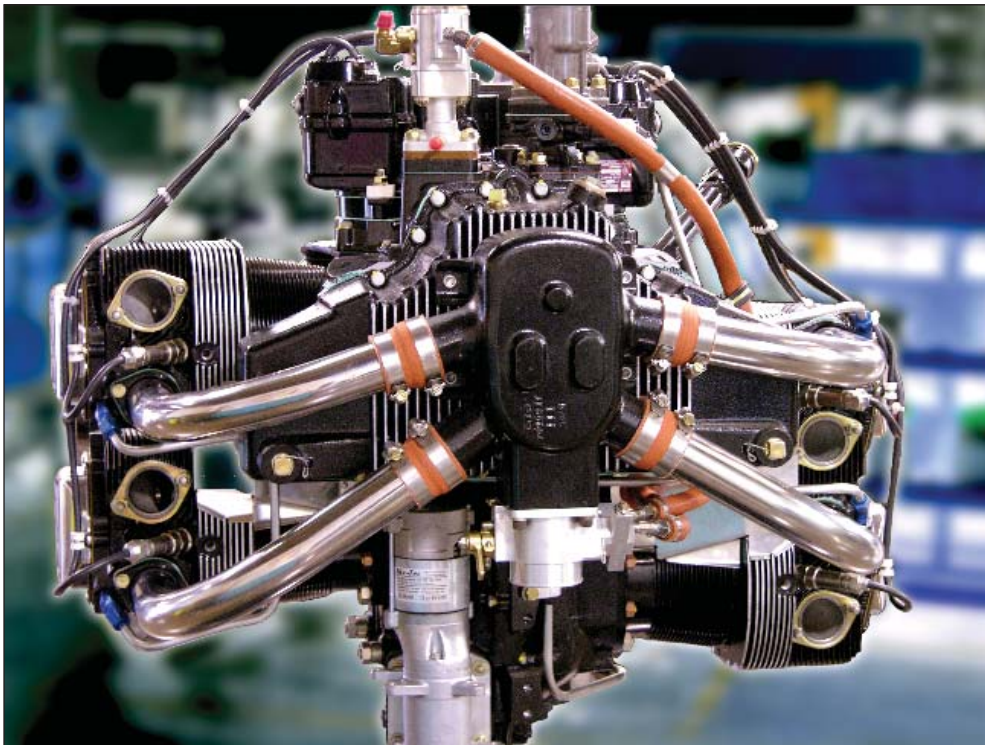




*ECi Experimental Products*



# COLD INDUCTION SYSTEM



**RELIABILITY**  
**REDUCED WEIGHT**  
**INCREASED POWER**  
**FUEL ECONOMY**  
**AFFORDABILITY**

# TITAN

# EXP

ECi Experimental Products



## Cold Air Induction System

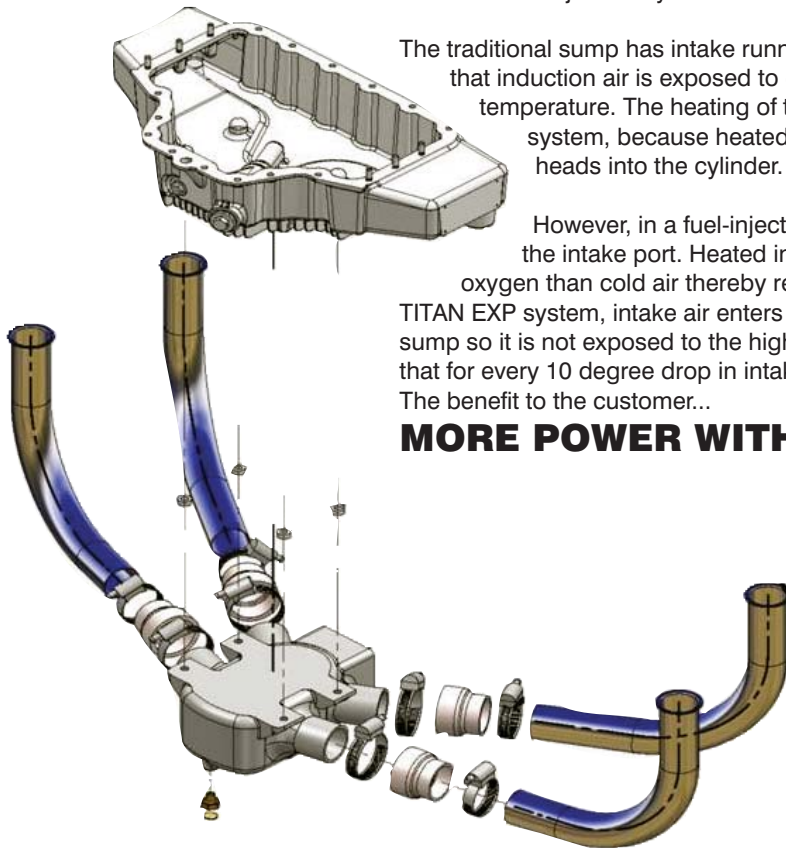
Change is in the air at ECi®, with the introduction of the new TITAN® EXP™ Cold Air Induction System, to be used on four-cylinder Lycoming type engines. This innovative system has all the features a pilot wants—reliability, reduced weight, increased power, fuel economy and affordability.

After considerable research in an effort to design the most technological advanced system at an affordable price, Airmotive Engineering Corporation (AE) engineers chose to use magnesium, a lightweight metal that offered a 30% weight savings over the typical aluminum used to cast sumps. Furthermore, the latest magnesium alloys offer corrosion resistance that earlier aircraft alloys did not have. With the new information in-hand, engineers designed a magnesium sump and plenum, configured for a front-mounted fuel injection system that the aviation market is looking for.

The traditional sump has intake runners cast into the pan area of the sump so that induction air is exposed to elevated temperatures equal to the engine oil temperature. The heating of the induction air is beneficial for a carbureted fuel system, because heated air helps to keep the fuel/air mixture atomized as it heads into the cylinder.

However, in a fuel-injected engine, the fuel charge is sprayed directly into the intake port. Heated intake air is undesirable because it carries less oxygen than cold air thereby reducing horsepower to less than optimum. With the TITAN EXP system, intake air enters through a plenum that is mounted beneath the oil sump so it is not exposed to the high temperature of the engine oil. Studies have found that for every 10 degree drop in intake air temperature there is a 1% gain in power—The benefit to the customer...

**MORE POWER WITH LESS FUEL.**



### Parts & Components Included in the Cold Induction System:

- Magnesium Oil Sump (finned or non-finned)
- Magnesium Plenum
- Stainless Steel Intake Pipes
- Intake Pipe Hoses
- Drain Valve
- All Installation Hardware

For more info, contact ECi at  
**1-800-ECi-2FLY**  
(800-324-2359)  
**www.eci.aero**  
e-mail: sales-service@eci.aero



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ECi is recognized for Quality Management System Compliance to ISO 9001:2000

Federal Aviation Administration Joint Aviation Authorities JAR-145 Acceptance Certified JAA/MAINT/A 10/93-L530

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