

Model No. ▶ MT902, MT903

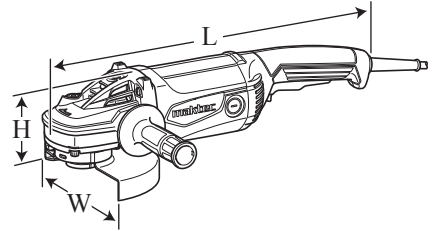
Description ▶ Angle Grinders 180mm (7")/ 230mm (9")

CONCEPT AND MAIN APPLICATIONS

Models MT902 and MT903 have been developed as the aesthetic change models of **maktec** angle grinders MT900 and MT901.

Feature the same advantages the current models as follows:

- Anti-dust, heavy-duty 2,000W motor
- Industrial performance and durability at less expense
- High dust-proof construction
- Rear handle with anti-slip surface for more control
- Machined spiral bevel gear for durability and long service life of the machine



Dimensions: mm (")		
Model No.	MT902	MT903
Length (L)	466 (18-3/8)	
Width (W)	200 (7-7/8)	250 (9-7/8)
Height (H)	138 (5-7/16)	

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output (W)
			Input	Output	
110	15	50/60	1,650	1,100	2,700
120	15	50/60	---	1,100	2,700
220	9.6	50/60	2,000	1,400	3,000
230	9.2	50/60	2,000	1,400	3,000
240	8.8	50/60	2,000	1,400	3,000

Model No.		MT902	MT903
Wheel size: mm (")	Diameter	180 (7)	230 (9)
	Hole diameter	22.23 (7/8)	
No load speed: min.-1 = rpm		8,500	6,600
Protection against electric shock		Double insulation	
Power supply cord: m (ft)		2.0 (6.6)	
Net weight*: kg (lbs)		5.4 (12.0)	5.7 (12.6)

* Weight according to EPTA-Procedure 01/2003, with Side grip, Wheel cover, Inner flange, Lock nut

► Standard equipment

Lock nut wrench 1 pc.

Side grip 1 pc.

Note: The standard equipment for the tool shown above may vary by country.

► Optional accessories

MT902: Accessories for 180mm angle grinder

MT903: Accessories for 230mm angle grinder

► Repair

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

[1] NECESSARY REPAIRING TOOLS

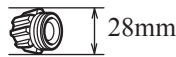

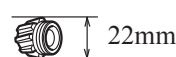

Code No.	Description	Use for
1R004	Retaining ring pliers ST-2	disassembling/ assembling Ring spring 15
1R005	Retaining ring pliers RT-2N	disassembling/ assembling Retaining ring R-42
1R027	Bearing setting pipe 18-10.2	disassembling Large spiral bevel gear from Spindle
1R269	Bearing extractor (small)	removing Ball bearings
1R286	Round bar for Arbor	disassembling large Spiral bevel gear from Spindle

[2] LUBRICATIONS

Apply approx. 70g of Makita grease N No.1 to Gear room.

[3] DIFFERENCE OF GEARS BETWEEN MT902 AND MT903

Refer to the following gears. They are not interchangeable.

Model No.	Small spiral bevel gear (Gear on Armature shaft)	Large spiral bevel gear (Gear on Spindle)
MT902	Spiral bevel gear 16  Number of teeth: 16	Spiral bevel gear 53B 
MT903	Spiral bevel gear 12  Number of teeth: 12	Spiral bevel gear 53A 

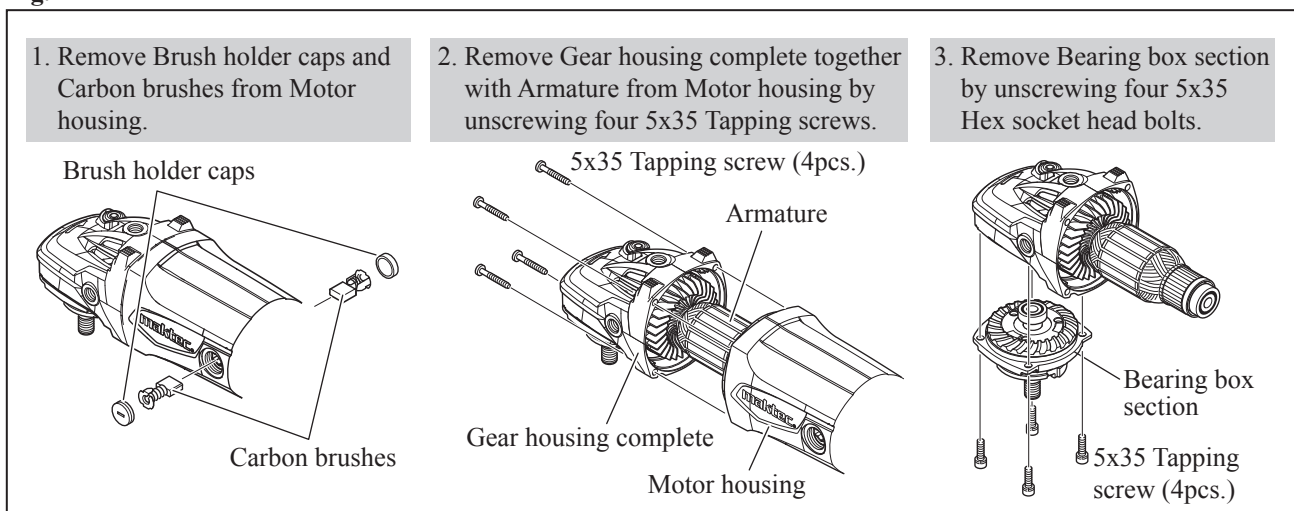
[4] DISASSEMBLY/ASSEMBLY

[4]-1. Small spiral bevel gear, Armature, Ball bearings 6301ZZ and 6200ZZ

DISASSEMBLING

(1) Disassemble Gear housing complete and Bearing box. (Fig. 1)

Fig. 1



► **Repair**

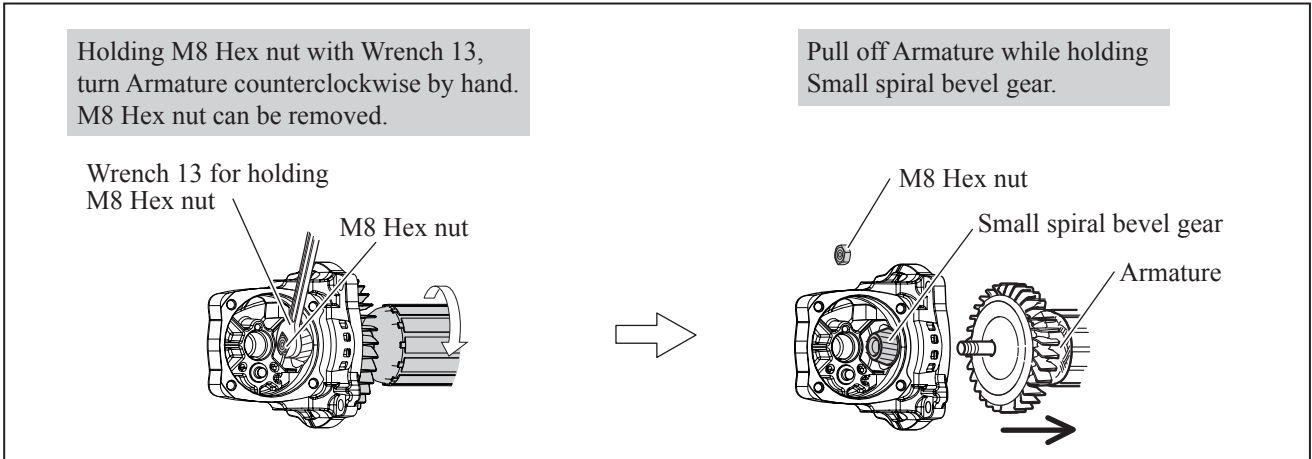
[4] DISASSEMBLY/ASSEMBLY

[4]-2. Small spiral bevel gear, Armature, Ball bearings 6301ZZ and 6200ZZ (cont.)

DISASSEMBLING

(2) Disassemble Armature and Small spiral bevel gear. (Fig. 2)

Fig. 2

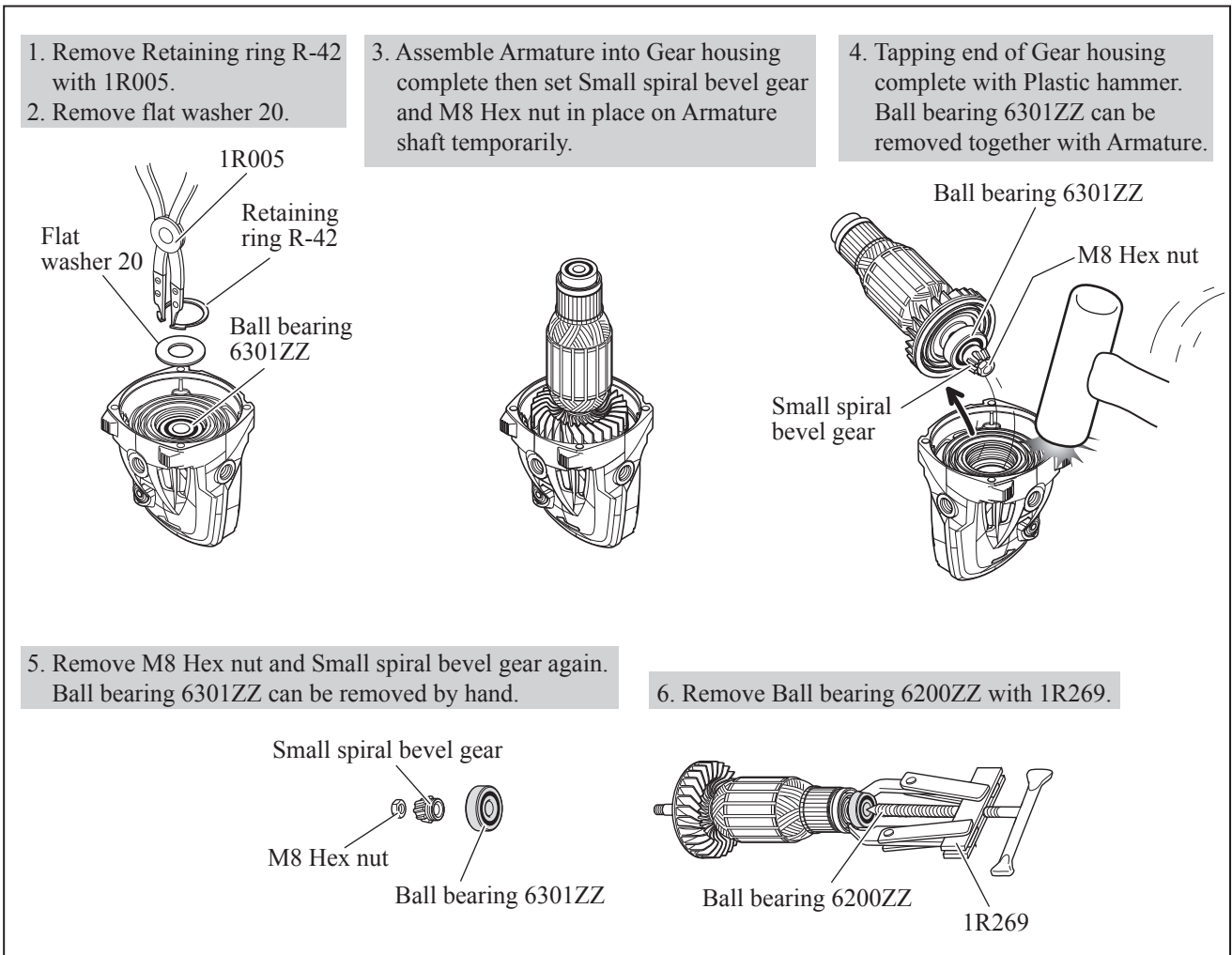


Note: If it is difficult to pull off Armature by hand, do the following steps.

1. Lubricate Small spiral bevel gear and Armature shaft with spray lubricant.
2. Wrap the gear with cloth to protect the gear teeth.
3. By using water pump pliers, firmly grip the gear wrapped with cloth and then turn and pull Armature.

(3) Disassemble Ball bearings 6301ZZ and 6200ZZ. (Fig. 3)

Fig. 3



► **Repair**

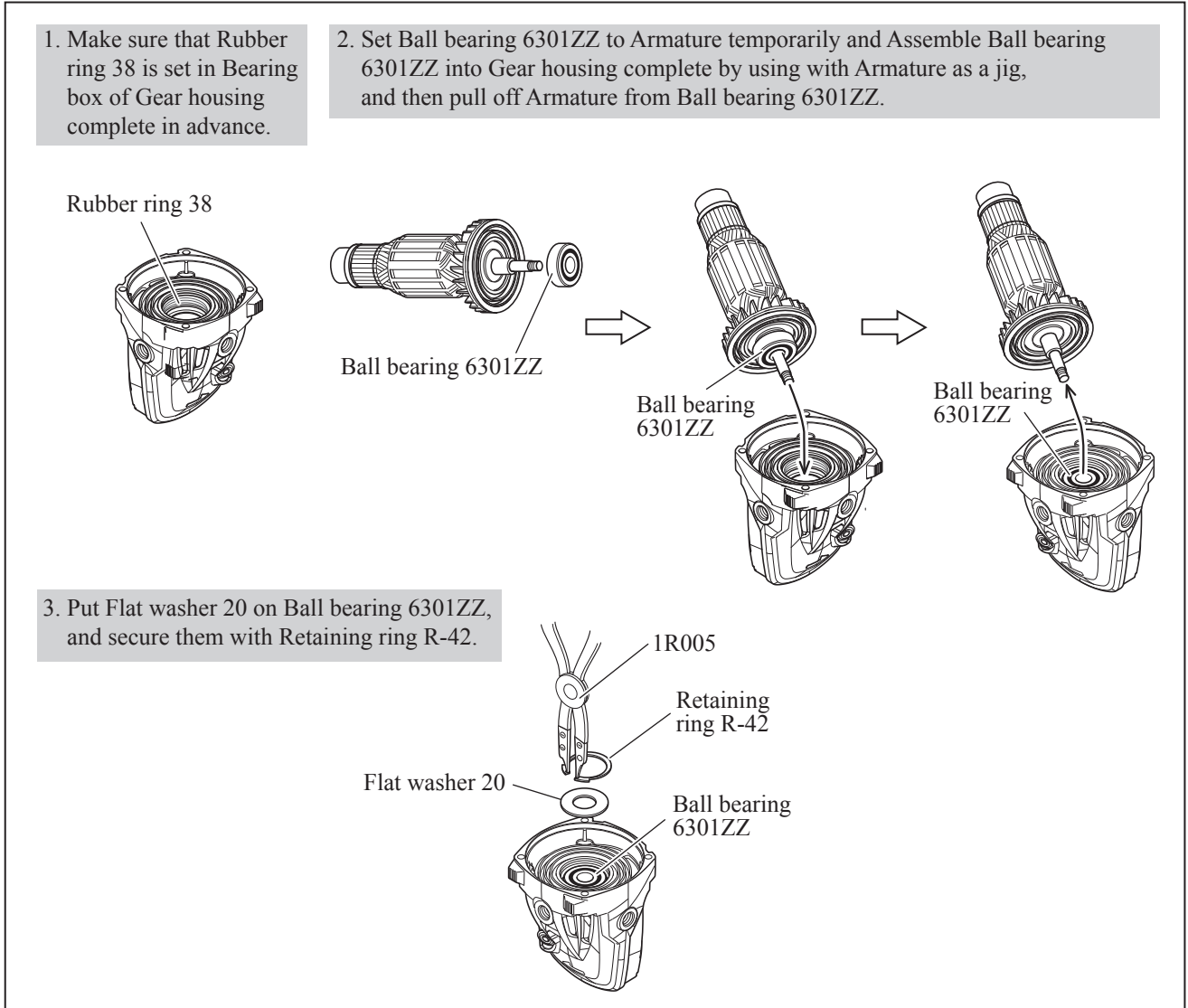
[4] DISASSEMBLY/ASSEMBLY

[4]-2. Small spiral bevel gear, Armature, Ball bearings 6301ZZ and 6200ZZ (cont.)

ASSEMBLING

(1) Armature can be also used as an assembling jig for Ball bearing 6301ZZ. (**Fig. 4**)

Fig. 4



(2) Assemble Spiral bevel gear 16 or 12 and M8 Hex nut to Armature shaft. Reverse step of disassembling. (**Fig. 3**)

► Repair

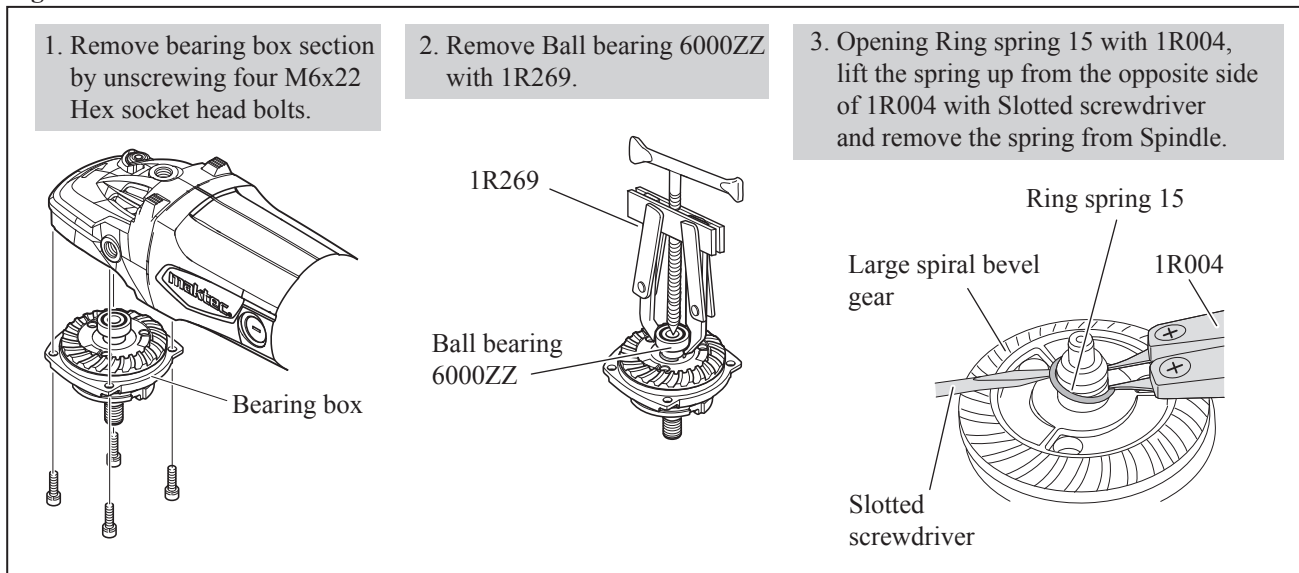
[4] DISASSEMBLY/ASSEMBLY

[4]-3. Large spiral bevel gear, Ball bearing 6203DDW

DISASSEMBLING

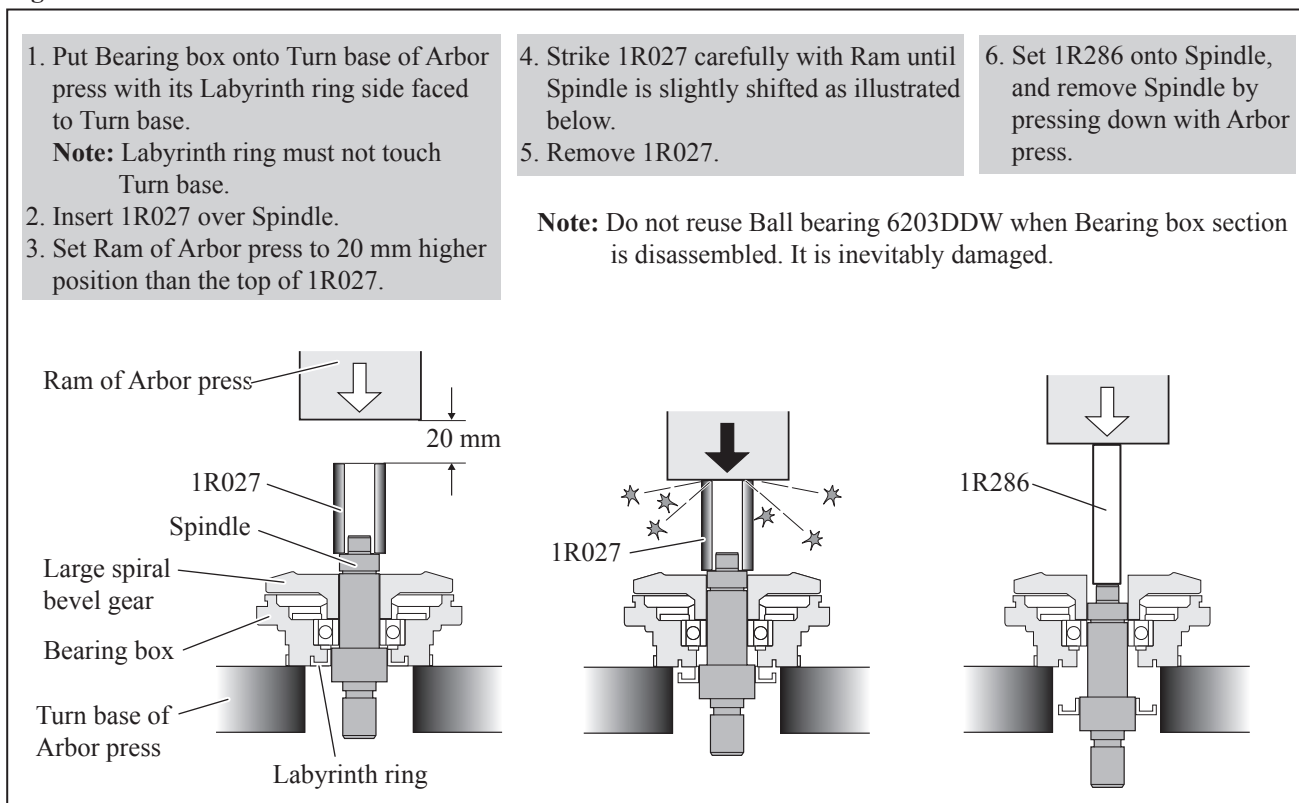
- (1) No need to separated Motor housing from Gear housing complete. Separate Bearing box section from Gear housing complete, and remove Ball bearing and Ring spring from Spindle. (Fig. 5)

Fig. 5



- (2) Disassemble Spindle. (Fig. 6)

Fig. 6



► Repair

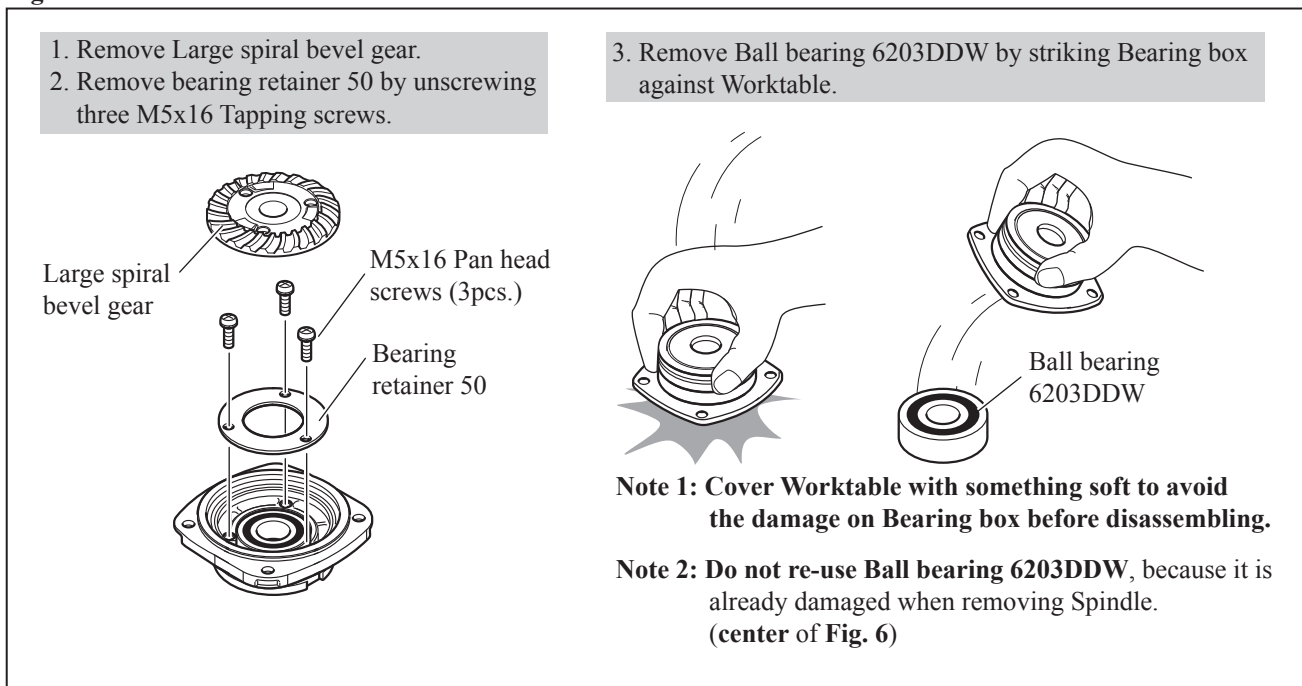
[4] DISASSEMBLY/ASSEMBLY

[4]-3. Large spiral bevel gear, Ball bearing 6203DDW (cont.)

DISASSEMBLING

(3) Disassemble Ball bearing 6203DDW. (Fig. 7)

Fig. 7



ASSEMBLING

- (1) Put fresh Ball bearing 6203DDW into Bearing box and secure the Ball bearing with Bearing retainer 50 by screwing M5x16 Pan head screws. (Fig. 7)
- (2) Assemble Spindle by pressing with Arbor press through Ball bearing and Large spiral bevel gear. (Fig. 6)
- (3) Assemble Ring spring 15 and Ball bearing 6000ZZ. (Fig.5)

► Repair

[4] DISASSEMBLY/ASSEMBLY

[4]-4. Shaft lock

DISASSEMBLYING

- (1) Remove Bearing box section from Gear housing complete. (Fig. 1)
- (2) Shaft lock mechanism can be disassembled. (Figs. 8, 9)

Fig. 8

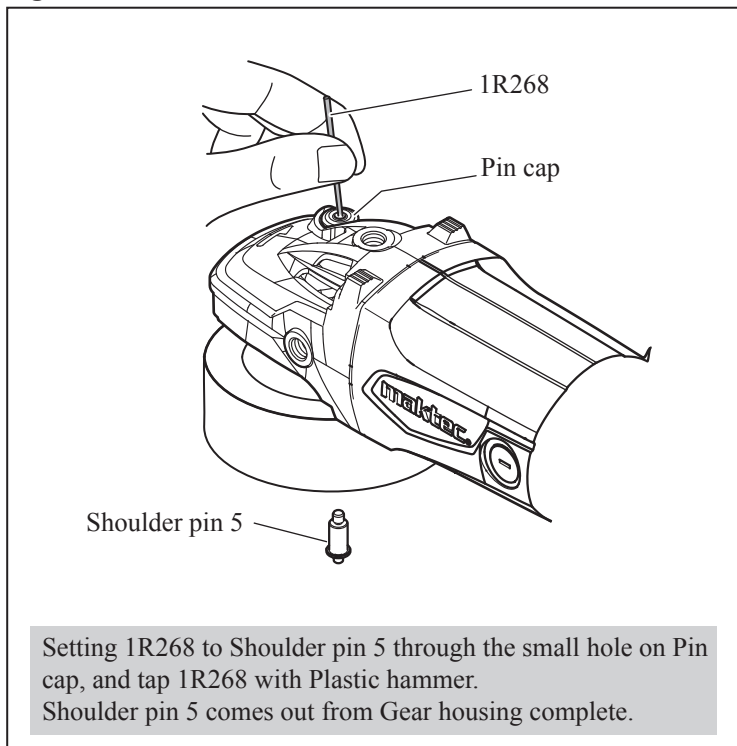
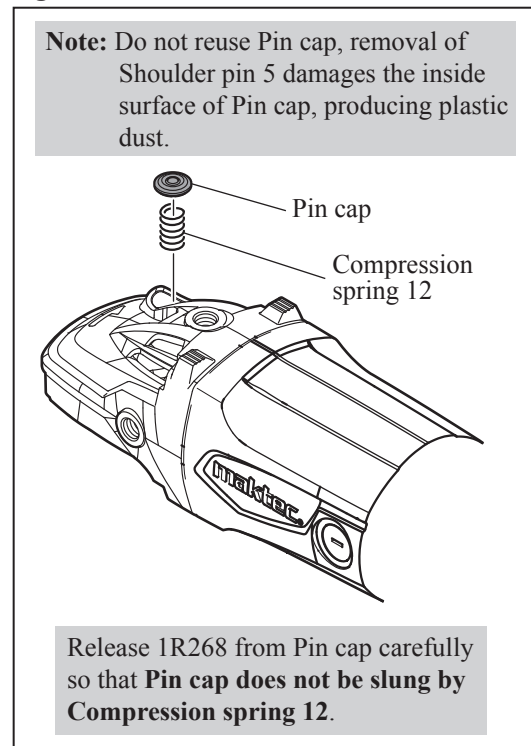


Fig. 9



ASSEMBLING

- (1) Be sure to use a new Pin cap for replacement and to remove all the plastic dust on Shoulder pin 5. (Fig. 10)
- (2) Assemble the Parts for Shaft lock mechanism. (Fig. 11)

Fig. 10

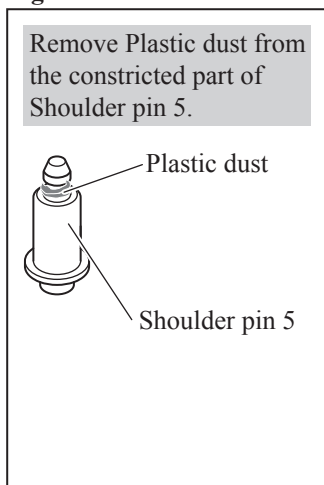
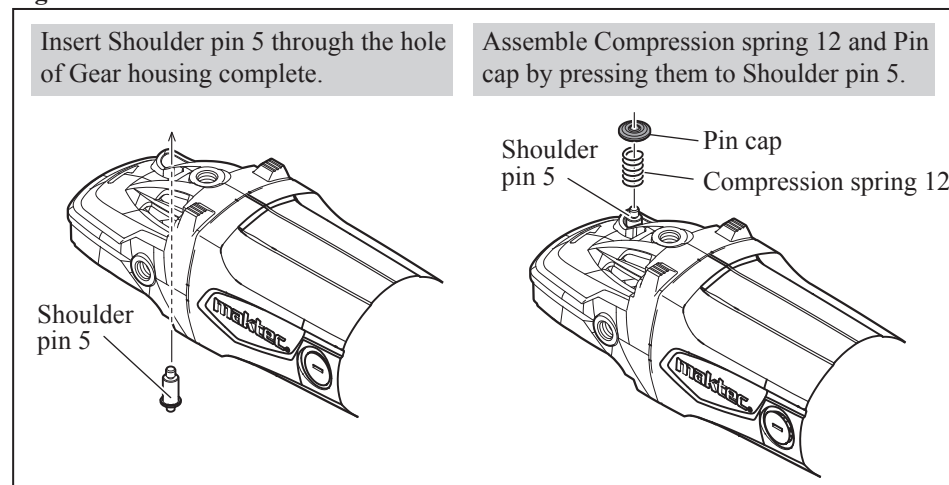
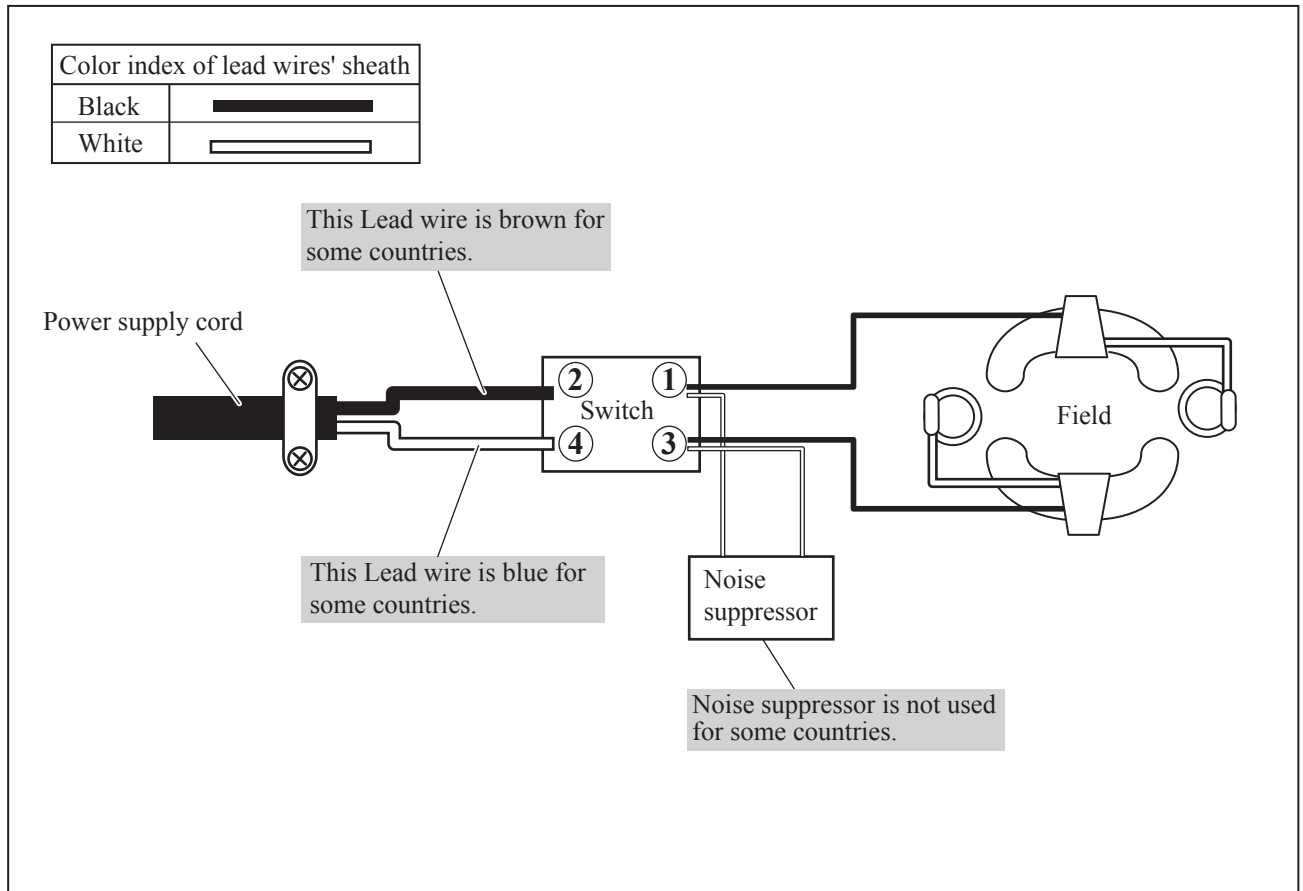


Fig. 11



► **Circuit diagram**

Fig. D-1



▶ Wiring diagram

Fig. D-2

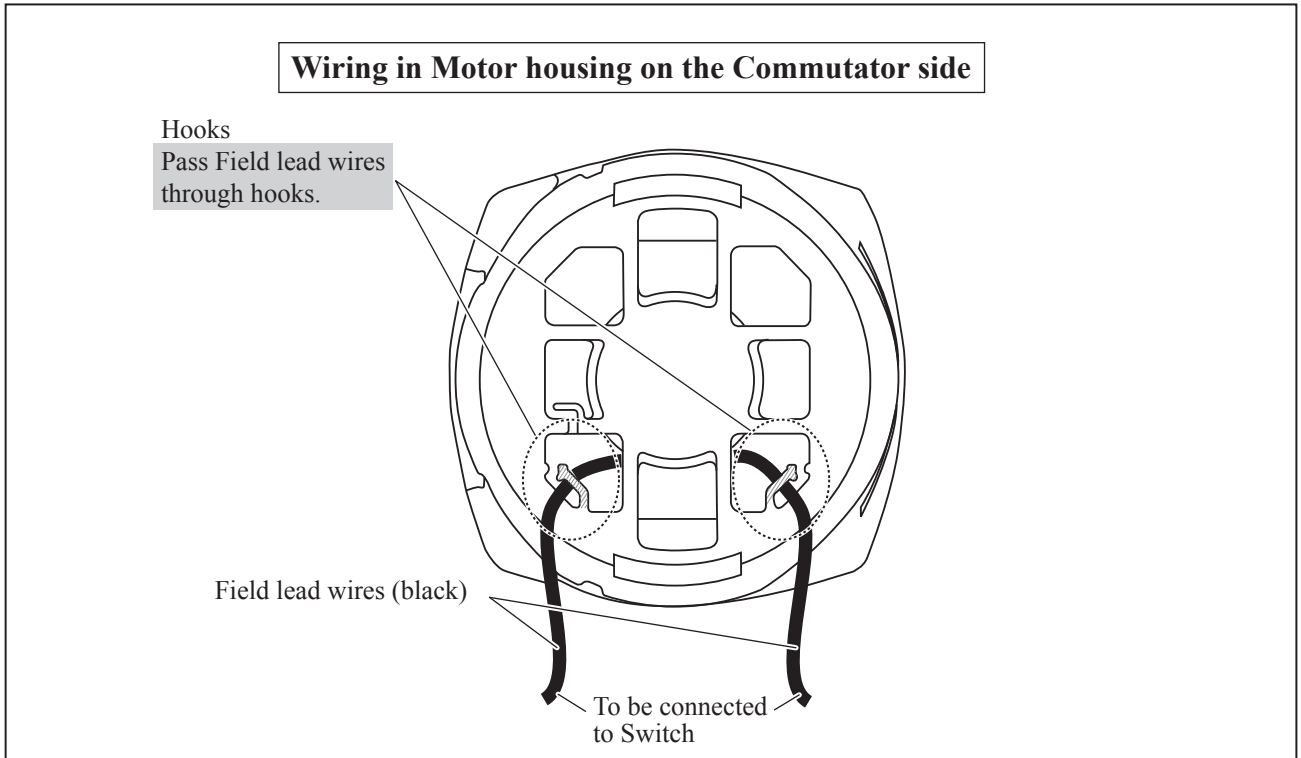


Fig. D-3

