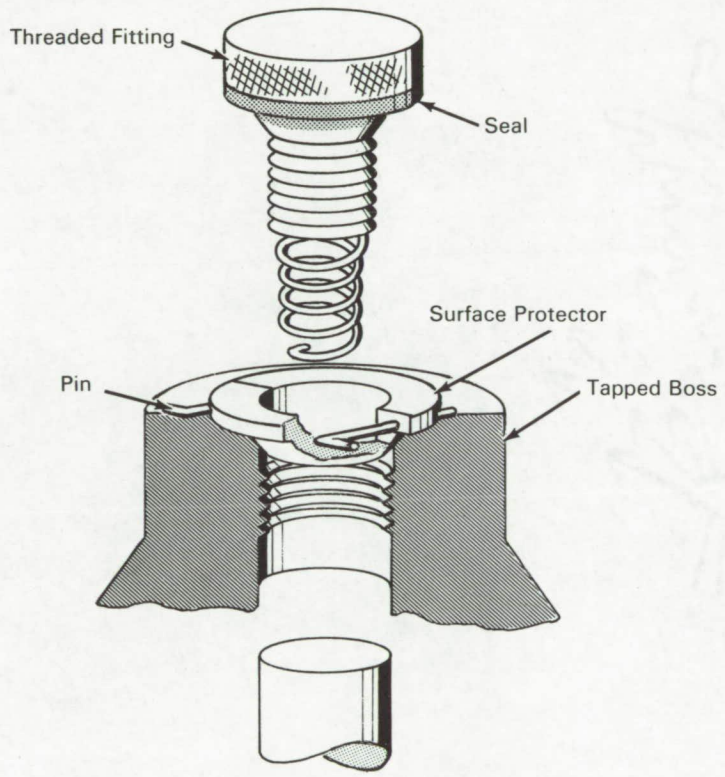
NASA TECH BRIEF

Seal Surfaces Protected During Assembly



The problem:

Seal surfaces at the entrances of tapped bosses are highly polished and easily damaged if sharply contacted during installation of close fitting, spring loaded, threaded fittings.

The solution:

A surface protection device that is placed over the polished surface and then removed when the fitting has been engaged with the boss threads.

How it's done:

A split seal surface protector fits over the chamfered portion of the boss while the threaded male fitting is inserted against spring tension into the tapped boss. When several threads have become engaged, the surface protector is withdrawn by pulling its attaching pins and removing the two separated halves. The male fitting is then torqued as required to effect the seal.

(continued overleaf)

Notes:

1. Although the sketch depicts an application involving a K-seal surface, the technique lends itself to a variety of seal types.
2. Inquiries concerning this innovation may be directed to:

   Technology Utilization Officer
   AEC-NASA Space Nuclear Propulsion Office
   U.S. Atomic Energy Commission
   Washington, D.C. 20545
   Reference: B66-10266

Patent status:

No patent action is contemplated by NASA.

Source: G. L. Richardson
of Aerojet-General Corporation
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