

TECHNICAL INFORMATION



New Tool

Models No. ▶ 6912D

Description ▶ 12mm Cordless ratchet wrench

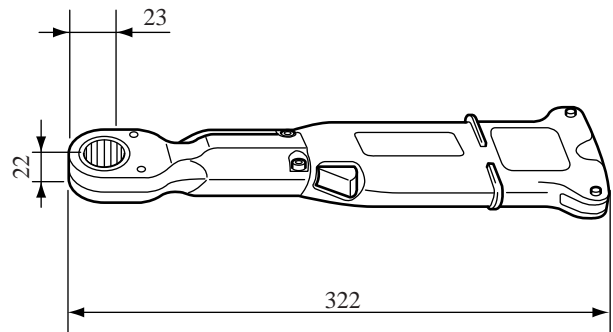
CONCEPTION AND MAIN APPLICATIONS

This product was developed to make temporary fastening of bolts and nuts easier for constructing prefabricated houses.

It can also be used as an ordinary ratchet wrench to finally tighten the bolts and nuts by swiveling its handle clockwise with the ratchet mechanism.

The model 6912DW is made up of
6912D (Makita 12mm battery powered ratchet wrench)
DC7000 (Boosting charger)

The model 6912D does not include batteries.



► Specifications

Motor	DC 7.2 magnet motor
No load speed(R.P.M.)	270
The size of the eyelet part of the wrench	21 mm in thickness with two eyelet parts together
Bolt size suitable for the model	1/25 inches
Temporary fastening with the torque by	20 kg-cm
Net weight(Kg)	0.85

► Standard equipment

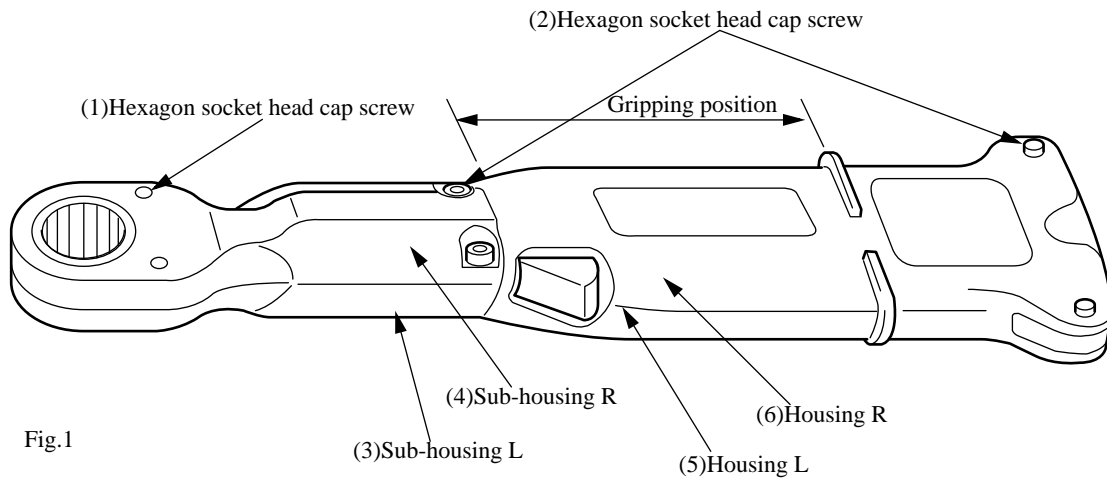
Socket adapter --- One piece.

► Optional accessories

Battery model 7000

► Repair

1) Replacement of the clutch



- (1) Loosen the hexagon socket head cap screws 1 (M4x18) and 2 (M4x25) with hexagon socket screw keys. and dismantle the sub-housing R and L, and housing R and L. (See the fig.1.)

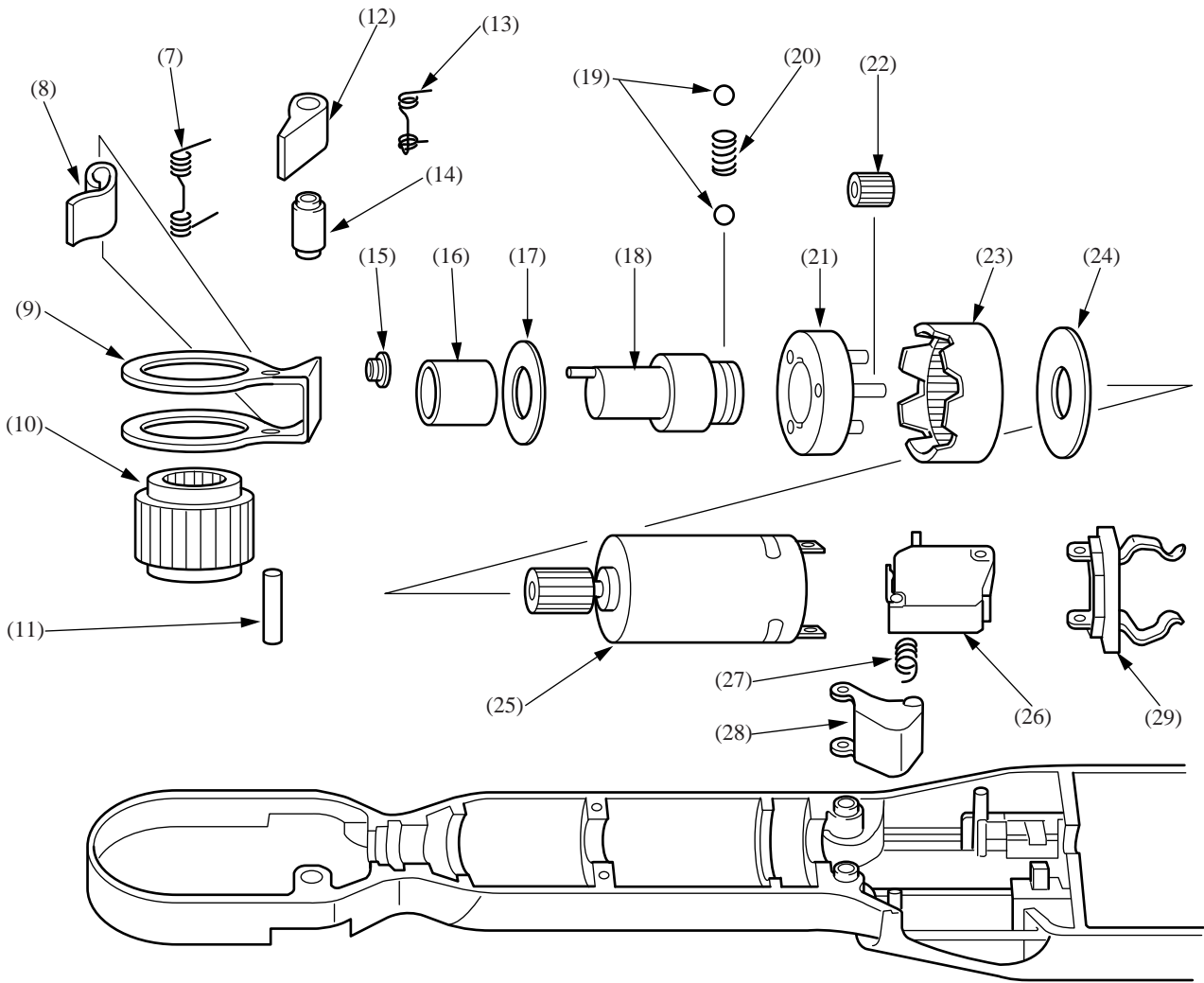


Fig.2

(7)Torsion spring	(8)Spring type catch	(9)Ratchet holder	(10)Socket 21	(11)Pin 4
(12)Ratchet pawl	(13)Torsion spring 7	(14)Sleeve 4	(15)Collar	(16)Needle bearing 1015
(17)Flat washer	(18)Spindle	(19)Steel ball 3.5	(20)Compression spring 2.4	(21)Complete clutch cam
(22)Spur gear 16	(23)Internal spur gear 49	(24)Flat washer	(25)DC motor	(26)Switch
(27)Compression spring 6	(28)Switch lever	(29)Battery holder		

(2) The parts from 7 to 14 can be easily dismantled after the sub-housing R and L are taken off. Remove the housing R and then remove the parts from 15 to 29 out of the housing L. (Care must be taken not to misplace 27 the compression spring 6 in removing the parts.) (See fig.2.)

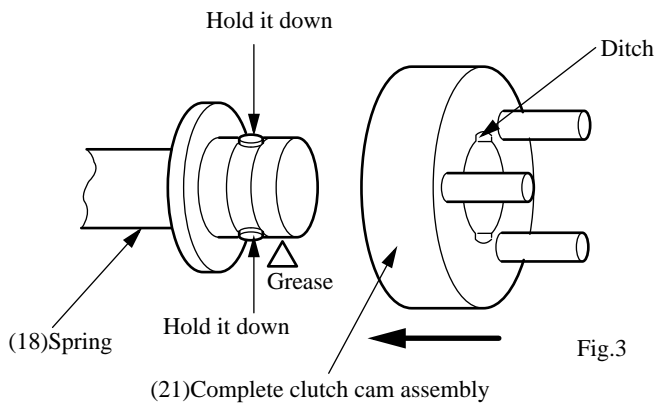
(3) 18 the spindle, 19 steel ball 3.5 20 compression spring 2.4 and 21 complete clutch cam assembly are the clutch related parts. Other parts can be manually dismantled. (See the fig.2.)

(4) Remove 21 the complete clutch cam assembly from 18 the spindle.(Be careful not to scatter 19 steel balls around in removing the 21 complete clutch cam assembly as the 19 steel balls 3.5 are pressed against the 21 complete clutch cam assembly with the 21 compression spring 2.4.) See the fig. 2.

(5) Replace the 20 Compression spring 2.4 and 21 complete clutch cam assembly together in replacing the clutch

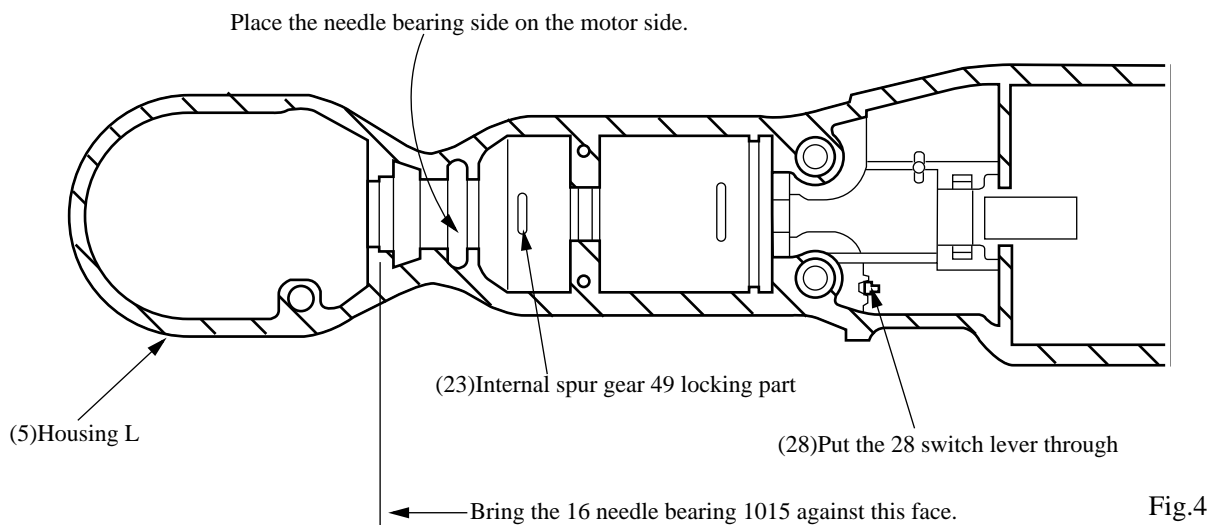
Assembling

- (1) Assemble the parts from 18 to 21.



Put the 19 steel balls 3.5 with the 20 compression spring 2.4 installed between the balls into the 3.6 mm diameter bore at the end of the 18 spindle. Insert the steel balls aligned with the groove in the complete clutch cam assembly by holding the 19 steel balls down. (See the fig. 3.)

- (2) Mount the parts from (16) to (29) in the (5) housing L.



Fit the 28 switch lever in together with the 26 switch and also the 27 compression spring 6. Insert the 17 flat washer 10 and 16 needle bearing 1015 in this order into the 18 spindle assembled in the above 1. Insert 3 pieces of the 22 spur gears 16 into the 21 complete clutch cam assembly and engage the gears with the 23 internal spur gear 49. Mount the 24 flat washer 15 at the same time.

(In assembling the internal spur gear, engage one of its slots against the rotation lock. Mount the 16 needle bearing 1015 by bringing it toward the left end as shown in the fig. 4.)(See the figs. 2, 3, & 4.)

- (3) Assemble the 6 housing R and sub-housing R. (Confirm the 18 spindle can rotate smoothly, and that there is a play in the axial direction after the housing and sub-housing are assembled.)

(4) Turn the wrench upside down, and assemble the parts from 7 to 15.

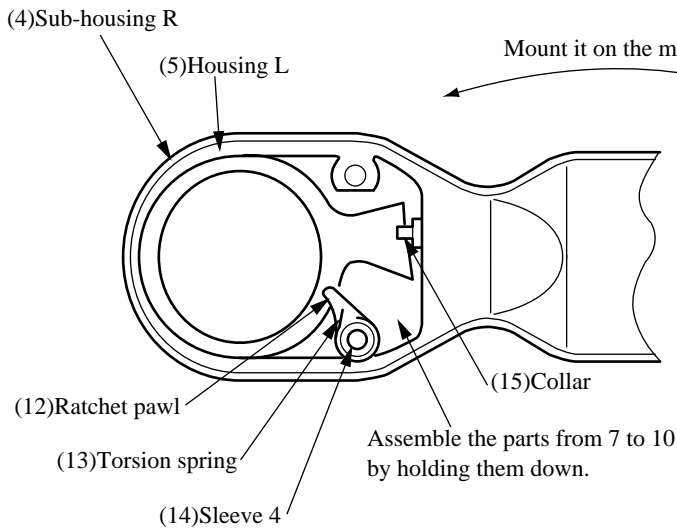


Fig. 5

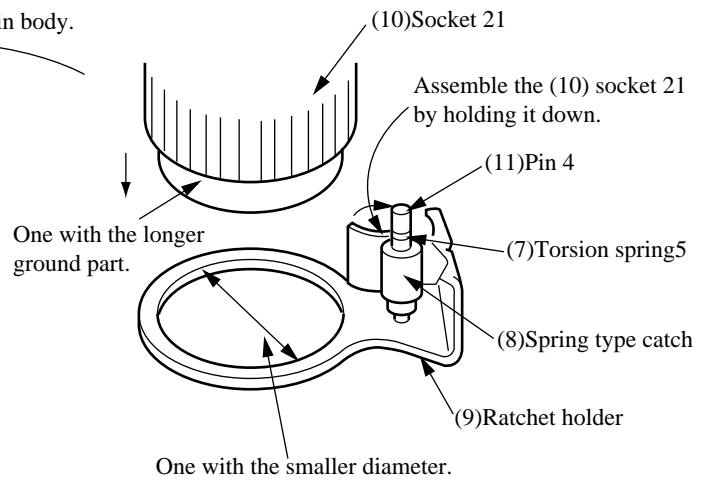


Fig. 6

Mount the 1 hexagon socket head cap screw (M4x18) in the 4 sub-housing R, insert the 14 sleeve 4, and assemble the 12 ratchet pawl and 13 torsion spring 7 as shown in the fig. 5. (Be careful not to catch the 14 torsion spring 7 between the 14 sleeve and 4 sub-housing in the above assembling process.)

Assemble the parts from 7 to 11 as shown in the fig. 5, and mount the assembled one to the main body. (It is easier to assemble the parts with the 15 collar positioned to the other side to the 12 ratchet pawl.)

(5) Mount the (3) sub-housing L and tighten the screws. (Install the spring washer on the nut for mounting the (1) hexagon socket head cap screw (M4x18).)