TECHNICAL INFORMATION

New Tool

Models No. ► 8015D

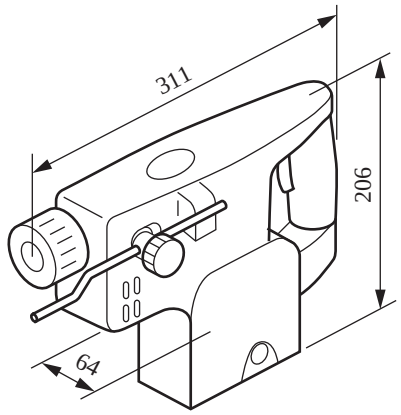
Description ► MAKITA Cordless hammer drill

CONCEPTION AND MAIN APPLICATIONS

This is the battery hammer drill using the battery 1000 as the power source and the first one equipped with the non-step variable switch developed throughout the world, thereby the drilling can be easily positioned and the built-in large capacity battery enables many holes to be drilled per charging. Also the reversing change switch allows this machine to be used as the screw driver once the drill chuck adapter has been mounted.

The 8015DW is the model without the battery and the charger.

The 8015DW consists of the 8015D, the battery and the charger(model DC1000).



► Specifications

Motor	DC 10.8V	
No load speed(/min.)	0-900	
No. of striking under no load(/min.)	0-3100	
Tool size(mm)	Shank bit with groove	10
Capacity(mm) The adapter(common for HR2000) is used for steel and wood. If the adapter is built, it also can be used for fastening the wooden screws.	**For stone**	15mm
	For steel	13mm
	For wood	15mm
Weight(including a battery)	3.5kg	

► Standard equipment

Stopper pole
Grease for bit, Dust cup

► Optional accessories

Carbide drill(6.5-14.5)
Drill chuck adapter
Chuck key
Dust cup
Anchor(No.2-No.3)
Anchoring rod
Holder driver
Taper shank adapter
(The above shown are common for HR2000.)

The standard equipment for the tools shown may differ form country to country.

Repair

1.Tool required

(1)+ Screw driver

(2)- Screw driver(small one with the edge width of 4 mm around)

(3) Circle clip plyer(for shaft)

(4) Resin hammer

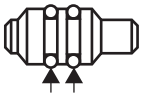
(5) Metal wire with dia. of about 2 mm and length of about 200 mm(see the figure 11 of 3-(3)-1.)

(6) Rod or pipe with dia. of 20 mm and length of 100 mm or more(If available, you can work easily.)

2.Lubricating points

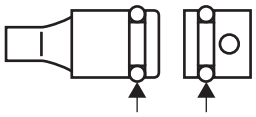
To avoid wearing or heating damage in an earlier stage, grease the MAKITA GREASE R NO. 00 on the points shown below.

(1) O-ring and groove on the impact bolt



<Figure 1>

(2)O-ring and groove on the striker and piston



<Figure 2>

(3)Inner portion on the cylinder liner

<Figure 3>

(4)Lip face on the oil seal 28

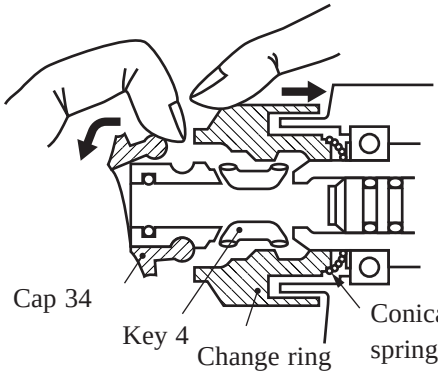
<Figure 4>

(5)Teeth face on each gear

3.Disassembling/assembling

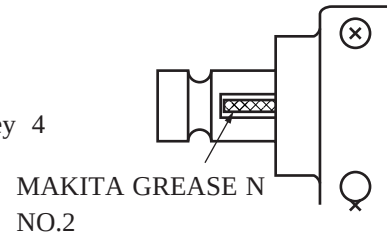
(1)Chuck(Remove it before disconnecting the housing.)

Pull the change ring at full as shown on the figure 5 and remove the cap 34 in a way peeling it in the arrow direction. If the cap 34 has been removed, remove the change ring, the key 4 and conical compression spring 21-29.



<Figure 5>

When assembling(for easy assembling), slightly grease the MAKITA GREASE N NO.2 on the groove for housing the key of the cylinder liner to protect the key 4 from falling.

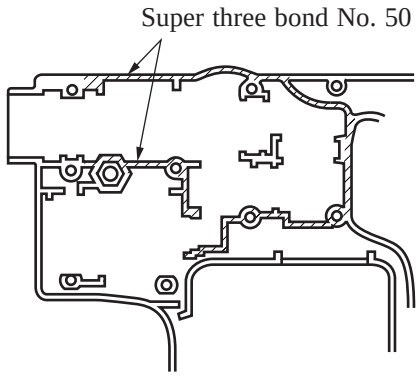


<Figure 6>

(2)Protecting the grease on the housing from leaking

The adhesive is applied on the overlapped portion around the housing function for preventing the grease from leaking. To assemble the housing after disassembling, securely clean away the grease on the fit face(portions marked by ▨ on the right figure) between both the housing R/L before applying the super three bond No.50 without breaks.

Note that the MAKITA grease R NO.00 of 20 g has been already contained in mass production, use it as the reference amount when repairing.(Do not overfill.)

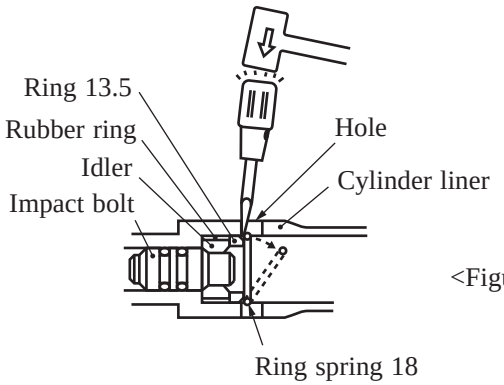


<Figure 7>

(3)-1. How to remove the impact bolt and idler

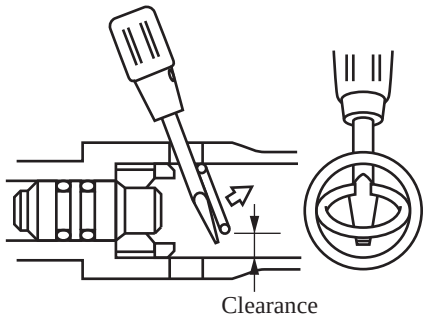
a) Place the minus screw driver with the edge width of about 4 mm in the clearance between the hole of cylinder liner and the ring spring 18 as shown on the figure 8 and then use the resin hammer to slightly hammer the driver to remove the ring spring 18 from the groove on cylinder liner.

If hard to remove, take the above same procedures for both holes.



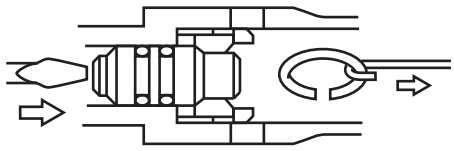
<Figure 8>

b)Use the driver to move the ring spring 18 to make clearance between the ring spring 18 and the cylinder liner.



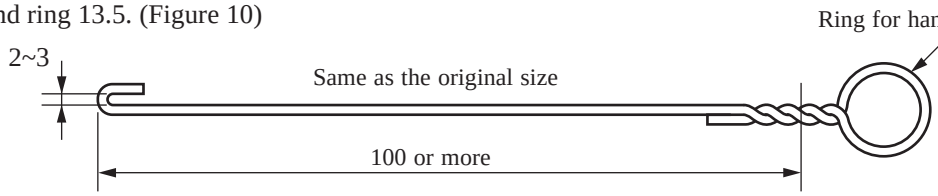
<Figure 9>

c)Bend the metal wire as shown on the figure 11, suspend the hook of the edge on the ring spring 18 and then remove it.(Figure 10)



<Figure 10>

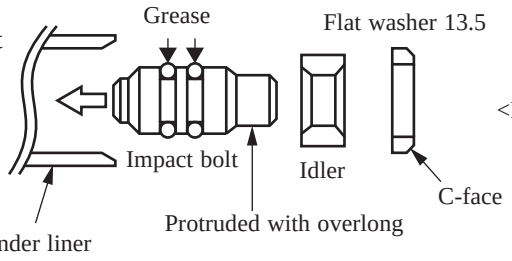
d)If the ring spring 18 has been removed, use the driver edge to press the impact bolt and then disconnect the idler and ring 13.5. (Figure 10)



<Figure 11>

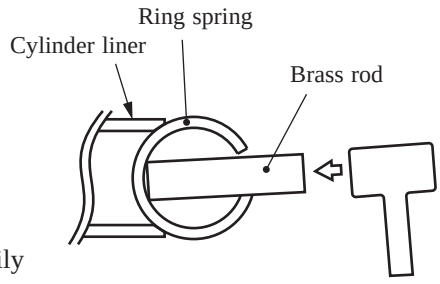
(3)2. Assembling of the impact bolt and the idler

a)Use care in assembling since the impact bolt and the flat washer 13.5 have each directionality.



<Figure 12>

(Note) Be sure to grease on the O ring of the impact bolt.

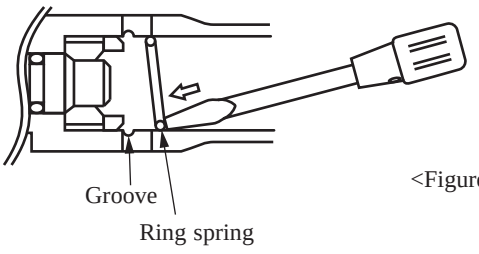


<Figure 13>

b)Once the ring spring has been detached, it can be easily damaged and broken.

In such a case renew it.

Apply the brass rod or the minus screw driver and slightly hit it to press as shown on the figure 13. If it has been inserted in the deepest, use the minus screw driver as shown on the figure 14 to securely place in the groove.

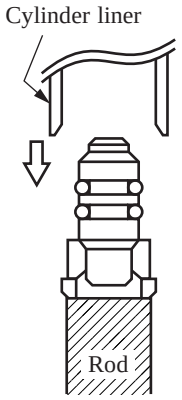


<Figure 14>

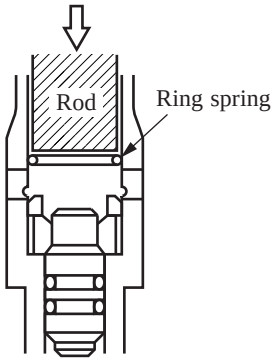
(Note) Use the minus screw driver with especial care not to damage the ring spring.

*If the rod or pipe with 20 mm in dia. and 100 mm inlength or more available,
When doing the work for (3)-2-a, place the parts on the rod as shown on the figure 15 and cover the cylinder liner from above so that the parts cannot turn upside down on the way.

When doing the work for(3)-2-b, use the rod to press into the groove after inserting the ring spring on the halfway.



<Figure 15>

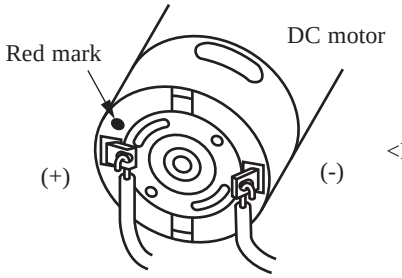


<Figure 16>

(4)Caution in replacing the DC motor

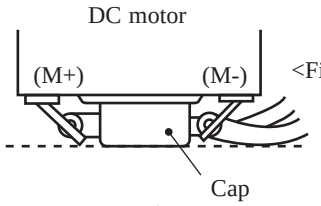
a)For the DC motor, the terminal with the red mark is for the M(+) terminal.

b)Insert the lead wire through inside as shown on the figure 17, bend it and then solder it.



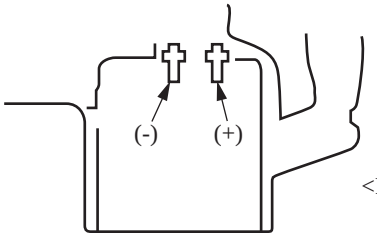
<Figure 17>

c)After soldering, cover the cap and then bend the terminal in a degree that the terminal is not protruded above the cap face.



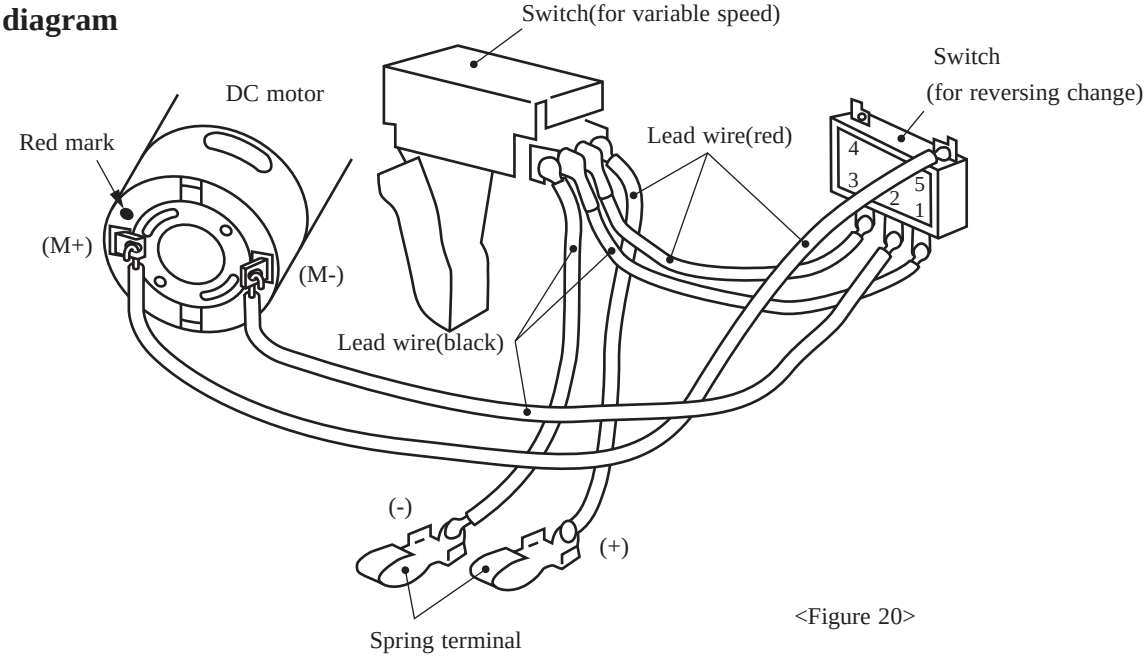
<Figure 18>

(5)Mount the spring terminal with the (+)side set at the handle side of the housing.



<Figure 19>

► Circuit diagram



<Figure 20>