# ECHNICAL INFORMATION





## CONCEPT AND MAIN APPLICATIONS

Models MT402, MT403 are maktec brand Blower.

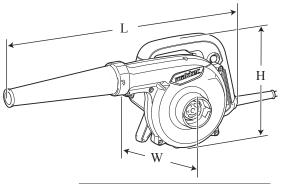
Their main features are as follows:

- Air volume 4.1m³/min.
- Ergonomic designed handle with elastomer
- Self-standing design enables stationary use and upside-down standing.
- Industrial performance and durability at less expense

The specification difference between MT402 and MT403 is;

MT402: Single speed

MT403: Variable speed control by dial and trigger



Dimensions: mm (")			
Length (L)	480 (18-7/8)		
Width (W)	185 (7-1/4)		
Height (H)	178 (7)		

## ► Specification

Voltage (V) Current (A)	Current (A)	Coole (II=)	Continuous Rating (W)		Max. Output (W)
	Cycle (Hz)	Input	Output		
110	5.7	50/60	600		
120	6.8	50/60			
220	2.9	50/60	600		
230	2.8	50/60	600		
240	2.7	50/60	600		

Model No.	MT402	MT403
No load speed: min1=rpm	16,000	0 - 16,000
Max. air volume*1: m³/min.	4.1	0 - 4.1
Max. sealed suction: kPa	5.7	0 - 5.7
Variable speed control	No	Yes
Protection against electric shock	Double insulation	
Power supply cord: m (ft)	Australia: 0.5 (1.6), Other countries: 2.0 (6.6)	
Weight according to EPTA-Procedure 01/2003*2: kg (lbs)	2.0 (4.3)	

<sup>\*1</sup> without Nozzle

## ► Standard equipment

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

## Optional accessories

Anchor nozzle set Flexible hose set
Long nozzle set Dust bag assembly
Bending long nozzle set Nozzle assembly

<sup>\*2</sup> with Nozzle assembly

## Repair

## CAUTION: Repair the machine in accordance with "Instruction manual" or "Safety instructions". [1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R370	Ring Terminal Setting Jig	connecting Ring terminals to Brush holder
1R063	Guide Bar for fitting Field	assembling Field to Motor housing complete

#### [2] LUBRICATION

It is not required to lubricate, because the product has no gear mechanism to be lubricated.

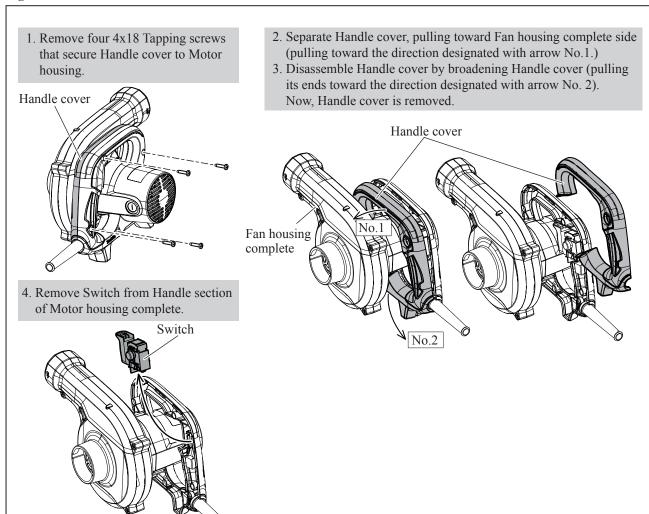
#### [3] DISASSEMBLY/ASSEMBLY

#### [3] -1. Switch

#### DISASSEMBLING

1. Switch can be disassembled without separating Fan housing complete section. See Fig. 1.

Fig. 1



#### **ASSEMBLING**

Assemble Switch by reversing the disassembly procedure. Refer to Fig. 1.

Note: When mounting Handle cover, be careful of the following.

- Switch and Lead wire are not pinched with Handle cover. Refer to Fig. D-2 and Fig. D-3.
- There are no gaps between Handle cover and Fan housing complete.

## - Repair

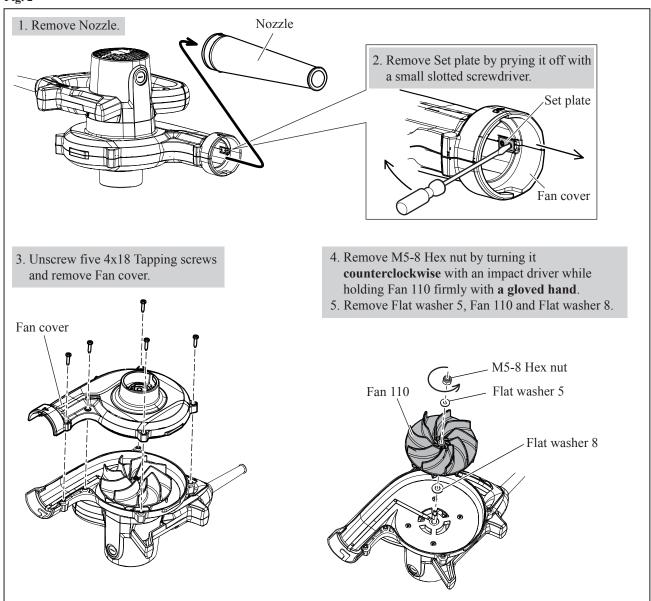
#### [3] DISASSEMBLY/ASSEMBLY

## [3] -2. Fan Section

#### DISASSEMBLING

Disassemble Fan 110 as drawn in Fig. 2.

Fig. 2



#### **ASSEMBLING**

Assemble Fan Section by reversing the disassembly procedure. Refer to Fig. 2.

**Note:** Align the hole on Set plate with the protrusion on Fan cover, and insert Set plate by hand, then push it with a small screwdriver until it stops.

Refer to the drawing on the top right in Fig. 2.

## ► Repair

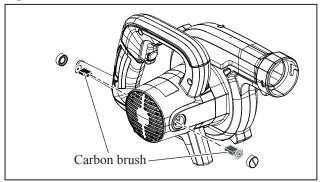
## [3] DISASSEMBLY/ASSEMBLY

## [3] -3. Motor Section

#### DISASSEMBLING

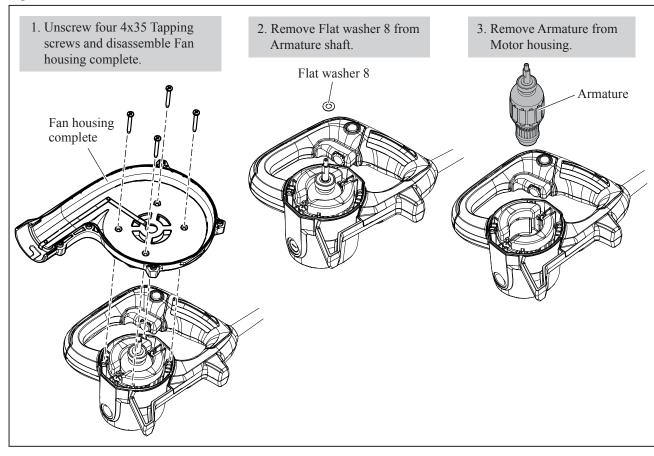
(1) Remove Carbon brush as drawn in Fig. 3.

Fig. 3



- (2) Disassemble Fan section as drawn in Fig. 2.
- (3) Disassemble Armature as drawn in Fig. 4.

Fig. 4



## - Repair

## [3] DISASSEMBLY/ASSEMBLY

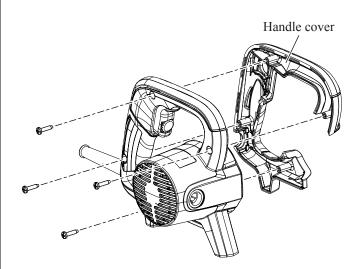
#### [3] -3. Motor Section (cont.)

#### DISASSEMBLING

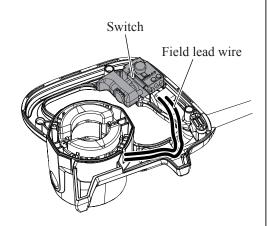
(4) Disassemble Field as drawn in Fig. 5.

Fig. 5

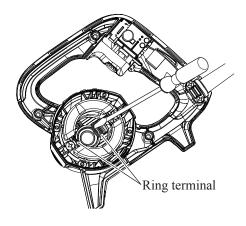
1. Unscrew four 4x18 Tapping screws and remove Handle cover

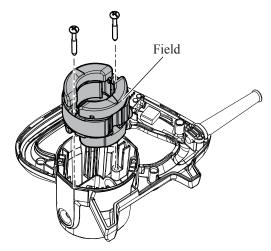


2. Disconnect Field lead wires from Switch.



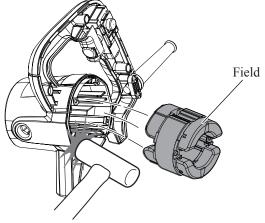
- 3. Disconnect Ring terminals from Brush holders with a Slotted screwdriver.
- 4. Unscrew two 5x40 Tapping screws and remove Field from Motor housing.





#### Note:

Tapping the edge of Motor housing with a plastic hammer enables Field to be removed easily.



## Repair

### [3] DISASSEMBLY/ASSEMBLY

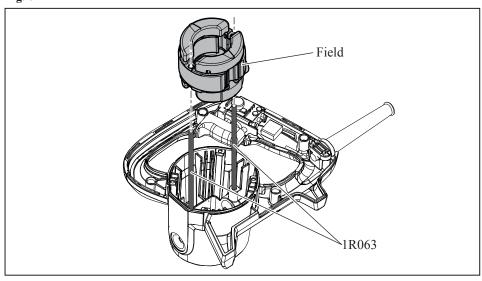
#### [3] -3. Motor Section (cont.)

#### **ASSEMBLING**

(1) Assemble Field to Motor housing. Refer to the drawing on the **middle right** in **Fig. 5**. Also see **Fig. D-2** about the wiring of Field lead wires.

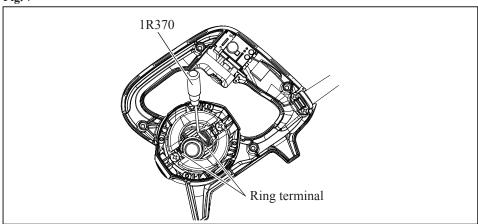
Note: Using 1R063 enables Field to be assembled easily than by hand. See Fig. 6.

Fig. 6



(2) Connect Ring terminal to Brush holder using 1R370. See Fig. 7.

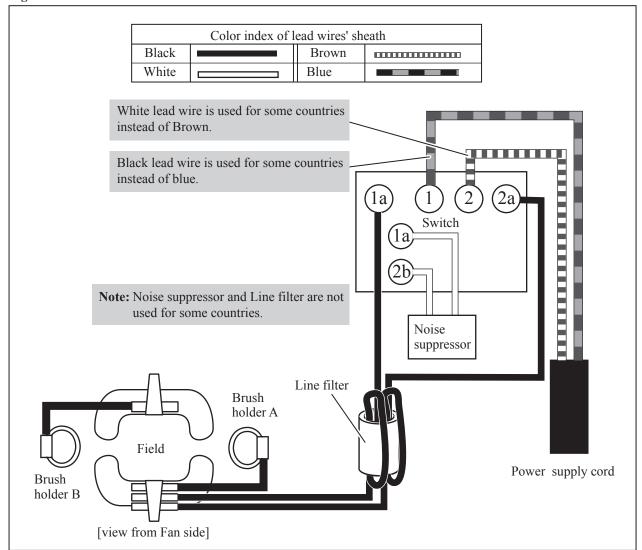
Fig. 7



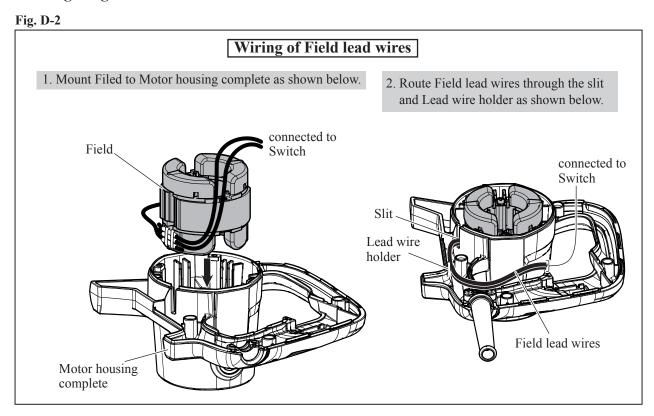
- (3) Connect field lead wires to Switch and mount Handle cover to Motor housing with four 4x18 Tapping screws. Refer to the drawings on the **top left** and **right** in **Fig. 5**.
- (4) Insert Armature into Motor housing. Refer to the drawing on the right in Fig. 4.
- (5) Mount Flat washer 8 to the drive end of Armature's shaft. Refer to the drawing on the center in Fig. 4.
- (6) Assemble Fan housing complete with four 4x35 Tapping screws. Refer to the drawing on the left in Fig. 4.
- (7) Assemble Fan 110 and Fan cover. Refer to **Fig. 2**. And then, set Carbon brush. Refer to **Fig. 3**.

## Circuit diagram

Fig. D-1



## ► Wiring diagram



## ► Wiring diagram

Fig. D-3

