

# N200 Depaneling Punch

## Users Guide



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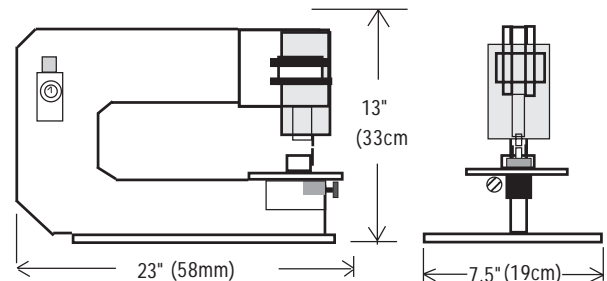
FKN Systek, Inc.



### 1. General Description

The N200 is a low cost tool designed to singulate one tab at a time in low volume flexible applications. Ideal in situations where curved board contours or small routing dimensions make the use of the N100 problematic. The N200 can punch round pcb profiles and thin routing patterns, since the punch comes from above. The routed section of the pcb is placed on two locating pins with the tab between the upper and lower knife set. The operator steps on a foot pedal to bring the upper knife down to cut the tab. The exact location for the cut can be changed by quick screw adjustment of the locating pin position. For operator safety the gap between upper and lower knife blade is about 1/4". Board material is cut from top and bottom with the parting line in the center of the PCB. This provides a very clean cut with no delamination.

#### Dimensions



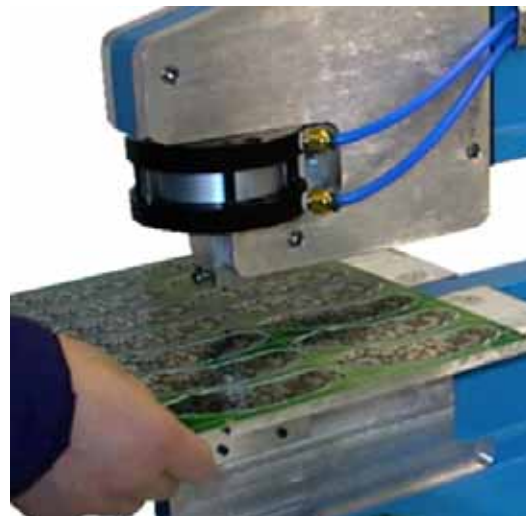
#### Specifications

|              |                  |
|--------------|------------------|
| Dimensions:  | 13 x 7.5 x 23 in |
| Weight:      | 43 lbs (19.5 kg) |
| Factory Air: | 80-100 PSI       |

### 2. Setup and Operation

Place the N200 on a clean work table and put the pneumatic foot pedal underneath the table for easy operator access. Plug the air line into your factory air system. The lower blade of the N200 is set in a lower position for transport. Before operating the machine, adjust the blade setting so that the upper and lower blade are separated by a gap as thin as a piece of typing paper. The blades should not be touching. The positioning pins are set so that the flat front edge of the knife will cut along the inside of the routed section. The position of the pins can be adjusted for better matching the contour of round panels to the cutting plane of the knife.

To singulate your round or straight tab routed panels, place the routed section over the locating pins and step on the foot pedal. For panels which are connected by a tab, it is necessary to take the panel with the left over tab and cut the tab a second time. The tab will slide down a chute built into the knife holding block.

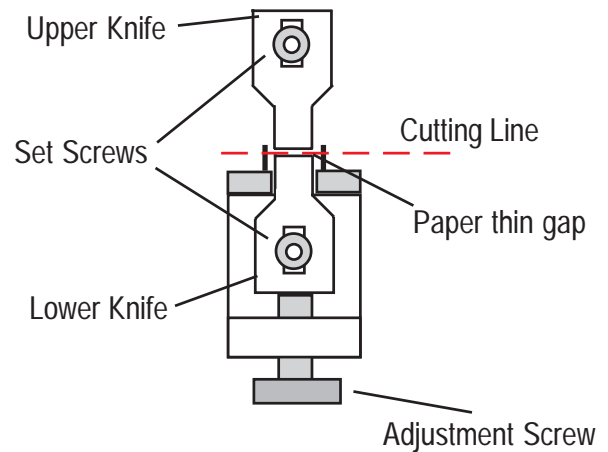
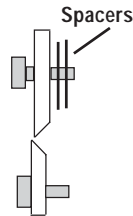


### 3. Blade Adjustment

Before operating, bring the upper blade down to its working position by holding the foot pedal down. Loosen the lower blade by inserting a hex wrench into the blade holding screw. Turn the knurled blade positioning screw to bring the lower blade to within a paper thickness of the lowered upper blade. Tighten the holding screw and begin operation.

#### Vertical Alignment

The blades should be aligned vertically right on top of each other. If for some reason they are misaligned, use a shim spacer behind one of the blades to bring it forward for perfect alignment.

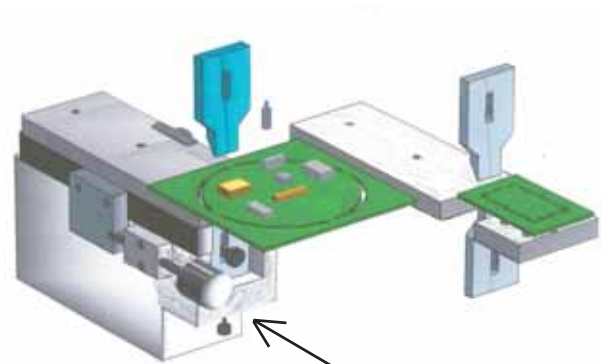


### 4. Positioning Pin Adjustment

The positioning pins are mounted on a sliding block which allows the operator to bring the pins forward so that round tab routed boards can be cut at the best position for minimizing left over material on the panel. To set the position of the guide pins relative to the blade turn the knurled knob to move the pins forward or backward from the cutting plane.

The guide pins are set in a replaceable tool block. They are available in a fixed position version or as a set of adjustable pins which can be moved closer to each other. These can be set so that the gap between the pins will just allow the tab of the panel to fit between them. This allows them to be placed flat against the edge of the blade, making it easy to singulate PCBs with various radii such as instrumentation panels.

In general, the pins can be set so that a line on the outside radius is flat against the cutting knife.



Turn Knob to move locating pins in and out from the blade edge.

### 5. Part Numbers

|                            |         |
|----------------------------|---------|
| N200 Depaneling Punch:     | 00-0200 |
| Upper and Lower Knife Set: | 00-0201 |
| Positioning Pins:          | 00-0202 |
| Foot Pedal:                | 97-0112 |

### 6. Safety Precautions

The N200 is to be used only for separating tab routed printed circuit cards. Use of the equipment for any other purpose may cause damage to the equipment and create a safety hazard for the operator. Be sure to follow all safety precautions. Any repairs or adjustment other than changing and adjusting blades should be made by trained authorized personell. When operating the machine, be sure that any loose items such as jewelry clothing or hair are kept clear of the machine.



Fixed pin locating block.



Adjustable pin locating block.