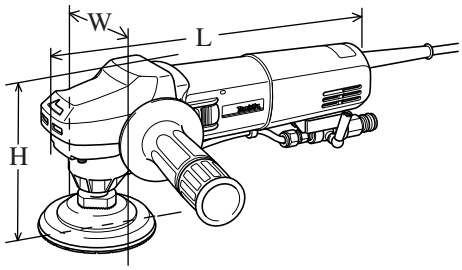
TECHNICAL INFORMATION

Models No. ► PW5000C (for 110V countries)
PW5000CH (for 220-240V countries)

Description ► Stone Polisher 125mm



Dimensions : mm (")	
Length (L)	313 (12-3/8)
Width (W)	80 (3-1/8)
Height (H)	126 (5)

CONCEPT AND MAIN APPLICATIONS

A machine ideal for stone polishing have been released.
Its features and benefits are as follows.

* Electronic with speed control by pre-setting dial, soft start and overload protection
* 3 water supply holes evenly feed water to every channel of the polishing pad, protecting the pad from overheating and getting clogged with dust.
* Ergonomically designed tool head provides comfortable grip.

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
110	8.6	50 / 60	900	530	1,000
220 - 240	4.1	50 / 60	900	530	1,000

No load speed: min-1= rpm.		2,000 - 4,000
Pad size: mm (")		Diameter:100 (4) - 125 (5) Spindle thread: M14
Water supply		Yes
Number of water supply holes		3
Soft start		Yes
Electronic control	Constant speed	Yes
	Overload protection	Yes
	Speed control dial	Yes
Head cover		Yes
Protection against electric shock		Double insulation
Cord length: m (ft)		5 (16.4) (For European countries)
Net weight: kg (lbs)		2.2 (4.9)

► Standard equipment

Pad 100 ..... 1 pc.
Side grip ..... 1 pc.
Head cover ..... 1 pc.
Wrench ..... 1 pc.

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

► Optional accessories

Assorted diamond discs
Front grip
Insulated transformer

Repair

< 1 > Lubrication

Put approximately 18g of MAKITA grease SG No.0 in gear chamber.
Apply the same grease to the inside of the rip portion of oil seal (2 pcs), when spindle has been removed from bearing box complete.

< 2 > Disassembling and Assembling of Hose, Joint and Cock Complete

1) Hose and Joint

Disassembling

1. Nut 12 is mounted on the both ends of hose as illustrated in **Fig. 1**. Loosen either of the nuts with wrench while holding joint with wrench 10. (**Fig. 1**)
2. Pull hose off from joint. If it is difficult to do so by hand, pull it off holding the trunk of sleeve with pliers. When holding sleeve with pliers, be careful not to break the trunk of sleeve. (**Fig. 2**)
3. Remove nut 12 and sleeve from hose.
   Be careful not to damage the tapered portion of sleeve. (**Fig. 3**)
4. Cock complete can be removed from rear cover by removing a 4x18 tapping screw. (**Fig. 4**)

Fig. 1

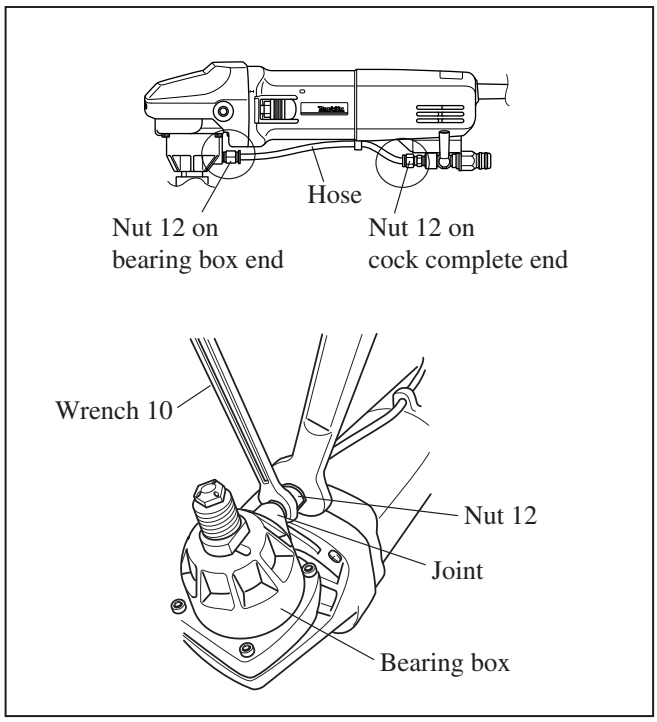


Fig. 2

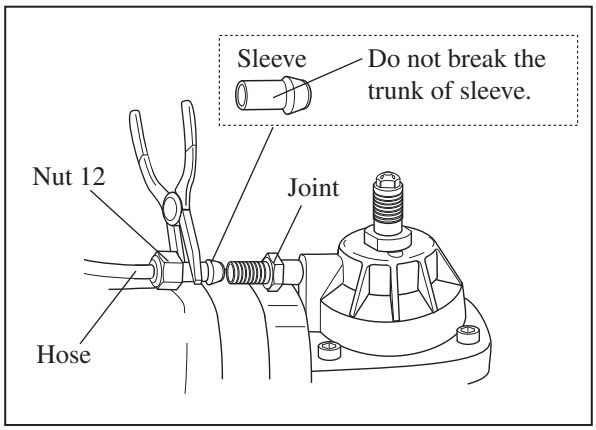
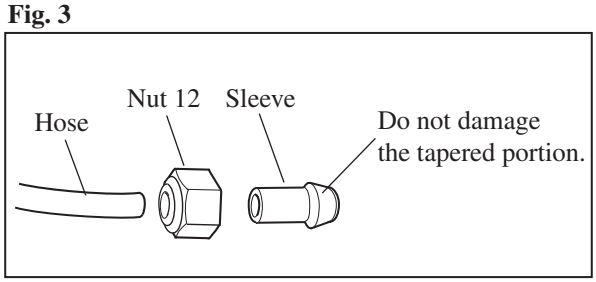


Fig. 3

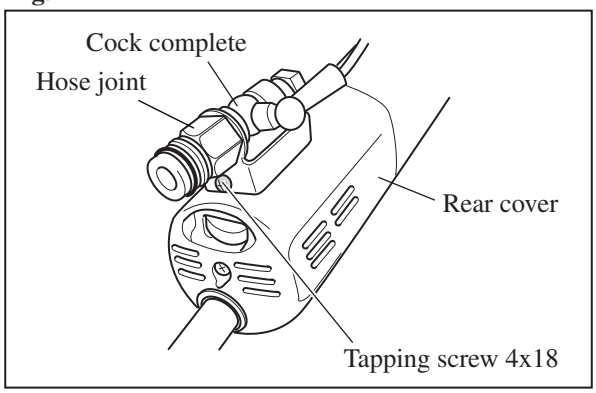


Assembling

1. Install nut 12 on hose, and then sleeve.
   The hose has to protrude approximately by 3mm from the top of sleeve. (**Fig. 5**)
2. Insert hose into joint. And holding joint with wrench 10, tighten nut 12 using Torque wrench (1R219) and Spanner head (1R253). (**Fig. 1**)

   Recommended torque;
   ***Tightening Joint to Bearing box to 7 - 10 N.m**
   ***Tightening Nut 12 to Joint to 8.7 - 9.7 N.m**

Fig. 4



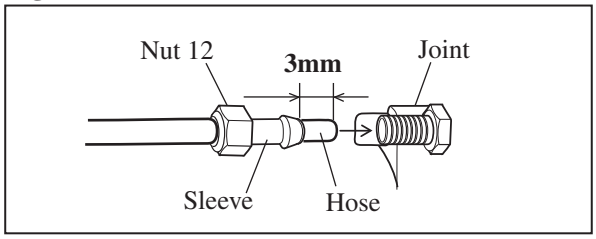
2) Cock Complete

Disassembling

By removing hose joint, cock complete can be removed from rear cover. (**Fig. 4**)

(See next page for assembling of cock complete.)

Fig. 5



Repair

< 2 > Disassembling and Assembling of Hose, Joint and Cock Complete

2) Cock Complete

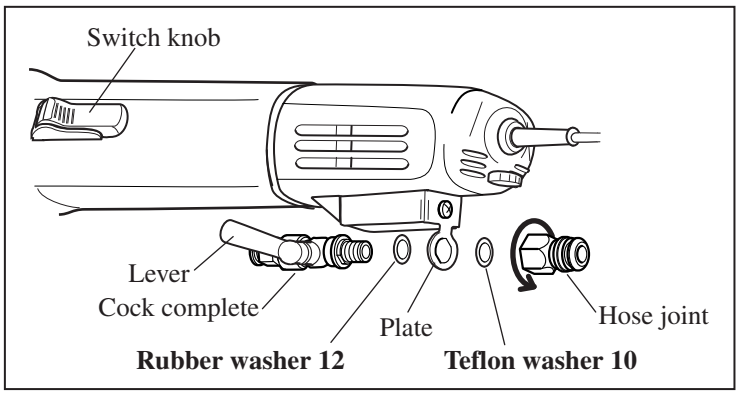
Assembling

When assembling cock complete to the tool, be sure to set the following two water sealing washers in each place. (**Fig. 6**)

- Rubber washer 12 between cock complete and plate
- Teflon washer 10 between plate and hose joint

Note: Be sure to install cock complete on the tool so that its lever is positioned on the left side where switch knob is located. (**Fig. 6**)

Fig. 6



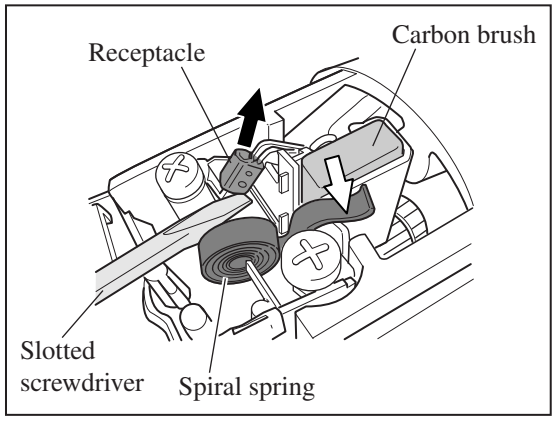
< 3 > Disassembling Rear Cover

1. Remove hose from the joint on bearing box side. (**Fig. 1, 2, 3**)
2. Remove a 4x18 tapping screw on the rear end of rear cover, and now, simply by pulling, rear cover can be removed from motor housing

< 4 > Replacing Power Supply Cord, Switch and Carbon Brush

1. Power supply cord and switch can be replaced by removing rear cover as described above in "<3> Removing Rear Cover.
2. Carbon brush can be replaced simply by pushing spiral spring aside as illustrated in **Fig. 7**
   Except in case you dispose of the carbon brush, be sure to disconnect receptacle by lifting up its bottom using a small slotted screwdriver. (**Fig. 7**) Pulling contact pigtail to disconnect receptacle will cut the pigtail.

Fig. 7

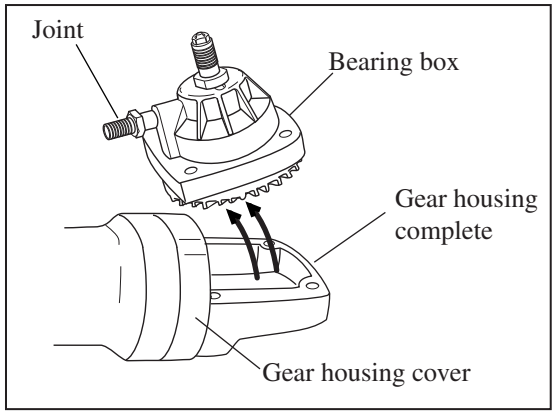


< 5 > Disassembling and Assembling of Spiral Bevel Gear 38 and Ball Bearing 6201DDW

Disassembling

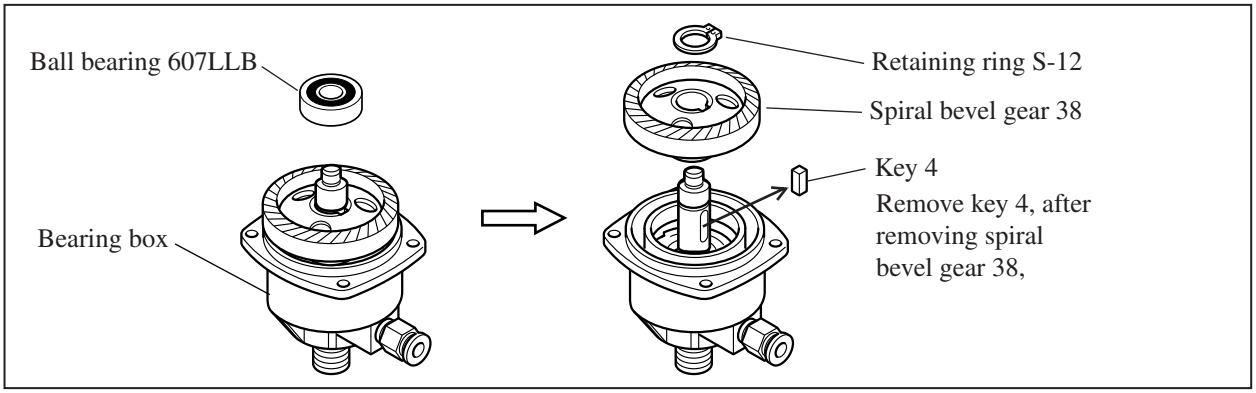
1. Remove hose from bearing box, and then remove the four M14x16 hex socket head bolts that fasten bearing box to gear housing complete.
   First loosen the bolts with an L-shaped hex wrench and then remove them using M4 hex shank bit (1R228) and Makita impact driver. Because adhesive is applied to the thread of the bolt, use of the hex shank bit from the start will break the top of the hex shank bit.
2. Remove bearing box by hitting gear housing cover with a plastic hammer. (**Fig. 8**)
   Note: At this time, be careful not to hit the joint.

Fig. 8



3. If ball bearing 607LLB is on spindle when bearing box has been separated from gear housing complete, remove it from spindle using bearing extractor (1R269). (**Fig. 9**)
4. Spiral bevel gear 38 can be removed from spindle by removing retaining ring S-12 from spindle using retaining ring S and R pliers. (**Fig. 9**)

Fig. 9



("Disassembling" is continued to next page.)

Repair

< 5 > Disassembling and Assembling of Spiral Bevel Gear 38 and Ball Bearing 6201DDW

Disassembling

5. In order to remove spindle from bearing box, first put bearing box on Ring 22 (1R217). And then, using arbor press and Round bar 10 (1R284), press spindle out of bearing box. (**Fig. 10**)
6. Bearing retainer can be removed from bearing box by holding bearing box securely in vise and then turning bearing retainer counterclockwise with Wrench for bearing retainer (1R340). (**Fig. 11**)

Fig. 10

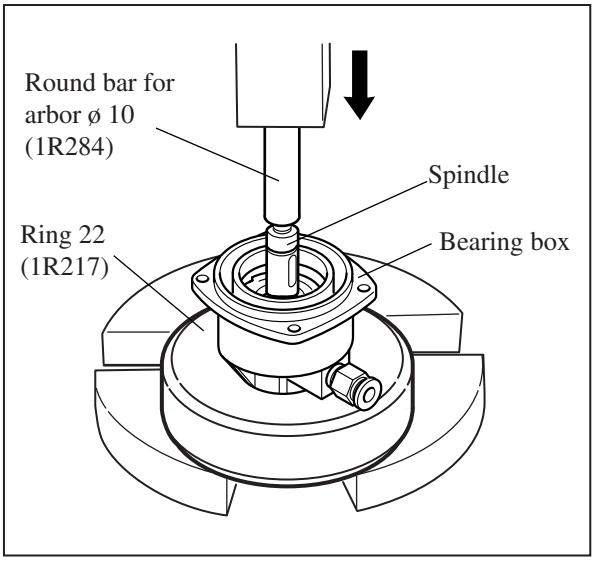
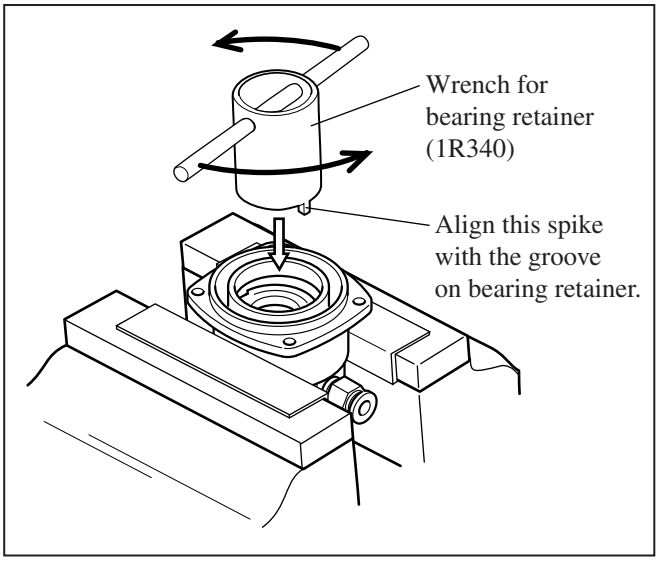
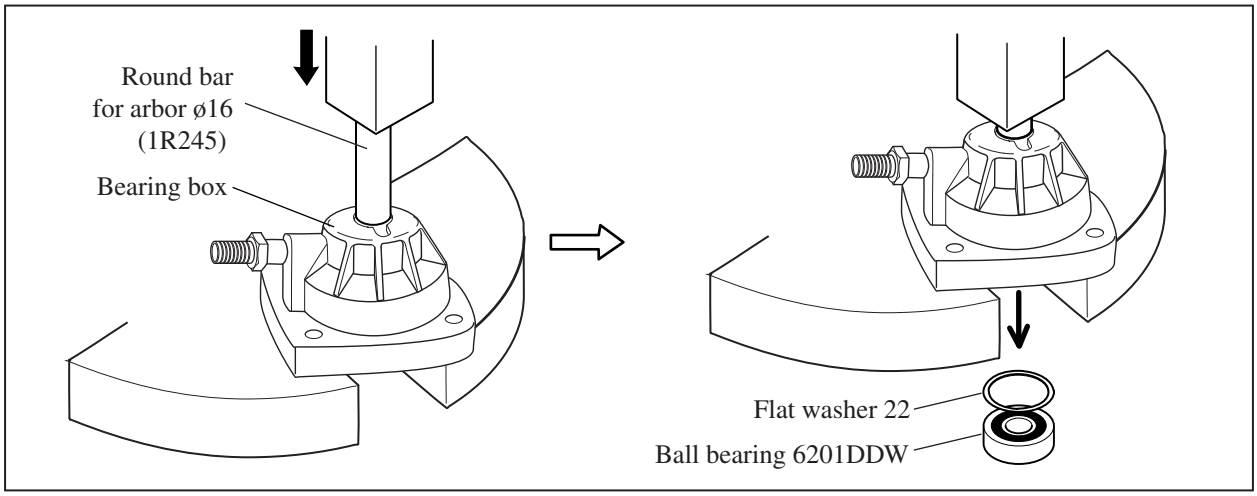


Fig. 11



5. Remove ball bearing 6201DDW from bearing box using arbor press and Round bar 16-100 (1R245). (**Fig. 12**)

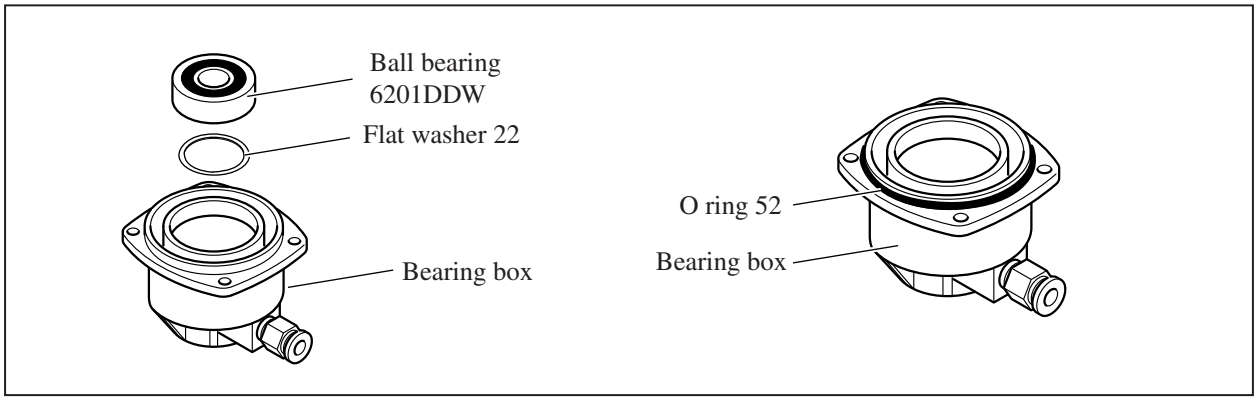
Fig. 12



Assembling

Do the reverse of disassembling.
Be sure to do the followings (**Fig. 13**):
1. Before assembling ball bearing 6201DDW to bearing box, set a flat washer 22 in place.
2. Before assembling bearing box to gear housing complete, set an O ring 52 in place.

Fig. 13



Repair

< 6 > Cleaning Nozzle

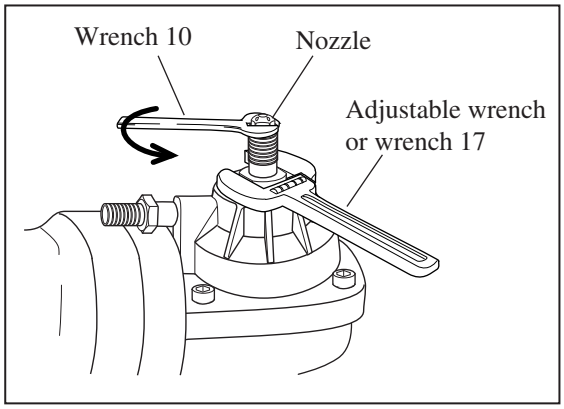
Disassembling and Cleaning of Nozzle

1. While locking spindle with wrench 17 or adjustable spanner, turn nozzle counterclockwise with wrench 10. Now nozzle can be removed from spindle. (**Fig. 14**)
2. Take dust out of the three water supply holes using a thin wire, and then blow off the dust from the holes using air.

Assembling Nozzle

Do the reverse of disassembling to install nozzle on spindle.
Note: Tighten nozzle to the recommended torque of 2 - 4 N.m using the following tools;
Torque wrench shaft (1R254), Ratchet head (1R220), Socket adapter (1R222), Bit adapter (A-33750), Socket bit (784405-9)

Fig. 14

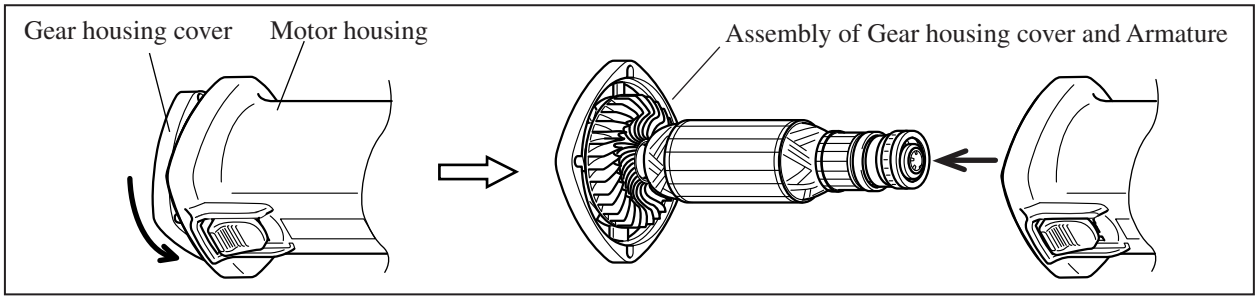


<7 > Replacing Armature

Disassembling

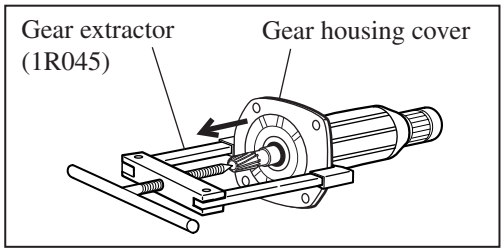
1. Disconnect hose from the joint on bearing box as described in "< 2 > Disassembling and Assembling of Hose, Joint and Cock Complete" on page 2. (**Fig. 1, 2, 3**)
2. Remove rear cover as described in "< 2 > Disassembling and Assembling of Hose, Joint and Cock Complete" on page 2. (**Fig. 4**).
3. Referring to "< 4 > Replacing Power Supply Cord, Switch and Carbon Brush" and **Fig. 7** on page 3,, lift up carbon brush a little bit for disconnection from the commutator of armature.
4. Separate gear housing complete from motor housing by removing four 4x28 tapping screws.
5. Turn gear housing cover a little by hitting the contact line of gear housing cover and motor housing. And then hit motor housing to remove the assembly of gear housing cover and armature. (**Fig. 15**)

Fig. 15



6. Remove retaining ring S-12 from armature shaft, and then remove the assembly of gear housing cover and ball bearing 6001DDW from armature using Gear extractor (1R045). (**Fig. 16**)
7. After removing labyrinth rubber ring 22, self lock 6, magnet sleeve and wave washer 6, remove ball bearing 627DDW from armature using Bearing extractor (1R269). And then remove flat washer 7 and insulation washer.

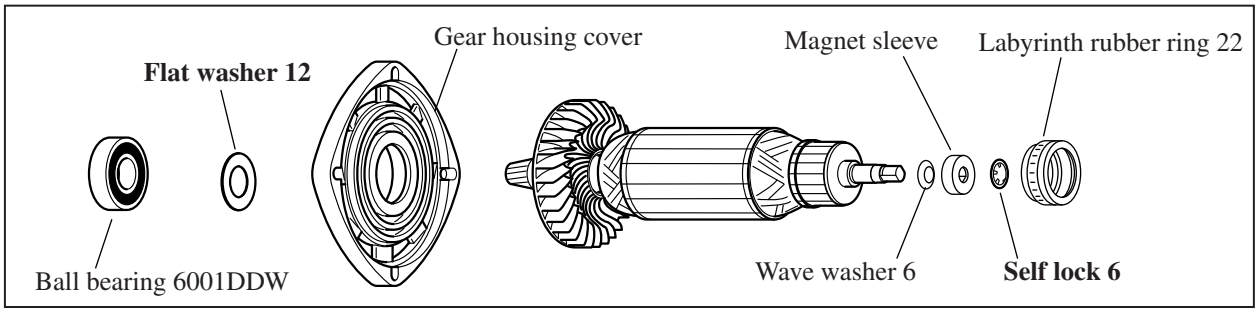
Fig. 16



Assembling

Do not fail to do the followings when assembling armature.
1. Set flat washer 12 in place before press-fitting ball bearing 6001DDW (**Fig. 17**)
2. Put the end of spiral spring over carbon brush. (Refer to **Fig. 4**.)
3. If self lock 6 is removed, always replace it with brand-new one. (**Fig. 17**)

Fig. 17



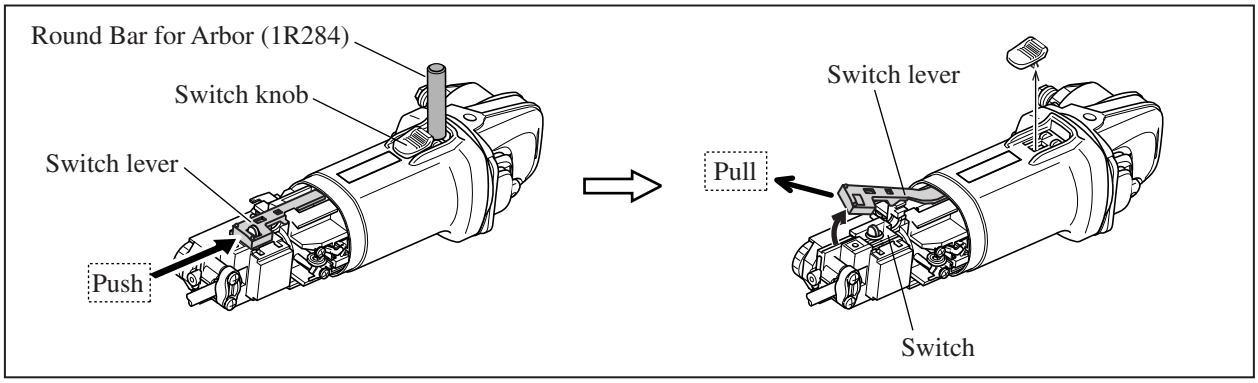
Repair

< 8 > Disassembling and Assembling Switch Lever

Disassembling

1. Remove rear cover as described in "< 2 > Disassembling and Assembling of Hose, Joint and Cock Complete" on page 2. (**Fig. 4**).
2. Put Round bar for arbor Ø10 (1R284) beside switch knob as illustrated to left in **Fig. 18** in order to lock switch knob.
3. Now switch lever can be removed from switch knob by pushing it strongly in the direction of switch knob as illustrated to left in **Fig. 18**.
4. Remove switch lever from switch by bending and then pulling the lever as illustrated to right in **Fig. 18**.

Fig. 18

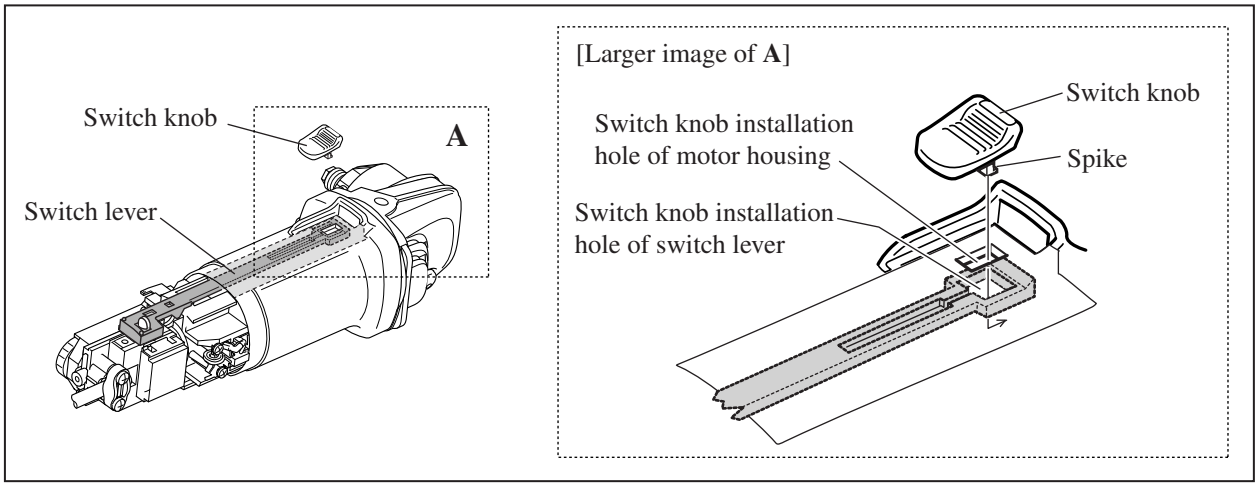


Assembling

See **Fig. 19**.

1. Insert switch lever into motor housing, and push it till the switch knob installation hole of switch lever is aligned with that of motor housing.
2. Keeping on pushing switch lever, insert the spike of switch knob through the two switch knob installation holes.
3. By releasing switch lever, it can be assembled in place.

Fig. 19

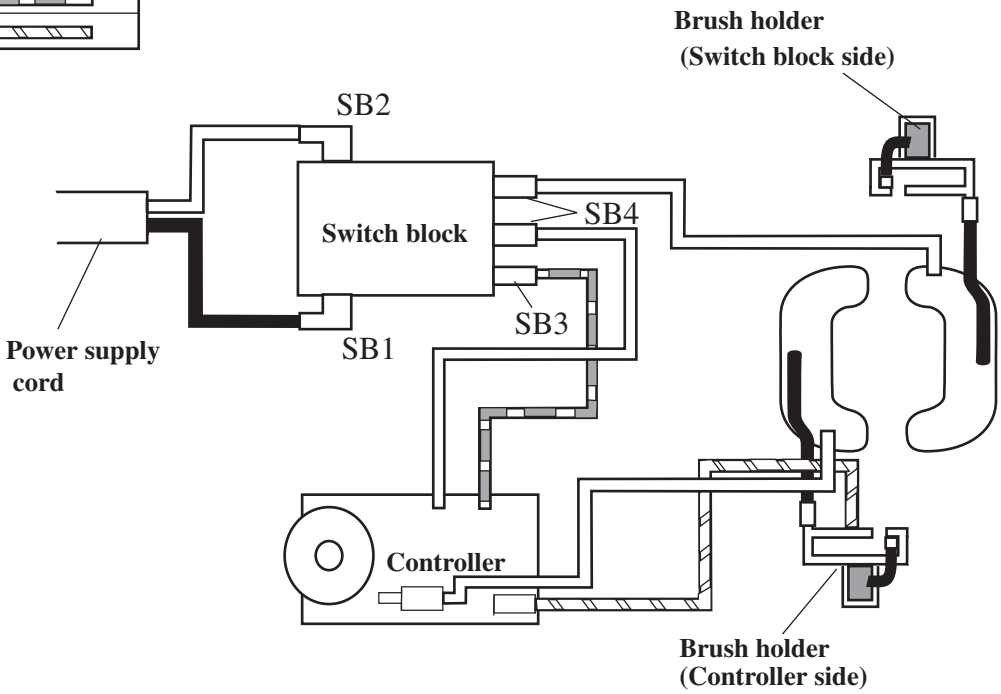


< 9 > Notes on Pin Cap When Disassembling and Assembling Shaft Lock Section

1. Although the plastic of pin cap is shaved down a little bit when removed from shaft lock section, you can use the pin cap again for replacement.
2. Remove plastic dust from shaft lock section, and then reinstall the pin cap.
3. If you find that the pin cap is installed too loose, replace it with brand-new one.

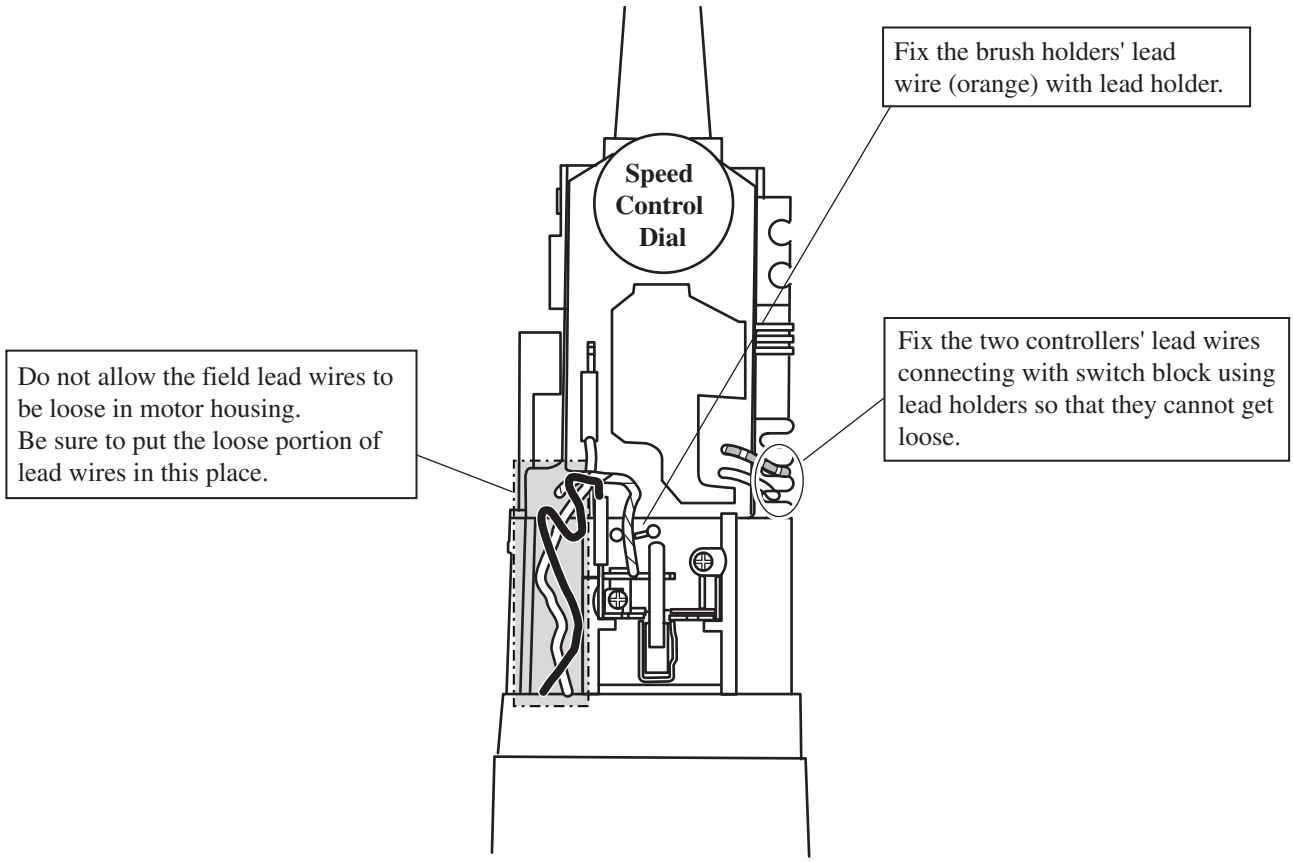
Circuit diagram

Color index of lead wires	
Black	
White	
Red	
Orange	



Wiring diagram

[Wiring on the Rear Portion of Motor]



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► Wiring diagram

[Wiring on the Rear Portion of Motor]