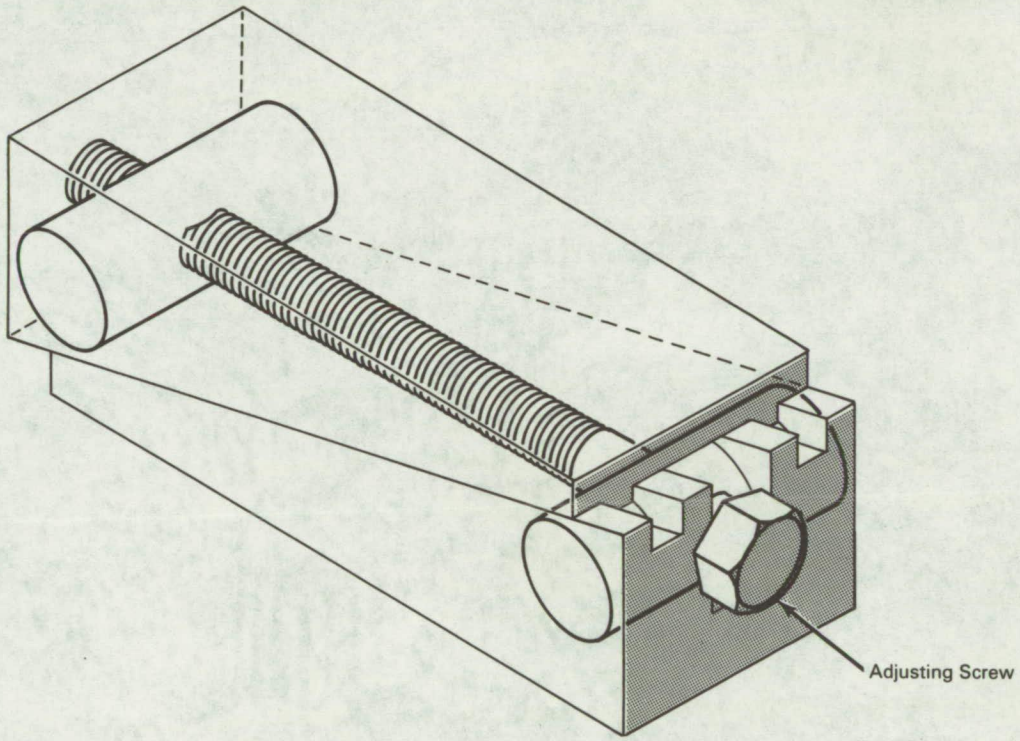
September 1966

Brief 66-10411

NASA TECH BRIEF

Heavy Duty Precision Leveling Jacks Expedite Setup Time on Horizontal Boring Mill



The problem:

To design an alignment tool to expedite the setup of extremely heavy components or assemblies (up to 2500 pounds) on horizontal boring mills. The use of wedges and blocks to shim these components to proper position was difficult and time consuming.

The solution:

A leveling jack that provides precise alignment control and is capable of handling loads up to 2500 pounds.

How it's done:

The number of jacks to be used will depend upon the configuration of the component or assembly to be worked on. Usually, a leveling jack is placed under each corner of the component and alignment is obtained by turning the adjusting screw, causing the inclined face of one-half the leveling jack to travel along the inclined face of the other half, which raises or lowers the height of the jack. This eliminates the use of wedges and shims and reduces the amount of handling of the workpiece.

(continued overleaf)

Note:

Inquiries concerning this innovation may be directed to:

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Reference: B66-10411

Patent status:

No patent action is contemplated by NASA.

Source: W. Dellenbaugh and C. Jones
of North American Aviation, Inc.
under contract to
Marshall Space Flight Center
(M-FS-1084)