

Superior Launches 100 hp Diesel Engine

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Superior Air Parts is taking direct aim at the market turf dominated by the Rotax 912 series piston engine with a 100 horsepower compression ignition diesel for experimental and light-sport aircraft called the Gemini 100.

The engine is a unique design adopted from a British-born aero diesel that's been in development for more than a decade by a now-defunct company called Powerplant Developments. The ultra simplistic configuration features six horizontally opposed pistons housed in three cylinders, each sharing a common fuel injector and glow plug.

Intended as a bolt-on replacement for the Rotax 912, the two-stroke, supercharged liquid-cooled engine weighs about 200 pounds (20 pounds heavier than the Rotax engine) with a projected 4.5 gallon an hour fuel burn at 75 percent power (running at 4,000 rpm with a reduction gear to 2,100 rpm at the prop).

Featuring a cast aluminum block and iron piston sleeves, the engines will be produced at Superior's headquarters in Dallas.

Superior says the engine will be just the first in a family of diesel products all the way to 550 horsepower for new OEM airplanes and aftermarket applications. The company, best known as a maker of piston engine replacement parts, will start shipping prototype engines to OEMs in the next 60 to 90 days for inflight testing ahead of the Gemini 100's formal market introduction early next year.

Superior plans to offer the Gemini 100 first for the experimental market, followed by ASTM approval for LSAs and finally Part 33 certification if a large enough OEM market emerges. TBO is projected to be 2,000 hours.

Price for the aftermarket version of the Gemini 100 is targeted at around \$25,000, Superior says.