

# Accessories for the Hakko 936-xx Temp-Controlled Soldering Station

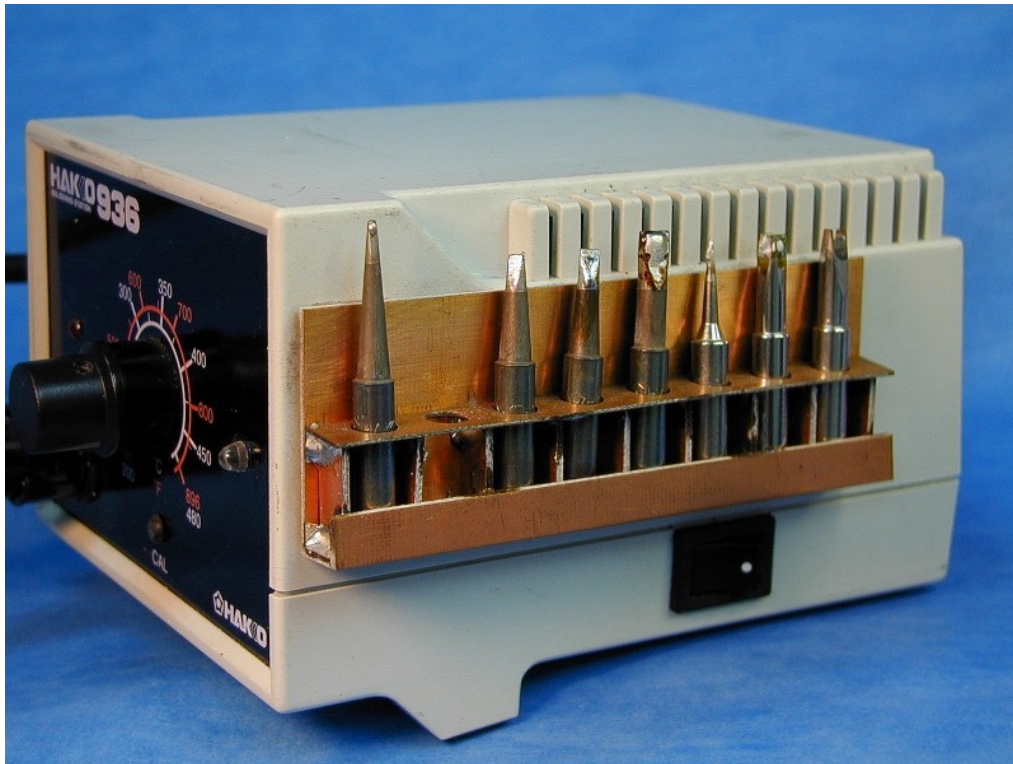
by: Tom Hammond NØSS 02/01/2004

After I'd purchased my Hakko 936-9 T/C soldering Station, it didn't take me long to realize that I needed additional tips to accommodate the range of soldering tasks I needed to attack. I bought five more tips of varying widths so I could handle (just about) any soldering requirement I came across. I try to use a tip width which is about 80%-90% the width of the pad I'm soldering to. Then, I purchased a couple more specialized (SMD) desoldering tips to at least enable me to REMOVE those pesky specs of ceramic from a PC board. Of course, once removed, they'd become LOST FOREVER!!! But that's another story.

Now that I had a total of eight different tips, I had to find a way of keeping them handy, but not so handy that they were rolling around everywhere on the desktop. I also wanted them to stay WITH the soldering station, but NOT in the front tray which was supposed to hold the dampened 'cleaning sponge'.

Let me digress a bit... around here, a number of the locals (hopefully) jokingly refer to me as "Mr PC Board", because I use surplus PC board to fabricate many of the items I need for my daily operations (2M mobile dash mounts, GPS mounts, specialized mic hangers, etc.). I was given about 100 lbs of surplus PC board about 8 years ago, and I use it for just about ANY task requiring a lightweight, strong, and easy-to-machine construction medium.

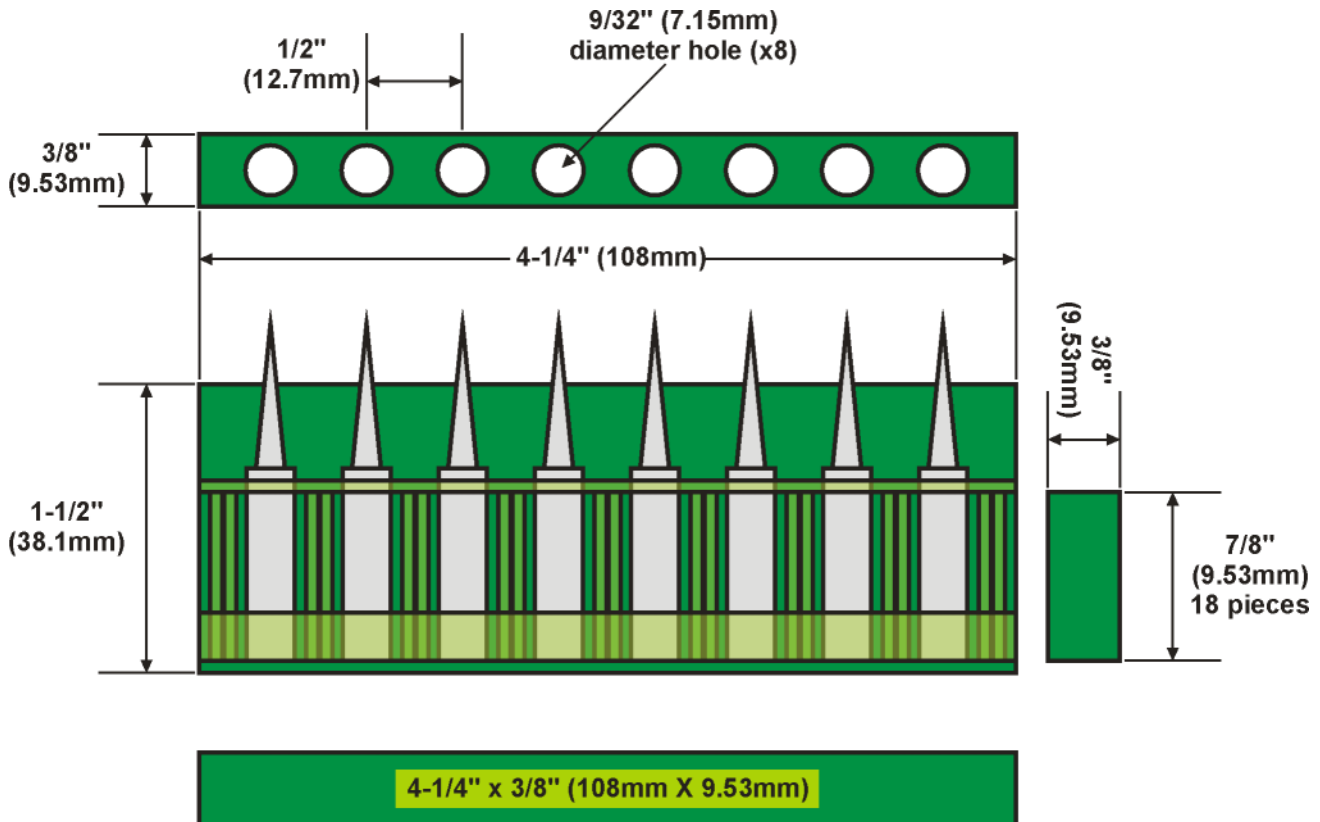
This having been said, and to answer my need for a holder for my soldering station tips, I designed and built the 8-place tip holder shown below.



This holder allows me to keep my spare tips handy at all times and to store them in a manner which permits me to see (and select) whichever tip I might need for the task at hand.

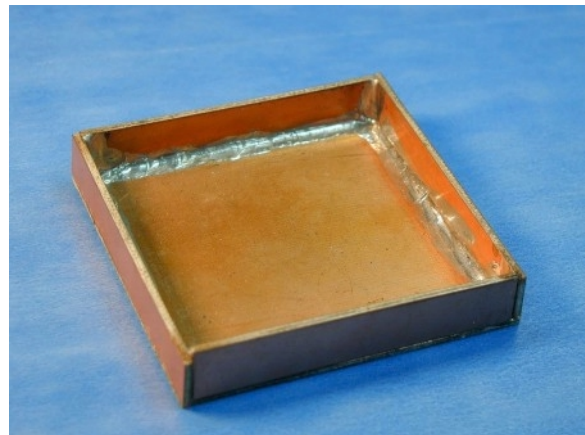
If I was going to do it again, I'd probably make the dividers between each tip's 'section' a bit thicker, so I could maintain the present spacing, but not have quite as much available 'slop' inside each slot for the tip to slip sideways and tilt.

Below, is shown a line drawing of the holder. This can be made using nothing but hand tools. However, a DremelTool with a number of cutoff wheels would be quite handy for cutting the PC board into smaller pieces.



I mounted the soldering tip rack to the side of my soldering station with a couple pieces of double-sided foam tape.

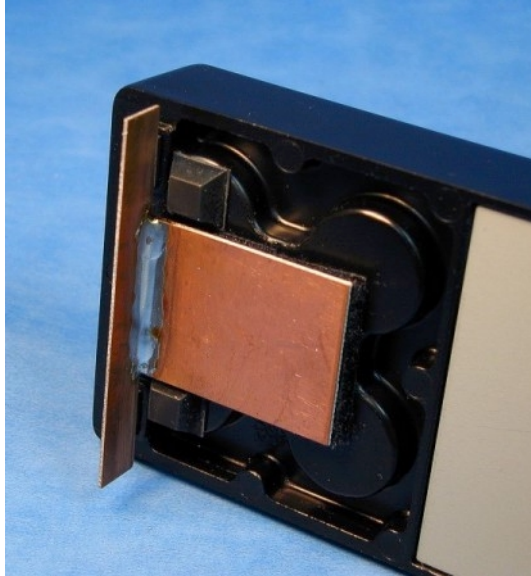
The next thing I attacked was the tray for the damp sponge, built into the base of the soldering iron holder. Since I don't use the sponge (preferring to use a coiled stainless steel kitchen pot scrubber to clean my tips), I decided to use the existing sponge tray to hold small parts.



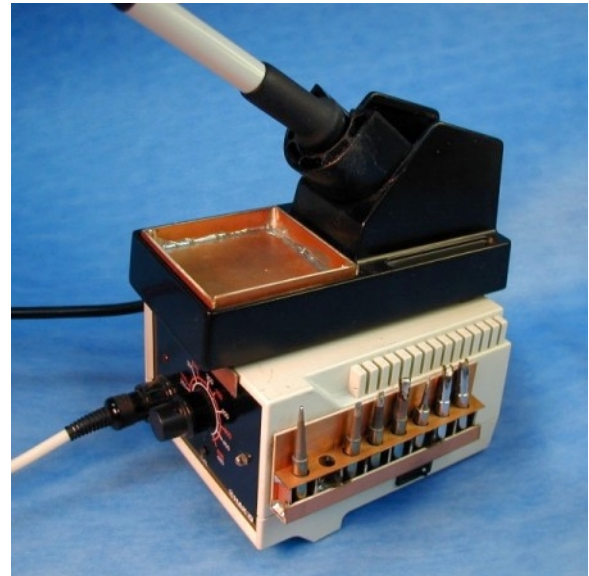
As you can see from the picture (above) the inside of the Hakko sponge tray doesn't lend itself to holding much of anything, except a reservoir for water for the sponge. I removed the sponge and made a small tray insert (from PC board, what else) to sit down into the sponge tray. This has proven to be VERY useful when I'm working with tiny (easily lost) parts.

As some of you already know, I'm not the world's most 'tidy' shack-keeper... OK, I'm not even close! And there's a LOT of 'stuff' on the work surface of my operating/building desk. As a result, I found it necessary to stack my soldering iron (and holder) on top of the soldering station itself. However, a problem arose... the iron holder kept slipping off the back of the slanted top of the station.

I solved this problem by attaching (using double-sided foam tape) a 'stopper' to the bottom-front edge of the iron holder. I also had to add slightly taller 'feet' to the base. See the illustrations below.



"Slide stopper", installed



Iron holder atop the Hakko 936-9

The only thing I don't care for about the Hakko 936-xx soldering stations is that they don't include a POWER ON indicator other than the red LED which is only lit during periods of time when heat is actually being applied to the tip. As a result, I've caught myself walking out of the shack, thinking the soldering station had been turned off, when in fact, it was still ON, but not applying heat at the instant I looked to check it. I fixed this, too. I added a second (green) LED (always ON when power is applied) to the front panel. This was not quite as easy as I'd expected as there's not source of a LOW voltage available in the station. As a result, I had to use a larger (1W or 2W, I forget) dropping resistor to limit the amount of current drawn by the LED.

PLEASE don't ask about why the POWER ON LED's not level with the red LED. That's the unfortunate result of an 'engineering' anomaly, and just too darn embarrassing to discuss... <G>.

73,

Tom Hammond NØSS

