

## PW4000 Fuel Injector & Support

### Repair Highlights

- + EthosEnergy Accessories & Components provides Pratt & Whitney source approved repairs for End Cap and Swirler replacement, helping operators to avoid purchasing high cost replacement fuel nozzles.

### 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

PW4000 air blast fuel injectors 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.

### Repair Solution

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

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

### Extended Repair Development

EthosEnergy Accessories and & Components supports the global aviation industry with repair services backed by OEM and regulatory approval. Our experienced engineers have successfully implemented CMM approved repair schemes to improve yield during the repair cycle, helping operators save time and avoid the need to purchase high cost replacement fuel nozzles. Since 1994 we have repaired in excess of 30,000 fuel nozzles, performing complex Pratt and Whitney source approved repairs including End Cap and Swirler replacement.



Typical Part Numbers	Repair Number	Repair Description
50J463 50J482 51J252 51J253	01	Remove strainer/metering plug
	02	Restore mounting flange
	03	Repair inlet fitting
	04	Weld repair fairing
	05	End cap heat shield replacement
	06	Hard face coating replacement
	07	Swirler replacement
	08	Weld repair swirler cracks
	09	Replace inlet fitting

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