

TECHNICAL INFORMATION

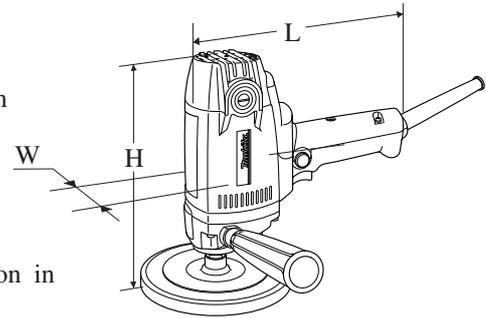


PRODUCT

P 1 / 16

Models No. ▶ PV7000C, PV7001C, PV7001
GV7000C, GV7000

Description ▶ PV7000C, PV7001C, PV7001 : Polisher 180mm
GV7000C, GV7000 : Disc Sander 180mm



| Dimensions : mm (") | |
|-----------------------|-------------|
| Length (L) | 210 (8-1/4) |
| Height (H) | 220 (8-5/8) |
| Width (W) | 82 (3-1/4) |

CONCEPTION AND MAIN APPLICATIONS

PV7000C, PV7001C

These polishers have been developed for the most controlled operation in various polishing works, featuring ;

- Compact and light-weighted body
- Electronic control for the least speed reduction
- Variable speed change dial and speed selecting button (low/high) for a wide range of polishing works

*Protection from electric shock

PV7000C : double insulation, PV7001C : by grounding

PV7001

The economy version of PV7001C ;

Features single speed without electronic control.

GV7000C

Easy-to-control Disc Sander has been developed on the same concepts as the PV line-up.

Features variable speed from 2,500 to 4,700 rpm. (without speed selecting button)

GV7000

The economy version of GV7000C ;

Features single speed without electronic control.

Specifications

| Model | Voltage (V) | Current (A) | Cycle (Hz) | Continuous Rating (W) | | Max. Output (W) |
|---------|-------------|-------------|------------|-----------------------|--------|-----------------|
| | | | | Input | Output | |
| PV7000C | 100 | 9.5 | 50/60 | 900 | 400 | 1,000 |
| | 110 | 8.6 | 50/60 | 900 | 400 | 1,000 |
| PV7001C | 120 | 7.9 | 50/60 | 900 | 400 | 1,000 |
| GV7000C | 220 | 4.3 | 50/60 | 900 | 400 | 1,000 |
| | 230 | 4.1 | 50/60 | 900 | 400 | 1,000 |
| | 240 | 3.9 | 50/60 | 900 | 400 | 1,000 |

| Model | Voltage (V) | Current (A) | Cycle (Hz) | Continuous Rating (W) | | Max. Output (W) |
|------------------|-------------|-------------|------------|-----------------------|--------|-----------------|
| | | | | Input | Output | |
| PV7001 GV7000 | 100 | 5.8 | 50/60 | 550 | 300 | 450 |
| | 110 | 5.3 | 50/60 | 550 | 300 | 450 |
| | 120 | 4.8 | 50/60 | 550 | 300 | 450 |
| | 220 | 2.6 | 50/60 | 550 | 300 | 450 |
| | 230 | 2.5 | 50/60 | 550 | 300 | 450 |
| | 240 | 2.4 | 50/60 | 550 | 300 | 450 |

| | PV7000C | PV7001C | PV7001 | GV7000C | GV7000 |
|---|--------------------------------|--------------|-----------------------|-----------------------|--------|
| No load speed : min-1=rpm | 600 / 600 - 2,000 (Changeable) | | 1,700 | 2,500 - 4,700 | 4,700 |
| Polishing/sanding capacity : mm (") | Wool bonnet 180 (7) | | | Abrasive disc 180 (7) | |
| Speed electing button for Low (single) or High (variable) | Yes | | No | No | |
| Variable speed control dial | Yes | | No | Yes | No |
| Electronic speed control | Yes | | No | Yes | No |
| Electronic soft start | Yes | | No | Yes | No |
| Protection from electric shock | Double insulation | By grounding | | Double insulation | |
| Overall length : mm (") | 210 (8-1/4) | | | 210 (8-1/4) | |
| Net weight : kg (lbs) | 2.0 (4.4) | | | 2.0 (4.4) | |
| Cord length : m (ft) | 2.5 (8.2) | | 4.0 (13.1) for Europe | | |

► **Standard equipment**

PV7000C, PV7001C, PV7001 :
Wrench 17, Side Grip, Pad 165 (Hook and Loop type)
GV7000C, GV7000 :
Wrench 17, Side Grip, Lock Nut Wrench 28, Sanding Lock Nut,
Abrasive Disc 180 (#80), Rubber Pad 170 (Conventional type)

Note : The standard equipment for the machine may differ from country to country.

► **Optional accessories**

PV7000C, PV7001C, PV7001 :
Sanding Lock Nut, Lock Nut Wrench 28, Sponge Pad 190, Wool Pad 180 (Hook & Loop type),
Abrasive Disc 180 (for sanding metal surface ; #16, #20, #24, #30, #50,#80, #100, #120) Wool Bonnet 180,
Rubber Pad 170 (Conventional type),
GV7000C, GV7000 :
Abrasive Disc 180 (for sanding metal surface) ; #16, #20, #24, #30, #50, #80, #100, #120

► **Features and benefits**

PV7000C, PV7001C, GV7000C

Variable Speed Control Dial

Optimum speed can be selected for a wide range as follows.
PV7000C, PV7001C : 600 - 2,000 min⁻¹
GV7000C : 2,500 - 4,700 min⁻¹

| PV7000C, PV7001C | | |
|------------------|-------|-------------------------------|
| Dial | rpm. | Purpose |
| 1 | 600 | Spreading polishing materials |
| 2 | 800 | General polishing work |
| 3 | 1,300 | |
| 4 | 1,800 | |
| 5 | 2,000 | High speed polishing work |

| GV7000C | |
|---------|-------|
| Dial | rpm. |
| 1 | 2,500 |
| 2 | 2,800 |
| 3 | 3,500 |
| 4 | 4,200 |
| 5 | 4,700 |

More Compact in Size, Lighter in Weight for the Most Controlled Polishing/Sanding

Compared with Makita's existing Model 9218PB(L) ;
• Lower in total height by 13mm (1/2")
• Lighter in weight by 0.9kg (2.0lbs)

Cord Guard Improved More in Durability and Flexibility

Protects power supply cord from disconnection.

PV7000C, PV7001C, GV7000C

Electronic Speed Control

Even when the machine is loaded, assures the least speed reduction for effective operation.

Ideally Balanced Design for Steady Polishing / Sanding

Because of the shortened interval between the backing pad and the gear housing, lower center of gravities is given to the machine for steadier polishing/sanding.

PV7000C, PV7001C

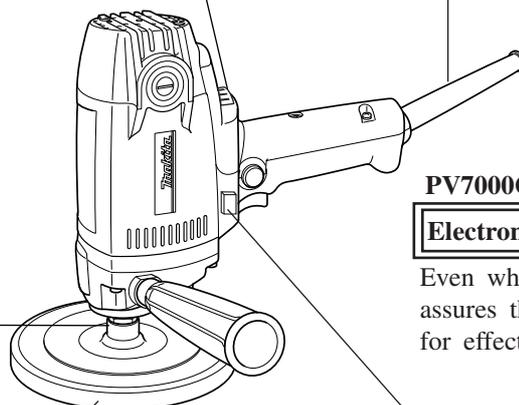
Speed Selecting Button for Low/600rpm (Single) and High/600-2,000rpm (Variable)

Simply push the button to select the optimum speed for your work.
Perfect function for a series of car polishing works from spreading polish compounds with no splash to polishing paint coated surfaces for a beautiful finish.

PV7000C, PV7001C, PV7001

"Hook & Loop" Backing Pad

For quick replacement of polishing accessories
*Note;
These polishers also accept the conventional rubber pad. GV7000C and GV7000 are equipped with the conventional rubber pads.



► Comparison of products

● Polishers

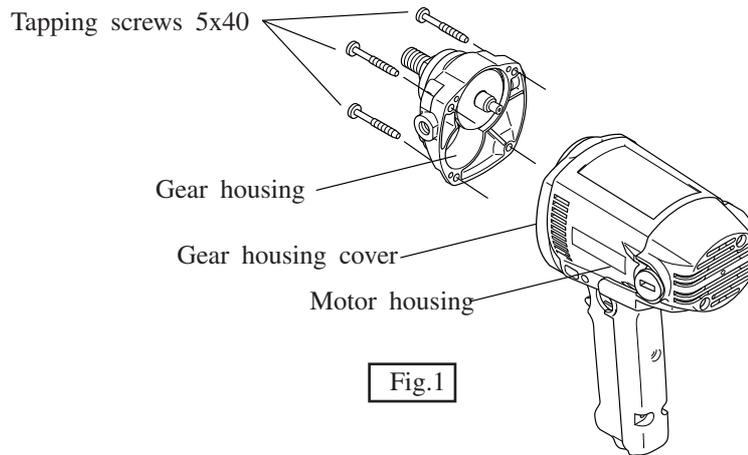
| Model | | Makita | | | | Competitor A | | Competitor B |
|--------------------------------|----------------|--|--------|---|---------|---------------------|--------------|---|
| | | PV7000C / PV7001C | PV7001 | 9218PB | 9218PBL | A-1 | A-2 | B-1 |
| Continuous rating input (W) | | 900 | 550 | 570 | 860 | 950 | 550 | 530 |
| No load speed : min-1=rpm | | 600 / 600 - 2,000 (Changeable) | 1,700 | 2,000 | 1,400 | 650 / 2,000 2 speed | 700 - 1,200 | 1,500 |
| Pad diameter : mm (") | | 180 (7) | | 180 (7) | | 180 (7) | | 180 (7) |
| Electronic | Speed control | Yes | No | No | | No | | No |
| | Constant speed | Yes | No | No | | Yes | Feed back | No |
| Material of motor housing | | Resin | | Resin | | Resin | | Aluminum |
| Protection from electric shock | | By grounding : PV7001C, PV7001 Double insulation : PV7000C | | Double insulation | | Double insulation | By grounding | By grounding |
| Overall length : mm (") | | 210 (8-1/4) | | 223 (8-3/4) | | 235 (9-1/4) | | 216 (8-1/2) |
| Net weight : kg (lbs) | | 2.0 (4.4) | | 2.9 (6.4) | | 2.4 (5.3) | | 3.8 (8.4) |
| Standard equipment | | Pad Side Grip Wrench | | Rubber Pad Wool Bonnet Side Grip Wrench Lock Nut Wrench | | Side Grip Wrench | | Pad Wool Bonnet Side Grip Wrench |

● Sanders

| Model | | Makita | | | Competitor A | Competitor B |
|---------------------------------|--|---|--------|---|--|-----------------------------|
| | | GV7000C | GV7000 | 9218SB | A-3 | B-2 |
| Continuous rating input (W) | | 900 | 550 | 570 | 550 | 530 |
| No load speed : min-1=rpm | | 2,500 - 4,700 | 4,700 | 4,000 | 2,700 - 4,500 | 4,000 |
| Abrasive disc diameter : mm (") | | 180 (7) | | 180 (7) | 150(6) | 150 (6) |
| Electronic speed control | | Yes | No | No | No | No |
| Material of motor housing | | Resin | | Resin | Aluminum | Aluminum |
| Protection from electric shock | | Double insulation | | Double insulation | By grounding | By grounding |
| Overall length : mm (") | | 210 (8-1/4) | | 223 (8-3/4) | 216 (8-1/2) | - |
| Net weight : kg (lbs) | | 2.0 (4.4) | | 2.7 (6.0) | 2.1 (4.6) | 3.2 (7.1) |
| Standard equipment | | Rubber Pad Abrasive Disc Side Grip Wrench Lock Nut Wrench | | Rubber Pad Abrasive Disc Side Grip Wrench Lock Nut Wrench | Rubber Pad Abrasive Disc Wrench Lock Nut Wrench | Rubber Pad Abrasive Disc |

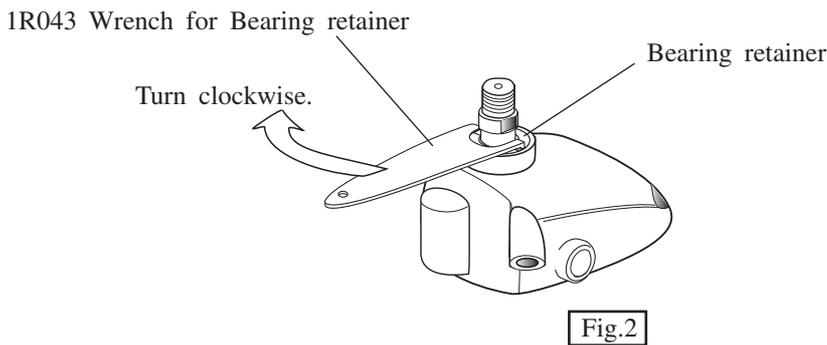
<1> Disassembling gear and ball bearing

(1) Disassembling gear housing by unscrewing 4 pcs. of tapping screws 5x40. See Fig.1.

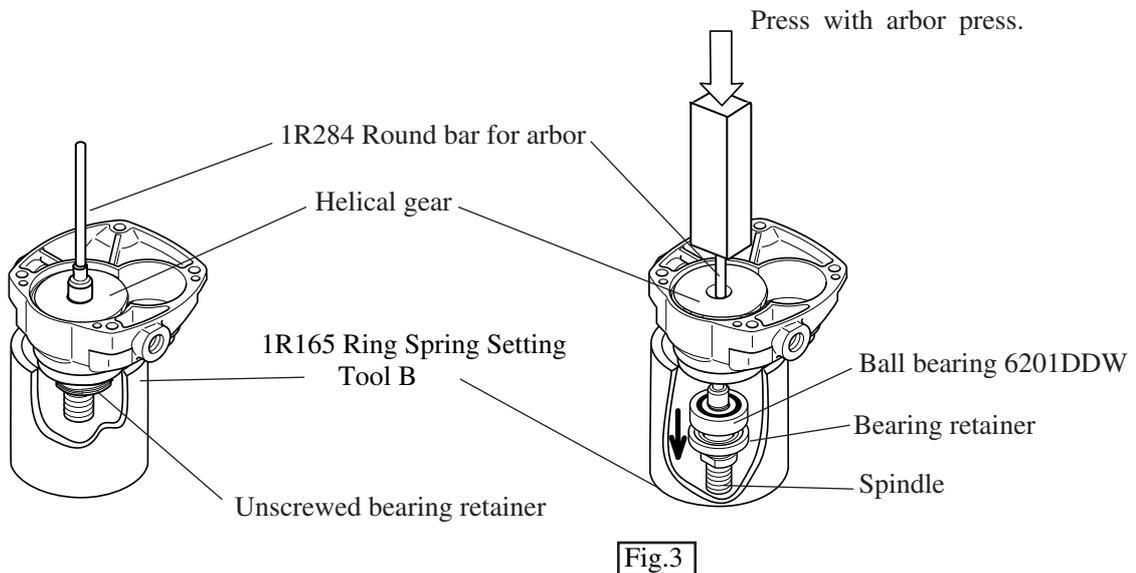


(2) Unscrew bearing retainer clockwise with No.1R043 "wrench for bearing retainer". See Fig.2.

<Note> The bearing retainer can not be separated from gear housing completely in this process, because spindle blocks bearing retainer.



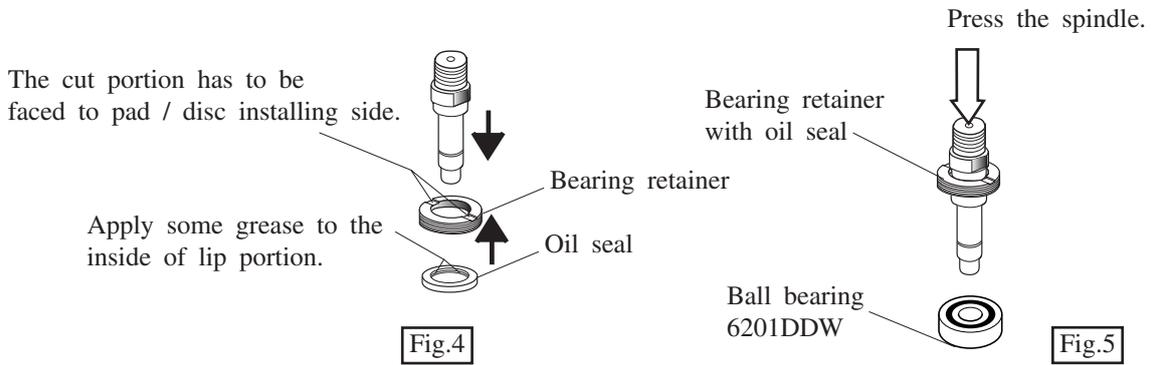
(3) Place gear housing onto No.1R165 "ring spring setting tool B", and press 1R284 "round bar for arbor" which has been placed onto spindle, with arbor press. So spindle can be disassembled from gear housing together with bearing retainer and ball bearing 6201DDW. See Fig.3.



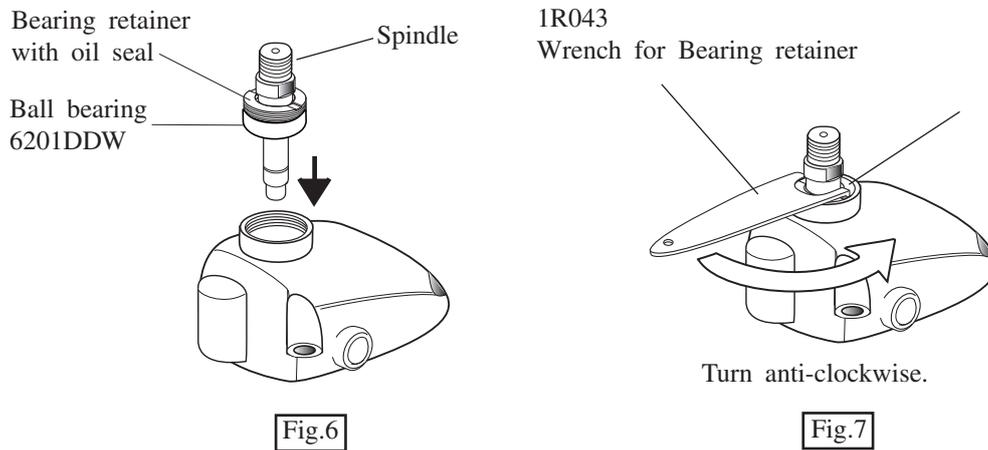
Repair

<2> Assembling gear and ball bearing

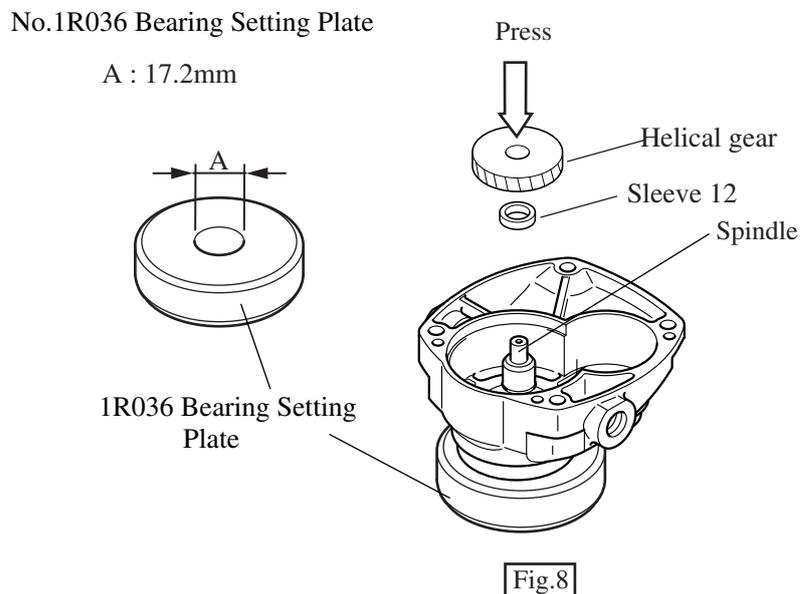
- (1) Assemble oil seal to bearing retainer. And then, assemble spindle to the bearing retainer as illustrated in Fig.4.
- (2) Assemble spindle to ball bearing 6201DDW by pressing it as illustrated in Fig.5.



- (3) Insert the spindle into gear housing as illustrated in Fig.6. And then, screw bearing retainer anti-clockwise into gear housing as illustrated in fig. 7.



- (4) Place the gear housing on No.1R036 "bearing setting plate" And then, assemble sleeve 12 and helical gear to spindle as illustrated in Fig. 8.



▶ Repair

<3> Disassembling armature

- (1) Take off accessories (rubber pad, abrasive disc. etc.) from the machine, and remove carbon brush.
- (2) Disassemble gear housing from motor housing by unscrewing 4 pcs. of tapping screws 5x40. See Fig.9. In case of Mod.PV7001 and PV7001C, disconnect the grounding lead wire from gear housing cover by unscrewing pan head screw. See Fig. 9A.

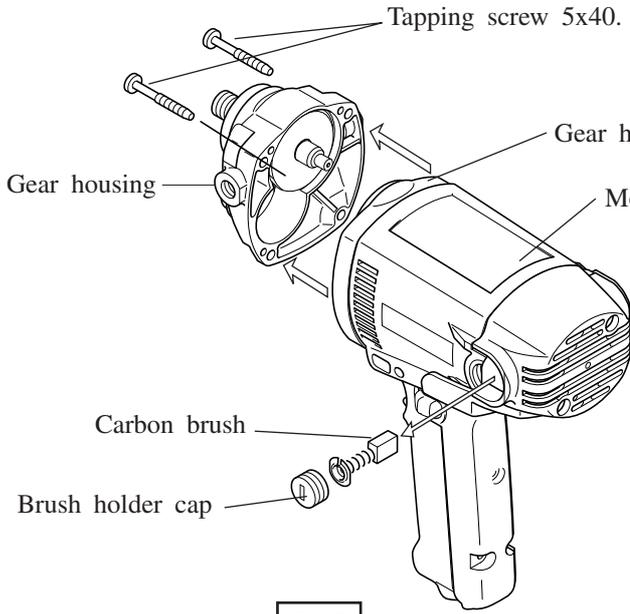


Fig.9

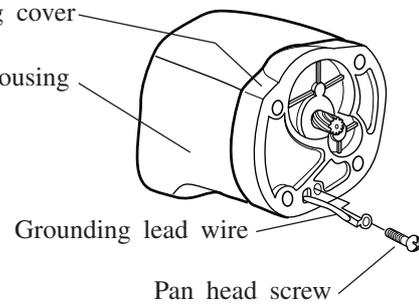


Fig. 9A

- (3) Disassemble gear housing cover from motor housing and take out armature from motor housing. See Fig.10.

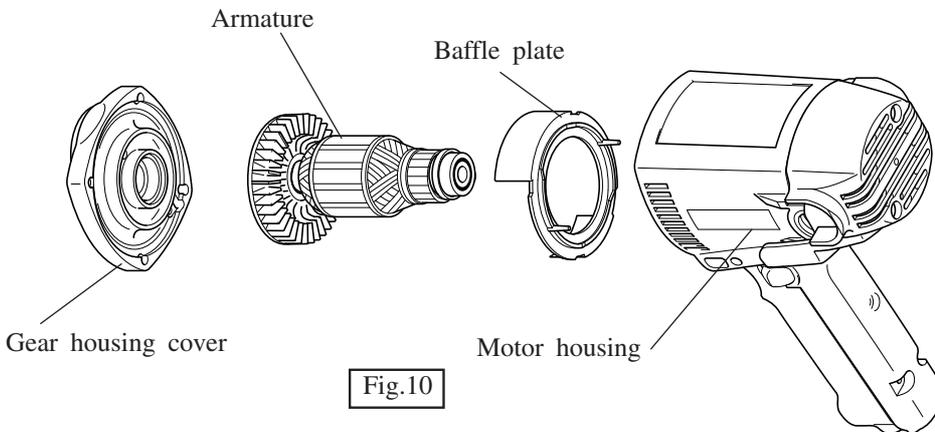


Fig.10

▶ Caution

The caution is carved on the side grip for Model PV7000C as illustrated in Fig. 11. For efficiently prevention of static electricity accumulation, the above side grip is conductive in comparing with other side grips. Therefore, you would not be protected from electric shock, when you would hit the live wire with the other machine equipped with this side grip, for example, drill, hammer drill or angle grinder, etc.

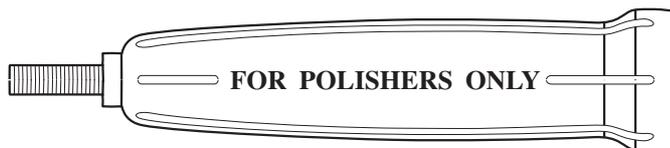
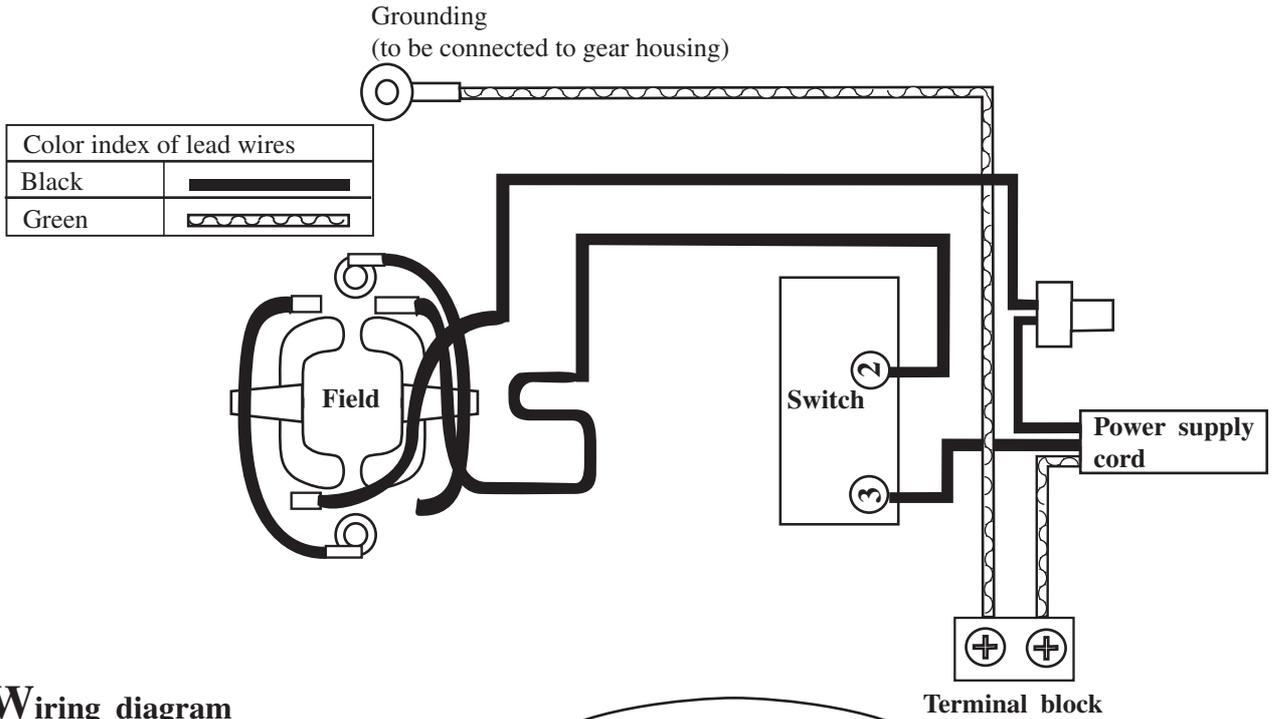


Fig.11

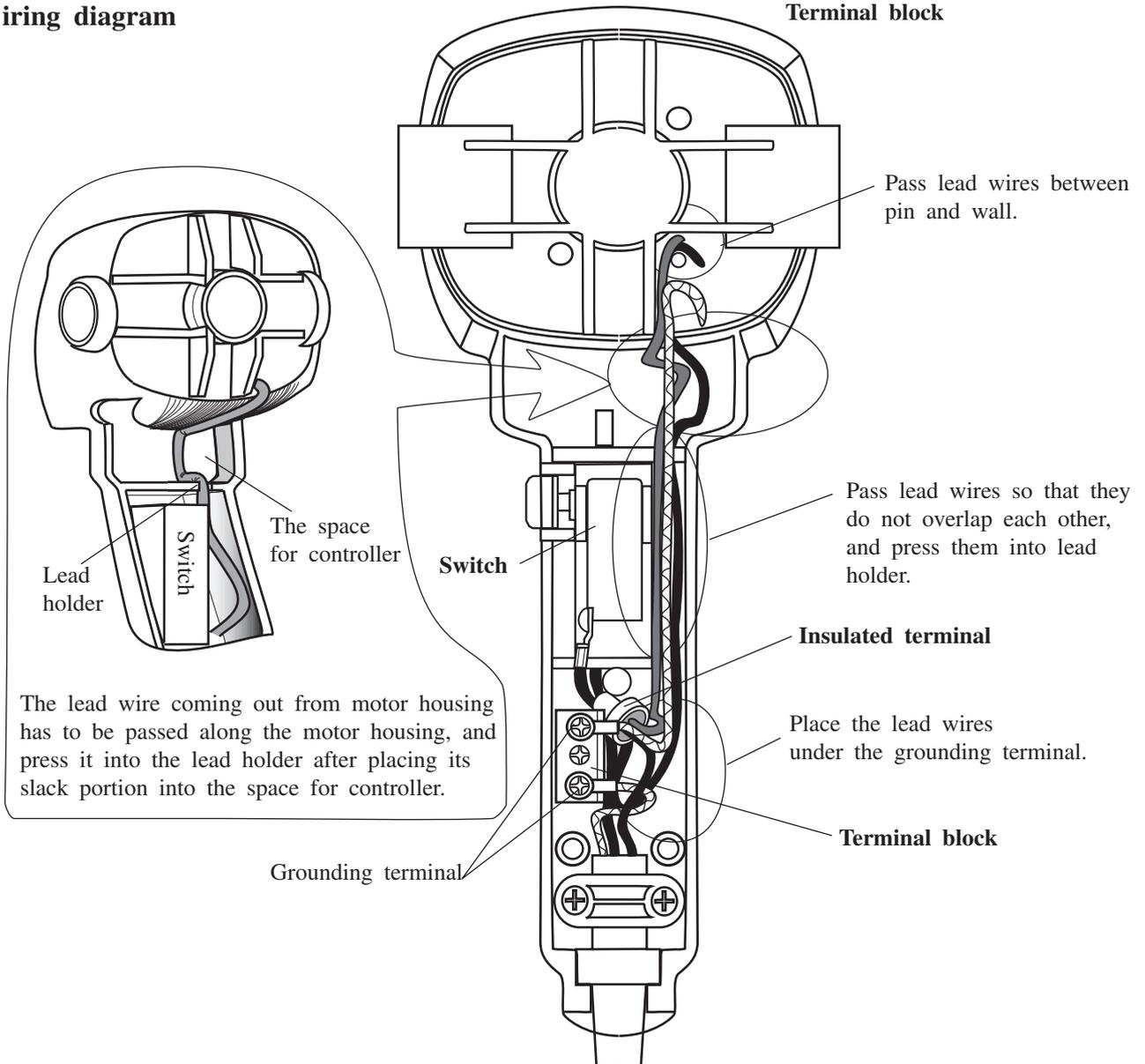
Do not install this side grip on other than PV7000C.

► **Circuit diagram**

PV7001 (grounding type) equipped with 2 terminal switch, without controller



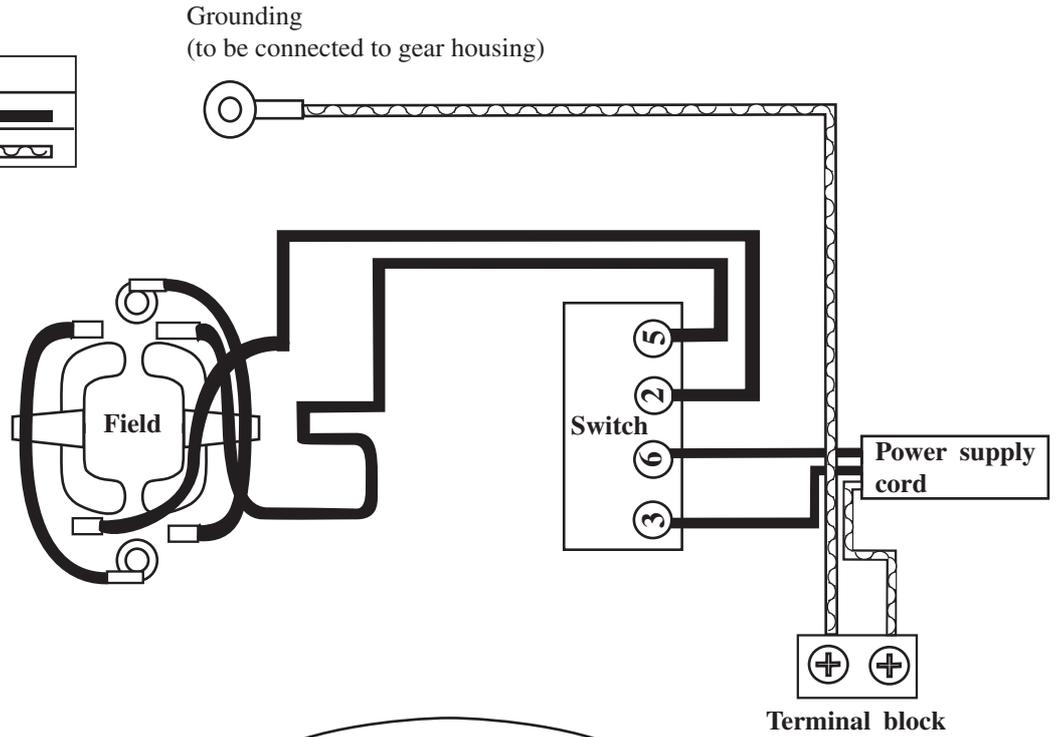
► **Wiring diagram**



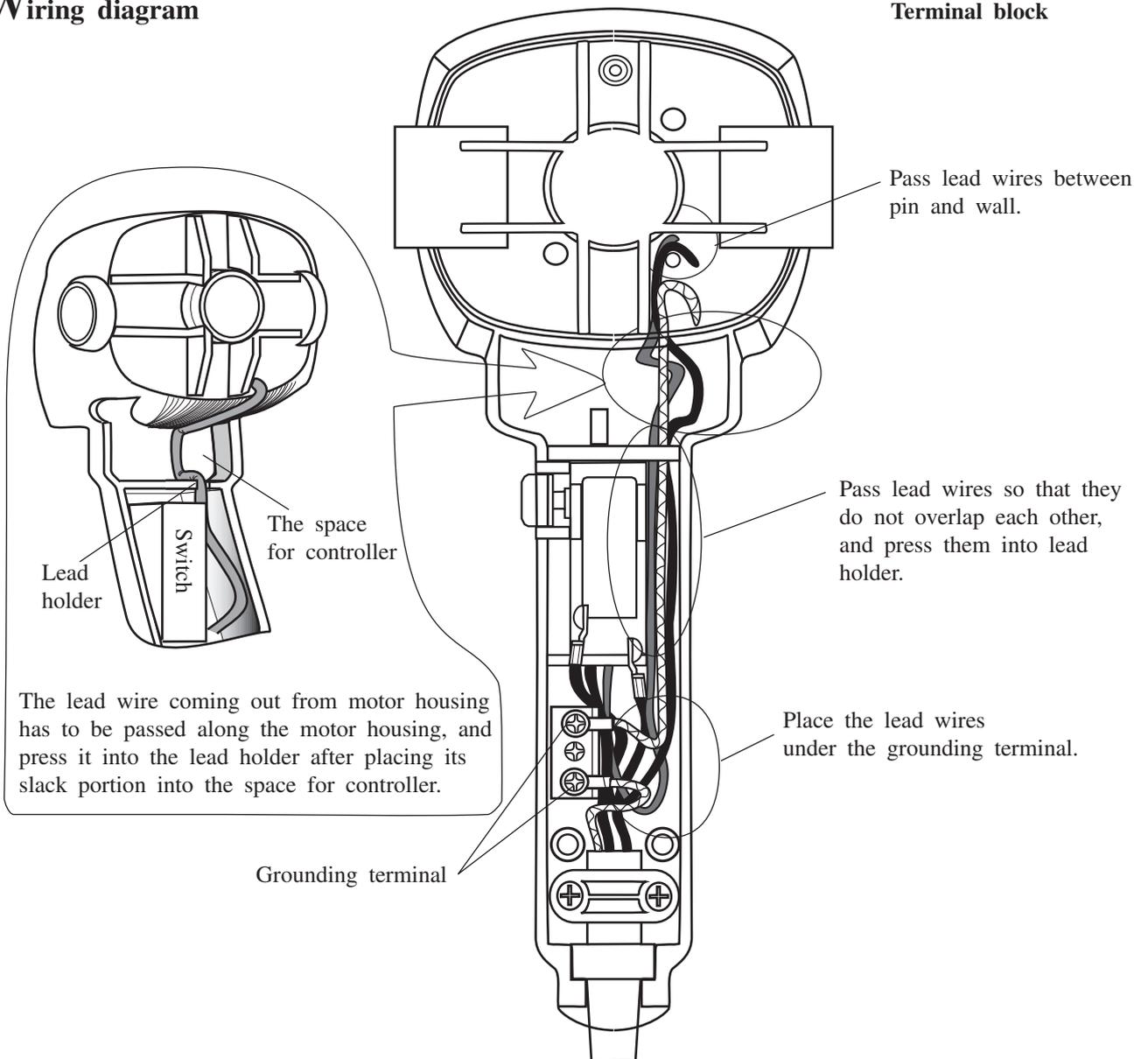
▶ **Circuit diagram**

PV7001 (grounding type) equipped with 4 terminal switch, without controller

| Color index of lead wires | |
|---------------------------|---|
| Black |  |
| Green |  |



▶ **Wiring diagram**

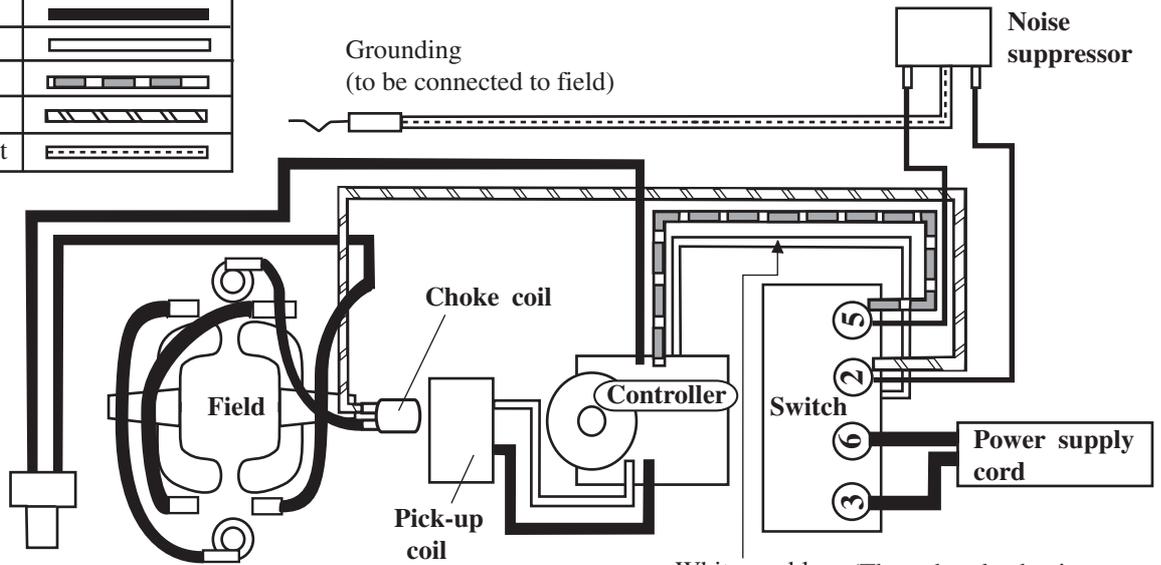


► **Circuit diagram**

PV7000C equipped with controller, 4 terminal switch, noise suppressor

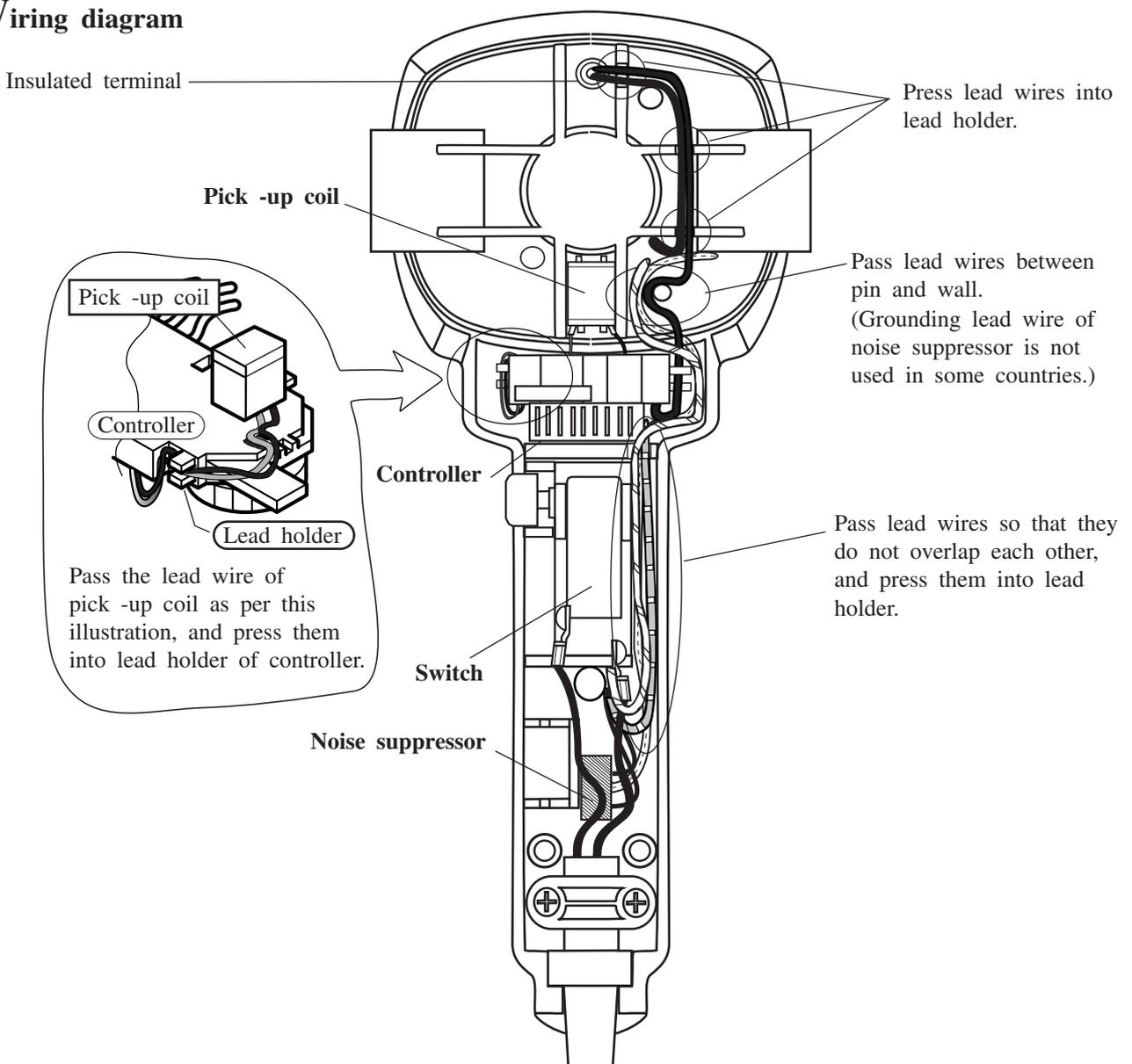
(for the market where the noise suppressor is required)

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



White or blue (The other lead wires are as per the color index listed above.)

► **Wiring diagram**

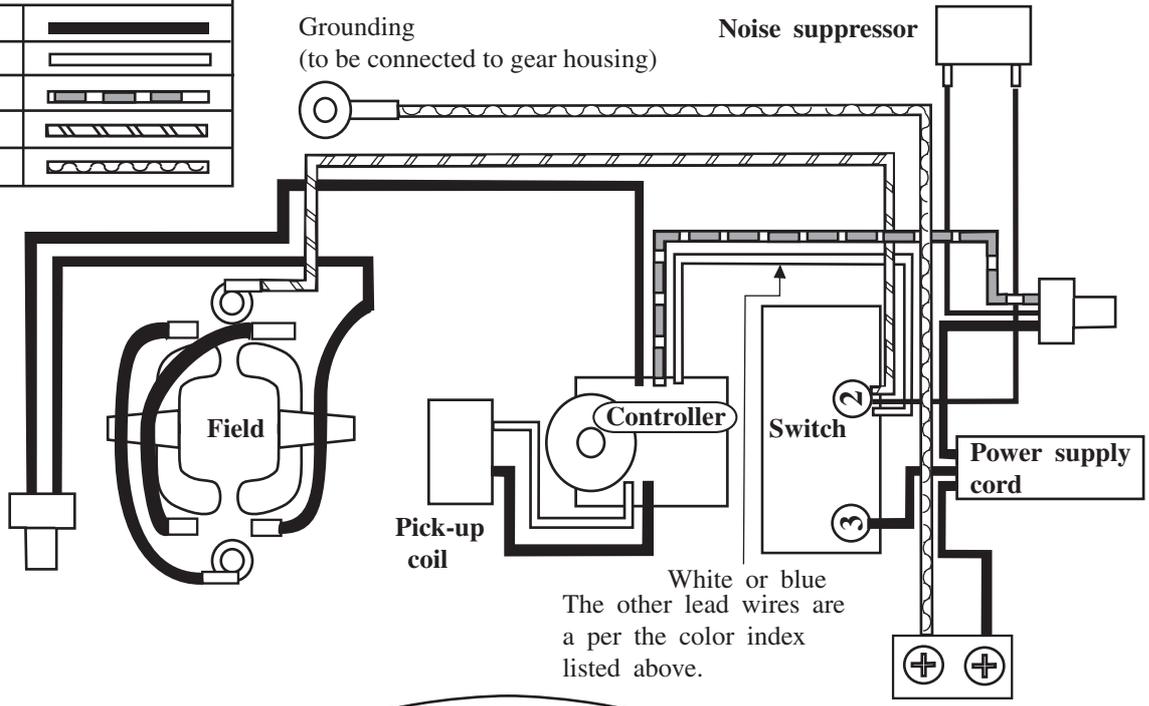


▶ **Circuit diagram**

PV7001C (grounding type) equipped with controller and 2 terminal switch

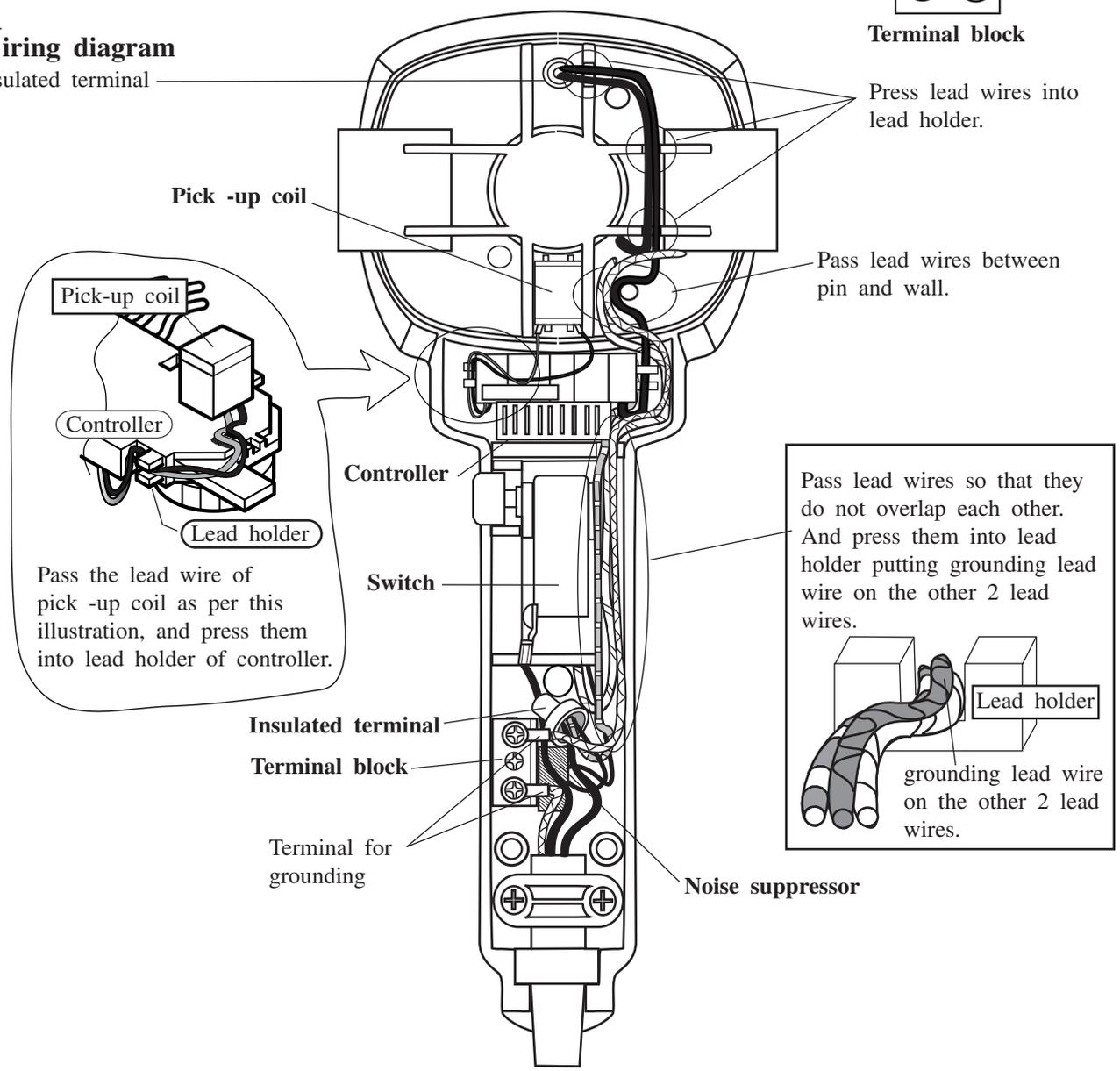
(The noise suppressor is not used in some countries.)

| Color index of lead wires | |
|---------------------------|--|
| Black | |
| White | |
| Red | |
| Orange | |
| Green | |



▶ **Wiring diagram**

Insulated terminal

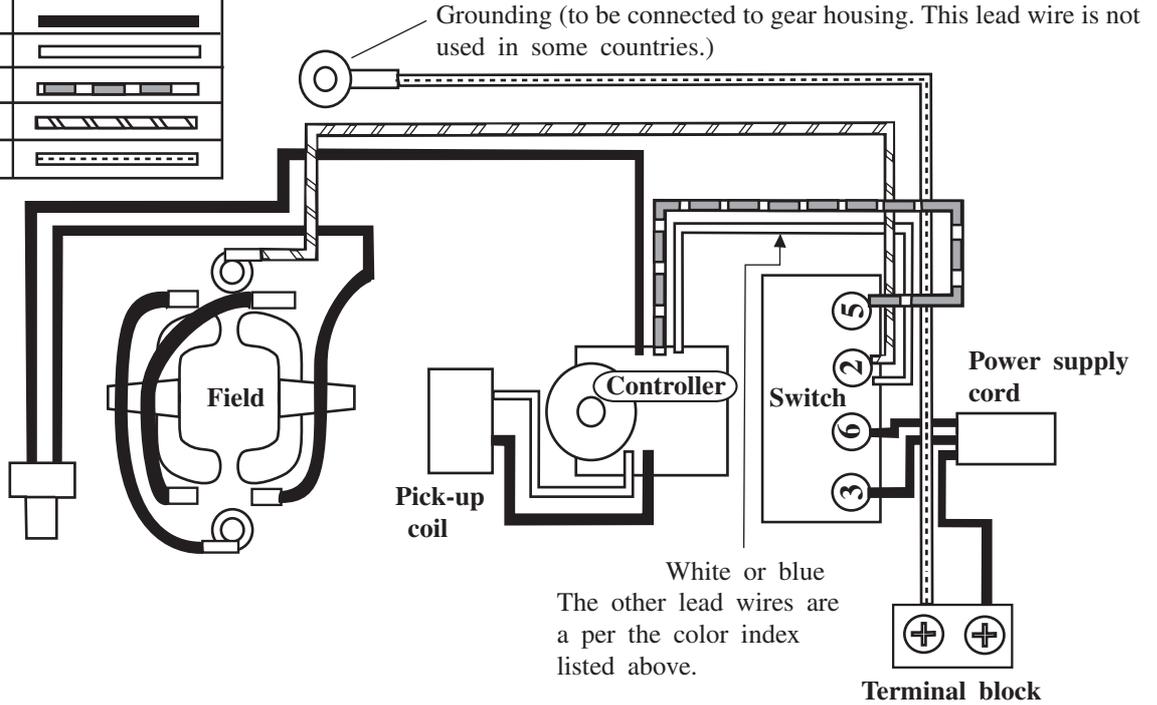


► **Circuit diagram**

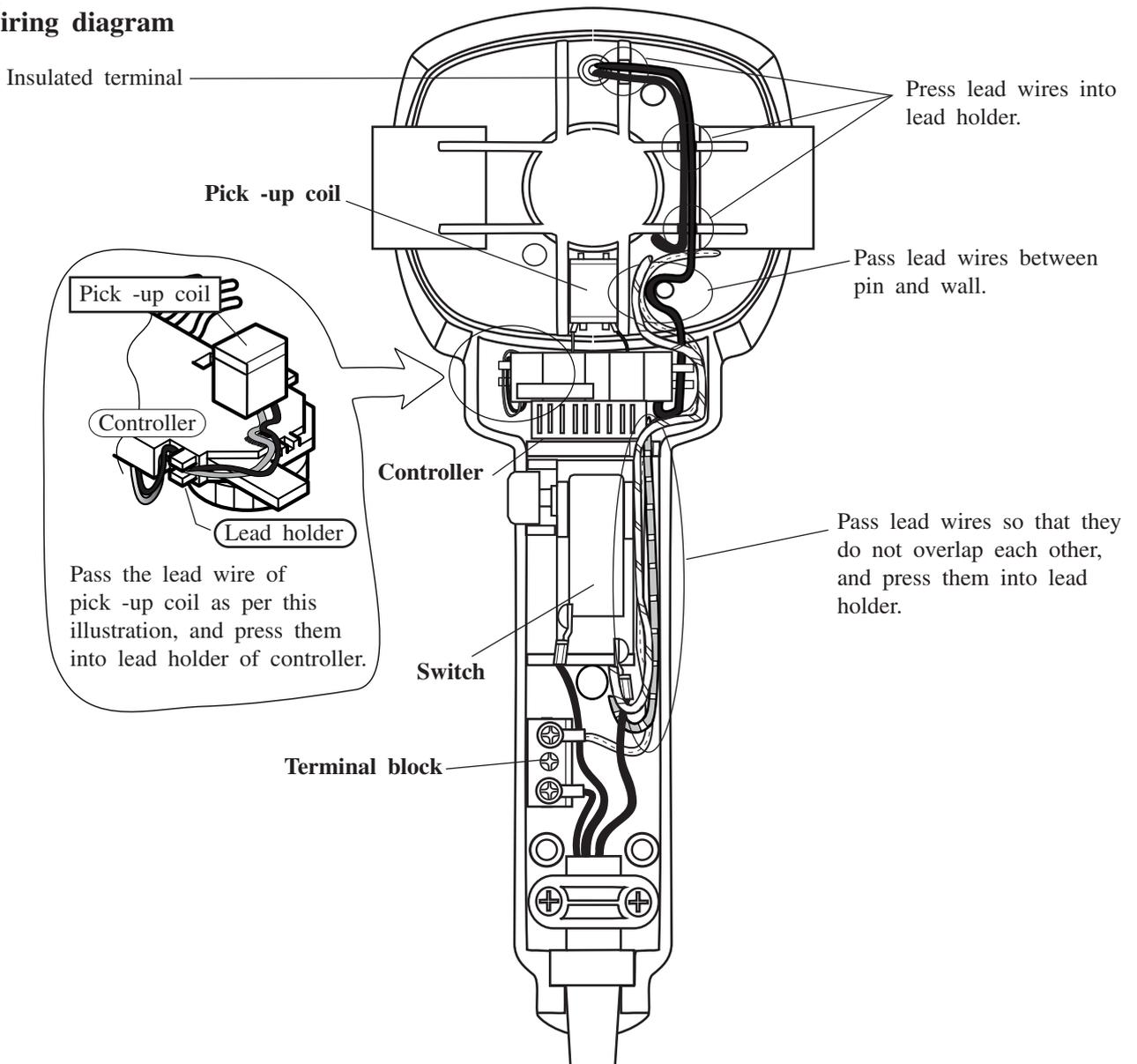
PV7001C (grounding type) equipped with controller and 4 terminal switch

(for the market where the noise suppressor is not required)

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



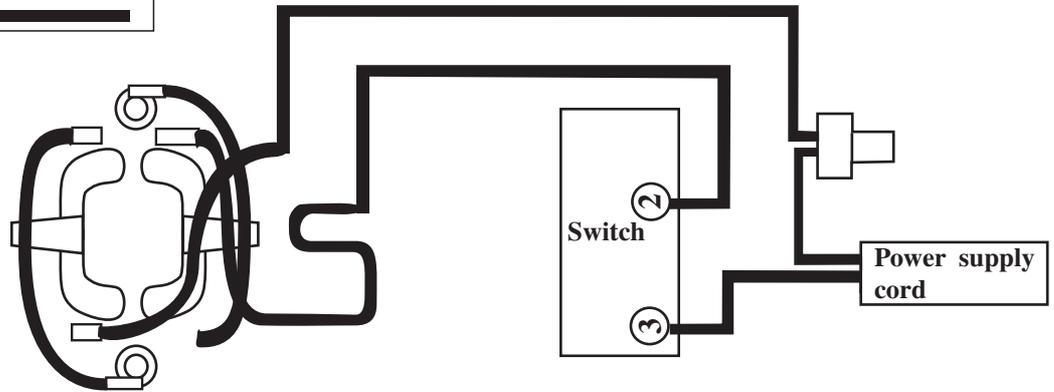
► **Wiring diagram**



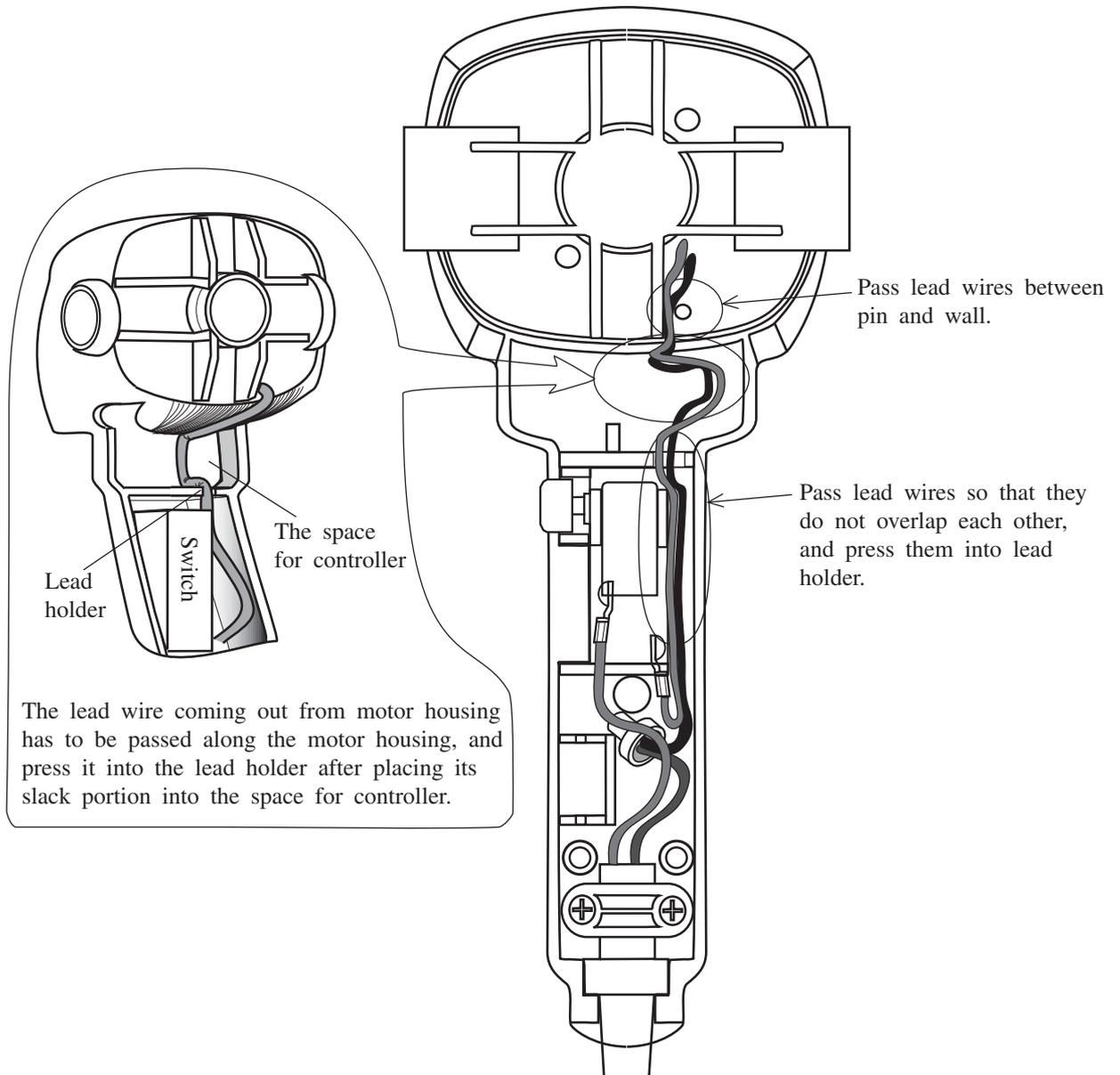
► **Circuit diagram**

GV7000 equipped with 2 terminal switch, without controller

| Color index of lead wires | |
|---------------------------|---|
| Black |  |



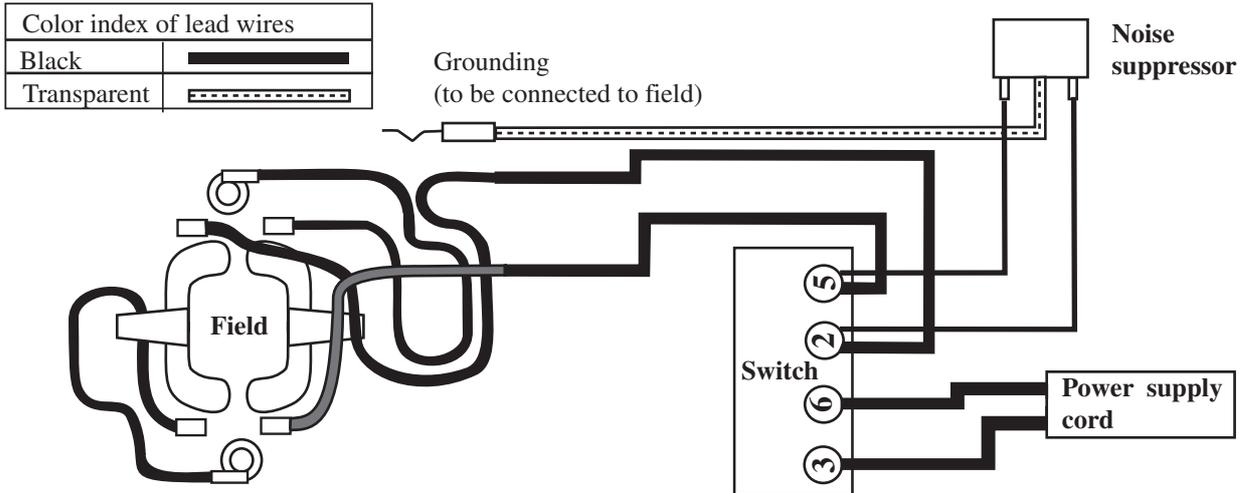
► **Wiring diagram**



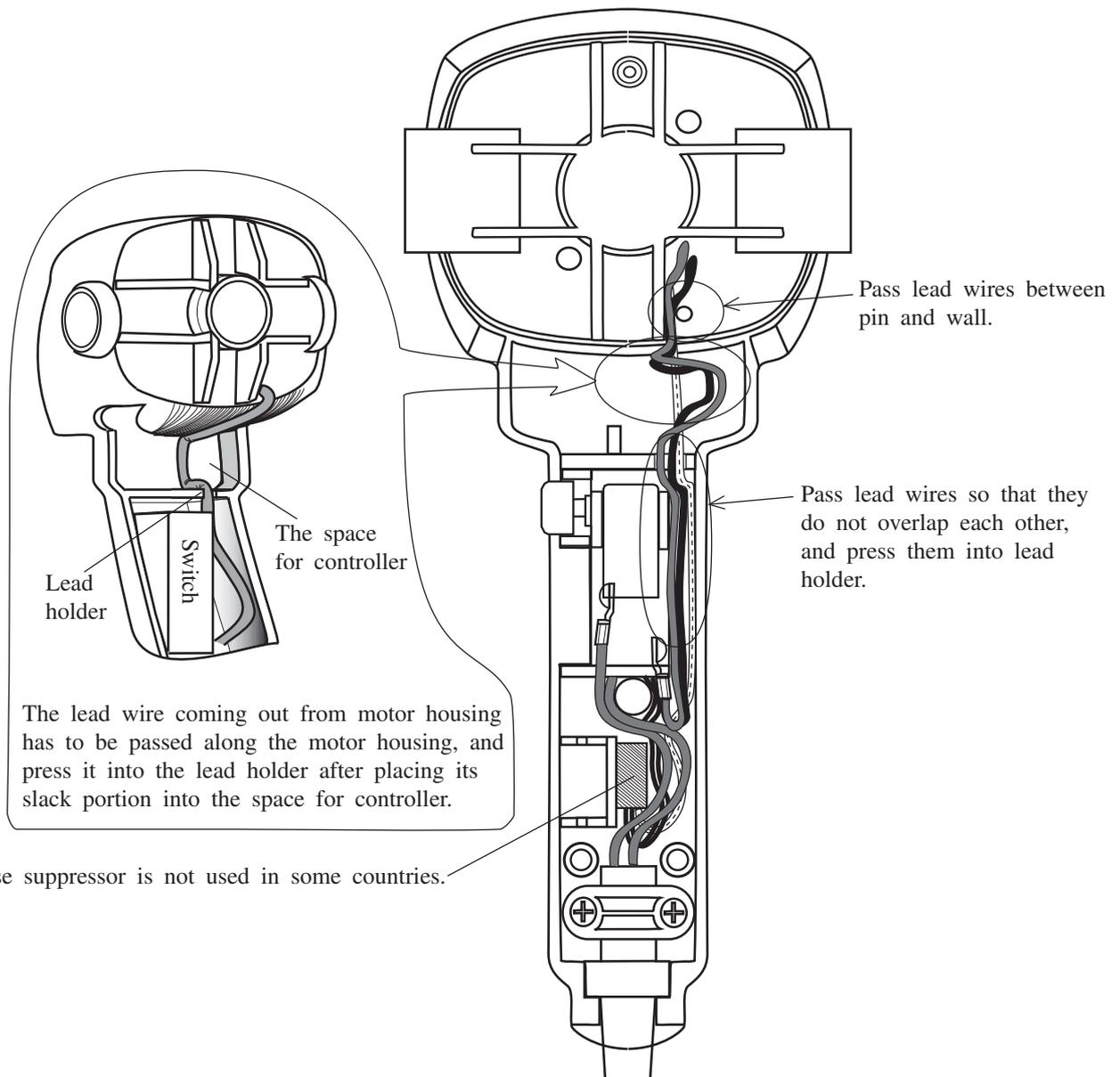
► **Circuit diagram**

GV7000 equipped with 4 terminal switch and noise suppressor, without controller

(The noise suppressor is not used in some countries.)



► **Wiring diagram**

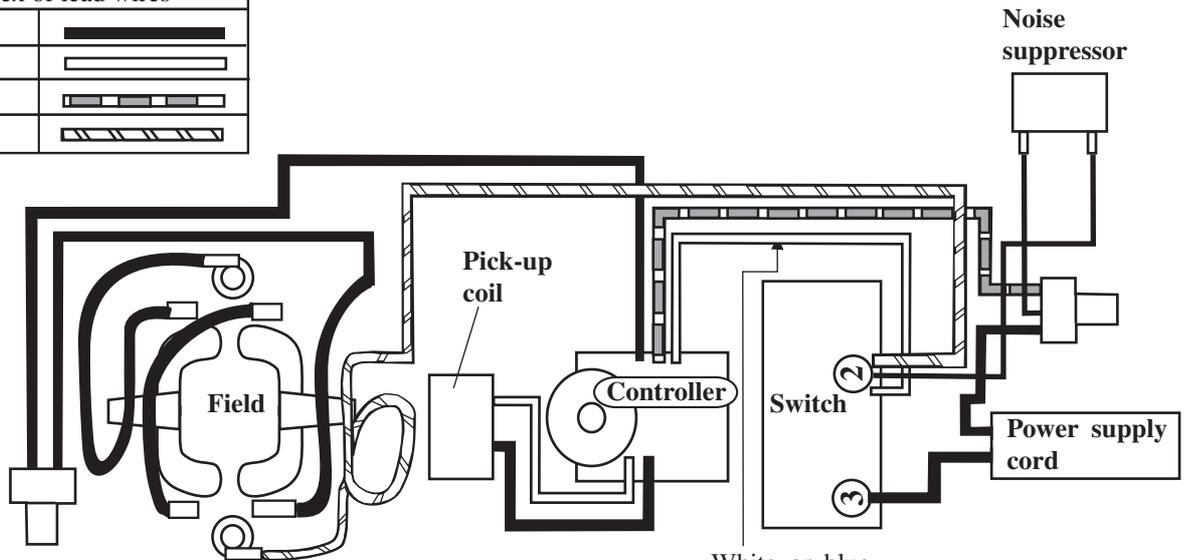


► **Circuit diagram**

GV7000C equipped with controller and 2 terminal switch,

(Noise suppressor is not used in some countries.)

| Color index of lead wires | |
|---------------------------|---|
| Black |  |
| White |  |
| Red |  |
| Orange |  |



White or blue
The other lead wires are
a per the color index
listed above.

► **Wiring diagram**

Insulated terminal

Press the lead wires
into the lead holder.

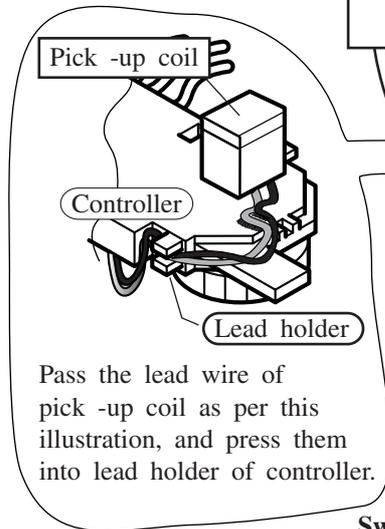
Pass the lead wires
between pin and wall.

Pick -up coil

Controller

Press the lead wires
into the lead holder of
controller.

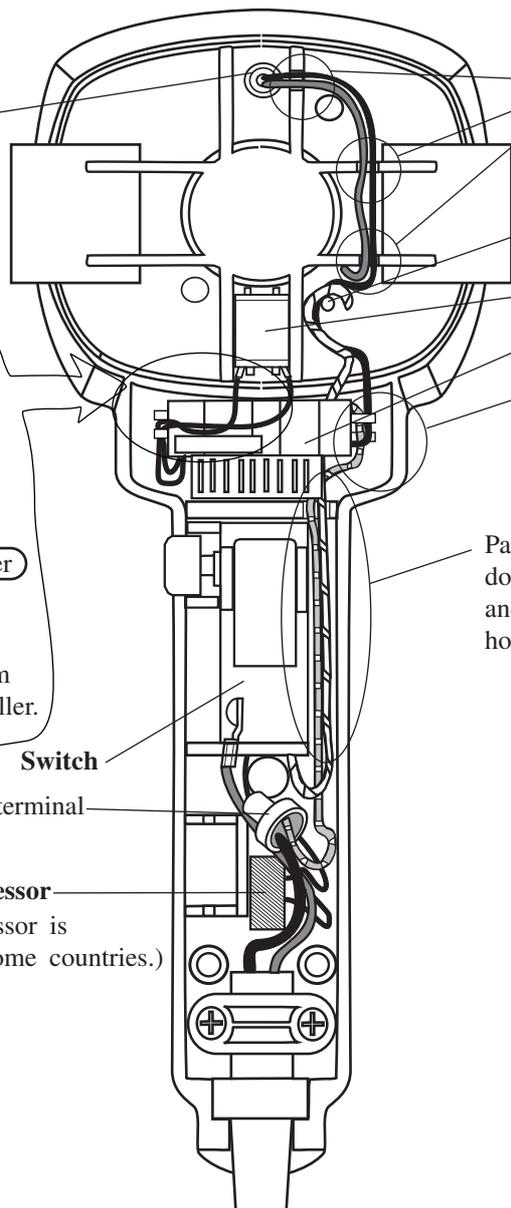
Pass lead wires so that they
do not overlap each other,
and press them into lead
holder.



Switch

Insulated terminal

Noise suppressor
(Noise suppressor is
not used in some countries.)

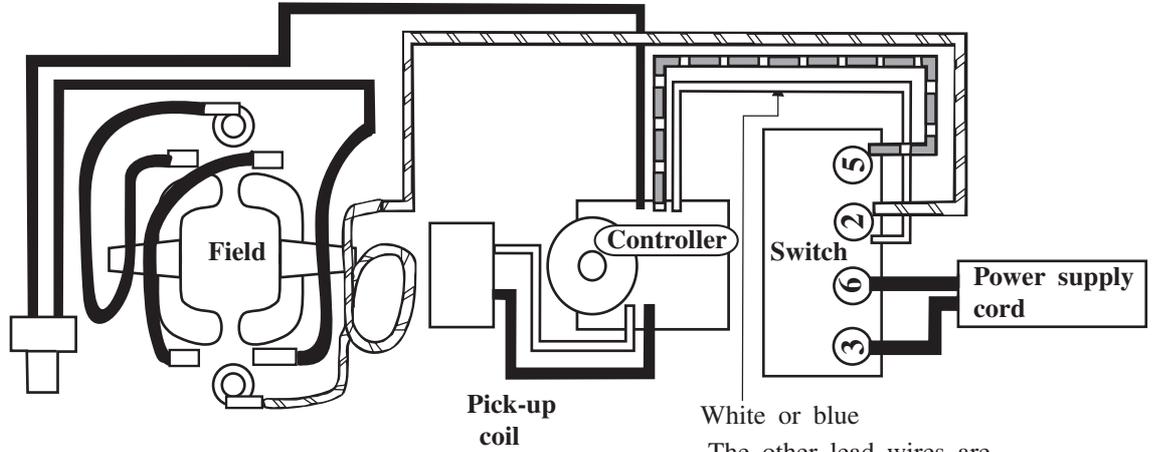


► **Circuit diagram**

GV7000C equipped with controller, 4 terminal switch

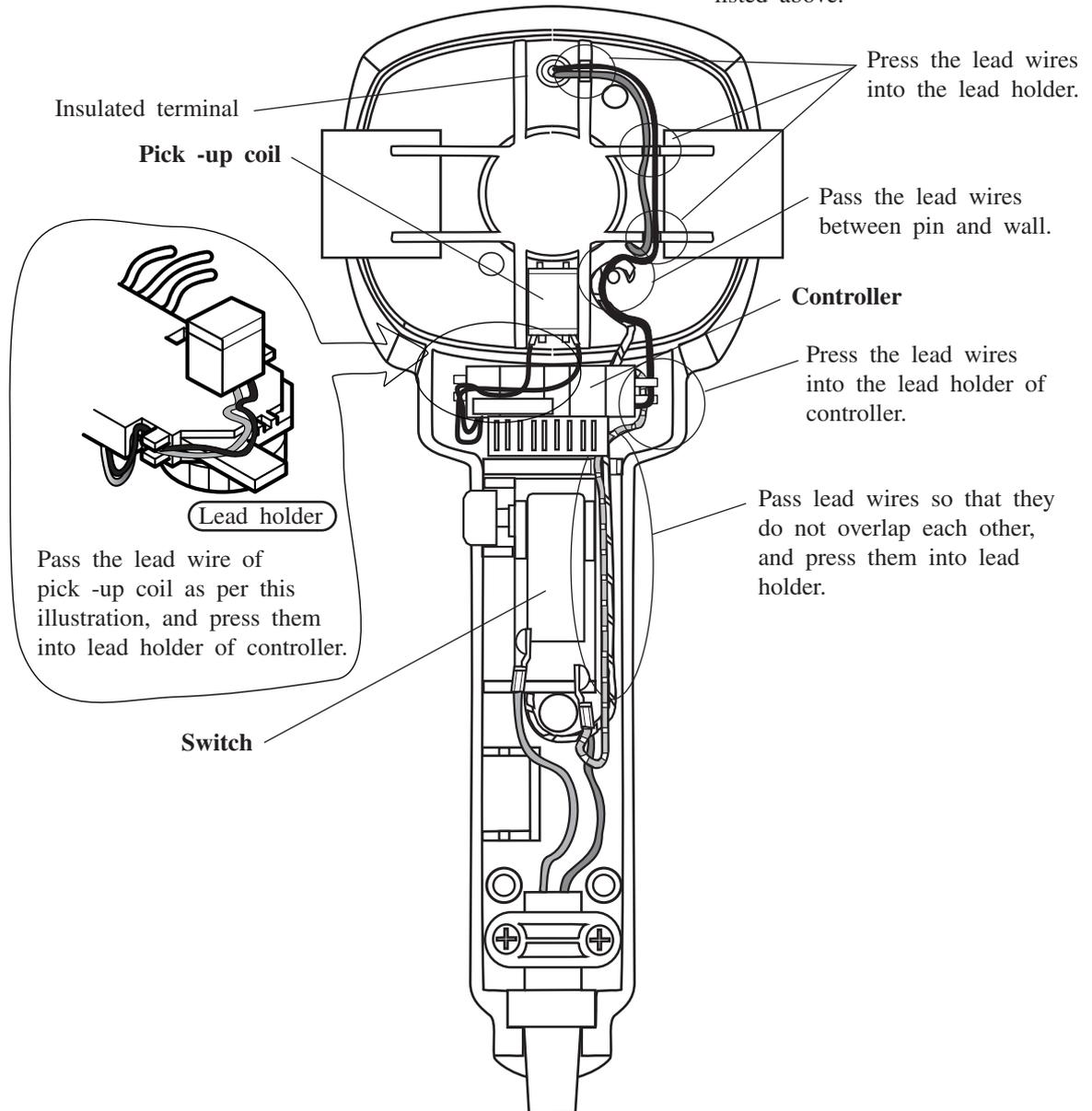
(for the market where the noise suppressor is not required)

| Color index of lead wires | |
|---------------------------|--|
| Black | |
| White | |
| Red | |
| Orange | |



White or blue
The other lead wires are a per the color index listed above.

► **Wiring diagram**



Pass the lead wire of pick-up coil as per this illustration, and press them into lead holder of controller.

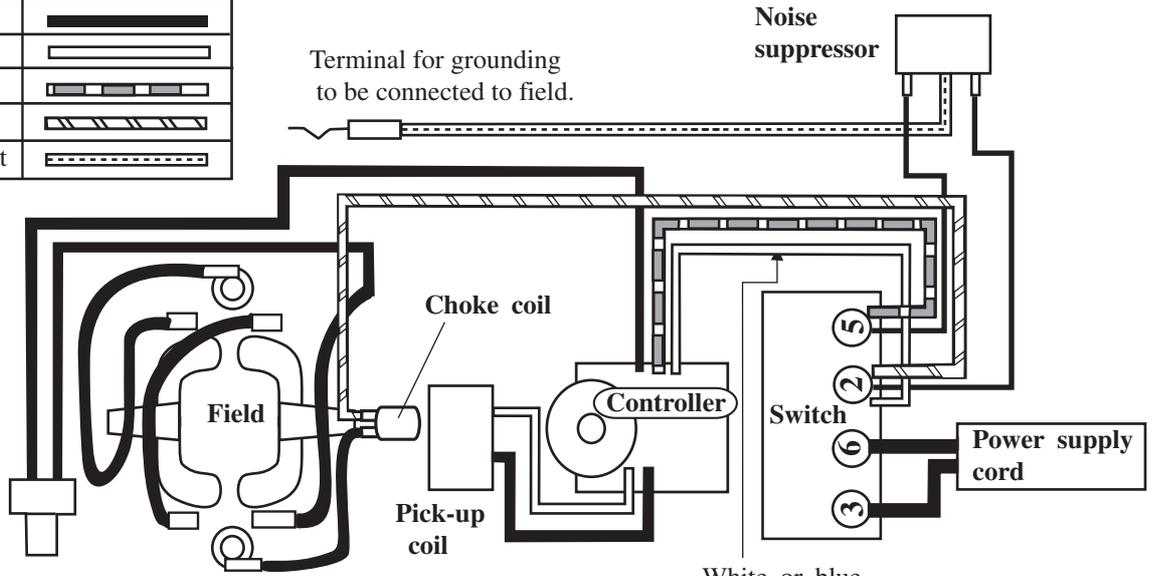
Pass lead wires so that they do not overlap each other, and press them into lead holder.

► **Circuit diagram**

GV7000C equipped with controller, 4 terminal switch, noise suppressor

(for the market where the noise suppressor is required)

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



White or blue
The other lead wires are a per the color index listed above.

► **Wiring diagram**

