

ES3005 RB211 IP compressor life improvement package

Increase the life and reliability of your IP compressor



Engineered solution purpose

This engineered solution is designed to increase the life and reliability of the RB211 Intermediate Pressure [IP] compressor.

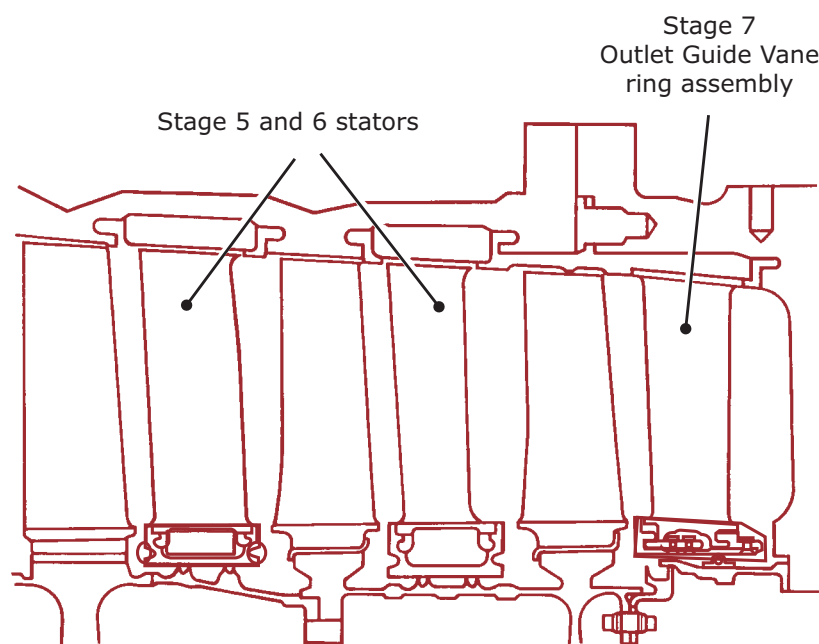
Applicability

All RB211 except for the latest -24G and 24GT engines.

Technical description

The stator vanes are located in a carrier ring which itself is mounted into the compressor casing. The carrier ring is filled with a rubber compound specifically designed to dampen occurrences of aerodynamic excitation. Stages 5, 6 and 7 of the stator assemblies can be susceptible to fretting as a result of deterioration of the rubber compound. This can lead to break up of stator assemblies and secondary damage to the gas generator and power turbine.

Modifications 1159, 1205 and 1249 have reduced fretting by the introduction of more wear resistant materials. The stage 7 stator has also been redesigned to reduce the wear loads.



Benefits

This improvement package increases the life and reliability of the IP compressor. Overhaul costs can be reduced due to any potential replacement of the stator assembly due to fretting being eliminated.

Experience

The modification included in this package have accumulated in excess of 1.5 million hours experience operating in over 100 engines.

Scope of work

Rework or replace stage 5 and 6 stator assemblies

Bill of materials

Stage 5 assembly (Mod 1205)
Stage 6 assembly (Mod 1159)
Stage 7 assembly (Mod 1249)

Undertaken

At overhaul

Bundling opportunities

RB211 closed loop VIGV control upgrade [ES3009]
RB211 VIGV transducer upgrade [ES3010]