

## CFM56 Thermocouple and Wiring Harness Repair and Overhaul

### Repair Solution

Fault finding unserviceable CFM56 components is time consuming and premature failure could result in the need to purchase high cost replacement parts. EthosEnergy offers an alternative solution to operators by providing a comprehensive repair service including:

- + Replacement of damaged probes
- + Junction box repairs
- + Replacement electrical connectors, braiding and wire
- + Full testing and certification
- + Exchanges thermocouple assemblies

EthosEnergy provides a one-stop-shop for OEM approved thermocouples and wiring harness repairs, providing near 100% yield and avoiding high cost replacement parts.

### Significant Cost Benefits through DER Repairs

EthosEnergy in Duncan, South Carolina supports the global aviation industry with repair services backed by OEM and regulatory approval. DER repairs developed for CFM56 wiring harnesses go beyond those defined within the CMM, improving yield and generating significant savings for operators. As a result most units can be repaired at a fraction of OEM repair/replacement cost, saving time and avoiding the need to purchase brand new assemblies.

### CFMI CFM56 Overview

The CFM56 family has 35 years heritage of delivering reliable aero engines. This successful partnership between GE and Snecma (SAFRAN) powers over 10,000 aircraft, with in excess of 24,000 engines in the fleet. This well-deserved reputation equally applies to the many sub-systems required for successful engine operation including harnesses, sensors and probes required for temperature indication.

### Harness and Thermocouple Degradation

Thermocouple and Wiring Harnesses on the CFM56 are very robust units providing many years of reliable service; however they are subject to hostile environments including exposure to the hot gas path, temperature variation, vibration, contamination, corrosion and erosion.



Engine Model	Thermocouple	Wiring Harness
	OEM Repair / Overhaul	OEM Repair / Overhaul
CFMI - CFM56-2	X	X
CFMI - CFM56-3	X	X
CFMI - CFM56-5A	X	X
CFMI - CFM56-5B	X	X
CFMI - CFM56-5C	X	X
CFMI - CFM56-7B	X	X

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