

# 3M

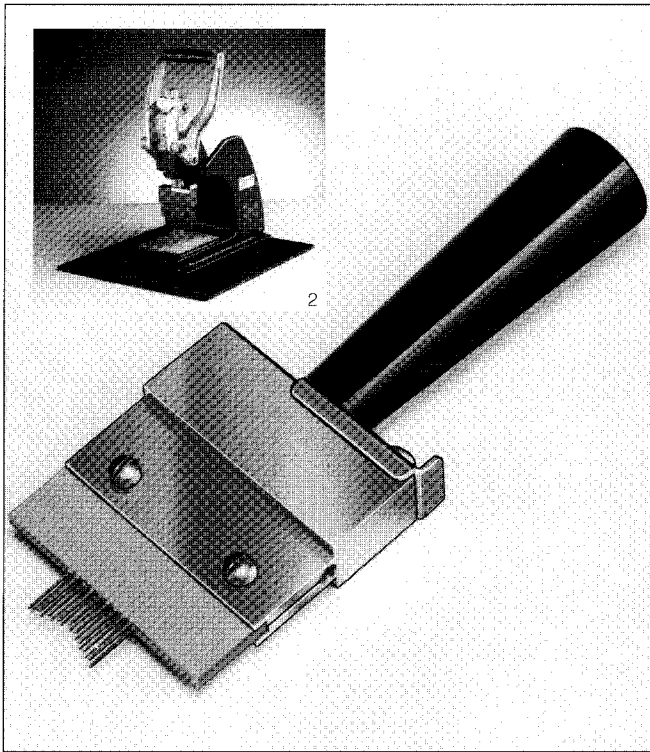
## Plug Knockout Tools

### For use with 3M 929 Series

### .100" Thru Board Sockets

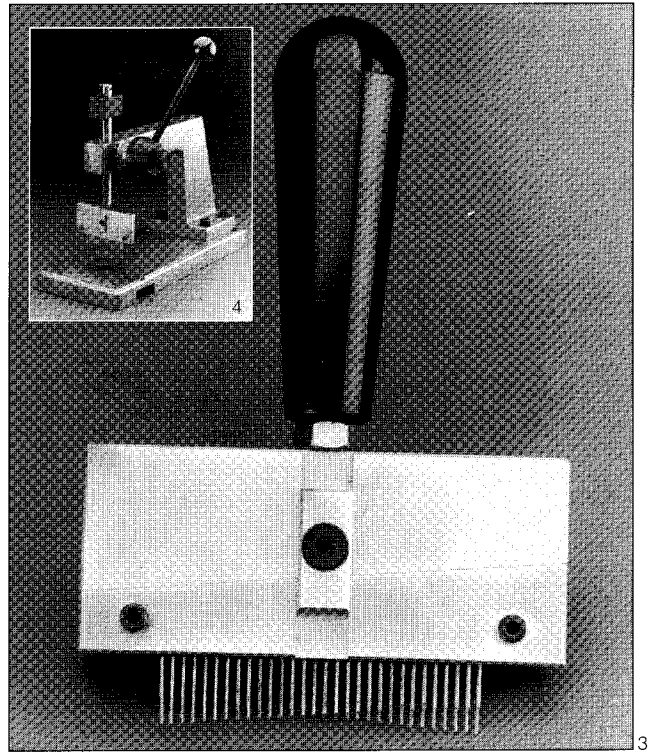
3M offers 2 Plug Knockout Tools for the removal of integral solder mask plugs for all levels of production. Both are designed for use as a hand tool. Each tool can easily be adapted for use with standard 3M presses. The 929013 with the 3640 assembly press and the 929012 with the 929050 (long neck) press.

#### For Prototype and Low Volume Production



929013 Knockout Tool (Inset) 3640 Press

#### For Medium and High Volume Production



929012 Knockout Tool (Inset) 929050 Press

#### Order Information:

Knockout Tool **929013**

Note: This does not include a molded head.

Hand Press (Standard) **3640**

Molded Head (with staggered pins)

**929025-0X-XX**

1 = One Row

2 = Two Row

Number of pins  
per row

#### Order Information:

Knockout Tool Kit **929012**

200 Qty. Replacement Pins **929018**

Hand Press(Long neck) **929050**

## Press Setup

### 3640 Assembly Press Only

With each hand tool, you will receive a plastic sleeve that is designed to slip over the press shaft. This acts as a safety stop so that the pins in the knockout tool will not hit the base of the press.

1. Unscrew the black handle from the knockout tool.
2. a. Remove the four (4) hex screws on the assembly head.  
b. Remove the two (2) hex screws on the bottom of the assembly head.  
c. Slide the shaft out of the assembly head.  
d. Put the plastic sleeve that comes with each hand tool inside the return spring by bending the spring in the middle.  
e. Replace the shaft by sliding it through the spring and into the plastic sleeve, and then through the press casting.  
f. Replace the hex screws removed in steps a and b.
3. Adjust the press to the uppermost position.
4. Attach the knockout tool to the shaft using the latch provided.

## 929012 Knockout Tool Assembly

1. Loosen the three screws from the pin holder with a 3/32" allen key wrench. Do not unscrew the cap screws completely. If the center supports should become loose it is important they are correctly reassembled. The pressure heels must face inward.

2. Place the desired number of pins into the pin holder. It is important not to bend the pins. Make sure that all pins are properly positioned in the holder. Tighten all three screws with an allen wrench.

## Press Setup

### 929050 Press (Long neck)

1. Loosen the down stop on the press with an allen wrench.
2. Raise the ram and screw the pin holder into the bottom of the ram.
3. To properly align the holder on the press, the holder must be lowered until it rests in the alignment slot.
4. Adjust the down stop on the top of the ram by loosening the two screws with an allen key. Set the tool to your desired height and retighten the screws. A fine adjustment for the height is available. This is located on the top of the stop and can be adjusted with an allen key.

For more details please refer to instructions for 929012 & 929050 Literature code 34-7034-0145-4. Also it is recommended to follow detailed instructions on how to use Thru board sockets in your production on "Tech Brief" Literature code 80-6106-0815-2.

**Call 800-225-5373**

for sales, ordering and technical product information

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