

ES3013 RB211 Mk. III LOC Moog valve retrofit

Replace obsolete component and increase lube oil system reliability



Engineered solution purpose

This engineered solution improves the availability and reliability of the gas generator Lube Oil Console (LOC) system.

Applicability

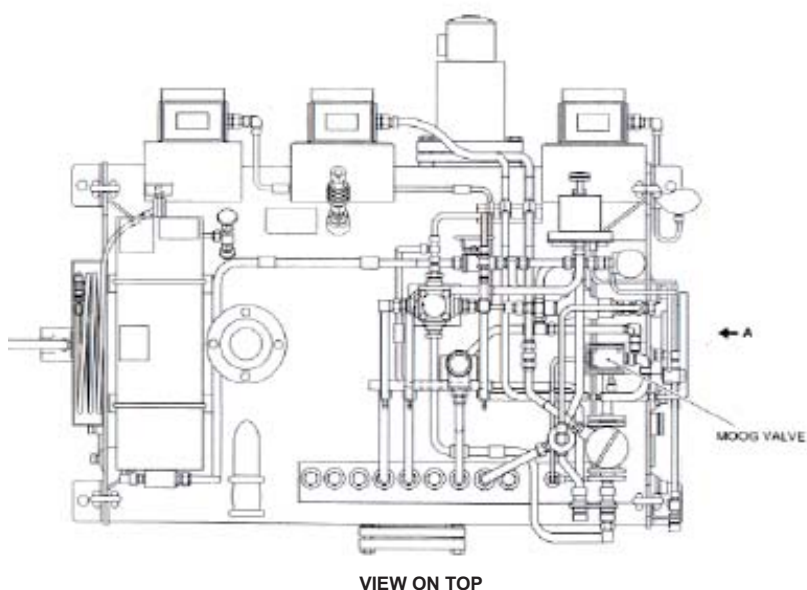
All RB211 gas generator Mk. III LOCs with Pegasus valve installed

Technical description

The Pegasus flow scheduling valve on the Mk. III LOC is replaced with the proven Moog valve and electrical harness. The oil flow is scheduled against engine speed (N1). If the Pegasus valve sticks, this causes scheduling errors that result in a unit shut down due to the mismatch between the demanded flow and the actual flow. The Moog valve eliminates the seizure and flow scheduling problems associated with the Pegasus valve.

Benefits

Both the reliability and performance of the LOC are improved by this retrofit with all shutdowns previously relating to the Pegasus valve being eliminated. The LOC is brought to the current build standard by the removal of the now-obsolete Pegasus valve.



VIEW ON TOP

Lube Oil Console (LOC)

Experience

All RB211-24G units have a Moog valve fitted as part of the closed loop Variable Inlet Guide Vane system. The valve has proven to be extremely reliable with over 4.5 million operating hours accumulated. Based on this successful experience, the Moog valve was introduced as a replacement for the Pegasus valve on the Mk III LOC.

Mk. III Moog valve retrofits have been carried out for:

TCPL

Saudi Aramco

BP North Sea

EPMI

Scope of work

Replace the Pegasus valve with the Moog valve

Modify control system

Bill of materials

Moog valve (Mod 3686)

Control system modification or replacement

Wiring

Undertaken

At site

Bundling opportunities

Controls upgrade [ES3006]

Instrumentation upgrade [ES3007]