



*High Performance Aircraft Engines*

**The Trace V-8 Engine is Here**



**The world's most affordable and advanced high-power reciprocating engine gives you turbine performance without the cost of moving to and maintaining turboprop power**

We've waited a long time for a modern, cost effective reciprocating engine.

The Aviation world finally has a **POWER** choice!

Displacement: 495 cubic inches  
Bore: 4.433"  
Stroke: 4.000"  
Dimensions: 59.5"(l) x 32" (w) x 32.5" (h)  
Dry Weight With Accessories: 750 lbs.  
Compression Ratio: 8:1  
Fuel Consumption: 0.44 lbs./HP/hr  
Fuel Grade: 100 LL  
Max. Crankshaft Speed: 4,400 RPM  
Reduction Gearbox: 0.4675:1  
Power Output: 600 HP max. takeoff;  
500 HP max. continuous

The result of installing the TRACE engine will typically provide the following:

- Improved performance (speed, range, safety)
- Increased gross weight (improved payload)
- Significantly reduced cost (acquisition and operation)

Stay tuned to our website as we document our **Trace Engine Installation** taking place in March 2007 on an AT401



**"We're There to Keep You in the Air"**

**1.800.776.4656**

## The Engine

The Trace V-8 engine represents an evolution that is changing the way the aviation world chooses power. Trace has re-engineered the concept of liquid-cooled, high output V-8 engines, in turbocharged version, for a variety of aircraft.

This engine is designed to specifically address the aviation industry's immediate requirement for a modern, cost effective reciprocating engine. It delivers unprecedented reliability and cost effectiveness.

**Certified Performance:** The engine is fully certified and ready for production to support the existing worldwide demand. No other in-production reciprocating engine certified by the FAA and Transport Canada are capable of producing 600 horsepower.

**Liquid-Cooled Reliability:** Maintaining constant operating temperatures throughout typical flight cycles allows for longer engine life. Liquid cooling also allows an aerodynamically clean and compact installation. Pilots can expect to see increased climb rates, and improved performance at altitude. Why? While a turbine engine displays constant power degradation as altitude increases, the turbocharged Trace V-8s maintain cruise power all the way up to 25,000 ft. An equivalent turboprop would have to be rated as much as 1,000 horsepower at sea level in order to match the Trace output at altitude.

**Maximum Durability:** The heart of the Trace engine is its modern V-8 block, which incorporates six-bolt mains and cast iron cylinder sleeves.

**Rational Economics:** The Trace V8 with an output of 600 horsepower extends the affordable range without the cost of moving up to turboprop power. The Orenda engine offers operators the opportunity to slash powerplant capital costs by as much as 50% and reduce operating costs by 30% over existing turbine options. The Trace produces more power than any other recip, which permits increased payloads, productivity and reliability. In addition, low life cycle costs contribute to a significant payback on investment over other alternatives. Combining the output of a turbine and the cost of a recip engine satisfies the market with a certified solution.

The TRACE engine is certified on the Air Tractor 401/402 and the deHavilland DHC-3 Otter. Phoenix Aero Aviation Group of Mississauga, Canada has immediately begun work on TRACE OE600 engine STC retro-fit programs for the DHC-2 Beaver, Air Tractor 300 and 500 series aircraft, Ayres Thrush S2R and the Ag-Cat aircraft and will market their kits to operators worldwide. Current OEM aircraft applications include the Rhino Utility aircraft and the Chinese N5B Agricultural Aircraft. The engine is applicable to 40,000 potential retrofit aircraft where no feasible alternative exists. Other retrofit programs currently underway include the King Air C90.

### Orthogonally Opposed

### 8-Cylinder Reciprocating Engine

### Fuel-Injected

### Liquid-Cooled

How about the numbers?

We have an analysis prepared of the Trace to the Walter. Interested?

Email us or call us toll free—we'll get it to you!