

Astatic TUP9-D104SKE PTT switch appears "shorted" or locked on, in D104 with ETS-9 Stand

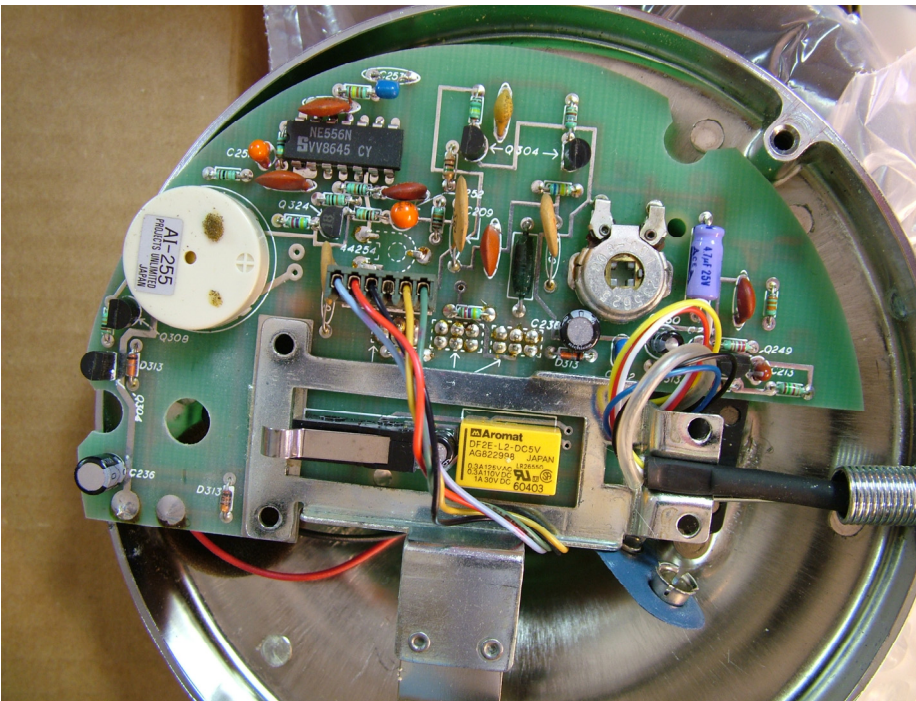
The ETS-9 stand has a PTT bar on the base as well as on the handle. This is the Astatic microphone stand with the half round pcb inside the base, 3 switches on the bottom, and the NE556 Ic.

I use it as a regular mic, and don't use the ETS function.



However, I suddenly found the radio locked on transmit. An ohmmeter check revealed the PTT line as shorted to ground although the two snap switches inside both tested fine.

I could find no schematic of this unit, but had heard that the ETS-9 stand used a magnetic latching relay for the actual PTT switching. It is shown in the photo below as the yellow part, Aromat part number DF2E-L2-DC5V:



I tried tapping the relay with a screw-driver and got it to open the PTT line. Also, a small magnet held nearby can make it change state too. Still it would not work normally with either of the PTT switches.

The Aromat part is no longer available, however part number NTE R72-1101-5C can be found on some websites and is an exact replacement. There may also be an Omron equivalent, but the NTE part seems more available. Replacing it, fixed the microphone.