

K3000 PCB Separator

V04-1

Users Guide

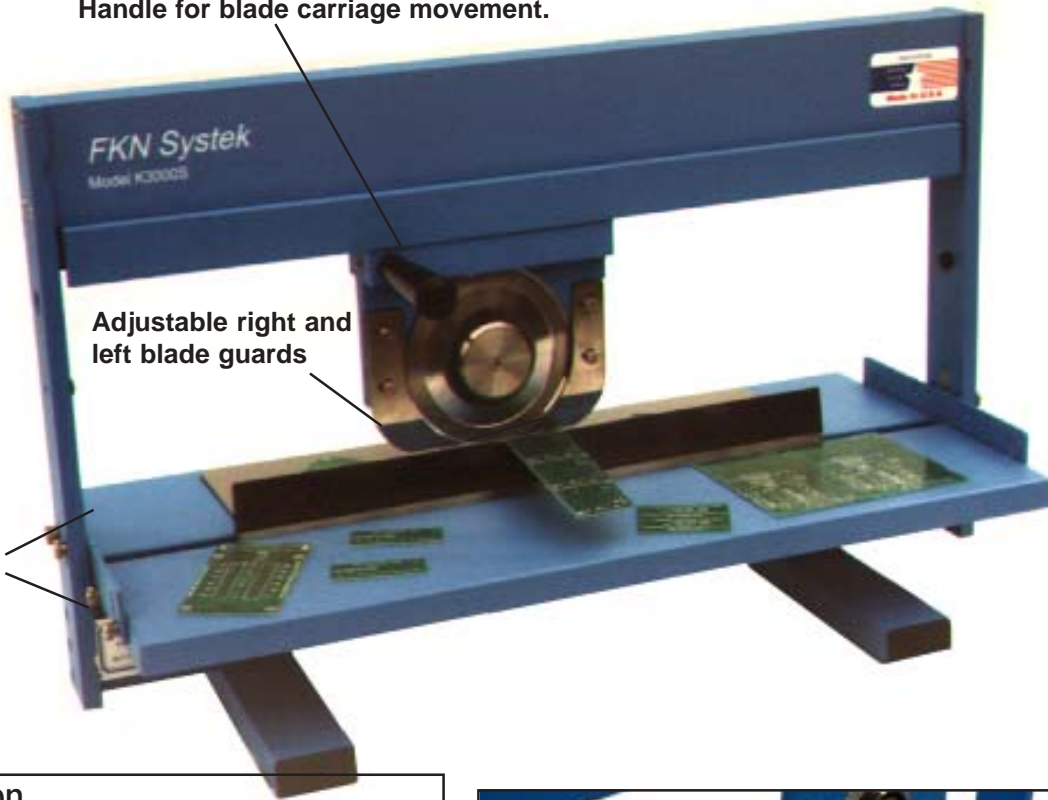


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Handle for blade carriage movement.

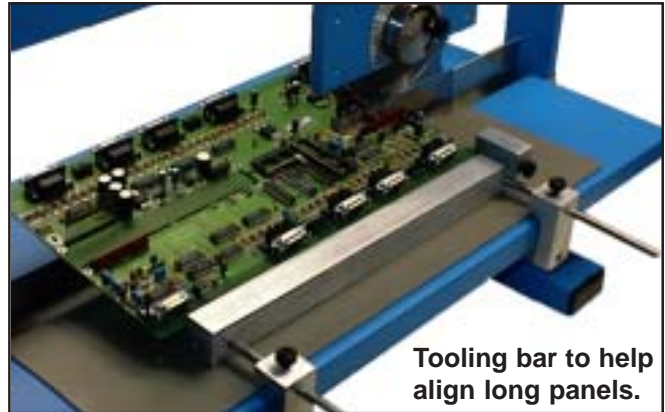
Adjustable right and left blade guards

Adjustable front and back support tables



1. Introduction

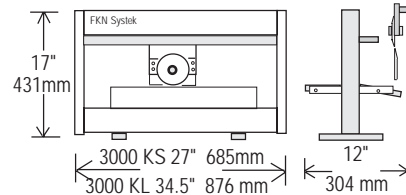
The K3000 is a circular blade on linear blade PCB depanelizer. By placing a prescored PCB onto the linear blade, and pulling the circular blade across the scoreline, the panels are cleanly and easily separated without dust or scrap. Wear resistant blades made of hardened tool steel and blade guides assure a long working life without need for adjustments. The K3000 will separate PCBs up to 18" long. The K3000L will separate PCBs up to 24" long.



Tooling bar to help align long panels.

2. Contents of Package

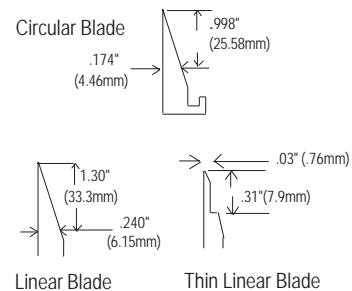
- K3000
- Users Guide
- Front and back table.



3. Technical Specifications

- Weight : 40 Lbs.
- Dimensions : H L W : 17" x 26" x 12.5 "
- Maximum length of PCB to be separated: 18"
- Depth of Scoreline: (Remainder material): $>.012 < .027$ "
- Angle of Score line : 25° Min.

Blade Profiles



4. Setup

To put the K3000 into operation, prepare a clean and level working surface and place the machine onto this surface. Remove the transport hold down screw on the right of the circular blade mechanism.

The gap between the top and bottom blades is set at the factory so that a piece of standard copy paper will freely rotate the circular blade as it passes through

Adjust the gap between the top and bottom blade so that a piece of standard typing or copy paper will rotate the circular blade as the circular blade is passed across the linear blade and the paper.

When using the K3000 for the first time it is recommended that a soft cloth be used to wipe away any film or oil on the blades.

5. Operation

Place the scoreline of the PCB onto the linear blade and pull the circular blade across the scoreline. Adjust the blade guards so that the PCB can pass between the blade guards and the linear blade only when the scoreline is resting on the blade. If set correctly, placing the panel incorrectly will cause the blade guard to bump the PCB panel edge.

6 Blade Replacement

To replace blades, remove the blade cap by unscrewing the flat head screw holding it into place. Pull off the old blades and replace them with a new blade. Use flat spacers provided with the blades to align the top and bottom blades exactly. Replace the blade cap when this is done.

7. Safety Precautions.

The K3000 is to be used only for separating prescored printed circuit cards. Use of the equipment for any other purpose may cause damage to the machine and create a safety hazard for the operator. Be sure to follow all safety precautions. When separating panelized PCBs using the K3000. It is recommended that protective gloves be worn by the operator to prevent injury from the sharpened blades. Any repairs or adjustment other than changing the blades or setting the blade and PCB guard gaps as described in this manual, should be made by trained authorize personnel. When operating the machine, be sure that any loose items such as jewelry clothing or hair are kept clear of the rotating blades.

1. Set on Clean Workplace

3. Adjust support tables

The support tables can be adusted up or down for maximum operator comfort. A esd safe take up matt is provided on one side of the machine for letting the cut panel fall onto the table.

4. Check blade alignment.

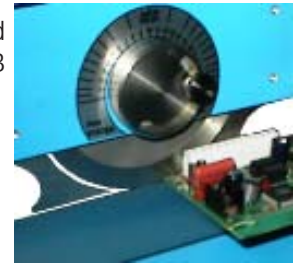
Move the circular blade carriage right and left to see that gap remains constant. The linear blade is held in place by a series of screws, with a pivot screw on the far right, and a cam adjusting screw on the left. To re-align the blade after it has been changed, loosen the holding screws with a hex wrench and turn the left cam screw to bring the left side up or down to the point where the gap between linear blade and circular blade remains constant from one side to the other.

4. Check blade gap

Set the blade gap between the circular blade and the linear blade so that a piece of paper placed on the linear blade will cause the circular blade to rotate when it is moved across the paper.

5. Check blade guards.

Place PCB Scoreline on linear blade and bring blade guard down so that PCB slides freely underneath blade guard.



6. Singulate PCB Panels

Placd scoreline of PCB panel onto the linear blade and pull the circular blade carriage across the scoreline to split the panels.

Replace Circular Blade.

1. Remove End Cap
2. Remove and replace blade
3. Adjust blade gap for operation.

