

# TECHNICAL INFORMATION



New Tool

**Models No.** ▶ 6213D

**Description** ▶ Cordless driver drill

## CONCEPTION AND MAIN APPLICATIONS

These are the competitive models against main competition products. Three types of 10mm cordless driver drill are 9.6V, 12V and 14.4V applications.

Their benefits are:

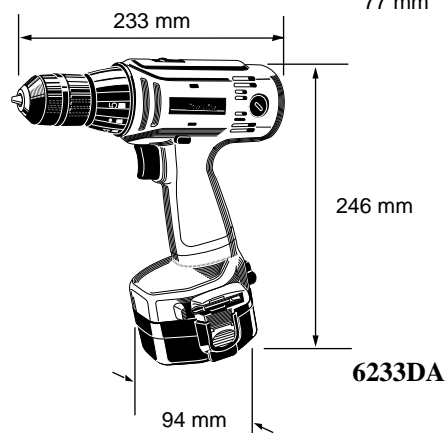
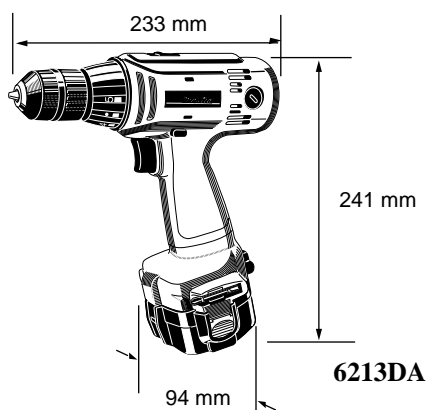
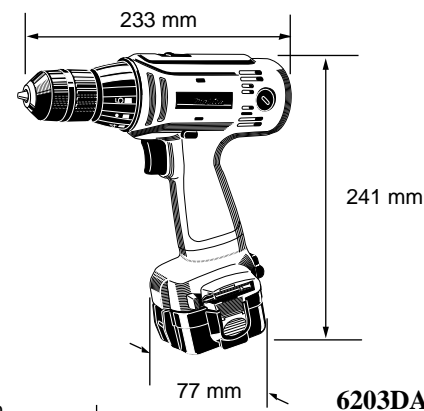
Comfortable handle shape, light-weight and well balanced body.

Durable motor that carbon replacement is possible without disassembling the machine.

New variable-speed switch has a large stroke in variable speed range, that makes speed control easy.

Changeover of rotation direction can be selected by one hand thanks to the convenient one-touch push-button switch.

Large capacity battery (2.0Ah) can be replaced easily by push-button mechanism



### ► Specifications

Model	6203DWA	6213DWA	6203DWA	6203DWA
<b>Voltage</b>	DC 9.6V	DC 12V	DC 14.4V	DC 14.4V
<b>Current</b>	2.0 Ah			
<b>Battery (Ni-cd battery)</b>	9122x2units	9122x2units	1422x1unit	1422x2units
<b>Fast charger</b>	DC1410			
<b>No load speed</b>	<b>High</b> 0-1200 min.	0-1400 min.	<b>Low</b> 0-1300 min.	
	<b>Low</b> 0-400 min.	0-450 min.	0-400 min.	
<b>Chucking ability</b>	1.0 (1/32") - 10 (3/8")			
<b>Drilling capacity</b>	<b>Iron material</b>	10mm (3/8")		
	<b>Wood material</b>	25.4mm (1")		
<b>Torque adjustment</b>	17-step + direct			
<b>Max.tightening torque</b>	230kgf·cm (16.6ft·lbs)	260kgf·cm (18.8ft·lbs)	310kgf·cm (22.4ft·lbs)	
<b>Clutch actuating torque</b>	5-50kgf·cm (0.4-3.6ft·lbs)	5-50kgf·cm (0.4-3.6ft·lbs)	10-60kgf·cm (0.7-4.3ft·lbs)	
<b>Net Weight</b>	1.7kg (3.8lbs)	1.9kg (4.2lbs)	2.0kg (4.4lbs)	

### ► Standard equipment

- Phillips and slotted bits 2-45 -----2
- Battery cover -----2

### ► Optional accessories

- Drill-----1.5, 2, 3, 4, 5, 6
- Wood drill -----9, 12, 15
- Phillips bit -----1-65, 2-45, 2-65, 2-110, 2-150, 2-250, 3-45, 3-65, 3-110
- Slotted bit -----5-45, 5-82, 6-70, 6.35-45, 8-45, 8-70,
- Socket bit -----7-55, 8-55, 10-55
- Foam polishing pad 125, Rubber pad assembly, wool bonnet 100
- Fast charger DC1410
- Battery 9122 (6203DWA), Battery 1222 (6213DWA), Battery 1422 (6233DWA, 6233 DWA)

## ► Repair

### (1) Disassembly

Remove drill chuck before replacing gear assembly. Drill chuck should not be removed when disassembling the housing only. Take care that compression spring in the speed change lever would fly out.

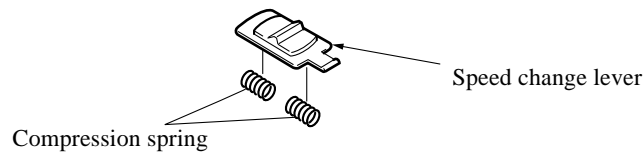


Figure 1

### (2) Handling of auxiliary gear assembly

Dispose machine screw that fixes the motor bracket as this is used for temporary fitting at the time of transportation.

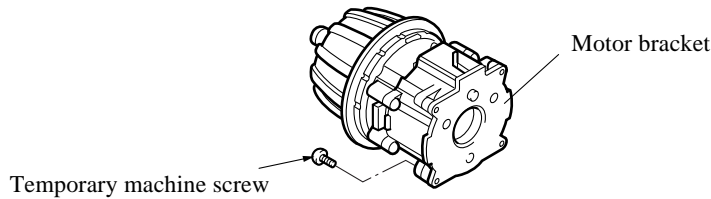


Figure 2

### (3) Mounting of motor bracket

Mount motor bracket to the motor and install gear assembly to the motor bracket. (See figure 3. Tightening torque of M3 screw that fixes gear assembly and motor bracket: 6 kgf/cm

(Do not tighten the screw over the specified torque, or the washer will be damaged.)

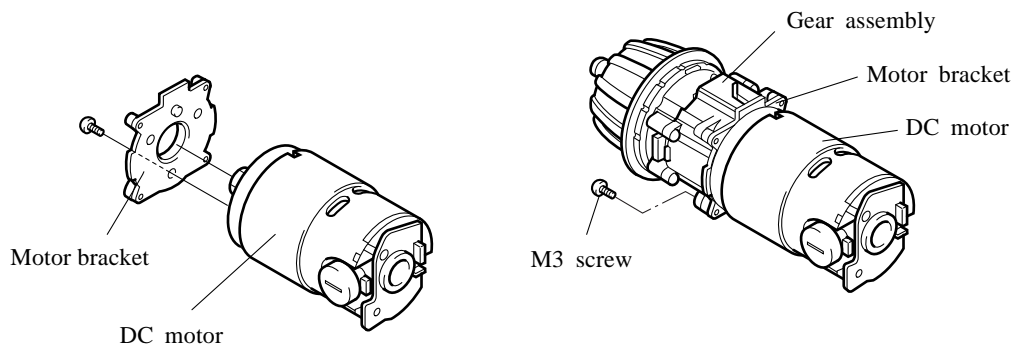
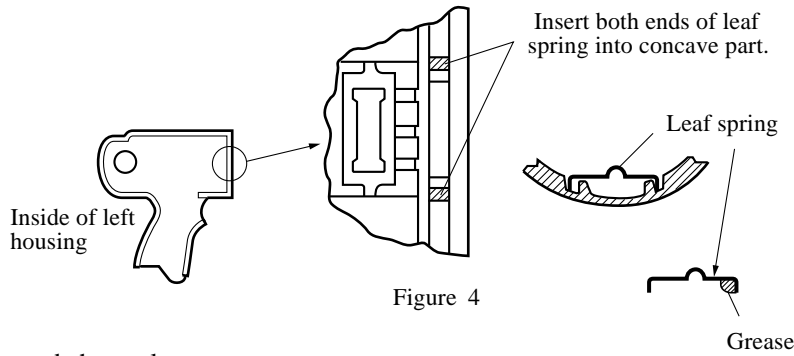


Figure 3

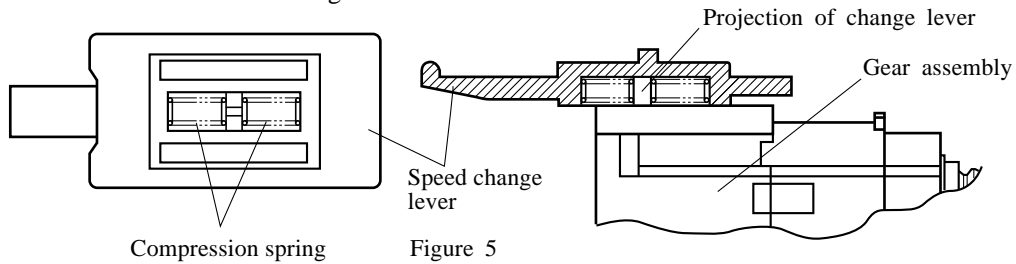
(4) Mounting of leaf spring

Mount leaf spring to housing L as shown in the figure 4. Coat grease to the leaf spring to prevent it from falling off at the time of assembly.

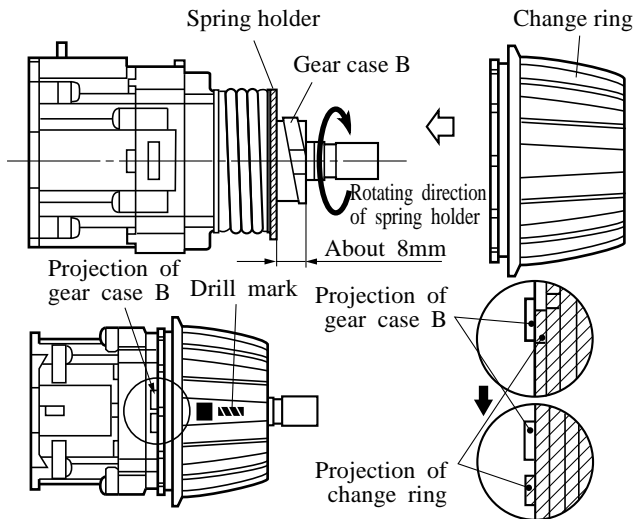


(5) Mounting of speed change lever

Include two compression springs into speed change lever and assemble the lever to the projection on the gear assembly. See figure 5 for the direction of assembling.



(6) Assembling of change ring



1) Turn spring holder to the direction as shown in figure 6 a) and fasten it tightly.

- Use change ring as a temporary tool.
- When fastening it regularly, position will be about 8mm from the side of the gear case B.

2) Mount change ring so that the drill mark should come right above (figure 6 b)).

- When the projections of gear B and change ring contact, turn change ring so that the drill mark will be the lower position as shown in the figure 6 c).

Figure 6

(7) Mounting of gear assembly to the housing

When mounting a unit of gear assembly, DC motor, and so forth, mount speed change lever as shown in the figure 7.

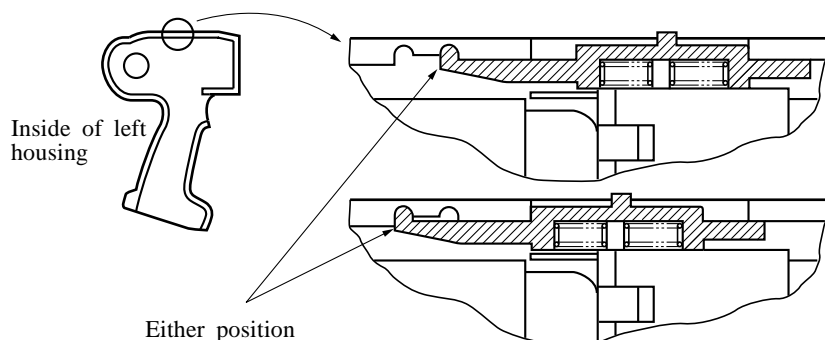


Figure 7

(8) Mounting of chuck

Check that change ring is mounted on the specified position. (See page 3/4 (6).)

Mount the chuck following the procedures below.

- 1) Set the chuck on sleeve 10.
  - 2) Mount hexagonal rod to the chuck and fix it with a vice.
  - 3) Set drill mode to forward and slow.
  - 4) Mount battery that is fully charged and hold the handle securely. \*
  - 5) Set trigger to full speed in 1 second taking care not to strike an impact.
- \* When the handle is held loose, it may turn recklessly in the case of locking.

► **Wiring diagram**

