

**CONTACT RETENTION TESTING - HOW TO USE THE RTCRT™ TOOL**

The RTCRT™ contact retention test tools are intended to be used for verifying that connector contacts are properly inserted and locked in the retaining clips. Figure 1 illustrates typical retention tools (A) with the probe in the "PIN" contact configuration, and (B) in the "SOCKET" contact configuration. The tools must be used only on the proper sized contacts of the proper contact family. Due to the dimensional differences in connectors and contacts, use of this type of tool on any contact other for which it was intended, can result in an erroneous check or possible damage to the connector.

**TOOL PREPARATION:**

The RTCRT™ is designed to be as safe to the test connector and as easy to use as possible. It is designed in such a way that an unseated contact will be pushed back only as far as the interfacial seal. Therefore it is important to select the correct tool for the specific connector style and contact size you will be testing. Tools are available for contact sizes #12, #16, #20 & #22 that will be reflected in the tool part number and color code. It is important to select the correct tool to insure the most effective repeatable test. Prepare the tool in the proper pin or socket contact configuration. The tools are equipped with a replaceable, double ended probe (FIGURE 2). Probes are removed by pressing in on the white button recessed inside the back of the tool handle. It is inserted from the front end of the tool by pressing in until it snaps into place. The plastic end of the probe is used on "PIN" contacts and the metal probe end is used on "SOCKET" contacts.

**THE TEST:**

Align the tool along the axial center line of the contact to be checked and locate the probe on the contact. The pin probe is plastic and has an indentation that will prevent its sliding off the pin contact. The socket contact probe is metal, and it is intended to fit inside the socket contact. Maintaining alignment, carefully press forward until the tool releases or the contact moves back into the connector. In either case, the forward motion of the tool will stop when the "TOOL STOP" meets the connector face or shell.

Disengage the tool and proceed to the next contact.

**TYPICAL RTCRT™ TEST PROFILE**

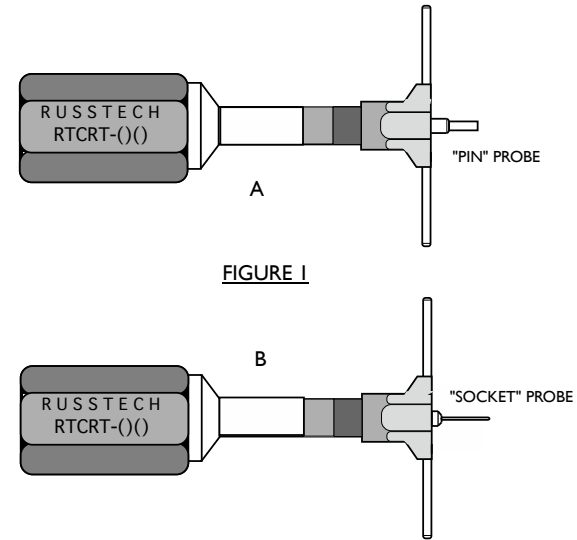
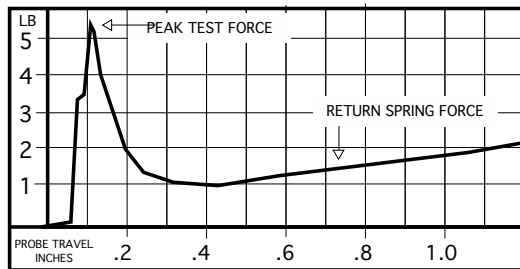


FIGURE 1

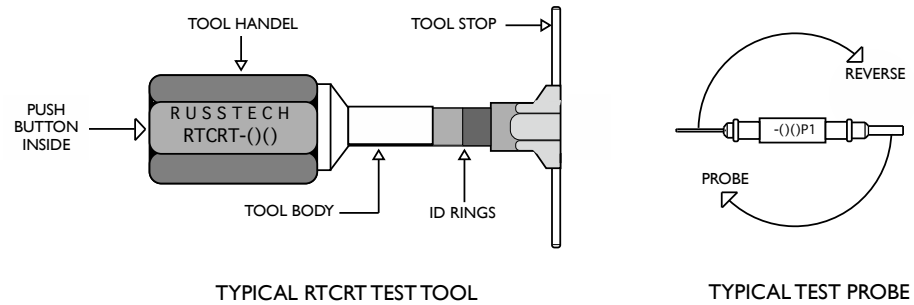


FIGURE 2

**CONFIDENTIAL INFORMATION.** THIS DOCUMENT AND CONTAINED INFORMATION ARE THE PROPERTY OF RUSSTECH ENGINEERING COMPANY, INC. THE RECIPIENT, BY RECEIPT AND RETENTION HEREOF, ACKNOWLEDGES THAT THE INFORMATION RECEIVED IS CONFIDENTIAL, DEVELOPED OVER TIME AT SIGNIFICANT EXPENSE, AND THAT DISCLOSURE THEREOF TO THIRD PARTIES WILL CAUSE IRREPARABLE HARM TO RUSSTECH. THE RECIPIENT, BY THE RECEIPT AND RETENTION OF SUCH INFORMATION, AGREES TO MAINTAIN SUCH INFORMATION IN CONFIDENCE, TO NOT DISCLOSE IT TO THIRD PARTIES, AND TO RETURN IT, AND ALL COPIES OR DERIVATIVES THEREOF, IN ANY FORM, TO RUSSTECH, UPON REQUEST.

SCALE: NONE		USER INSTRUCTIONS FOR RTCRT™ CONTACT RETENTION TOOLS AND DERIVATIVES	
BY	Don Fieberg 07/14/06	DRAWING NO.	REV.
 <b>RUSSTECH</b> Engineering Co., Inc. 23322(D) Madero Road Mission Viejo, Ca. 92691		<b>RC11006-S</b>	<b>0</b>