

# T ECHNICAL INFORMATION

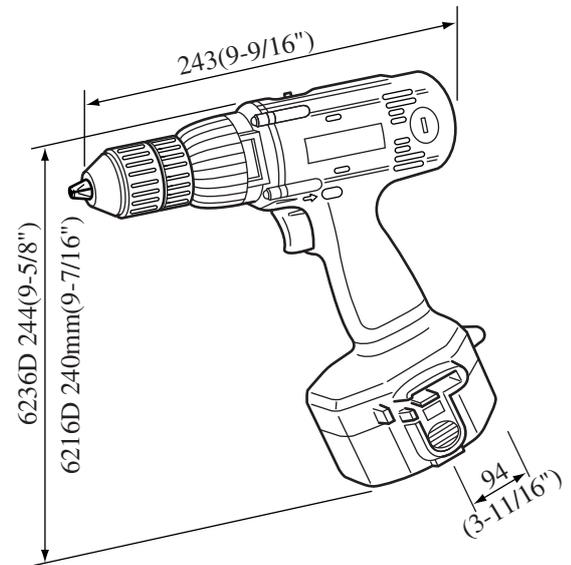
**Models No.** ▶ 6236D/6216D

**Description** ▶ Cordless Driver Drill

## CONCEPTION AND MAIN APPLICATIONS

Model 6236D and 6216D are 10mm version of existing Model 6336D and 6316D.

| Model    | Battery              | Charger |
|----------|----------------------|---------|
| 6236DWAE | Battery 1422 x 2 pcs | DC1411  |
| 6236DWBE | Battery 1433x 2 pcs  |         |
| 6216DWAE | Battery 1222 x 2 pcs |         |
| 6216DWBE | Battery 1233x 2 pcs  |         |



### ► Specifications

|                                | 6236D   | 6216D                         |
|--------------------------------|---|-------------------------------|
| <b>Motor</b>                   | Direct current magnet motor                           |                               |
| <b>Battery</b>                 | Battery 1422 NiCad 14.4V, 2.0Ah                       | Battery 1222 NiCad 12V, 2.0Ah |
|                                | Battery 1433 NiMH 14.4V, 2.2Ah                        | Battery 1233 NiMH 12V, 2.2Ah  |
| <b>Speed at no load</b>        | High speed 0~1300 R/min                               |                               |
|                                | Low speed 0~400 R/min                                 |                               |
| <b>Chuck capacity</b>          | 1.5(1/16") - 13(1/2")                                 |                               |
| <b>Drilling capacity</b>       | Iron works 10mm(3/8")                                 |                               |
|                                | Wood works 36mm(1-7/16")                              | Wood works 30mm(1-3/16")      |
| <b>Torque adjusting</b>        | 16 levels + Direct connection                         |                               |
| <b>Max. tighten torque</b>     | 38 N.m(390 kgf-cm,28ft•lbs)                           | 32 N.m(330 kgf-cm,24ft•lbs)   |
| <b>Clutch operative torque</b> | 1 N.m(10kgf-cm,0.7ft•lbs) - 6 N.m(60kgf-cm,4.3ft•lbs) |                               |

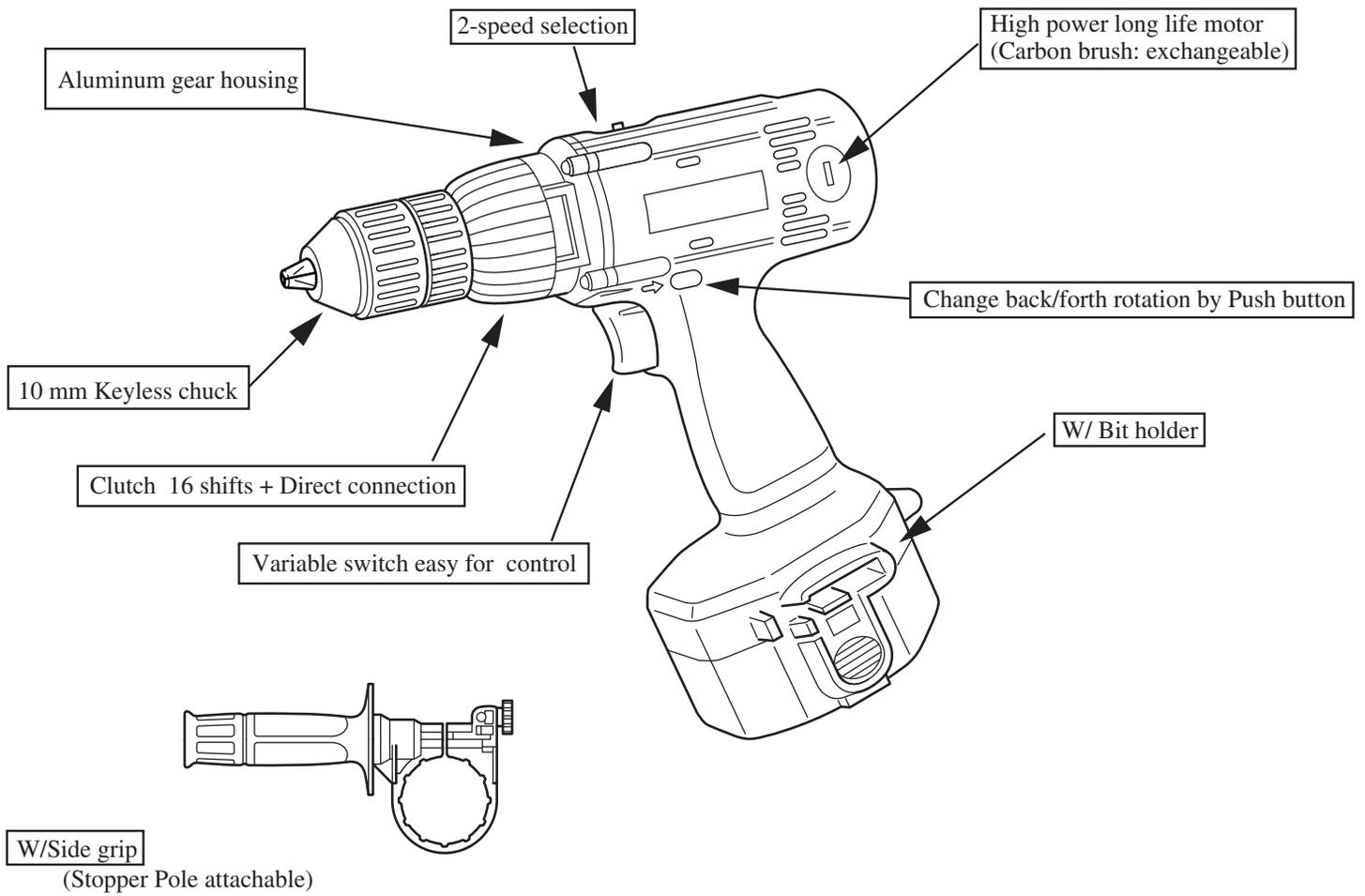
### ► Standard equipment

Battery cover ----- 1pc (DWAE/DWBE: 2pcs)  
 + - Bit 2-45 ----- 2pcs  
 Set Plate

### ► Optional accessories

Drill 1,5,2,3,4,5,6  
 Drill Bit for wood 9,12,15  
 + Bit 1-65,2-45,2-65,2-110,2-150,2-250,3-45,3-65,3-110  
 - Bit 5-45,5-82,6-70,6.35-45,8-45,8-70  
 Socket bit 7-55,8-55,10-55  
 Buff 125  
 Rubber pad assembly  
 Wool bonnet100  
 Grip Assemble, Stopper pole assemble  
 Charger DC1411,DC1801  
 Battery (NiCad 1422)  
 Battery (NiMH 1433)

The standard equipment for the tools shown may differ from country to country



## ► Comparison

| Model Name            |            | Makita                        |                               |                               |                               |
|-----------------------|------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
|                       |            | 6236D                         | 6233D                         | 6216D                         | 6213D                         |
| Rotation(rpm)         | Low speed  | 0~ 400                        | 0~ 400                        | 0~ 400                        | 0~ 450                        |
|                       | High speed | 0~1,300                       | 0~1,300                       | 0~1,300                       | 0~1,400                       |
| Max.tightening torque |            | 38(450kgf•cm)                 | 31(450kgf•cm)                 | 32(450kgf•cm)                 | 26(230kgf•cm)                 |
| Torque adjusting      |            | 16 levels + Direct connection | 17 levels + Direct connection | 16 levels + Direct connection | 17 levels + Direct connection |
| Aluminum gear housing |            | ○                             | ×                             | ○                             | ×                             |
| Side grip             |            | ○                             | ×                             | ○                             | ×                             |
| Carbon exchange       |            | ○                             | ○                             | ○                             | ○                             |
| Weight (kgs)          |            | 2.2[4.9 lbs]                  | 2.0[4.4 lbs]                  | 2.1[4.6 lbs]                  | 1.9[4.2 lbs]                  |

Comparison

Working capacity per charging

\* Data: In setting 6233D as 100

100

7/8" Spade bit drilling (high speed) Spruce t=38mm

|       |   |     |
|-------|---|-----|
| 6236D |  | 100 |
| 6233D |  | 100 |

Rag bolt 1/4"x3" tightening (low speed) Spruce

|       |   |     |
|-------|---|-----|
| 6236D |  | 105 |
| 6233D |  | 100 |

Working speed

100

← Slow Fast →

|  |     |
|--|-----|
|  | 100 |
|  | 100 |

\* Data: In setting 6213D as 100

7/8" Spade bit drilling (high speed) Spruce t=38mm

|       |   |     |
|-------|---|-----|
| 6216D |  | 105 |
| 6213D |  | 100 |

Rag bolt 1/4"x3" tightening (high speed)

|       |   |     |
|-------|---|-----|
| 6216D |  | 90  |
| 6213D |  | 100 |

|  |     |
|--|-----|
|  | 105 |
|  | 100 |

|  |     |
|--|-----|
|  | 100 |
|  | 100 |

## ► Repair

### (1) Notes in Disassembly

- When exchanging Gear assembly, remove Drill chuck in advance.  
(If you only dismantle Housing, removal of Chuck is unnecessary.)
- When detaching Chuck, hold two-face width of Spindle.
- In disassembly, be careful no to lose Compression spring 4 in Speed change lever, because it easily goes away.

### (2) Note in Assembly

#### 1 Assembly of Motor and Gear assembly

- \* Since Motor bracket is equipped in Gear assembly for repair, detach Motor bracket from Gear assembly. Be careful that the content may not go out from Gear assembly at that time.

1) Screw Motor bracket to Motor.

2) Attach the above 1) Motor with Bracket to Gear assembly.

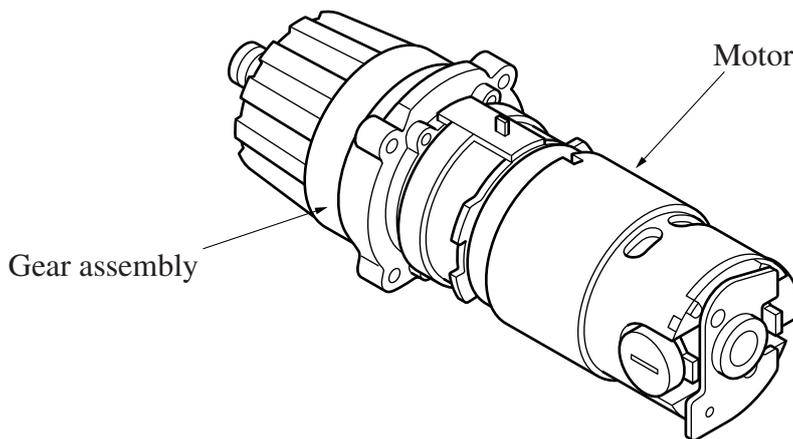


Figure 2

### 2 Installing of Speed change lever

- 1) Place two Compression spring 4s into Speed change lever.
- 2) Being careful that Compression spring 4 may not comes out , install Speed change lever assembly in the projection of Change lever as shown in Figure 3.

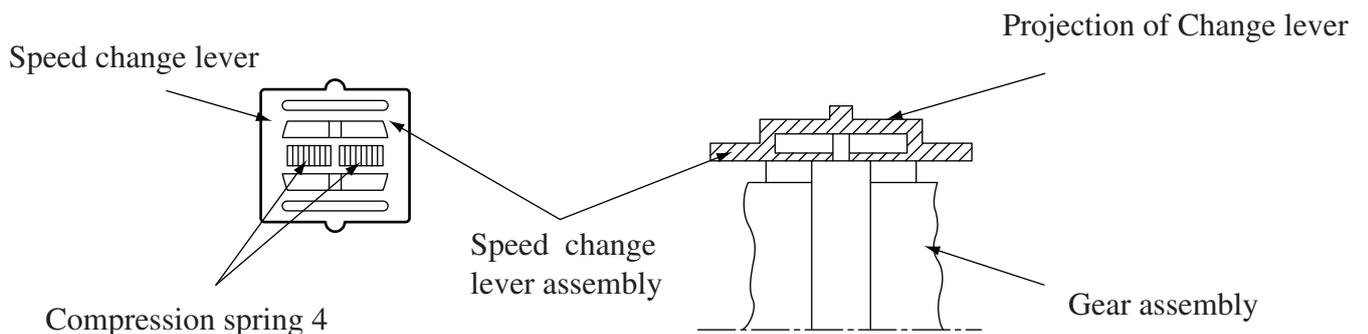


Figure 3

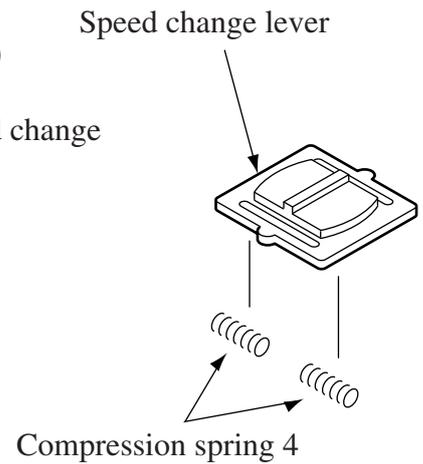


Figure 1

### 3 Attaching to Housing

- 1) When attaching a unit of Gear assembly and Motor, etc. to Housing L, place Speed change lever in the position as shown in Figure 4.

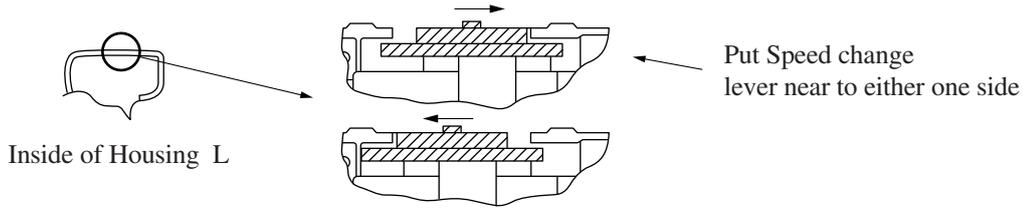
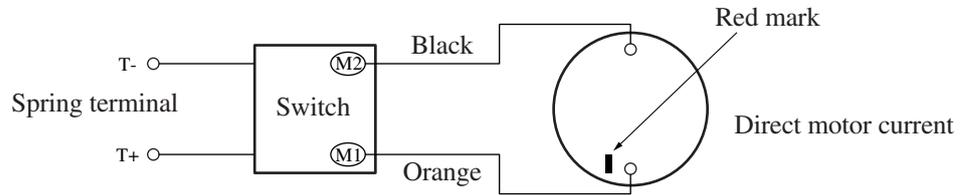


Figure 4

### 4 Assembly of chuck

- 1) In assembly of Chuck, hold the two-face width and tighten by 50~60 N.m (500~600kgf.cm).
  - If tightened by the torque less than the above, Chuck may loosen in reverse rotation, which will break Screw for Chuck and Chuck may comes off.
  - Do not tighten Chuck by low speed lock torque, because you may be swung around and dangerously.
- 2) Used screw for fixing Chuck is left-handed.

## ► Wiring diagram



## ► Details of wiring

Inside of Housing L

