

TECHNICAL INFORMATION



PRODUCT

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Models No. ▶ RD1100, RD1101, RF1100, RF1101

Description ▶ 12.7mm (1/2") Router

RD1100
RD1101

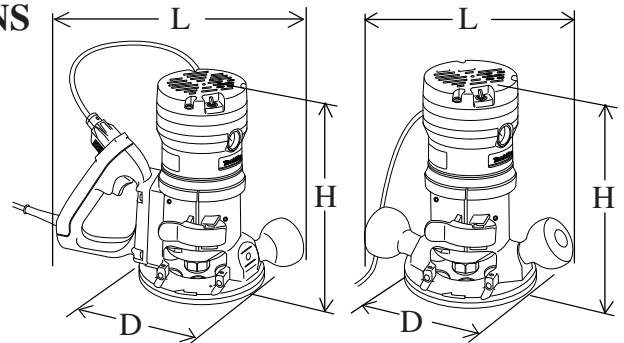
RF1100
RF1101

CONCEPTION AND MAIN APPLICATIONS

The above models are equipped with high power motor of 1,700W (2-1/4 HP) in max.output.

Their brief benefits and features are as follows.

- * electronic control for constant speed
 - * soft start feature
 - * speed control dial to work with optimum rpm. in terms of bits and materials. (Mod.RD1101 and RF1101)
- Mod.RD1100 and RD1101 are D-shaped handle type.
Mod.RF1100 and RF1101 are dual handle type.



Dimensions : mm (")		
Model No.	RD1100, RD1101	RF1100 RF1101
Base dia.(D)	146 (5-3/4)	146 (5-3/4)
Height (H)	223 (8-3/4)	223 (8-3/4)
Length (L)	294 (11-9/16)	235 (9-1/4)

► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
120	11	50/60	1,250	960	1,700

Model No.	RD1100	RD1101	RF1100	RF1101
Collet capacity : mm (")	12.7 (1/2) , 6.35 (1/4)			
No load speed : (min -max rpm)	24,000	8,000 - 24,000	24,000	8,000 - 24,000
Depth adjustment : mm (")	0 - 55 (2-3/16)			
Net weight :Kg (lbs)	3.6 (7.9)		3.2 (7.1)	
Cord length : m (ft)	2.5 (8.2) **0.45 (1.5)		2.5 (8.2)	
Soft start feature	Yes	Yes	Yes	Yes
Speed control dial	No	Yes	No	Yes

**0.45 (1.5) : Length of interconnecting cord between D-form handle and motor unit. Refer to the illustration at page 2/8.

► Standard equipment

- * Wrench 27 2 pcs.
- * Collet cone set 6.35..... 1 pc.

< Note > The standard equipment for the tool shown may differ from country to country.

► Optional accessories

- * Straight guide
- * Dust nozzle
- * Base plate
- * Templet guide 25
- * Wrench
- * Collet cone 12.7m (1/2)
- * Collet cone 6.35
- * Various router bits

Equipped with strong motor of 2-1/4 HP (1,700W)

Electronic controller for soft start, and for constant speed at any setting of rpm.

Slim motor housing for easy operation : only Ø82mm [3-1/4"]

Competitor A's product) Ø89mm [3-1/2"]
 Competitor B's product)

Speed control dial for adjusting the rpm. to match the various work piece.(only Mod.RF1101)

Low noise, 81dB

Competitor A's product : 86dB
 Competitor B's product : 83dB

Flat top

Toggle switch

Twisting depth adjuster

Cutting depth can be adjusted by twisting the motor section.

Lever for locking the adjusted cutting depth.

1/2" collet consisting of 3 parts. Easy to detach router bit

RF1100 / RF1101

Dust nozzle for connection to the vacuum cleaner, is available as an optional accessory.

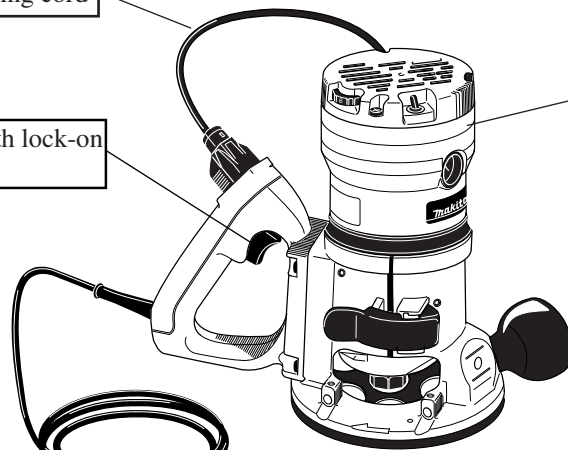
Round base

Also the accessories (for instance templet guide, guide rule, etc.) for PORTER CABLE can be attached.

Interconnecting cord

Trigger switch with lock-on device

The motor section is same as the one of RF series models



RD1100 / RD1101

The installing position of front grip can be changed as follows.

Dual grip type						
Manufacturer		MAKITA		Competitor A	Competitor B	
Specifications	Model No.	RF1100	RF1101	Model A-1	Model B-1	Model B-2
Max. Output (W)	Nominal	2-1/4 HP		1-1/2 HP	2 HP	1-3/4 HP
	Measured	1,700 W		1,250 W	*1,350 W	1,400 W
Rating Amperage under 120V (A)		11		10	12	11
Equipped motor		N72-50		81-44	80-48	80-48
Diameter of motor unit : mm (")		82 (3-1/4)		89 (3-1/2)	89 (3-1/2)	89 (3-1/2)
No load speed : (min -1= rpm)		24,000	8,000 - 24,000	23,000	8,000 - 25,000	25,000
Collet capacity : inch "		1/2		1/2	1/2	1/2
Protection from electric shock	by grounding	○		○		
	by double insulation					
Electronic control system		Yes		No	Yes	No
Speed control dial		No	Yes	No	Yes	No
Externally accessible brushes		Yes		Yes	No	No
Flat top		Yes		Yes	Yes	Yes
Net weight :Kg (lbs)		3.2 (7.1)		3.3 (7.3)	3.4 (7.5)	3.4 (7.5)
Standard equipment		Collet 1/2" Collet 1/4" 2 Wrenches				

< Remark > *1,350 W : In case of Model B-1, the max. output comes to 1,350 W in actually, because the limiter functions with 20 A.

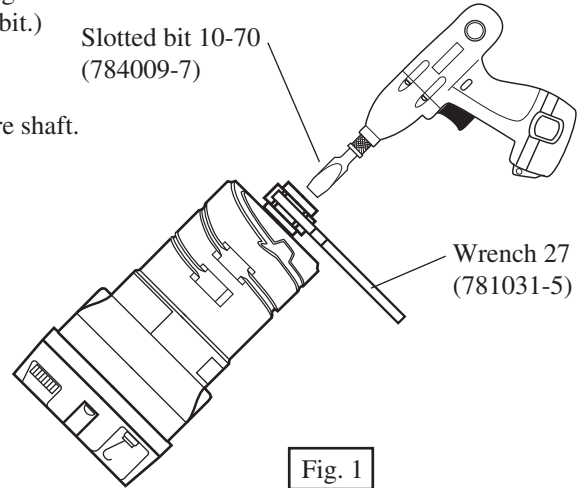
D-shaped handle type						
Manufacturer		MAKITA		Competitor A	Competitor B	
Specifications	Model No.	RD1100	RD1101	Model A-2	Model B-3	
Max. Output (W)	Nominal	2-1/4 HP		1-1/2 HP	1-3/4 HP	
	Measured	1,700 W		1,250 W	1,400 W	
Rating Amperage under 120V (A)		11		11	11	
Equipped motor		N72-50		81-44	80-48	
Diameter of motor portion : mm (")		82 (3-1/4)		89 (3-1/2)	89 (3-1/2)	
No load speed : (min -1= rpm)		24,000	8,000 - 24,000	23,000	25,000	
Collet capacity : inch "		1/2		1/2	1/2	
Protection from electric shock	by grounding	○		○		
	by double insulation					
Electronic control system		Yes		No	No	
Speed control dial		No	Yes	No	No	
Externally accessible brushes		Yes		Yes	No	
Flat top		Yes		Yes	Yes	
Net weight :Kg (lbs)		3.6 (7.9)		3.7 (8.2)	3.8 (8.4)	
Standard equipment		Collet 1/2" Collet 1/4" 2 Wrenches				

Repair

< 1 > Dismounting collet body

Holding collet body with spanner 27, turn the armature shaft with impact wrench clockwise as illustrated in Fig. 1. (The end of armature shaft is slotted for accepting the bit.)

Use impact wrench, because the collet body is secured too tight to be detached by hand from armature shaft.

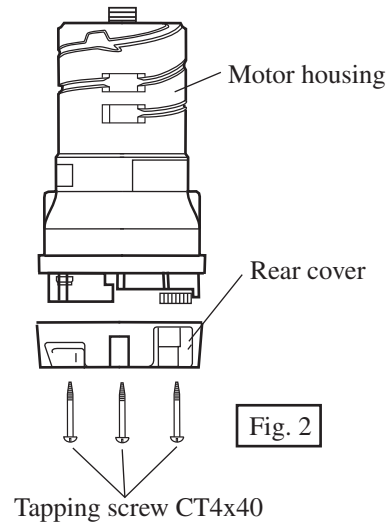


< 2 > Mounting collet body

Fasten the collet body so strong that it can not loosen. The fastening torque is 3.14 - 6.28 N.m.

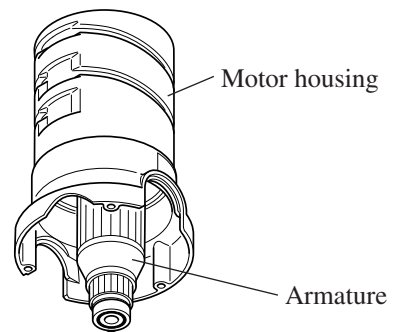
< 3 > Removing motor housing

(1) Take off tapping screw CT4x40. And remove rear cover from motor section. See Fig. 2.

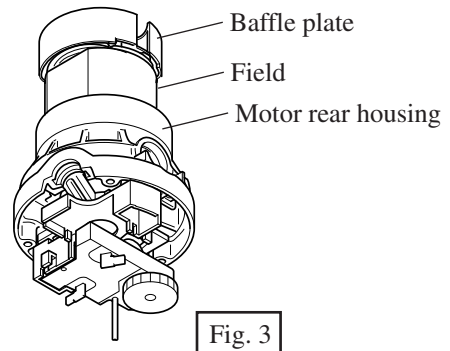


(2) Remove motor rear housing from motor housing as illustrated in Fig. 3.

* Motor housing is to be removed together with armature.



* Motor rear housing is to be removed together with baffle plate and field.



► **Repair**

< 4 > Adjusting hex lock nut M6-10

The tightening force of router base against motor is depending on the fastening position of hex nut M6-10.

The hex lock nut M6-10 has to be adjusted so that the motor section can be fixed firmly with smooth one action of lock lever. The motor must not slide easily up and down, after tightening lock lever.

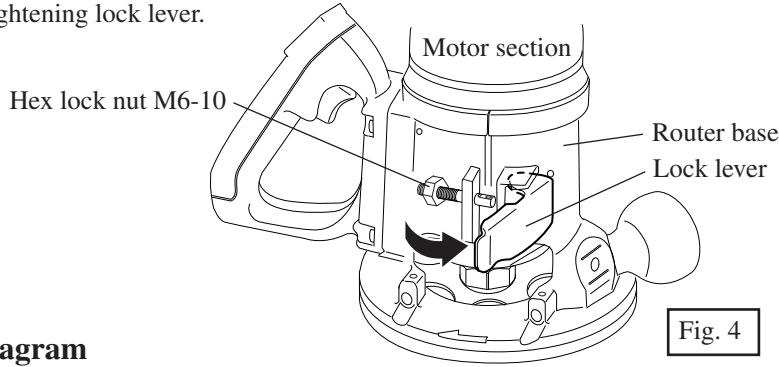
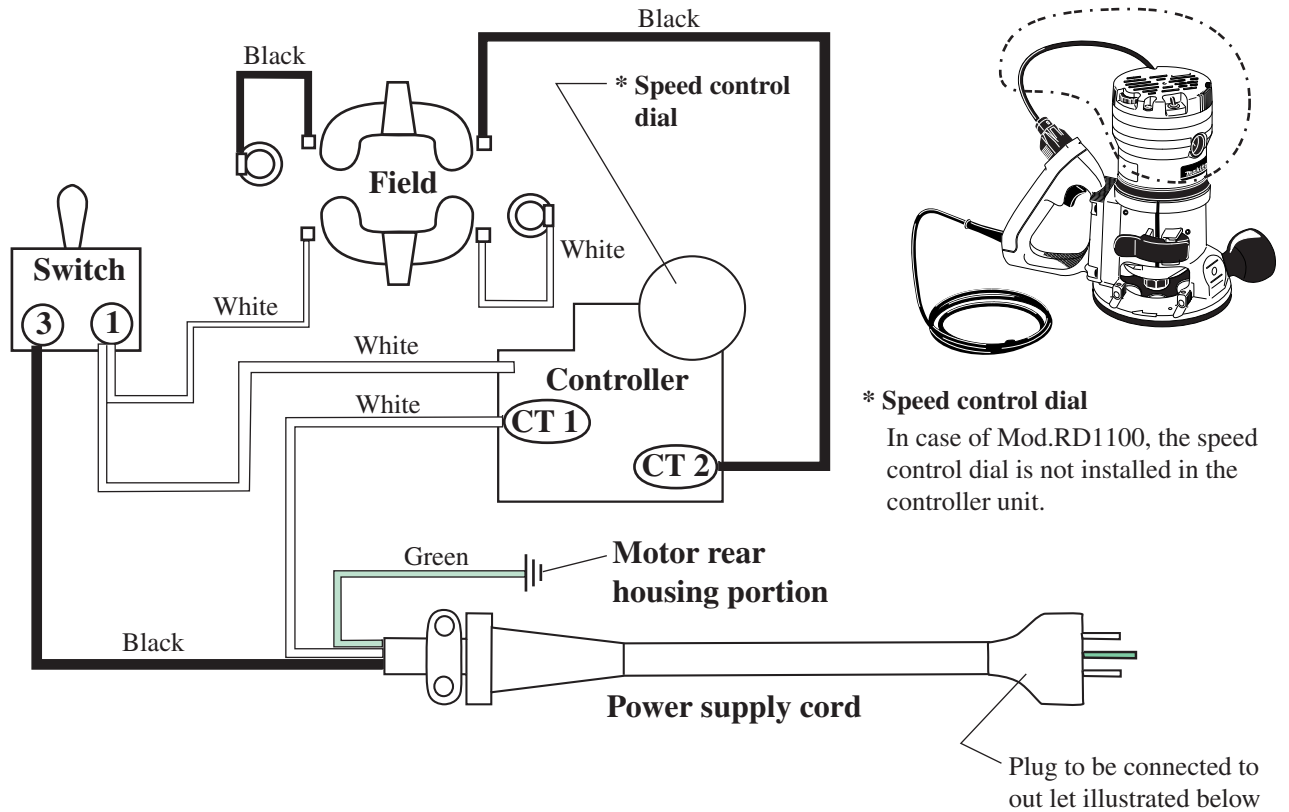


Fig. 4

► **Circuit diagram**

RD1101 and RD1100

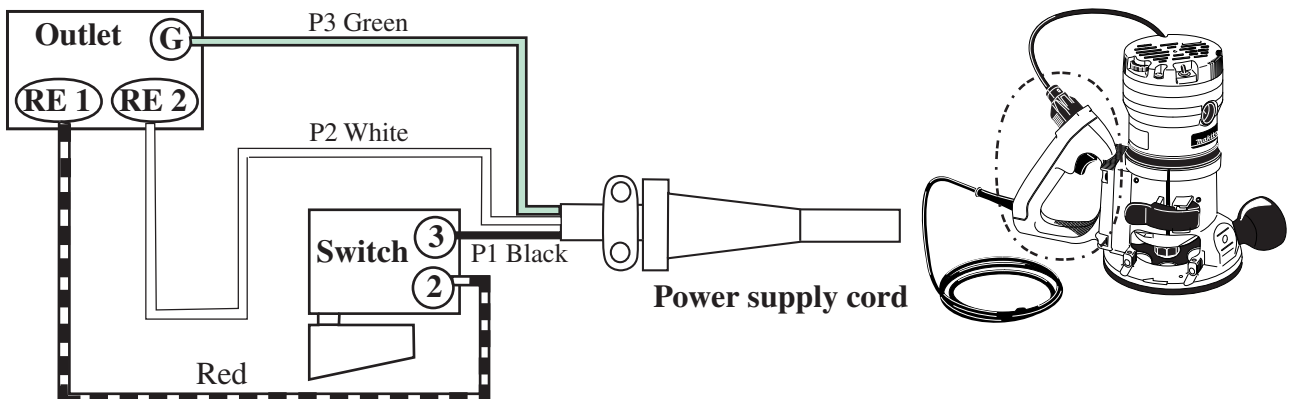
Circuit diagram in the machine's body



* Speed control dial

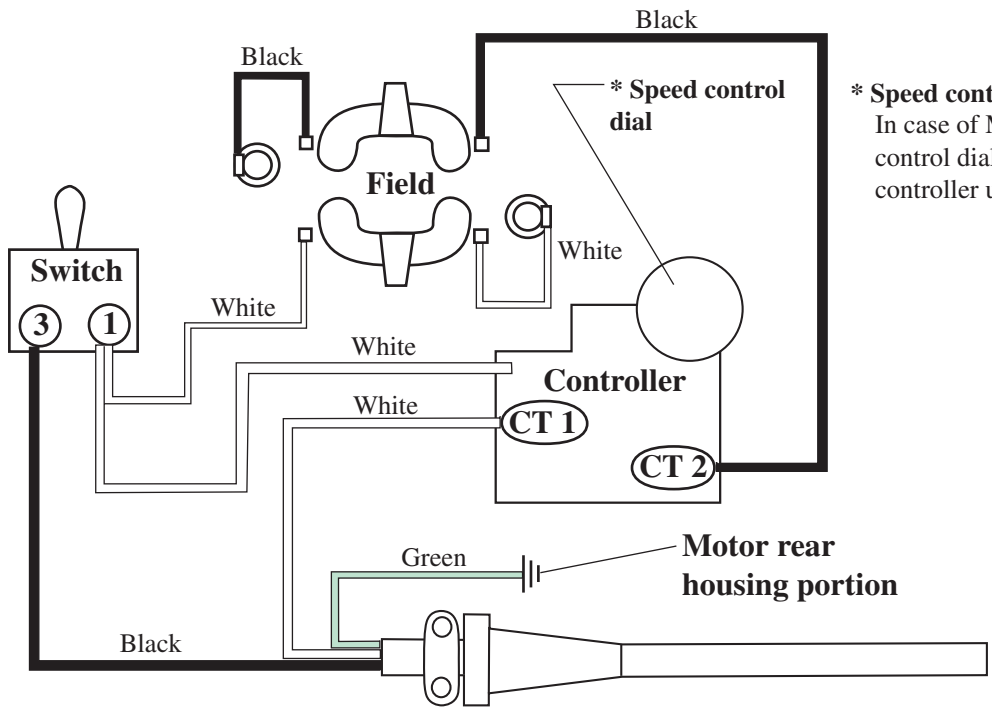
In case of Mod.RD1100, the speed control dial is not installed in the controller unit.

Circuit diagram in the D-form handle



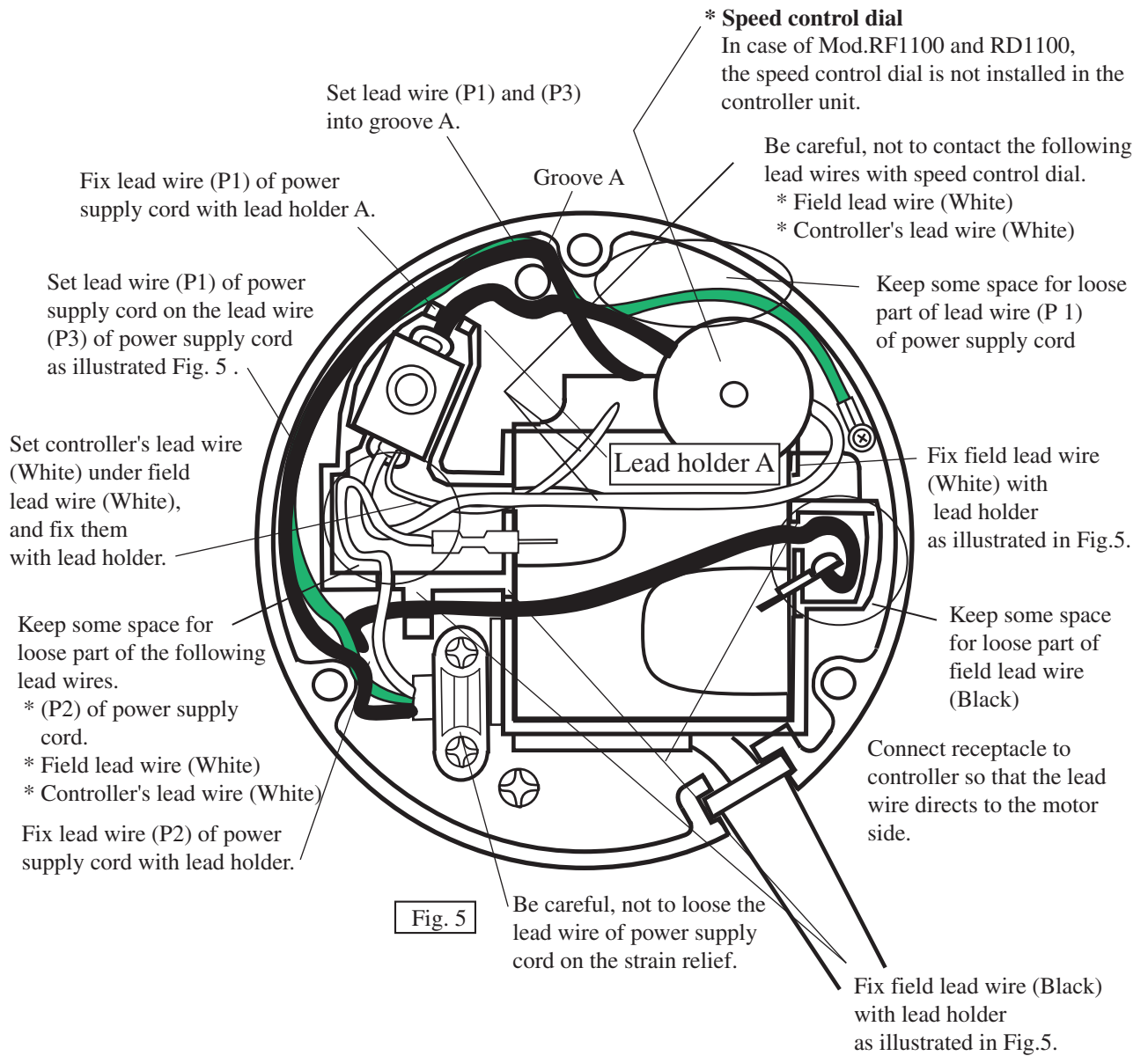
► **Circuit diagram**

RF1101 and RF1100



*** Speed control dial**
In case of Mod.RF1100, the speed control dial is not installed in the controller unit.

Mod.RF1100 / RF1101 Mod.RD1100 / RD1101



▶ Wiring diagram

The wiring in the D-form handle

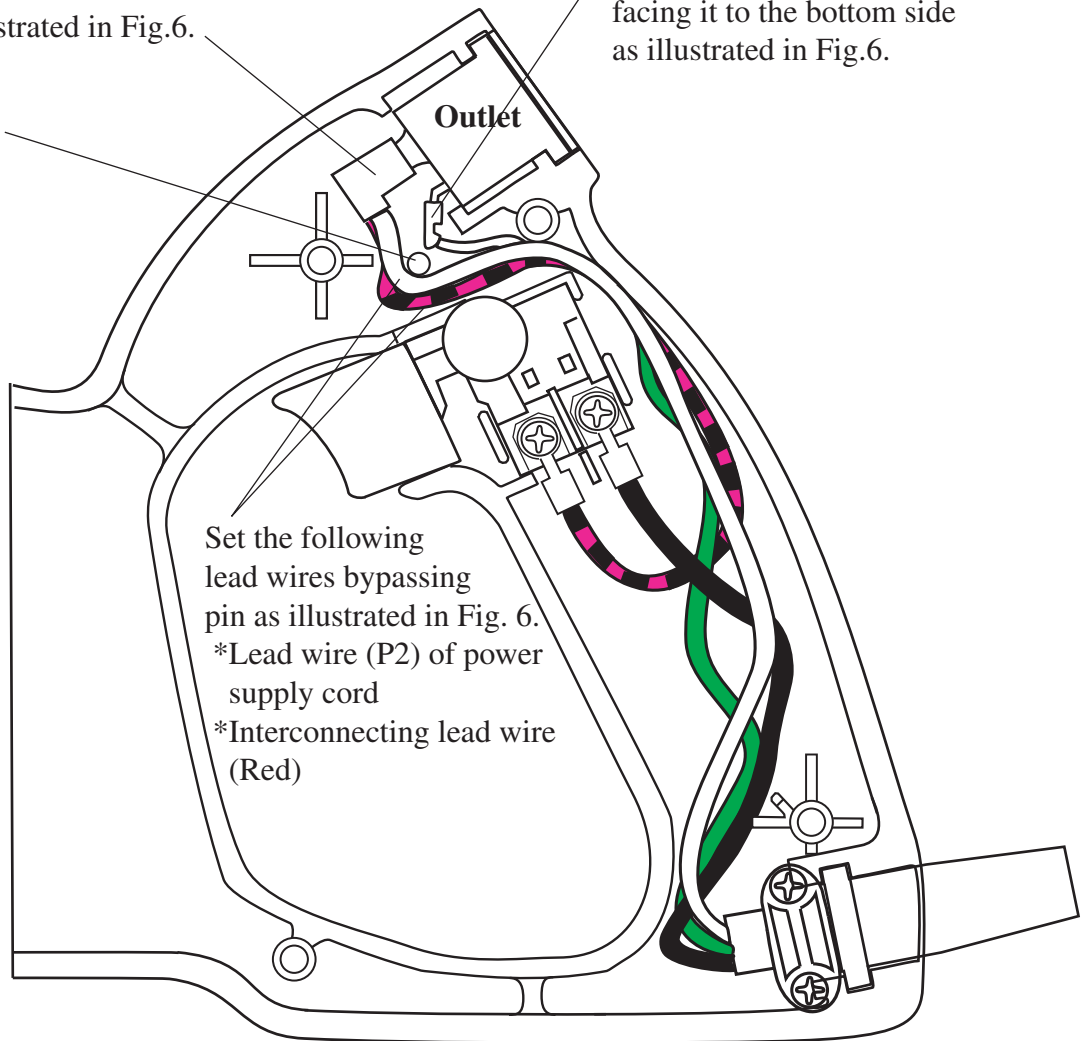
Mod. RD1100 and RD1101

Connect insulated receptacle to outlet facing it to the bottom side as illustrated in Fig.6.

Connect receptacle to outlet facing it to the bottom side as illustrated in Fig.6.

Pin

Outlet



Set the following lead wires bypassing pin as illustrated in Fig. 6.
*Lead wire (P2) of power supply cord
*Interconnecting lead wire (Red)

Fig.6