

TECHNICAL INFORMATION



PRODUCT

P 1 / 11

Model No. ▶ BO4900V, BO4900, BO4901

Description ▶ Finishing Sander

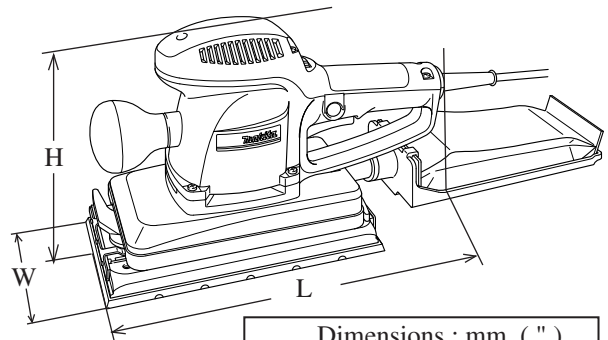
CONCEPT AND MAIN APPLICATIONS

The above finishing sanders are the advanced version of Model 9045N or 9045B.

Their features and benefits are

- * Incredible minimized vibration
- * Large clamping lever for quick and easy changing abrasive paper
- * Palm-fitting soft grip
- * More efficient dust collection system
- * Both paper clamp type and hook and loop type of abrasive papers are applicable.

(For model BO4901, pad complete which is an optional accessory, is required for attaching hook and loop type abrasive paper.)



| Dimensions : mm (") | |
|-----------------------|--------------|
| Length (L) | 289 (11-3/8) |
| Height (H) | 190 (7-1/2) |
| Width (W) | 115 (4-1/2) |

▶ Specification

| Voltage (V) | Current (A) | Cycle (Hz) | Continuous Rating (W) | | Max. Output(W) |
|-------------|-------------|------------|-----------------------|--------|----------------|
| | | | Input | Output | |
| 110 | 3.2 | 50 / 60 | 330 | 170 | 200 |
| 120 | 2.9 | 50 / 60 | 330 | 170 | 200 |
| 220 | 1.6 | 50 / 60 | 330 | 170 | 200 |
| 230 | 1.5 | 50 / 60 | 330 | 170 | 200 |
| 240 | 1.4 | 50 / 60 | 330 | 170 | 200 |

| Model No. | BO4900V | BO4900 | BO4901 |
|--------------------------------|---------------------------|---------------------------|------------------------|
| Pad size : mm (") | 115 x 229 (4-1/2 x 9) | | |
| Paper size : mm (") | 115 x 232 (4-1/2 x 9-1/8) | | 115 x 280 (4-1/2 x 11) |
| Paper type | Clamp type | Yes | Yes |
| | Hook and loop | Yes | Yes |
| Orbit per min : opm = min-1 | 4,000 - 10,000 | 10,000 | |
| Orbit diameter : mm (") | 2.6 (3/32) | | |
| Stroke per min. : spm = min-1 | 8,000 - 20,000 | 20,000 | |
| Speed control dial | Yes | No | |
| Dust collecting | Integrated | Yes | Yes |
| | with vacuum cleaner | | |
| Protection from electric shock | By double insulation | | |
| Cord length : m (") | For Europe : 4.0 (13.1) | For Australia : 2.0 (6.6) | For others : 2.5 (8.2) |
| Net weight : Kg (lbs) | 2.8 (6.2) | | |

*Note: Optional Pad complete is required.

▶ Standard equipment

- * Abrasive paper (grit 120) 1 pc.
- * Paper pack set (Paper pack holder and paper pack) for dust collecting 1 pc.

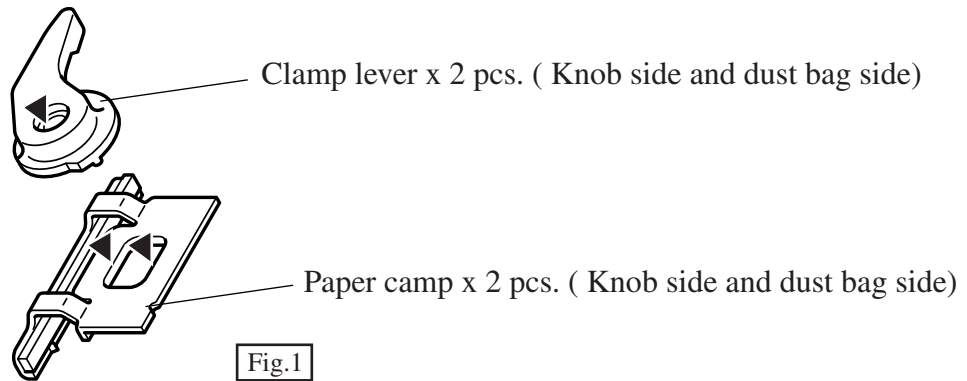
< Note > The standard equipment for the tool shown may differ from country to country.

▶ Optional accessories

- * Clamp type pad
- * Hook and loop type pad
- * Punch plate
- * Dust bag (made of paper)
- * Dust bag (made of cloth)
- * Paper pack set
- * Hose complete 28 set
- * Joint 25
- * Clamp type abrasive papers w/o punched holes (10 pcs. per pack), grit 60, 80, 100, 120, 150, 180,
- * Clamp type abrasive papers w/ punched holes (10 pcs. per pack), grit 60, 80, 100, 120, 150, 180, 240
- * Hook and loop type abrasive papers w/ punched holes (5 pcs. per pack), grit 60, 80, 100, 120, 150, 180, 240

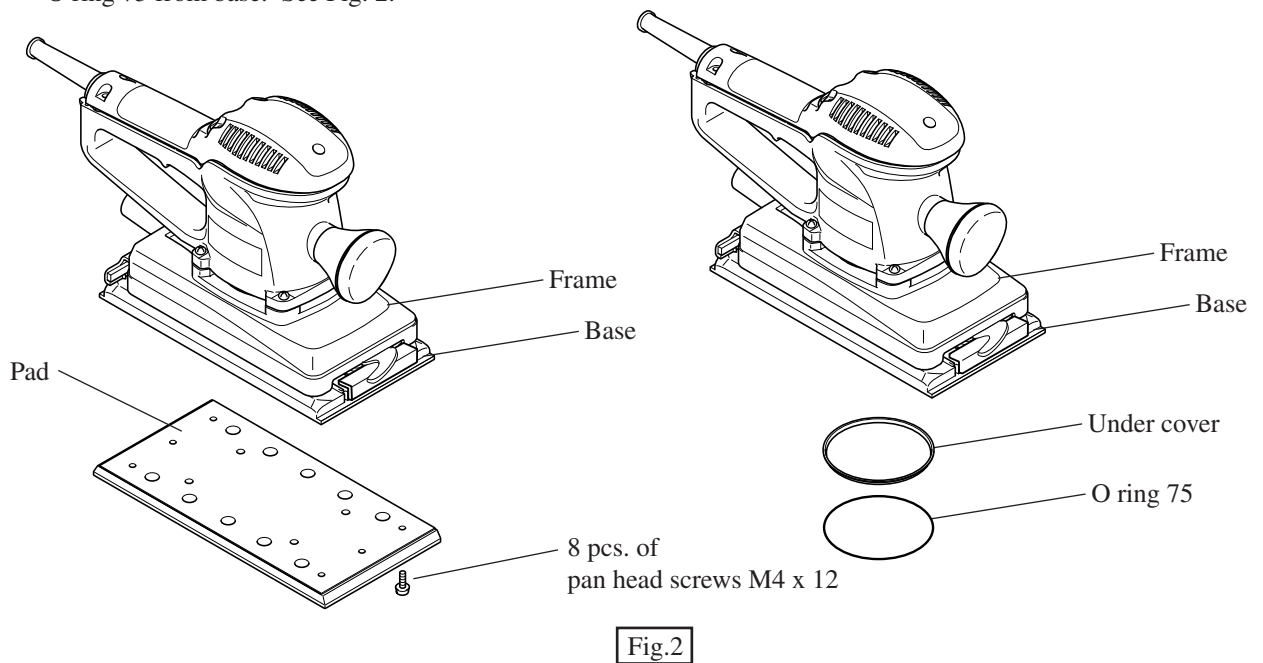
< 1 > Lubrication

Apply a bit of MAKITA grease N. No.2 to the following portions marked with black triangle to protect parts and product from unusual abrasion. See Fig.1.

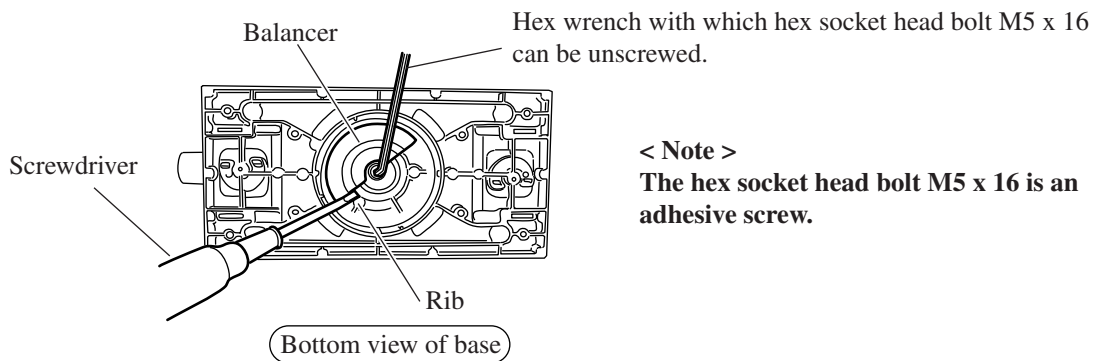


< 2 > Disassembling base section

1. Separate pad from base by unscrewing 8 pcs. of pan head screws M4 x 12. And disassemble under cover and O ring 75 from base. See Fig. 2.



2. Lock balancer with screwdriver inserted at the rib of base, and take off hex socket head bolt M5 x 16 with hex wrench, or with impact driver. Then balancer can be separated from base. See Fig. 3.



< Note >
The hex socket head bolt M5 x 16 is an adhesive screw.

3. After taking off balancer, tighten the hex socket head bolt M5x16 again loosely. And slightly hit this hex socket head bolt. Then base can be separated from frame. See Fig. 4.

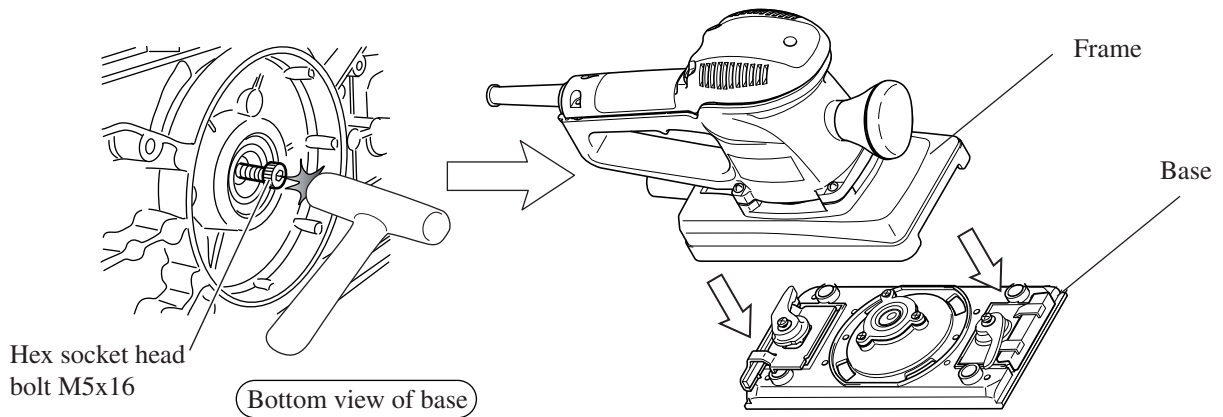


Fig. 4

< 3 > Assembling base section

1. Make sure that 4 pcs. of foot has been assembled to the correct positions, before assembling base. See Fig. 5.
2. Lock balancer with screwdriver inserted at the rib of base, and fasten hex socket head bolt M5 x 16 with hex wrench, or with impact driver. Then balancer can be assembled to base. See Fig. 6.

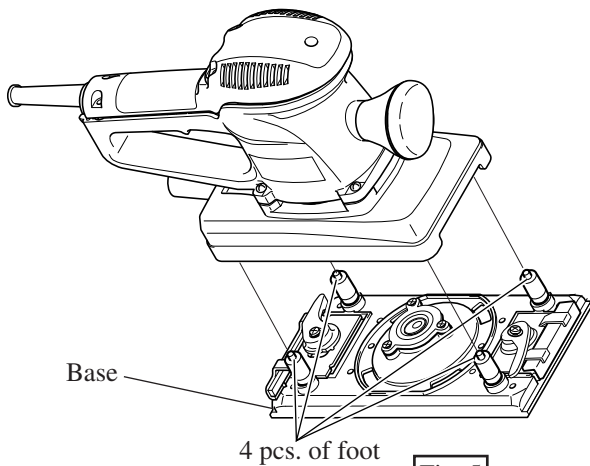
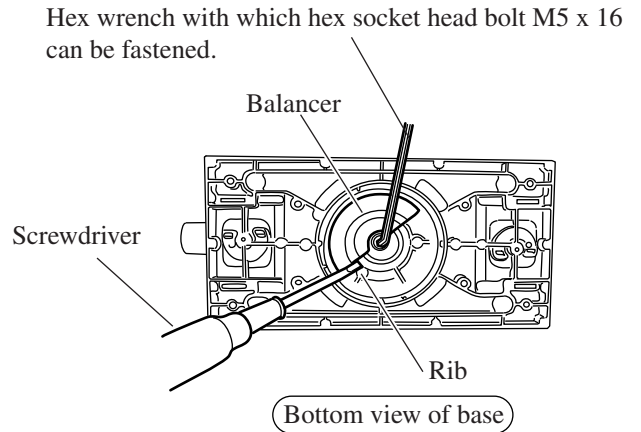


Fig. 5



< Note >

The hex socket head bolt M5 x 16 is an adhesive screw. Do not fasten the base with the used bolt. Replace with the fresh adhesive hex socket head bolt M5 x 16.

Fig. 6

3. Assemble under cover with aligning its slit with the guide rib of base as illustrated in Fig.7.
4. Assemble O ring 75 by pushing it with screwdriver into the space between under cover and the wall of base. See Fig. 7A.

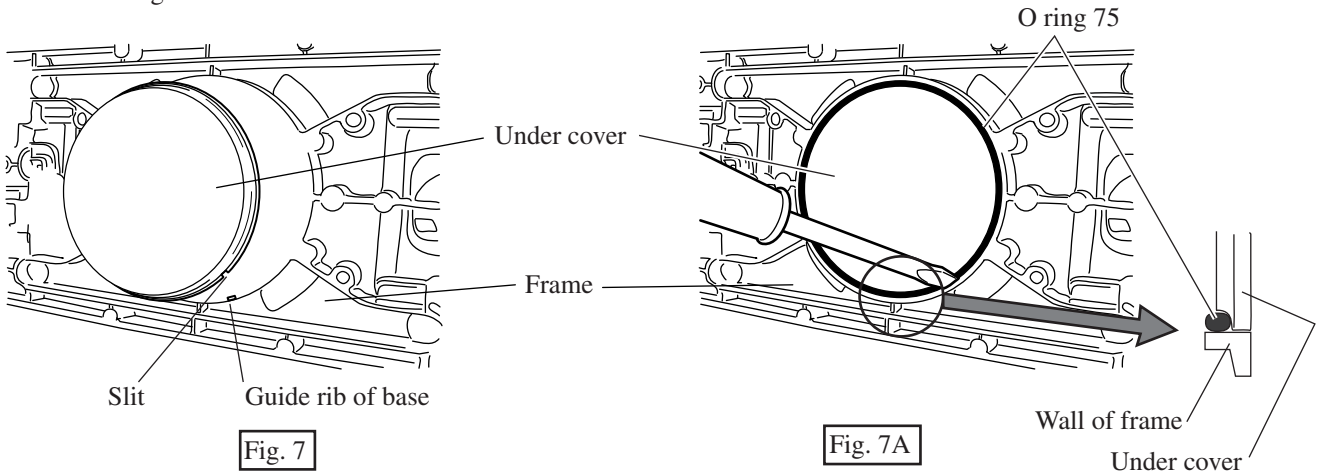


Fig. 7

Fig. 7A

< 4 > Disassembling ball bearings 6002LLB

1. Disassemble bearing 24 and thin washer 15 by unscrewing 3 pcs. of tapping screws as illustrated in Fig. 8.

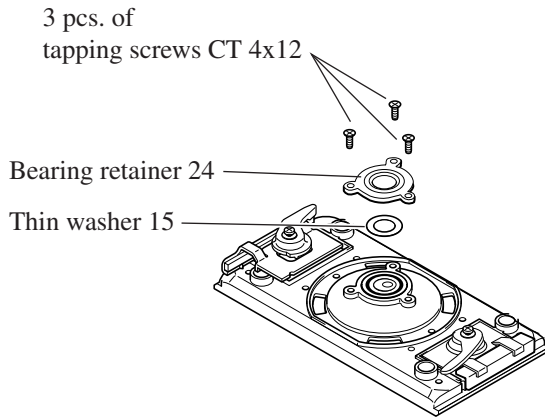


Fig. 8

2. Holding the base with 1R165 "Ring Spring Setting Tool", disassemble 2 pcs. of ball bearings 6002LLB by pressing No.1R24 "Round Bar for Arbor" with arbor press as illustrated in Fig. 9.

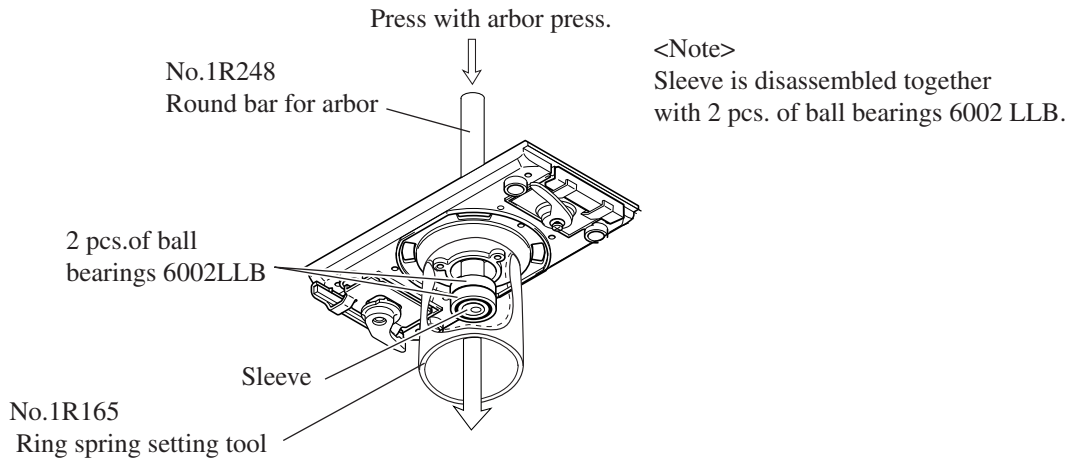


Fig. 9

3. Holding the ball bearings 6002LLB with No.1R232 "Pipe 30", separate sleeve from ball bearings by pressing it with arbor press as illustrated in Fig. 10.

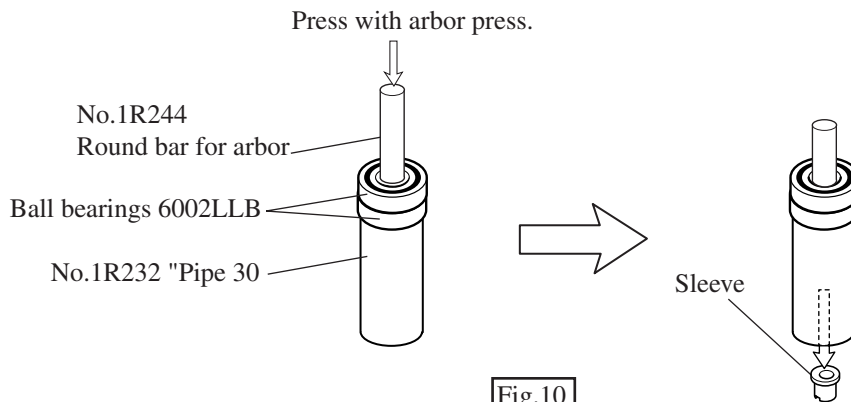
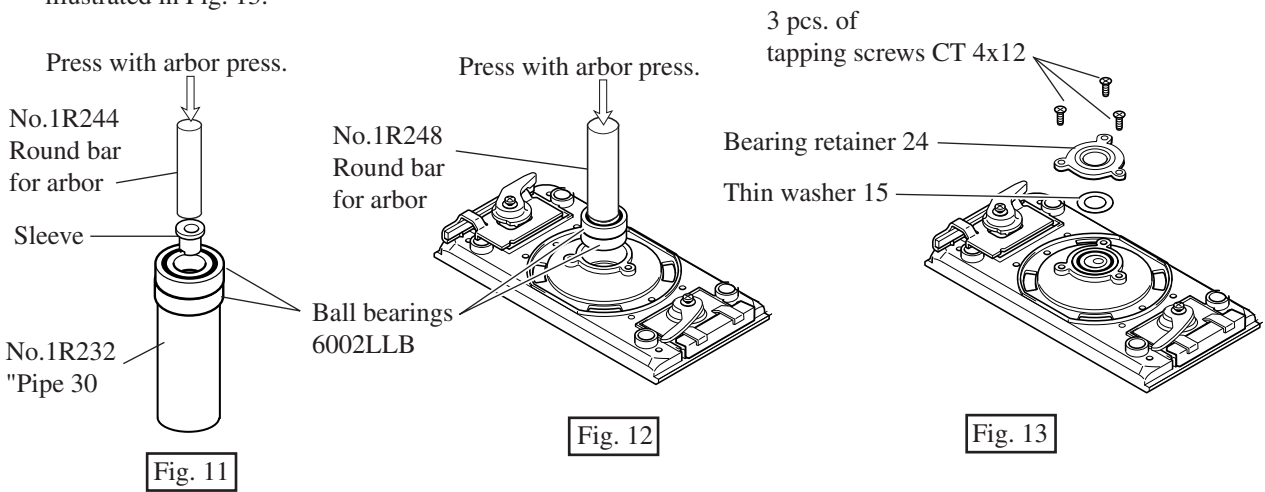


Fig.10

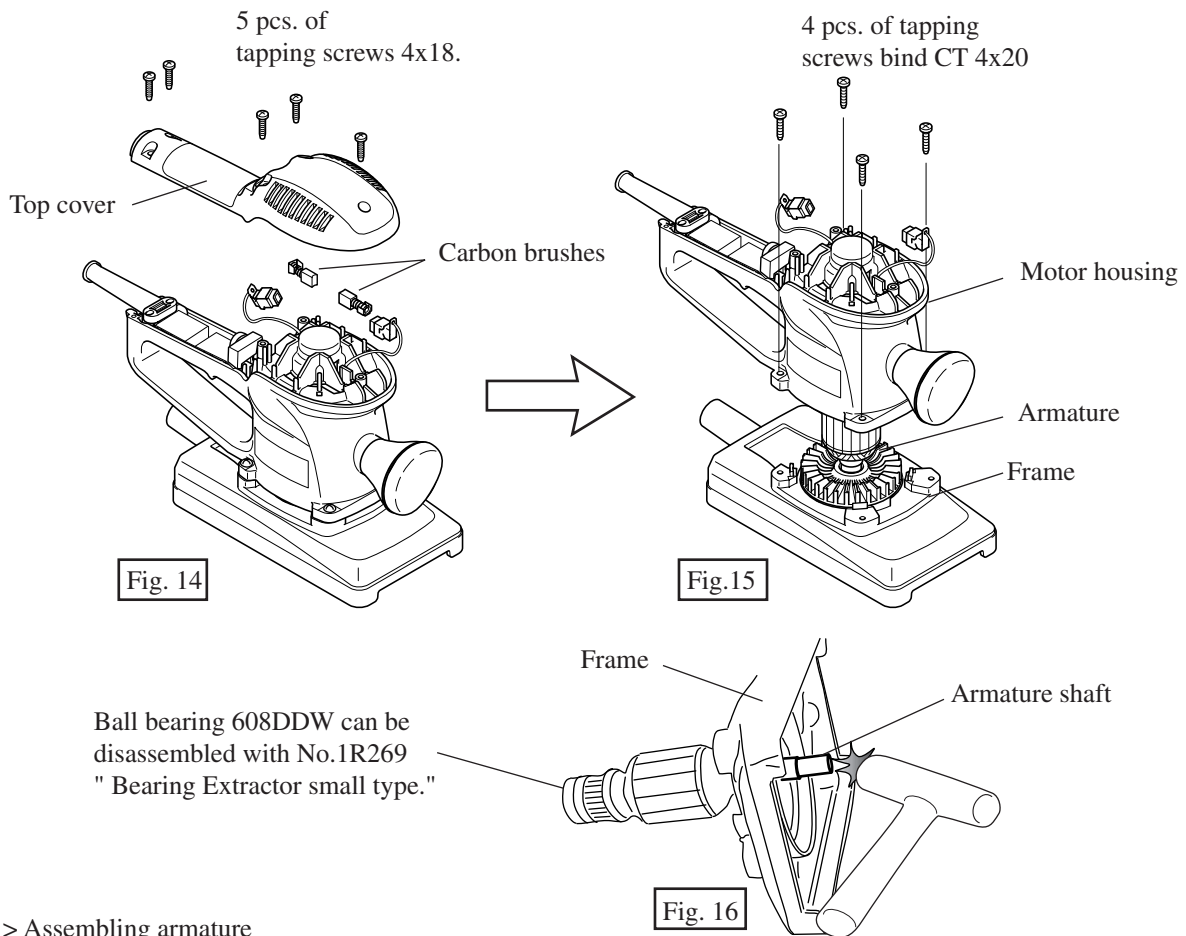
< 5 > Assembling ball bearings 6002LLB

1. Holding the ball bearings 6002LLB with No.1R232 "Pipe 30", insert sleeve into ball bearings by pressing it with arbor press as illustrated in Fig. 11.
2. Assemble the ball bearings 6002LLB (with sleeve) to base by pressing with arbor press as illustrated in Fig. 12.
3. Assemble thin washer 15 and bearing retainer 24 by fastening them with 3 pcs. of tapping screws CT 4x12 as illustrated in Fig. 13.








< 6 > Disassembling armature

1. Disassemble top cover by unscrewing 5 pcs. of tapping screws 4x18. And disassemble carbon brushes as illustrated in Fig. 14.
2. Separate motor housing from frame after unscrewing 4 pcs. of tapping screws bind CT 4x20 as illustrated in Fig. 15.
3. Slightly hit the armature shaft with plastic hammer as illustrated in Fig. 16. Then armature can be separated from frame.

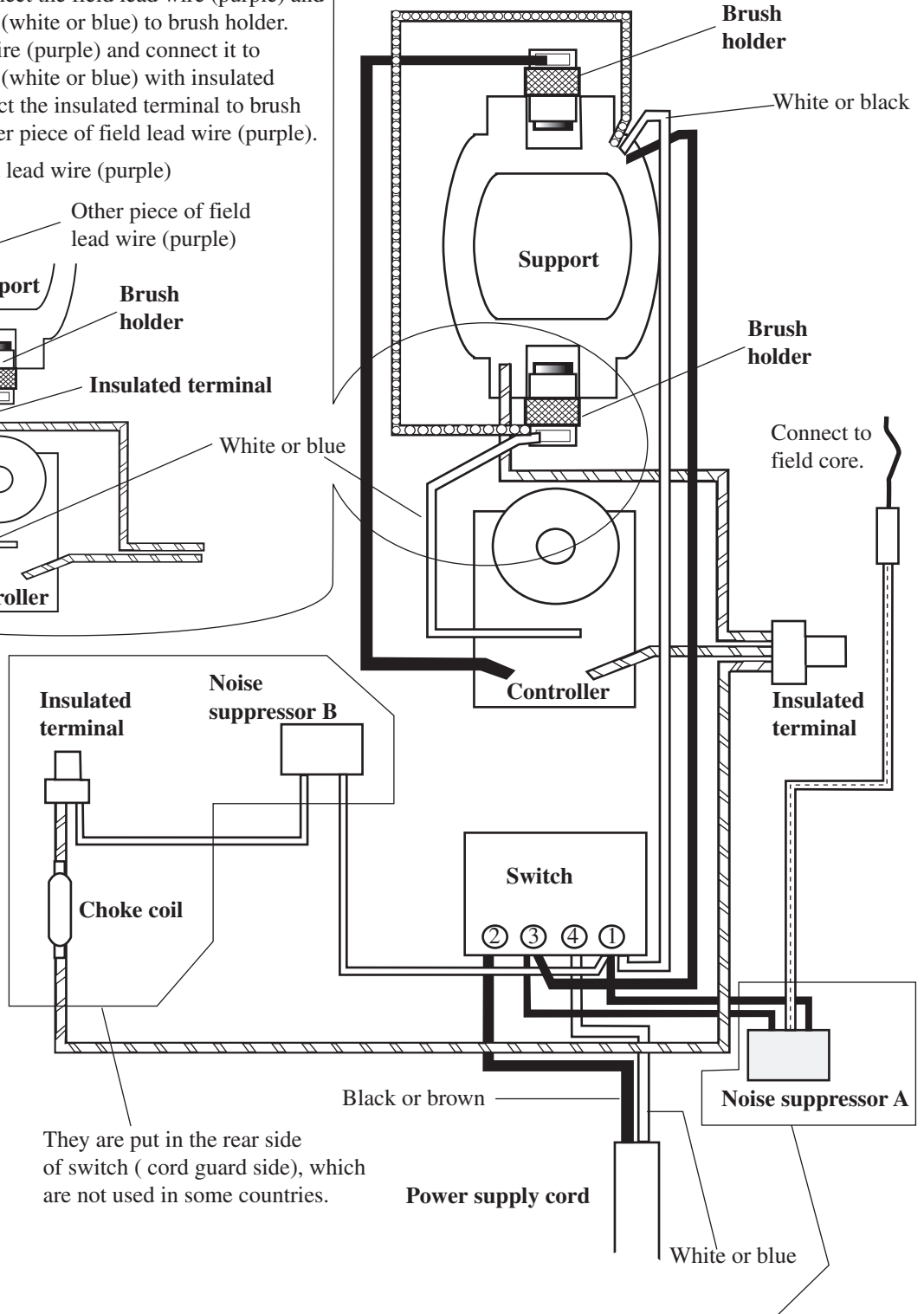
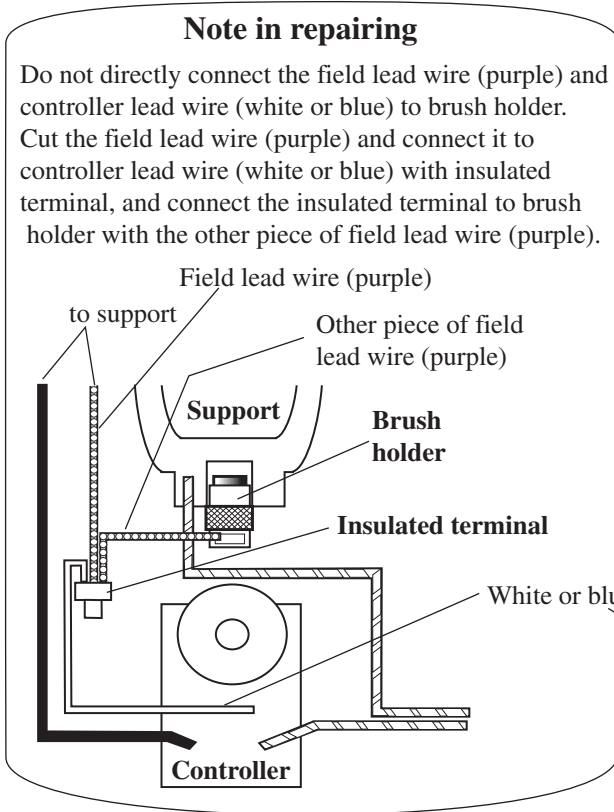


< 7 > Assembling armature

Take the reverse steps of Fig.13 - Fig.15.

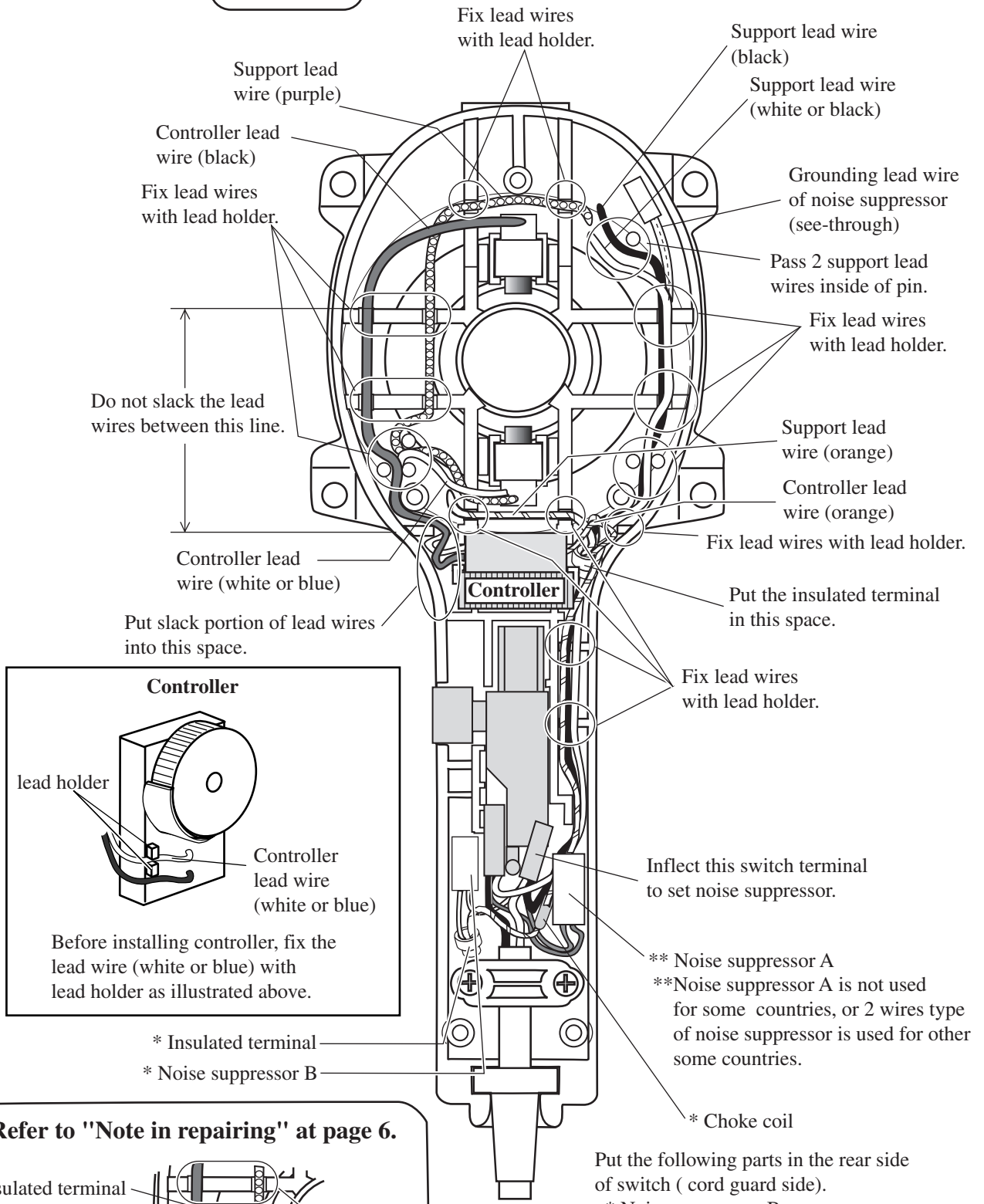
| Color index of lead wires | |
|---------------------------|---|
| Black |  |
| White |  |
| Orange |  |
| Purple |  |
| See-through |  |

BO4900V



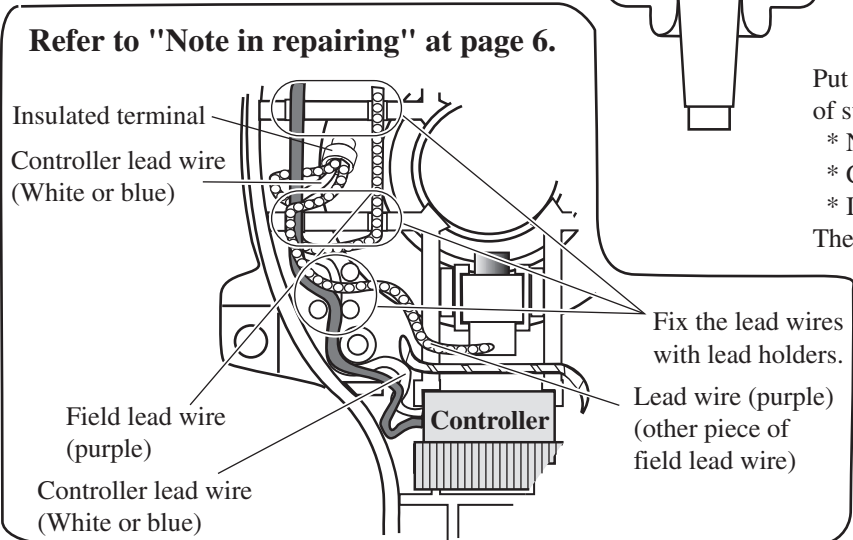
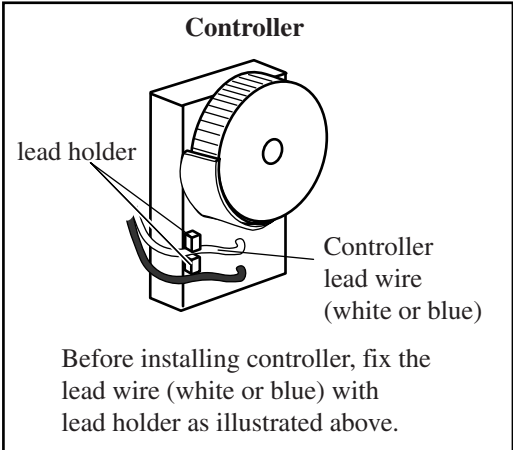
Noise suppressor is not used for some countries, or 2 wires type of noise suppressor is used for other some countries.

BO4900V








Do not slack the lead wires between this line.

Put slack portion of lead wires into this space.

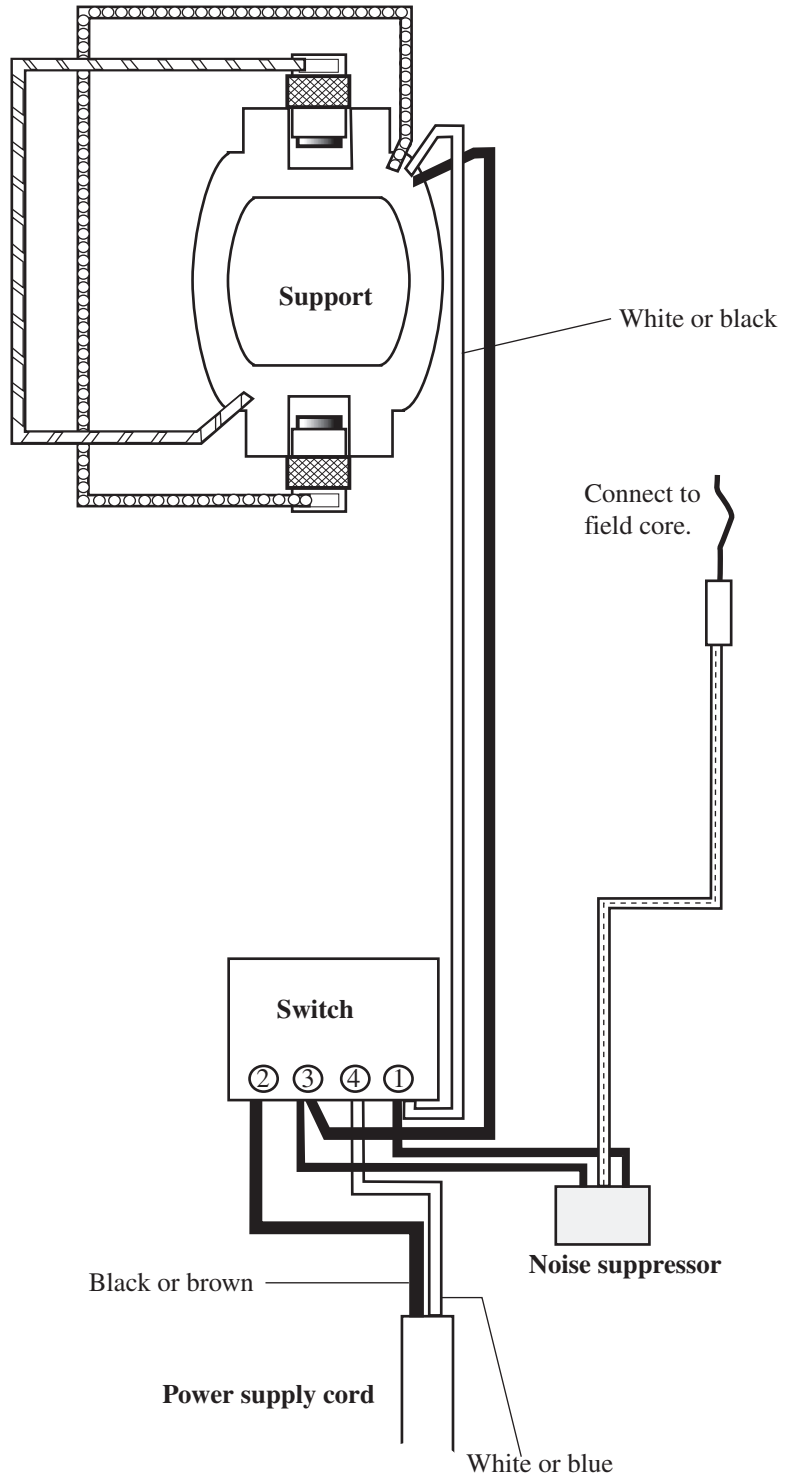


Put the following parts in the rear side of switch (cord guard side).
 * Noise suppressor B
 * Choke coil
 * Insulated terminal
 They are not used for some countries

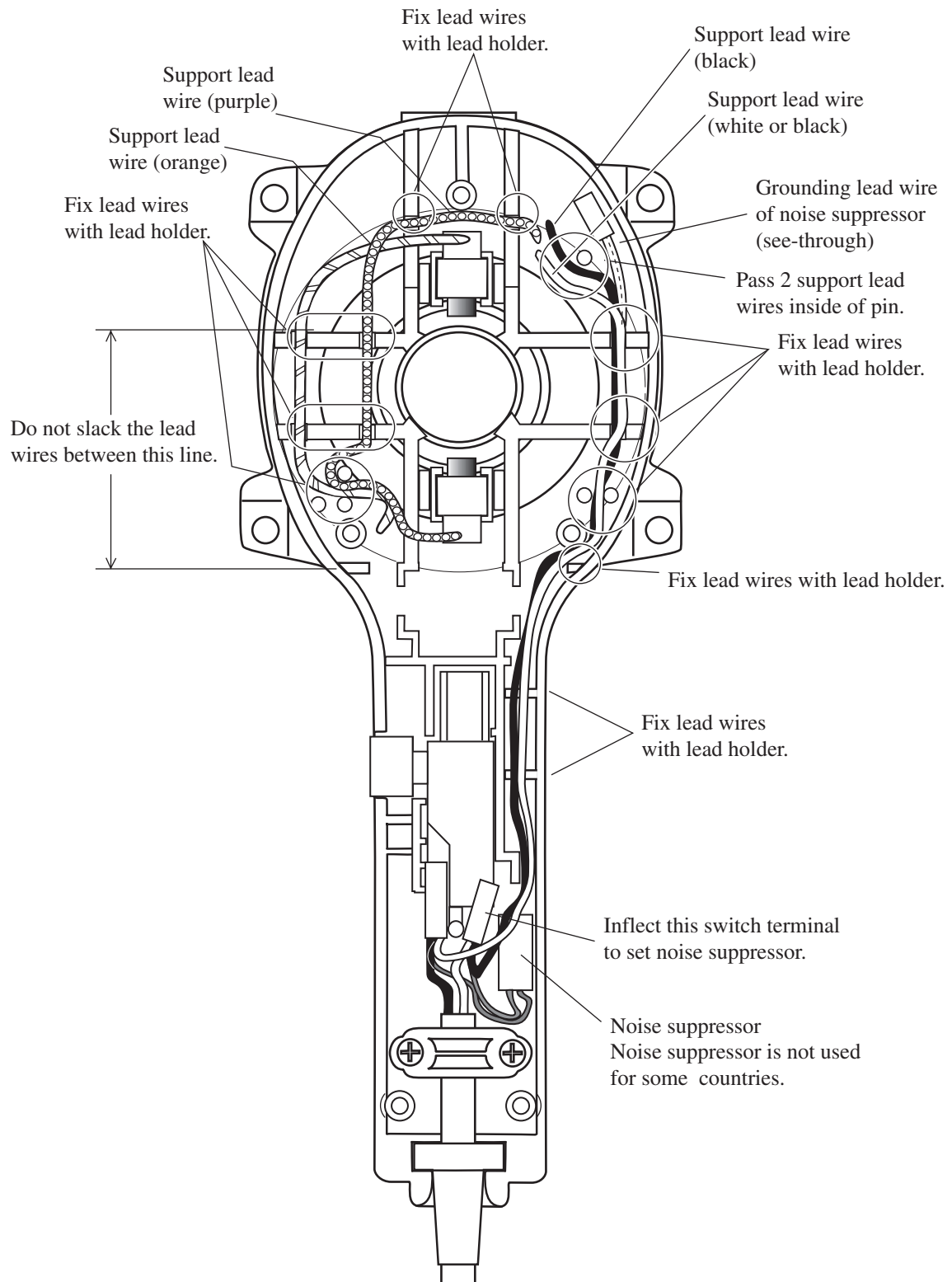
▶ **Circuit diagram**

| Color index of lead wires | |
|---------------------------|---|
| Black |  |
| White |  |
| Orange |  |
| Purple |  |
| See-through |  |


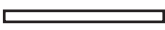
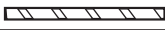


BO4900 (except Taiwan and Great Britain, low voltage area)
BO4901

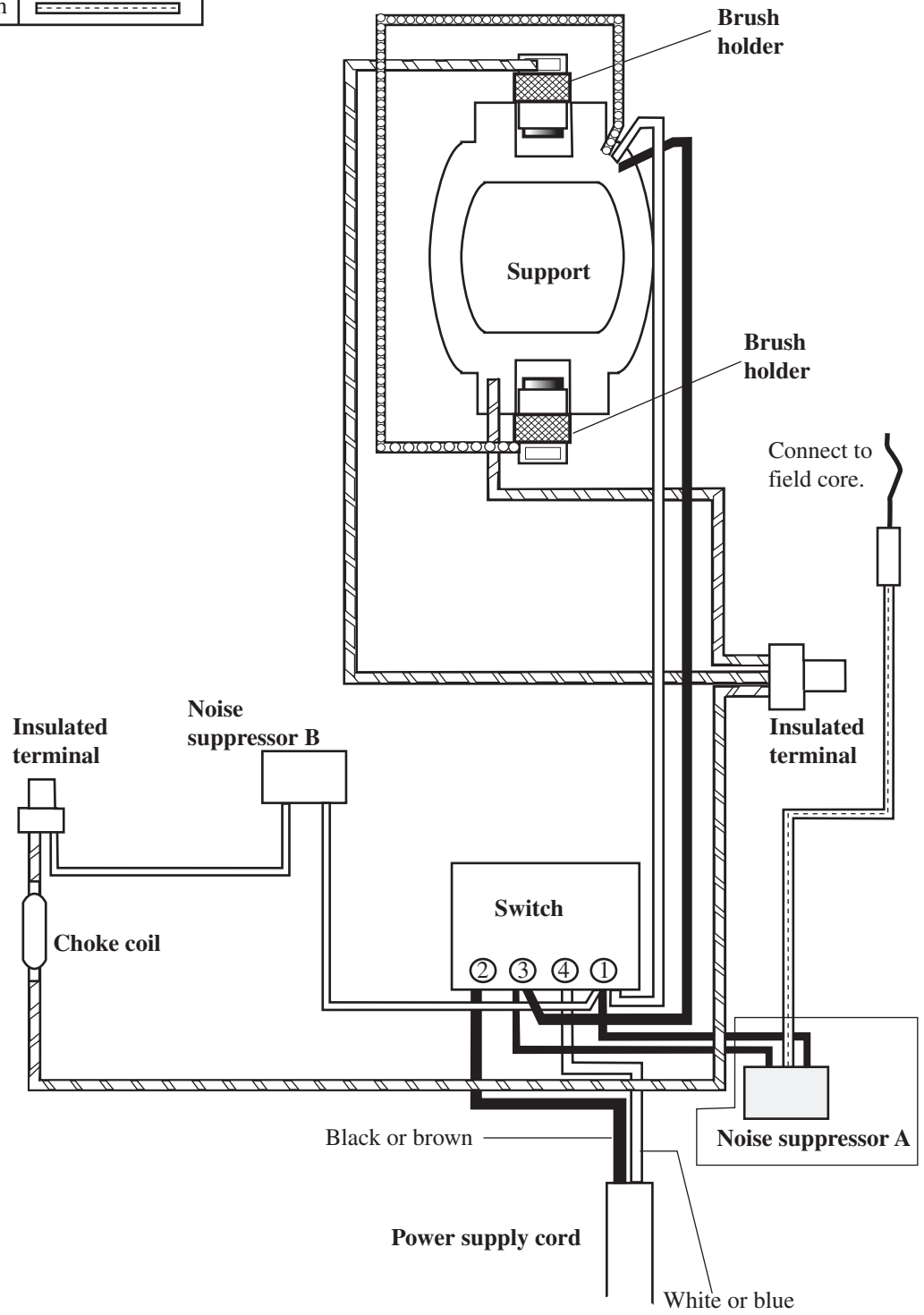


BO4900 (except Taiwan and Great Britain, low voltage area)
BO4901



BO4900 (Taiwan and Great Britain, low voltage area)

| Color index of lead wires | |
|---------------------------|---|
| Black |  |
| White |  |
| Orange |  |
| Purple |  |
| See-through |  |



BO4900 (Taiwan and Great Britain, low voltage area)

