June 1969

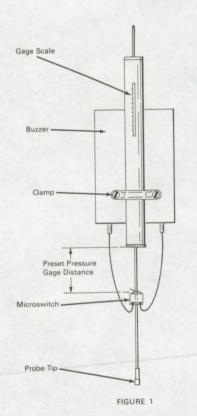
Brief 69-10173

NASA TECH BRIEF



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Gage Provides Audible Signal to Facilitate Checkout of Connector Pins



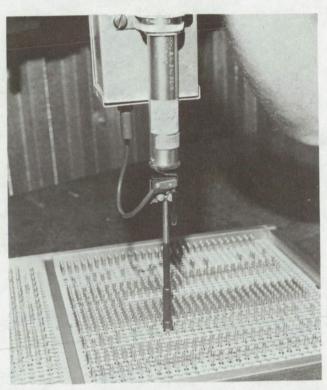


FIGURE 2

A commercial push gage has been modified to enable rapid, accurate testing of paddle pins in distributors and bullet pins in distributors and distributor patch boards. The modified gage emits an audible signal when it is pushed against a pin at a preset pressure. The purpose of the gage is to ensure that the pins will not break electrical contact when they are subjected to a minimum, preset pressure. With an unmodified gage, an inspector must visually observe that the gage probe tip is properly positioned on each

pin while he attempts to read the gage scale for the preset pressure value. This operation is both tedious and prone to measurement error.

As shown in Figure 1, the modification of the commercial push gage consists of the addition of a microswitch and a buzzer circuit, with a probe tip configuration designed to fit the pins under test. The probe tip is pushed against a pin, as shown in Figure 2, until the buzzer sounds, indicating that the required preset

(continued overleaf)

pressure has been reached. The mounting of the microswitch can be adjusted to permit presetting of any desired scale pressure within the range of the gage. The gage may also be used to provide an audible signal in response to a preset tension. Additional applications of the modified gage would include the checking of spring rates, cable tensions, and actuation pressures.

Note:

No additional documentation is available. Inquiries may be directed to:

Technology Utilization Officer Kennedy Spacecraft Center Kennedy Space Center, Florida 32899 Reference: B69-10173

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: B. J. Northern of The Boeing Company under contract to Kennedy Space Center (KSC-10335)