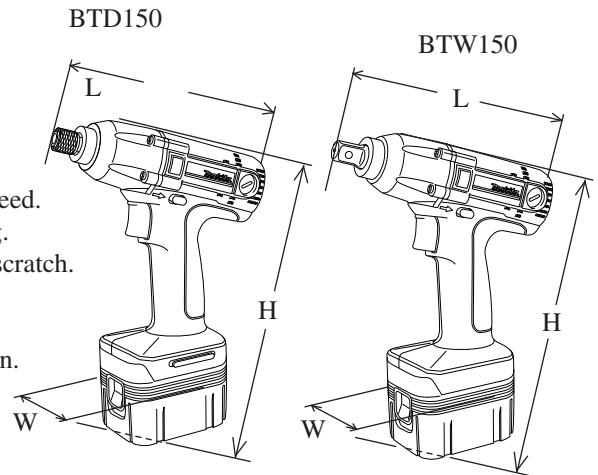


- Models No.** ▶ BTD150
BTW150
- Description** ▶ 14.4V Cordless Impact Driver
14.4V Cordless Impact Wrench

CONCEPT AND MAIN APPLICATIONS

The above models are equipped with newly developed battery. The brief benefits and features are as mentioned below.

- BTD150 :** *Superior to Model 6916D or BTD120 in fastening speed.
 *Slim designed grip for easy and comfortable gripping.
 *Equipped with bumper to protect the materials from scratch.
- BTW150 :** *Same max. fastening torque, 150 N.m as Mod.6902D but much more compact than Mod.6902D.
 *Slim designed grip for easy and comfortable operation.
 *Equipped with bumper to protect the materials from scratch.



Below listed standard type models are only available.

Model No.	Battery	Charger	Plastic case
BTD150SA	Ni-MH BH1420 / 14.4V / 2.0Ah	DC14SA	Yes
BTW150SA	Ni-MH BH1420 / 14.4V / 2.0Ah	DC14SA	Yes

Dimensions : mm (")		
Model No.	BTD150	BTW150
Length (L)	190 (7-1/2)	193 (7-5/8)
Height (H)	*253 (10)	*253 (10)
Width (W)	78 (3-1/16)	78 (3-1/16)

*253 (10) is the height with battery BH1420.

► Specification

Model No.	BTD150	BTW150
Voltage (V)	14.4	14.4
No load speed (min-1=rpm)	0 - 2,300	0 - 2,300
Impact per minute (min-1=ipm)	0 - 3,000	0 - 3,000
Driving shank : mm (")	Hex 6.35 (1/4)	Square 12.7 (1/2)
Capacities	Standard bolt	M10 - M16 (3/8 - 5/8)
	High Tensile bolt	M8 - M12 (5/16 - 1/2)
	Machine screw	M4 - M10 (5/32" - 3/8")
	Self drilling screw	ø4 - ø6 x 13-45mm in length ø5/32" - ø1/4" x 1/2" - 1-3/4" in length
	Course thread	22 - 150mm (7/8" - 5-7/8") in length
Max. fastening torque	130N.m 1,330Kgf.cm 1,250in.lbs	150N.m 1,530Kgf.cm 1,330in.lbs
Electric brake	Yes	Yes
Variable speed control switch	Yes	Yes
Reverse switch	Yes	Yes
Net weight: kg (lbs)	1.8 (4.0) including battery BH1420	1.9 (4.2) including battery BH1420

► Standard equipment

For Model BTD150

- * Philips bit 2-65 1 pc.
- * Plastic case 1 pc.
(only for Model BTD150SA)

For Model BTW150

- * Socket 19-48 1 pc.
- * Pin 4 1 pc.
- * O ring 24 1 pc. (Except North American market)
- * Plastic case 1 pc. (only for Model BTW150SA)

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

► Optional accessories

For Model BTD150

- * Various philips bit
- * Various socket bit
- * Various drill chuck set
- * Bit piece
- * Stopper for impact driver
- * Battery BH1420 (2.0Ah)
- * Battery BH1433 (3.3Ah)
- * Charger DC14SA

For Model BTW150

- * Various socket
- * Battery BH1420 (2.0Ah)
- * Battery BH1433 (3.3Ah)
- * Charger DC14SA

< 1 > Disassembling housing R and L

Remove hammer case from housing R and L.

(In case of Model BTW150, anvil can be disassembled from the machine in this process.)

And then, housing R can be separated from housing L.

< 2 > Disassembling sleeve section (only for Model BTD150)

- (1) Take off ring spring from the groove on anvil.
- (2) Flat washer, compression spring, sleeve and 2 pcs. of steel ball 3.5 can be removed from anvil.
- (3) Anvil can be removed from hammer case.

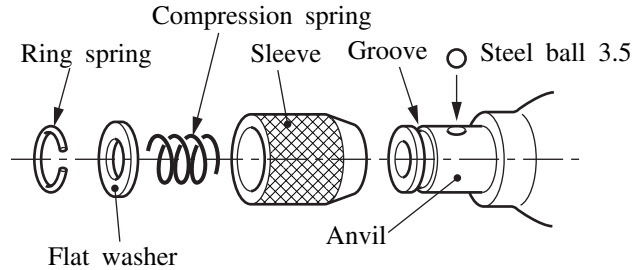


Fig. 1

- (4) When assembling anvil to hammer case, put MAKITA grease N No.1 by approx.0.1g to the cylindric part of anvil.

< 3 > Disassembling hammer

- (1) Press down hammer with 1R045: Large gear extractor by turning the handle.

- (2) Adjust the opening for steel ball inserting to the cam groove top of spindle.

- (3) Take off 2 pcs. of steel balls 5.6 from spindle.

< Note > 25 steel balls 3.5 are installed in hammer.
Check the quantity when assembling.

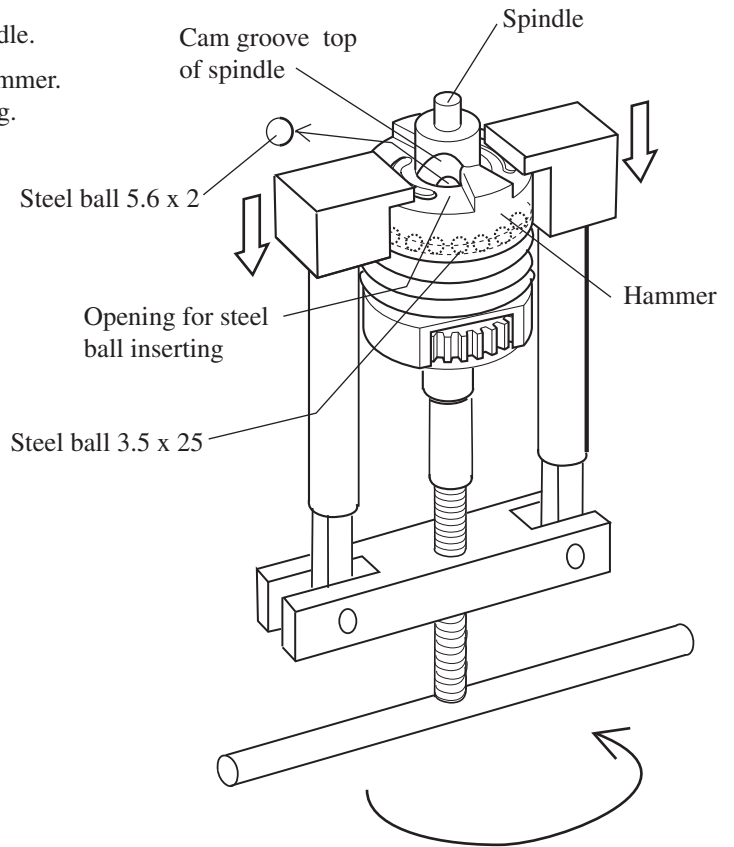
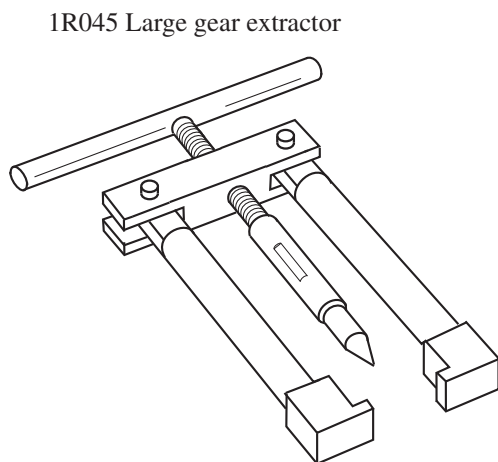


Fig. 2

(4) Apply grease to the position No. 1, 2, 3 and 4 as listed below, when assembling.

	MAKITA grease N No.1	Molybdenum di-sulphide lubricant
(1)	0.5g	0.2g
(2)	0.5g	—
(3)	—	0.6g
(4)	1.0g	0.2g

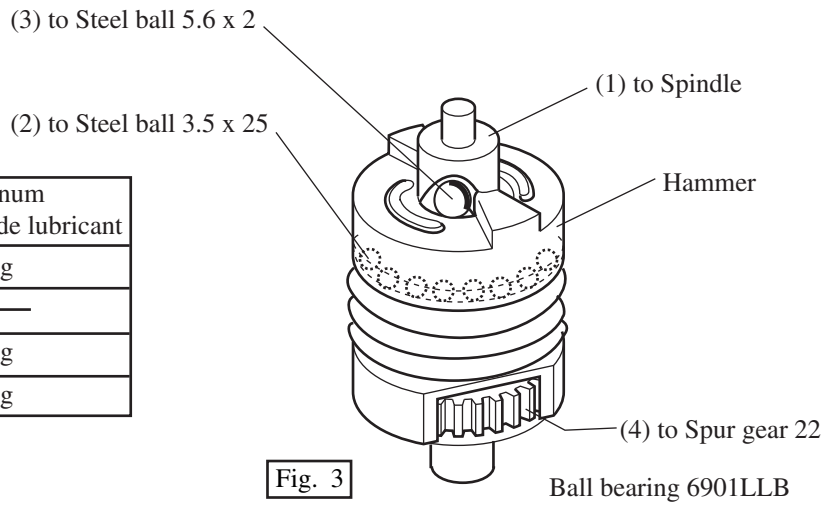
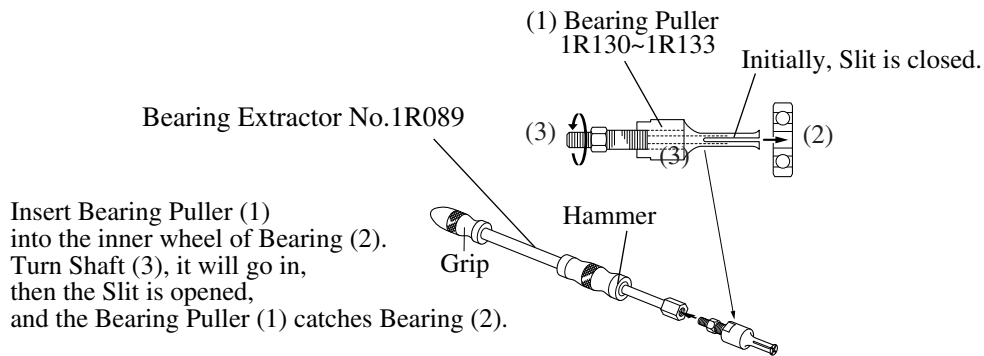


Fig. 3

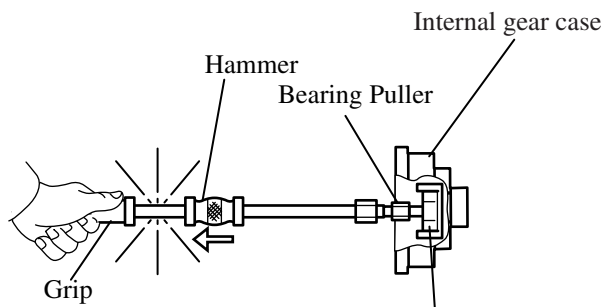
< 4 > Removing ball bearing 6901LLB

Ball bearing 6901LLB is firmly assembled by pressing into internal gear case, and it is difficult to disassemble it without any tool. For disassembling it, the following repairing tools are required.

- * Bearing pullers No. 1R130 - 133
- * Bearing Extractor No.1R089






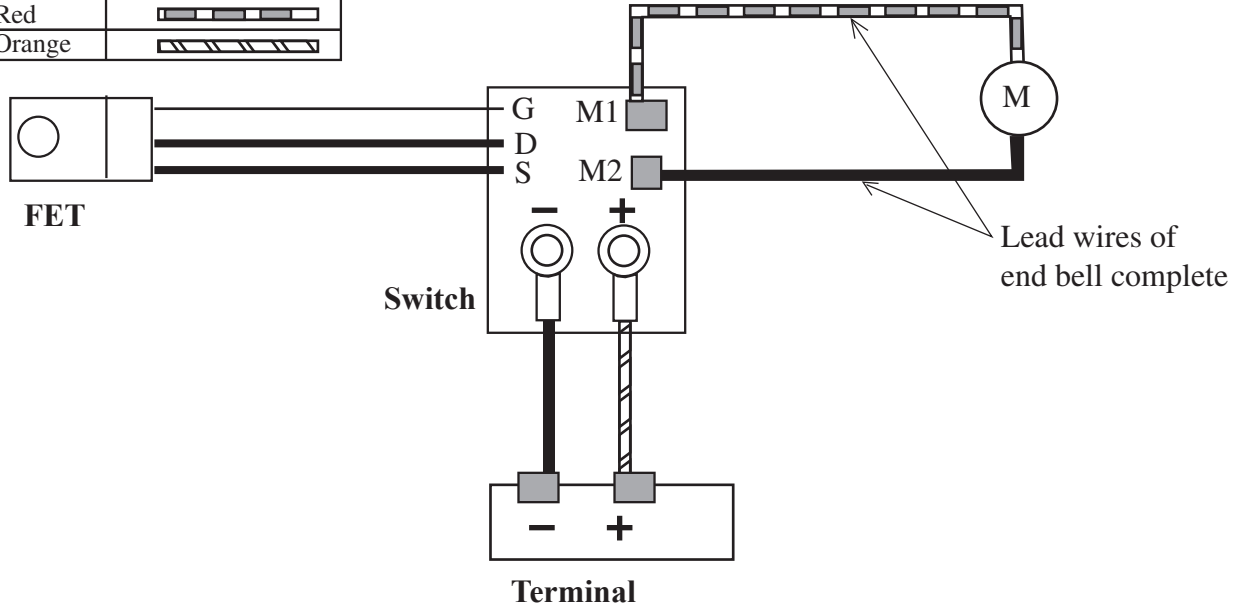
Insert Bearing Puller (1) into the inner wheel of Bearing (2). Turn Shaft (3), it will go in, then the Slit is opened, and the Bearing Puller (1) catches Bearing (2).



Hit Grip strongly with Hammer, the Bearing is pulled out by the shock.

▶ **Circuit diagram**

Color index of lead wires	
Black	
Red	
Orange	



▶ **Wiring diagram**

