# ECHNICAL INFORMATION



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

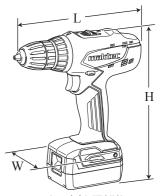
# CONCEPT AND MAIN APPLICATIONS

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



(model MT070)

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		
Voltage: V Capacity: Ah			14.4	18	14.4	18		
		Ah		1.1				
Cell	Cell	Cell			Li-ion			
Charging tin		me (approx.): min.		60 with DC1851				
Chuck capacity: mm (")			10 (3/8)	13 (1/2)	10 (3/8)	13 (1/2)		
No load	No load speed: min-1=rpm   Low/ High			0 - 400/ 0 - 1,400				
Impacts	Impacts per min.: min-1=ipm Low/ High		N/A		0 - 6,000/ 0 - 21,000			
		Steel		10 (3/8)	13 (1/2)	10 (3/8)	13 (1/2)	
Capacity: mm (")	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)	
	N.m (in.lbs)	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		

<sup>\*1</sup> with Battery L1451

## ► 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

<sup>\*2</sup> with Battery L1851

#### - 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

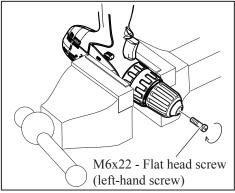
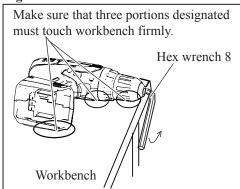


Fig. 2



#### 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

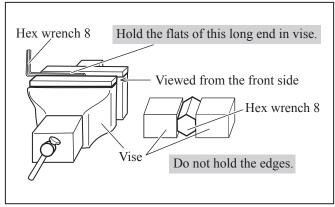
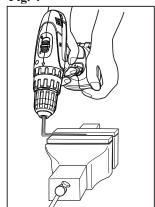


Fig. 4



### ► Repair

#### [3] DISASSEMBLY/ASSEMBLY

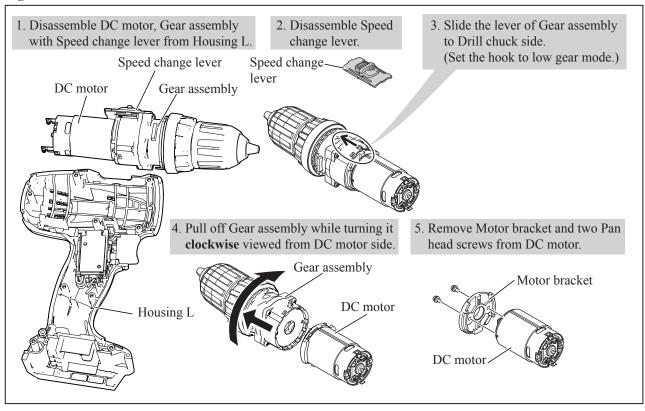
#### [3]-2. DC motor

#### 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

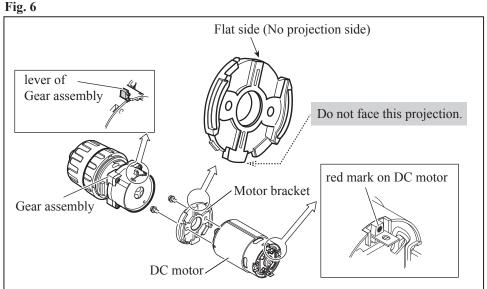


#### ASSEMBLING

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



## ► Repair

#### [3] DISASSEMBLY/ASSEMBLY

#### [3]-3. Speed change lever assembly

DISASSEMBLING

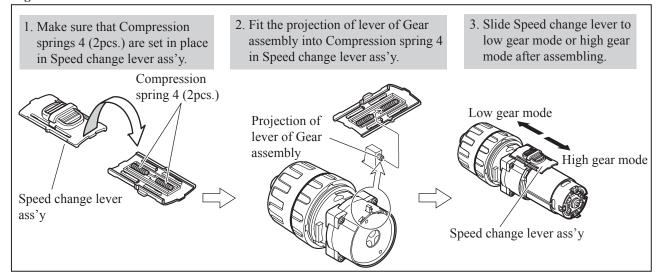
Refer to Fig. 5.

#### ASSEMBLING

Do the reverse of the disassembling steps.

Assemble Speed change lever to Gear assembly as drawn in Fig. 7.

Fig. 7

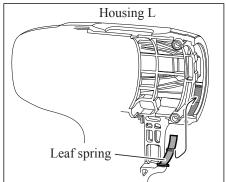


#### [3]-4. Leaf spring

#### ASSEMBLING

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



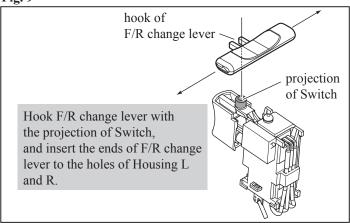


#### [3]-5. F/R change lever

#### **ASSEMBLING**

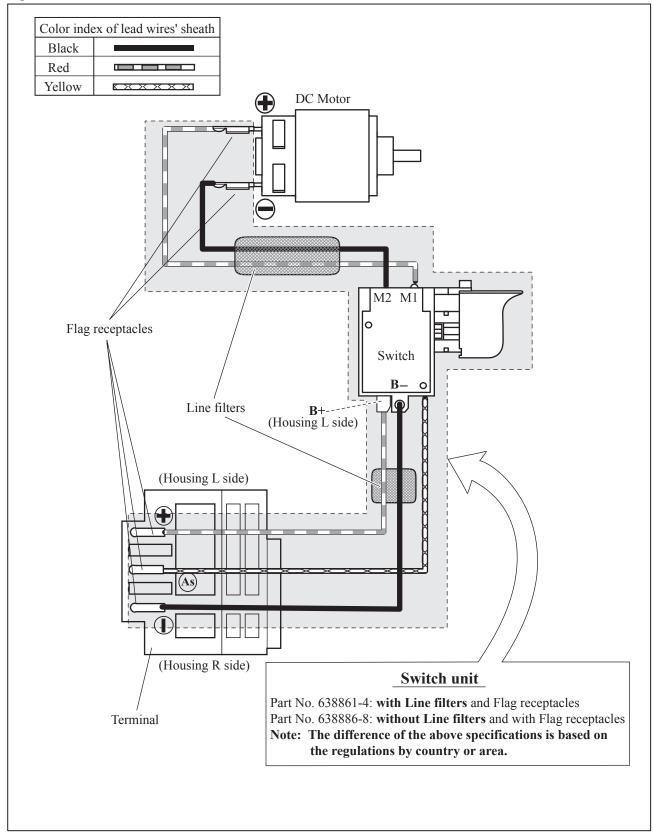
F/R Change lever can be assembled to Switch as drawn in **Fig. 9.** 

Fig. 9



# ► Circuit diagram

Fig. D-1



## ► Wiring diagram

Fig. D-2

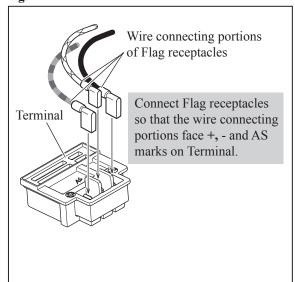


Fig. D-3

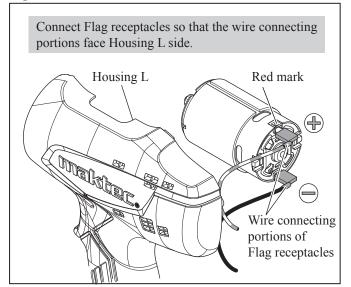


Fig. D-4

