

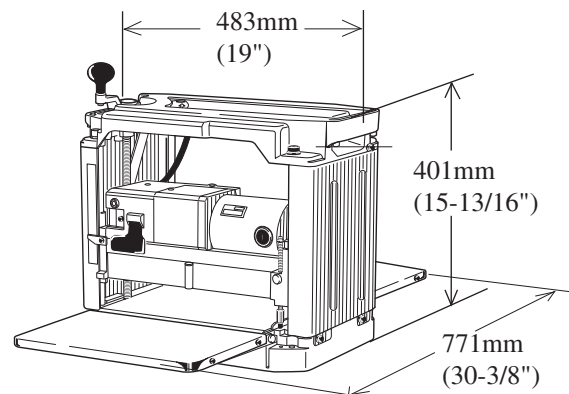
TECHNICAL INFORMATION



- Models No.** ▶ 2012NB
- Description** ▶ 304mm (12") Automatic Thickness Planer

CONCEPTION AND MAIN APPLICATIONS

- * Compact and light weight (27 Kg./59 lbs) automatic thickness planer for easier transport.
- * Cutterhead powered by powerful 1,650W but the lowest noise motor (83db) raises and lowers on four columns for stability.
- * Unique feeding mechanism assures smoother finish with minimal snipe on stock.
- * Double insulated automatic thickness planer with indicator lamp ready to operate.
- * Depth stop can be set in any positions from 3 mm (1/8") to 100mm (4") for desired thickness of stock.
- * Large support table and detachable tool box fro standard equipment.



► Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
100	15	50/60	1,430	960	1,900
110	15	50/60	1,650	1,140	2,100
120	15	50/60	1,650	1,140	2,100
220	8	50/60	1,650	1,140	2,100
230	7.6	50/60	1,650	1,140	2,100
240	7.3	50/60	1,650	1,140	2,100

No load speed	8,500 min ⁻¹ (rpm.)
Feed rate / min	8.5 m/min (0.14 m/s, 27.8 ft/min.)
Planer blade	306 mm (12-3/64")
Max.planing width	304 mm
Max.planing depth	0 - 3.0 mm
Material thickness	3 - 155mm (1/8" - 6-3/32")

► Standard equipment

- Magnetic holder (2) for replacing planer blade
- Socket wrench 9
- Hex wrench
- Blade guage
- Detachable tool box

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

► Optional accessories

- Planer stand
- Planer blade 306
- Key
- Hood set for connecting with Mod.410

► Repair

Contents

1. Repairing tool to be used
2. Lubrication
3. Removing chain
4. Mounting tensioner
5. Removing motor section
6. Adjusting play of steel ball mounted in the bottom end of depth adjustment screw
7. Adjusting nut M14 and M14L mounted for minimizing play on depth adjustment screw
8. Depth adjustment of planer blade unit

1. Repairing tool to be used
(1R258) V Block

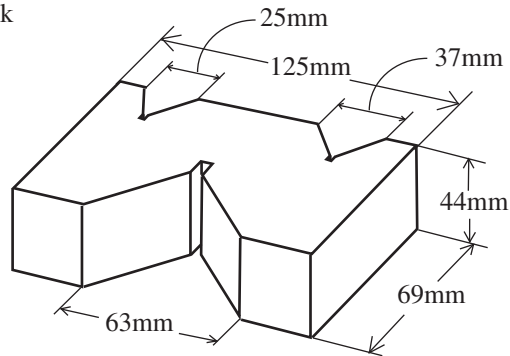


Fig.1

2. Lubrication

Parts to be lubricated	Lubricating material	Volume to be applied
Reduction gears (Gear complete 8-50 and 8-46 Helical gear 46)	MAKITA Grease N No.2	Applox. 30 g
Gears for depth adjustment (4 pcs.of straight bevel gear 15)	MAKITA Grease N No.2	Applox. 10 g
Depth adjustment screw	MAKITA Grease N No.2	Applox. 10 g
Surface of columns	Machine oil	—————

3. Removing chain

- (1) Loosen all of 3 hex socket head bolts on sprockets.
- (2) Remove torsion spring 9 (chain tensioner) and take off chain together with sprockets.

4. Mounting tensioner

- (1) Mount chain.
- (2) Fasten torsion spring 9 with screw provisionally, hitching its short side of torsion spring to rib.
(See Fig.2.)
- (3) Hitch long side of torsion spring 9 to chain, gripping it with nippers. (See FIG.2.)
- (4) Tighten torsion spring 9 with screw.
- (5) Fasten 3 sprockets with hex socket head bolts firmly.

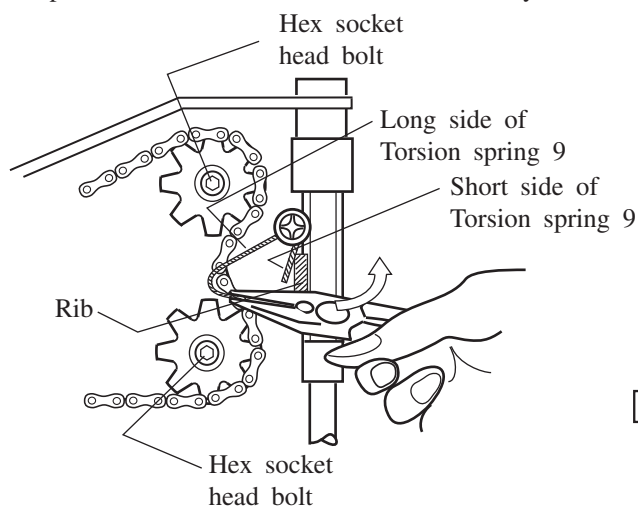


Fig.2

5. Removing motor section

- (1) Lift main frame to the highest point by turning depth control handle
- (2) Take off side cover, chain, and poly V-belt.
- (3) Motor section is fastened with 4 tapping screws from the bottom side of main frame. They are
 Tapping screw 5 x 30 for plastic : 2 pcs. on V-pulley side
 Tapping screw CT 4 x 25 for aluminum : 2 pcs. on switch box side
 Take off the above screws with screwdriver of short size.
 < Note > Pay attention to drive them in the correct place, when assembling.
- (4) Down main frame to the lowest point by turning depth control handle, and take off motor section.
- (5) Loosen tapping screws, and take off switch box cover and switch box.
 Tapping screw 4 x 18 for plastic : 2 pcs. for switch box cover
 Tapping screw bind CT 4 x 12 for aluminum : 2 pc. for switch box
 < Note > Pay attention to drive them into the correct place, when assembling.

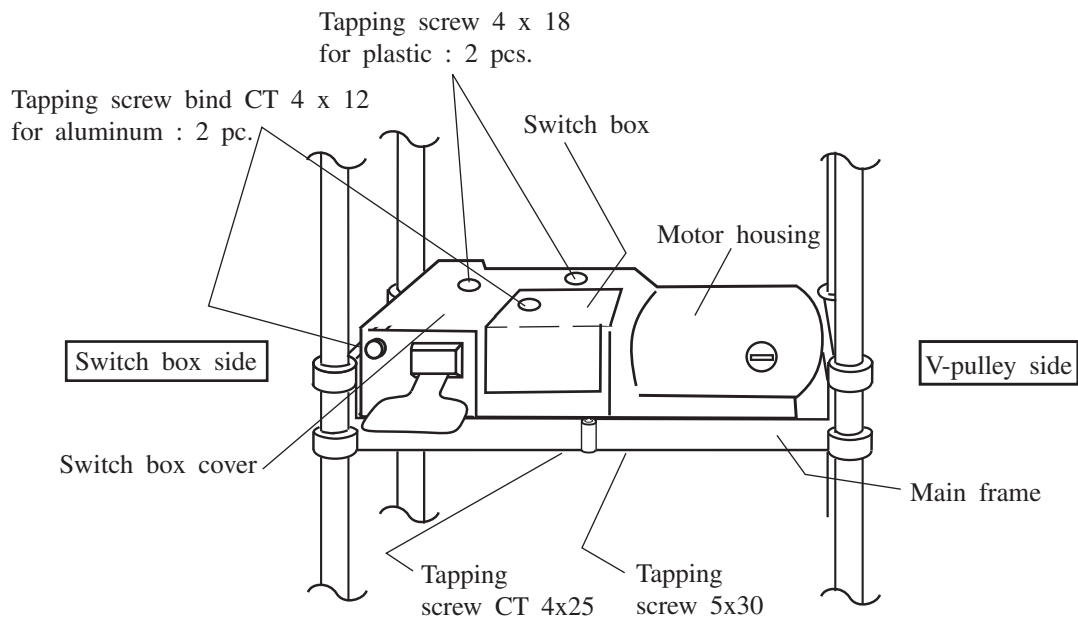


Fig.3

- (6) Motor unit (consisting of motor housing, gear housing, and gear housing cover) have to be mounted so that its bottom surface is parallel to the surface of main frame.
- (7) Do not forget to mount flat washer 14 to inner part of gear housing cover, for accepting drive shaft. (See Fig.4)

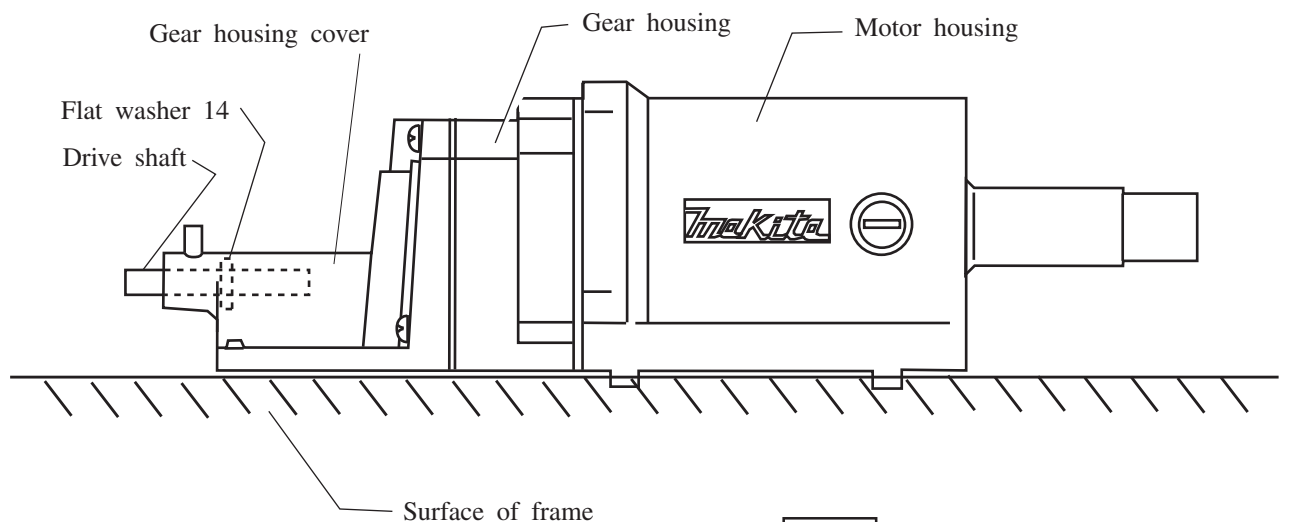
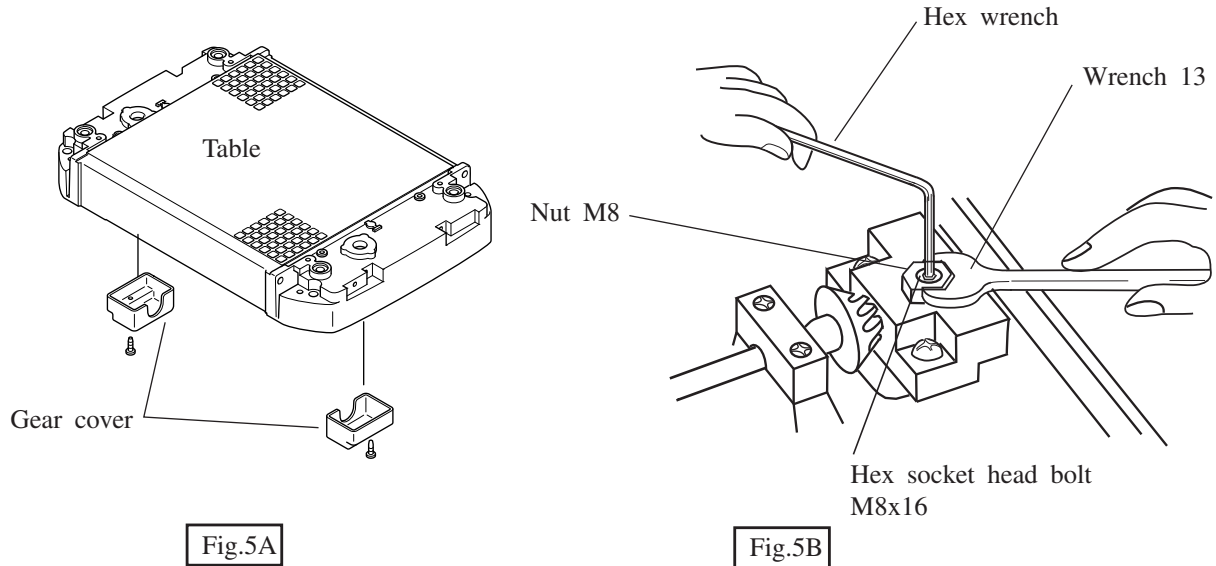


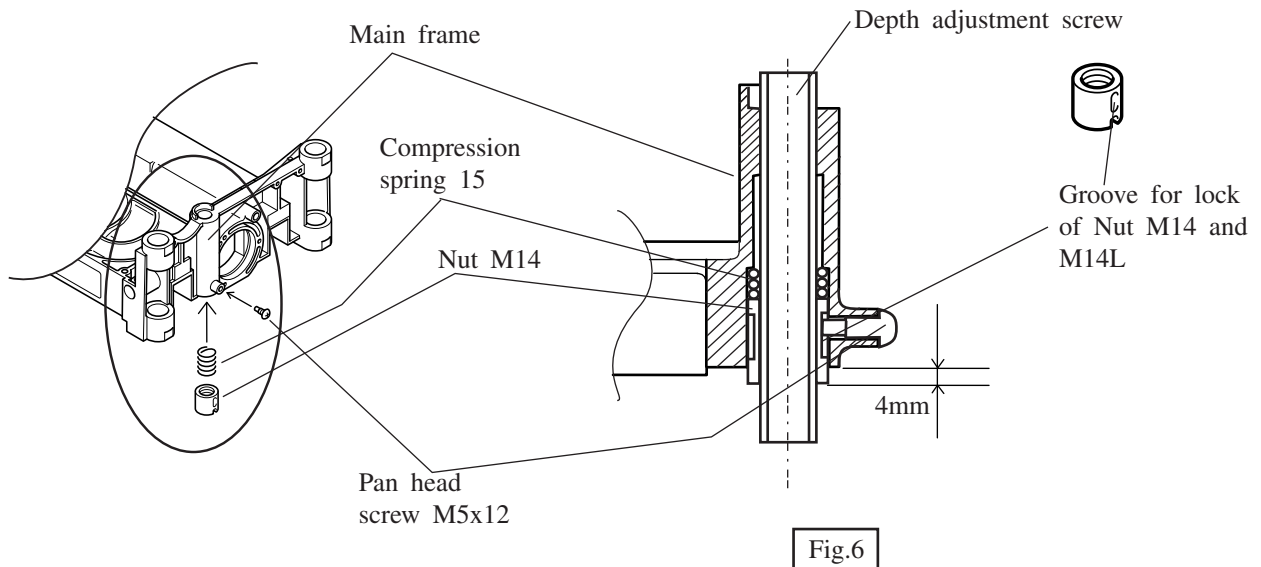
Fig.4

6. Adjusting play of steel ball mounted in the bottom end of depth adjustment screw
 - (1) Remove gear cover which is mounted under table. (See Fig.5A.)
 - (2) Tighten hex socket head bolt M8x16 with hex wrench. (See Fig.5B.)
 - (3) Loosen the above hex socket head bolt again, and adjust it to the position where the wobble of steel ball does not arise. (See Fig.5B.)
 - < Note > Be careful not to tighten too strong for smooth lift.
 - (4) Fix the hex socket head bolt M8x16 with hex nut M8.

Bottom view of Gear section for depth adjustment



7. Adjusting nut M14 and M14L mounted for minimizing play on depth adjustment screw



Drive nut M14 and M14L protruding approx. 4mm from the edge of main frame. (See Fig.6)
 And after facing the groove for lock to the screw hole on main frame, tighten pan head screw M5x12.

8. Depth adjustment of planer blade unit

(1) Upset the machine.

(2) Turn drum after taking off side cover of pulley side and face the round section of drum to table.

(See FIG.7)

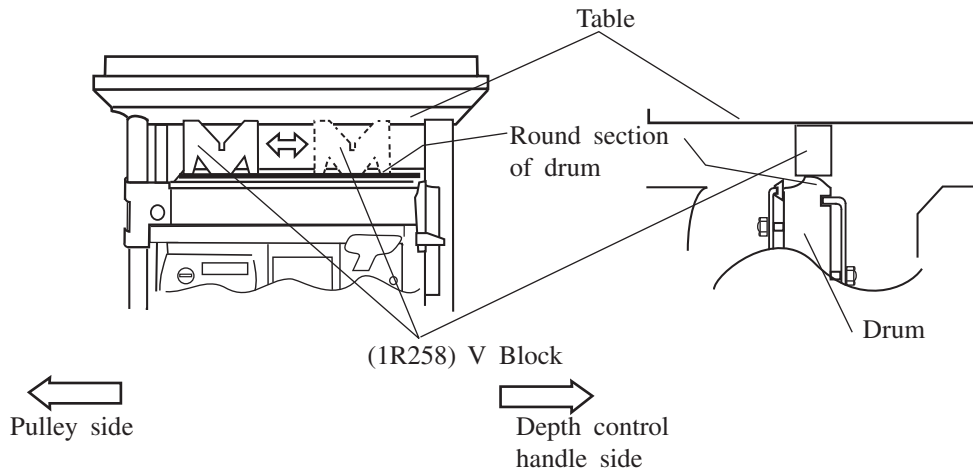


Fig.7

(3) Insert V block between table and round section of drum and check the distance of drum's round section and table on left and right side. (See FIG.7)

(4) Remove gear cover on depth control handle side. (See Fig.8A.)

(5) Loosen screw on shaft retainer and take off bevel gears' engagement. (See Fig.8B.)

(6) Adjust the distance between table and round section of drum by turning depth control handle. Movement by one tooth is equivalent to 0.13mm up and down. (See Fig.8B and Fig.9)

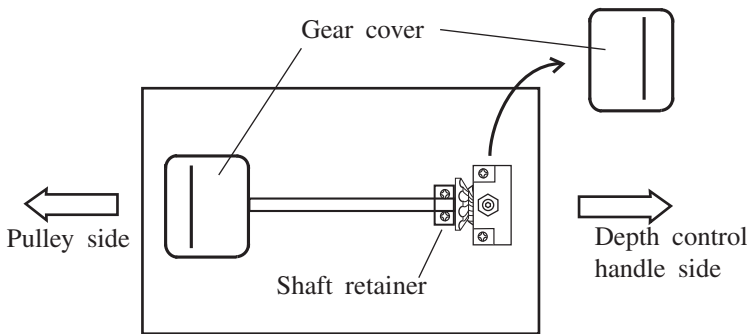


Fig.8A

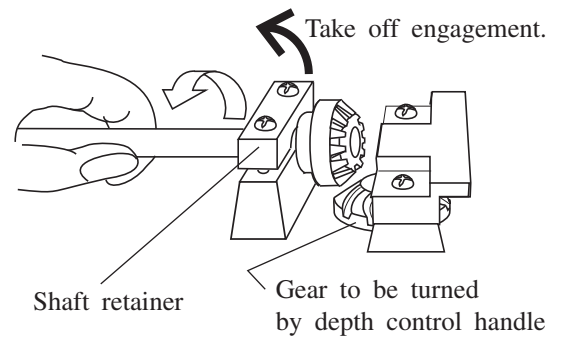


Fig.8B

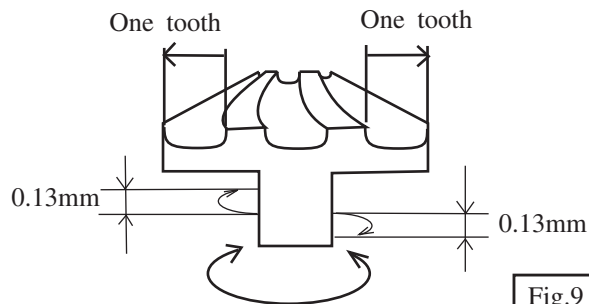
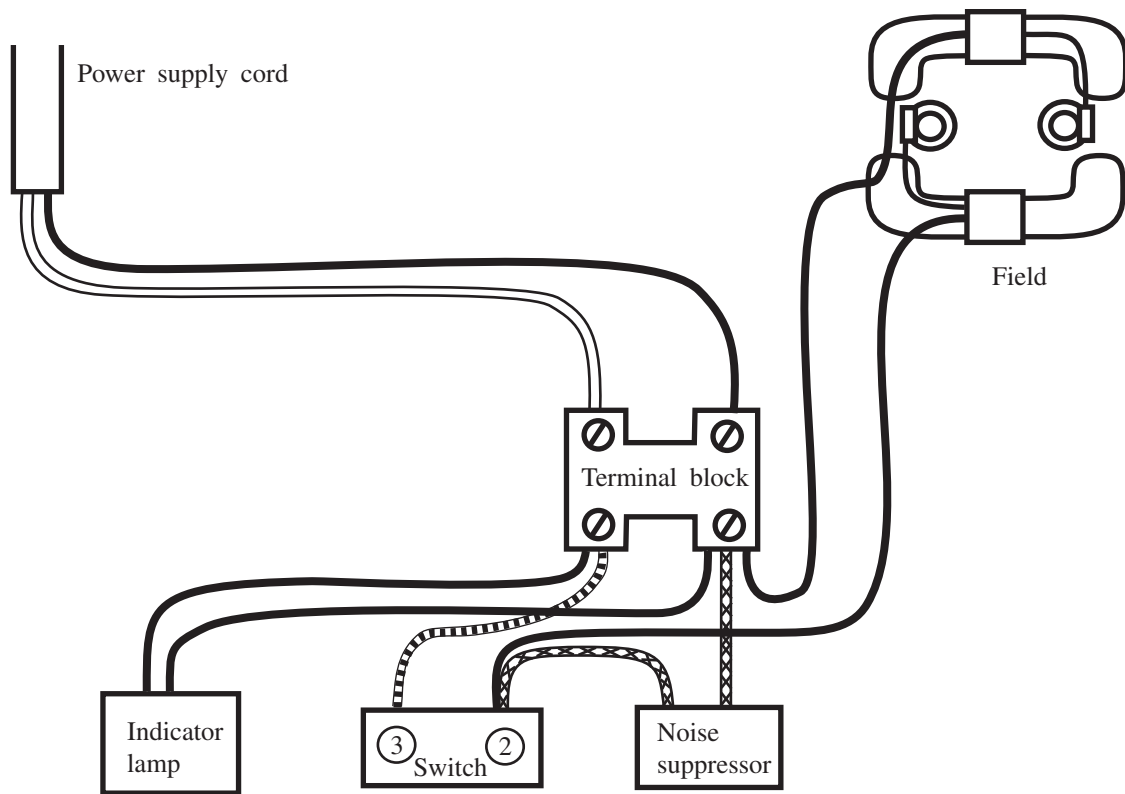


Fig.9

▶ Circuit diagram

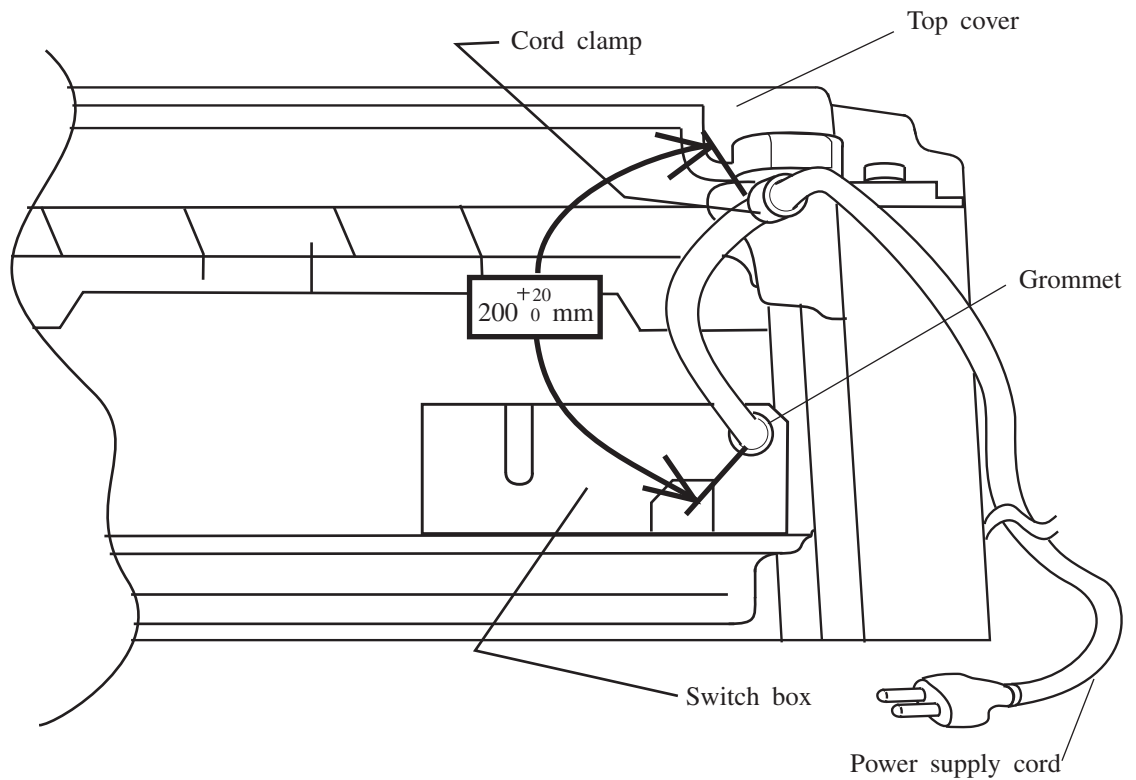


< Note > Noise suppressor is not used in some countries.

▶ Wiring diagram

(1) Power supply cord has to be set as illustrated in Fig.10.

Fig.10



(2) Terminal 1 and 2 has to be connected to switch as illustrated in Fig.11.

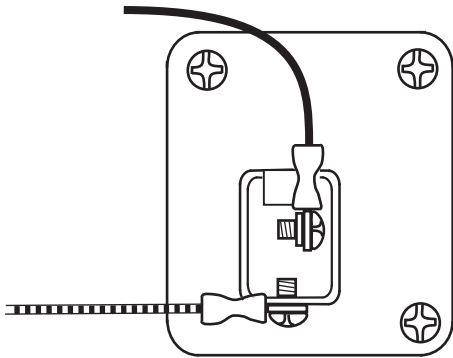


Fig.11

(3) Leas wire to field has to be set so careful that they would not be pinched by ribs as illustrated in Fig.12.

Set lead wire without slacking

Set lead wire deep in lead holder.

Set noise suppressor in the position illustrated in Fig.12.

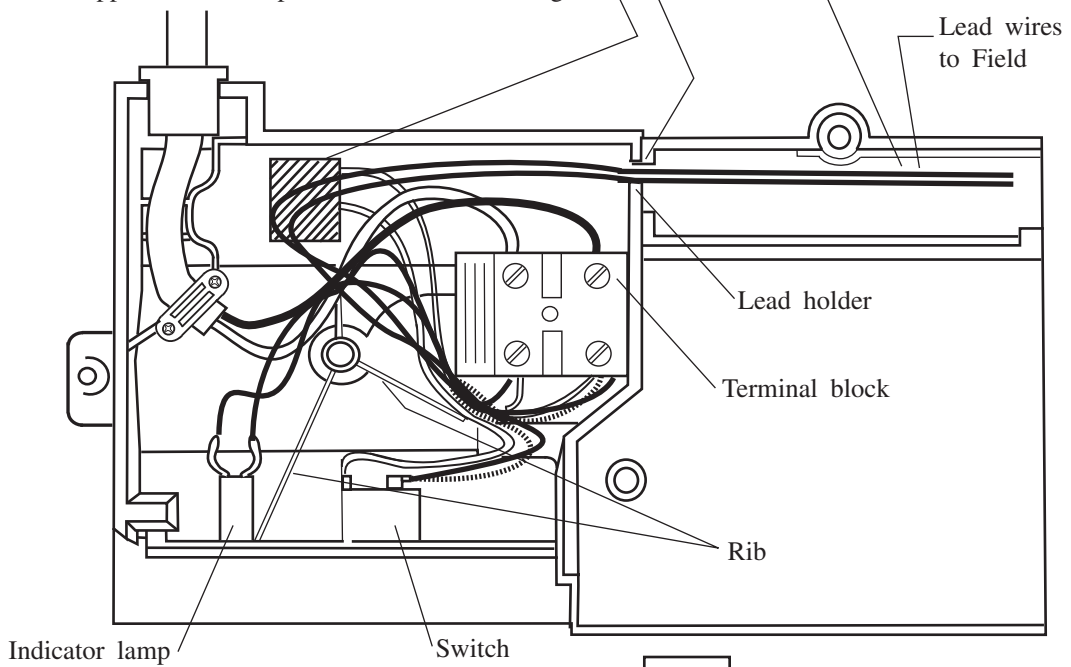


Fig.12