

## CF34-8 Fuel Nozzle and CF34 Electrical Harness Repair

### Repair Highlights

- + Accessories and Components (A&C) provides overhaul solutions, increasing yield and helping operators avoid the need to purchase high cost replacement fuel nozzles and harnesses

### GE CF34 Overview

The GE CF34 engine first entered service in 1995 and now dominates power plants for the regional jet market. A derivative of the combat-proven TF34 powering the US Air Force A-10 and US Navy S-3A, the CF34 has evolved into a durable commercial engine, delivering both high performance and reliability.

### Fuel Nozzle Performance

Aero engine fuel nozzles play a vital role in the safe and reliable operation of modern aero engines. Air blast, pressure atomizing and direct injection technologies ensure turbine engine performance is optimized to improve efficiency and reduce emissions. To maintain this level of performance; operators require support from specialist service providers with the capability to clean, test, overhaul and calibrate these complex components.

### In-service Degradation

CF34-8 fuel nozzles are robust components providing many years of reliable service, however they are subject to a hostile environment including thermal cycling, contamination, erosion, crack defects, wear and handling damage.

### Overhaul Solution

Over time fuel nozzle performance deteriorates requiring intervention and remedial action, either on wing or during routine engine maintenance intervals. EthosEnergy Accessories and Components offers a comprehensive solution to operators including:

- + Clean, test and inspect
- + Full overhaul in accordance with CMM
- + Extended DER repairs in development
- + Exchange nozzle service

### Extended Repair Development

EthosEnergy Accessories and Components' Duncan, South Carolina Repair Station supports the global aviation industry with repair services backed by OEM and regulatory approval. Our experienced engineers have successfully implemented repair schemes to improve yield during the repair cycle, helping operators save time and avoid the need to purchase high cost replacement fuel nozzles. They also have the capable of fault diagnosis and full repair development, including reverse engineering and DER repairs.



# Energy

## Harness Degradation

Harness assemblies on the CF34 are robust units providing many years of reliable service, however they are subject to hostile environments including, wind turbulence, temperature variation, vibration, contamination and handling damage.

## Repair Solution

Fault finding unserviceable CF34 harnesses is very time consuming and premature failure could result in the need to purchase high cost replacement parts. A&C offers an alternative solution to operators by providing a comprehensive repair service including:

- + Replacement electrical connectors
- + Full testing and certification
- + Rewiring of damaged harnesses
- + Exchange harness service
- + Replacement of protective braiding



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