



# Belt Sander

## M9400G

### REPAIR MANUAL



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## 2 CAUTION

Repair the machine in accordance with “Instruction manual” or “Safety instructions”.

Follow the instructions described below in advance before repairing:



- Wear gloves.
- In order to avoid wrong reassembly, draw or write down where and how the parts are assembled, and what are the parts.  
It is also recommended to have boxes ready to keep disassembled parts by group.
- Handle the disassembled parts carefully. Clean and wash them properly.

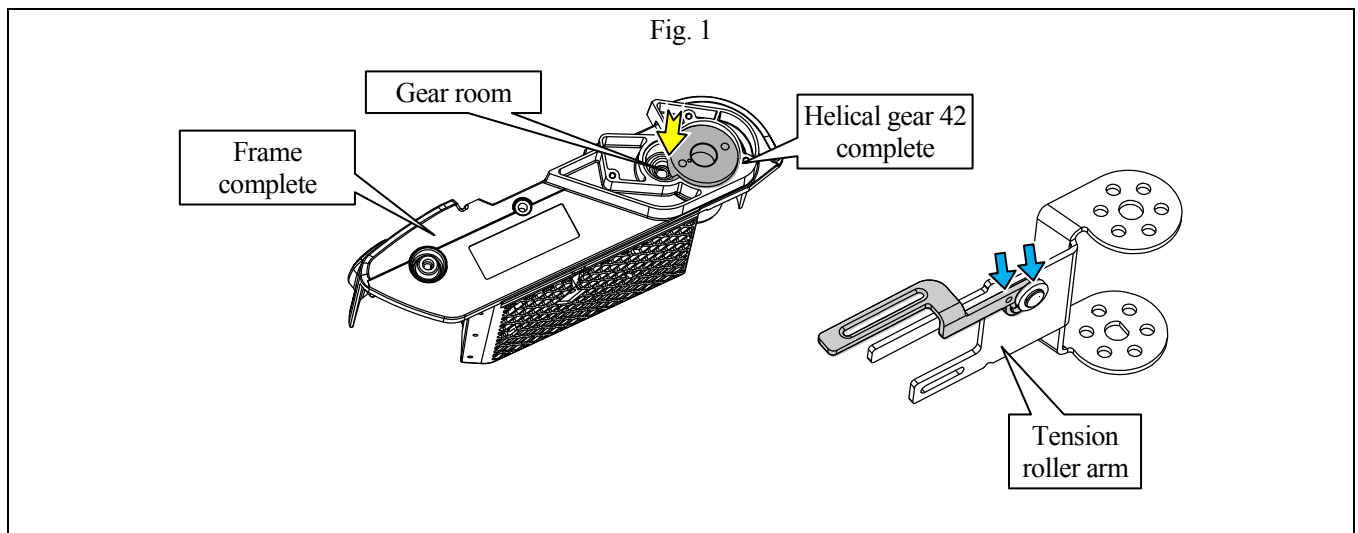
## 3 NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R041	Vise plate	disassembling V-pulley 6-52.9, Helical gear 10
1R269	Bearing extractor (small)	removing Ball bearings
A-43343	Socket 24-45	use with Nut spinner handle
782412-6	Lock nut wrench 28	disassembling Driving roller, removing/assembling Poly V-belt 6-355
-	Nut spinner handle (Square drive: 12.7 mm)	disassembling Driving roller

## 4 LUBRICANT AND ADHESIVE APPLICATION

Apply the following lubricants and adhesives.

	Lubricant	Amount
	Makita grease N No.2	7g
	Lubricating oil VG46	a little



**5 REPAIR**  
**5-1 Armature**  
**5-1-1 Disassembling**

1 Remove Brush holder caps and Carbon brushes.

Fig. 2

2 Remove M4x18 (+) Pan head screw, and remove Belt cover.

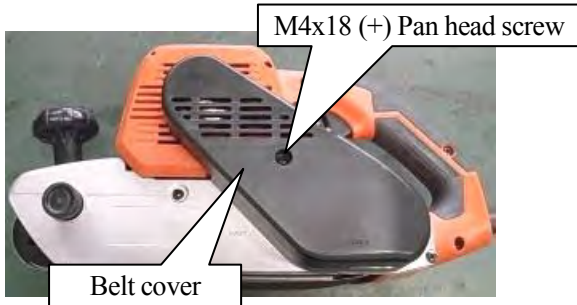


Fig. 3

3 Insert Lock nut wrench 28 between Poly V-belt 6-355 and Motor housing complete. And then pry up the wrench while turning V-pulley 6-52.9. Poly V-belt 6-355 is now removed.

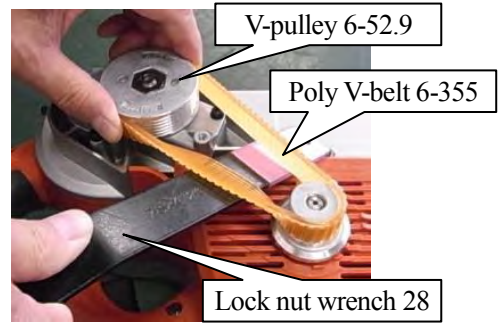


Fig. 4

4 While inserting a slotted screwdriver into the hole for Dust bag assembling in order to lock Fan 80, and protecting V-pulley 6-23 with a scrap Poly V-belt, turn V-pulley 6-23 clockwise with water pump pliers. Now, V-pulley 6-23 (driving V-pulley) is removed from Armature shaft.

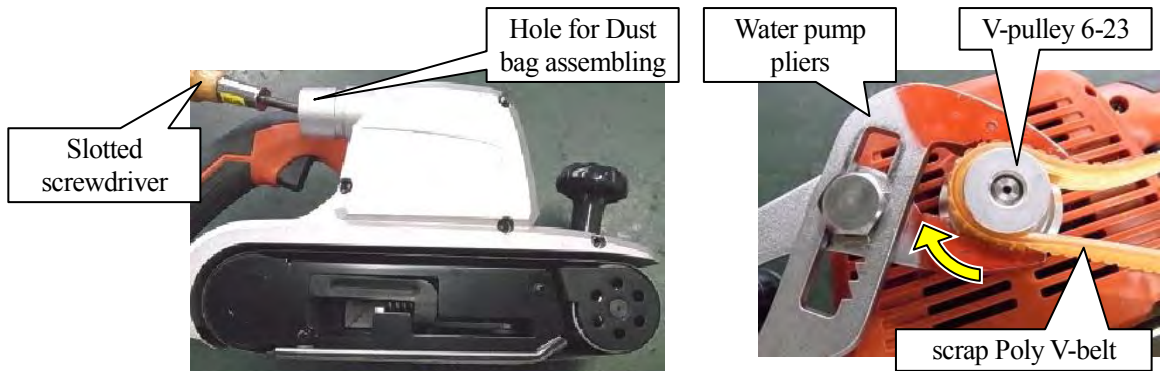


Fig. 5

- 5 Remove M4x45 (+) Pan head screw and four 4x40 Tapping screws, and remove Dust collector cover. And then, remove Separator.

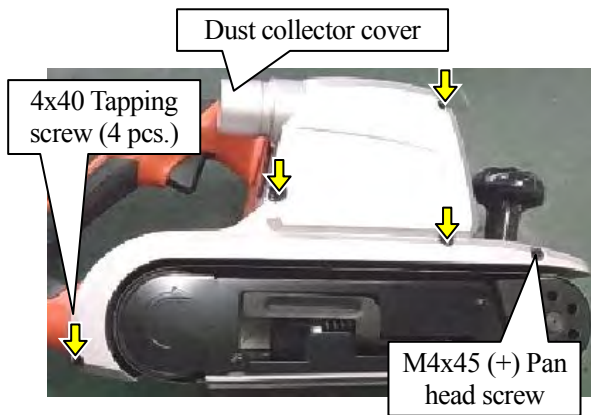


Fig. 6

- 6 Remove M5x12 (+) Pan head screw, and remove Fan 80. And then, separate Dust collector bracket together with Armature from the machine by loosening two 4x18 Tapping screws.

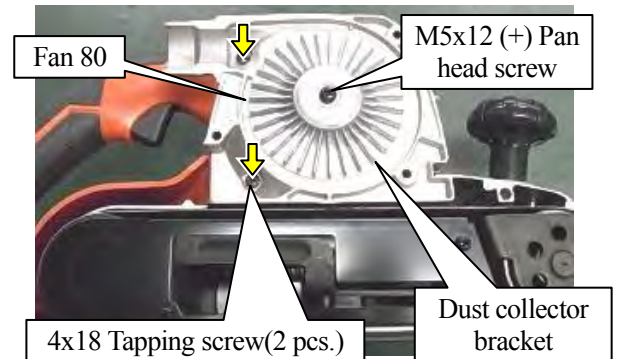


Fig. 7

- 7 Remove Ball bearing 6000ZZ from the commutator end of Armature while holding the claws of 1R269 with water pump pliers so that the claw of 1R269 does not slip from the tight gap between the bearing and Insulation washer. Then, remove Insulation washer from Armature.

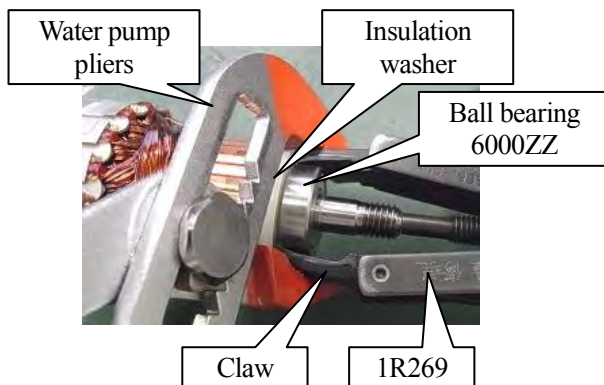
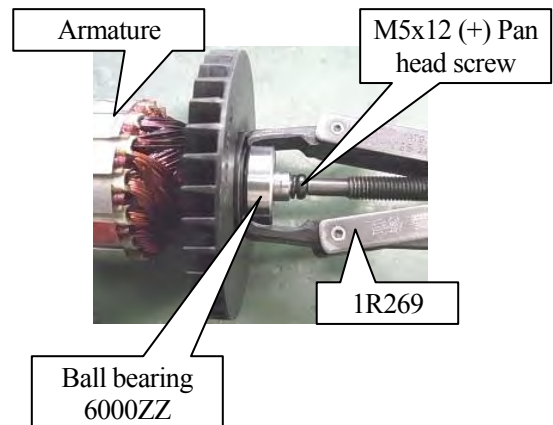


Fig. 8

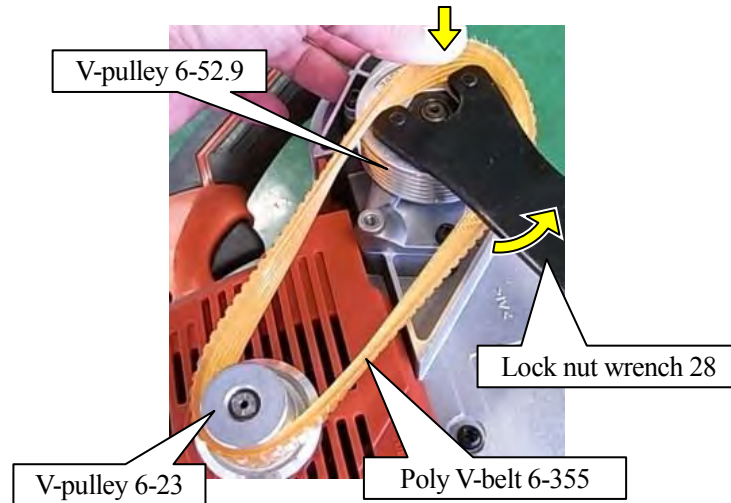
- 8 To protect the screw hole on the other end of Armature shaft, temporarily tighten M5x12 (+) Pan head screw for Fan 80. And then remove Ball bearing 6000ZZ from Armature with 1R269.



## 5-2 Assembling

Fig. 9

- 1 Hook Poly V-belt 6-355 completely with V-pulley 6-23.
- 2 Set two spikes of Lock nut wrench 28 to the holes of V-pulley 6-52.9.
- 3 While pressing the Poly V-belt 6-355 with your finger, turn V-pulley 6-52.9 with Lock nut wrench 28 counterclockwise. Poly V-belt is now engaged with both V-pulleys.



### 5-3 Driving Roller

#### 5-3-1 Disassembling

- 1 Remove Belt cover and Poly V-belt 6-355. (Refer to Fig. 2 and Fig. 3.)

Fig. 10

- 2 Remove three M4x18 (+) Pan head screws, and remove Gear cover section\* from the machine.

\* It consists of V-pulley 6-52.9, Helical gear 10, M10 Hex nut and Ball bearing 6200ZZ/ LLB.

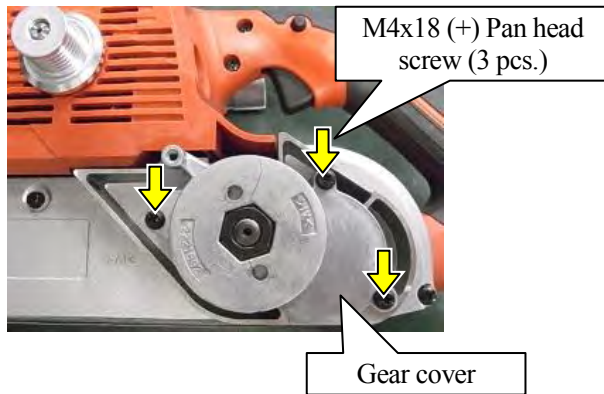


Fig. 11

- 3 Remove two M4x18 (+) Pan head screws, and remove Safety cover.

**Note:**

Make the lever of Tension roller arm flat to Safety cover. Otherwise, Safety cover cannot be removed.

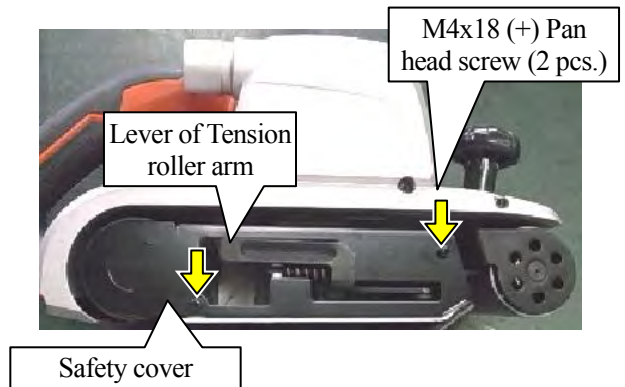


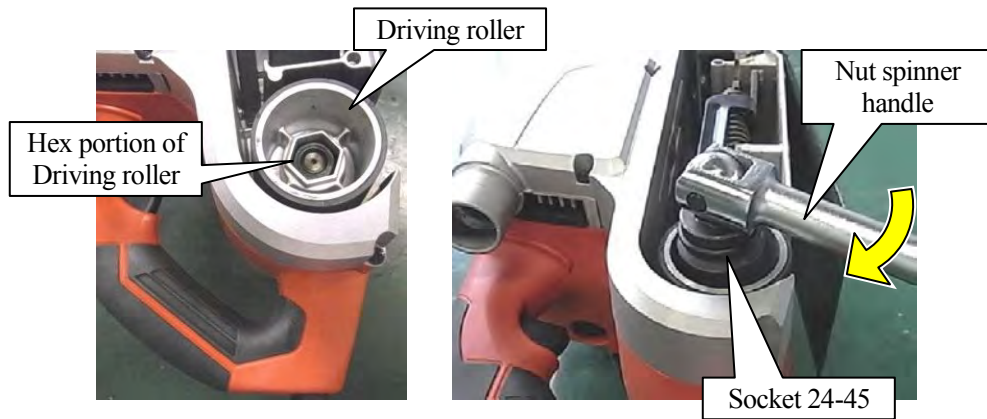
Fig. 12

- 4 Insert the two spikes of Lock nut wrench 28 into the holes on Helical gear 42 complete to lock Driving roller.



Fig. 13

- 5 Attach Socket 24-45 to Nut spinner handle. And fit the Socket to the hex portion of Driving roller. And then remove Driving roller by turning the hex portion of Driving roller clockwise.



### 5-3-2 Assembling

- 1 Assemble by reversing the disassembly procedure.



## 5-4 V-pulley 6-52.9, Helical gear 10

### 5-4-1 Disassembling

- 1 Disassemble Gear cover section. (Refer to Fig. 10.)

Fig. 14

- 2 Fix Helical gear 10 of Gear cover section in Vise.

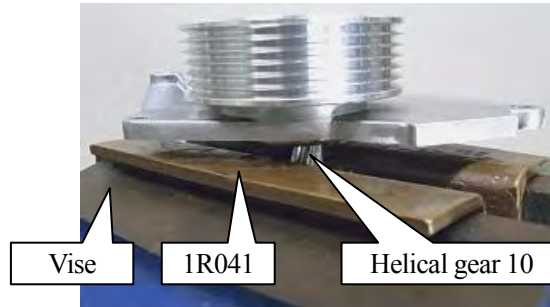
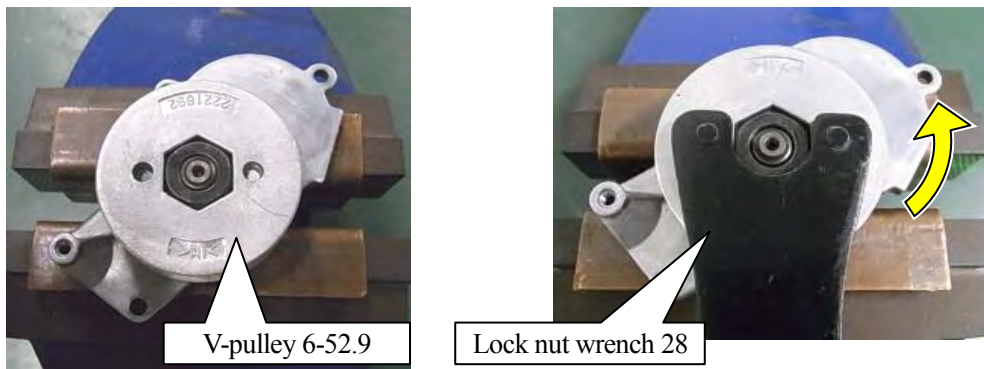


Fig. 15

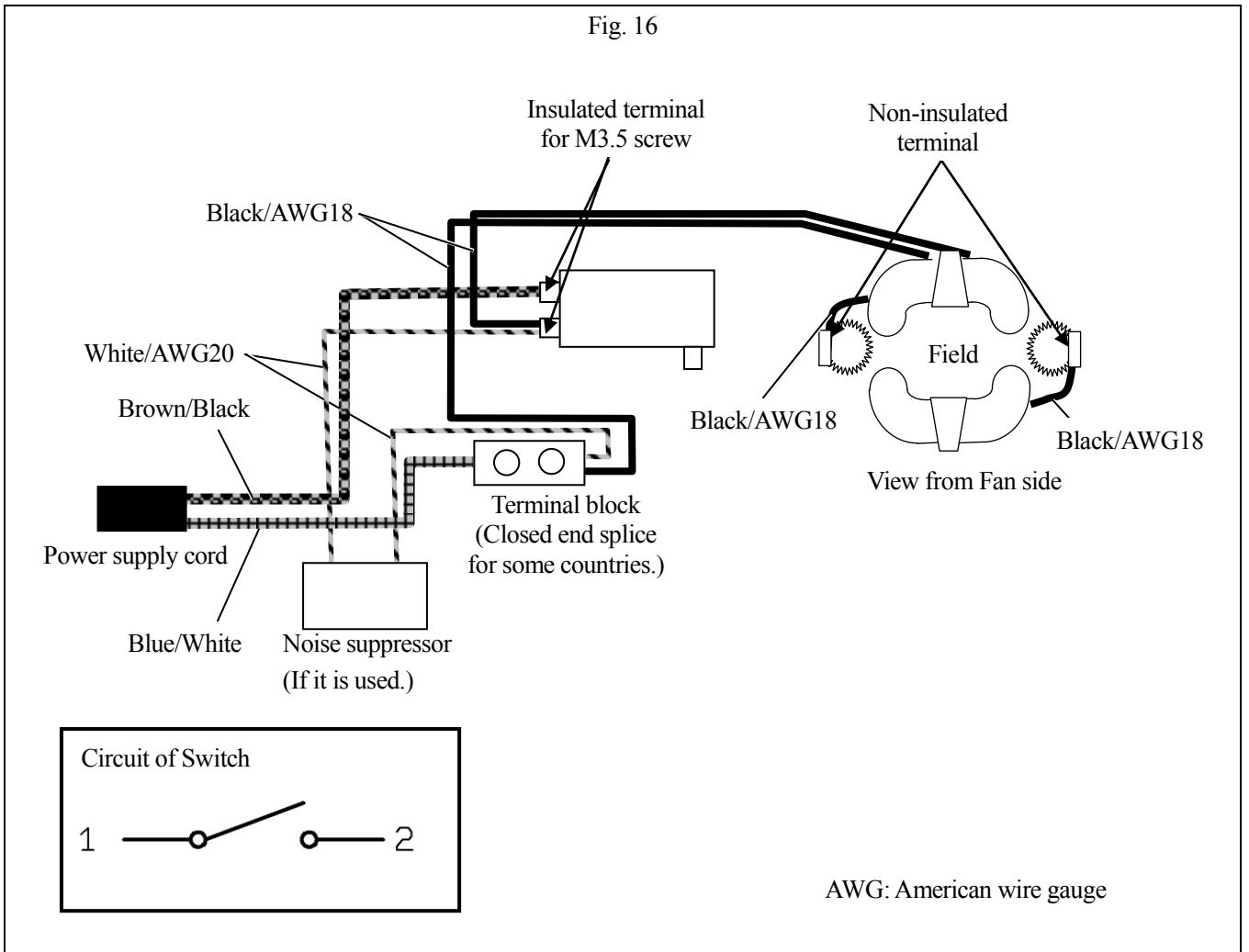
- 3 Insert the two spikes of Lock nut wrench 28 into the holes on V-pulley 6-52.9. And then, remove V-pulley 6-52.9 and Helical gear 10 by turning Lock nut wrench 28 counterclockwise.



### 5-4-2 Assembling

- 1 Assemble by reversing the disassembly procedure.

## 6 Circuit diagram



7 Wiring diagram

Fig. 17

Assemble Field as shown below.

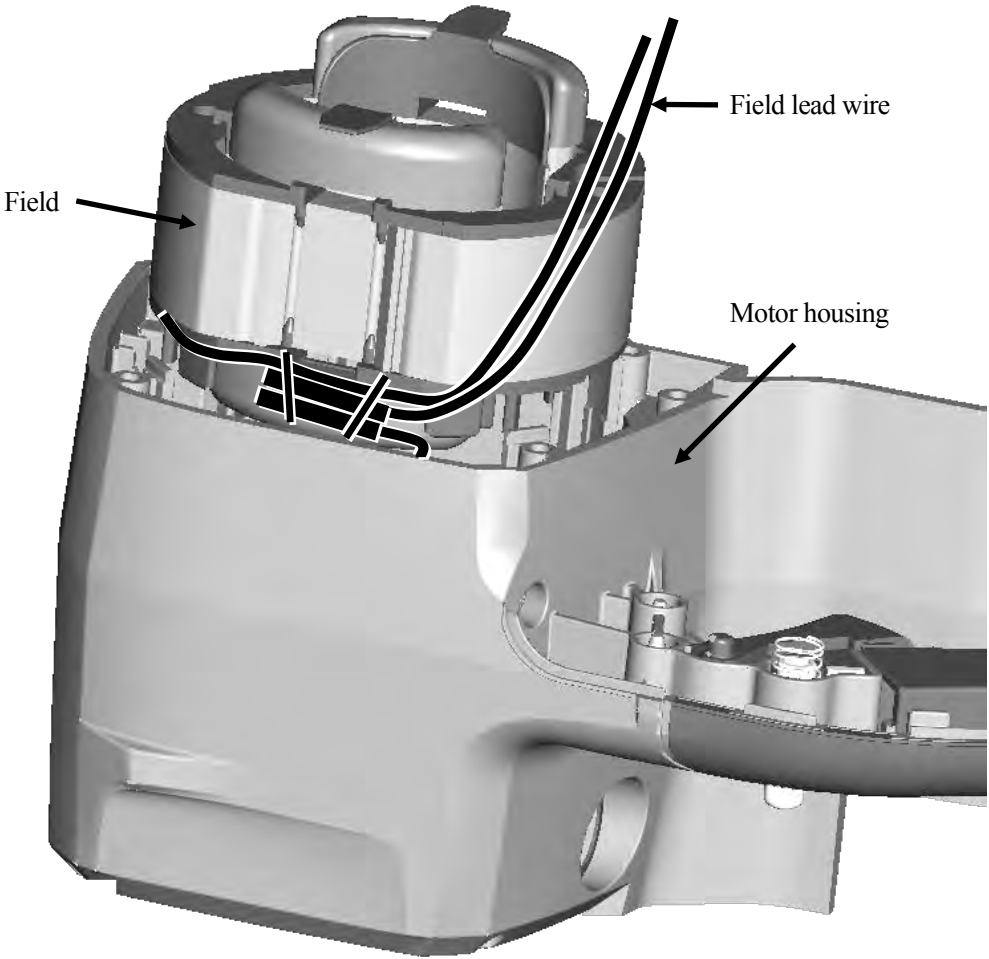
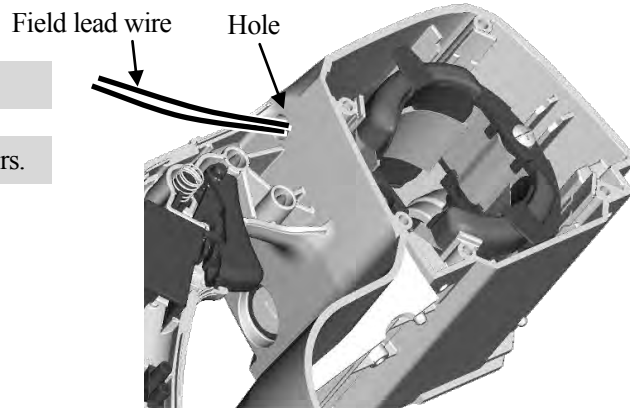


Fig. 18

Pass Field lead wires through the hole.

Fix Field lead wires in Lead wire holders.



Pass Field lead wires through this groove.

