

TECHNICAL INFORMATION



PRODUCT

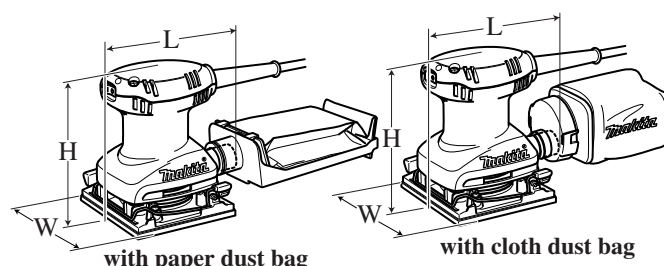
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Model No. ▶ BO4557

Description ▶ Finishing Sander

CONCEPT AND MAIN APPLICATIONS

Model BO4557 has been developed from Model MT920. Features the same compact and lightweight tool design as the maktec Model with an additional benefits of built-in dust extraction.



Dimensions: mm (")	
Length (L)	131 (5-1/8)
Width (W)	112 (4-3/8)
Height (H)	137 (5-3/8)

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output (W)
			Input	Output	
110	1.7	50/60	180	25	50
120	1.6	50/60	---	25	50
220	0.9	50/60	180	25	50
230	0.9	50/60	180	25	50
240	0.8	50/60	180	25	50

Specification	Model	BO4557
Orbits per minute: opm= min-1		14,000
Sanding strokes: spm= min-1		28,000
Paper fastening system	Hook & loop	No
	Clamp	Yes
Pad	Shape	Standard
	Size: mm (")	112 x 102 (4-3/8 x 4)
Abrasive paper size: mm (")		114 x 140 (4-1/2 x 5-1/2)
Double insulation		Yes
Power supply cord: m (ft)		2.0 (6.6)
Net weight: kg (lbs)		0.9 (2.0)

► Standard equipment

Abrasive paper 114-60 1
 Abrasive paper 114-100 1
 Abrasive paper 114-150 1
 Paper bag + Paper dust bag holder
 or Dust bag assembly 1
 Punch plate 1
 Plastic carrying case 1

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

► Optional accessories

Abrasive paper 114-60, 114-80, 114-100, 114-150

► Repair

CAUTION: Unplug the machine for safety before repair/ maintenance, in accordance with the instruction manual!

[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R027	Bearing setting pipe 18-10.2	Removing Armature from Bearing box
1R269	Bearing extractor	Removing Ball bearings from Armature

[2] LUBRICATION

Lubrication is not required for this product because no gear is used for transmission.

[3] DISASSEMBLY/ASSEMBLY

DISASSEMBLING

- 1) Remove Top cover from Motor housing by unscrewing three 4x18 Tapping screws, then disconnect Flag terminal from each Brush holder. (**Fig. 1**)
- 2) Carbon brush can be removed from Motor housing together with Brush holder as described in **Fig. 2**.

Fig. 1

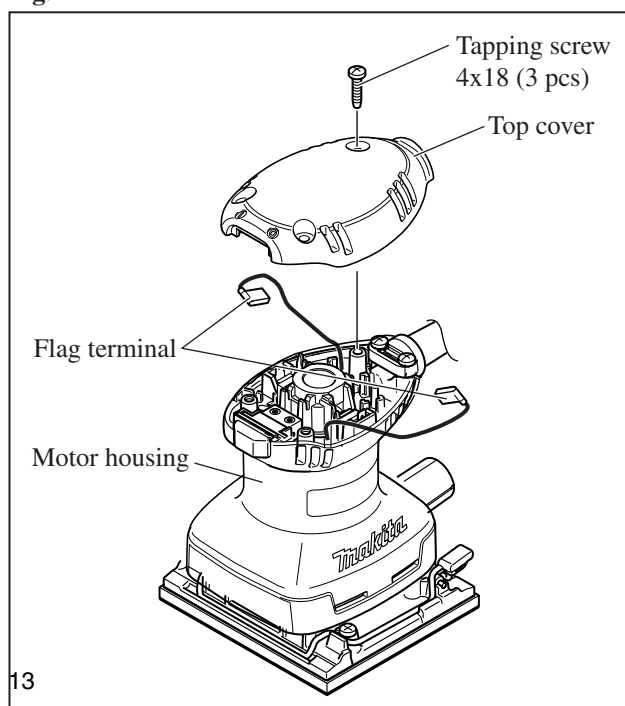
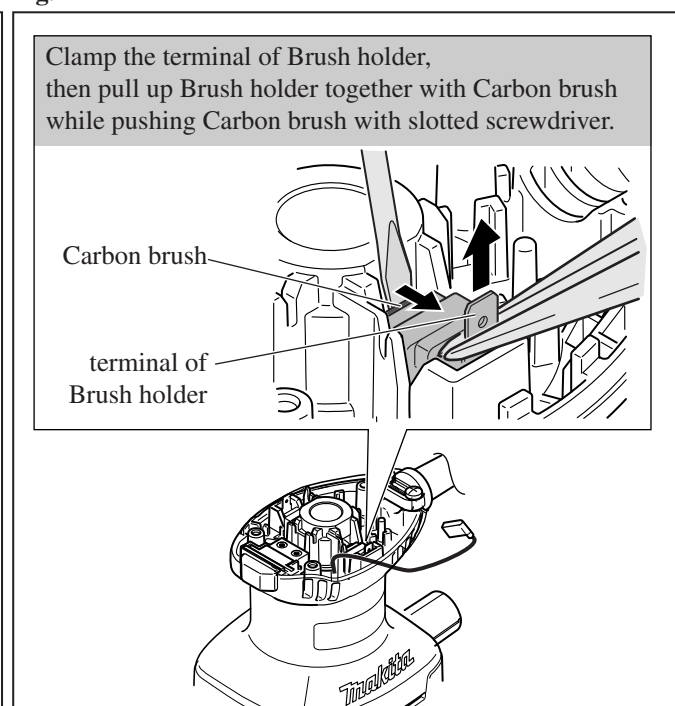


Fig. 2



- 3) Remove Pad complete from Base by unscrewing four 4x12 Tapping screws. (**Fig. 3**)
- 4) Lock Armature shaft by inserting screwdriver from the discharge nozzle of Fan guide between the lower Fan blades of Fan 63 as illustrated in **Fig. 4**. Balancer can now be removed by removing Countersunk head screw M4x12 from Armature shaft.

Fig. 3

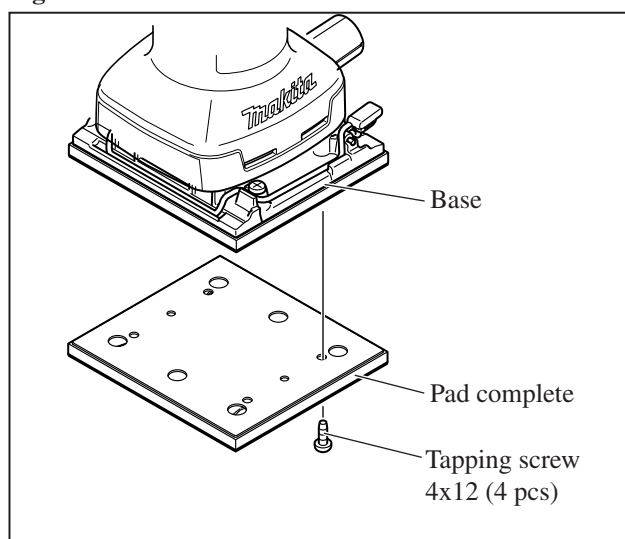
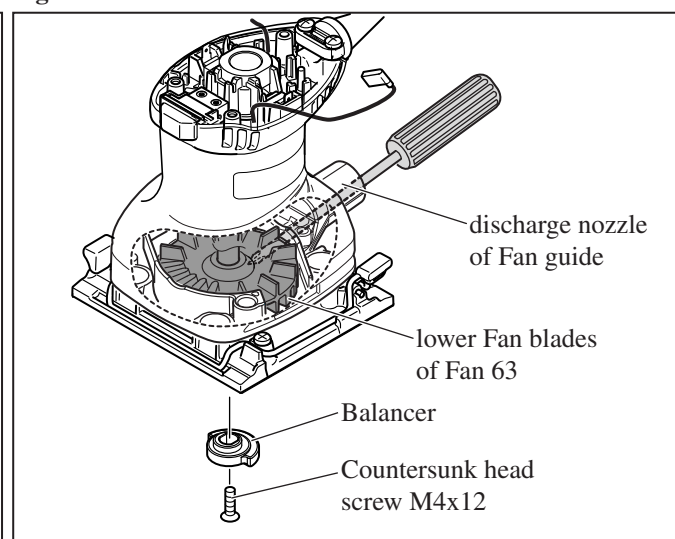


Fig. 4



► Repair

[3] DISASSEMBLY/ASSEMBLY

DISASSEMBLING

- 5) Remove Base from Motor housing. Some adjacent parts can be also removed in this step as illustrated in **Fig. 5**.
- 6) Remove Fan guide from Motor housing by unscrewing two 4x12 Tapping screws. (**Fig. 6**)
- 7) Remove Fan 63, then remove four 4x18 Tapping screws. (**Fig. 7**)

Fig. 5

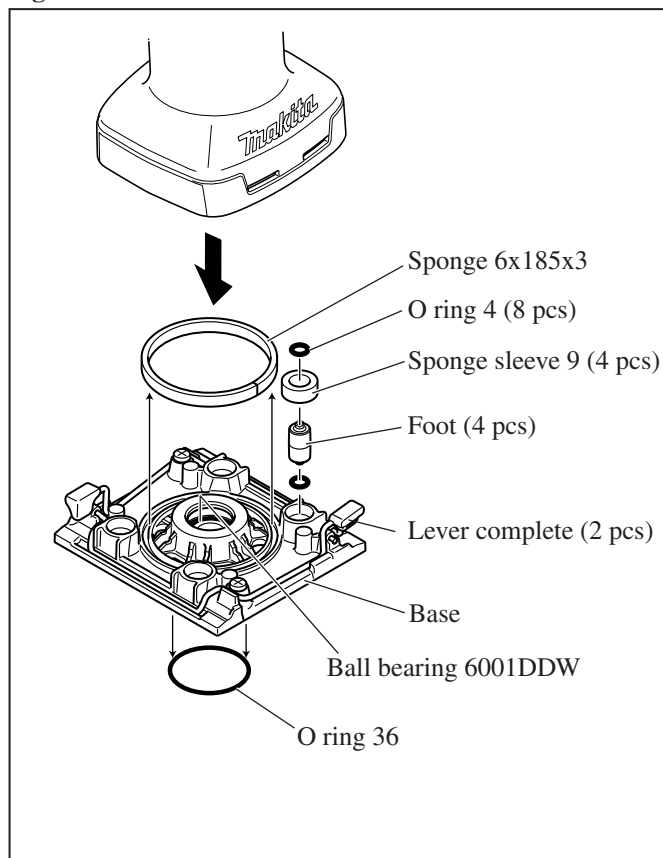


Fig. 6

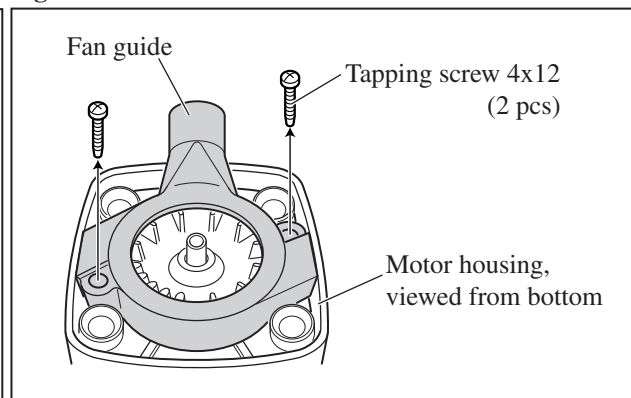
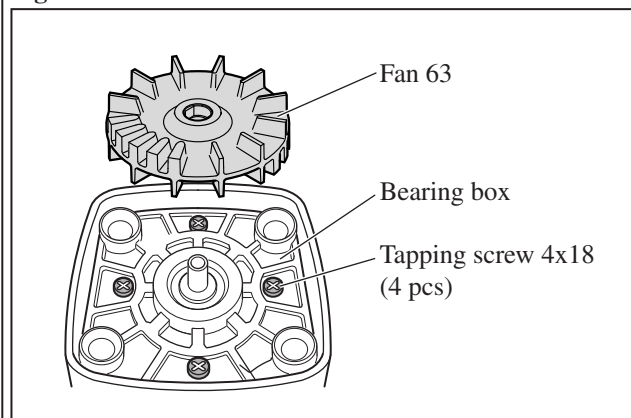


Fig. 7



- 8) Bearing box and Armature can now be removed as an assembly by tapping the end surface of Motor housing with plastic hammer. (**Fig. 8**)
- 9) Remove Armature from Bearing box using 1R027 and arbor press. (**Fig. 9**)

Fig. 8

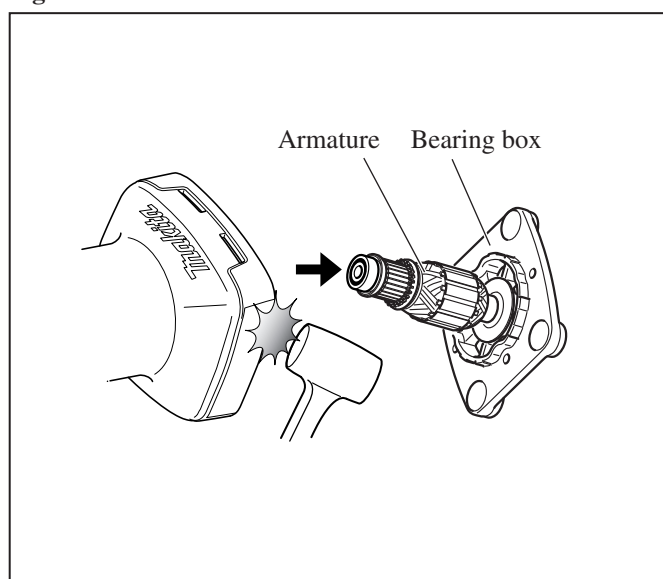
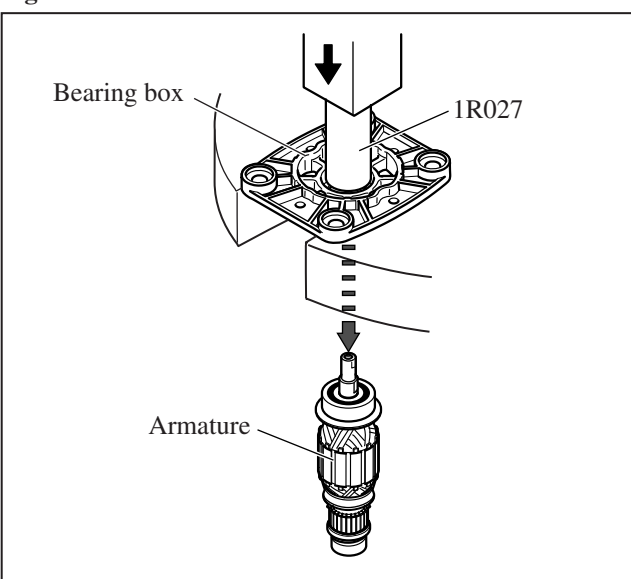


Fig. 9



Repair

[3] DISASSEMBLY/ASSEMBLY

DISASSEMBLING

- 10) Remove Ball bearing 606ZZ from the commutator-end of Armature shaft using 1R269 and adjustable pliers (**Fig. 10**),
Note: Be sure to firmly grasp the claws of 1R269 with adjustable pliers because the space between Insulation washer and Ball bearing 606ZZ is so tight that Ball bearing 606ZZ cannot be securely grasped with the claws of 1R269.
- 11) Remove Ball bearing 629DDW from the drive-end of Armature shaft using 1R269 and adjustable pliers in the same way as described above in 10). (**Fig. 11**)
Important: Before attaching 1R269 to Ball bearing 629DDW, be sure to fasten Countersunk head screw M4x12 to the drive-end of Armature shaft in order not to damage to the threads inside Armature shaft.

Fig. 10

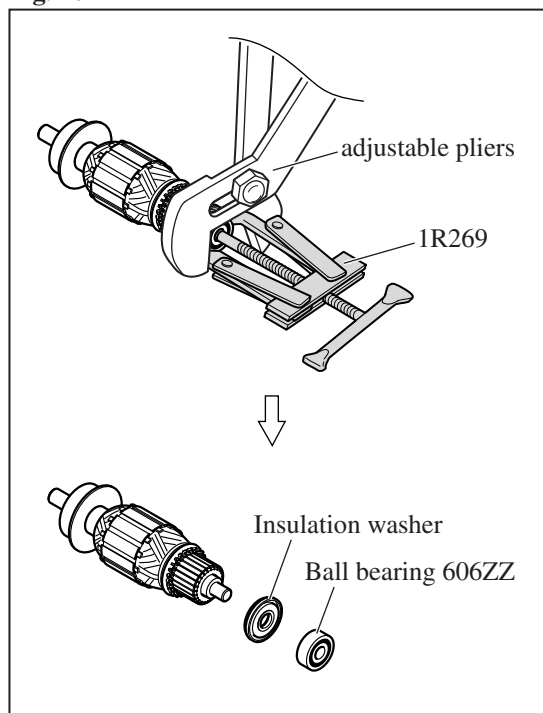
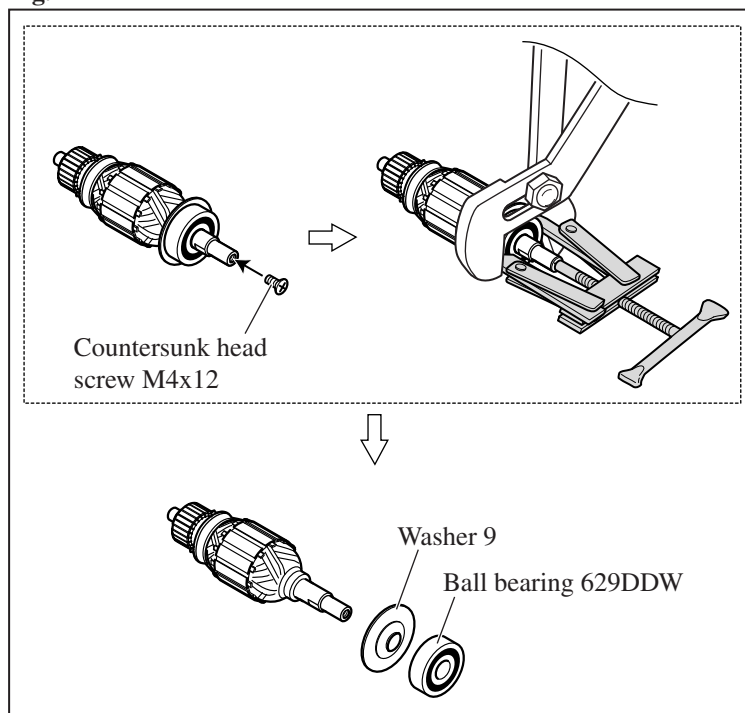


Fig. 11



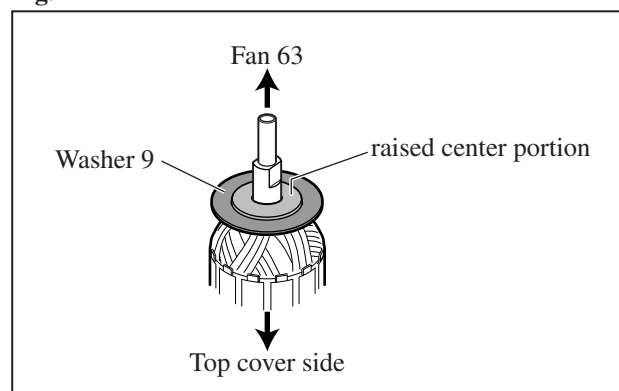
ASSEMBLING

Do the reverse of the disassembling steps.

Note: Flat washer 9 is not reversible when assembled to Armature.

The side with the raised center portion must face towards Fan 63 as illustrated in Fig. 12.

Fig. 12



► Repair

[3] DISASSEMBLY/ASSEMBLY

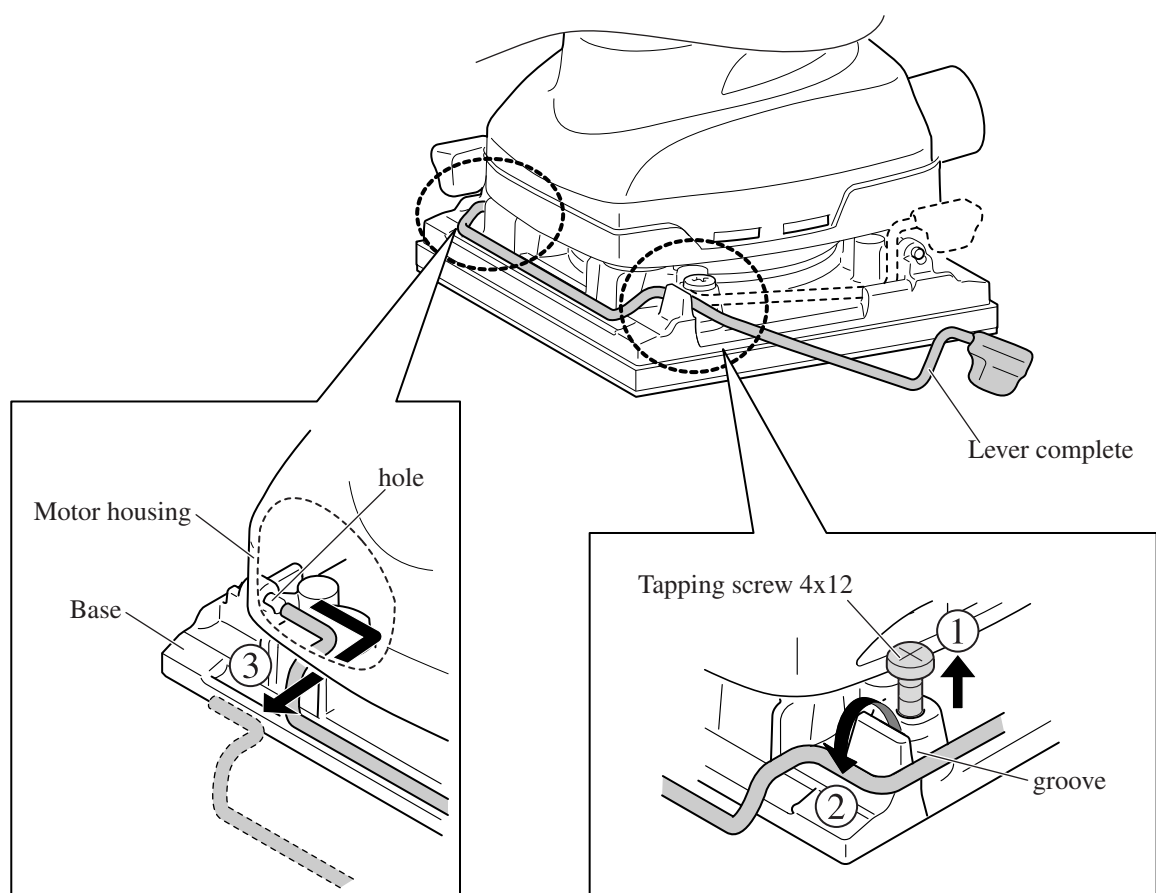
REPLACING LEVER COMPLETE

Lever complete (=paper clamp) can be replaced without removing Base from the machine as described in **Fig. 13**.

Fig. 13

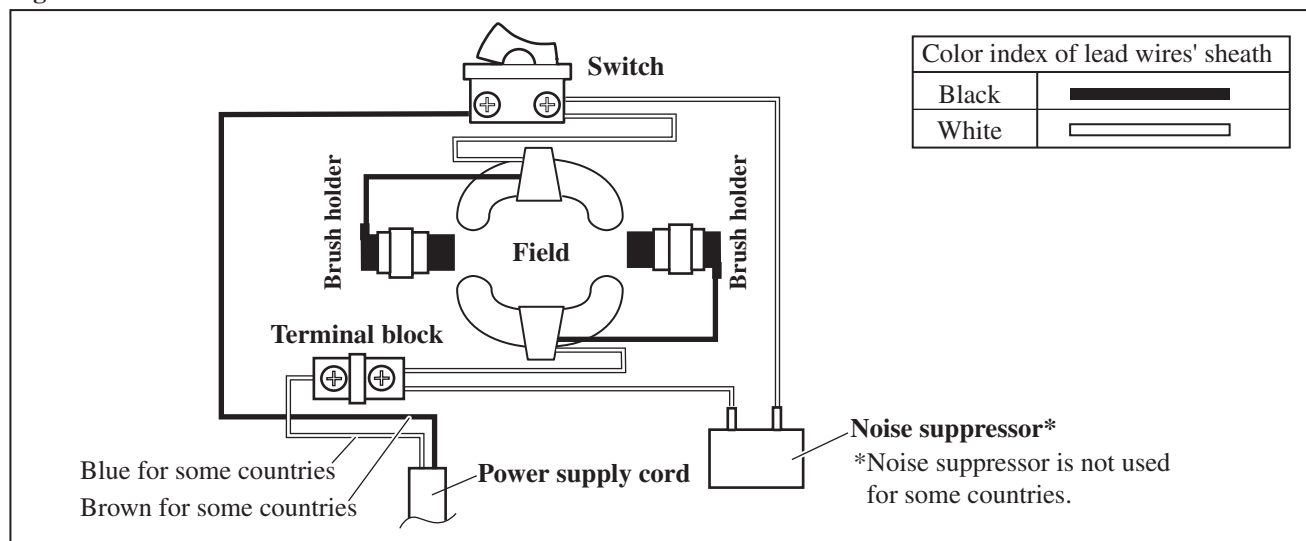
Take the following steps:

- ① Loosen Tapping screw 4x12 a little bit.
- ② Pull Lever complete out of the groove.
- ③ Pull the end of Lever complete out of the hole, then move Lever complete along the space between Base and Motor housing.



► Circuit diagram

Fig. D-1



► Wiring diagram

Route Lead wires as illustrated in Fig. D-2.

- ① ④ Field lead wire (black):
Route through the opening 1/opening 2 of Motor housing, then connect to Brush holder.
Note: Be sure to fix with Lead wire holder 1/
Lead wire holder 6.
 - ② Field lead wire (white):
Route through the opening 1 of Motor housing, then connect to Switch.
Note: Be sure to fix with Lead wire holders 2, 3.
 - ③ Lead wire of Noise suppressor (white):
Connect to Switch.
Note: Be sure to fix with Lead wire holders 4, 5.
 - ⑤ Field lead wire (white):
Route through the opening 2 of Motor housing, then connect to Terminal block.
 - ⑥ Lead wire (white) of Noise suppressor:
Connect to Terminal block.
 - ⑦ Lead wire (white or blue) of Power supply cord:
Connect to Terminal block.
 - ⑧ Lead wire (black or brown) of Power supply cord:
Connect to Switch.
Note: Be sure to route through the groove of Motor housing.
- Note:** Put slack portions of Lead wires in spaces 1 and 2.

Fig. D-2

