

TECHNICAL INFORMATION



PRODUCT

P 1 / 8

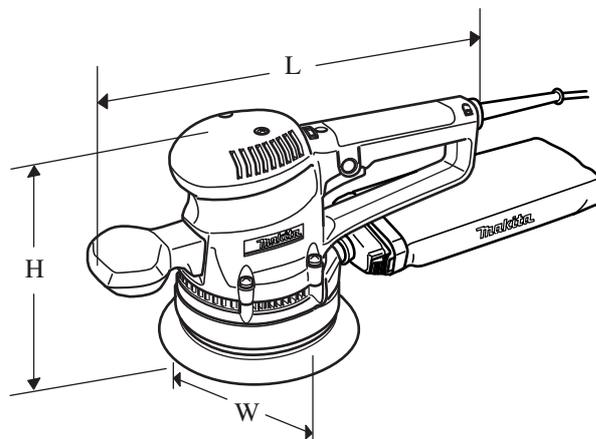
Models No. ▶ BO6030

Description ▶ Random Orbit Sander 150mm (6")

CONCEPTION AND MAIN APPLICATIONS

Model BO6030 is a new Random Orbit Sander 150mm (6") with two handles from Makita, featuring;

- Tough exterior construction - durable motor housing and sturdy aluminum fan housing - for pro's hard jobs
- Ergonomic design for controlled operation
- Optimum speed selection and assorted accessories for a wide range of sanding jobs
- Superiority to the competing model, FESTO #ET2E in sanding efficiency and dust extraction rate



See page 2 and 3 for more detailed information.

Dimensions : mm (")	
Length (L)	309 (12-1/8)
Width (W)	150 (5-7/8)
Height (H)	181 (7-1/8)

► Specifications

Voltage (V)	Current (A)	Cycle (Hz)	Continuous rating (W)		Max. Output(W)
			Input	Output	
110	3.0	50 / 60	310	160	200
120	2.7	50 / 60	310	160	200
220	1.5	50 / 60	310	160	200
230	1.4	50 / 60	310	160	200
240	1.4	50 / 60	310	160	200

Pad diameter : mm (")	150 (6)	
Pad fastening system	Hook and Loop	
No load speed	Orbits (*min ⁻¹)	4,000 - 10,000
	Sanding stroke rate (*min ⁻¹)	8,000 - 20,000
Orbit diameter : mm (")	3.0 (1/8)	
Dust extraction system	Integral dust extraction (through the sanding plate with dust bag)	
Sanding plate brake	Yes	
Protection from electric shock	by double insulation	
Cord length : m (ft)	2.5 (8.2)	
Net weight : Kg (lbs)	2.3 (5.1)	

*min⁻¹ = per minute

► Standard equipment

- *Abrasive disc 150-#120 1 pc.
- *Hex wrench 6 1 pc.
- *Dust bag 1 pc.

► Optional accessories

- *Sanding clothes (150mm) ; Grit 100, 240, 800
- *Abrasive discs (150mm) ; #40, 60, 80, 120, 180, 240, 400
- *Pads (150mm) ; soft, super soft
- *Sponge pad (150mm), Felt pad (150mm), Wool pad (150mm)
- *Paper pack
- *Paper pack holder

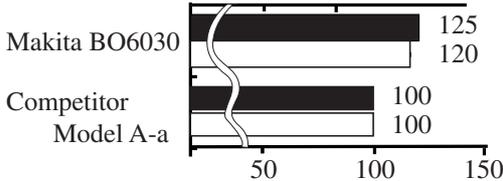
► **Features and benefits**

**Lower Vibration,
More Efficient Sanding**

Compared with competitor A's model A-a in the same class, BO6030 sands more than model A-a although its vibration is almost at the same level.

Sanding rate

Numbers in chart below are relative values when setting model A-a's capacity as 100.



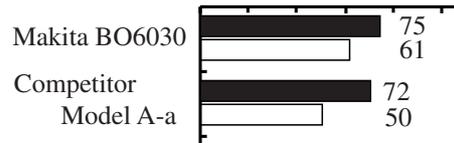
(When sanding a workpiece of spruce fir with the following abrasive papers for two minutes.)

■ Grit :60
□ Grit :120

**Effective System of
Integrated Dust Extraction**

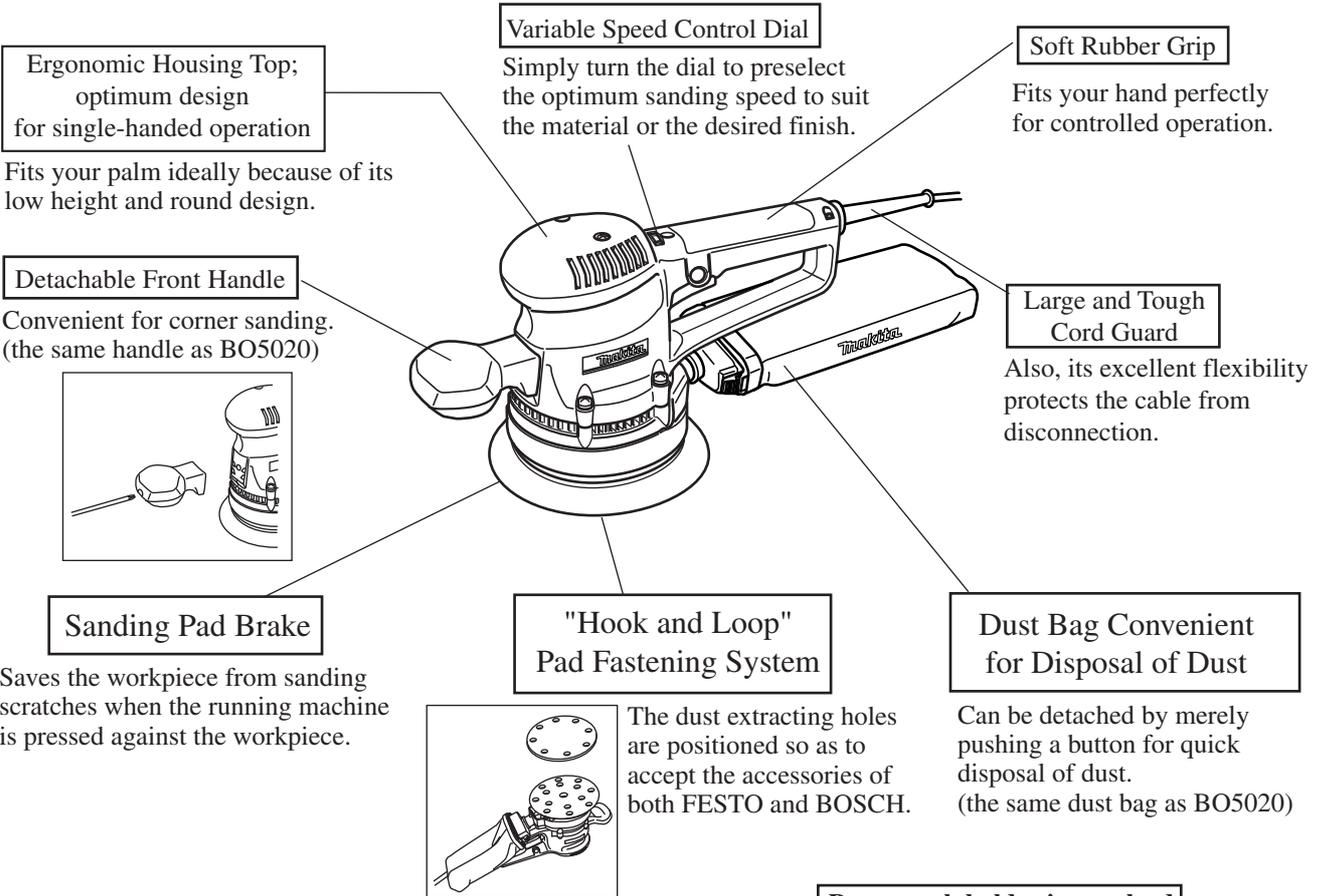
- The large vacuum fan for more effective dust extraction.
- Can be connected to the Makita vacuum cleaner. (The diameter of the opening for dust ejection is the same as BO5020.)

Dust extracting rate (%)



(When sanding a workpiece of spruce fir with the following abrasive papers for two minutes.)

■ Grit :60
□ Grit :120

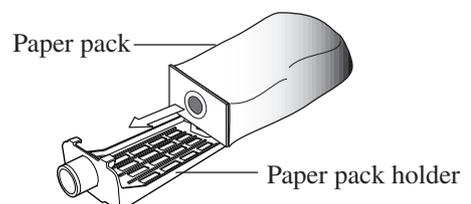


Assorted Optional Accessories for a Wide Range of Sanding Jobs

- Pads; soft, super-soft
- Abrasive discs
- Sanding cloth (for extra fine finish)
- Sponge pad
- Wool pad (for buffing)

Paper pack holder is supplied as an optional accessory.

Also FESTO's paper pack can be attached to Mod. BO6030. See page 6/8



► Comparison of products

Model No. Spec.		Makita	Competitor A	Competitor C	Competitor B
		BO6030	Model A-a	Model C	Model B
Continuous rating input (W)		310	310	340	400
Rated ampere under 120V (A)		2.7	—	—	—
Orbits per minute (min-1)		4,000 - 10,000	4,000 - 10,000	4,500 - 12,000	4,000 - 10,000
Stroke per minute (min-1)		8,000 - 20,000	8,000 - 19,000	9,000 - 24,000	8,000 - 20,000
Orbit diameter : mm (")		3	3	4	Changeable in 3 and 6
Vibration : (m/s ²)	No load	0.9	1.2	12.1	12.9
	Loaded	2.7	3.5	4.0	3.5
Change from eccentric mode to eccentric+rotation mode		No	No	No	No
Pad fastening system		Hook and Loop	Hook and Loop	Hook and Loop	Hook and Loop
Electronic control of constant sanding speed		No (feed-back control)	Yes	No	No
Sanding pad brake		Yes	Yes	Yes	Yes
Dust extracting system		Integral dust extraction	Integral dust extraction	Integral dust extraction	Integral dust extraction
Protection from electric shock		by double insulation	by double insulation	by double insulation	by double insulation
Dimensions : mm (")	Length	252 (9-7/8)	230 (9)	297 (11-3/4)	286 (11-1/4)
	Width	150 (5-7/8)	150 (5-7/8)	150 (5-7/8)	150 (5-7/8)
	Height	181 (7-1/8)	183 (7-1/4)	183 (7-1/4)	195 (7-5/8)
Net weight : kg (lbs)		2.3 (5.1)	2.1 (4.6)	2.1 (4.6)	2.7 (5.9)
Standard equipment		Front handle Dust bag (fabric) Abrasive disc	Dust bag (paper)	Front handle Dust bag (paper) Abrasive disc	Front handle 2 Dust bags (paper) 3 Abrasive papers

< 1 > Disassembling armature

1. Lock fan 92 (for dust extraction) with screwdriver inserted into dust extracting hole of skirt. See Fig. 1.
2. Turn armature anti-clockwise as illustrated in Fig. 1. Then, armature can be separated from skirt.

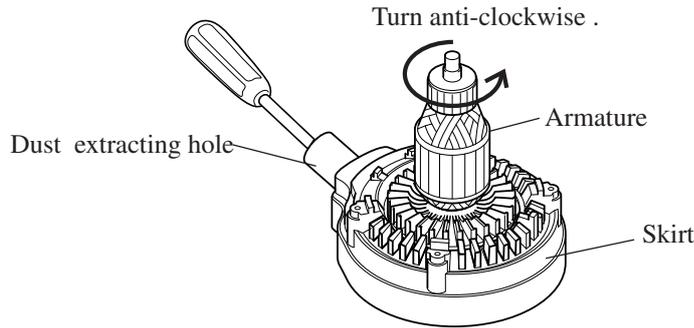
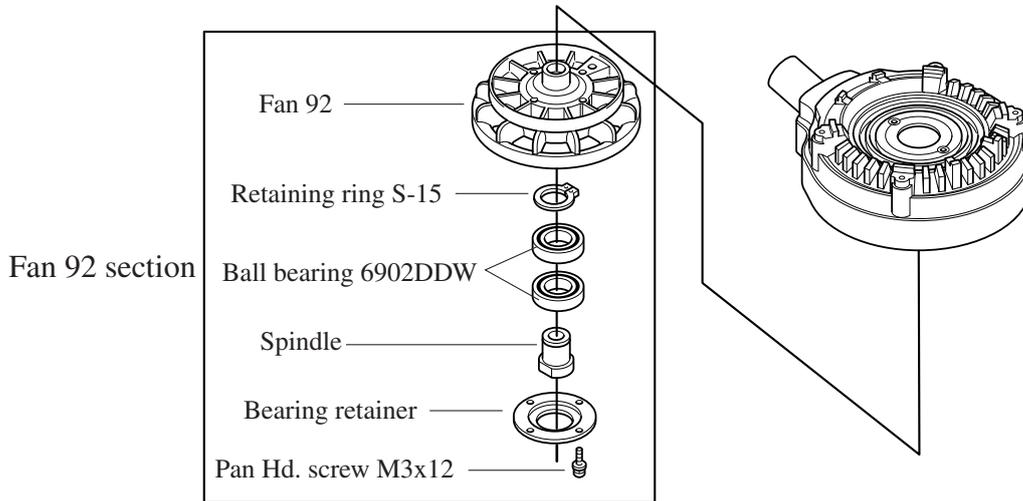


Fig. 1

< 2 > Disassembling ball bearing 6902DDW

1. Separate fan 92 section from skirt, after disassembling armature as illustrated in Fig. 2.
2. Disassemble bearing retainer from fan 92 by unscrewing pan head screw M3x12. See Fig. 2.



3. Screw hex socket head bolt M8x14 (for fastening pad 150) into spindle as illustrated in Fig. 3. This hex socket head bolt M8x14 functions as a stopper for No.1R234 "round bar for arbor" which is to be inserted into the hole of fan 92 in order to separate spindle.
4. Insert No.1R234"round bar for arbor" into armature installing hole of fan 92. And press it by arbor press as illustrated in Fig. 3A. Then, spindle, 2 pcs.of ball bearing 6902DDW and retaining ring S-15 can be removed.

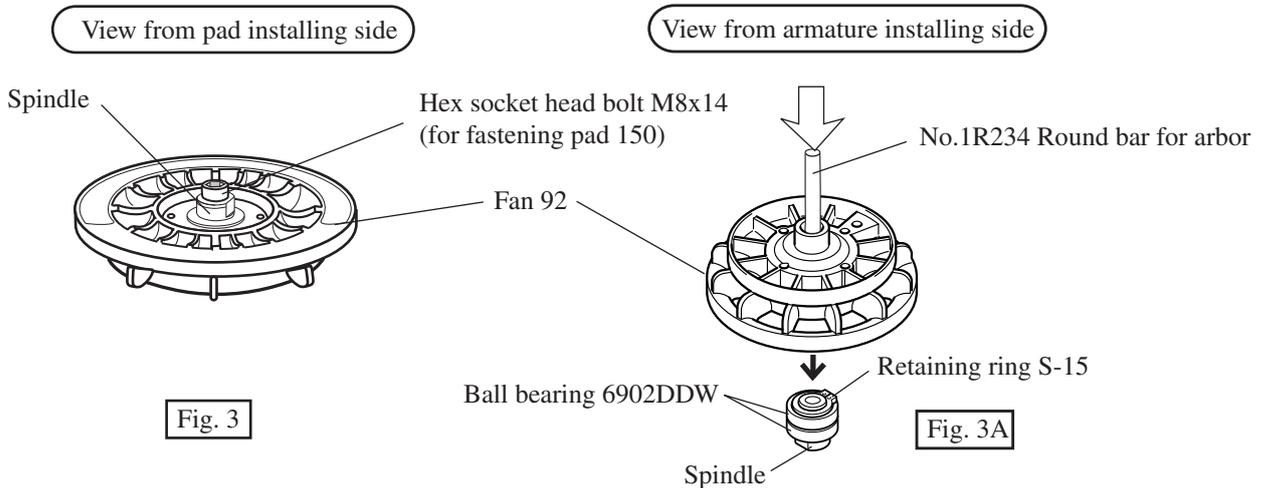
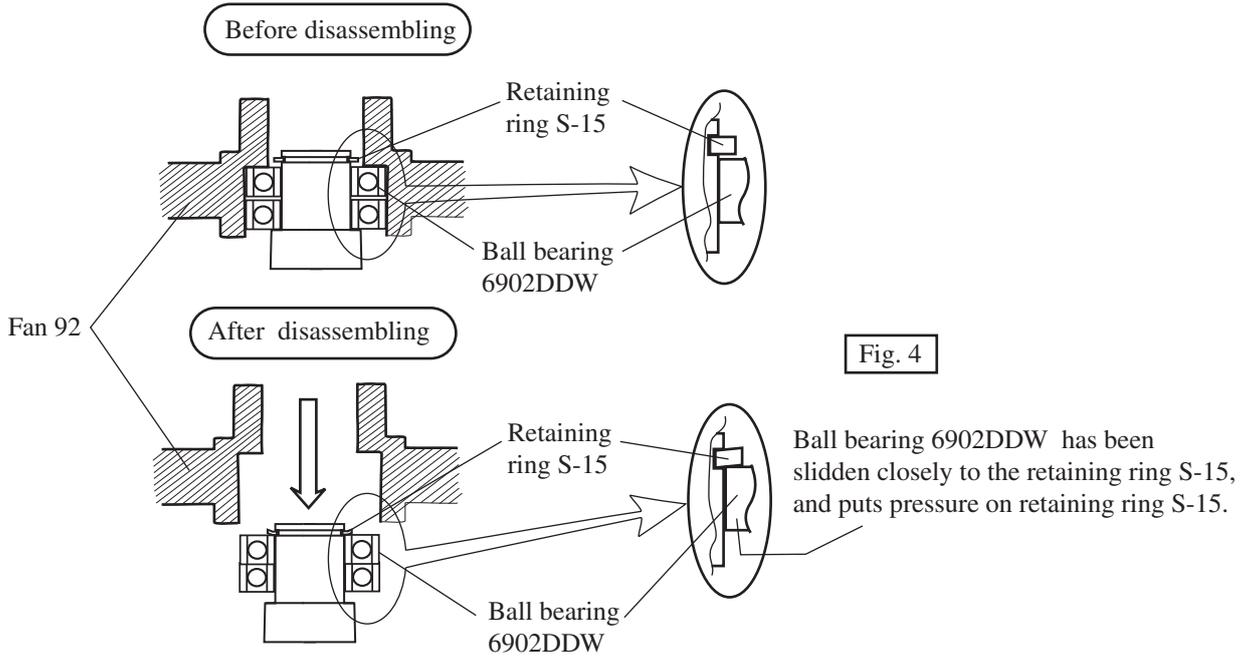


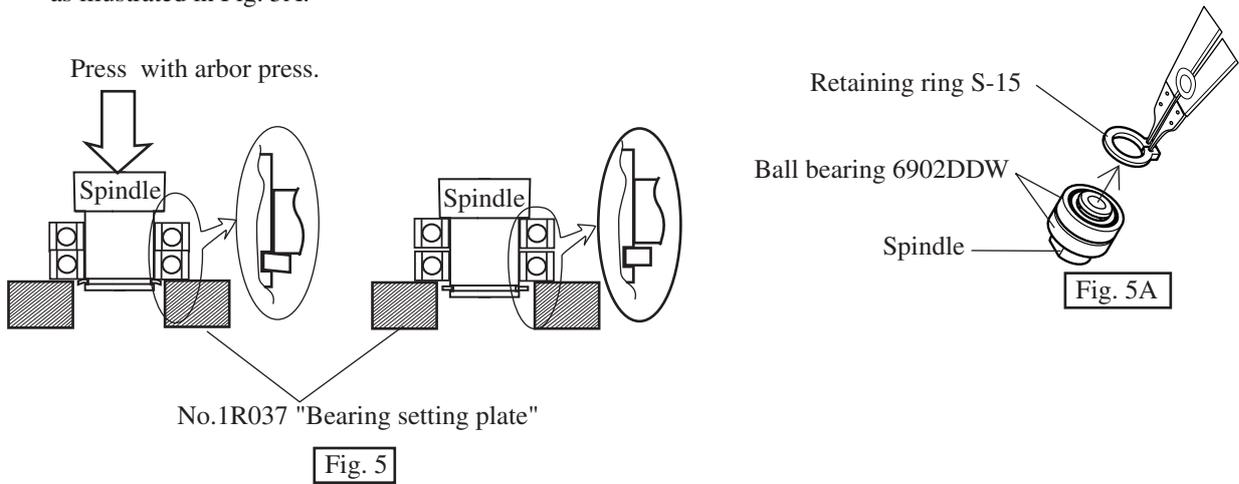
Fig. 3

Fig. 3A

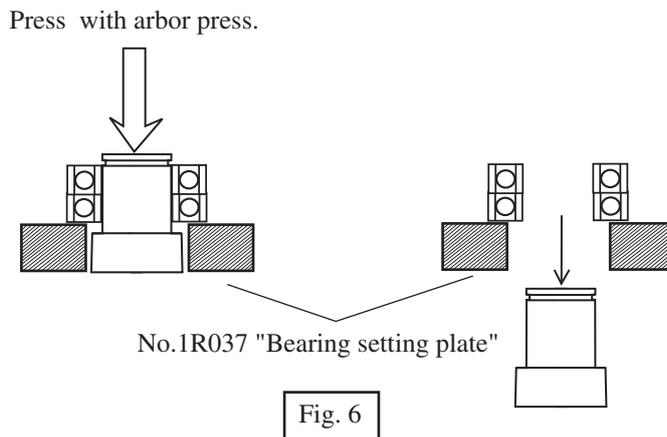
5. Ball bearing 6902DDW puts pressure on retaining ring S-15 which is engaged in the groove of spindle, because it has been slidden closely to the retaining ring S-15, when separating from fan 92. See Fig. 4.



6. In order to take off pressure on retaining ring S-15, put the spindle on No.1R037 "bearing setting plate" as illustrated in Fig. 5, and press the spindle. So, ball bearing 6902DDW is returned to the original position. Consequently the pressure on retaining ring S-15 is taken off, and it can be easily disassembled from spindle as illustrated in Fig. 5A.



7. Put the spindle from which retaining ring S-15 has been taken off, on No.1R037 "bearing setting plate" as illustrated in Fig. 6. And disassemble ball gearings 6902DDW by pressing spindle.



< 3 > Assembling rubber guard

The lip portion of rubber guard has to fit in the groove of skirt as illustrated in Fig. 7.

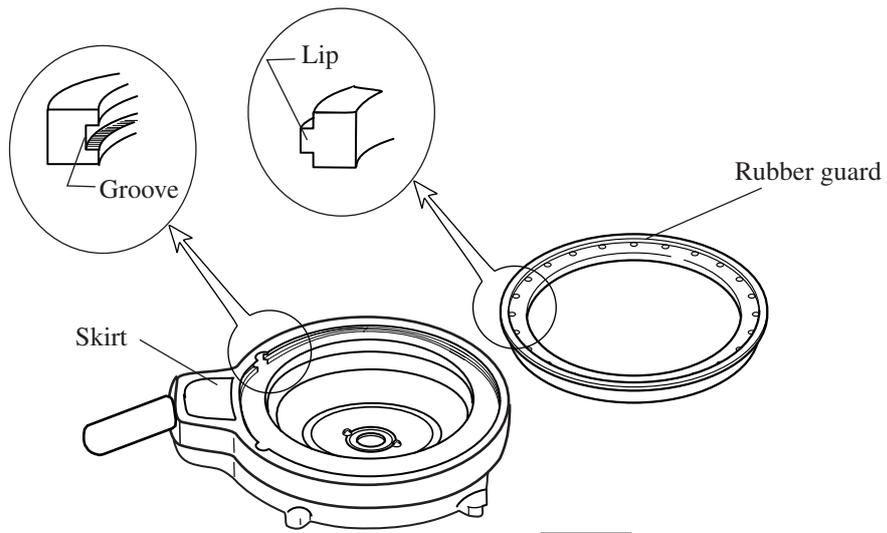


Fig. 7

< 4 > Attaching the other manufacturer's accessory

FESTO's paper pack can be attached to Mod.BO6030, too. In this case, open the paper film with your finger. And attach the paper pack to paper pack holder. See Fig. 8.

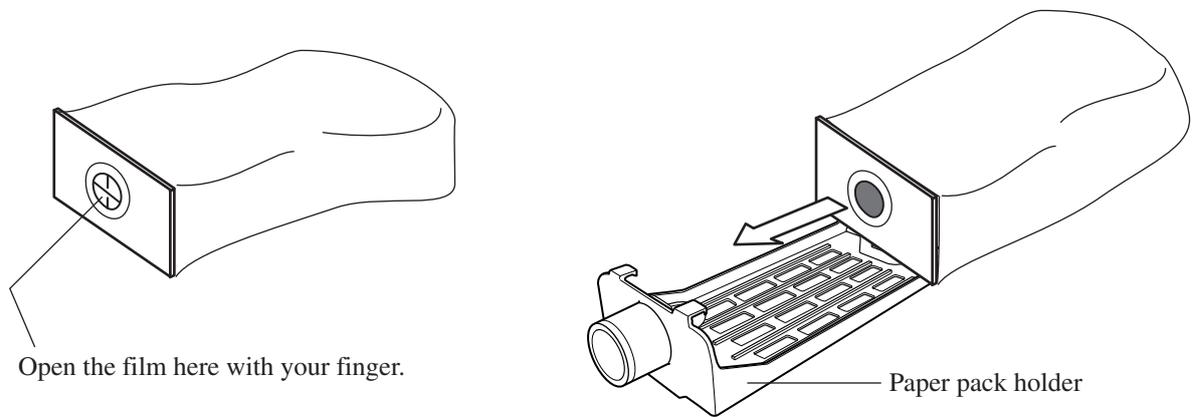
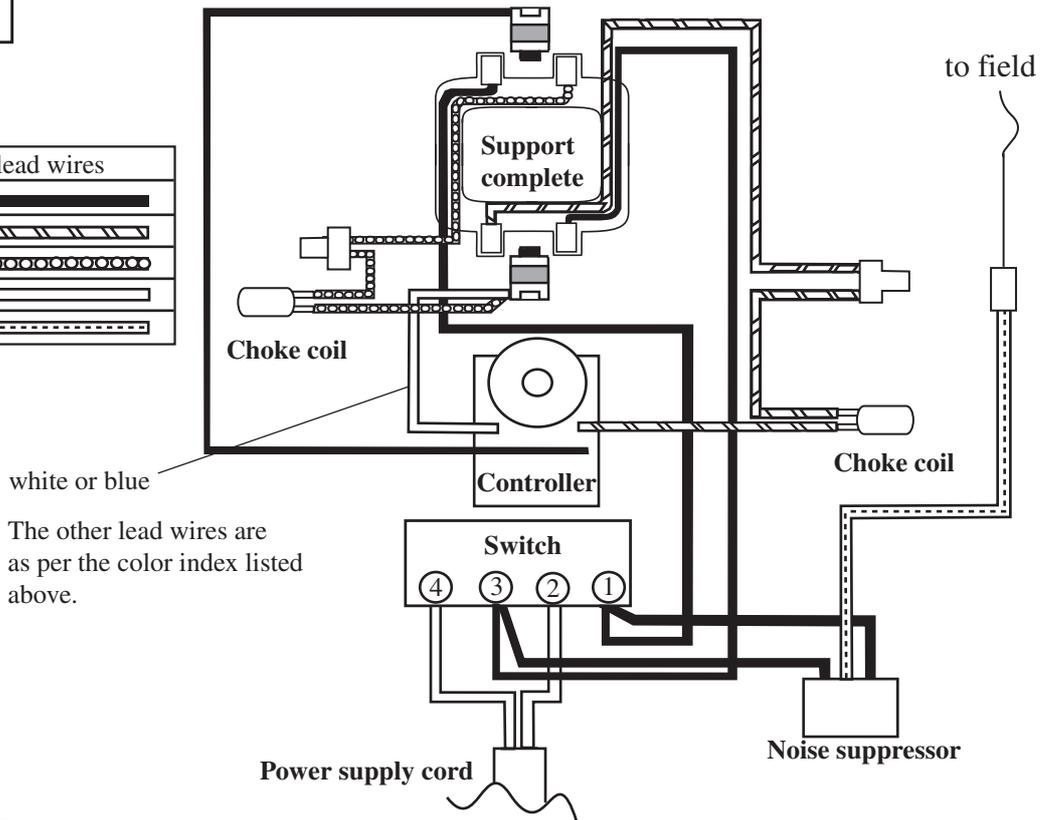


Fig. 8

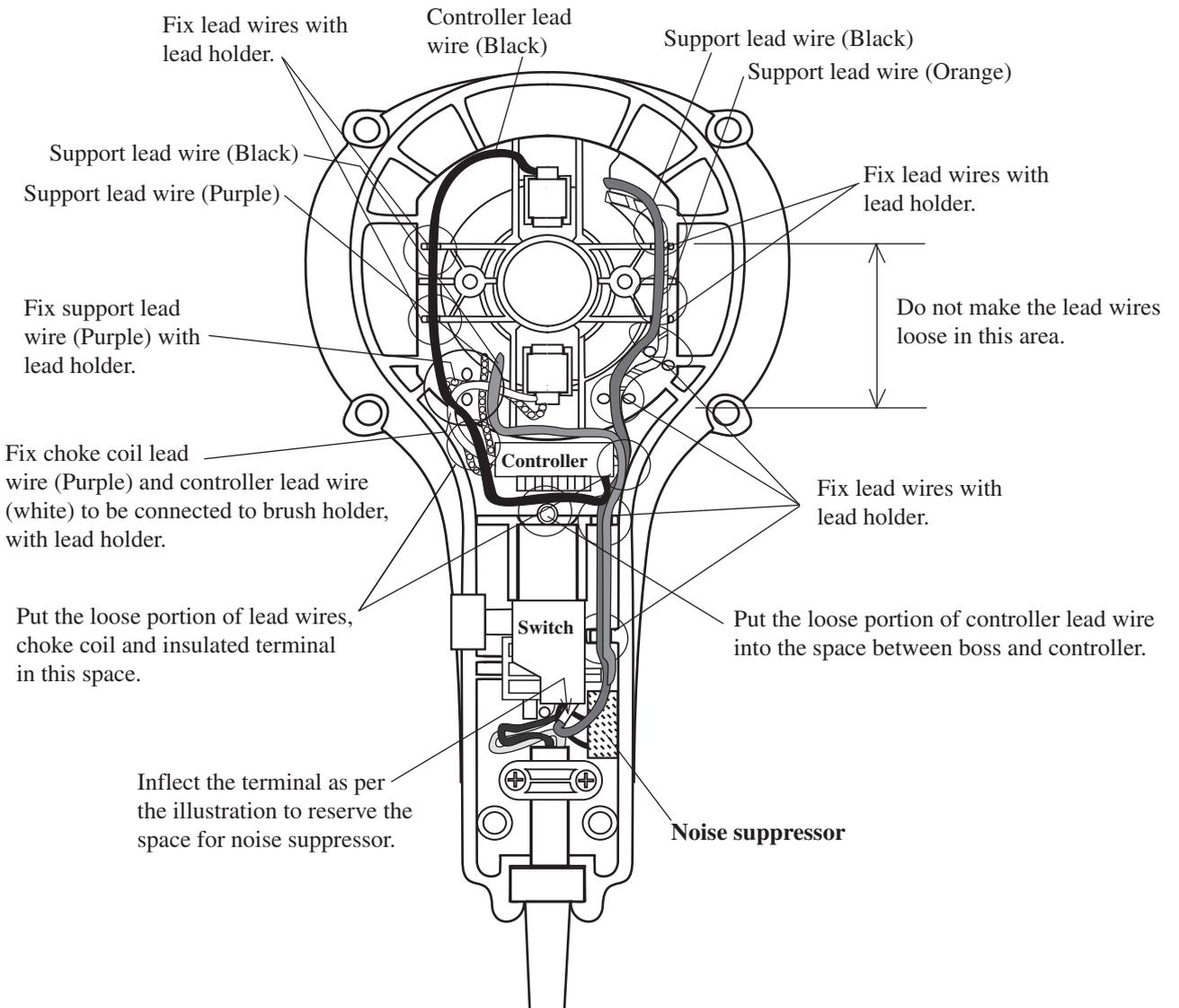
▶ **Circuit diagram**

With choke coil

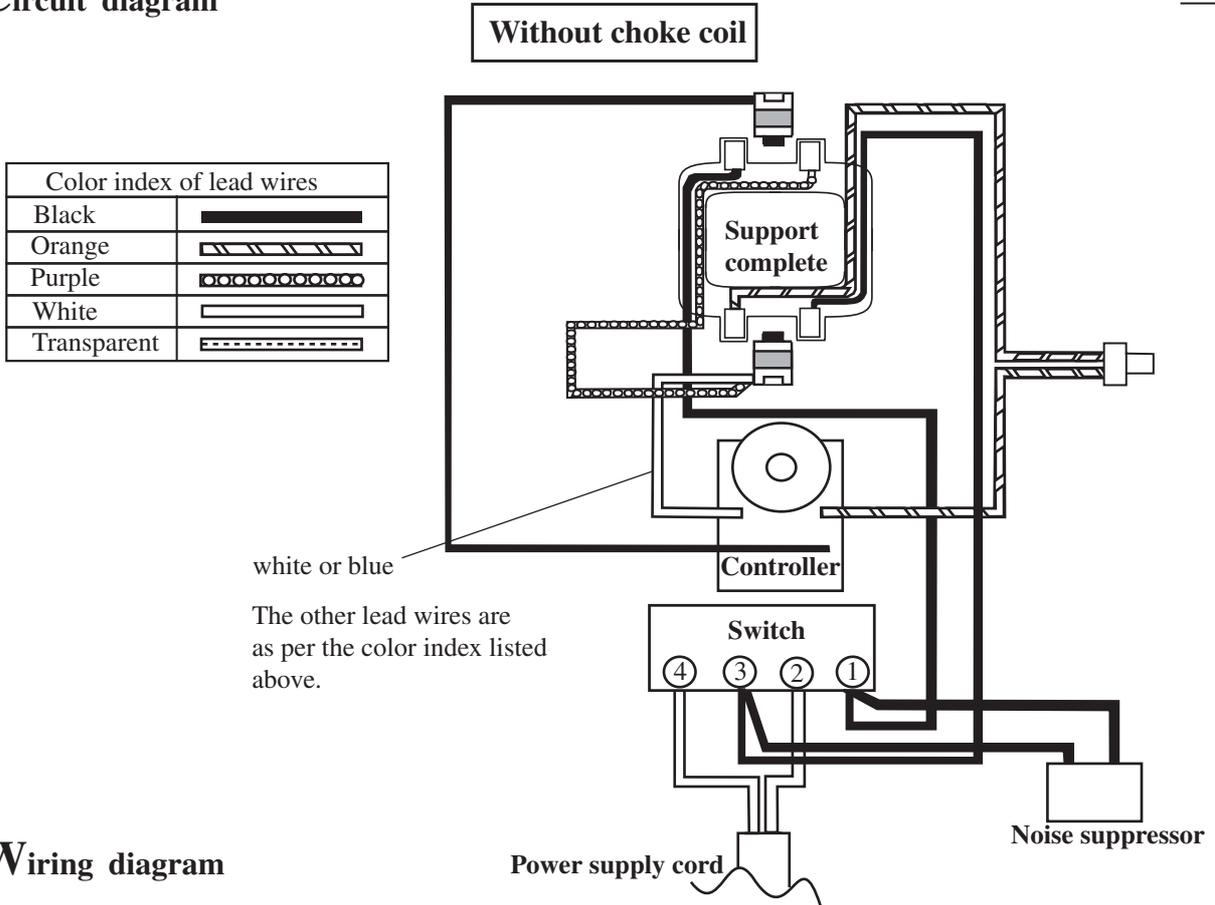
Color index of lead wires	
Black	
Orange	
Purple	
White	
Transparent	



▶ **Wiring diagram**



▶ **Circuit diagram**



▶ **Wiring diagram**

