### MILITARY | F-15 ARI & PRCA

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# **F-15** ARI & PRCA RELIABILITY UPGRADE

Moog recently developed and qualified a number of reliability upgrades for the F-15 Pitch & Roll Channel Assembly (PRCA) and Aileron Rudder Interconnect (ARI). Moog is the original design authority for the F-15 PRCA & ARI and offers these USAF approved upgrades to improve system reliability and extend Mean Time Between Failure (MTBF), thereby allowing parts to stay on wing longer. The upgrades include material changes to the piston and glands, along with the use of improved seals. These changes improve the system reliability by minimizing wear and leakage, and reduce subsequent maintenance activities by eliminating hard anodizing which is more prone to chipping. These upgrades can be installed at the Depot (D) level, with upgrade kits available exclusively through Moog.

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### RELIABILITY UPGRADE HIGHLIGHTS

#### Improved Piston Coatings

- Utilizes a Tungsten Carbide/Cobalt/Chrome coating applied using the HVOF process for a much harder, more durable surface
- Designed for extended life, which increases MTBF and reduces life cycle costs

#### Enhanced Seals & Glands

- New Aluminum Nickel Bronze seal glands, designed to prevent fatigue failure
- Eliminates need for hard anodizing on seal glands which is more prone to chipping and subsequent leakage
- Static and Dynamic Turcon seals to allow for better wear on the HVOF coated surface



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Pitch and Roll Channel Assembly



Aileron Rudder Interconnect



## MOOG CONTENT ON F-15 CONFIGURATION DETAILS

Description	Configuration	Moog P/N	NSN
Pitch & Roll Channel Assembly (PRCA)	Original PRCA	010-63055-23* 010-63055-24 A71500-5	N/A 1650-01-446-2029 1650-01-446-0599
	Reliability Upgrade	010-63055-27* 010-63055-28 A71500-007	TBD TBD TBD
	Reliability Upgrade Kit	CC12023-001	TBD
Aileron Rudder Interconnect (ARI)	Original ARI	010-63058-19	1650-01-050-3491
	Reliability Upgrade	010-63058-021	TBD
	Reliability Upgrade Kit	CC12024-001	TBD

\*Japanese variant



