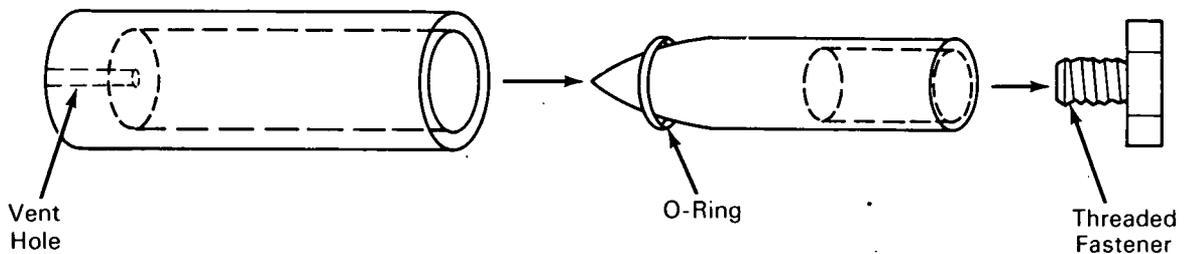


# NASA TECH BRIEF



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## Low-Cost Tool Minimizes Damage To O-Rings During Installation



**The problem:** To install O-rings over threaded fasteners without damaging the sealing characteristics of the O-ring. When an O-ring is forced over threads by hand, they may cut or gouge the ring and impair its reliability as a seal.

**The solution:** A tapered cylindrical tool which fits over the threaded fastener and allows the O-ring to be pushed along a smooth surface while being installed. This tool has a simple configuration and costs little to make or use.

**How it's done:** The O-ring is placed over the tapered end of the cylindrical tool and the threaded fastener is inserted in the base of the cylinder. The O-ring is then pushed along the shaft of the tool either by finger pressure or through the use of a second cylinder

whose inner diameter is slightly larger than that of the tapered tool. The pushing cylinder is vented at the top to prevent the buildup of air pressure in its cavity.

**Note:**

Inquiries concerning this innovation may be directed to:

Technology Utilization Officer  
 Manned Spacecraft Center  
 Box 1537  
 Houston, Texas, 77001  
 Reference: B65-10116

**Patent status:** NASA encourages commercial use of this innovation. No patent action is contemplated.

Source: North American Aviation, Inc.  
 under contract to Manned Spacecraft Center  
 (MSC-140)

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