

Model No. ▶ MT111

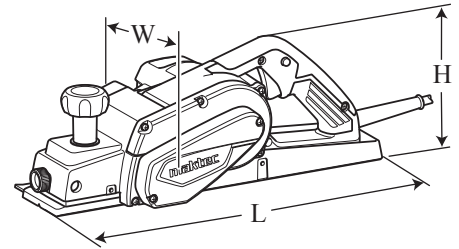
Description ▶ Power Planer 82mm (3-1/4")

CONCEPT AND MAIN APPLICATIONS

Model MT111 has been developed as the cosmetic change model of maktec power planer MT110.

Its main features are:

- Industrial performance and durability at less expense
- Ergonomically designed handle with rubberized soft grip
- Orange color main frame



Dimensions: mm (")	
Length (L)	390 (15-3/8)
Width (W)	175 (6-7/8)
Height (H)	140 (5-1/2)

▶ Specification

Voltage (V)	Current (A)	Cycle (Hz)	Continuous Rating (W)		Max. Output(W)
			Input	Output	
110	7.2	50 / 60	750	250	1,100
120	6.6	50 / 60	---	250	1,100
220	3.6	50 / 60	750	250	1,100
230	3.5	50 / 60	750	250	1,100
240	3.3	50 / 60	750	250	1,100

No load speed: min. ⁻¹ = rpm.	18,000	
Planer blade: mm (")	82 (3-1/4)	
Capacities: mm (")	Planing width	82 (3-1/4)
	Planing depth	3 (1/8)
	Shiplapping	20 (3/4)
Protection from electric shock	Double insulation	
Power supply cord: m (ft)	2.0 (6.6)	
Weight according to EPTA-Procedure 01/2003*1: kg (lbs)	4.6 (10.1)	

*1: with Planer blade 82

▶ Standard equipment

Blade gauge assembly	1
Sharpening holder assembly	1 (for resharpenable blade)
Socket wrench 9	1
Planer blade 82	1
Guide rule	1
Dressing stone	1 (for Thailand only)
Extra blade set	1 (for "KX model" only)
Plastic carrying case	1 (for "K or KX models" only)
Cap	1 (for South Africa, Tahiti, New Caledonia only)

Note: The standard equipment for the tool shown above may vary by country.

▶ Optional accessories

No

► Repair

CAUTION: Repair the machine in accordance with “Instruction manual” or “Safety instructions”.

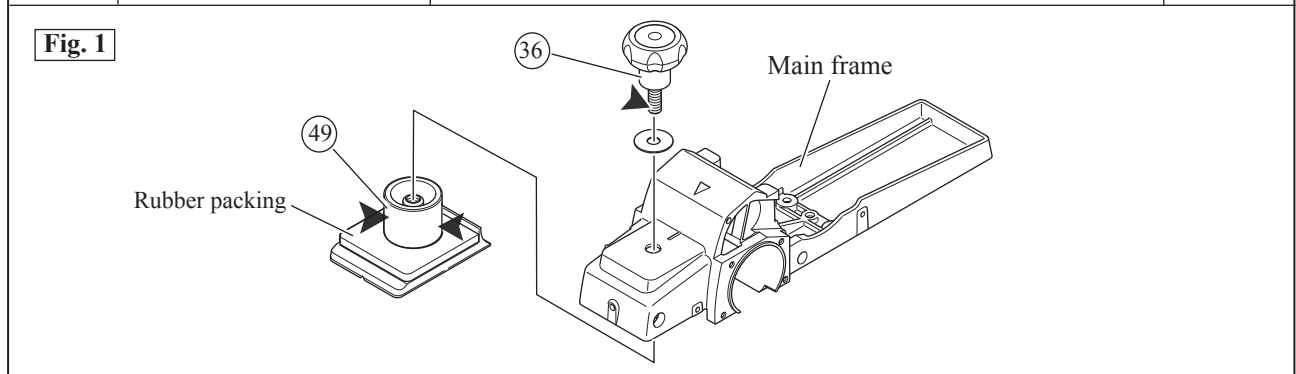
[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R004	Retaining ring pliers ST-2	removing Retaining ring S-7 from Drum
1R045	Gear extractor (large)	removing Bearing box and Bracket
1R269	Bearing extractor	removing Ball bearings from Armature and Drum
1R280	Round bar for arbor 6-50	removing Drum shaft from Ball bearing 627ZZ
1R284	Round bar for arbor 10-50	locking Drum when replacing V-pulley
—	Lock nut wrench (as standard equipment of Malita angle grinder)	removing Poly V-belt
—	Wrench 17	removing Pulleys from Armature/ Drum

[2] LUBRICATION

Apply lubricating oil VG100 to the following portions designated with the black triangle to protect parts and product from unusual abrasion.

Item No.	Description	Portion to lubricate	Amount
③⑥	Knob 50	Screw hole for Knob 50	a little
④⑨	Front base	Outside surface of Cylinder that contacts Main frame.	a little



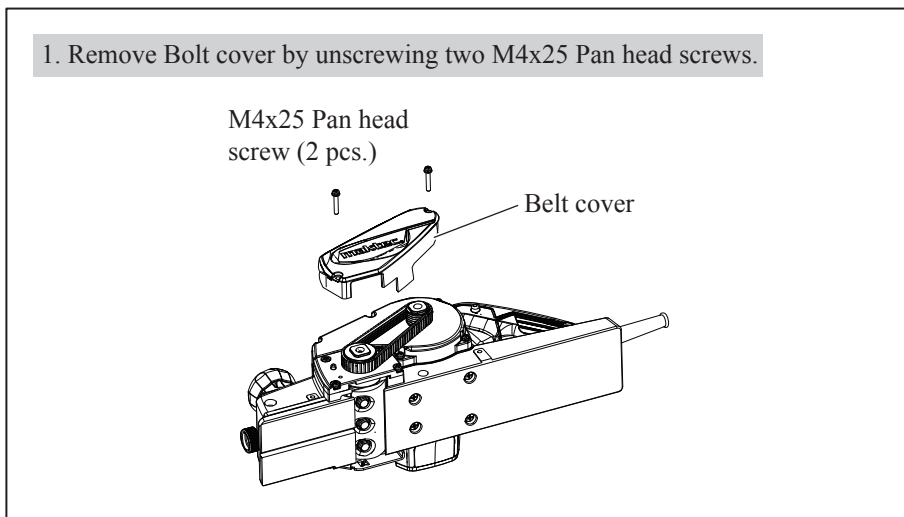
[3] DISASSEMBLY/ASSEMBLY

[3] -1. Poly V-belt 5-285

DISASSEMBLING

(1) Remove Belt cover. (Fig. 2)

Fig. 2



► Repair

[3] DISASSEMBLY/ASSEMBLY

[3] -1. Poly V-belt 5-285 (cont.)

DISASSEMBLING

(2) Cut Poly V-belt 5-285 as drawn in **Fig. 3** when it has damaged.

When replacing Armature, Ball bearings or Drum and reusing Poly V-belt, remove it as drawn in **Fig. 3A**.

Fig. 3

2. When you replace Poly V-belt 5-285 with new one, remove simply by cutting the worn belt with a knife or nipper.

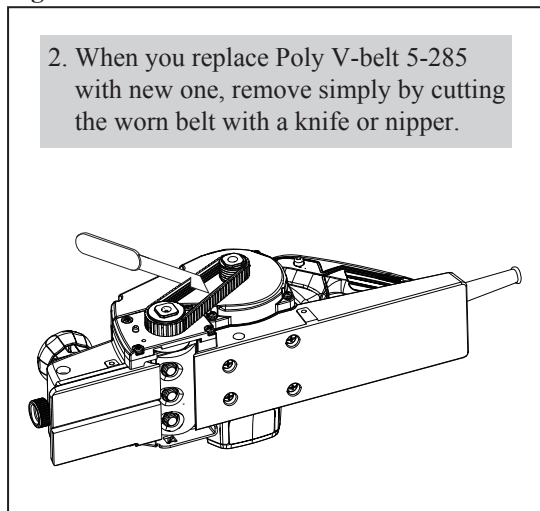
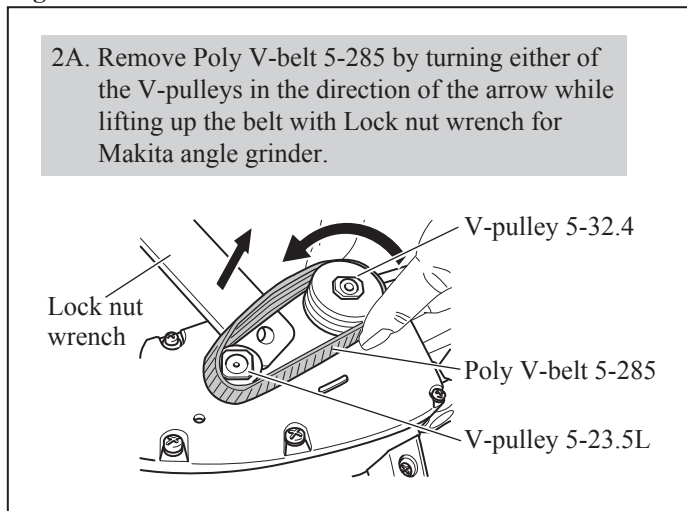


Fig. 3A

2A. Remove Poly V-belt 5-285 by turning either of the V-pulleys in the direction of the arrow while lifting up the belt with Lock nut wrench for Makita angle grinder.

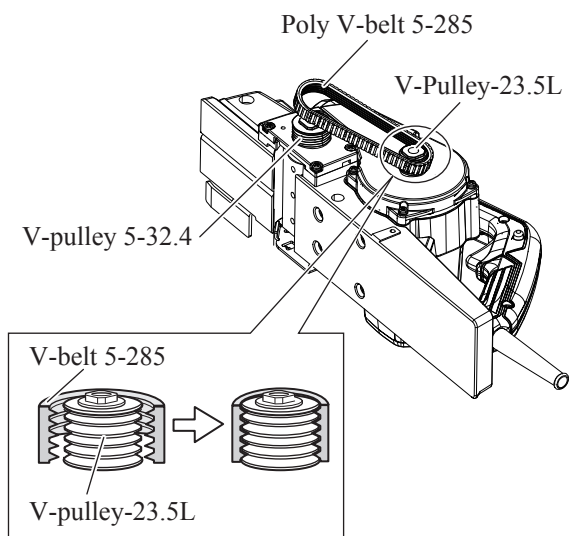


ASSEMBLING

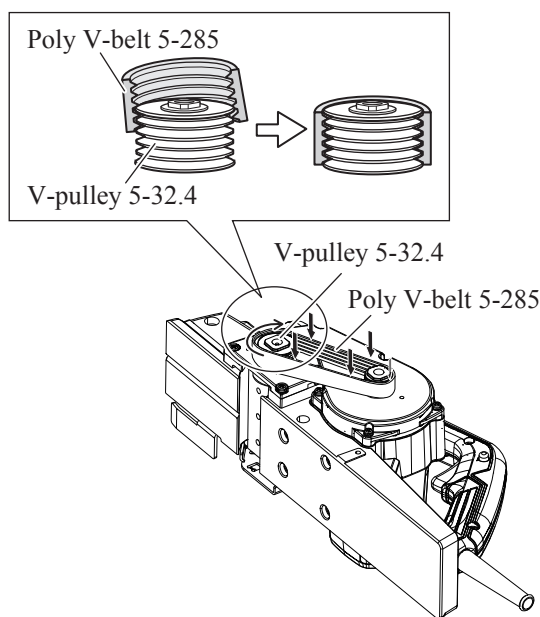
(1) Mount Poly V-belt 5-285 as drawn in **Fig. 4**.

Fig. 4

1. Engage all V-shaped ribs of Poly V-belt 5-285 with the grooves of V-pulley 23.5L (small one). And engage some of V-shaped ribs of the belt with the groove of V-pulley 5-32.4 (large one).



2. Turn V-pulley 5-32.4 (large one) while pressing Poly V-belt 5-285 toward Bracket until all V-shaped ribs of the belt fit into the grooves of the pulley. Now, Poly V-belt and both of V-pulleys engage each other.



(2) Mount Belt cover. (Refer to **Fig. 2**)

► Repair

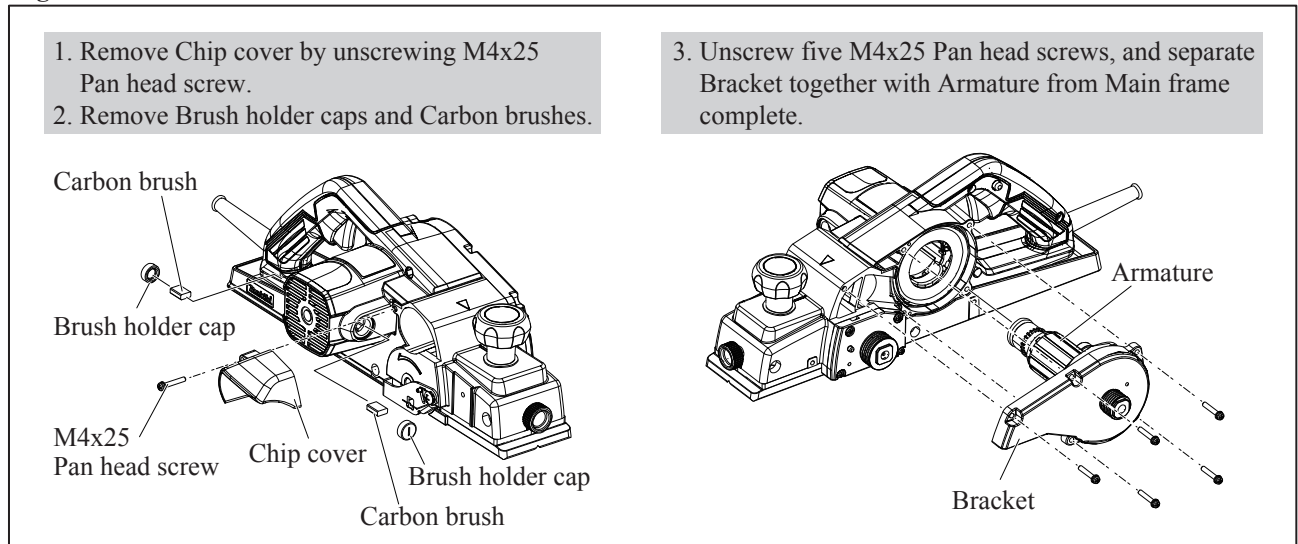
[3] DISASSEMBLY/ASSEMBLY

[3] -2. Armature

DISASSEMBLING

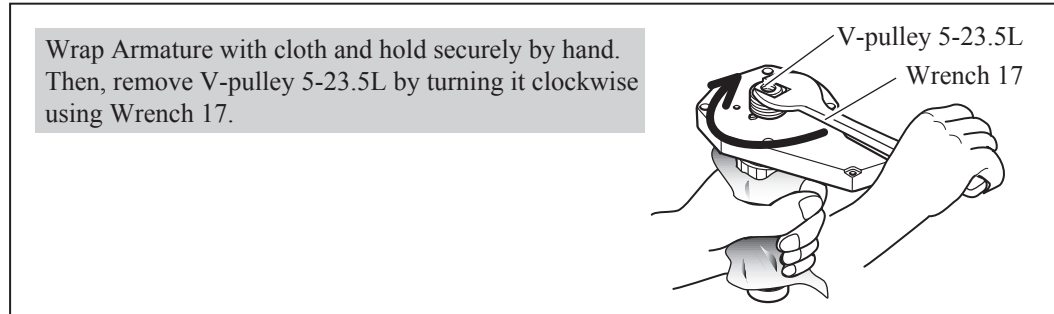
- (1) Remove Belt cover and Poly V-belt 5-285. (See **Figs. 2, 3 and 3A**)
- (2) Separate Armature section from Main frame complete. (**Fig. 5**)

Fig. 5



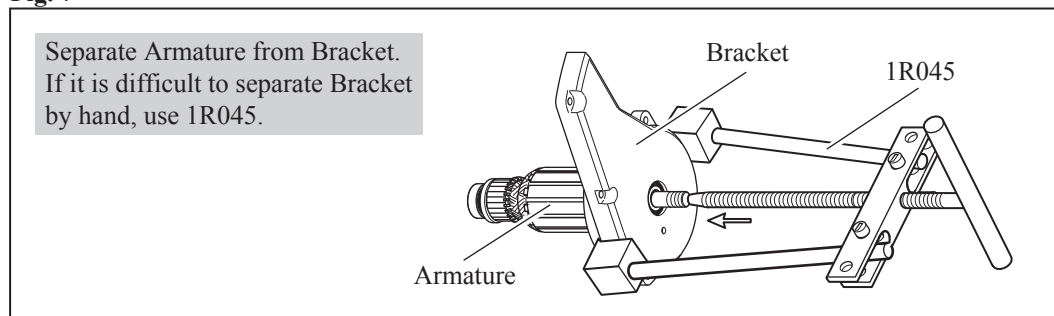
- (3) Remove V-pulley 5-23.5L. (**Fig. 6**)

Fig. 6



- (4) Separate Armature from Bracket. (**Fig. 7**)

Fig. 7



ASSEMBLING

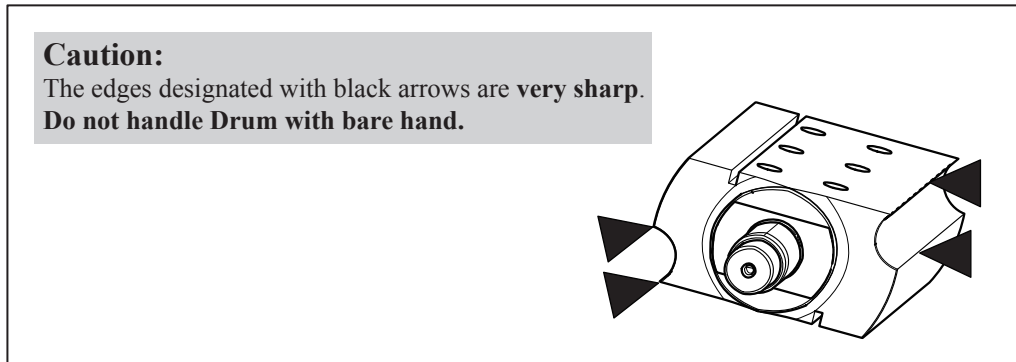
Assemble Armature by reversing the disassembly procedure. (Refer to **Figs. 7, 6 and 5**)

Note:

Assemble V-pulley 5-23.5L by turning it **counterclockwise** using Wrench 17.

► **Repair**
[3] DISASSEMBLY/ASSEMBLY
[3] -3. Drum

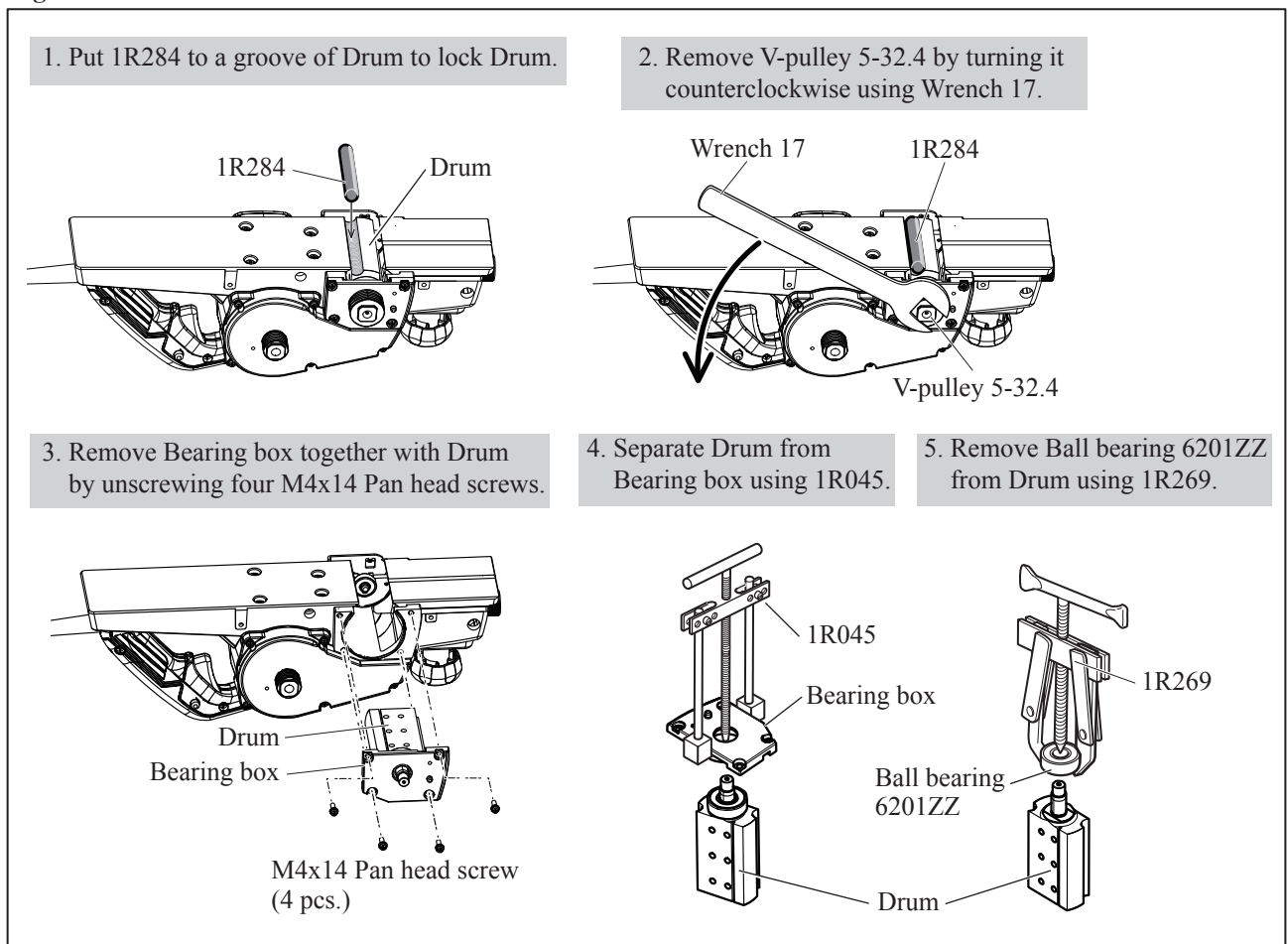
Fig. 5



DISASSEMBLING

- (1) Remove Belt cover and Poly V-belt 5-285. (See Figs. 2, 3 and 3A)
- (2) Disassemble Drum. (Fig. 8)

Fig. 8



ASSEMBLING

Assemble by reversing the disassembly procedure.

► Repair

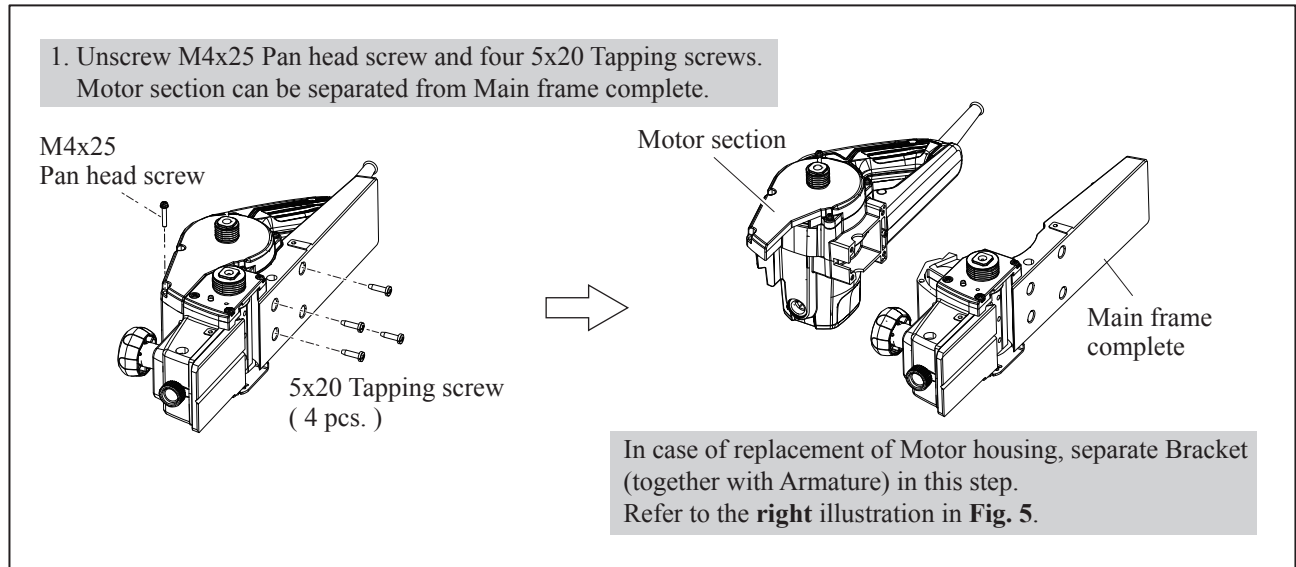
[3] DISASSEMBLY/ASSEMBLY

[3] -4. Main frame complete, Front base

DISASSEMBLING

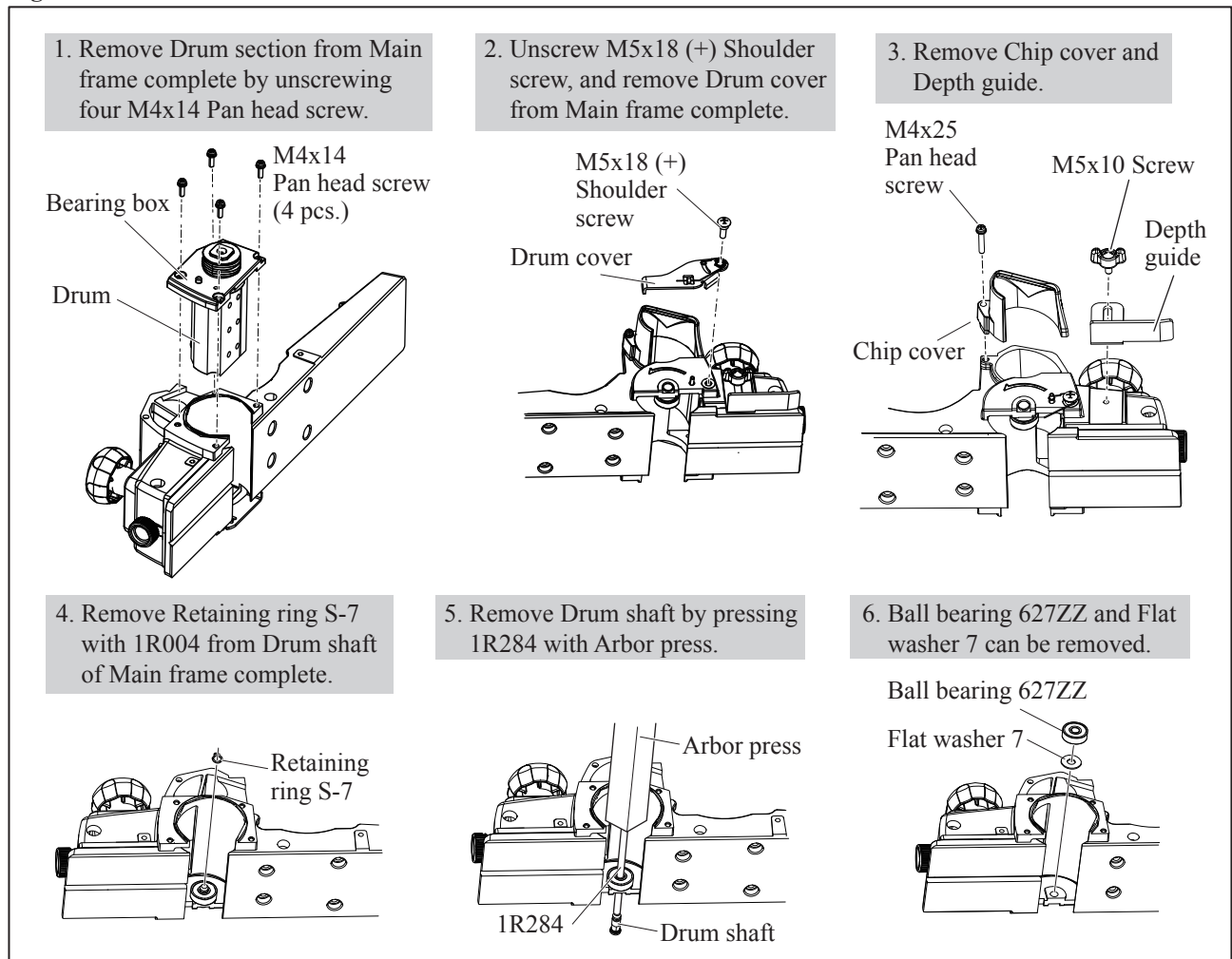
- (1) Remove Belt cover and Poly V-belt 5-285. (See **Figs. 2, 3 and 3A**)
- (2) Disassemble Motor section from Main frame complete. (**Fig. 9**)

Fig. 9



- (3) Main frame complete can be disassembled as drawn in **Fig.10**.

Fig. 10



► Repair

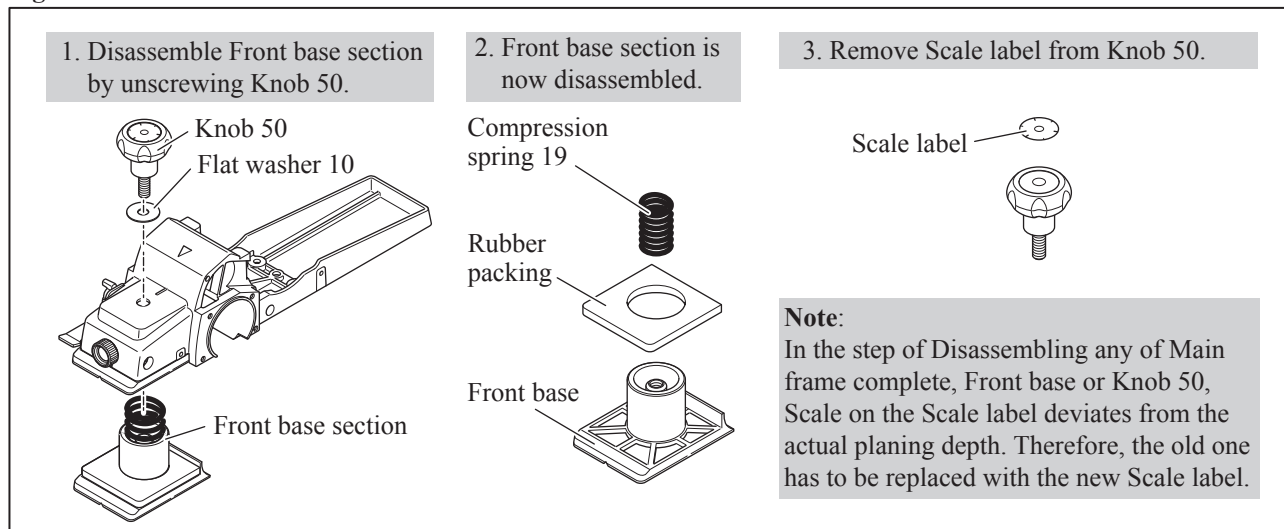
[3] DISASSEMBLY/ASSEMBLY

[3] -4. Main frame complete, Front base (cont.)

DISASSEMBLING

(4) Remove Front base section from Main frame complete as drawn in **Fig. 11**.

Fig. 11



ASSEMBLING

(1) Before assembling Knob 50 and Front base section, mount the following parts to Main frame complete.

(Refer to **Fig. 10**)

1. Drum shaft
2. Flat washer 7 and Ball bearing 627ZZ
3. Retaining ring S-7
4. Drum cover
5. Bearing box and Drum
6. Chip cover and Depth guide

(2) If Bracket (together with Armature) is disassembled from Motor housing in the step of **Fig. 9**, assemble as drawn in **Fig. 12** in order to assemble without any gap between Bracket and Motor housing, between Main frame complete and Bracket.

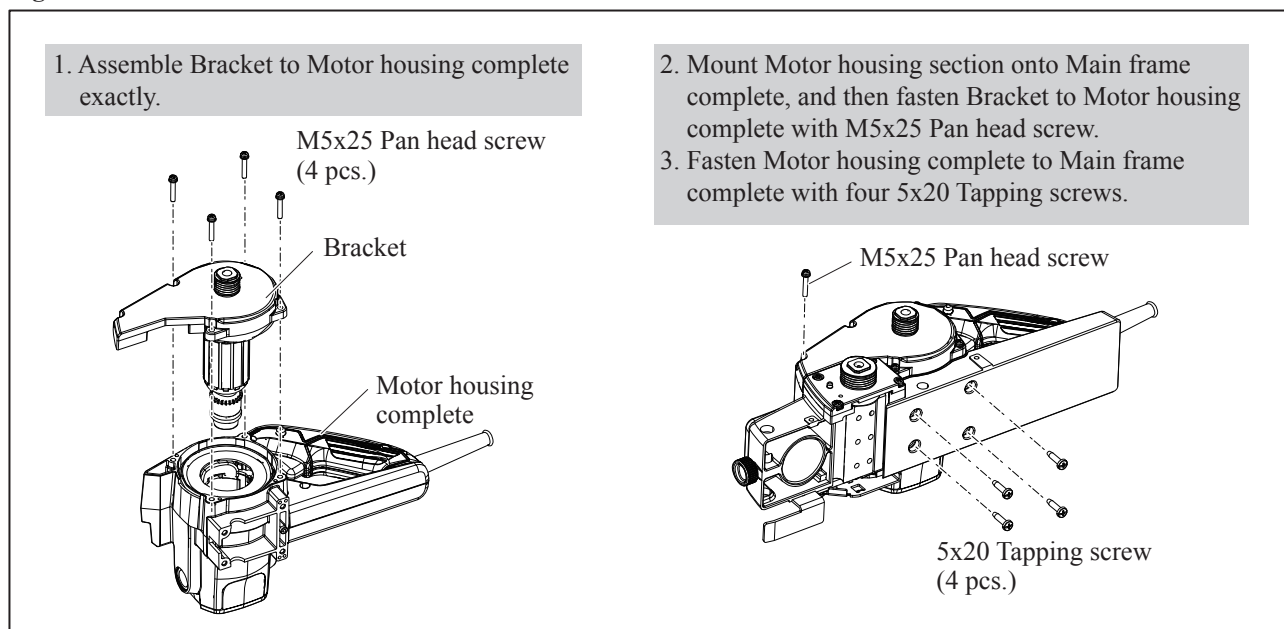
(3) Assemble Front base section to Main frame complete by reversing the disassembly procedure. (Refer to **Fig. 11**)

Note: Do not adhere Scale label to Knob 50 in this step.

(4) The adjustment mechanism has to be adjusted to obtain precise planing depth by turning Knob 50.

See “**ADJUSTMENT**” in detail.

Fig. 12



► Repair

[3] DISASSEMBLY/ASSEMBLY

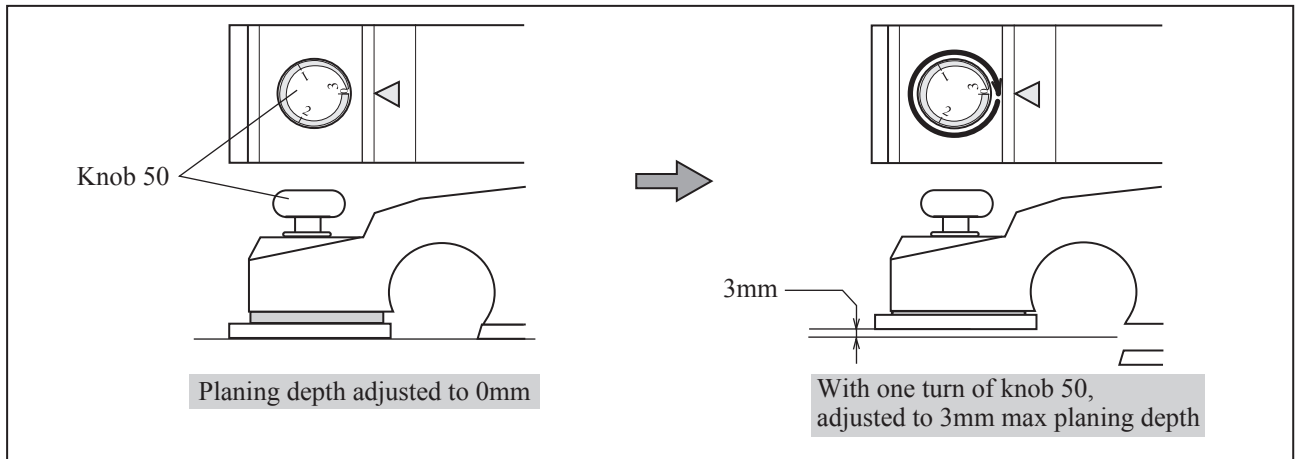
[3] -5. Adjustment for obtaining exact planing depth

ADJUSTMENT

Note: When replacing any of Main frame complete, Front base or Knob 50, Scale on the Scale label deviates from the actual planing depth. Therefore, the old one has to be replaced with the new Scale label.

(1) The tool is designed so that one turn of Knob 50 lifts up/ down Front base by 3mm. (**Fig. 14**)

Fig. 14



- (2) Put the tool on a completely flat surface such as the table of stationary planers or the turn table of LS-series models as drawn in **Fig. 15**. (If these tools are not available, use a stainless steel scale instead.)
- (3) Turn Knob 50 so that the height of Front base is completely aligned with that of Rear base (bottom of Main frame) as drawn in **Fig. 16**.
- (4) Adhere new Scale label to Knob 50 so that the line of 0/3mm on Scale label is aligned with the apex of the pointer on Main frame complete as drawn in **Fig. 17**.

Fig. 15

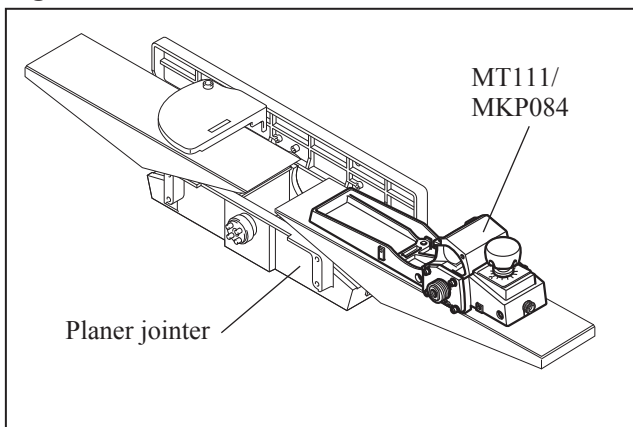


Fig. 16

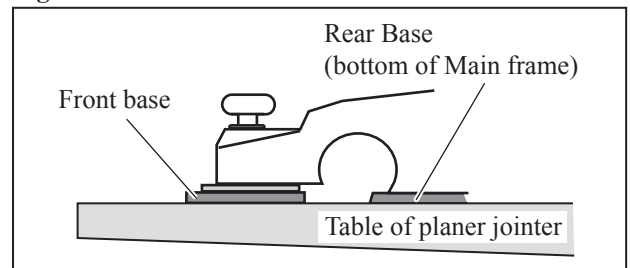
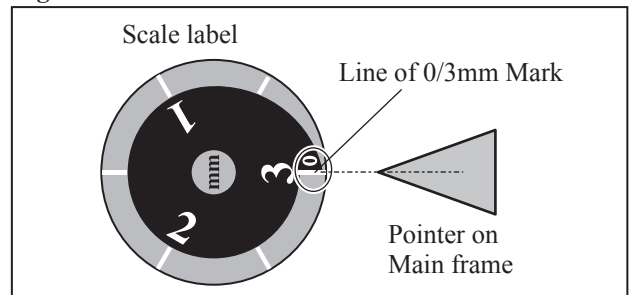
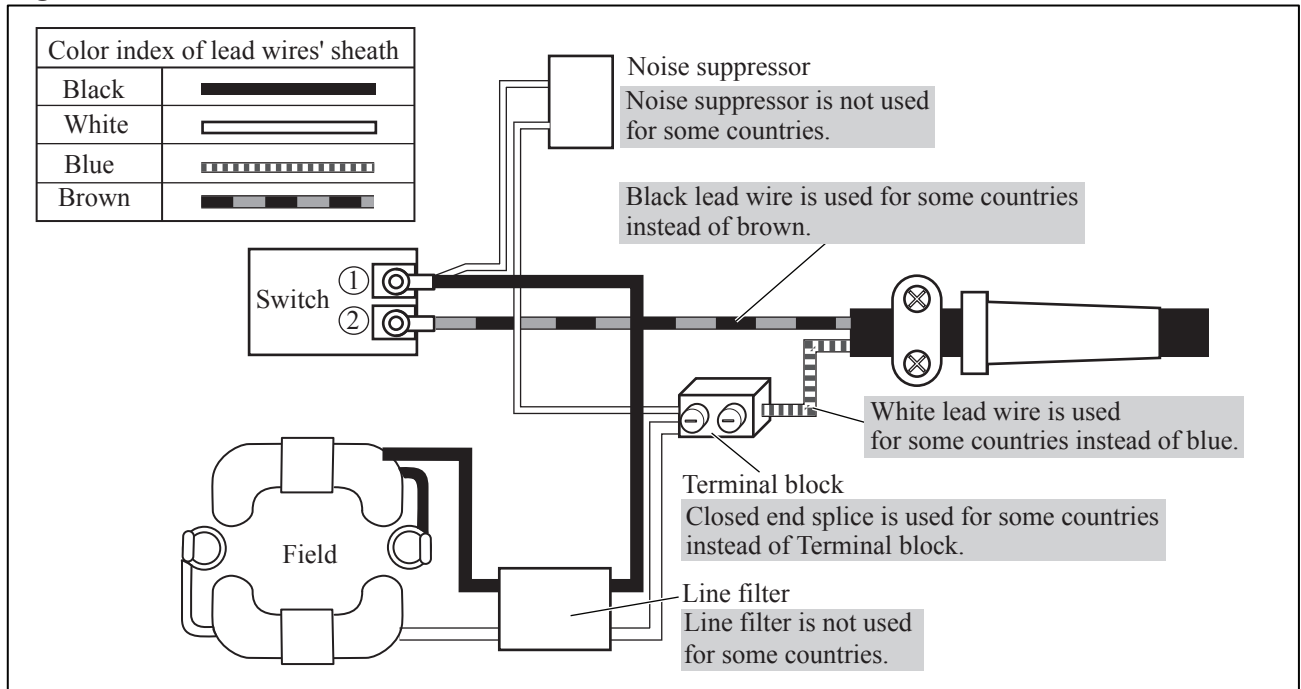


Fig. 17



▶ Circuit diagram

Fig. D-1



▶ Wiring diagram

Fig. D-2

