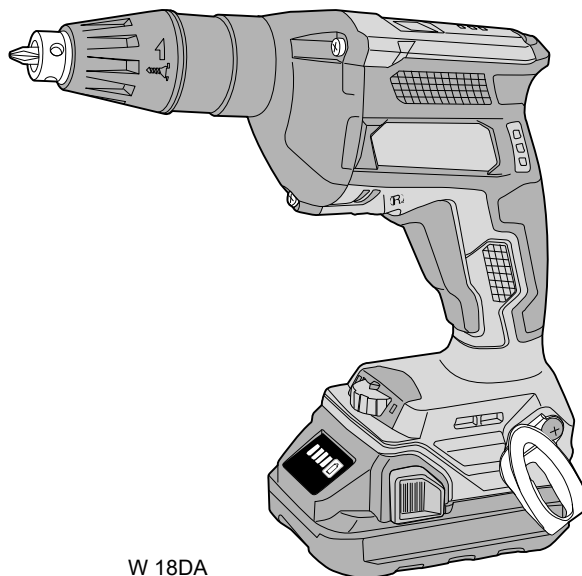


PRODUCT NAME

18 V Cordless Screw Driver

Models W 18DA, W 18DB

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W 18DA

REPAIR GUIDE

WARNING: Always remove the battery from the main body before starting repair or maintenance work. Because the tool is cordless, inadvertently activating the switch with the battery left in the main body will start the motor rotating unexpectedly, and could cause serious injury.

1. Precautions on disassembly and reassembly

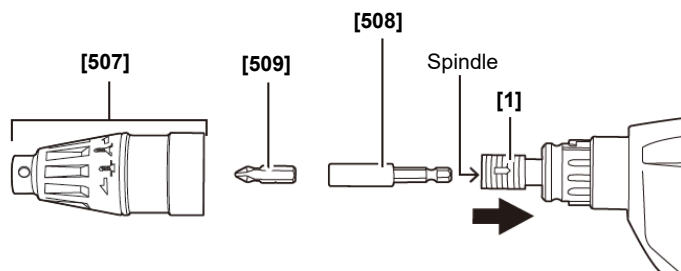
[Bold] numbers in the description below correspond to the item numbers in the parts lists and exploded assembly diagrams for the Models W 18DA and W 18DB.

Disassembly

1. Removal of the stopper

- (1) Pull out the Stopper **[507]**.
- (2) Pull out the Magnet Bit Holder **[508]** from the spindle while pulling back the Guide Sleeve **[1]** in the arrow direction.
- (3) Pull out the Plus Driver Bit No. 2 25L **[509]** while holding the Magnet Bit Holder **[508]** with hand.

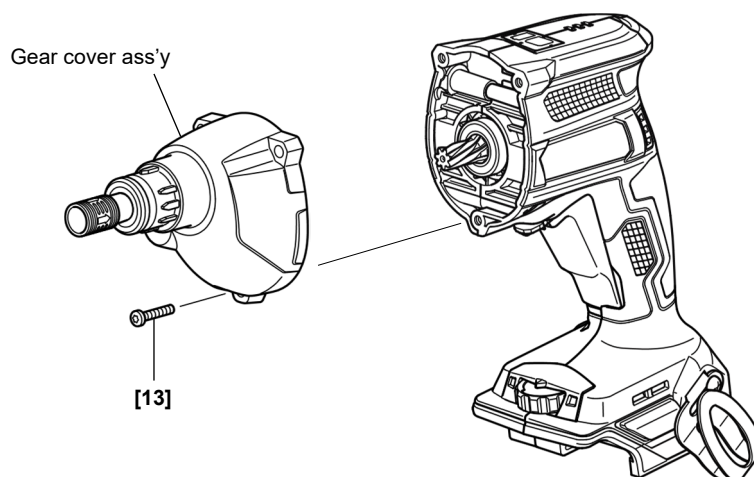
• Removal of the stopper



2. Removal of the gear cover ass'y

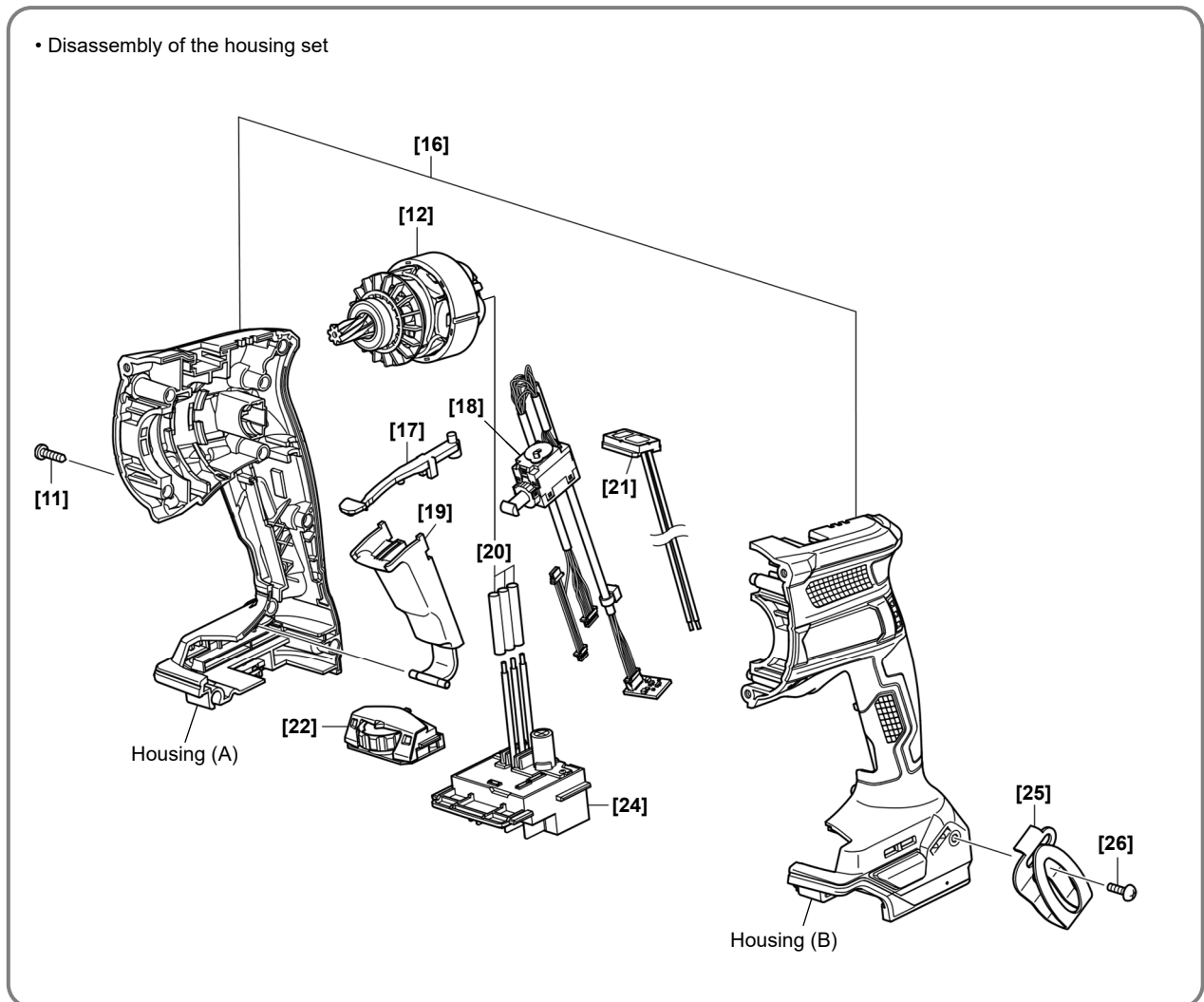
Remove the three Tapping Screws ST4.2 x 22 **[13]** and remove the gear cover ass'y.

• Removal of the gear cover ass'y



3. Disassembly of the housing set

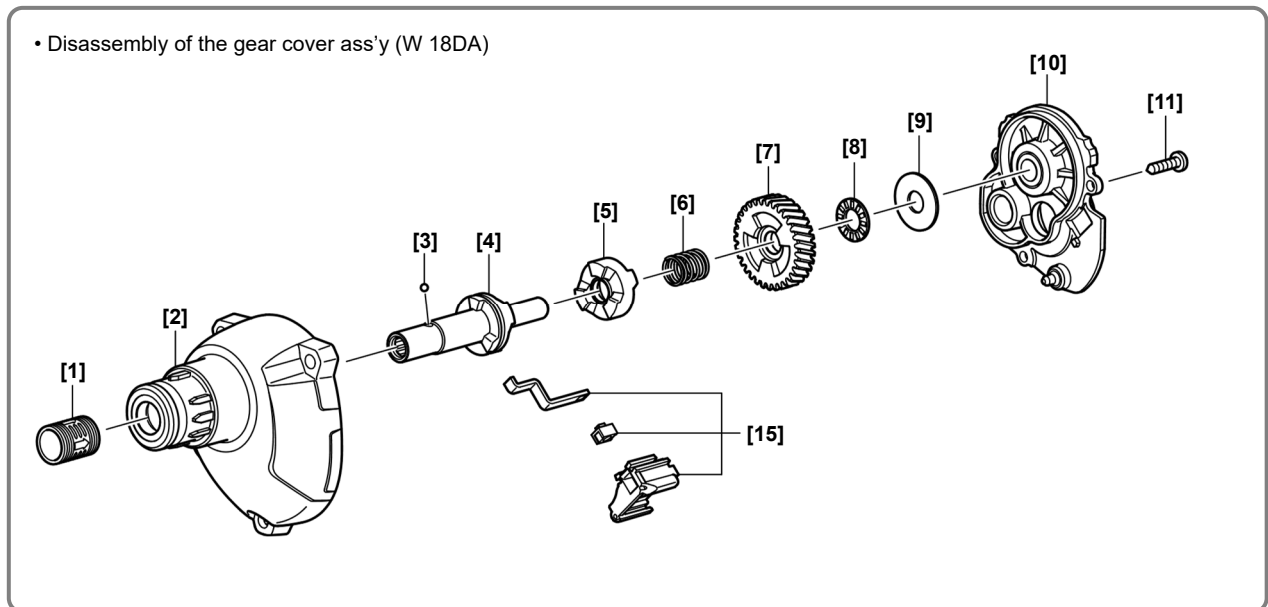
- (1) Remove the nine Tapping Screws ST2.9 x 16 [11] and remove housing (A) of the Housing Set [16].
- (2) Remove the Shift Lever [17] and Trigger [19]. Then, the Motor [12], Switch [18], Sumi Tube [20], Indicator Set [21], Dial [22], and PCB Terminal Set [24] can be removed.
- (3) Remove the three Sumi Tubes [20] using a cutter knife. Then unsolder the soldered portions (3 places).



4. Removal of the gear and spring

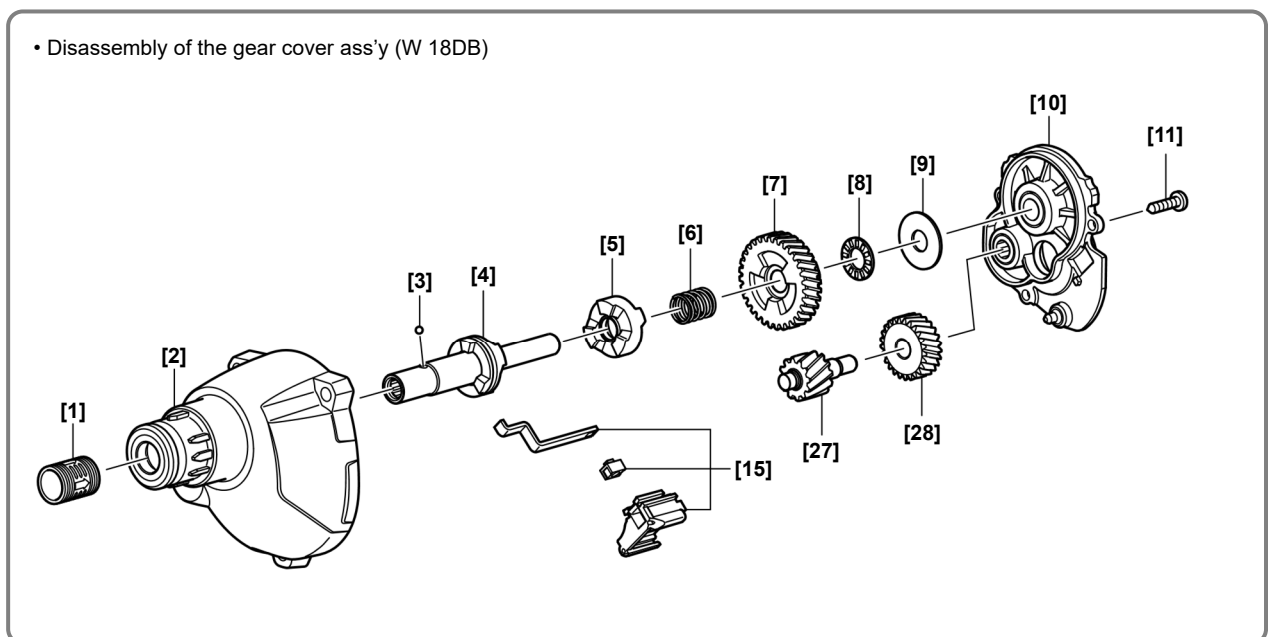
- (1) Pull out the Guide Sleeve [1].
- (2) Remove the three Tapping Screws ST2.9 x 16 [11] and remove the Inner Cover [10].
- (3) Pull out the sensor PCB from the Gear Cover [2].
- (4) **W 18DA:** Remove the Thrust Washer [9] and Thrust Needle Bearing [8]. Then, the Gear [7], Spring [6], and Clutch [5] can be removed.

NOTE: Note that the Thrust Washer [9] and Thrust Needle Bearing [8] may be removed together with the Inner Cover [10]. Be careful not to lose them in such a case.



- (5) **W 18DB:** Remove the Thrust Washer [9] and Thrust Needle Bearing [8]. Then, the First Gear [28], Second Pinion [27], Gear [7], Spring [6], and Clutch [5] can be removed.

NOTE: Note that the Thrust Washer [9] and Thrust Needle Bearing [8] may be removed together with the Inner Cover [10]. Be careful not to lose them in such a case.



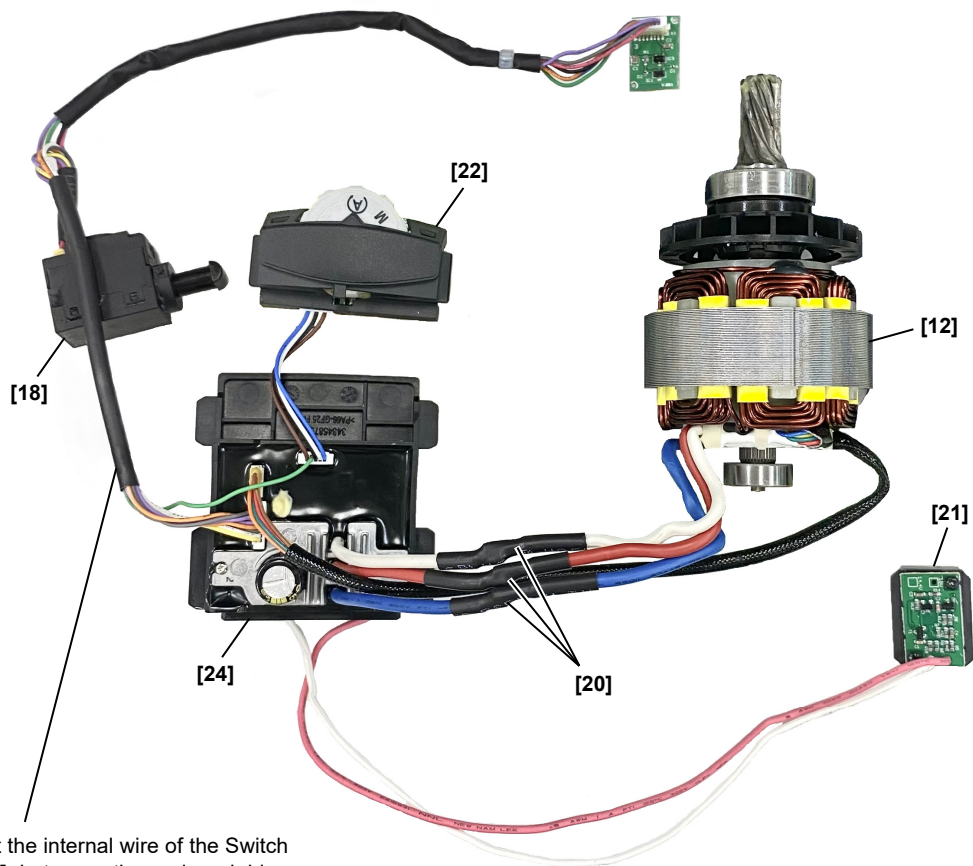
Reassembly

Perform reassembly by reversing the disassembly procedure, but note the following.

1. Reassembly of the power supply unit and its vicinity

- (1) Connect the internal wires correctly according to the following connecting diagram when replacing the Switch [18], Dial [22], and PCB Terminal Set [24]. Securely connect the faston terminals to the connectors.
- (2) Connect the internal wires correctly according to the following connecting diagram when replacing the Motor [12] and PCB Terminal Set [24]. After replacement, solder the internal wires and attach the Sumi Tubes [20] to the internal wires to insulate them.

• Connecting diagram



Put the internal wire of the Switch [18] between the red and blue internal wires of the power line.

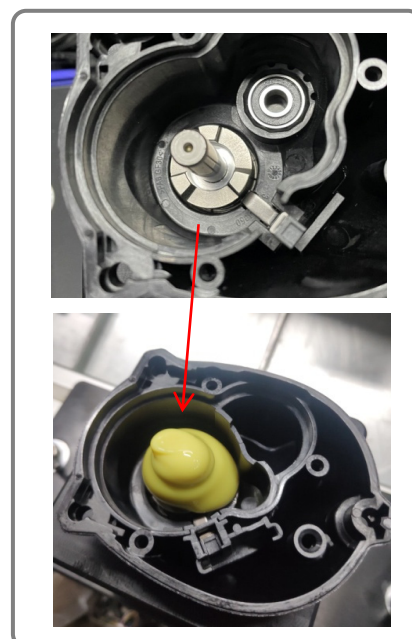
Lubrication points and type of lubricant

W 18DA

(1) Apply 6 grams of FG126 grease to the following portions.

- Sliding portion of the Socket [4]
- Tooth section of the Gear [7]
- Thrust Needle Bearing [8]
- Thrust Washer [9]

(2) Put the remainder of grease on the clutch as shown in the figure.



W 18DB

(1) Apply 12 grams of FG126 grease to the following portions.

- Sliding portion of the Socket [4]
- Tooth section of the Gear [7]
- Thrust Needle Bearing [8]
- Thrust Washer [9]
- Tooth section of the First Gear [28]
- Tooth section and sliding portion of the Second Pinion [27]

(2) Put the remainder of grease on the clutch as shown in the figure.

Item	Registered part name	Net weight
FG126 grease	Grease (FG126) 110 g	110 g

Tightening torque

Item No.	Part name	No. used	Tightening torque	
			N•m	kgf•cm
[11]	Tapping Screw ST2.9 x 16	12	1.0 ± 0.1	10.2 ± 1.02
[13]	Tapping Screw ST4.2 x 22	3	2.4 ± 0.24	24.5 ± 2.45
[26]	Truss Hd. Screw M4 (Black)	1	1.8 ± 0.4	18.4 ± 0.41

Checking after reassembly

Check that the Model W 18DA/W 18DB runs smoothly and starts, stops, and changes direction securely when activating the rotation selector switch.

No-load current

W 18DA: 2.5 to 6.5 A (DC 19.8 V—equivalent to the voltage of a fully charged battery) in Manual mode
 W 18DB: 3.3 to 7.3 A (DC 19.8 V—equivalent to the voltage of a fully charged battery) in Manual mode

Wiring diagram

• Wiring diagram

