TECHNICAL INFORMATION   maktec
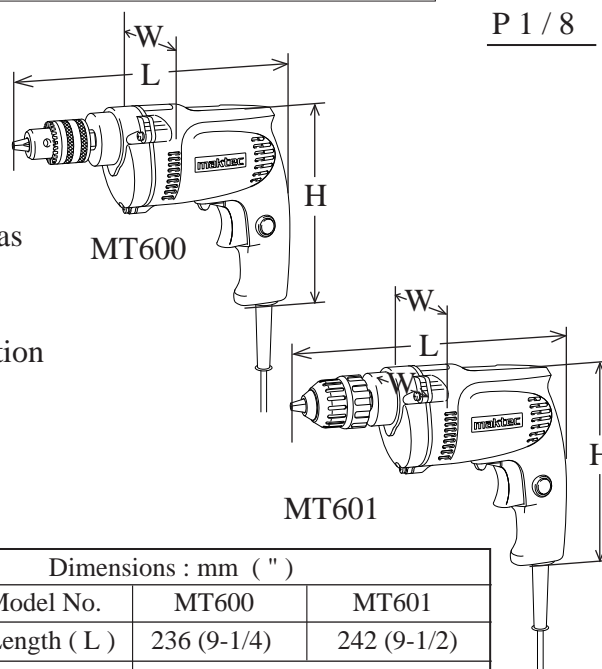
maktec · Makita® PRODUCT

| Model No. | ► MT600, MT601 |

| Description | ► Drill 10mm (3/8") |

CONCEPT AND MAIN APPLICATIONS

New power tool series from MAKITA
* MT600 : 1. Less expensive, but service life is long as the existing models.
         2. Easy to repair construction
* MT601 : Equipped with keyless drill chuck in addition to the above features.

MT600

MT601

Dimensions : mm (")		
Model No.	MT600	MT601
Length (L)	236 (9-1/4)	242 (9-1/2)
Width (W)	71 (2-13/16)	
Height (H)	194 (7-5/8)	

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
* 110	3.3	50 / 60	350	180	230
220	1.7	50 / 60	350	180	230
220 / 230	1.6	50 / 60	350	180	230
230 / 240	1.5	50 / 60	350	180	230

    * The data with 110V is available only for MT600.

Model No.	MT600	MT601
No load speed : (min -1= rpm)	0 - 2,500	
Keyless chuck	No	Yes
Chuck ability : mm (")	1.5 - 10 (1/16 - 3/8)	
Drilling capacity : mm (") in Steel	10 (3/8)	
in Wood	25 (1)	
Reverse switch	Yes	
Protection from electric shock	by double insulation	
Cord length : m (ft)	2.0 (6.6)	
Net weight :Kg (lbs)	1.4 (3.1)	

► Standard equipment

    * Chuck key .... 1 pc. (available only for MT600)

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

► Optional accessories

< 1 > Lubrication

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

    7. Helical gear 39 : approx. 3.5g (0.12 oz)
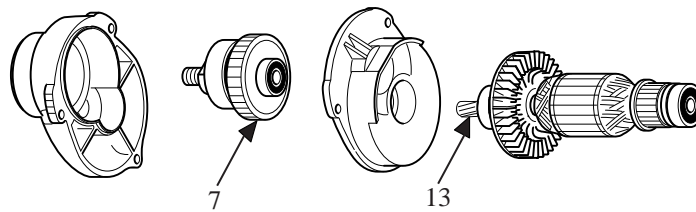   13. Armature, gear portion : approx. 3.5g (0.12 oz)

7

13

Fig. 1

< 2 > Removing drill chuck

Firmly hold No.1R139 "Drill chuck extractor" with vise. And lock spindle with the drill chuck extractor.
Hold hex wrench with drill chuck firmly.
Strike the hex wrench with hammer so that the drill chick turns anti-clockwise. See Fig. 2.
So drill chuck can be removed from spindle.

No.134873-0 Bit adaptor

No.1R231 Hex shank bit M8

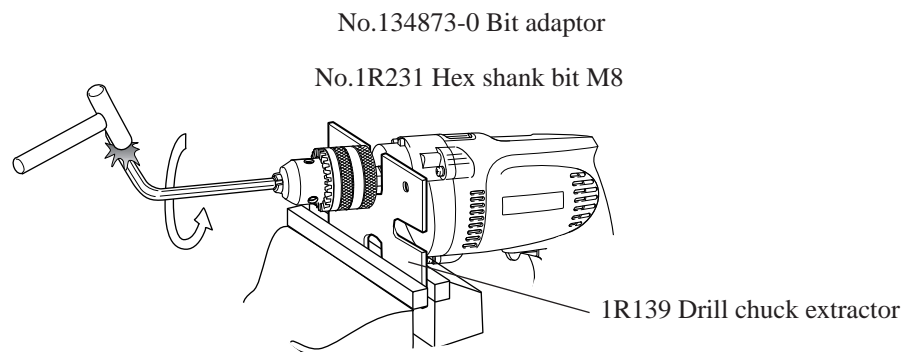1R139 Drill chuck extractor

Fig. 2

< 3 > Mounting drill chuck

Firmly hold No.1R139 "Drill chuck extractor" with vise. And lock spindle with the drill chuck extractor.
Hold the repairing tools in Fig. 3A, with drill chuck as illustrated in Fig. 3. And turn torque wrench clockwise.

<Note in assembling>
Pre-set the fastening torque of the torque wrench with 15 - 20 N.m, when assembling.
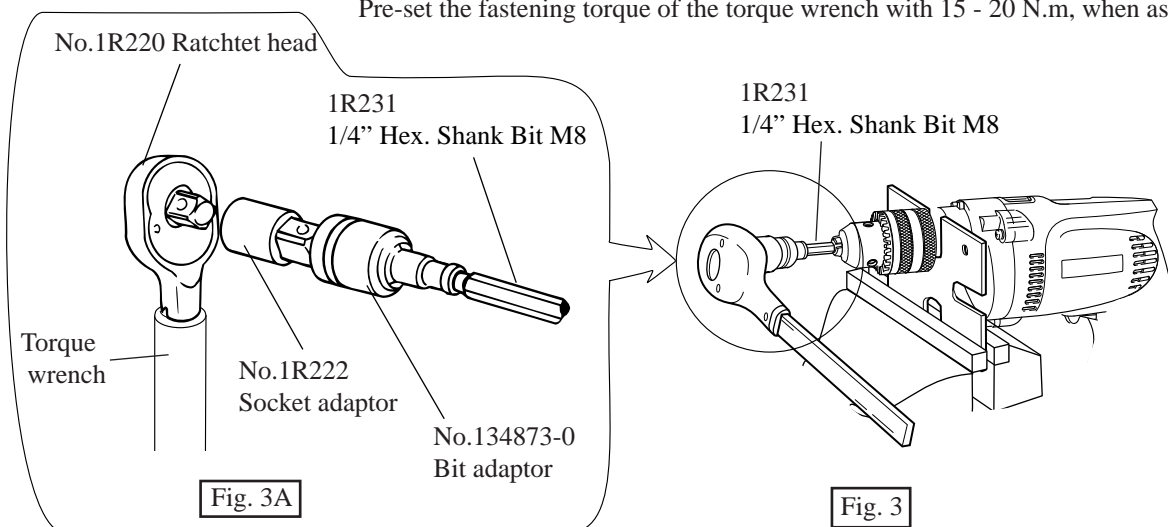
No.1R220 Ratchtet head

1R231
1/4" Hex. Shank Bit M8

1R231
1/4" Hex. Shank Bit M8

Torque
wrench

No.1R222
Socket adaptor

No.134873-0
Bit adaptor

Fig. 3A

Fig. 3

< 4 > Disassembling gear section

(1) After removing drill chuck, separate gear housing from motor housing by unscrewing 3 pcs.
   of pan head screws M4x18.   See Fig. 4.
   Tap the edge of gear housing with plastic hammer.   So, helical gear 39 section can be removed from
   gear housing.   See Fig. 5.

Ggear
housing

Ggear
housing cover

Fig. 4.
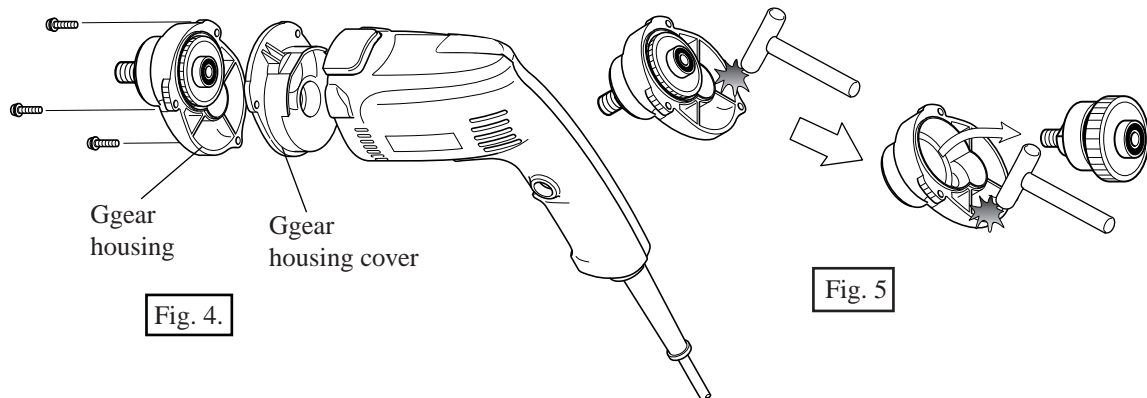
Fig. 5

(2) Remove ball bearing 607ZZ with No.1R269 "Bearing Extractor as illustrated in Fig. 5.
   Hold the gear section (helical ear 39, spindle, ring 12 and ball bearing 6202ZZ) with No.1R139 "Drill chuck
   extractor" on the turn base of arbor press. And then, remove helical gear 39 by pressing down spindle as
   illustrated in Fig. 6.

1R139 Drill chuck extractor

No.1R269
"Bearing Extractor

Ball bearing 607ZZ
Helical gear 39

Helical gear 39
Spindle
Ring 12
Ball bearing 6202ZZ

1R282
"Round Bar for Arbor"

Fig. 5

Fig. 6
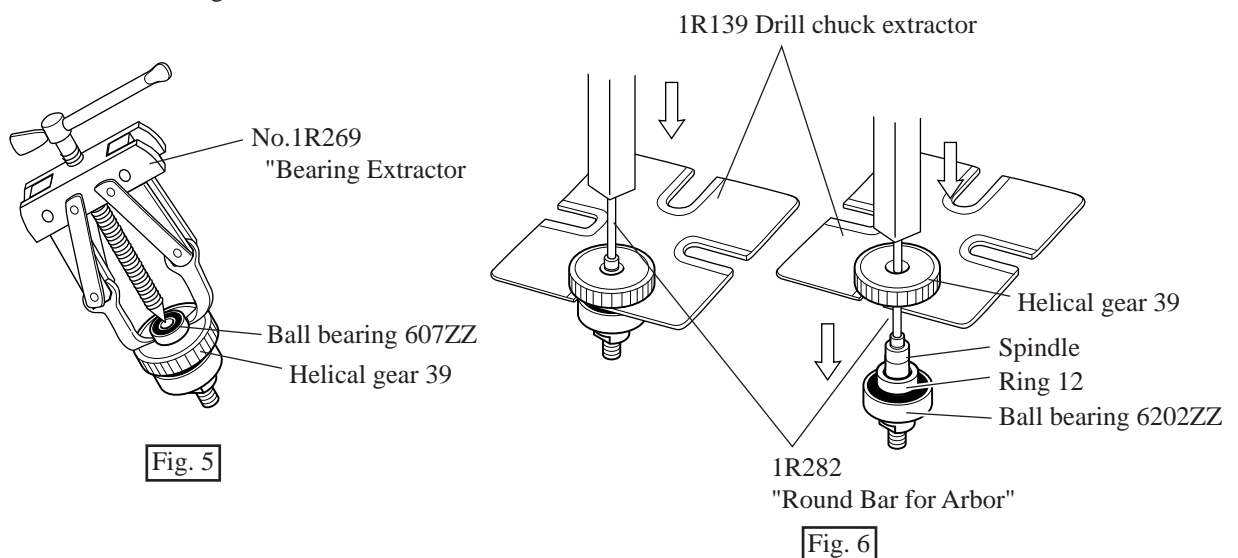
(3) Remove ring 12. Hold spindle with No.1R139 "Drill chuck extractor" on the turn base of arbor press.
    And then, remove ball bearing 6202ZZ by pressing down spindle as illustrated in Fig. 7.

Ring 12

1R282
"Round Bar for Arbor"

Ball bearing 6202ZZ

Spindle

1R139 Drill chuck extractor

Fig. 7
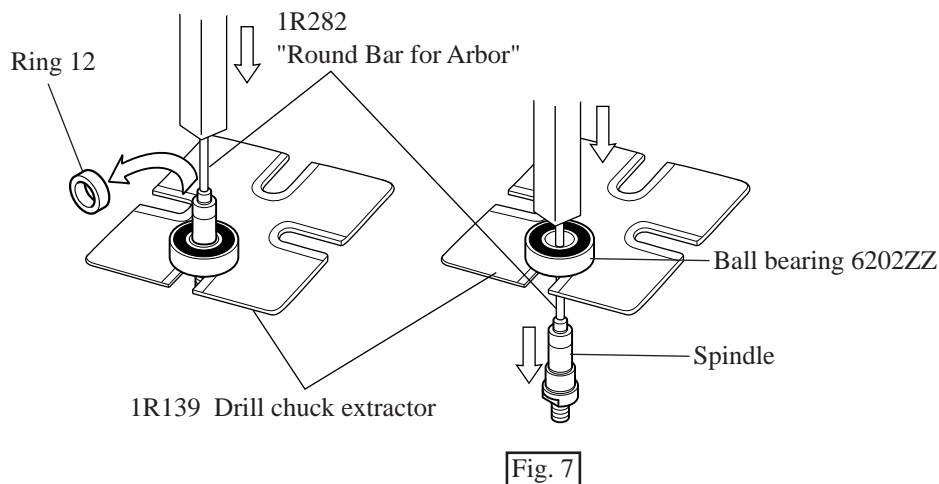
< 5 > Assembling gear section

   (1) Accepting ball bearing 6202DDW with No.1R217 "Ring 22", mount spindle to the ball bearing 6202DDW by
pressing with arbor press. See Fig. 8.
Mount ring 12 and helical gear 39 to spindle with your hand. See Fig. 9. And then, press them with arbor press
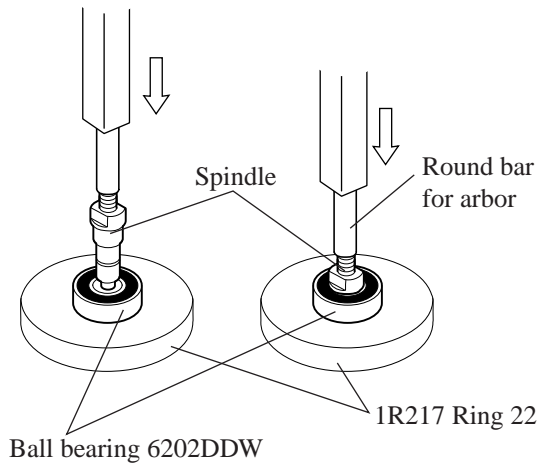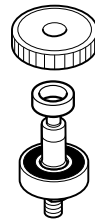finally. See Fig. 10.

Spindle

Round bar
for arbor
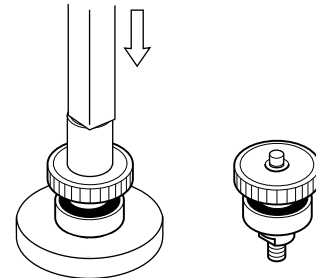
Fig. 9

Fig. 10

1R217 Ring 22

Ball bearing 6202DDW

Fig. 8

   (2) Mount ball bearing 607ZZ by pressing with arbor press as illustrated in Fig. 11.
Mount the gear unit (spindle, ball bearing 6202DDW, ring 12, helical gear 39 and ball bearing 607ZZ)
to gear housing. And then, mount gear housing in which the gear unit has been mounted, to motor housing
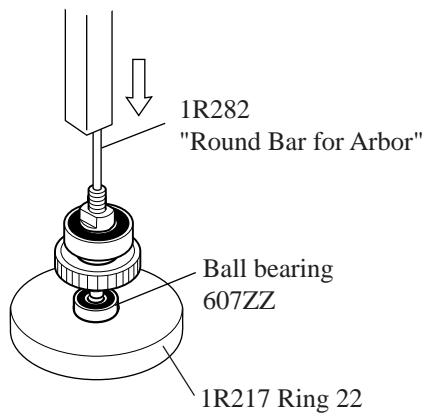as illustrated in Fig. 12.

1R282
"Round Bar for Arbor"

Ball bearing
607ZZ

Gear housing

Gear housing
cover

1R217 Ring 22

Fig. 11
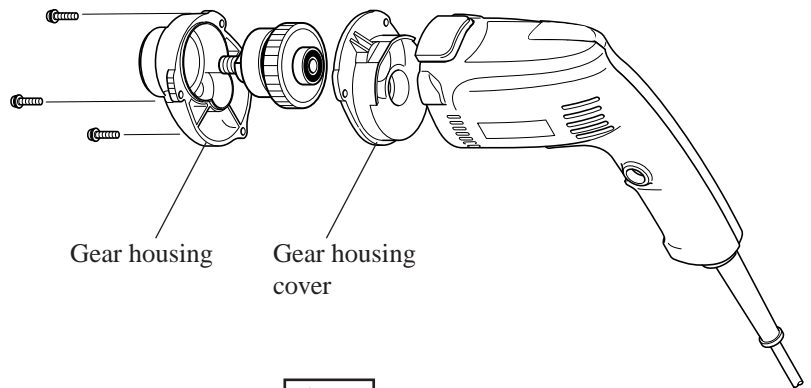
Fig. 12

► **Circuit diagram**

Color index of lead wires	
Black	
White	
Red	
Orange	
Purple	

Insulated terminal

Choke coil

Choke coil

Brush holders

Field

③ ⑤

Switch (Top view)

⑥ ④

View from top

View from bottom

Switch

Switch

Switch (bottom view)

2b
1b
1a

2a

② ①

Noise suppressor

White or blue

Black or brown

Power supply cord
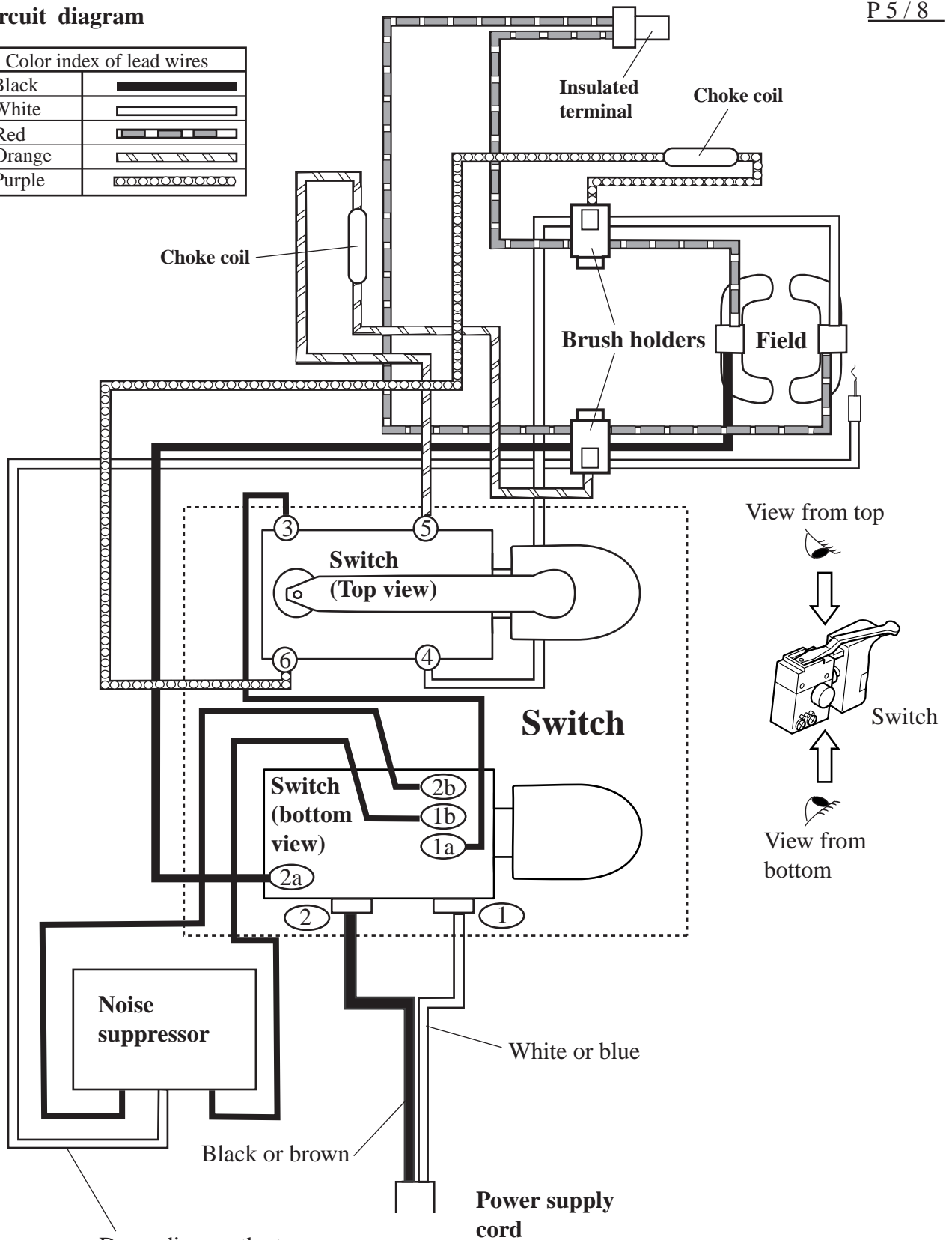
Depending on the type of noise suppressor, this white lead wire may not be used.

► **W**iring **diagram**

Wire the field lead wire as illustrated below.

Field lead wire (red)

Pass field lead wire (white)
between rib A and B.

Put insulated terminal
in the position as illustrated below.

Rib A

Field lead wire (white)

Rib B

Pass field lead wire (red)
between rib B and C
without slack.

Boss A

Rib C

Pass field lead wire (black)
between rib D and E.

Rib D

Rib E

Rib F

Pass the following lead wires
between rib E and F.
* Field lead wire (red)
* Noise suppressor's
  lead wire (white), if any

⑥ ④

Switch

Be careful not to pinch the
lead wires to be connected
to switch terminal No.4 and 6,
with boss A.

**Noise
suppressor**

Field lead wire (black)

Wiring **diagram**

Wire the brush holders' lead wires as illustrated below, in case of with choke.

Put choke coil (orange) in the position as illustrated below.

Put choke coil (purple) in the position as illustrated below.

Rib A
Rib B
Rib C

Boss A

Rib D
Rib E

Pass the following lead wires between rib E and rib F.
* Choke coil lead wire (orange)
* Noise suppressor's lead wire (white), if any

⑥ ④

Rib F

Switch

Noise suppressor

Be careful not to pinch the lead wires to be connected to switch terminal No.4 and 6, with boss A.

Inflect this terminal as per the illustration.

Brush holders

The top of this inflected terminal must not cross the line T.

Line T

Switch

► **W**iring **diagram**

Wire the brush holders' lead wires as illustrated below, in case of with choke.

Rib A

Rib B

Rib C

Boss A

Rib D

Rib E

Pass the following lead wires
between rib E and rib F.
* Choke coil lead wire
  (orange)
* Noise suppressor's lead
  wire (white), if any

Rib F

⑥ ④

Switch

**Noise
suppressor**

Be careful not to pinch the
lead wires to be connected
to switch terminal No.4 and 6,
with boss A.

Inflect this terminal
as per the illustration.

**Brush
holders**

The top of this inflected
terminal must not cross
the line T.

Line T

Switch