



# TEI-PD170

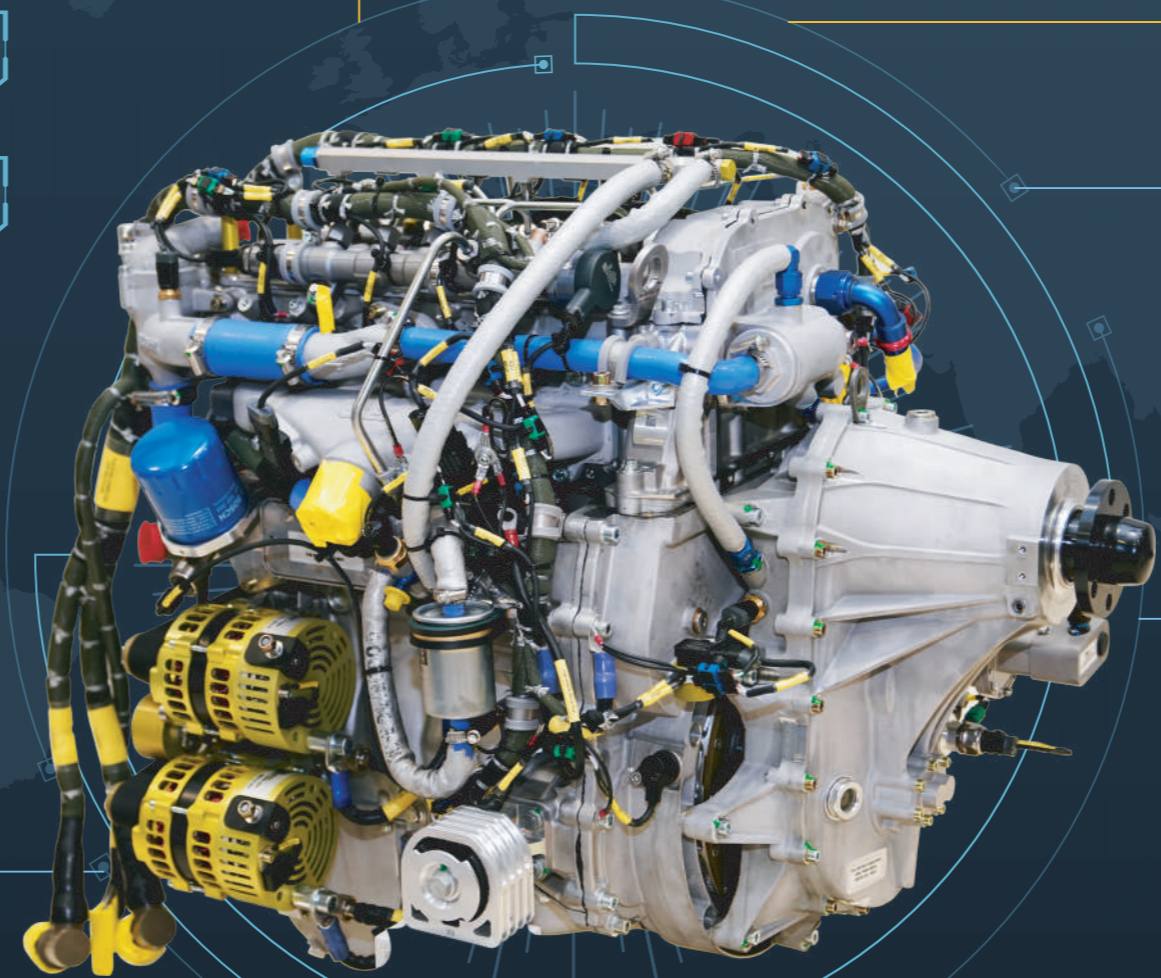
TURBODIESEL AVIATION ENGINE



# TEI-PD170

## TURBODIESEL AVIATION ENGINE

The serial production turbodiesel engine **TEI-PD170** with a world record altitude of 45,000 feet



**Maiden Flight with ANKA;**  
27 December 2018

**Displacement**  
2.1 lt

**Engine Configuration**  
Straight 4 Cylinder

**Fuel Supply**  
Common Rail Diesel Injection

**Air Induction**  
Two-Stage Turbocharging

**Maximum Power**  
(@2,300 propeller RPM)  
172 HP (±2)

**Dry Weight**  
162 kg

**Engine Cooling**  
Water Cooled

**Material**  
Aluminium Block and Cylinder Head

**Fuel Options**  
JP-8 or Jet -A1

**BSFC (@MSL)**  
207 g/kWh (±3)

**Electrical Power**  
9 kW (2x4.5 kW)

**Critical Altitude**  
20,000 + feet

**Maximum Altitude**  
45,000 feet

**Propeller Control**  
ECU Controlled Hydromechanical (Single Lever)

**Aircraft Configuration**  
Tractor or Pusher Compatible

**Engine Control**  
Redundant ECU (FADEC)

**FADEC Software**  
DO-178C DAL-C Certifiable

**Alternator Control**  
DO-178C DAL-C Certifiable

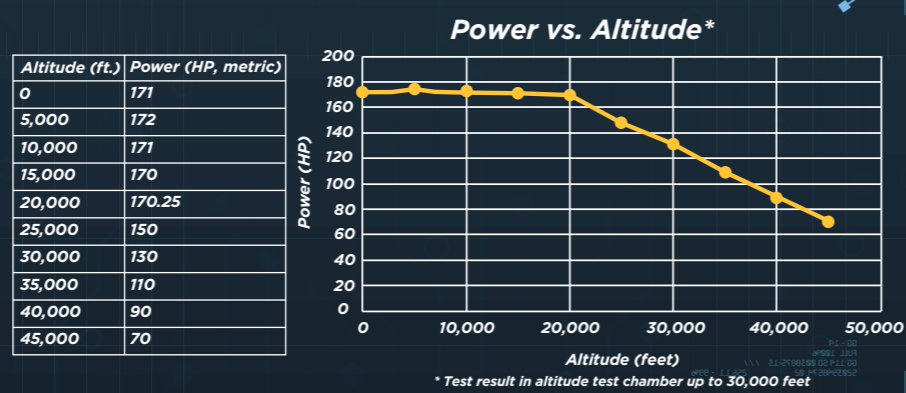
### TECHNICAL SPECIFICATIONS

### ADVANTAGES OF THE TEI-PD170

- High Power/Weight ratio
- Superior high altitude capability
- Less fuel consumption
- Compact design
- Approximately 100% localized part
- 3,600 hours engine lifetime

### OTHER HIGHLIGHTS

- Turbodiesel aviation engine designed for medium altitude long endurance (MALE) unmanned aerial vehicles
- Engine is certifiable according to civil aviation engine specifications
- FADEC is compliant with MIL-STD-461F, MIL-STD-704F, MIL-STD-810G
- Reconfigurable engine control system software and hardware (developed by TEI)
- Power increase potential up to 220+ HP
- Engine is designed and validated according to EASA CS-E





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