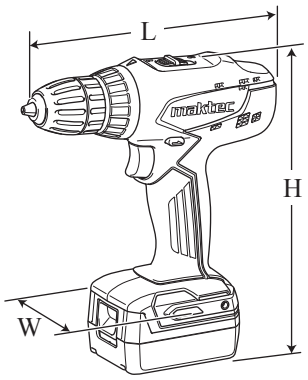
TECHNICAL INFORMATION

Model No. ► MT070/ MT071
MT080/ MT081

Description ► Cordless Driver Drill 14.4V/ 18V
Cordless Hammer Driver Drill 14.4V/ 18V



(model MT070)

CONCEPT AND MAIN APPLICATIONS

These cordless products are the new **maktec** aesthetic design models, and have been developed to use 1.1Ah Li-ion batteries (L1451/ L1851) and charger (DC1851) newly designed to provide cost-competitive advantage to **maktec** brand cordless tools.

The specification difference between these models are:
MT070/ 14.4V Cordless driver drill
MT071/ 18V Cordless driver drill
MT080/ 14.4V Cordless hammer driver drill
MT081/ 18V Cordless hammer driver drill

Dimensions: mm (")				
Model No.	**MT070**	**MT071**	**MT080**	**MT081**
Length (L)	201 (7-7/8)	223 (8-3/4)	216 (8-1/2)	238 (9-3/8)
Width (W)	82 (3-1/4)		82 (3-1/4)	
Height (H)	236 (9-1/4)	239 (9-3/8)	236 (9-1/4)	239 (9-3/8)

► Specification

Specification \ Model No.			**MT070**	**MT071**	**MT080**	**MT081**
Battery	Voltage: V		14.4	18	14.4	18
	Capacity: Ah		1.1			
	Cell		Li-ion			
	Charging time (approx.): min.		60 with DC1851			
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		14 (120)	24 (210)	14 (120)	24 (210)
Lock torque: N.m (in.lbs)			21 (190)	38 (340)	21 (190)	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 (3.1)*1	1.7 (3.7)*2	1.5 (3.2)*1	1.7 (3.8)*2

***1** with Battery L1451
***2** with Battery L1851

► Standard equipment

Battery L1451 for MT070/ MT080
Battery L1851 for MT071/ MT081
Charger DC1851
Battery cover
Plastic carrying case
Note: The standard equipment for the tool shown above may vary by country.

► Optional accessories

Charger DC1851
Battery L1451 for MT070/ MT080
Battery L1851 for MT071/ MT081
Drill bits for wood
Drill bits for steel
Drill bits for masonry for MT080/ MT081
Driver bits

► 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

[2] DISASSEMBLY/ASSEMBLY

[2]-1. Double 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) Install Hex wrench 8 into Drill chuck and tighten it firmly. Then set the machine to Drill mode and Low gear mode.

(3) Holding the machine on workbench firmly, strike the wrench end with Plastic hammer to turn Drill chuck counterclockwise. **(Fig. 2)**

Fig. 1

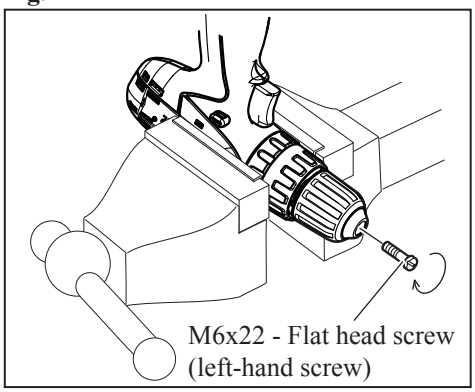
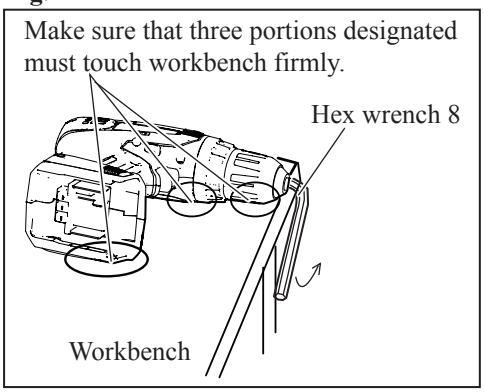


Fig. 2



ASSEMBLING

(1) Seat Drill chuck on Spindle.

(2) Set the machine to Drill mode, Low gear mode and Forward rotation mode.

(3) Secure the short end of Hex wrench 8 in the jaws of Drill chuck, and the long end in vise. (**Fig. 3**) Hold the grip of the machine firmly so that your hand cannot be pulled away by reaction torque. 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. (**Fig. 4**)

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.

Fig. 3

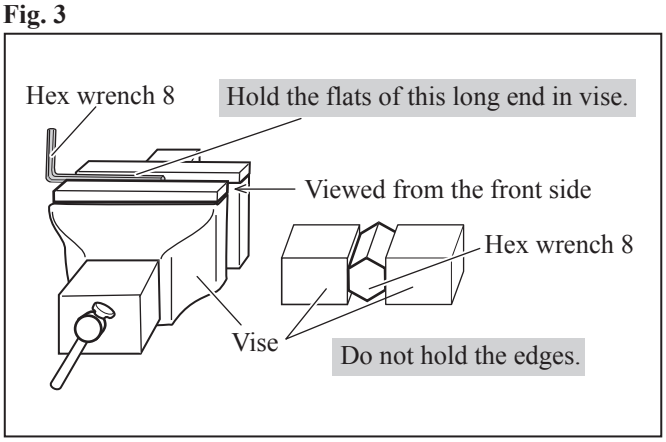
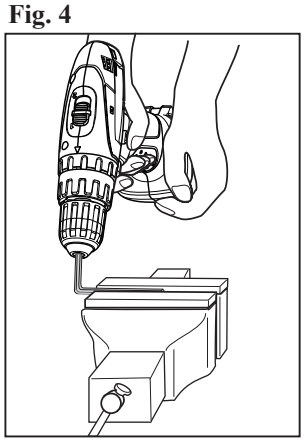


Fig. 4



Repair

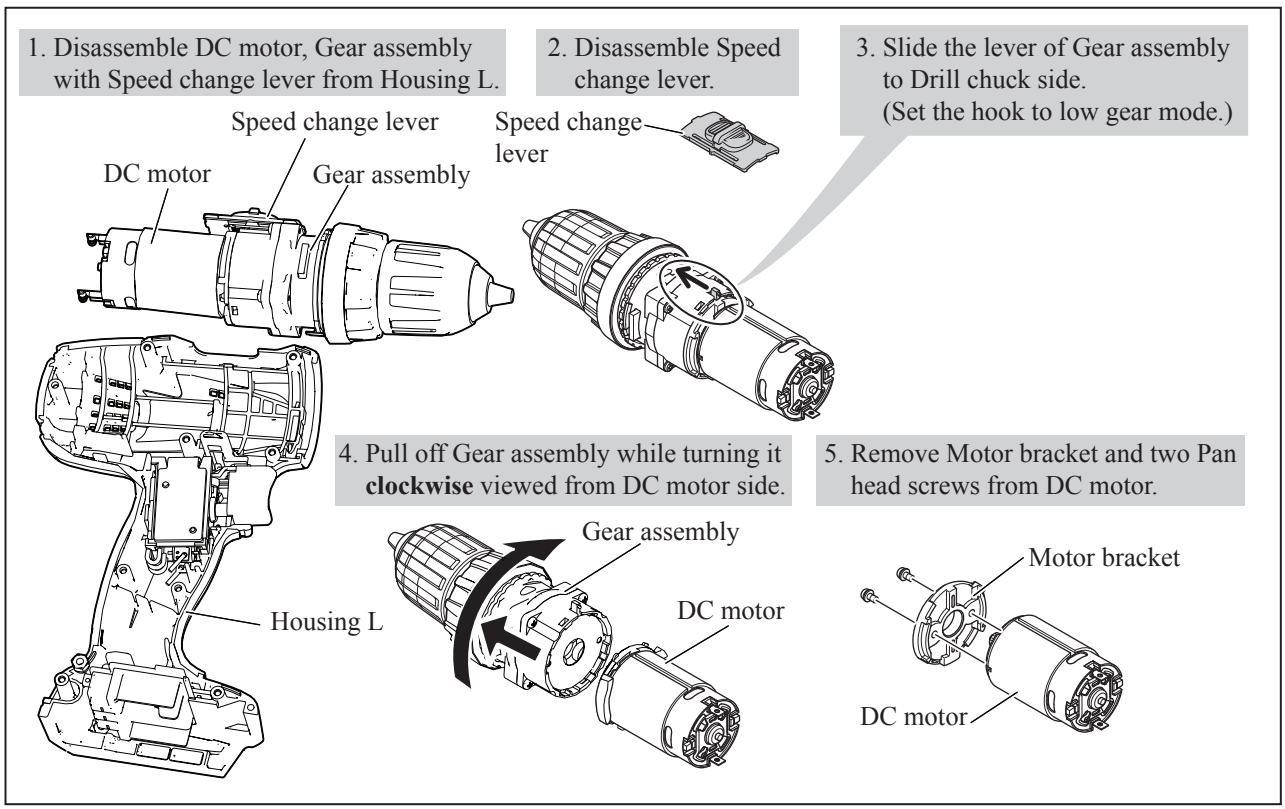
[3] DISASSEMBLY/ASSEMBLY

[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. 5**.

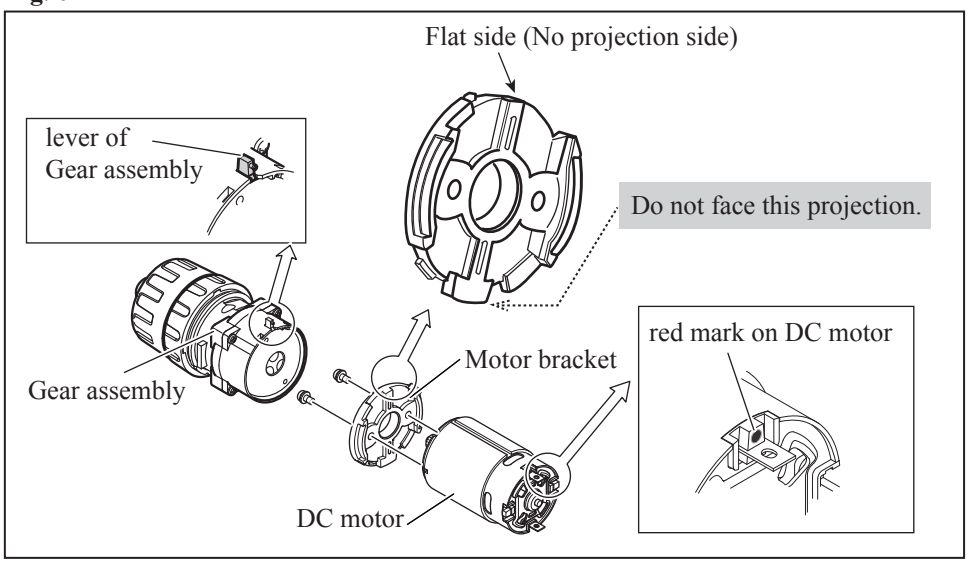
Fig. 5



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. 6**)
- red mark (designated as plus terminal) on DC motor
- flat side (No projection side) of Motor bracket
- lever of Gear assembly

Fig. 6



Repair

[3] DISASSEMBLY/ASSEMBLY

[3]-3. Speed change lever assembly

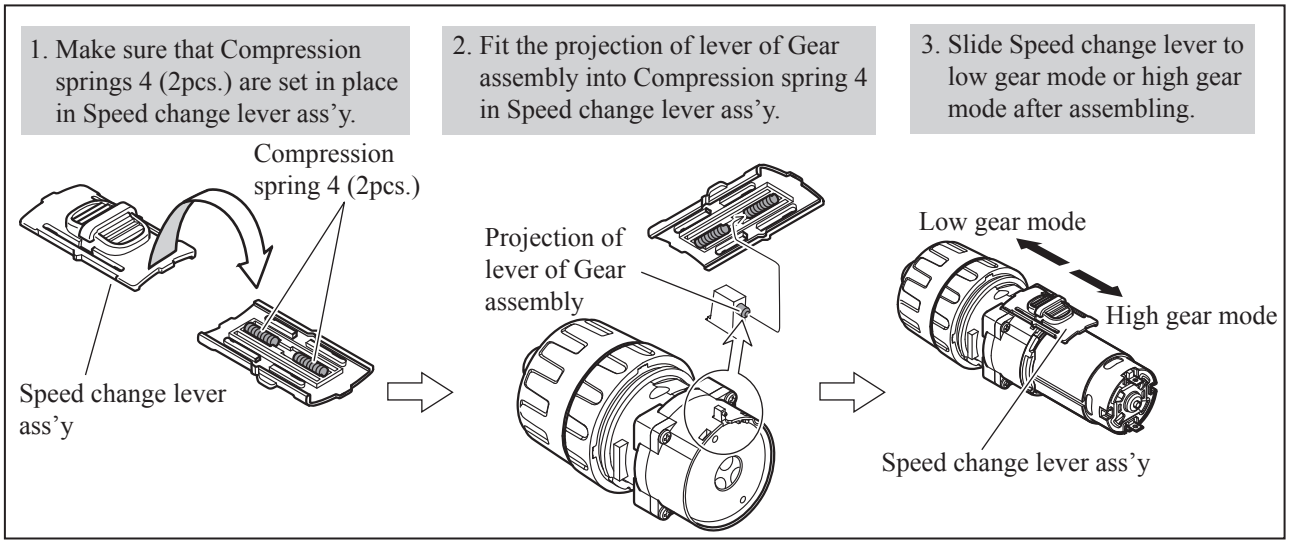
DISASSEMBLING

Refer to **Fig. 5**.

ASSEMBLING

Do the reverse of the disassembling steps.
Assemble Speed change lever to Gear assembly as drawn in **Fig. 7**.

Fig. 7

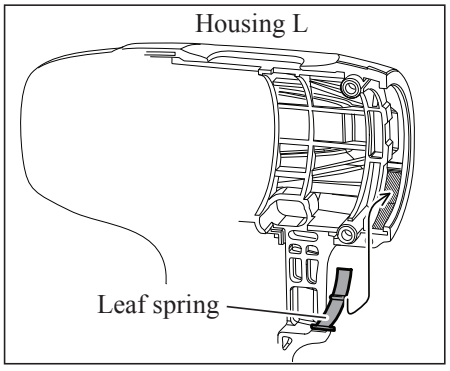


[3]-4. Leaf spring

ASSEMBLING

Set Leaf spring in place in Housing L. (**Fig. 8**).

Fig. 8

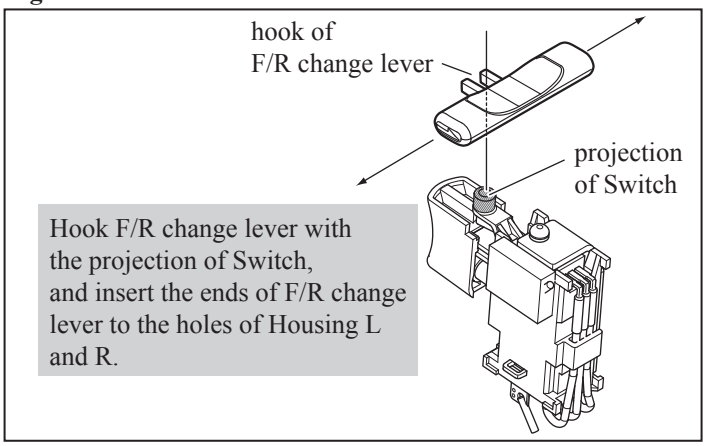


[3]-5. F/R change lever

ASSEMBLING

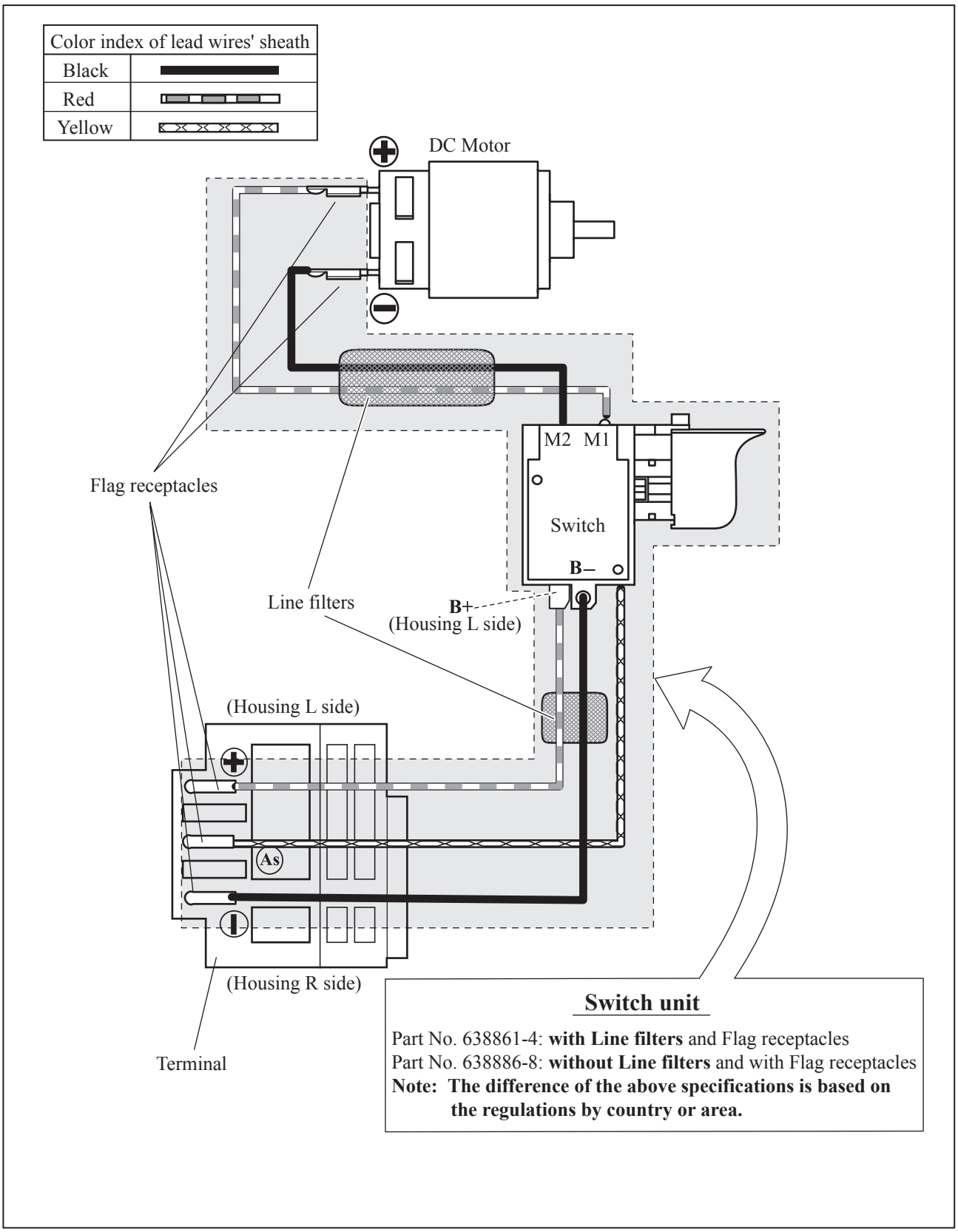
F/R Change lever can be assembled to Switch as drawn in **Fig. 9.**

Fig. 9



Circuit diagram

Fig. D-1



Wiring diagram

Fig. D-2

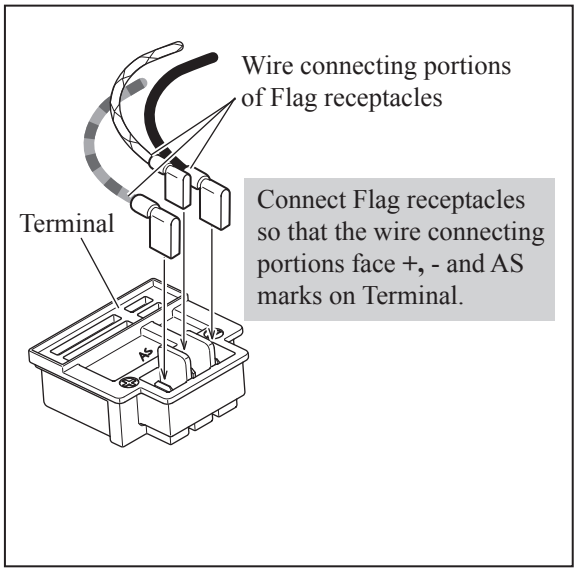


Fig. D-3

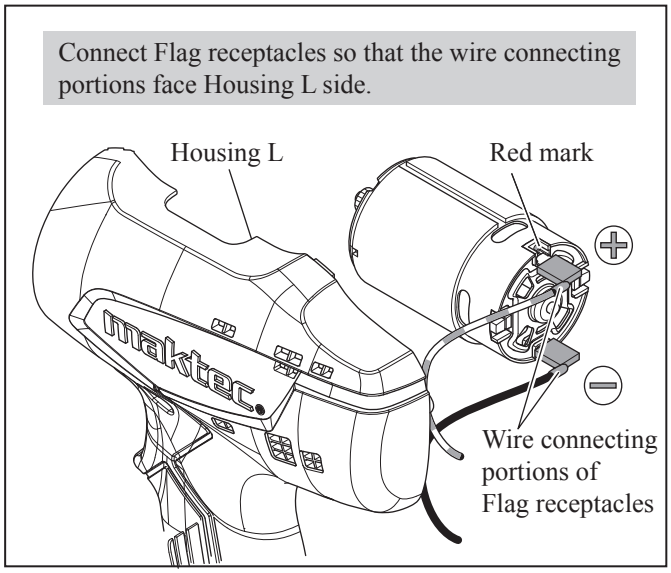
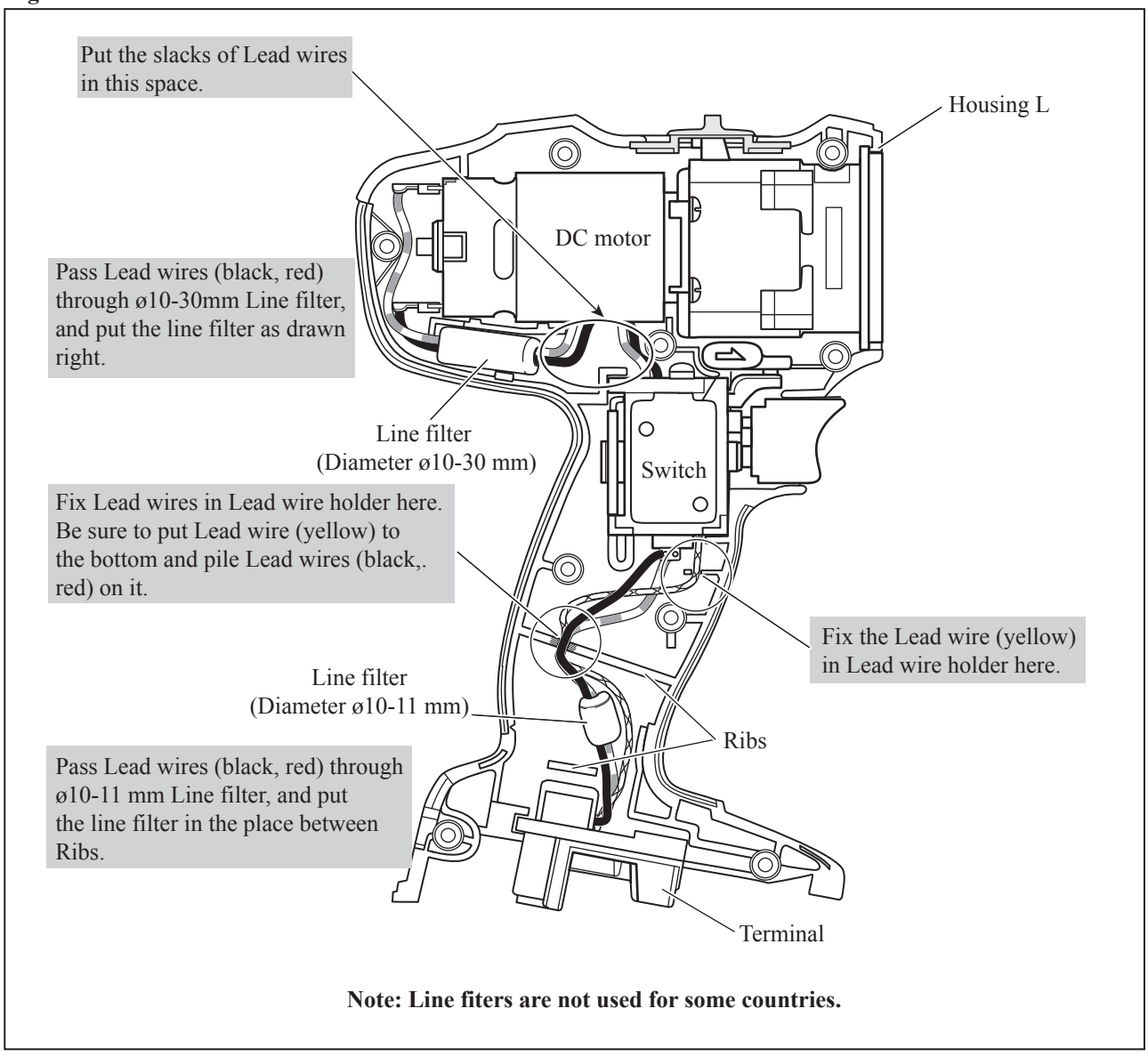


Fig. D-4



Note: Line fiters are not used for some countries.