

TECHNICAL INFORMATION



PRODUCT

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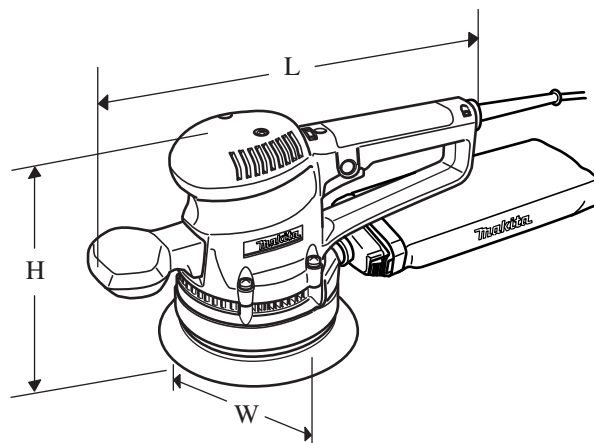
Models No. ▶ BO6030

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

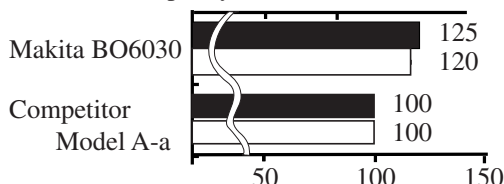
► Features and benefits

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.



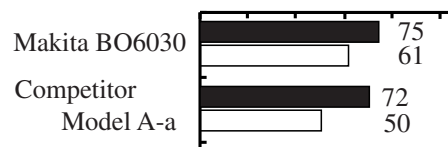
(When sanding a workpiece of spruce fir with the following abrasive papers for two minutes.)

■ Grit :60
□ Grit :120

Effective System of Integrated Dust Extraction

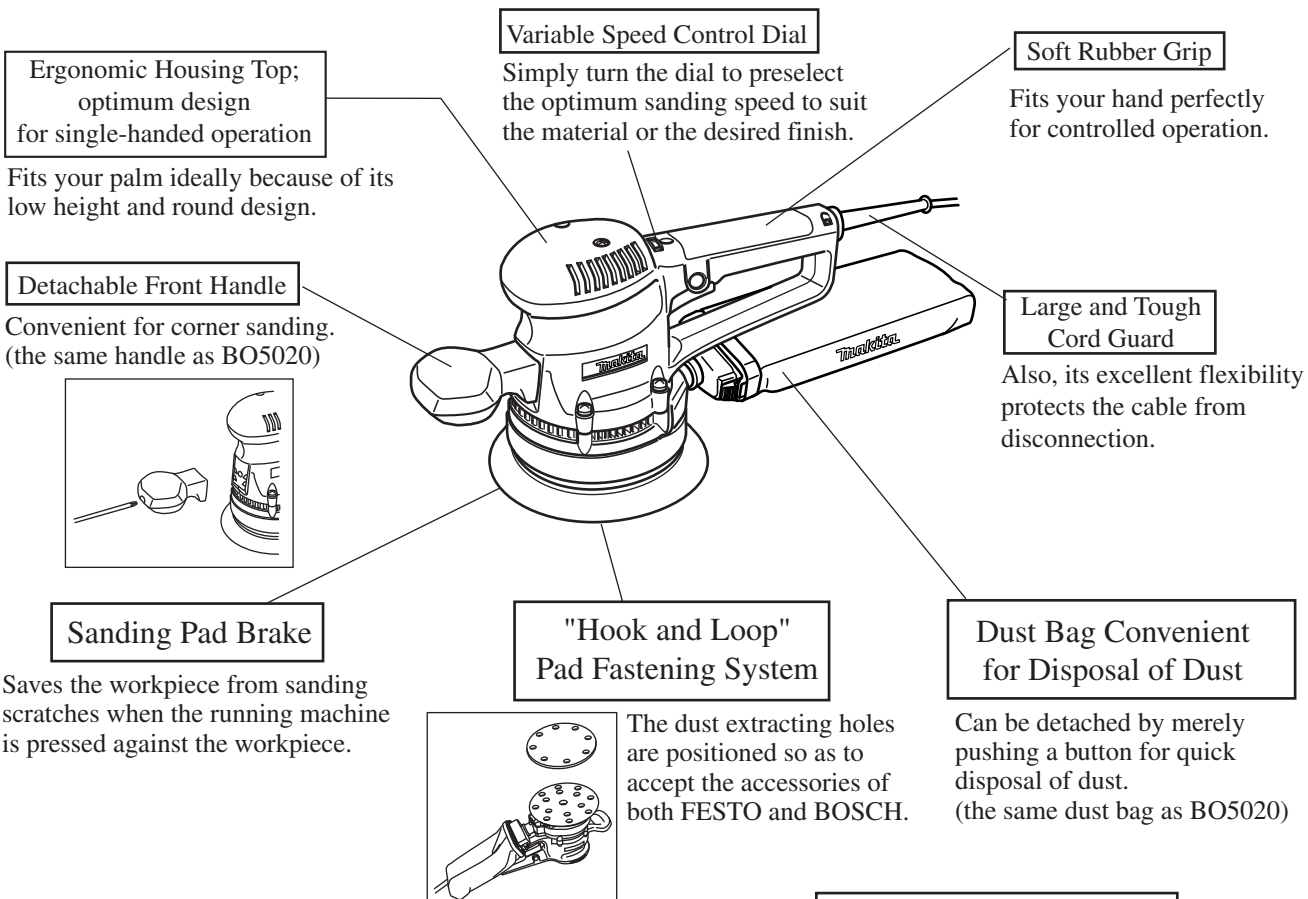
- The large vacuum fan for more effective dust extraction.
- Can be connected to the Makita vacuum cleaner. (The diameter of the opening for dust ejection is the same as BO5020.)

Dust extracting rate (%)



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

■ Grit :60
□ Grit :120

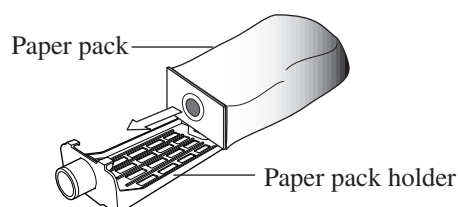


Assorted Optional Accessories for a Wide Range of Sanding Jobs

- 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 BO6030 | Competitor A Model A-a | Competitor C Model C | Competitor B 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.

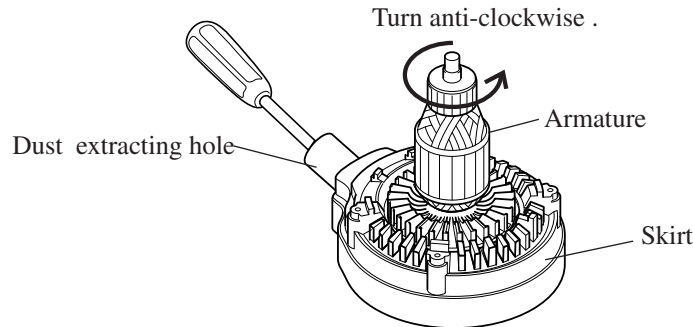
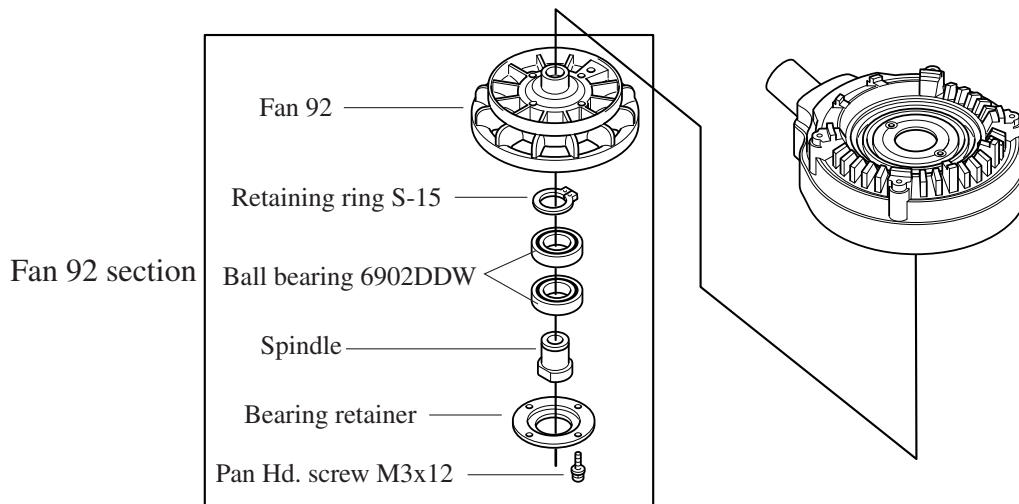


Fig. 1

< 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.

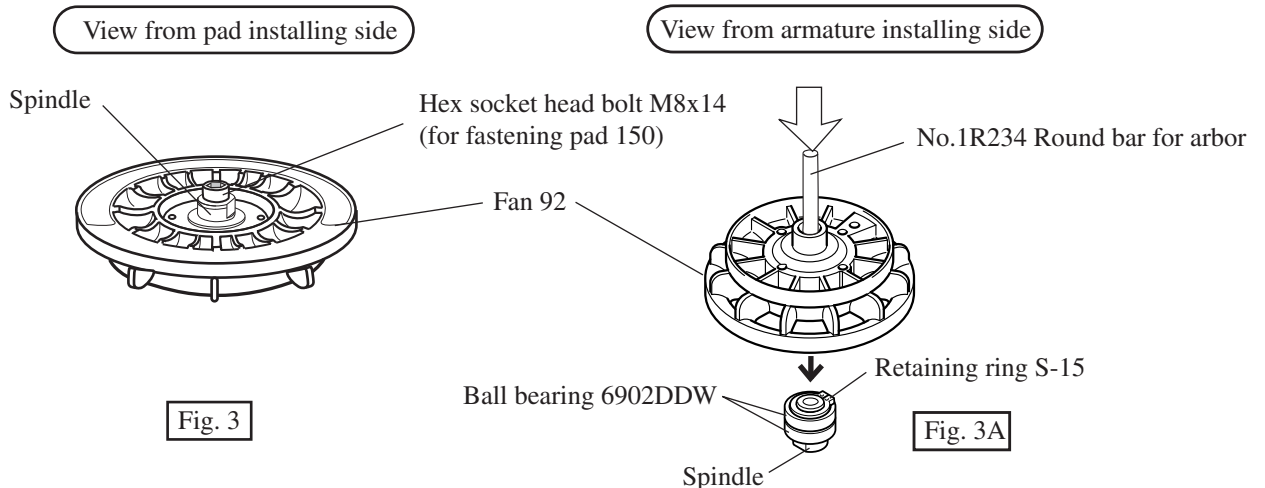
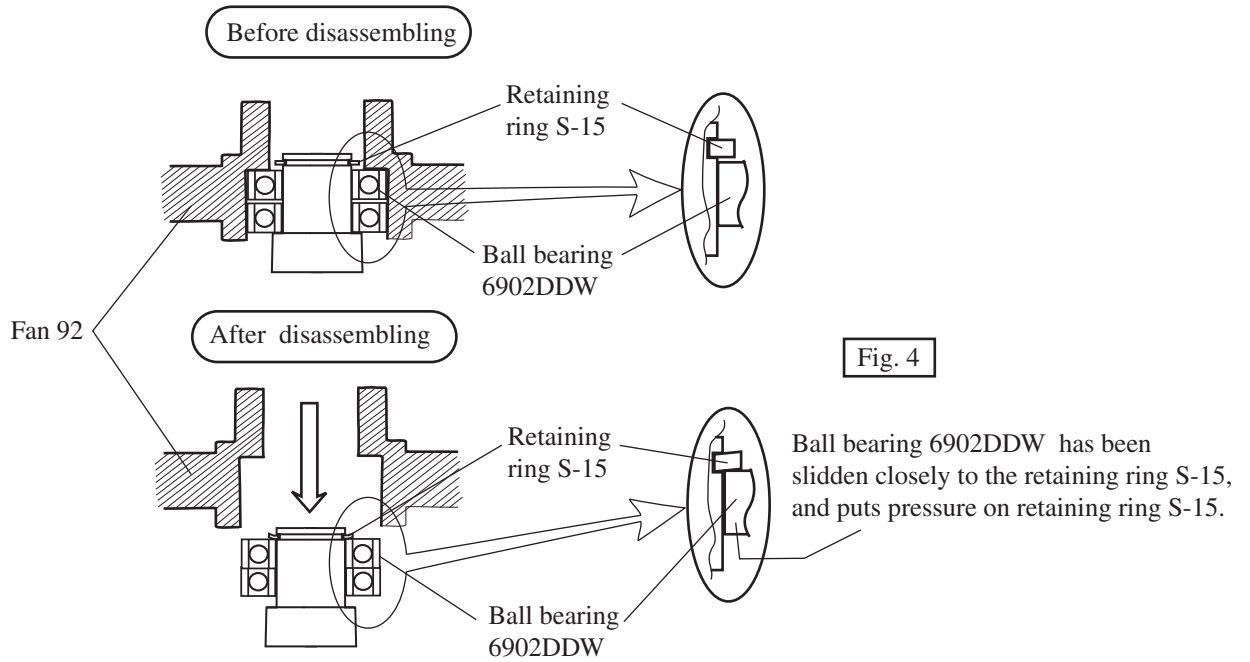


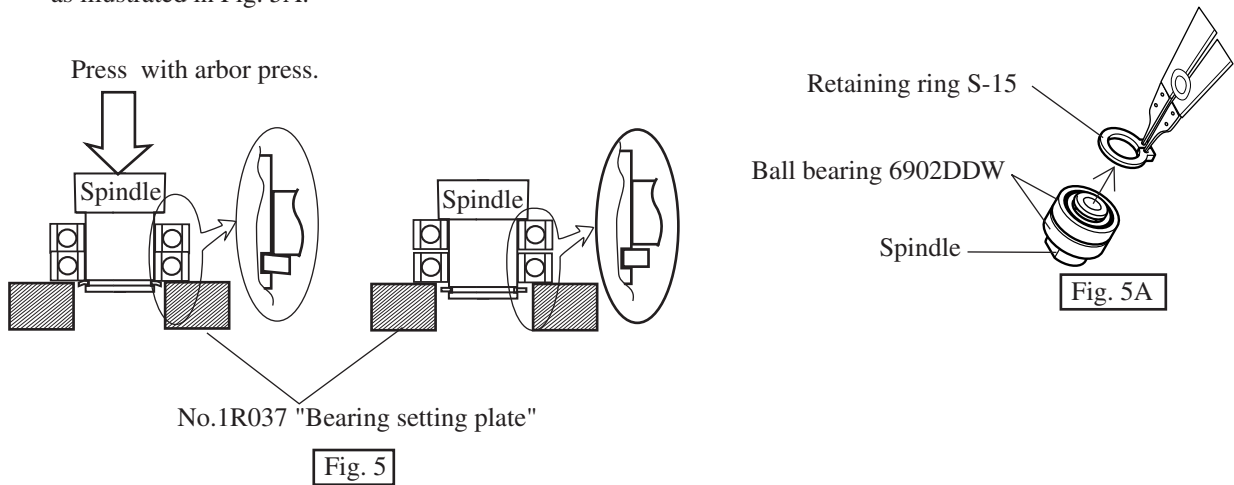
Fig. 3

Fig. 3A

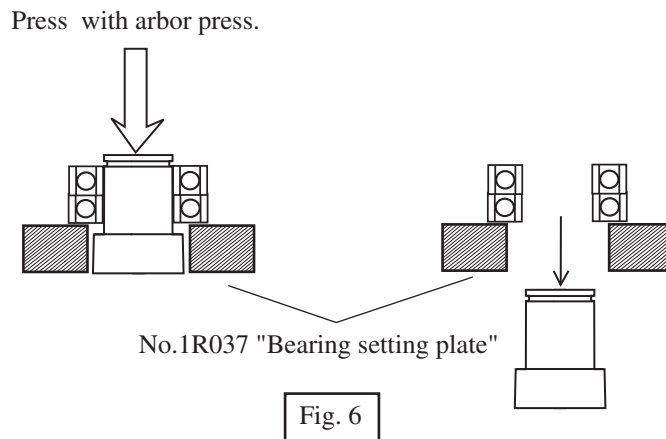
5. Ball bearing 6902DDW puts pressure on retaining ring S-15 which is engaged in the groove of spindle, because it has been slidden closely to the retaining ring S-15, when separating from fan 92. See Fig. 4.



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.

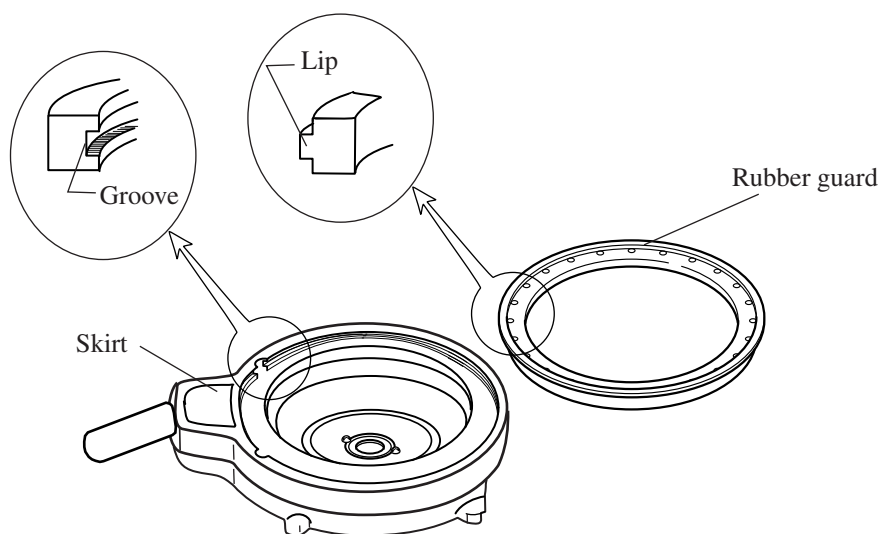


Fig. 7

< 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 attache the paper pack to paper pack holder. See Fig. 8.

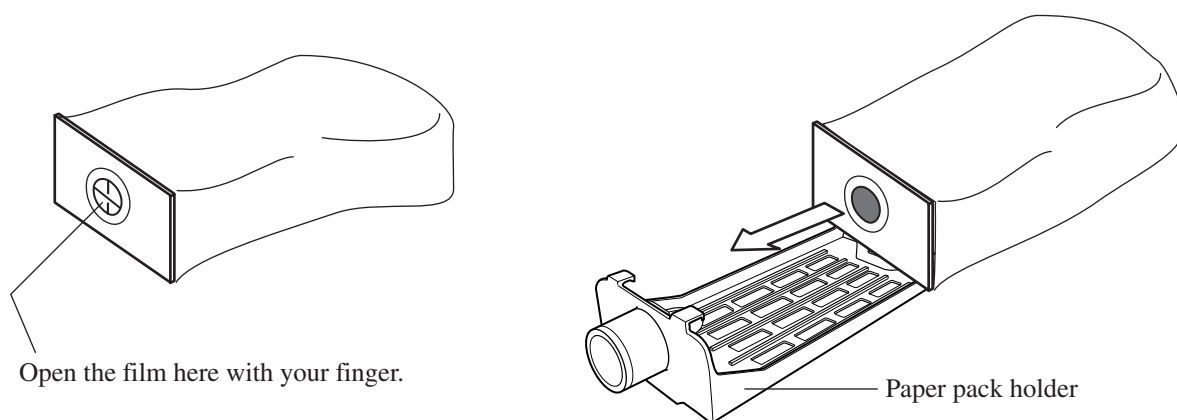


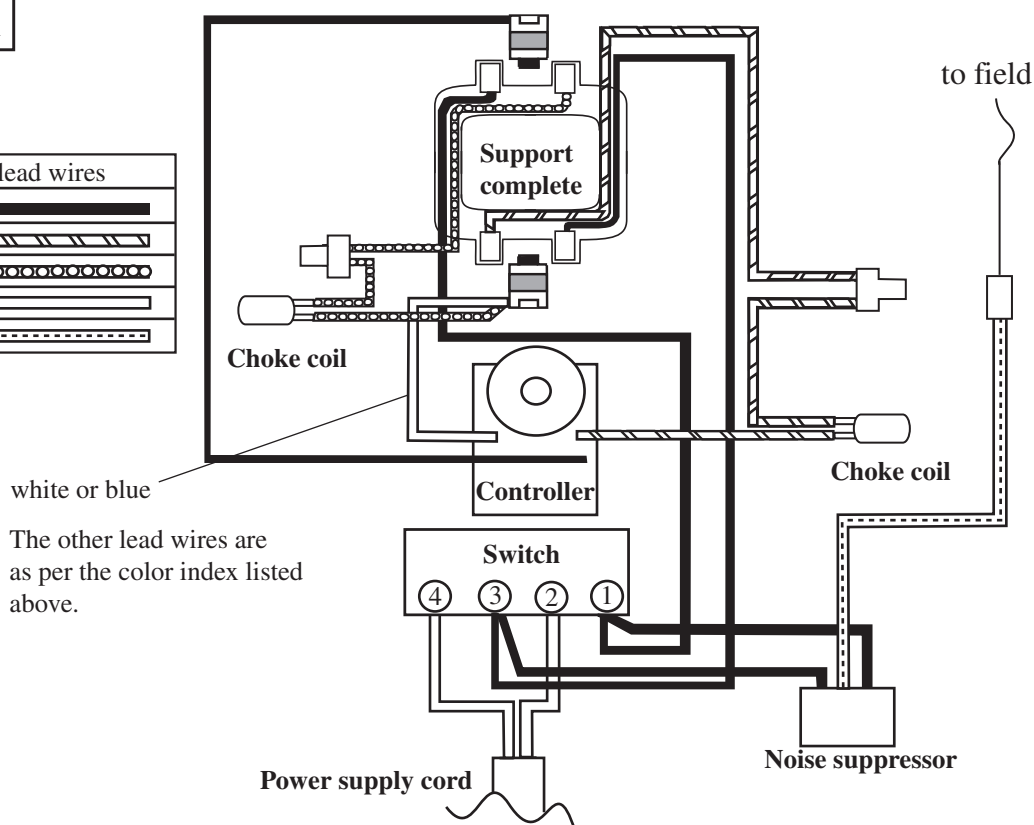
Fig. 8

► Circuit diagram

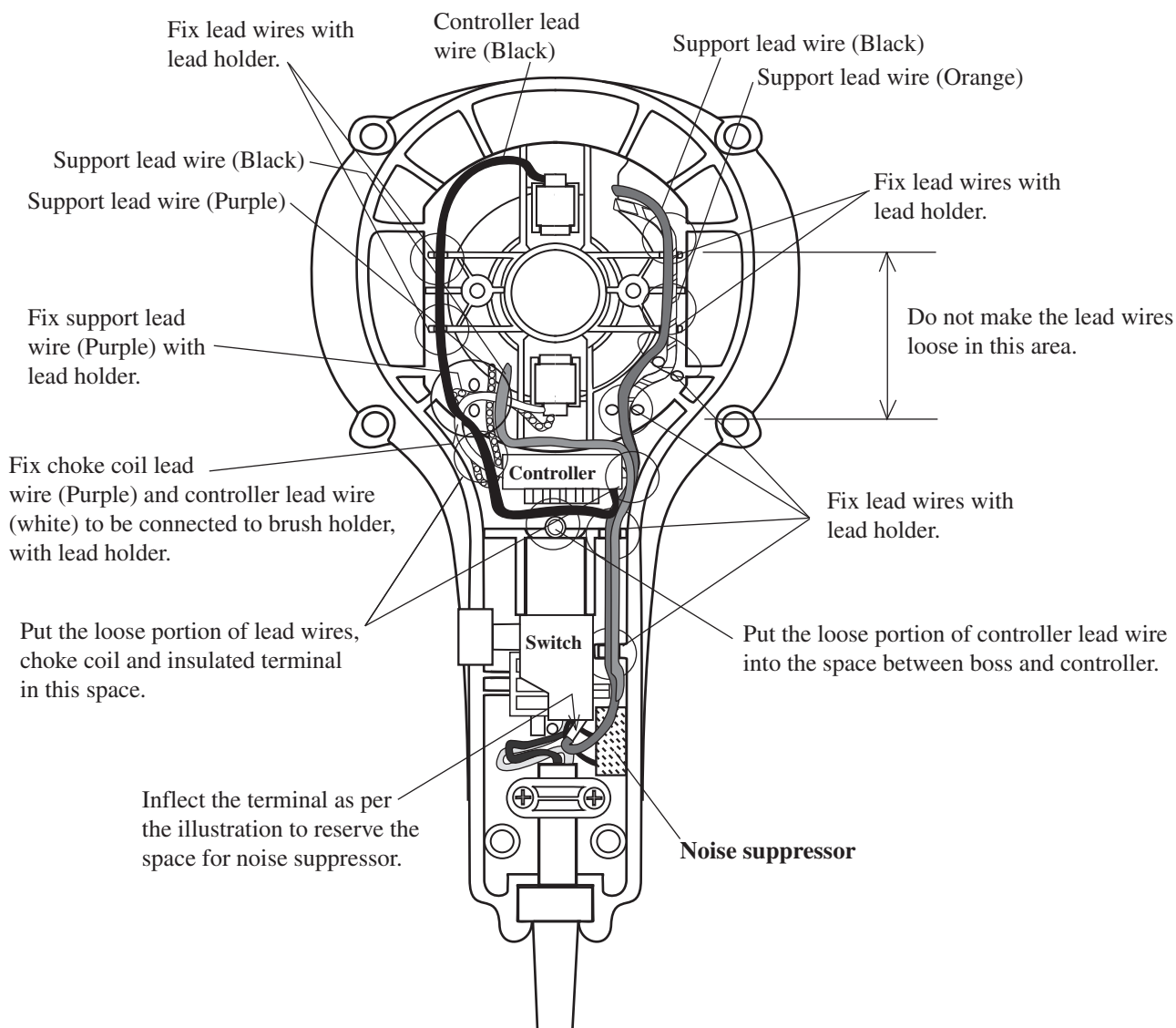
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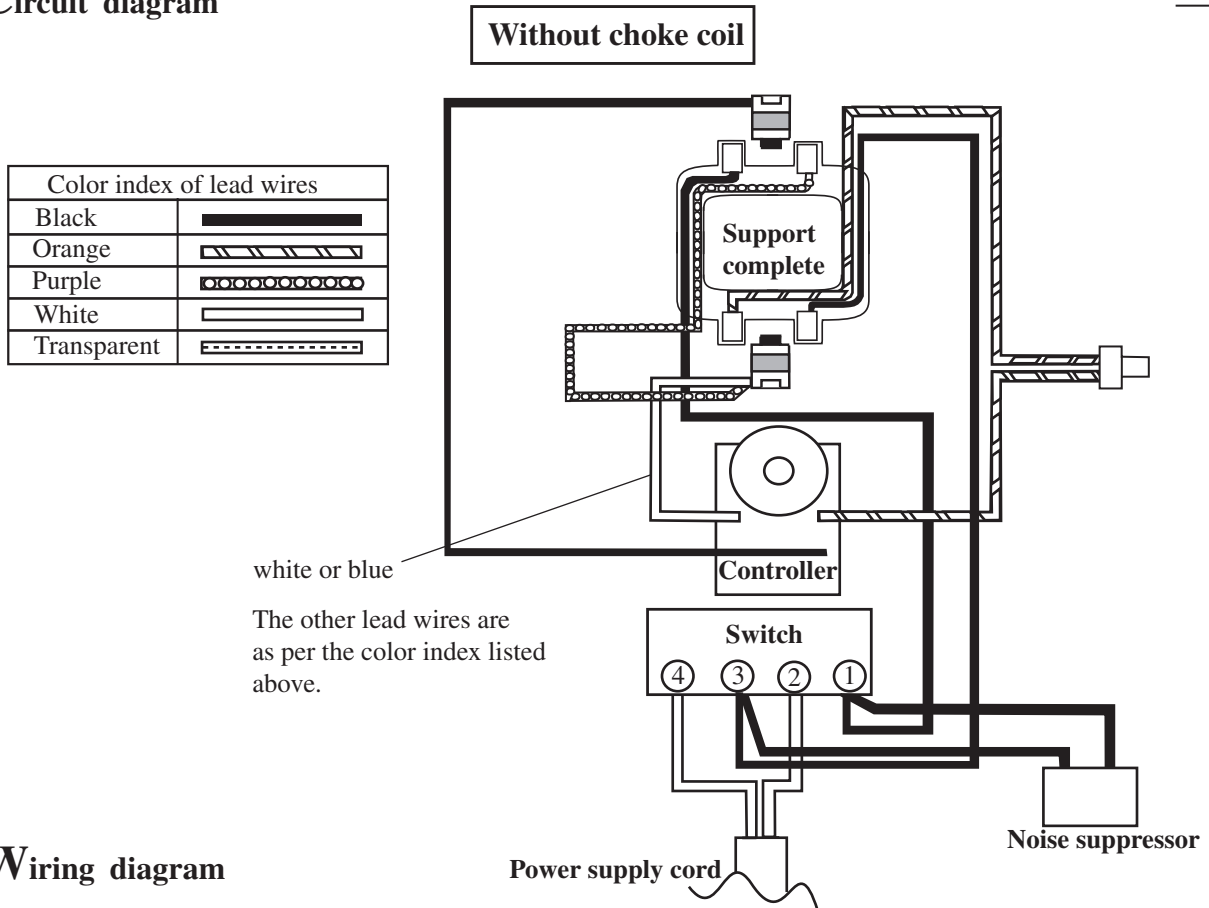
With choke coil

| Color index of lead wires | |
|---------------------------|--|
| Black | |
| Orange | |
| Purple | |
| White | |
| Transparent | |



► Wiring diagram





► **Wiring diagram**

