

T ECHNICAL INFORMATION



New Tool

Models No. ▶ 4191D

Description ▶ 85mm Cordless Cutter

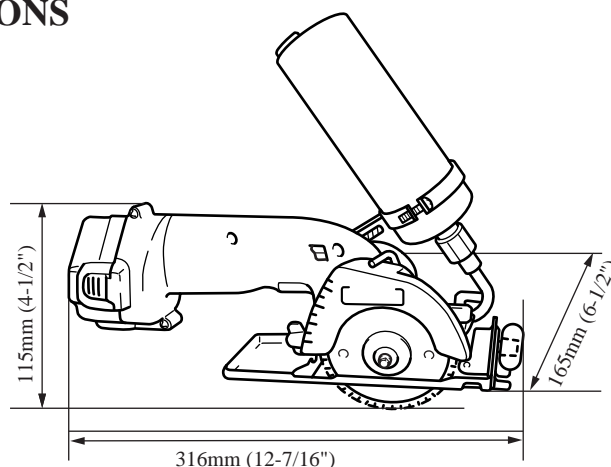
CONCEPTION AND MAIN APPLICATIONS

Model 4191DWA is upgraded 12V version of the existing Model 4090DW(9.6V) and its brief benefits are;

*Depth and/or bevel cutting can be adjusted by fastening thumb screws.

*This model adopts Battery 1222(2.0Ah) that can be removed easily by pushing buttons.

*Cutting length from a single charge is about 1.6 times as Model 4190DW



▶ Specifications

Motor		DC 12V magnet motor	
Battery		Battery 1222 (Ni-Cd,12V,2.0Ah)	
No load speed		1000 rpm	
Wheel diameter		80~85 mm (3-1/8"~3-3/8")	
Arbor diameter		15 mm(19/32")	
Max. cutting capacities	Diamond Wheel 85	At 90°	24 mm(15/16")
		At 45°	18 mm(11/16")
	Diamond Wheel 80	At 90°	21.5 mm(13/16")
		At 45°	16 mm(5/8")
Net weight		2.1 Kg(4.6lbs)	

▶ Standard equipment

- Hex. Wrench 4
- Fast Charger DC1410
- Battery Cover
- Battery 1222
- Set PLate (for Battery 1200,1200A,1201,1201A,1202,1202A)
- Diamond Wheel 85 (Electrodeposited-type) (for U.S.A. and Canada)
- (Diamond Wheel 80 (for European countries))

▶ Optional accessories

- Diamond Wheel 85 (Electrodeposited-type)
- Diamond Wheel 80
- Diamond Wheel 85
- Guide Rule
- Battery 1222,1200,1200A,1202,1202A
- Fast Charger DCI410,DC1201,DC1209

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

► Repair

(1) Disassembling of housing R, L

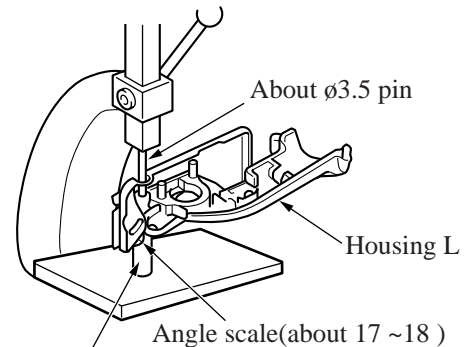
To disassemble, loosen the thumb screw of the depth guide, remove the 3 pieces of tapping screw on the blade case, and then remove the 7 pieces of screws on the R-side of the housing.

(2) Disassembling of the motor housing

After disassembling the housings R/L, remove the tapping screw on the medium bottom, and then remove the motor housing.

(3) Disassembling of the base

Insert the pin (about $\phi 3.5$) through the rectangle hole for the parallel ruler at the right of base front while fixing the angle scale of the base at 17-18 around, set the sleeve (inner dia. 5 or more) to the left side of the angular guide, use the arbor to press the pin, and then pull out the spring pin 4-40. (see the figure 1.)



Sleeve Figure 1

(4) Assembling of the base

Insert the top of the housing L (while being separated from housing R) into the angular guide, make fit the hole, and then use the arbor to insert the spring 4-40 through the left side while holding the right side of the angular guide.

(5) Assembling direction of ball bearing 608LB

Assemble while the seal face is at blade side.

(6) Assembling of DC motor

To set the DC motor into the motor housing, assemble in the direction as shown in the figure 2.

Assemble the varnish polyester tube in a way like housing in the position over the outer circumference of back side of motor.

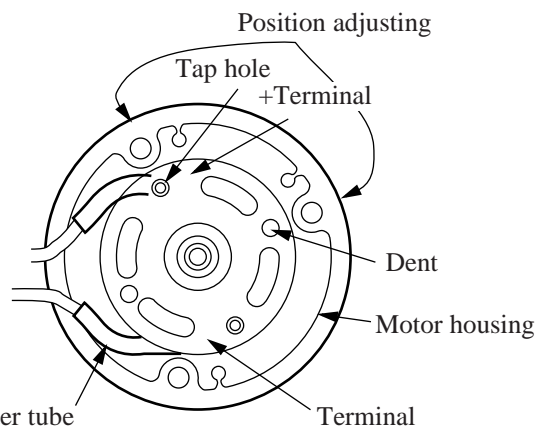


Figure 2

(7) Mount the rubber sheet of the battery holder at the position on the housing R/L shown on the figure 3.

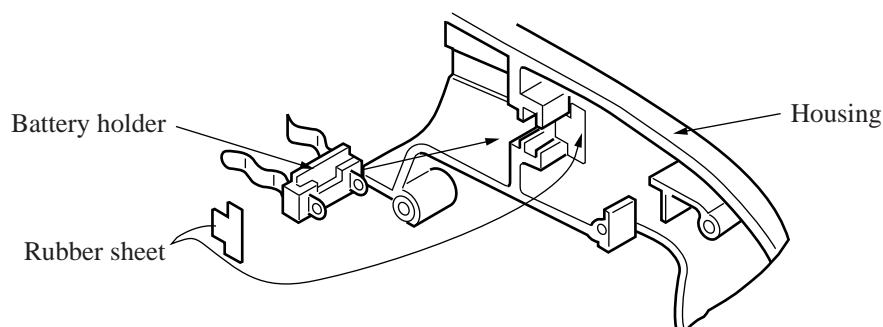
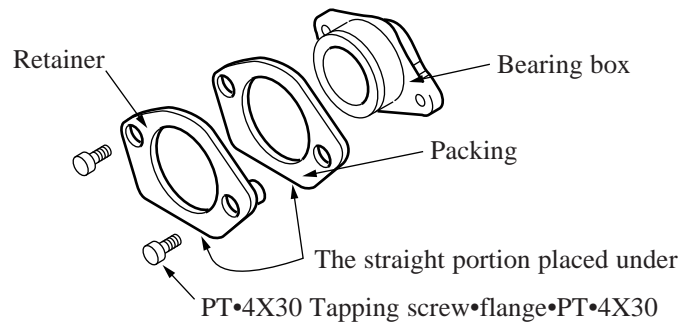


Figure 3

(8) Set the packing and retainer on the bearing box in the direction as shown on the figure below.



(9) Manually fasten the nut for holding the water supply cock complete in a degree that can be fastened by hands. Insert the nozzle through the hole in a way that the longer curl edge on the nozzle is placed into the hole of water supply cock complete of the housing R.

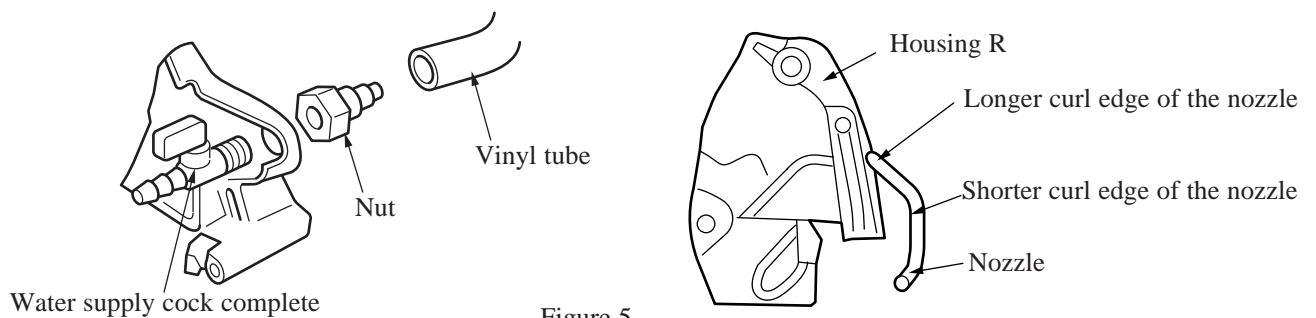


Figure 5

(10) Fix the band B for holding the tank at the position shown on the figure 6 while care is exercised not to cover the air window of motor housing.

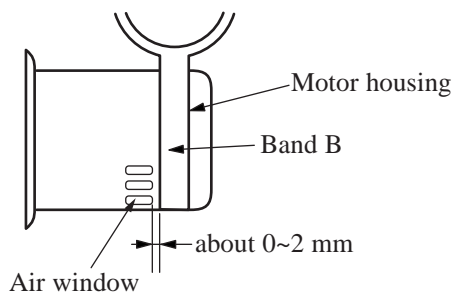


Figure 6

► Circuit drawing

