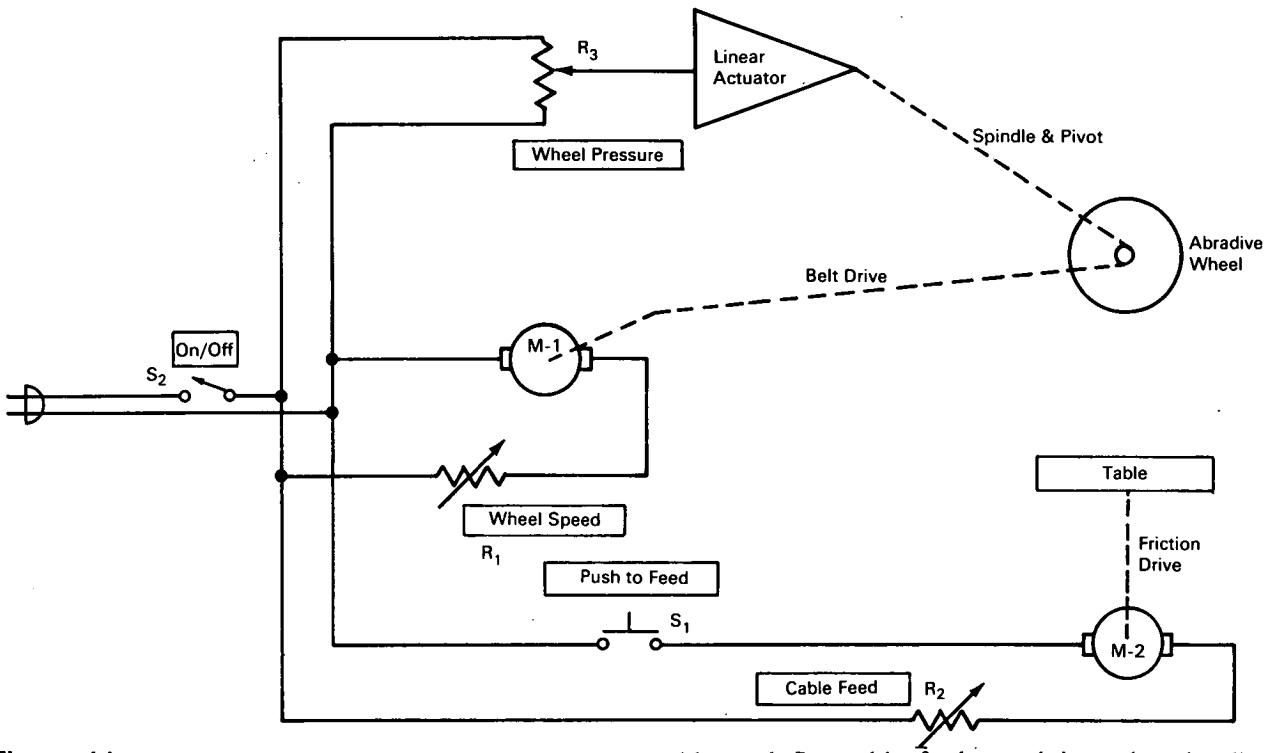
NASA TECH BRIEF

Flat Cable Insulation Stripping Machine



The problem:

In the use of lately favored flat cables, the most difficult problem has been the application of connectors. The most important factor in successfully assembling such connectors is the ability to arrive at an efficient and effective flat terminal termination technique.

The solution:

A flat cable insulation stripping machine that operates on a principle of variable parameters of abradive wheel speed, wheel pressure on the flat cable, and flat cable feed speed into the abradive wheel.

How it's done:

The diagram depicts the functional arrangement of the flat cable insulation stripping machine. The cable feed system consists of motor M-2 that moves the cable feed assembly by means of a friction drive, a cable feed pushbutton switch S_1, and a cable feed rotational speed control rheostat R_2. Speed of the abradive wheel is governed by wheel speed rheostat R_1 acting on wheel drive motor M-1. The most critical component of the stripping machine is the linear actuator that is used to maintain a constant

(continued overleaf)

floating pressure of the abradive wheel upon the flat cable. The linear actuator is preset by the operator to the desired wheel pressure by adjustment of wheel pressure rheostat R_3.

The linear actuator maintains the same preset pressure regardless of minute variations in the flat cable plane or possible misalignment of the flat conductors, the abradive wheel tracing the contour of the cable and each conductor identically, thus imparting to each cable identical heat and abradive force. Variations in wheel diameters have no effect on pressure at the wheel periphery.

Note:

Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B67-10581

Patent status:

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

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of Viking Industries, Inc.
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