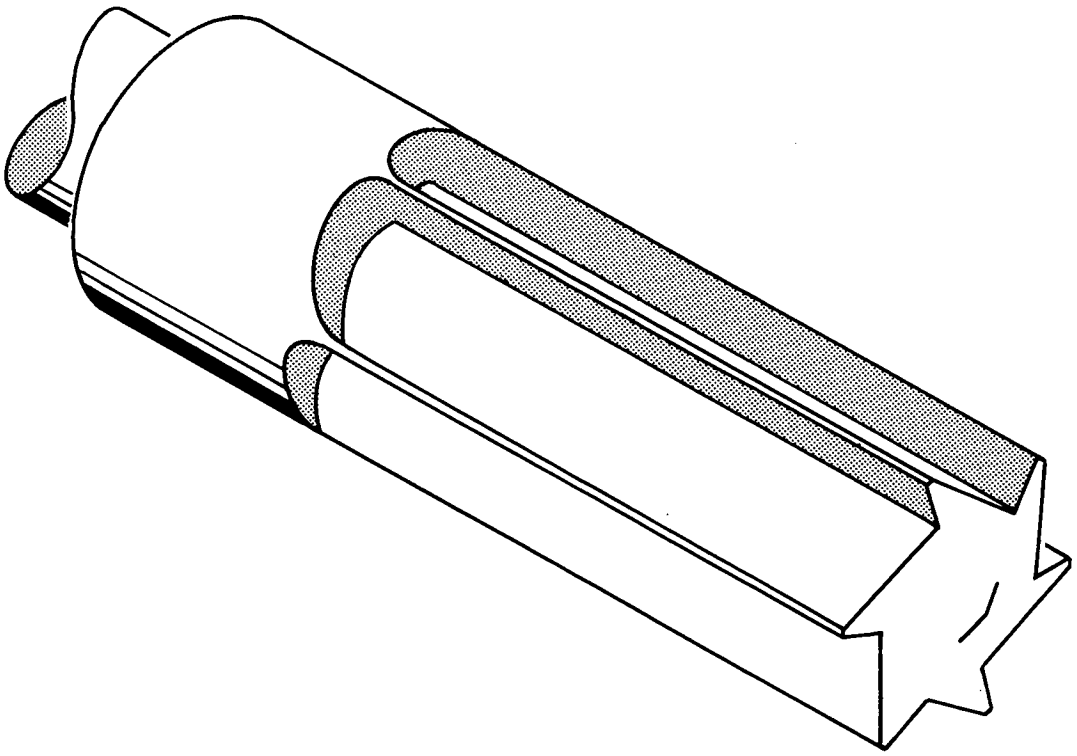
NASA TECH BRIEF

Nylon Bit Removes Cork Insulation without Damage to Substrate



The problem:

To remove small quantities of cork insulation from a metal or fiberglass surface without cutting or scratching the surface. Present methods use metal knives and drills, or sanding devices that can cut into or scratch the underlying surface.

The solution:

A nylon router bit used in an electric hand-held drill. The bit is hard enough to cut through cork, but not hard enough to damage metal or fiberglass surfaces.

How it's done:

A router bit is machined from a block of nylon stock to the configuration of a conventional steel router bit and is used in a standard hand drill to remove the cork.

Notes:

1. The nylon router works efficiently at speeds of 800 to 1200 rpm but tends to wear rapidly at higher speeds.
2. The cutting faces of the bit are easily restored with a sharp knife or razor blade.

(continued overleaf)

3. For removing unusually shaped areas, a wooden template may be fastened to the cork surface, and the nylon router used to remove all the cork inside the template.
4. Inquiries concerning this invention may be directed to:

   Technology Utilization Officer
   Manned Spacecraft Center
   Houston, Texas, 77001
   Reference: B66-10152

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: James C. Crandall
of North American Aviation, Inc.
under contract to
Manned Spacecraft Center
(MSC-381)