



TEI-PD170

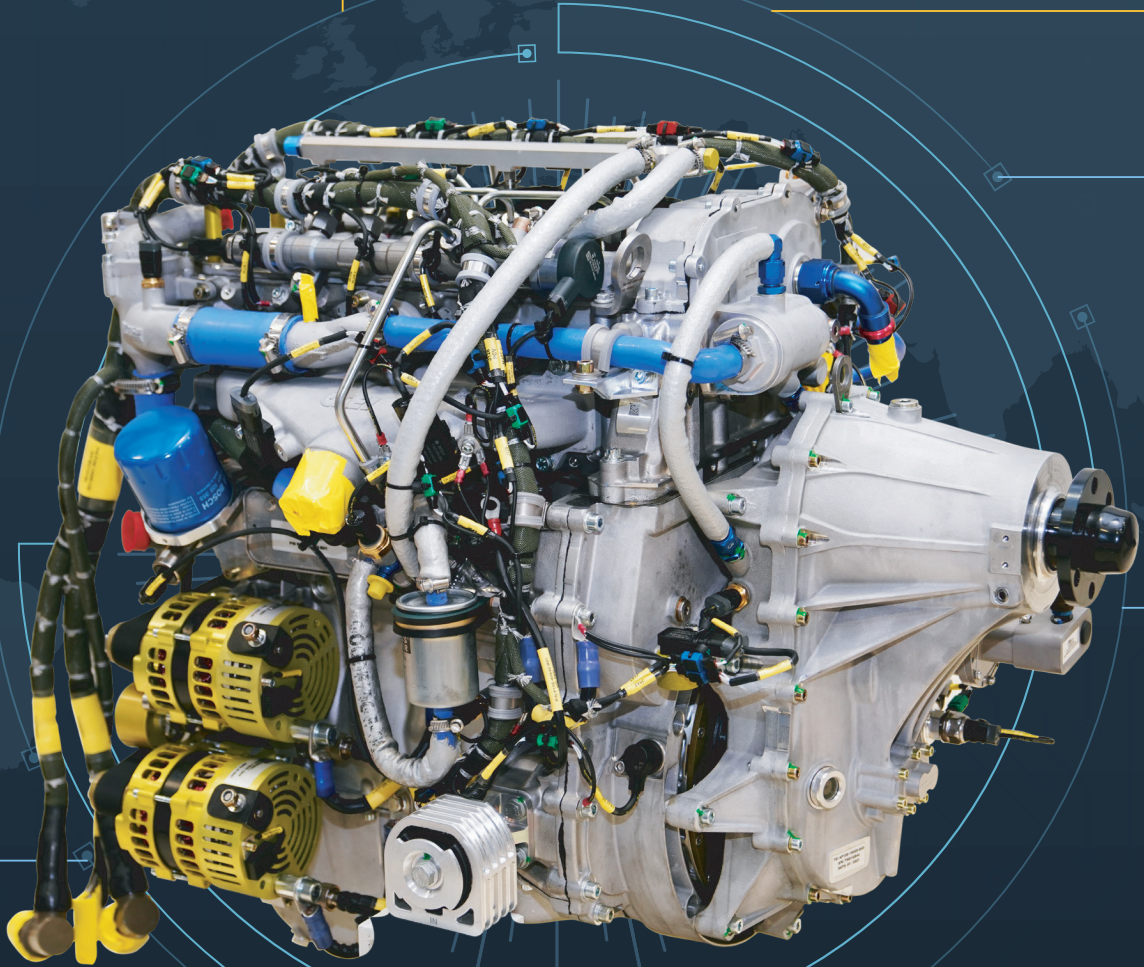
TURBODIESEL AVIATION ENGINE



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

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

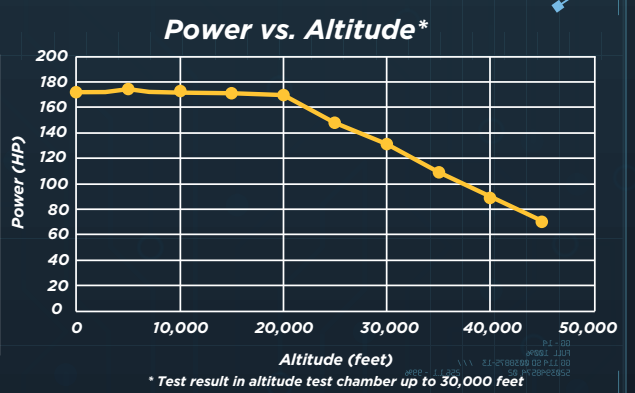
- Turbodiesel aviation engine designed for medium altitude long endurance (MALE) unmanned aerial vehicles
- Engine is certifiable according to civil aviation engine specifications
- FADEC is compliant with MIL-STD-461F, MIL-STD-704F, MIL-STD-810G
- Reconfigurable engine control system software and hardware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

- max** 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

- 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**

Altitude (ft.)	Power (HP, metric)
0	171
5,000	172
10,000	171
15,000	170
20,000	170.25
25,000	150
30,000	130
35,000	110
40,000	90
45,000	70





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