Standard PC-64 Electric Paper Cutter

Instruction Manual



Call Us at 1-800-944-4573





Important Information

- This manual is designed to help you to install, operate and maintain Paper Cutter, PC-64II. Read, understand and keep this manual in a safe and convenient place.

- Do not operate PC-64II until you read and understand the instructions in this manual.

- Horizon International Inc. shall not be liable for incidental consequential damages resulting from : improper or inadequate maintenance by customer; unauthorized modification or misuse; operation outside of the environmental specifications for the product.

- Horizon International Inc. pursues a policy of continuing improvement in design and performance of the product. Therefore, the product design and specifications are subject to change without prior notice and without our legal obligation.

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Safety Precautions

- The signal word WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

- The signal word CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

- The signal word IMPORTANT indicates a potentially hazardous situation which, if not avoided, may result in damage on products.

- Read and understand all safety instructions with signal word such as WARNING, CAU-TION and IMPORTANT. If safety instructions are ignored, personal injury will result.

- Observe the provisions of the federal, state, or local regulations, including OSHA.

- Horizon International Inc. cannot anticipate every possible situation that might involve a potential hazard. The instruction in this manual and warning labels on the machine are therefore not all inclusive.

- All equipment shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy isolating device where it is locked or tagged out.

- Do not operate the machines with any covers being removed.

- Some of the drawings in this manual shows the machine uncovered for explaining the detail or inside of machine.



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1. MACHINE PARTS DESCRIPTIONS

1. MACHINE PARTS DESCRIPTION

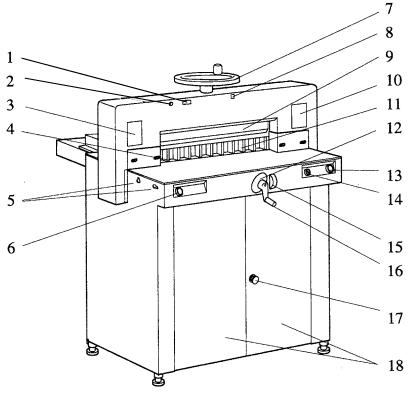
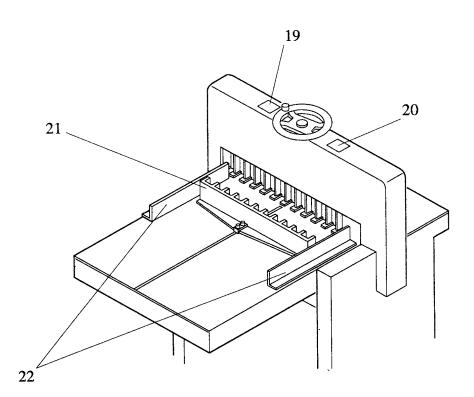


Fig. 1-1







1

1. MACHINE PARTS DESCRIPTIONS

1. Counter This counter indicates the number of cycles knife has made.

2. Knife Lamp This lamp comes or when knife is not Staying home (top) position.

3. Left Small Cover Parallel adjustment bolts is accessible by opening this cover.

4. Cut Stick

5. Threaded Holes These threaded holes are used to mount extension tables installed at both sides of front table.

6. Cut Button A

Cut button A must be pressed at same time as cut button B to operate knife.

7. Paper Clamp Hand Wheel

Controls movement of paper clamp.

8. Pilot Lamp This lamp comes on when power switch is on.

9. Cutting Knife

10. Right Small Cover

Lubrication point on sliding parts is accesssible by opening this cover.

11. Paper Clamp

Holds paper lift in place for perfect cuts.

12. Dial Gauge

This gauge is used to make fine adjustments in setting cut length.

13. Cut Button B

Cut button B must be pressed at same time as cut button A to operate knife.

14. Key Switch (Power Switch) Key switch is used to turn power on.

15. Back Gauge Scale

This dial indicates distance between back gauge and cutting knife edge.

16. Back Gauge Handle

This handle is used to move back gauge either forward or backward to required cutting length.

17. Front Door Knob This knob is used to open front door.

18. Front Door

19. RH-side Top Lid

20. LH-side Top Lid

21. Back Gauge

22. Side Guide



2. OPERATION

WARNING :

- BE SURE THAT ALL COVERS ARE IN PLACE BEFORE STARTING OPERA-TION. - PC-64II MUST BE USED BY ONE OP-ERATOR AT A TIME. - ONLY AUTHORIZED OPERATORS SHOULD HAVE ACCESS TO KEY SWITCH.

2-1 OPERATION PROCEDURE

1 Turn power on.

- Plug power cord to single phase receptacle.
- Insert key into power switch. (Fig. 2-1)
- Turn key clockwise to switch on power.

Power pilot lamp will come on and a cut line will be illuminated.

2. Adjust back gauge.

- Determine cut dimension and turn back gauge handle (Fig.2-1) to move back gauge to proper position according to back gauge dial or line up a cut mark on paper with illuminated cut line.

IMPORTANT:

For accuracy always move back gauge beyond desired setting and finish adjusting by moving back gauge forward.

- Use dial gauge (Fig.2-1) to make fine adjustments. Back gauge moves 0.5 mm (1/32") for each division of dial gauge. When cutting same size sheets repeatedly, pull back gauge hand crank toward you to release mechanism and turn back gauge clamp knob (Fig.2-2) clockwise.

3. Place a lift of paper into position on cut bed.

- Neatly jog a lift of paper against back gauge and left side guide. (*Fig. 2-2*)

4 Clamp paper

- Clamp lift of paper by turning paper clamp hand wheel (*Fig.2-2*) clockwise until clamp is firmly securing lift of paper.

IMPORTANT:

Do not over tighten. If excessive pressure must be used to obtain a clean cut, knife may need replacing.

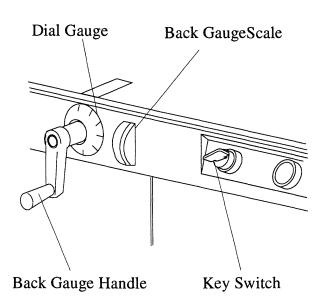
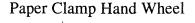
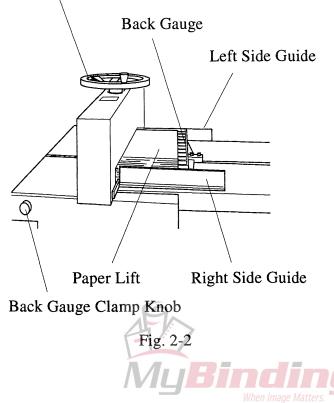


Fig. 2-1





5. Cut paper.

- Depress cut buttons A and B (*Fig. 2-3*) simultaneously.

If knife fails to descend after cut buttons have been actuated, release buttons and wait two seconds then depress both buttons again.

- Continue depressing both cut buttons until paper is cut completely. When knife begins to raise, you can release cut buttons. Knife should return to home position (upper) automatically.

WARNING:	
NEVER PLACE HANDS OR FINGERS	
UNDER KNIFE WHEN PRESSING AN	Y
BUTTONS.	

IMPORTANT:

- Knife will come to a stop instantly when one or both buttons are released before knife reaches its lowest point. To reverse movement of knife depress cut buttons A & B separately with the interval of 0.5 seconds or more. Knife will reverse direction. Hold cut button until knife stops at home position (upper position).

- If knife is past it's lowest position it should return automatically to home position even if cut buttons are released.

6. Cut cycle complete.

- Ensure knife stops at home position (upper position).

- Turn off power switch.
- Remove trimmings. (Fig. 2-4)

- Turn paper clamp hand wheel (Fig. 2-4)

counterclockwise until paper lift is released.

- Remove lift of paper.

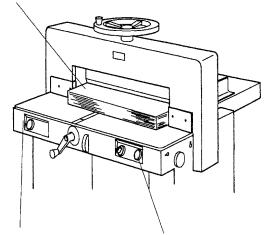
7. Job complete.

Turn key switch off and remove key. (*Fig.* 2-4)
Unplug power cord.

IMPORTANT:

Keep key switch at safe place by an authorized operator.

Paper Pile



Cut Button A

Cut Button B

Fig. 2-3

ADDITIONAL INFORMATION

- If the front cover is opened while the knife is moving, the buzzer beeps and the knife lamp lights.

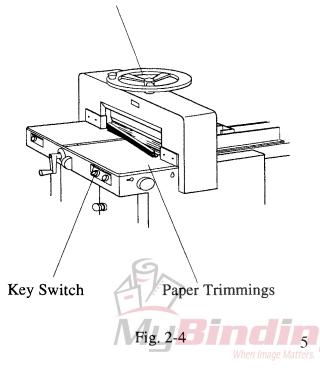
In this case, follow the steps below to move the knife to the home position.

1. Close the front cover.

In case that the knife stops during raising because the front cover is opened, the knife returns to the home position automatically after closing the cover. If the knife still stay there, go to the next step.
Press the cut button A first, and then press the cut button B after 0.5 seconds or more.
The knife returns to the home position automati-

cally.

Paper Clamp Hand Whell



3. REPLACING CUT STICK

3-1 REPLACING CUT STICK

WARNING :

- TURN OFF POWER (KEY SWITCH) AND UNPLUG POWER CORD BEFORE REPLACING CUT STICK. - SHARP KNIFE CAN CAUSE SEVERE PERSONAL INJURY. - KEEP HANDS AND FINGERS AWAY FROM KNIFE.

Replace cut stick when:

- Bottom sheet of lift does not cut.
- Bottom sheet of lift cuts ragged.
- Knife is replaced or adjusted.

IMPORTANT

Ensure knife is at home position (upper position) by making one cut cycle.

1. Turn off power.

- Turn off power, remove key (Fig. 3-1) and unplug power cord.

2. Removal

- Pull up left hand end of cut stick. (Fig. 3-1)

3. Rotate or replace cut stick.

- Rotate or flip cut stick and reinstall.

Each face of cut stick can be used twice so that one cut stick provides 8 positions.

4. Seat cut stick.

Turn paper clamp hand wheel (*Fig. 3-1*) clockwise until it contacts cut stick.
Continue applying pressure until stick is seated completely.

Cut Stick Key Switch

Paper Clamp Hand Wheel

Fig. 3-1



4. REPLACING KNIFE

4-1 HOW TO REMOVE KNIFE

WARNING:

- SHARP KNIFE CAN CAUSE SEVERE PERSONAL INJURY. KEEP HANDS AND FINGERS AWAY FROM KNIFE. - ONLY ONE OPERATOR SHOULD PERFORM THIS OPERATION.

Life of a knife will vary depending on type and quality of paper that has been cut.

Replace knife when:

- Éxcessive clamp pressure is needed to obtain a clean cut.

- Cutting noise becomes abnormal.
- Cut sheets tend to stick to knife.
- Knife stops in middle of descending stroke.
- Cut is not clean.

1. Prepare area.

- Ensure that a level surface is available for scabbard, upon which knife may be placed once it has been removed.

2. Lower paper clamp.

- Turn paper clamp hand wheel (Fig. 4-1) clockwise until clamp is fully down.

3. Lower knife.

- Using cut buttons A and B (*Fig. 4-1*), bring knife down until all 5 knife securing bolts are accessible. Release cut buttons.

4. Turn off power.

- Turn key counterclockwise and remove key from switch.

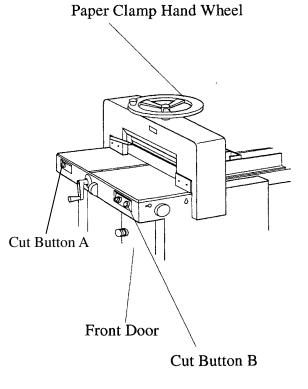


Fig. 4-1



5. Remove knife securing bolts.

- Remove knife securing bolts #2 and #4. (Fig. 4-2)

- Install knife change handles in bolt locations #2 and #4. (*Fig. 4-3*)

- Remove knife securing bolts #1 and #5. (Fig. 4-3)

- Holding knife change handle, apply pressure towards right (*Fig. 4-2*) while removing #3 center bolt.

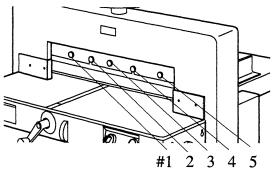


Fig. 4-2

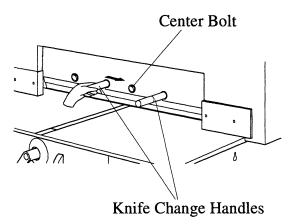


Fig. 4-3

6. Remove knife

- Grasping both knife change handles, carefully move knife first to left and then downward. (*Fig. 4-4*)

- Pivot left side of knife out through clamp opening towards you, being careful not to let edge of knife come in contact with anything.

- Place knife in scabbard.

- Remove knife change handles.

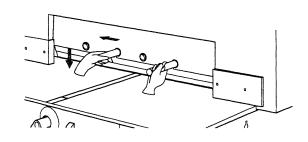


Fig. 4-4

4-2 SHARPENING SPECIFICATIONS (Fig. 4-5)

- Knife should be ground to an angle of 20° .

- Grind as little of knife as necessary.

- Sharpened knife must have a height measurement of at least 70 mm (2.75").

IMPORTANT:

Knife to be installed must have a height dimension of at least 70 mm (2.75") (Fig. 4-5) If a knife is installed having a dimension smaller than 70 mm (2.75") damage to mechanical and safety systems can result.

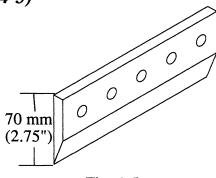


Fig. 4-5



4. REPLACING KNIFE

4-3 HOW TO INSTALL KNIFE

IMPORTANT:

Always reposition or replace cut stick when adjusting or replacing knife.

WARNING:

KEEP HANDS AND FINGERS OFF FROM ANY MOVING PARTS INSIDE FRONT DOOR DARING THE PROCE-DURE.

1. Lower paper clamp.

- Turn paper clamp hand wheel clockwise until clamp is fully down. (*Fig. 4-5*)

2. Turn on power.

3. Open front door.

- Open front door (Fig. 4-5) to be able to check gear axis and linkage arm. (Fig. 4-6)

4. Raise knife to highest position.

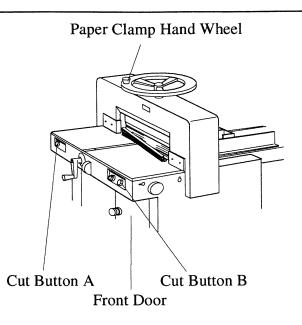
- Cycle knife by depressing cut buttons A and B separately with the interval of 0.5 seconds or more to return the knife to the home position. (*Fig. 4-5*)

- And stop cycle when knife reaches absolute highest point of its stroke. When the linkage arm is in line with the large gear axis. (*Fig.* 4-6)

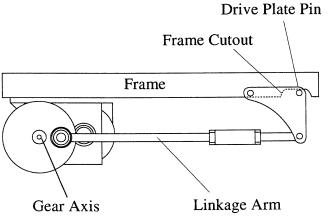
- Loosen knife adjusting turnbuckle lock nuts. (*Fig.* 4-8)

- Turn turnbuckle in direction shown *in* Fig. 4-8 to raise knife completely until resistance is felt and drive plate pin is hitting frame. (Fig. 4-6)

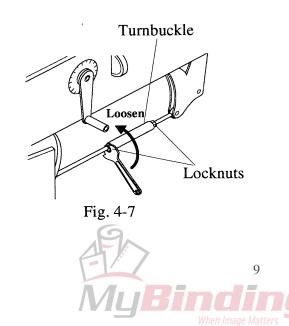
- Turn turnbuckle opposite direction one turn to lower knife.











WARNING: - SHARP KNIFE CAN CAUSE SEVERE PERSONAL INJURY. KEEP HANDS AND FINGERS AWAY FROM KNIFE. - ONLY ONE OPERATOR SHOULD PERFORM KNIFE INSTALLATION.

5. Prep cut stick.

- Raise clamp with paper clamp hand wheel.
- Re-position or replace cut stick.(Fig. 4-9)

6. Lower paper clamp.

- Turn paper clamp hand wheel clockwise until clamp is fully down. (*Fig. 4-5*)

7. Install knife.

- Turn power on.

- Cycle knife by depressing cut buttons A and B (*Fig. 4-5*) until all five knife mounting bolt holes are accessible, release buttons.

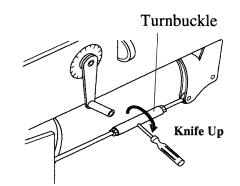
- Turn off power and remove key from switch. (Fig. 4-5)

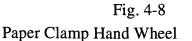
- Install knife change handles in holes #2 and #4 of new knife.(*Fig. 4-10*)

- While holding new knife by knife change handles, insert right hand side of knife into side frame.

- Carefully move left side of knife into position, flush with clamp.

- Raise knife up to carriage and slide knife change handles into mounting holes. (*Fig. 4-10*)





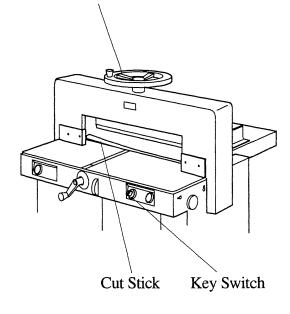


Fig.4-9

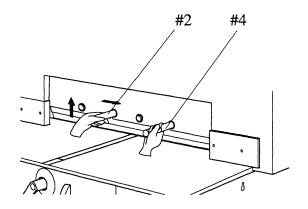
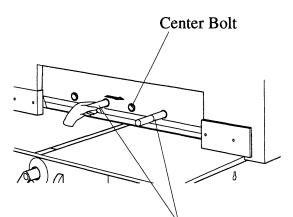


Fig.4-10



4. REPLACING KNIFE

8. Install mounting bolts. - While holding left knife change handle, apply pressure towards right (*Fig. 4-11*). Install bolts #3 and #5 snugly. - Remove knife change handles.



Knife Change Handles

Fig. 4-11

- Install bolts in remaining holes. - Gradually tighten knife mounting bolts in order 1, 2, 3, 4, 5. (Fig. 4-12).

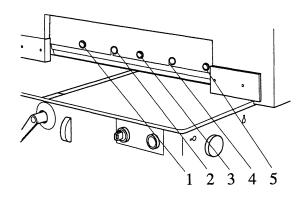


Fig. 4-12

9. Adjust knife height.- Refer to Knife Height Adjustment section 5-1 in page 20.



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5. KNIFE ADJUSTMENT

IMPORTANT:

If knife cuts too deep into cut stick, cut stick may wear out prematurely and place excessive load on cut mechanism.
Maximum cut-in depth of knife into cut stick should be 0.5mm (1/64").

Adjust knife when:

- Last sheet of paper is not cutting.

- Blade is replaced.

Cut stick should be repositioned or replaced before knife adjustment is made.

5-1 KNIFE HEIGHT ADJUSTMENT

1. Insert test stock.

- Place two 30mm (1") strips of paper at right and left side of clamp opening over cut stick. (*Fig. 5-1*)

2. Lower paper clamp.

- Turn paper clamp hand wheel clockwise until clamp is fully down. (Fig. 5-1)

3. Bring knife to absolute lowest position.

WARNING : KEEP HANDS AND FINGERS OFF ANY MOVING PARTS INSIDE FRONT DOOR DURING THIS PROCEDURE.

- Open front doors to be able to check yellow arrow on gear. (Fig. 5-1)

- Using cut buttons A and B(Fig. 5-1) bring knife down until arrow on large gear is in line with arrow or bracket.(Fig. 5-2)

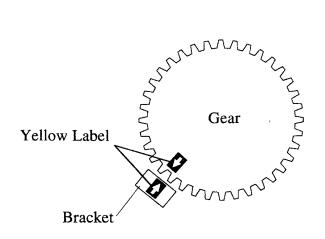


Fig. 5-2



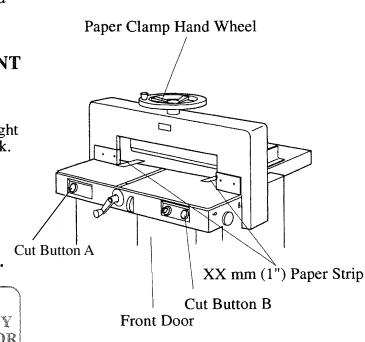


Fig. 5-1

5. KNIFE ADJUSTMENT.

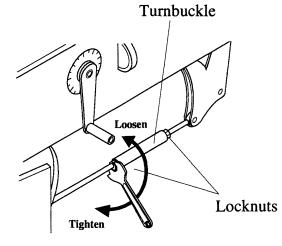
4. Adjust Knife

- Loosen knife adjusting turnbuckle lock nuts (*Fig. 5-3*) and adjust turnbuckle (*Fig. 5-4*) until paper just cuts.

IMPORTANT:

If one side cuts before other, adjust parallel of knife to bed. (Refer to 5-2 "Knife Parallel Adjustment" steps 1-4.)

When both sides cut at same time, adjust turnbuckle additional 1/8th turn.
Tighten turnbuckle lock nuts. Hold turnbuckle to prevent it from rotating while changing adjustment.





5. Test adjustment.

- Test adjustment in automatic cutting mode with two 30 mm (1") strips of paper placed at right and left side of clamp opening over cut stick (*Fig. 5-1*). Readjust if necessary.

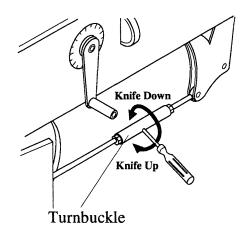


Fig. 5-4



5. KNIFE ADJUSTMENT

5-2 KNIFE PARALLEL ADJUSTMENT

CAUTION:

Turn off power before adjusting knife parallel adjustment.

1. Open left small cover.

- Open left small cover to access parallel adjusting bolt.

2. Lower knife.

- Lower knife until parallel adjusting bolt moves down to accessible possition.

3. Turn off power.

- Turn key counterclockwise and remove key from switch.

4. Adjust knife parallel.

- Loosen locking bolt by supplied allen wrench. (Fig.5-5)

- Insert allen wrench into parallel adjusting bolt (*Fig. 5-5*), turn bolt counterclockwise to raise left hand side of knife. Turn bolt in reverse direction to lower left hand side of knife.

- Tighten locking bolt after adjustment.

5. Remove allen wrench.

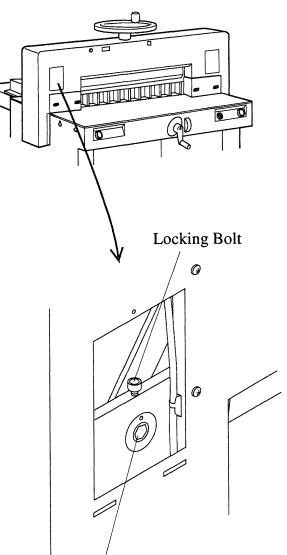
6. Close left small cover.

7. Turn on cutter.

- Insert key, turn clockwise to turn on cutter.

8. Test adjustment.

- Test adjustment in automatic cutting mode with two 30mm (1") strips of paper at right and left side of clamp opening over cut stick. Readjust if necessary. (*Fig. 5-1*)



Parallel Adjusting Bolt

Fig. 5-5



6. MAINTENANCE

6-1 KNIFE HOLDER SLIDE

- Open right and left small cover (Fig.6-1) to access knife holder slide.

- Apply grease once a month on both side of knife holder.

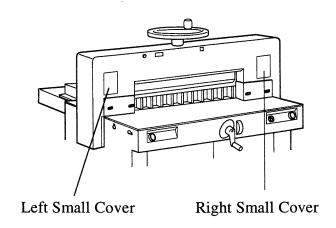


Fig. 6-1

6-2 DRIVE UNIT

- Open front door to access drive unit. - Apply grease once a month on sliding and rotating parts of driving unit. (*Fig. 6-2*)

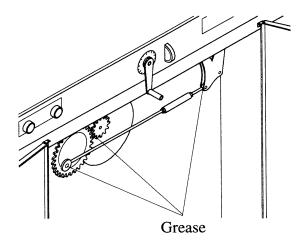


Fig. 6-2



7. INSTALLATION

7-1 INSTALLATION LOCATION

Select a flat, rigid floor free from vibration.
Select a place free from direct exposure to sunlight.

- Select a place free from extremely high temperature and humidity.

7-2 INSTALLING PC-64II (Fig. 7-1)

1. Install four leveling bolts under frame.

2. Install back table and attach with four table fix bolts.

IMPORTANT:

- Side Guide (C) on front table should be aligned with side guide (B) on back table.

3. Connect back gauge screw shaft to back gauge handle shaft with supplied screw.

4. Attach back gauge scale to bracket for back gauge.

5. Put paper clamp hand wheel on clamp shaft (vertical). Push hand wheel downward and fasten locking screw with supplied wrench.

7-3 POWER CONNECTION.

WARNING:

- BE SURE TO GROUND MACHINE WITH USE OF SUPPLIED GROUNDING WIRE.

DO NOT USE EXTENSION CORD.

CAUTION:

- Please check voltase on model plate sticked at of PC-64II.

- Connect power cord to a single phase power receptacle.

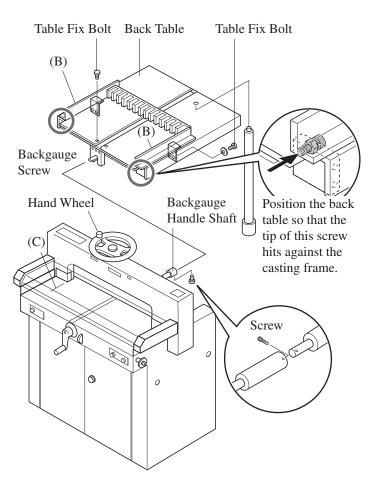


Fig. 7-1



8. SPECIFICATIONS

8-1 SPECIFICATIONS

Maximum Cutting Width	640 mm (25.1")
Maximum Cutting Length	640 mm (25.1")
Minimum Cutting Length	20 mm (0.8")
Maximum Lift (pile per job)	70 mm (2.7")
Cutting Speed	About 3.6 sec.
Power	120V 60Hz 14A 220V 50Hz 5.6A 220V 60Hz 6.8A 240V 50Hz 5.9A
Power Consumption	1.1kw Max.
Machine Dimensions	990 mm (W) (38.9") 1120 mm (D) (44.1") 1280 mm (H) (50.4")
Distance from floor up to table top	900 mm (35.4")
Machine Weight	290 kg (638 lb)
Other Features	-Back Gauge Dial at Front Table -Counter -Automatic Knife Return to Home Position -Illuminated Cutting Line



8-2 ACCESSORIES

Model	PC-64
Allen Wrench	4 mm 1 pc
	5 mm 1 pc
	6 mm 1 pc
	8 mm 1 pc
Open Ended Spanner	30 mm 1 pc
T-Box Wrench	17 mm 1 pc
Knife Change Holder	2 pcs
Adjusting Bar	1 pc
Spare Knife	1 pc
Grounding Wire	1 pc

Consumable Parts No.

Cutting Stick	5044-2075
Knife	5044-2045

Option

Side Table (RLT-64) : Extension tables to be installed at both sides of front table.

False Plate (FCP-64) : Used to prevent paper clamp from marking paper.

