

# TECHNICAL INFORMATION



PRODUCT

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**Model No.** ▶ BGD800 (LXDG01)\*1, BGD801

**Description** ▶ Cordless Die Grinder

\*1 Model number for North and Central American countries

## CONCEPT AND MAIN APPLICATIONS

Models BGD800 (LXDG01)\*1 and BGD801 are Cordless die grinders powered by 18V/3.0A Li-ion battery BL1830, featuring the same easy-to-grip slim motor housing as used for Model BGA402 Cordless angle grinder.

BGD800 is a long-nose die grinder using the mechanical section of Model GD601 while BGD801 is a short-nose type using that of Model GD602.

**Note:** These models are not compatible with 1.3Ah Li-ion battery BL1815.

These new products are available in the following variations.

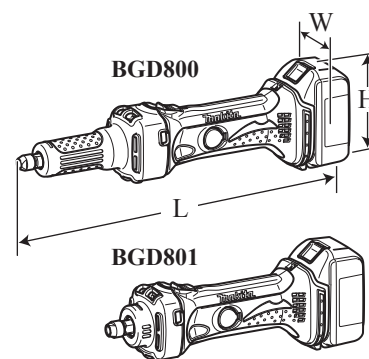
### BGD800 (LXDG01)\*1

Model No.	Battery		Battery cover	Charger	Plastic carrying case
	Type	Quantity			
BGD800Z (LXDG01Z)*1	---	---	---	---	---
BGD800RFE (LXDG01)*1	BL1830	2	1	DC18RA	Yes

### BGD801

Model No.	Battery		Battery cover	Charger	Plastic carrying case
	Type	Quantity			
BGD801Z	---	---	---	---	---
BGD801RFE	BL1830	2	1	DC18RA	Yes

All models also include the accessories listed below in "Standard equipment".



Dimensions: mm (")		
	BGD800	BGD801
Length (L)	402 (15-3/4)	307 (12-1/8)
Width (W)	82 (3-1/4)	
Height (H)	118 (4-5/8)	

## Specification

Specification		Model	BGD800	BGD801
Battery	Cell		Li-ion	
	Voltage: V		18	
	Capacity: Ah		3.0	
	Charging time (approx.): min.		22 with DC18RA	
Max output: W			350	
No load speed: min-1=rpm			25,000	
Collet size: mm (")	Supplied with the tool		6*2 (1/4)	
	Option		3, 6, 8 (1/8, 1/4)	
Max collet capacity: mm (")			8 (1/4)*3	
Max wheel diameter: mm (")			38 (1-1/2)	
Weight according to EPTA-Procedure 01/2003*4: kg (lbs)			2.0 (4.4)	1.7 (3.8)

\*2: The tools for India additionally includes 8mm collet cone.

\*3: 1/4" is the Max. collet capacity in inch for North American countries.

(Collet cone of inch size corresponding to 8mm is not available for these models.)

\*4: with battery, collet cone and collet nut

## Standard equipment

Wrench 13 ..... 2  
 Collect cone 6mm or 1/4" ..... 1  
 Collect cone 8mm ..... 1 (for India)

**Note:** The standard equipment shown above may vary by country.

## Optional accessories

Collet cones (3mm, 6mm, 8mm, 1/8", 1/4")	Fast charger DC18RA
Side grip	Charger DC18SD
Wheel points	Charger DC24SC
Battery BL1830	Automotive charger DC18SE

**BGD0800 (LXDG01)**

► **Repair**

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

**[1] NECESSARY REPAIRING TOOLS**

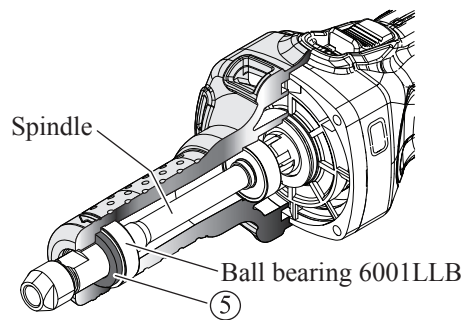
Code No.	Description	Use for
1R279	Round bar for arbor 5-50	removing Armature
1R291	Retaining ring S and R pliers	removing Retaining rings S-9 and S-12
1R350	Ring 60	holding Bearing box complete when removing Armature
1R382	Armature positioning jig	positioning Armature at the precise position when mounting it to Bearing box complete
	Hex socket bit 17	fixing Coupling when removing it from Spindle
	Wrench 13	removing Spindle from Coupling

**[2] LUBRICATION**

Apply lubricant as instructed in the table below.

Item No.	Description	Portion to lubricate	Lubricant	Amount (g)
⑤	Felt Ring 17	Apply sufficient lubricant to protect from dust.	“VG100”	

**Fig. 1**



**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Coupling, Spindle**

**DISASSEMBLING**

- (1) Remove Collet cone and Collet sleeve from Spindle.
- (2) Remove Insulation cover from Barrel section. Separate Barrel section from Housing, then disassemble Barrel section using vise. (**Fig.2**)

**Fig. 2**

1. Remove Insulation cover from Barrel, then remove four 4x30 Tapping screws that fasten Barrel section to Housing.

2. Separate Barrel section from Housing.  
**Note:**  
Be careful not to lose Flat washer 22 in this step.

3. Fix Barrel section in vise securely, then remove Bearing retainer from Barrel complete by turning Barrel complete counterclockwise.

**BGD0800 (LXDG01)**

► **Repair**

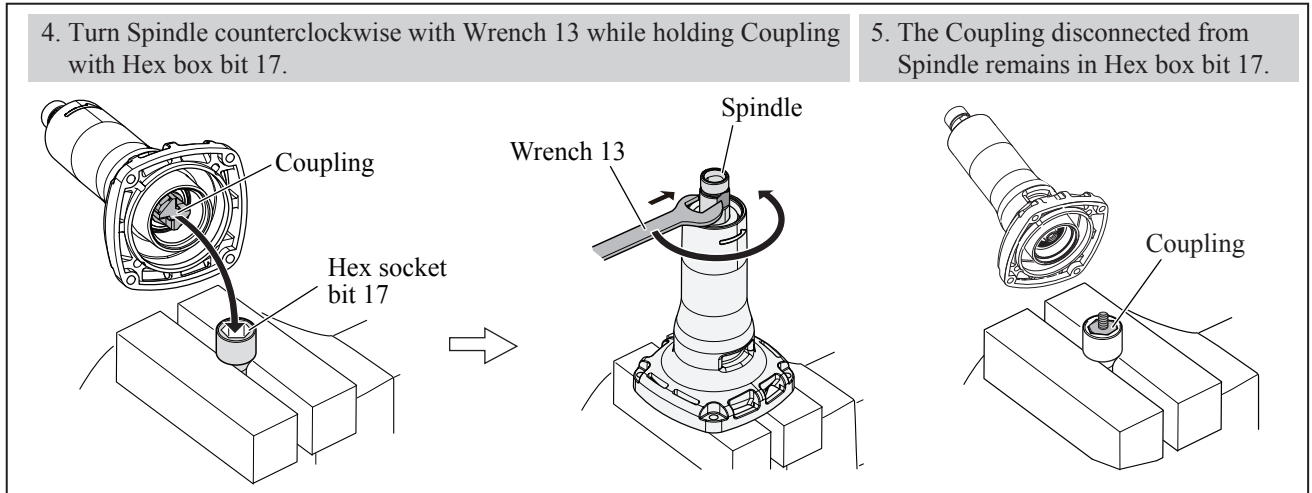
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Coupling, Spindle**

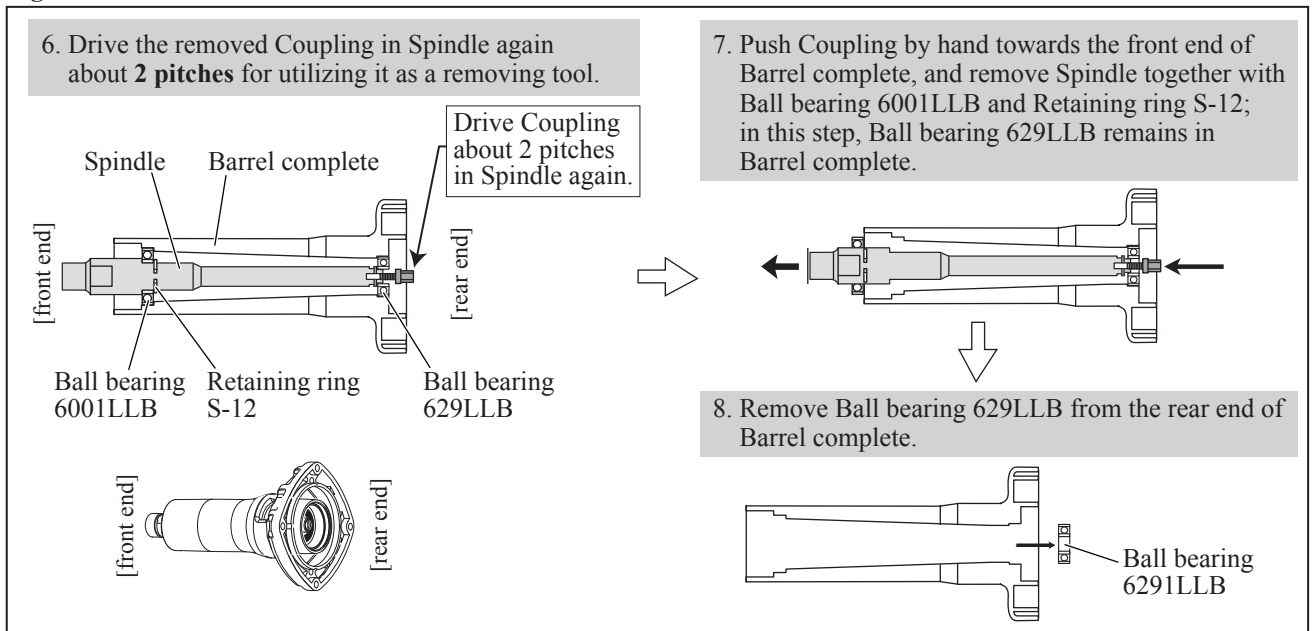
**DISASSEMBLING**

(2) Remove Coupling from Spindle, then separate Spindle from Barrel complete. (Figs. 3, 4)

**Fig. 3**

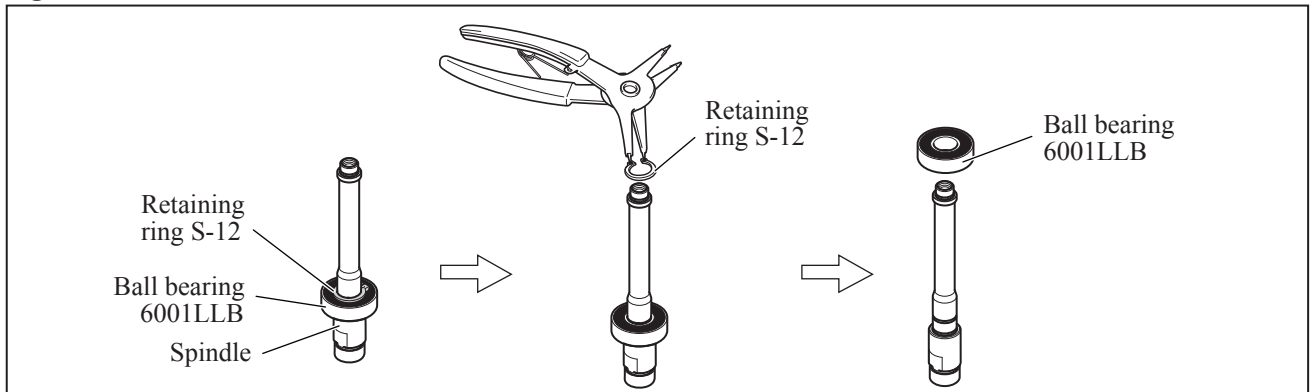


**Fig. 4**



(3) Remove Retaining ring S-12 and Ball bearing 6001LLB from Spindle. (Fig. 5)

**Fig. 5**



**ASSEMBLING**

Do the reverse of the disassembling steps.

**BGD0800 (LXDG01)**

► **Repair**

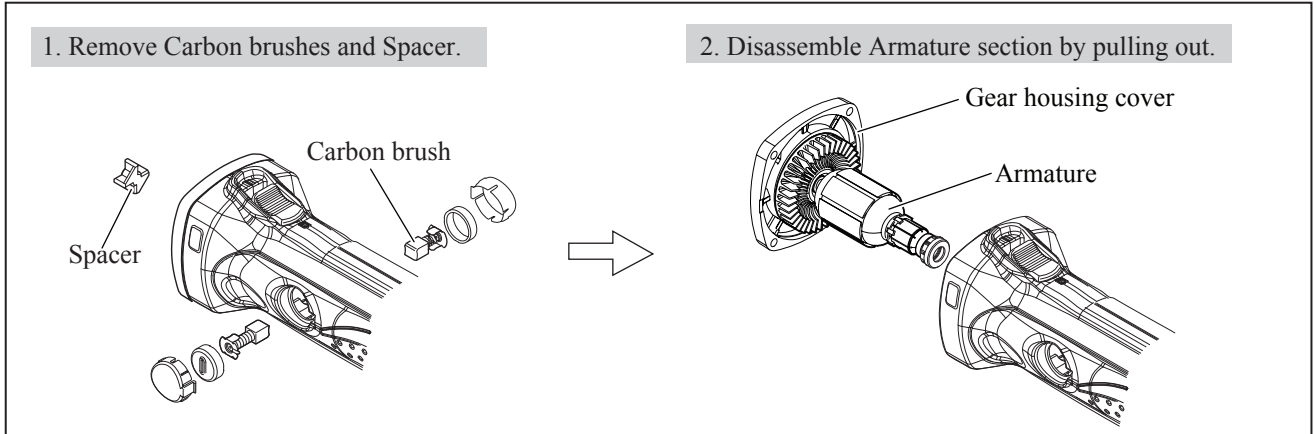
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-2. Armature**

**DISASSEMBLING**

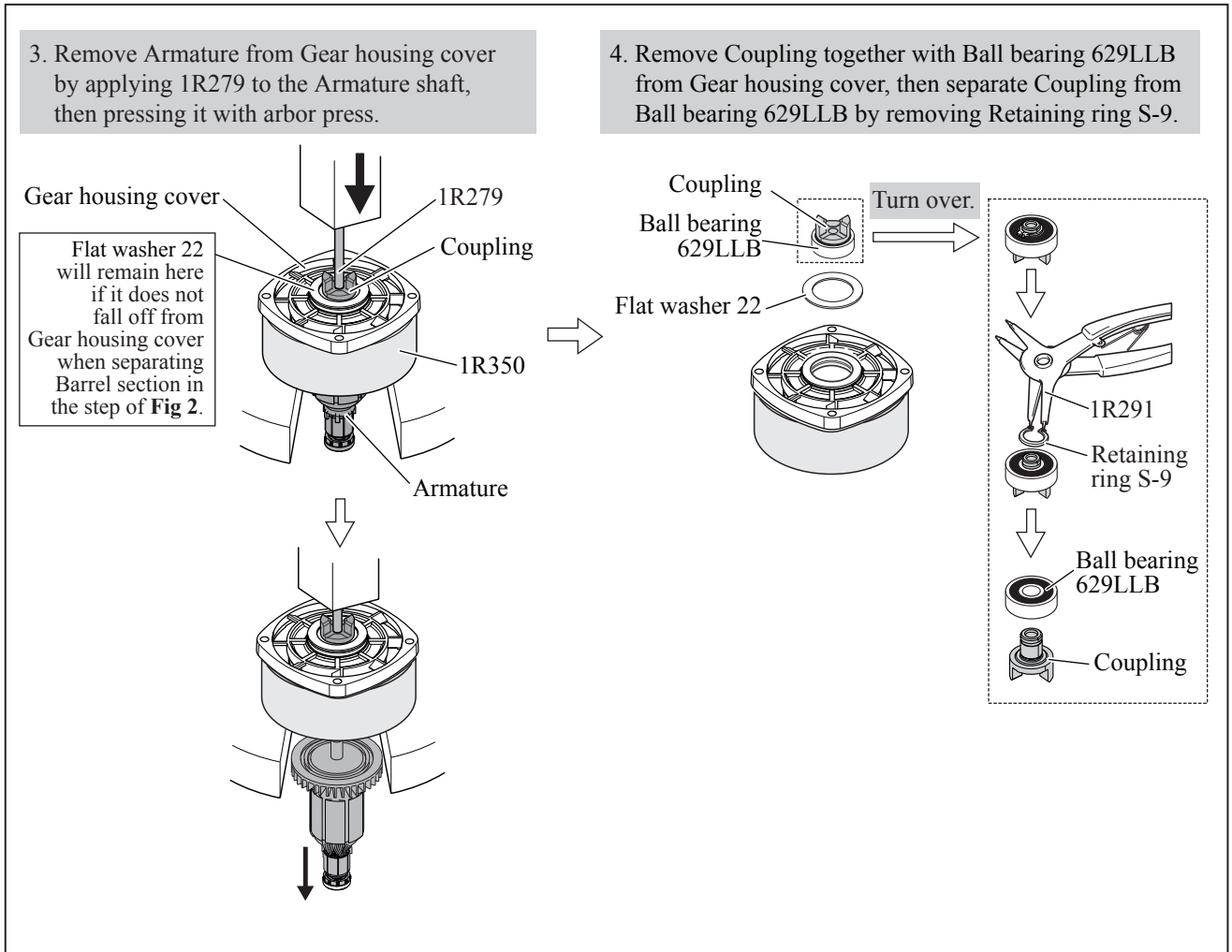
- (1) Remove Barrel section. (Fig. 2)
- (2) Disassemble Armature. (Fig. 6)

**Fig. 6**



- (3) Separate Armature from Gear housing cover. (Fig. 7)

**Fig. 7**



**BGD0800 (LXDG01)**

► **Repair**

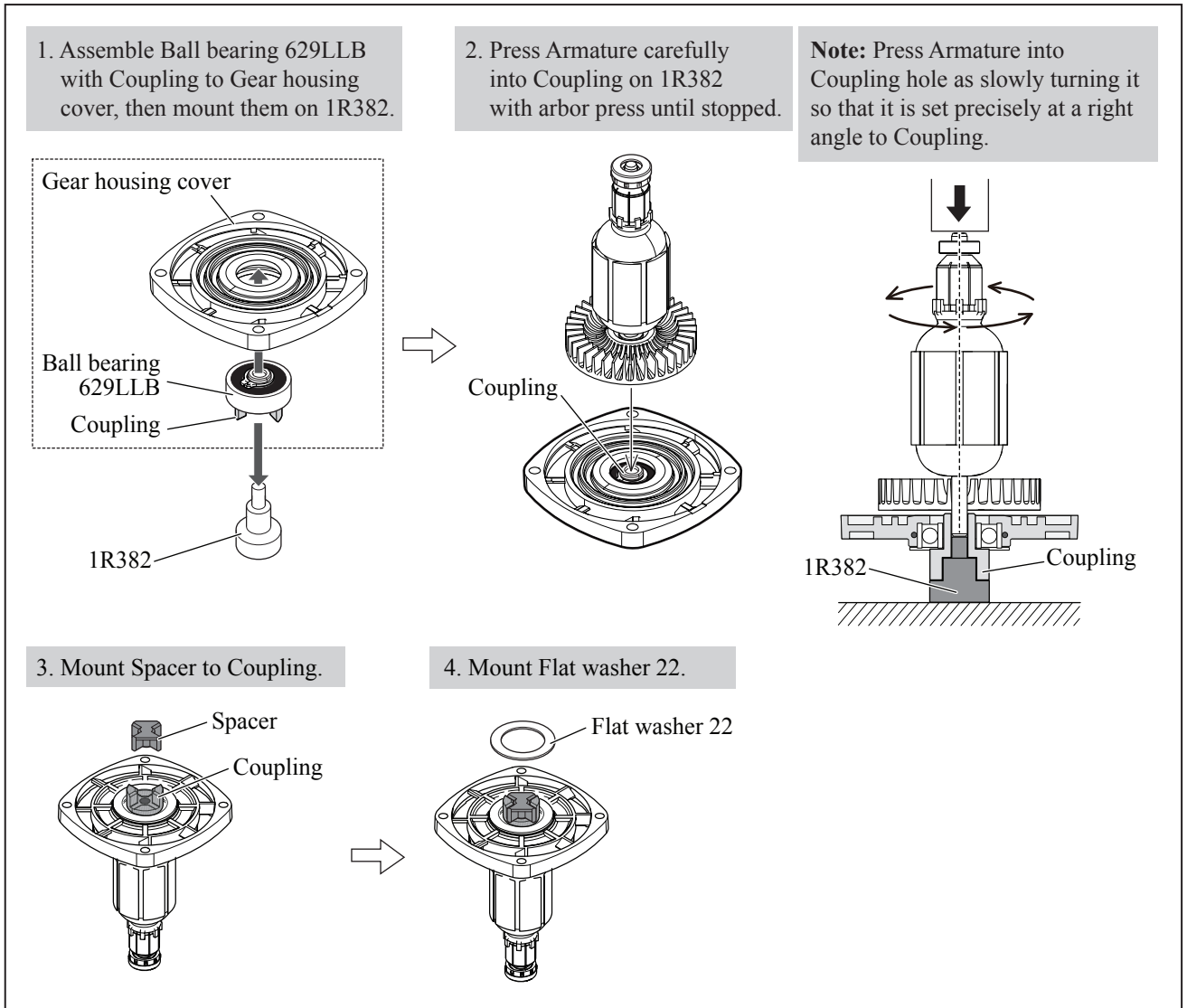
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-2. Armature**

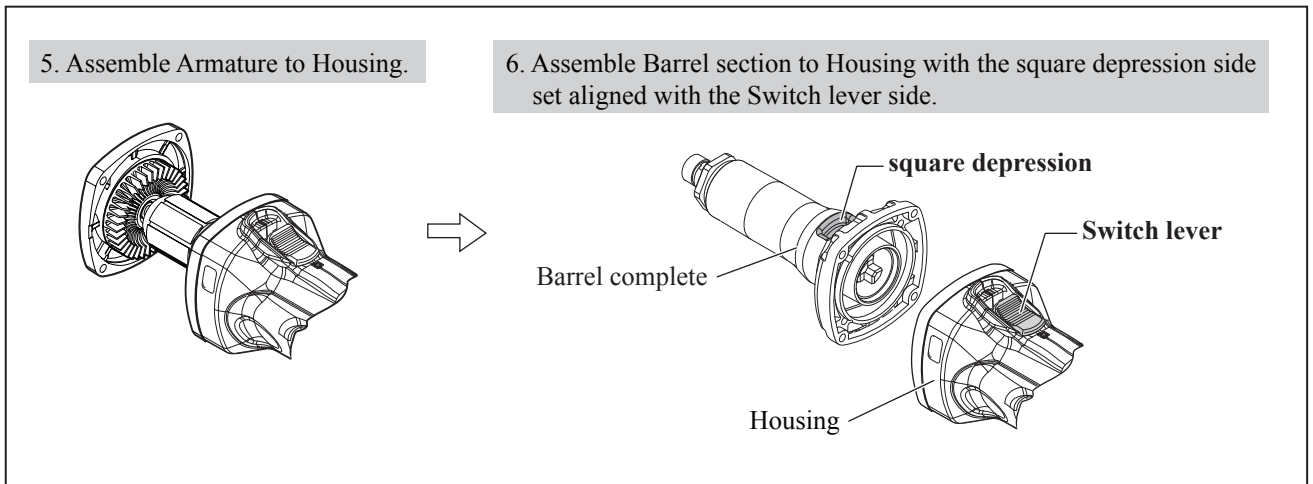
**ASSEMBLING**

- (1) Assemble Coupling to Ball bearing 629LLB by fitting Retaining ring S-9. (Fig. 7)
- (2) Assemble Armature to Gear housing cover. (Fig. 8)

**Fig. 8**



**Fig. 9**



**BGD0801**

► **Repair**

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

**[1] NECESSARY REPAIRING TOOLS**

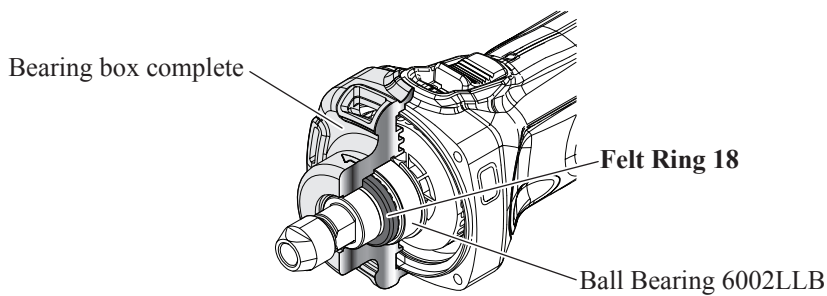
Code No.	Description	Use for
1R005	Retaining ring pliers RT-2N	removing Retaining ring R-32
1R279	Round bar for arbor 5-50	removing Armature
1R291	Retaining ring S and R pliers	removing Retaining ring S-15
1R350	Ring 60	holding Bearing box complete when removing Armature
1R383	Armature positioning jig	positioning Armature at the precise position when mounting it to Bearing box complete

**[2] LUBRICATION**

Apply lubricant as instructed in the table below.

Item No.	Description	Portion to lubricate	Lubricant	Amount (g)
---	Felt Ring 18 (a component part of Bearing box complete)	Apply sufficient lubricant to protect from dust.	“VG100”	

**Fig. 1**



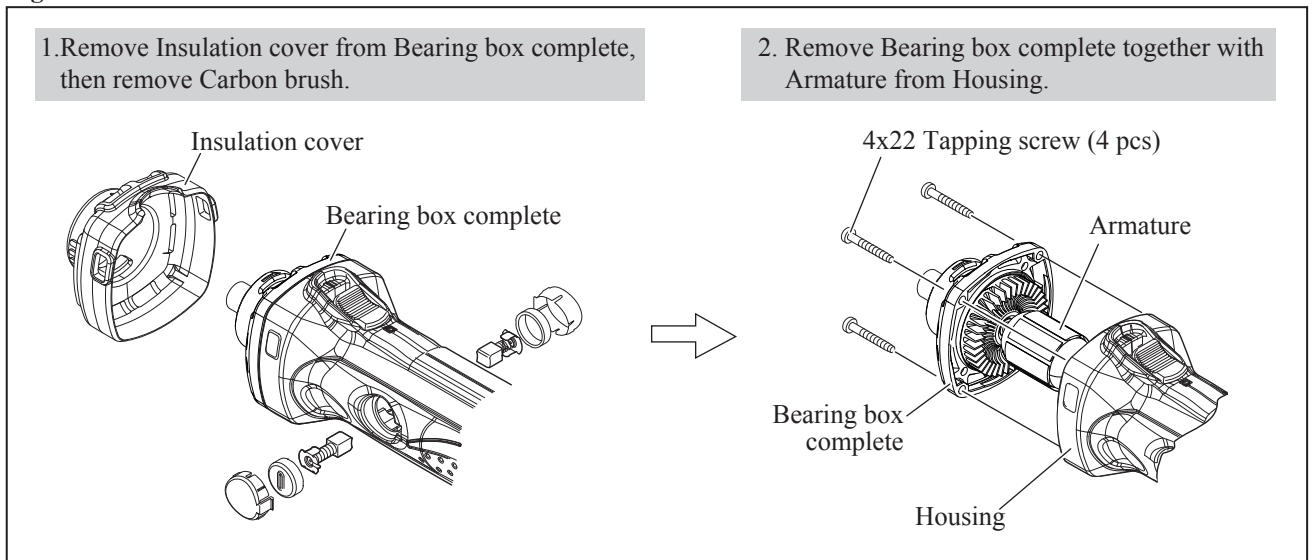
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Armature**

**DISASSEMBLING**

- (1) Remove Collet cone and Collet sleeve from Spindle.
- (2) Remove Insulation cover from Bearing box complete, then separate Bearing box complete from Housing. (**Fig.2**)

**Fig. 2**



**BGD0801**

**Repair**

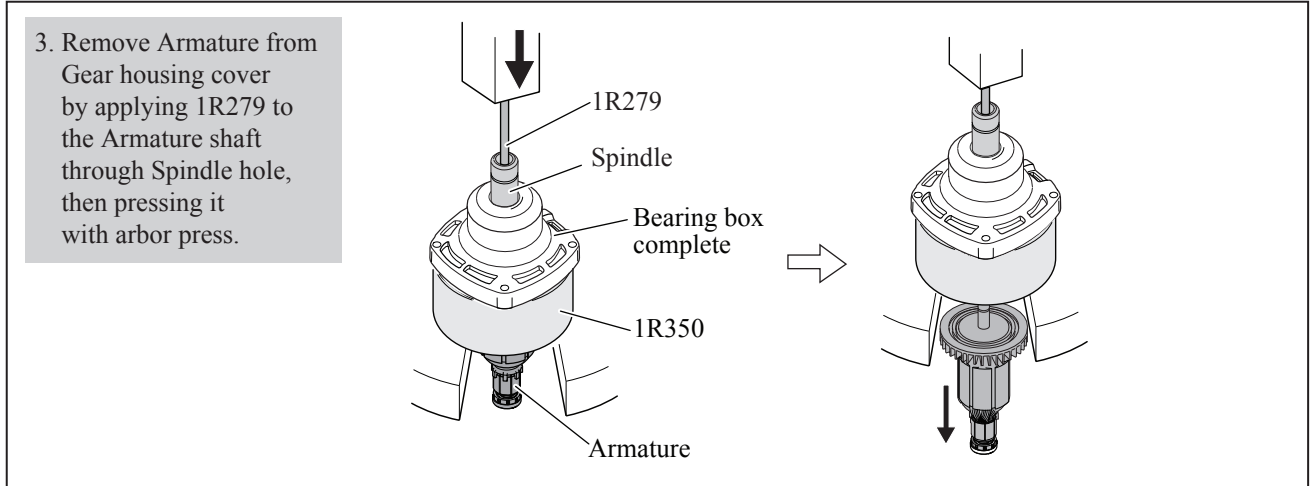
**[3] DISASSEMBLY/ASSEMBLY**

**[3]-1. Armature**

**DISASSEMBLING**

(3) Separate Armature from Bearing box complete. (Fig. 3)

**Fig. 3**

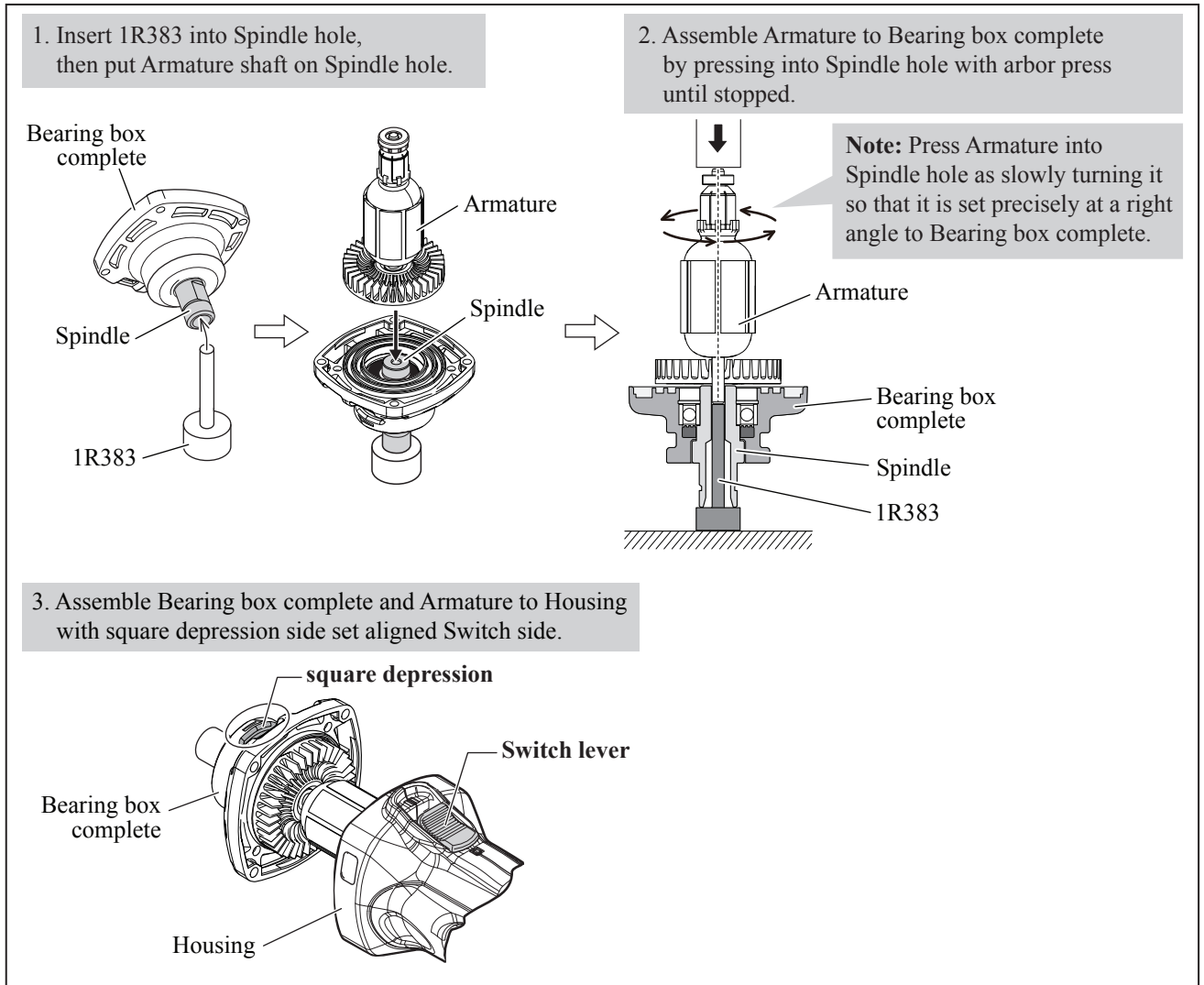


**ASSEMBLING**

Assemble Armature to Gear housing cover by using Armature positioning jig 1R383. (Fig. 4)

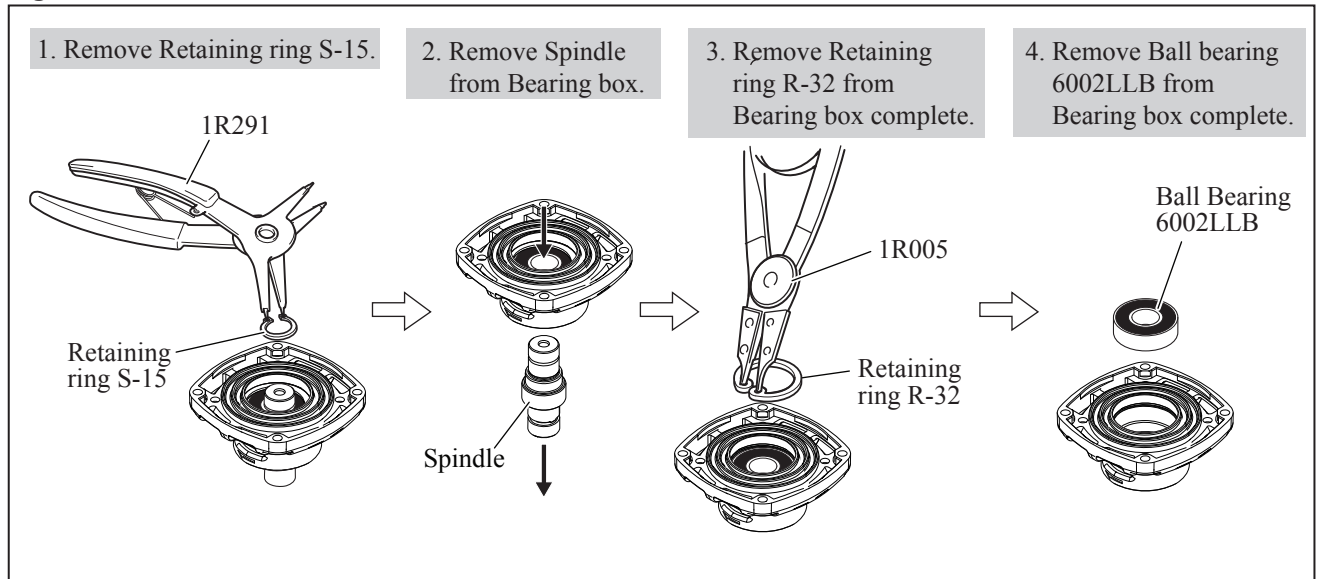
**Note:** 1R383 must be used for fixing Armature spindle at right depth.

**Fig. 4**



**BGD0801****► Repair****[3] DISASSEMBLY/ASSEMBLY****[3]-2. Spindle and Bearing Box Complete****DISASSEMBLING**

- (1) Remove Collet cone and Collet sleeve from Spindle and separate Bearing box complete from Housing. (**Fig. 2**)
- (2) Separate Armature from Bearing box complete. (**Fig.3**)
- (3) Disassemble Bearing box complete. (**Fig. 5**)

**Fig. 5****ASSEMBLING**

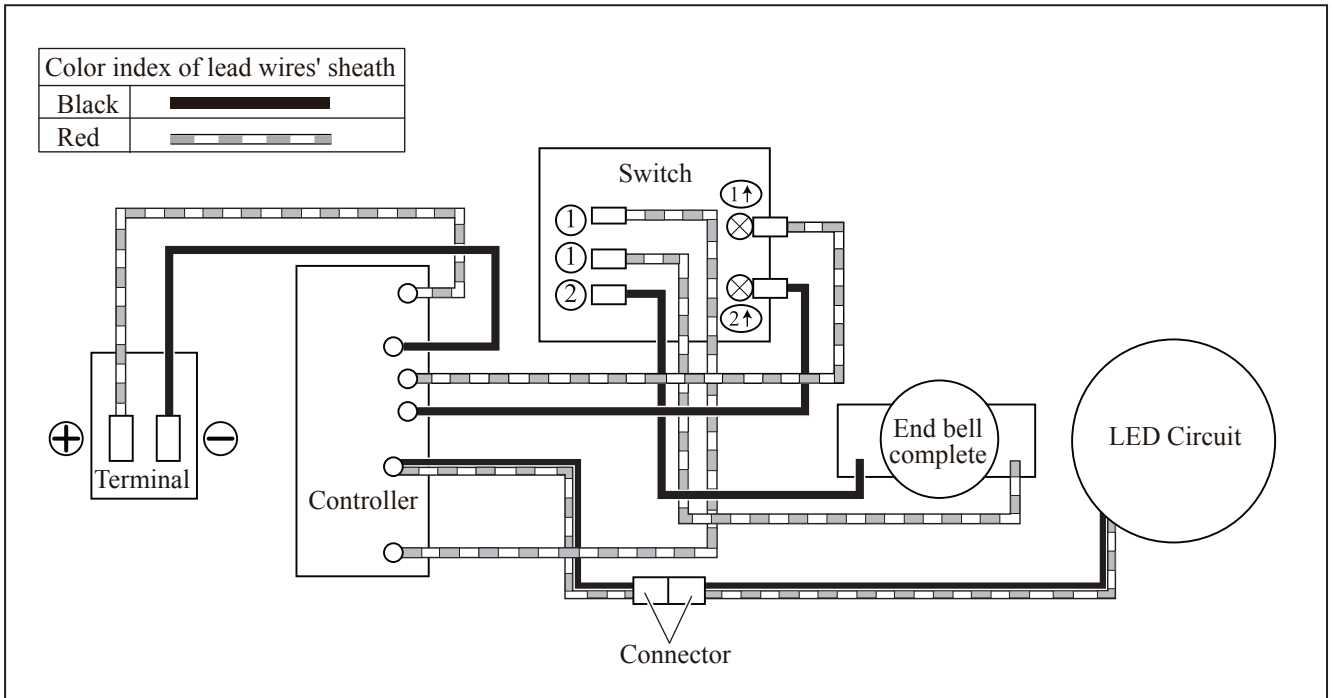
Do the reverse of the disassembling steps. (**Figs. 5 and 4**)



**BGD0800 (LXDG01)/ BGD0801**

► **Circuit diagram**

Fig. D-1



► **Wiring diagram**

Fig. D-2

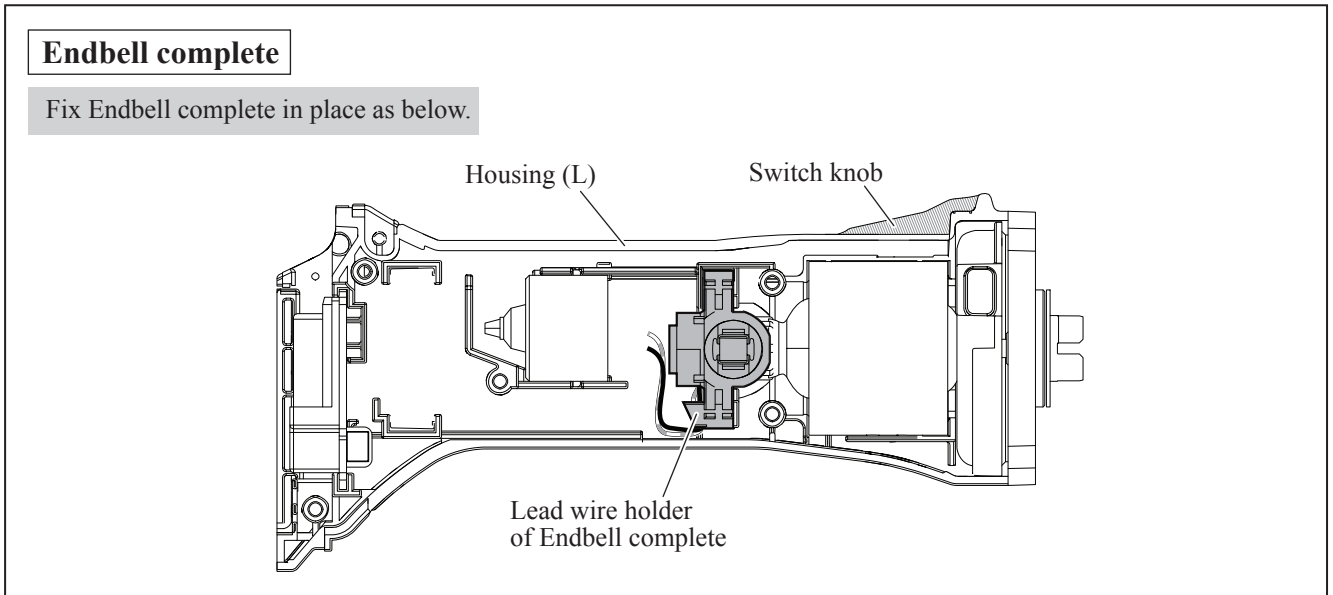
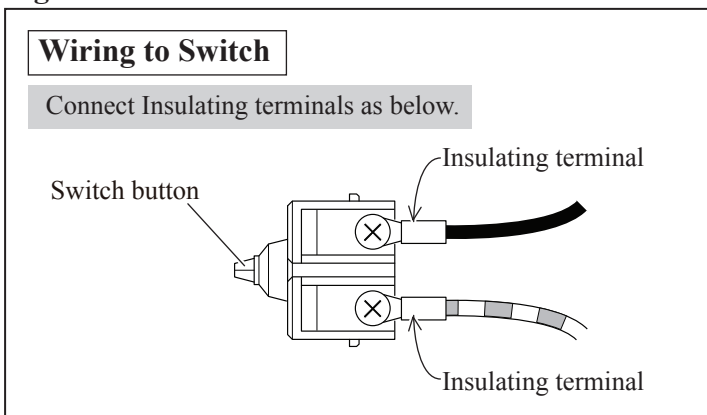


Fig. D-3



**BGD0800 (LXDG01)/ BGD0801**

► **Wiring diagram**

**Fig. D-4**

