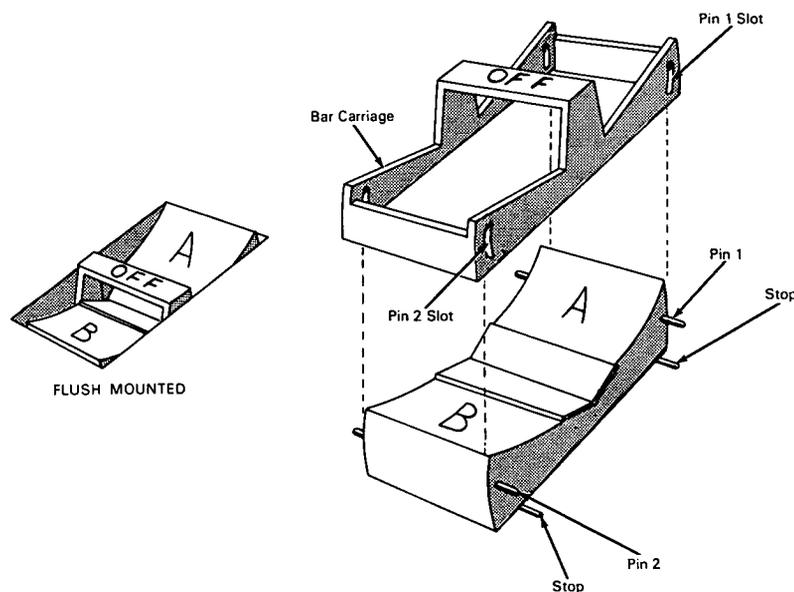


NASA TECH BRIEF



NASA Tech Briefs are issued by the Technology Utilization Division to summarize specific technical innovations derived from the space program. Copies are available to the public from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia, 22151.

Three-Position Rocker Switch Actuator Has Positive Centering



The problem: In certain activities, cumbersome gloves, sometimes pressurized as in high-altitude aircraft, limit the sense of touch of the operator who must use three position switches, such as toggle, rocker, or pushbutton. In this situation there is a danger of overriding the center position, which could have undesirable results.

The solution: A three-position rocker switch actuator that provides positive center positioning to inhibit possible override.

How it's done: When properly mounted to a three-position switch, the actuator is operated in the following manner. Depressing rocker tab A causes pin 1 to move downward in its slot and the pivoted rocker causes tab B to rise an amount equal to the downward

travel of tab A. With pin 2 being normally at the top of its slot, the bar carriage rises at this end along with tab B. This action displaces the *off* bar upward by a slightly lesser amount and the switch is now positioned so that a circuit is controlled.

To control the second circuit and release the first, tab B is depressed and an action opposite to that described above takes place.

To return the switch to center position so both circuits are released, the *off* bar is pressed. In the case of tab A having been previously depressed, this applies pressure to pin 1 through the bar carriage and pin 2 slot to force tab B downward to its center or neutral position where its further downward movement is arrested by the stops.

(continued overleaf)

Note: Switch position is visually identified by rocker position and functions can be shown on tabs and bar.

Patent status: Title to this invention has been waived under the provisions of the National Aeronautics and Space Act (42 U.S.C. 2457 (f)), to North American Aviation, Inc. 1700 East Imperial Highway, El Segundo, California.

Source: Robert L. Bogley of North American Aviation, Inc., under contract to Manned Spacecraft Center (MSC-261)