocker coated) **clockwise** with Slotted screwdriver. When it is difficult to remove the screw, use Vise and Impact driver. (**Fig. 1**)
- (2) Set the machine to drill mode, low gear mode and reverse rotation mode.
- (3) Hold the long side of Hex wrench 8 in Vise and secure the short side to Drill chuck firmly as drawn in **Fig. 2**.
- (3) Pull Switch trigger slowly.

Important:

Be sure to hold the grip of Machine tightly with sufficient counterclockwise* force against clockwise* recoil force of the machine.

Note: The rotational direction marked with * is viewed from operator.

- (4) Spindle rotates counterclockwise* and consequently Drill chuck is removed from spindle.

When the above way is not effective, use 1R359 to remove Drill chuck. Refer to Makita repair tool list.

Fig. 1

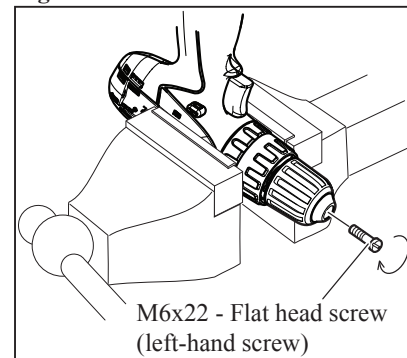
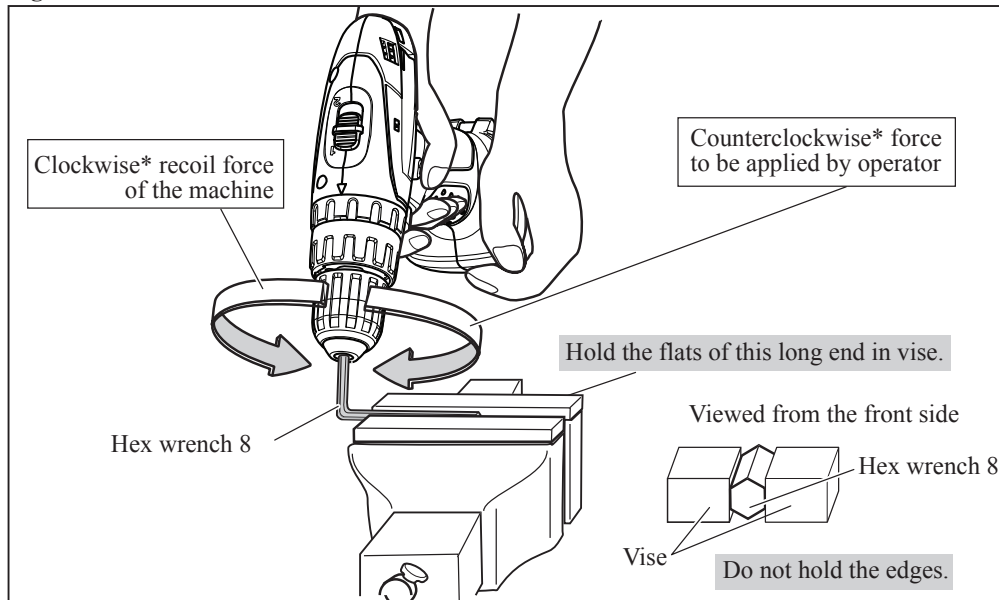


Fig. 2



ASSEMBLING

- (1) Seat Drill chuck on Spindle.
- (2) Set the machine to Drill mode, Low gear mode and Forward rotation mode.
- (3) Hold the long side of Hex wrench 10 in Vise and secure the short side to Drill chuck firmly. And then tighten Spindle into Drill chuck by pulling the trigger of Switch slowly at first and to the full speed in one second not to give impacts carefully.

Note: Release the trigger of Switch just after Spindle is locked. Do not keep on pulling the trigger for longer than one second.

- (4) Fasten Drill chuck to Spindle with M6x22 - Flat head screw by turning it counterclockwise.

Note: If you reuse the screw removed from Drill chuck, apply an appropriate amount of adhesive (ThreeBond 1321B/ 1342 or Loctite 242) to the thread for secure fastening.

► **Repair**

[3] DISASSEMBLY/ASSEMBLY

[3]-2. DC motor

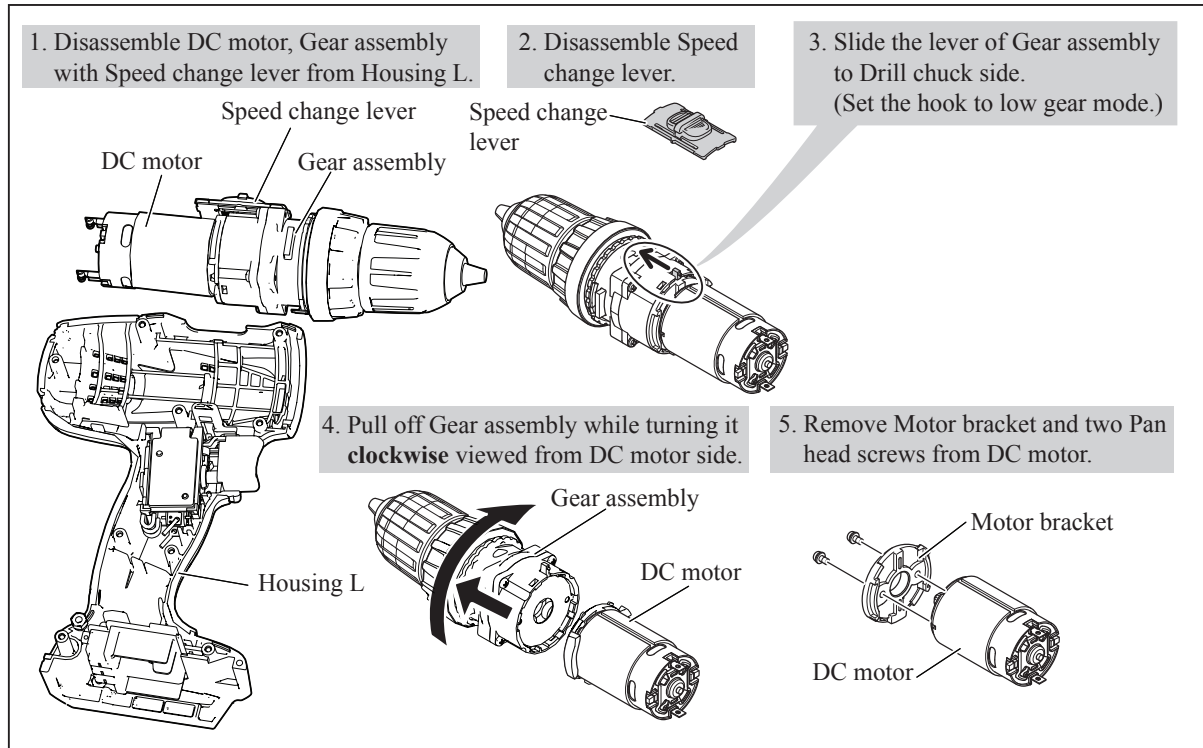
DISASSEMBLING

It is not necessary to remove Drill chuck from Gear assembly when replacing DC motor.

(1) Remove nine 3x16 Tapping screws and Housing R from Housing L.

(2) DC motor can be replaced as drawn in **Fig. 3**.

Fig. 3



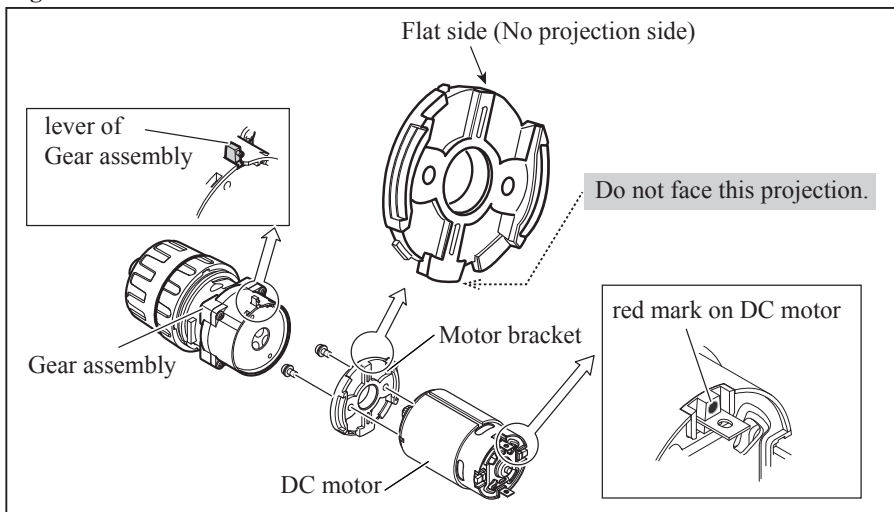
ASSEMBLING

Do the reverse of the disassembling steps.

The following portions of DC motor, Motor bracket and Gear assembly have to face the same side. (**Fig. 4**)

- red mark (designated as plus terminal) on DC motor
- flat side (No projection side) of Motor bracket
- lever of Gear assembly

Fig. 4



► **Repair**

[3] DISASSEMBLY/ASSEMBLY

[3]-3. Speed change lever assembly

DISASSEMBLING

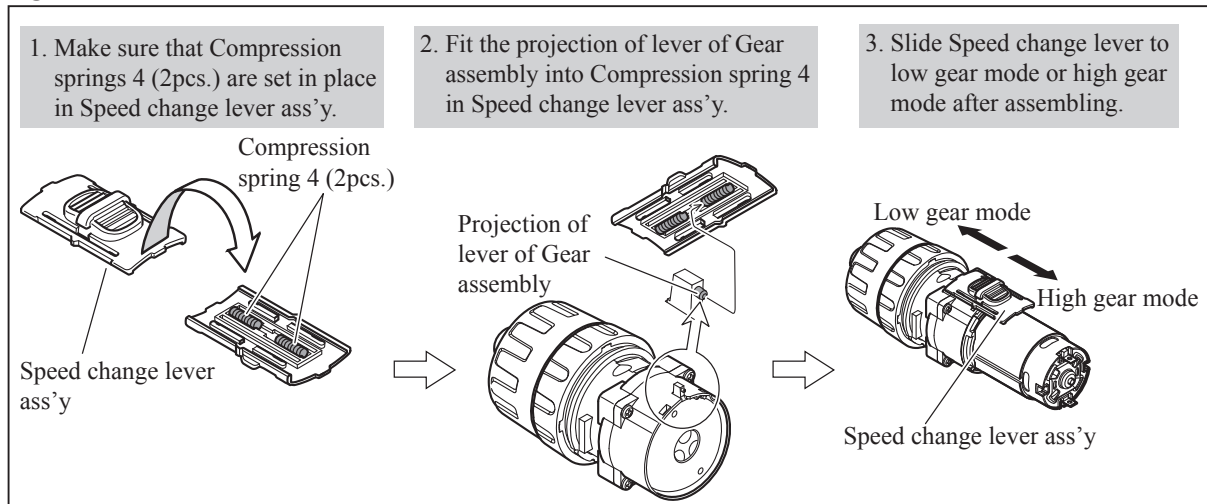
Refer to **Fig. 5**.

ASSEMBLING

Do the reverse of the disassembling steps.

Assemble Speed change lever to Gear assembly as drawn in **Fig. 5**.

Fig. 5

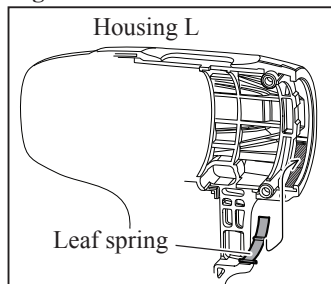


[3]-4. Leaf spring

ASSEMBLING

Set Leaf spring in place in Housing L. (**Fig. 6**).

Fig. 6

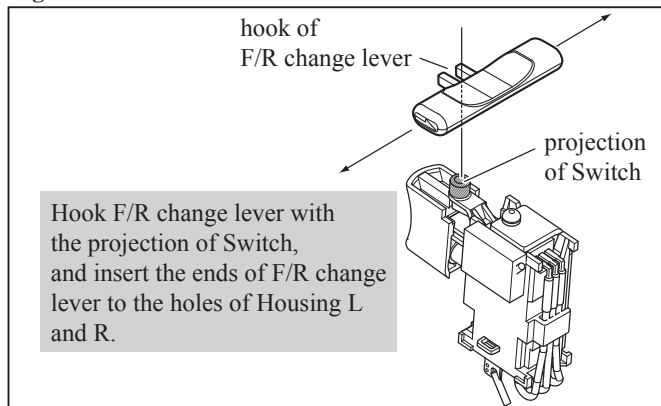


[3]-5. F/R change lever

ASSEMBLING

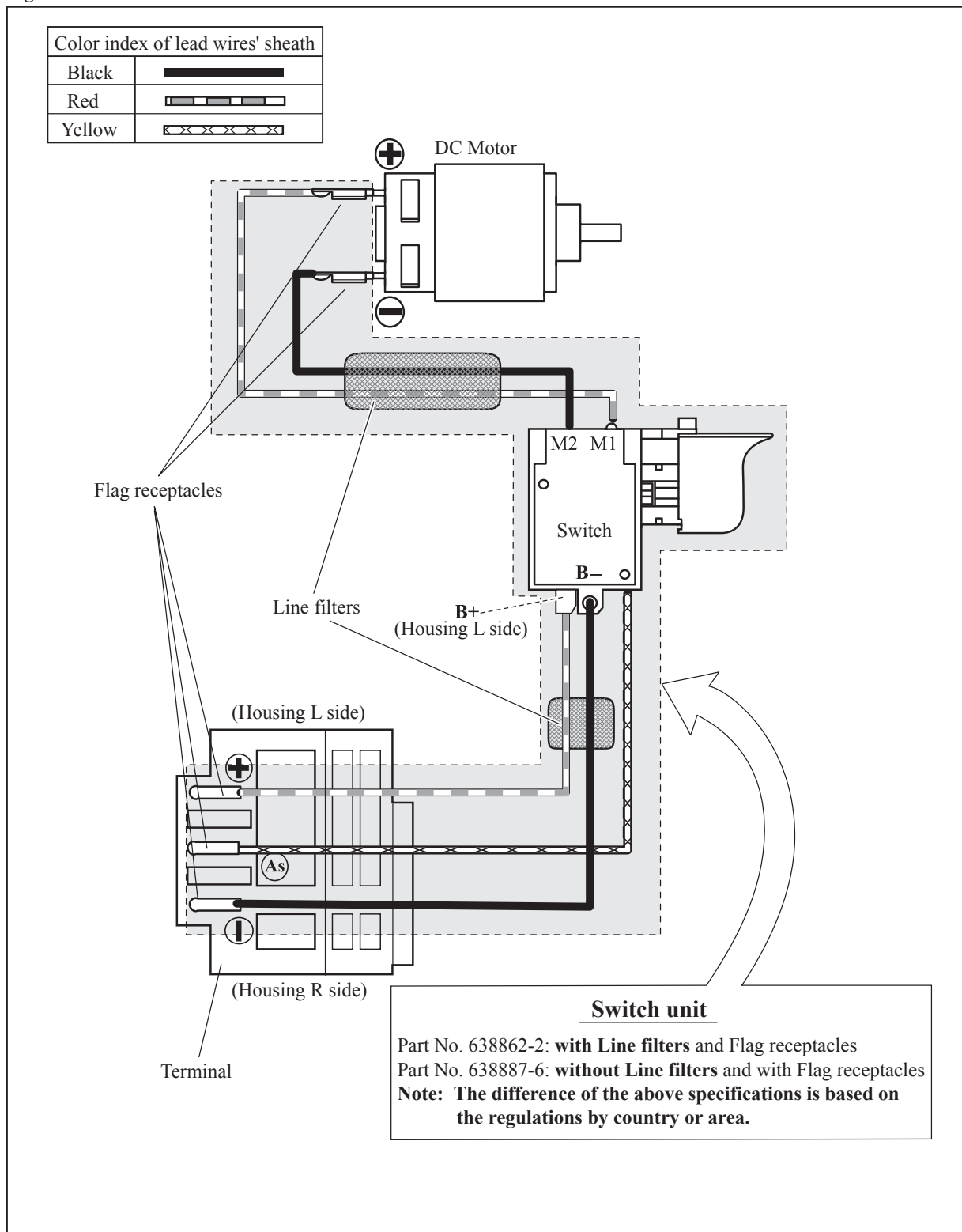
F/R Change lever can be assembled to Switch as drawn in **Fig. 7**.

Fig. 7



► **Circuit diagram**

Fig. D-1



► **Wiring diagram**

Fig. D-2

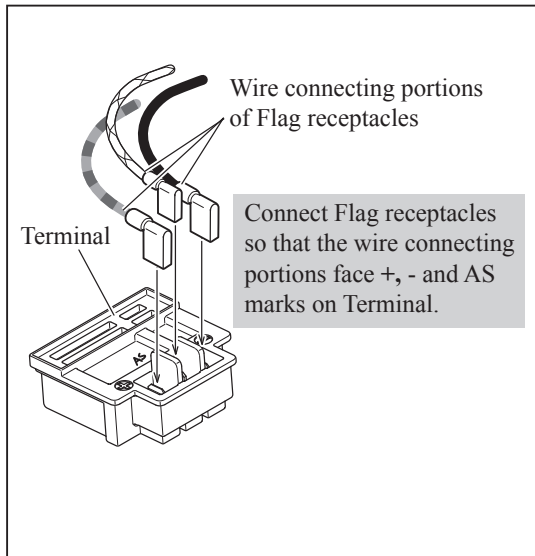


Fig. D-3

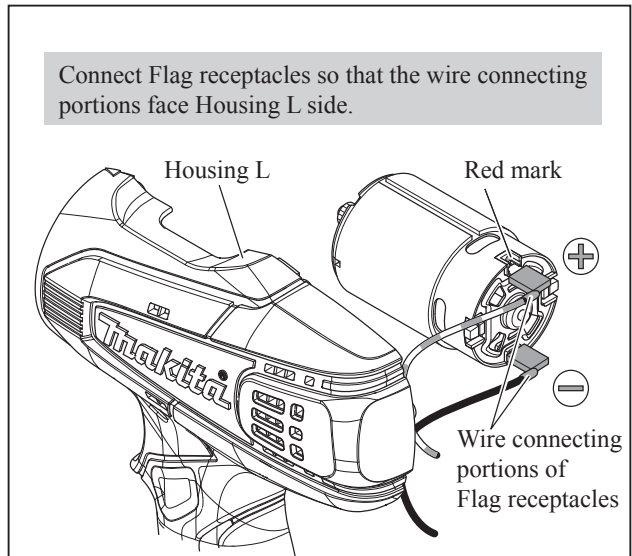


Fig. D-4

