

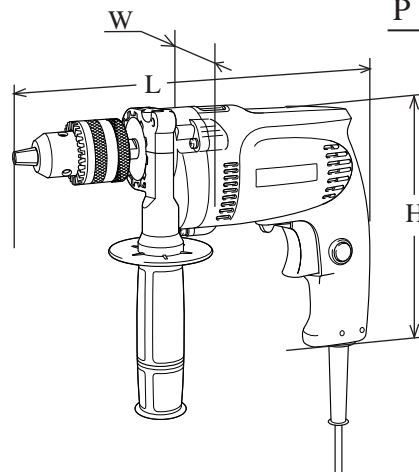
Model No. ▶ MT811

Description ▶ 13mm (1/2") Hammer Drill

CONCEPT AND MAIN APPLICATIONS

New power tool series from MAKITA

- * Less expensive but service life is as long as existing MAKITA models.
- * Easy to-repair-construction



Dimensions : mm (")	
Length (L)	272 (10-3/4)
Height (H)	194 (7-5/8)
Width (W)	71 (2-13/16)

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
220	2.0	50 / 60	430	220	340
230 / 240	1.9	50 / 60	430	220	340

No load speed : (min -1= rpm)	0 - 2,800	
Blows per min. : (min -1= bpm)	0 - 30,800	
Keyless chuck	No	
Chuck ability : mm (")	1.5 - 13 (1/16 - 1/2)	
Drilling capacity : mm (")	Steel	13 (1/2)
	Wood	18 (11/16)
	Concrete	13 (1/2)
Reverse switch	Yes	
Protection from electric shock	by double insulation	
Cord length : m (ft)	2.0 (6.6)	
Net weight :Kg (lbs)	1.6 (3.5)	

► Standard equipment

- * Chuck key S13 1 pc.
- * Side grip 1 pc.

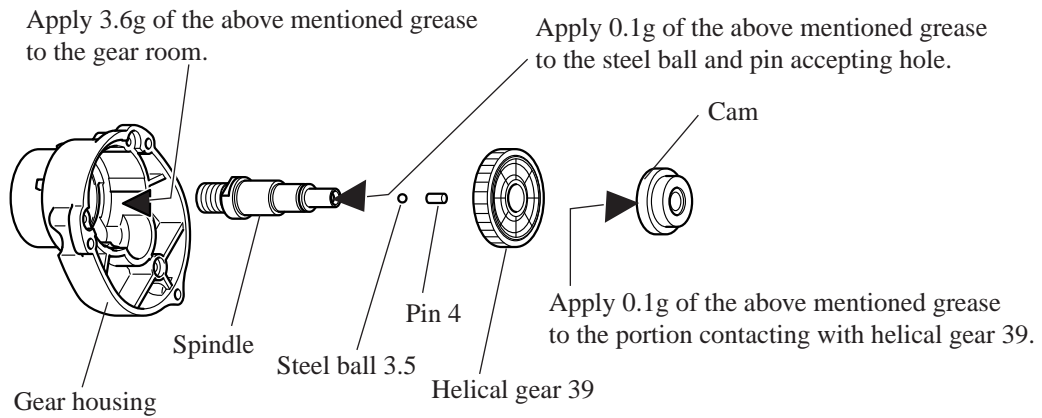
< Note > The standard equipment for the tool shown may differ from country to country.

► Optional accessories

- * Stopper pole

< 1 > Lubrication

Apply MAKITA grease N. No.1 to the following portions marked with black triangle to protect parts and product from unusual abrasion.



< 2 > Disassembling drill chuck

Firmly hold No.1R139 "Drill chuck extractor" with vise. And lock spindle with the drill chuck extractor. Holding No.1R298 "hex socket" with drill chuck, and turn the hex socket with No.1R223 "Torque wrench" anti-clockwise. So drill chuck can be disassembled from spindle. See Fig. 1.

< 3 > Assembling drill chuck

Firmly hold No.1R139 "Drill chuck extractor" with vise. And lock spindle with the drill chuck extractor. Holding No.1R298 "hex socket" with drill chuck, and turn the hex socket with No.1R223 "Torque wrench" clockwise. So drill chuck can be assembled to spindle. See Fig. 1.

<Note in assembling>

Pre-set the fastening torque of the torque wrench with 25 - 30 N.m, when assembling.

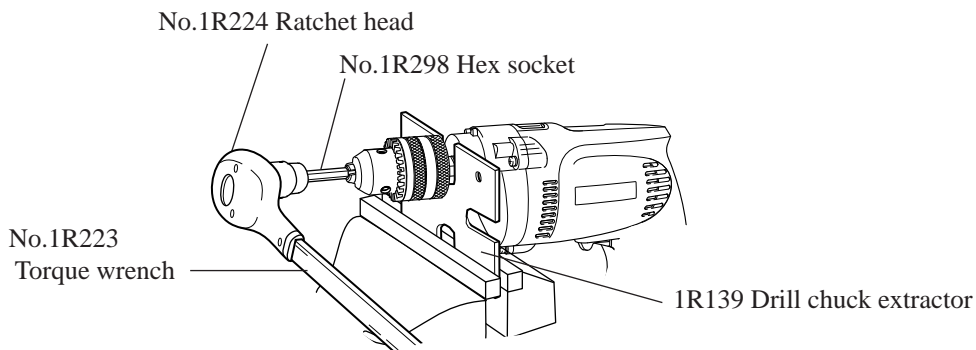


Fig. 1

< 4 > Disassembling and assembling cam

(Disassembling)

Hold inner housing with vise.

Insert the screwdriver into the space between cam and inner housing.

Disassemble cam with the screwdriver as illustrated in Fig. 2.

(Assembling)

Assemble cam by pressing with arbor press as illustrated in Fig. 3.

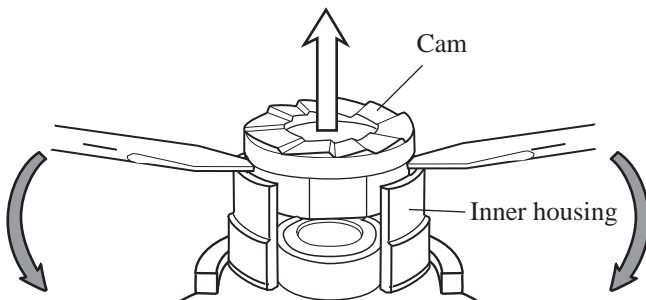


Fig. 2

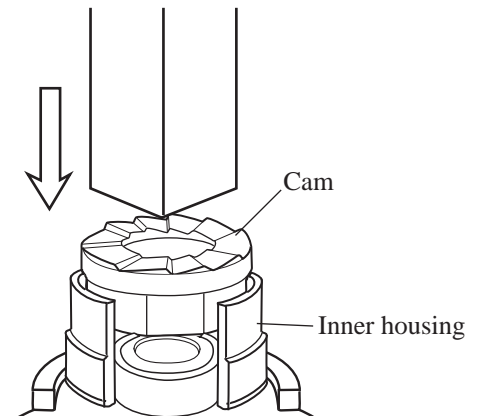


Fig. 3

< 5 > Disassembling helical gear 39 See Fig. 4.

1. Take off retaining ring S12, pin 4 and steel ball 3.5 from spindle.
 2. Set gear housing on No.1R037 "Bearing setting plate", and set No.1R284 "Round bar for arbor" on spindle.
 3. Disassemble spindle by pressing the round bar for arbor set on spindle, with arbor press.
- Then, helical gear 39 can be removed form gear housing.

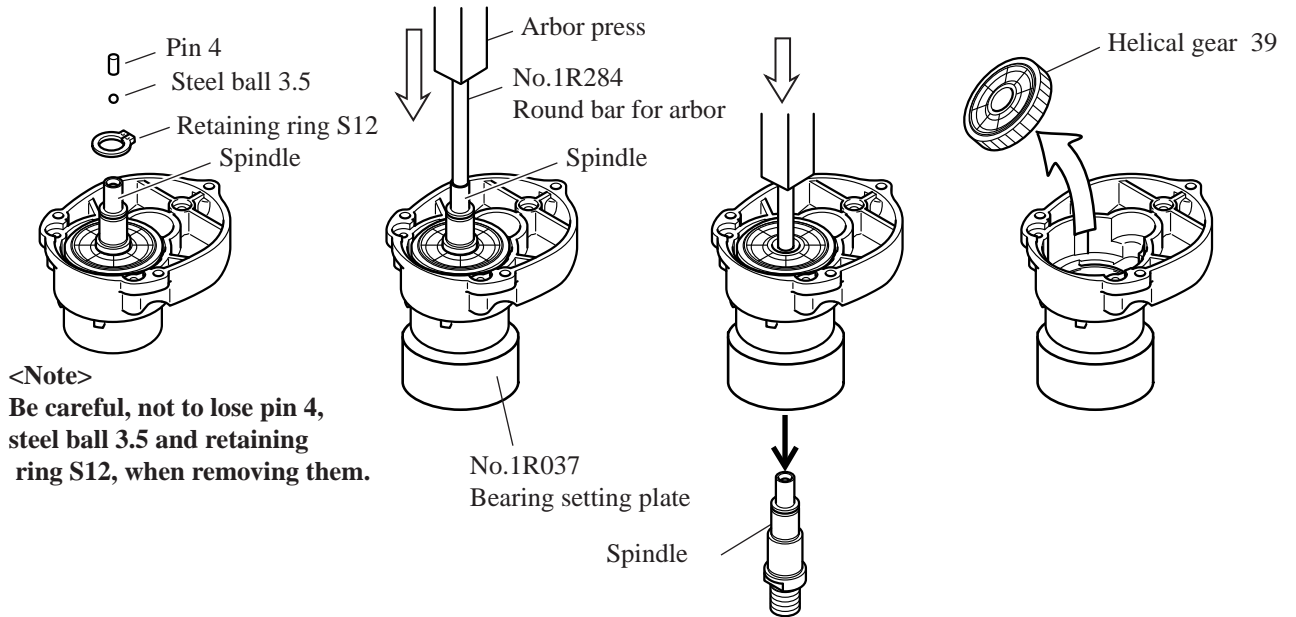


Fig. 4

< 6 > Assembling helical gear 39 See Fig. 5.

1. Assemble spindle by pressing with arbor press.
2. Assemble helical gear 39 to spindle by pressing 1R028 "Bearing setting pipe" on the helical gear, with arbor press.
3. Fix helical gear 39 with retaining ring S12, and put steel ball 3.5 and pin 4 into the hole of spindle.

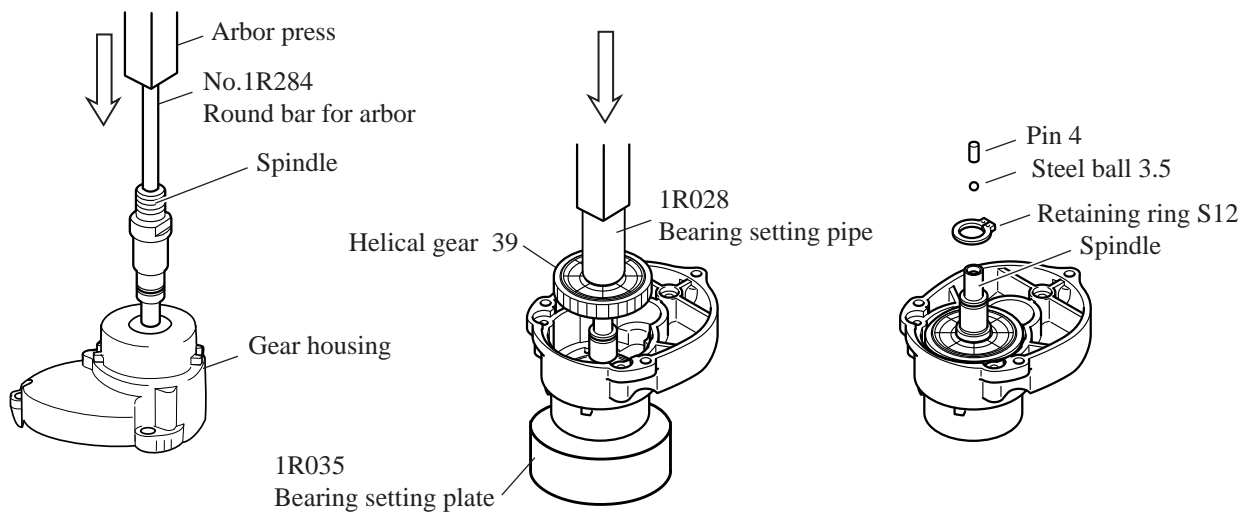
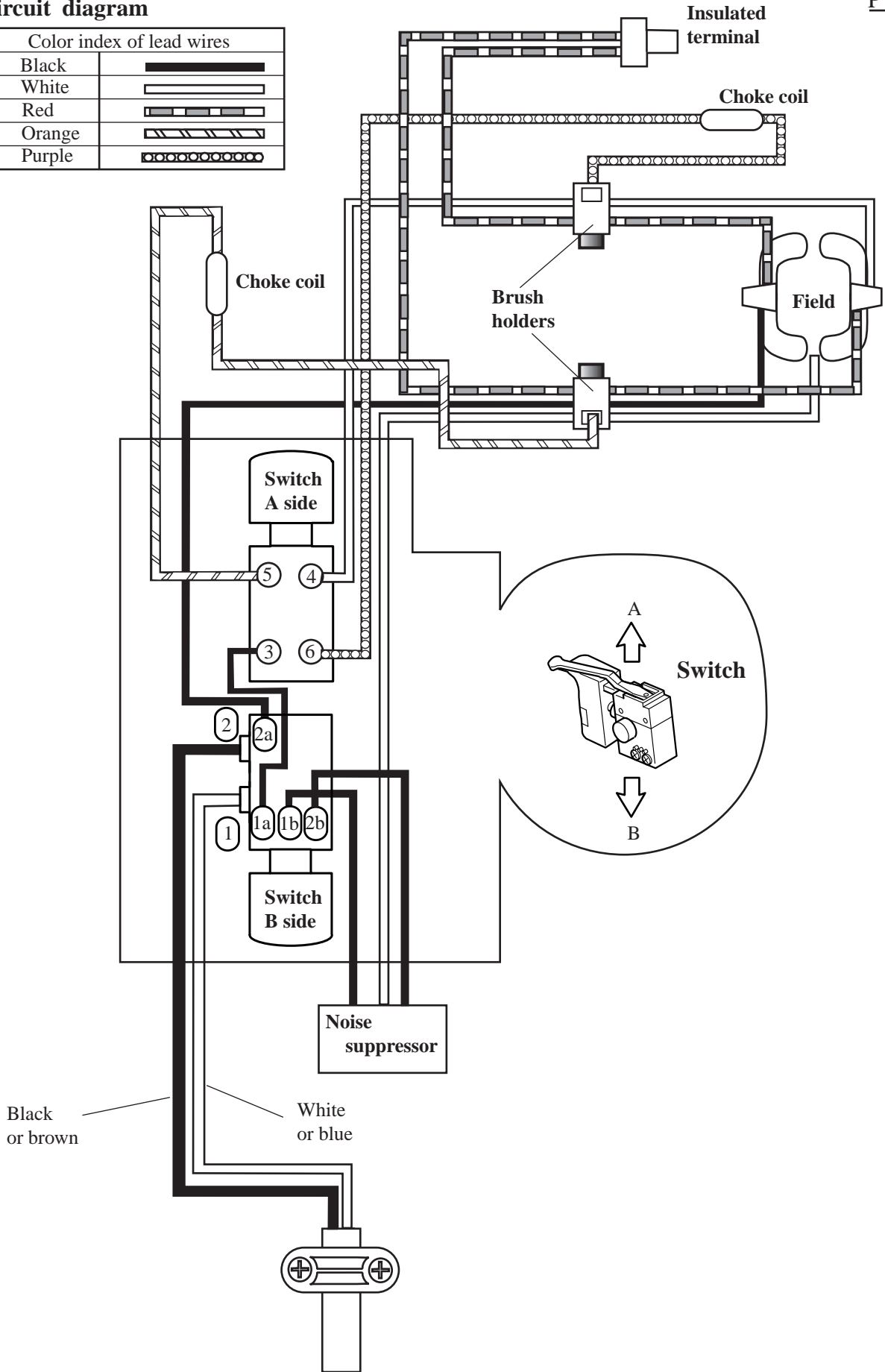


Fig. 5

► **Circuit diagram**

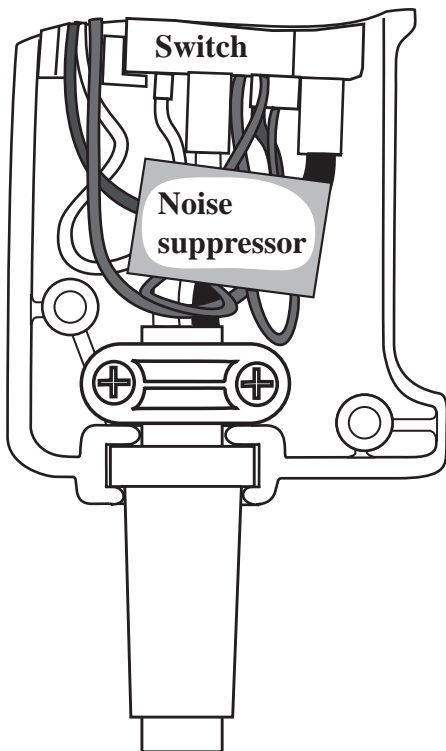
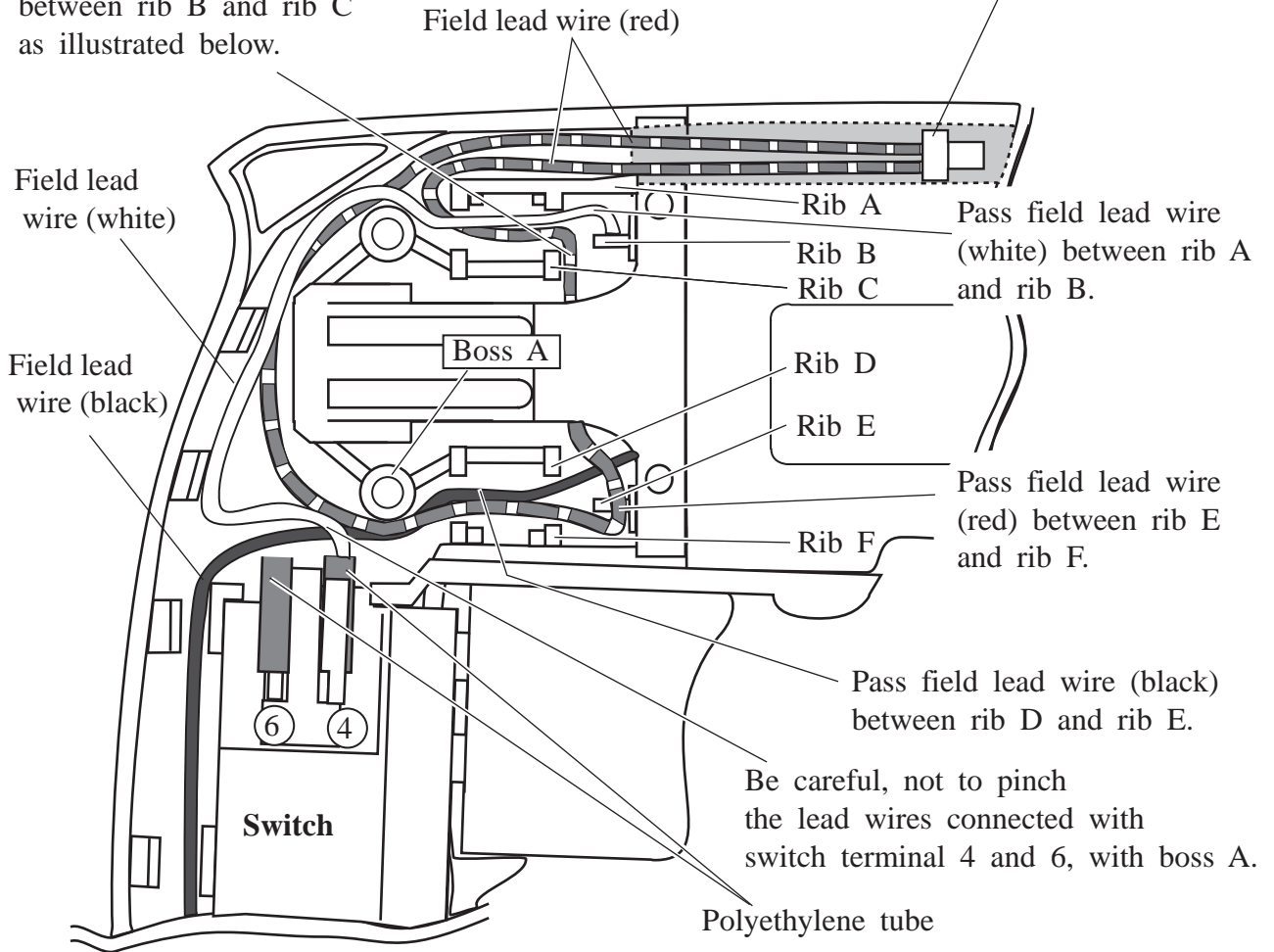
Color index of lead wires	
Black	
White	
Red	
Orange	
Purple	



Wiring diagram of field lead wires

Pass field lead wire (red) between rib B and rib C as illustrated below.

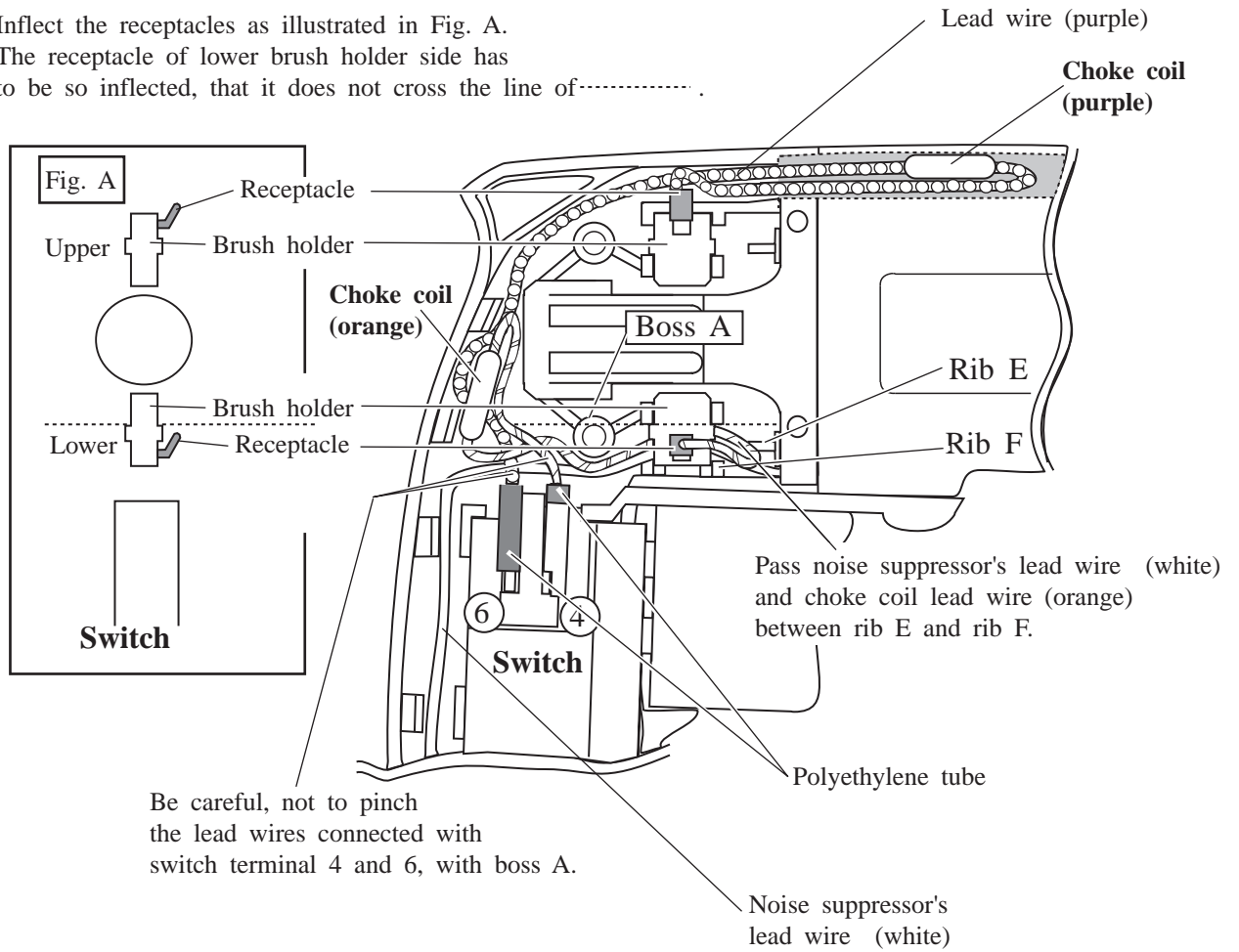
Put the insulated terminal into the space illustrated below.



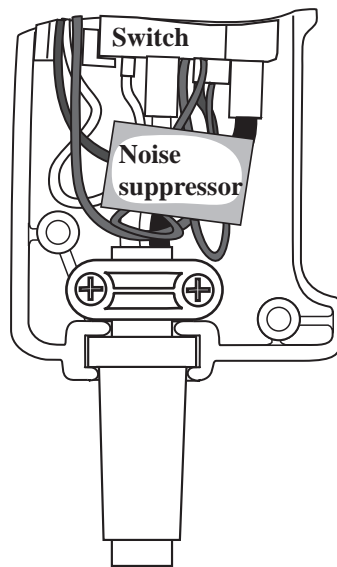
Wiring diagram of lower portion of switch

Wiring diagram of wires connected with brush holders (With choke coil)

Inflect the receptacles as illustrated in Fig. A.
 The receptacle of lower brush holder side has to be so inflected, that it does not cross the line of.....



Wiring diagram of lower portion of switch

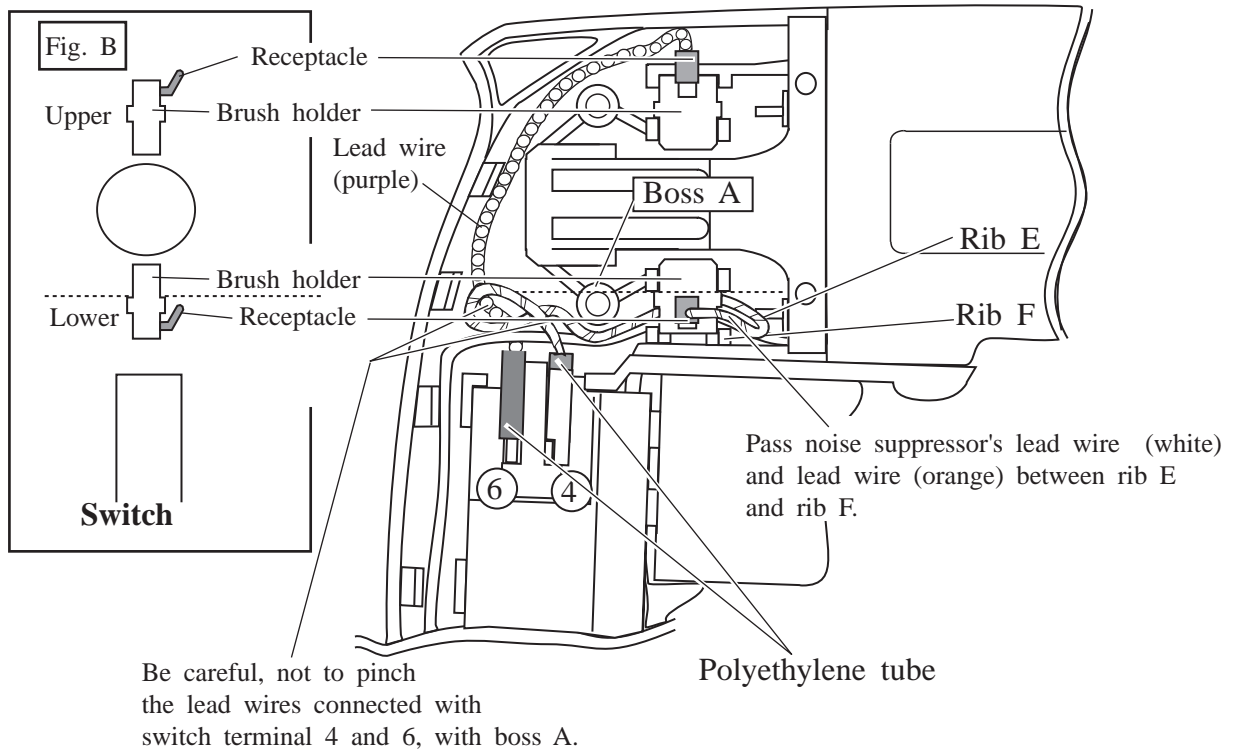


Wiring diagram of wires connected with brush holders (Without choke coil)

Infect the receptacles as illustrated in Fig. B.

The receptacle of lower brush holder has

to be so inflected, that it does not cross the line of----- .



Wiring diagram of lower portion of switch

