

Product Note: B6132298A

# Pogo Pin Replacement Instructions

(for TDR Probes with Spring-loaded Ground Contacts)

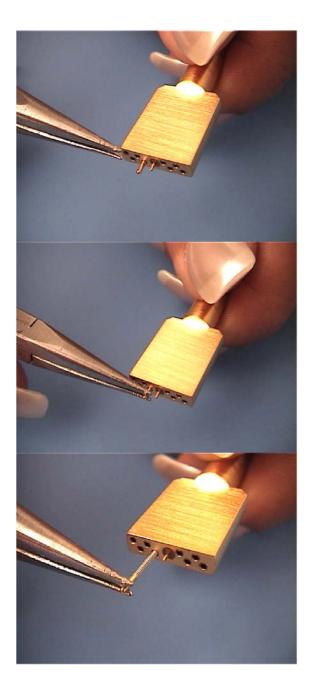
This instruction manual is for all TDR Probes that have a spring-loaded ground contact pin (part number 41112542) with a mating socket (part number 41130950) in the probe. It describes how to remove a pin (either to move it to a new hole or because it is broken) and how to place a pin into the desired hole. If you require further information, please contact ICM.

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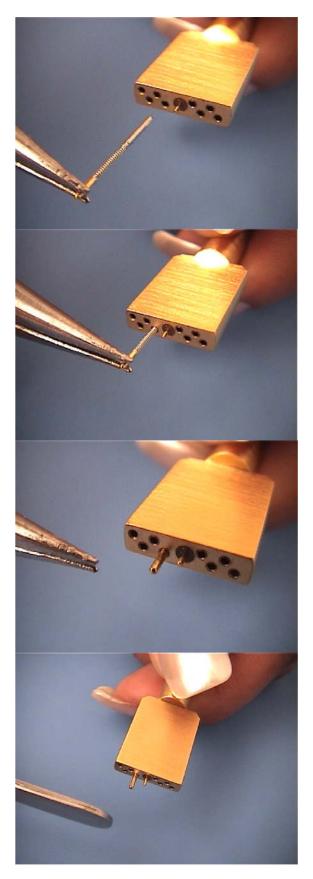


In order to remove the spring-loaded contact pin (pogo pin), you need to use a set of needle nose pliers. Use care when squeezing the pin as you do not want to damage it. However, you must it securely.

Hold the pogo pin firmly with the pliers, and pull it **straight** out from the TDR probe.

Notice that the pogo pin is coming out of the probe along the axis of the mating socket. If you do not pull straight out with the pliers, you could bend or break the pogo pin.

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After you have removed the pogo pin from the probe, do a quick inspection to make sure it was not damaged during the removal. If it is okay, proceed to the next step.

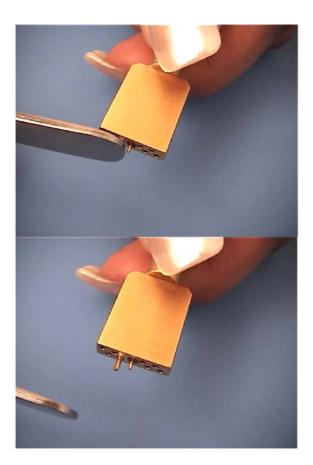
# **Pogo Pin Installation**

Select the hole that you wish to put the pogo pin into (the holes are laid out to have different RF-to-ground pitches for a wider range of applications). Again, it is important to place the pogo pin into the socket with a pair of pliers. Notice that every effort is made to place the pogo pin into the socket in a straight manner along the common axis.

Use the pliers to push the pogo pin into the socket as far as it will go. Do not force it at this point.

After you have pressed the pogo pin into the probe as far as you can with the sockets you will need to give it a final push to get it the rest of the way into the probe. To do this, use a solid, flat tool (perhaps use the opposite end of a pair of tweezers as shown).

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Push firmly with the flat tool to "pop" the pogo pin into the socket. You should feel a final movement in the pogo pin when it secures itself into the mating socket.

After pushing the pogo pin into the probe, you should see only the compressive part of the pogo pin (it should look similar to the picture at the right).

# **Contact Socket Replacement**

The contact sockets are secured in the probe housing with a small amount of epoxy. Please use the procedure outlined in 41130950 when replacing the sockets.

#### Socket Removal

You will need a 0.030" diameter drill bit and a pin vise for this application. Slowly hand drill halfway down into the damaged socket (under microscope is most effective). When the socket rotates with the drill, the socket is loose enough to pull it out of the probe housing. If the socket is difficult to remove, it is helpful to heat the probe body to 100 degree Celsius to loosen the epoxy. This will make it easier to remove the socket.

# Installation of New Socket

Make sure the probe body and the new socket are clean. Apply a small amount of epoxy into the hole, insert the socket and press firmly with a flat surface until the socket is flush with the probe. Wipe off excess epoxy and let dry for 15 minutes.

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