N 200 PCB Depaneling Punch

FKN Systek Inc.
Tools For Electronics Assembly

Low Cost Punch For Singulation Small Tab Routed Panels.

Singulates one tab at a time with upper and lower pinch blades.

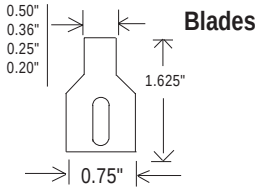
Singulate curve routed and odd shaped boa

Top and bottom knife set cuts tabs cleanly.

Minimal stress on PCB.

Tooling pins adjustable in X and Y direction.

Custom tooling available.



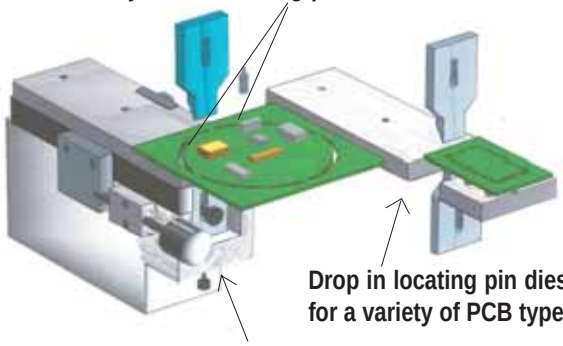
Tooling

The N200 is a low cost top down air operated punch for singulating tab routed PCB panels one tab at a time. An upper and lower matching knife blade is used to pinch the tabs apart. This method produces less stress on the PCB than a punch and die since the cutting action takes place from both sides.

The standard die set consists of an upper and lower knife for cutting one tab at a time. The tab is positioned on the lower knife by placing the routed section of the panel on a set of locating pins and holding the PCB or letting it rest on the support table. The locating pins can be moved in the x and y direction. The exact cutting location can be set by turning an adjustment screw which brings the locating pins to the desired position for cutting the tab at the board side. Dies for cutting a complete small panel can be supplied on request.

The N200 is the most versatile low cost depaneling punch on the market. Quick change drop in die sets are available for special applications. Tooling for cutting up to 4 tabs in one operation is available.

Adjustable locating pins.



Drop in locating pin dies for a variety of PCB types.

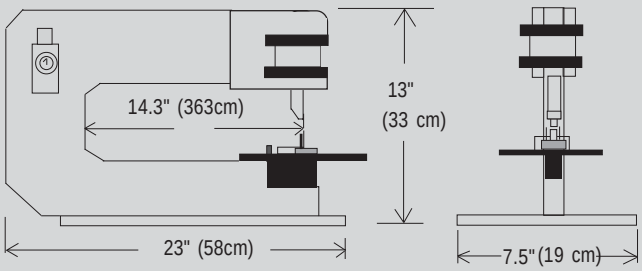
Turn Knob to Bring Pins Forward

Specifications
Size: HWL -13" x 7.5" x 23"
Air: 80-100 PSI Factory Air
Weight: 80lbs

Order Information	
00 - 0200N	N200 Punch
00 - 0201N	Upper and Lower Knife 0.36"
00 - 0202N	Upper and Lower Knife 0.50"
00 - 0203N	Upper and Lower Knife 0.25"
00 - 0204N	Upper and Lower Knife 0.20"
00 - 0210Nxxx	Positioning Pins in Block

Positioning pin blocks are board specific

Dimensions

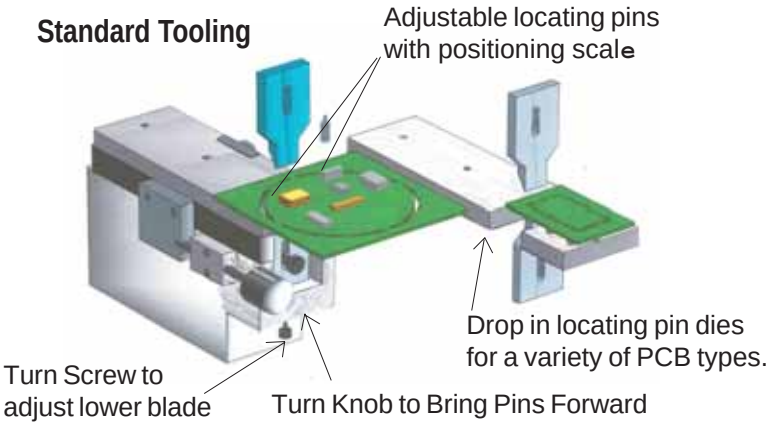


FKN Systek, 115 Pleasant Street, Millis, MA 02054. Tel. 508 376 2500 Fax 508 376 2505 FKN@fknsystek.com

N 200 PCB Depaneling Punch

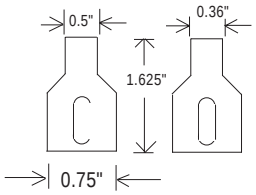
FKN Systek
Tools For Electronics Assembly

Standard Tooling

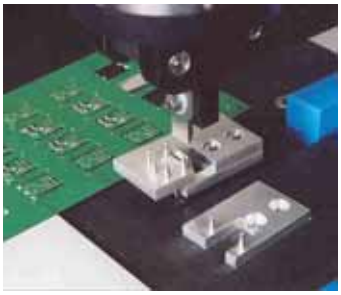


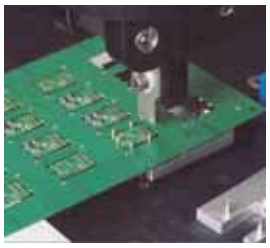
Standard tooling for the N200 is 2 blades with a guide pin die mounted on the adjustable slide block. Standard guide pins are .090" in diameter for the most popular size of routed section. Custom sizes can easily be accomodated. The bottom blade is adjustable to create a zero gap between blades.

Blades



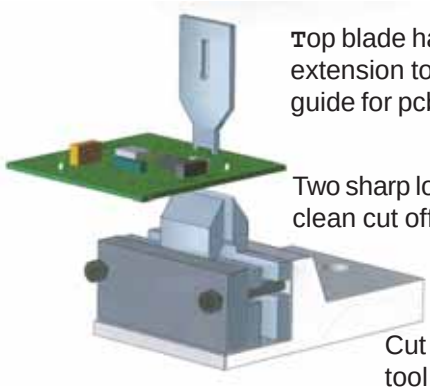
Drop In Tool Plates





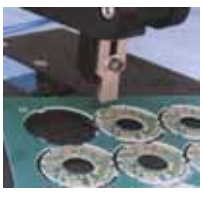
Two standard drop in die sets are available. The first is a two pin die set which allows the operator to bring the pins to the correct position for setting the edge of a round panel to center under the cutting line of the blades. The second drop in die is for panels which may need more positioning pins than a standard round or square panel. This provides a flexible positioning platform for many different panel geometries.

Changing from one set to another takes less than a minute.



One option for separating odd shaped panels where tooling pins are difficult to place close enough together, or where the radious for singulating a panel varies depending upon the position of the tab (ie, kidney shaped or oval panels) is to use a top down punch with two sharp support knives on both sides to slice the tab from the panel to be singulated.

4 Blade Drop In Die with Linear Slide.



To speed up the process of singulating tab routed panels in an economical manner, it is possible to use the 4 blade die set with a sliding table. The operator places the panel onto the lower die positioning pins and brings the panel and die underneath the top die set. This actuates a pneumatic enabling switch which allows the top die to travel down when the foot pedal is activated. Once the panel is cut, it is brought back out from under the tool for removal from the die set.

FKN Systek, 115 Pleasant Street, Millis, MA 02054. Tel. 508 376 2500 Fax 508 376 2505 FKN@fknsystek.com