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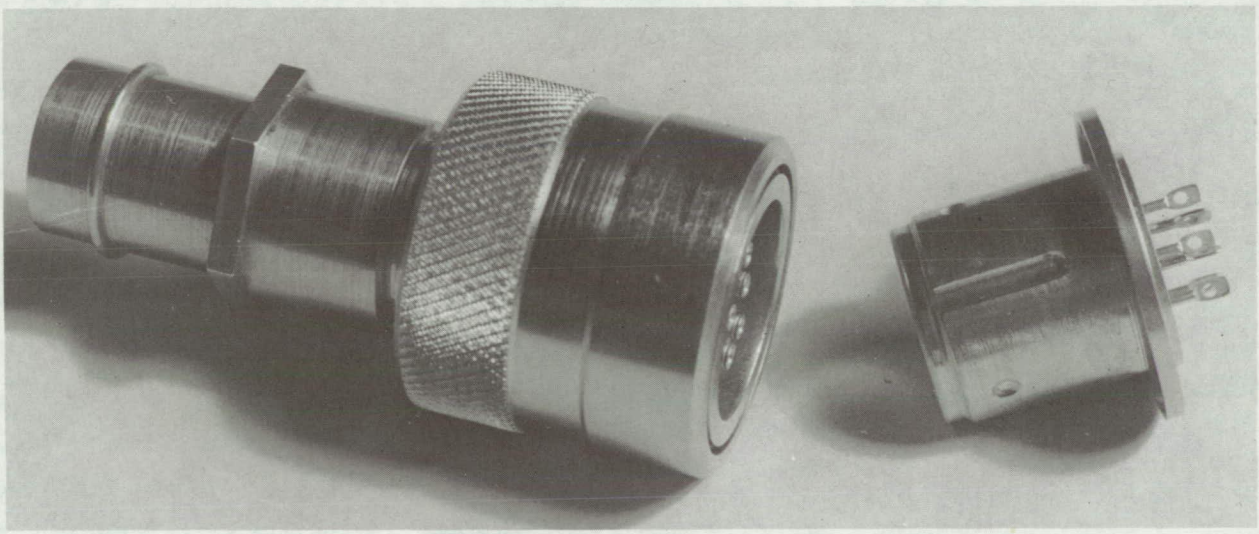
Brief 70-10109

NASA TECH BRIEF

Improved Quick-Disconnect Electrical Connector



This connector has several new and unusual features. The connector receptacle is fitted with an "O" ring that provides a moisture-proof seal when the connector is in the lock position. The connector is shielded in both the mated and unmated positions. For locking, the connector is equipped with one keying and three locking spheres, reducing manufacturing costs as compared to the costs of the conventional keyway lock connector.

To assemble the connector in the mated position, the male plug is fitted to the receptacle with the keying sphere aligned with the receptacle slot. When the connection is made, the locking spheres seat in the receptacle indentations, allowing the collar to slide forward, depressing the locking spheres in the locked position. The connector is unlocked by sliding the locking collar back (away from the joint), allowing the spring-loaded locking spheres to free the receptacle half of the connector.

Note:

No further documentation is available. Specific questions, however, may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B70-10109

(continued overleaf)

Patent status:

No patent action is contemplated by NASA.

Source: Robert F. Horton
Marshall Space Flight Center
(MFS-20610)