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Brief 66-10202

NASA TECH BRIEF

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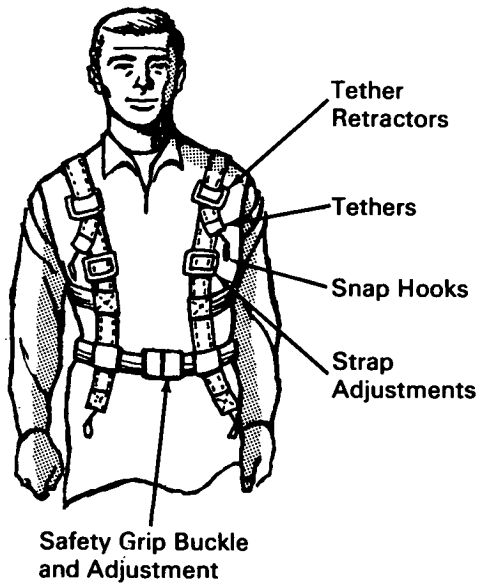
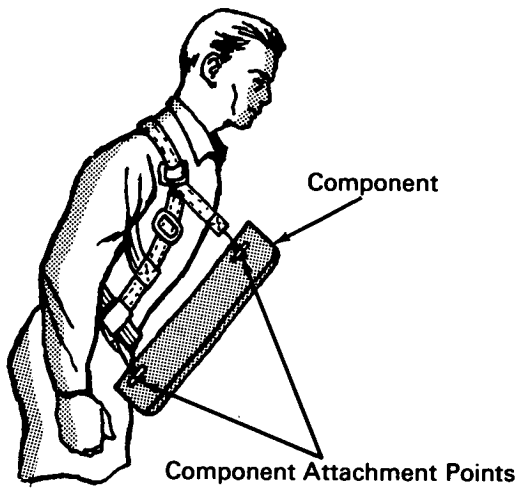
Body-Fitted Harness Provides Safe and Easy Component Handling





The problem:

To devise a safe method for workers to handle critical components, during installation or removal, involving difficult access to the work area or hazardous handling conditions. Ordinary handling poses the risk of dropping a component and causing injury to the worker or damage to the component and the impact surface.

The solution:

A body-fitted restraint harness designed to support components conveniently and safely during installation or removal.

How it's done:

The harness design provides four tethers with individual locking retractors that easily adjust to the desired length. The locking feature allows the tethers to be secured at any point, and snap-hook fasteners permit easy attachment to the component. The length of the upper two tethers is adjusted by the worker to accommodate the component and comfortably support its weight. The lower two tethers hold the component close to the body, even though the worker bends.

To attach the component to its mounting surface, only the lower tethers are released initially so that the component is positioned and secured before the upper tethers are released; this eliminates the possibility of dropping the component. The reverse procedure removes the component under the same safeguards.

Notes:

1. This design permits the worker to maneuver through restricted places, such as hatches, with his hands free.

(continued overleaf)

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2. The harness may easily be put on, adjusted, and removed, or it may be comfortably worn for extended periods without interfering with normal activities.
3. Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama, 35812
Reference: B66-10202

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: E. G. Miller and G. E. Rothwell
of International Business Machines
under contract to
Marshall Space Flight Center
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