



**NEW AIRCRAFT CYLINDER ASSEMBLIES**  
**Parallel Valve 320/360/540 Series**  
**NEW HEAD - NEW BARREL - NEW PRODUCT**  
 Manufactured to Higher Standards for Extreme Durability

◆ **Exclusive features not found on OEM or other PMA cylinders.**

**Casting Surface Texture**  
 Efficient cylinder head cooling — minimizes valve sticking and cylinder head cracking.

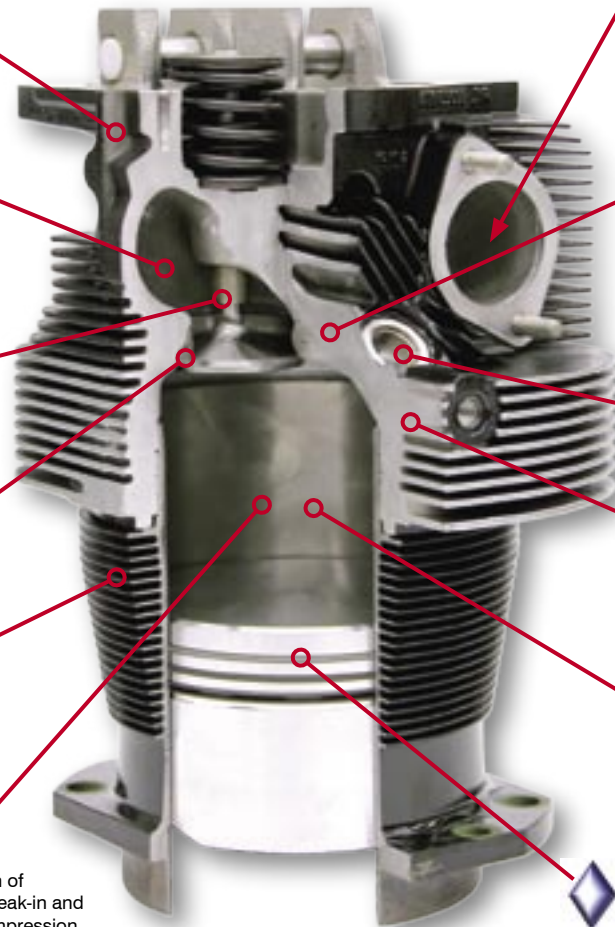
**Calibrated Intake Port**  
 Use of a calibrated flow bench during manufacturing is standard procedure for all TITAN cylinders - assures engine performance.

◆ **Tru-Bore™ Valve Guides**  
 Precision finished valve guides — reduces unscheduled maintenance costs.

◆ **Venturi Intake Seat**  
 Creates improved air flow and more horsepower.

◆ **Tapered Barrel Fins**  
 Allows proper cooling while reducing cylinder weight by 1.21 pounds.

◆ **Plateau Bore Finish**  
 A 2-step honing process creates a finish of plateaus and valleys essential to ring break-in and lubrication of the ECi moly-filled top compression ring and bore system.



**High-Chrome Cast Iron Exhaust Valve Guides**  
 Improved wear resistance helps maintain good cylinder compression ratios and peak horse power output during the life of the engine.

◆ **Increased Critical Wall Thickness**  
 Increased thickness in the Combustion Dome and thread region. The right amount of metal in the right place — no better cylinder is on the market today.

◆ **Optional 14mm Spark Plug**  
 Allows for installation of experimental electronic ignition systems.

**Shell Molded Casting**  
 A manufacturing process that produces dimensional accuracy and improved metallurgical properties.

◆ **Nickel+Carbide™ Bore Coating**  
 Warranted against premature wear and corrosion for sixty (60) months - no other cylinder bore carries a warranty of this magnitude.\*

◆ **Moly-filled Top Compression Ring**  
 Scuff resistant and self-lubricating - easy break-in, longer ring life, less bore wear.

◆ ECi warrants each Nickel+Carbide™ Cylinder Bore to remain free of corrosion and wear up to **5 years** following date of first operation. **No other cylinder manufacturer offers a warranty against corrosion.**

**TITAN® EXP™ Parallel Cylinder Complete Assemblies**

| 320 Series       |                  |                  | 360/540 Series   |                  |                  |
|------------------|------------------|------------------|------------------|------------------|------------------|
| w/Piston (7.2:1) | w/Piston (8.5:1) | w/Piston (9.0:1) | w/Piston (7.2:1) | w/Piston (8.5:1) | w/Piston (9.0:1) |
| TISN04.0X18CA    | TISN04.1X18CA    | TISN04.3X18CA    | TISN12.0X18CA    | TISN12.2X18CA    | TISN12.3X18CA    |
| TISN04.0X14CA    | TISN04.1X14CA    | TISN04.3X14CA    | TISN12.0X14CA    | TISN12.2X14CA    | TISN12.3X14CA    |
| TISN04.0X11CA    | TISN04.1X11CA    | TISN04.3X11CA    | TISN12.0X11CA    | TISN12.2X11CA    | TISN12.3X11CA    |

Suffix (top/bottom spark plug boss configuration): 18=18/18 (standard); 14=14/14mm; 11=14/18mm

TITAN® EXP™ Cylinder  installed.

**For more information, please refer to Technical Data Sheet (TDS) 06-02, TITAN EXP Parallel Valve Tapered Fin Cylinder Complete Assembly at [www.eci.aero/exp](http://www.eci.aero/exp).**

**ECi ENGINE COMPONENTS, INC.**

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 ECi is recognized for Quality Management System Registration to ISO 9001:2000.  
 FAA Joint Aviation Authorities JAR-145 Acceptance Certified JAA/MAINT/A 10/93-L530. ©2008 ECi. M254 (05/02/08)

**ECi SALES HOTLINE**  
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**For a complete list of experimental parts, visit [www.eci.aero/exp](http://www.eci.aero/exp)**

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## Engine Components, Inc.

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ECi® is an internationally recognized general aviation manufacturer since 1943. As a premier worldwide manufacturer and certified repair station of experimental and FAA-PMA approved replacement parts for Lycoming and Continental engines, ECi is ISO 9001:2000 registered – maintaining an effective Quality Management System based on the ISO 9001:2000 international standard.

ECi provides the GA industry with an extensive line of TITAN® EXP™ (experimental products) and TITAN FAA-PMA (certified) approved products and services, including: cylinder assemblies, camshafts, connecting rods, crankshafts, crankcases, gears, pistons, ring sets, valves, guides, seats, springs, sumps, and much more. The new TITAN EXP KitEngine™ for 320/340/360 series engines features ECi's exclusive TITAN cylinder assemblies with unsurpassed Nickel+Carbide™ bores, guaranteed up to 5 years.

## New TITAN® EXP™ Cylinder Assemblies

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### New Head - New Barrel - New Product Manufactured to Higher Standards for Extreme Durability™

The TITAN EXP cylinder incorporates unprecedented design, metallurgical and manufacturing improvements over traditional cylinder design. As the name implies, the all new TITAN EXP brand cylinders from ECi stands head and shoulders above all competing cylinders currently available in the market.

Armed with state-of-the-art digital design technology, ECi engineers re-examined every feature of previous cylinder designs. Manufacturing methods were carefully studied to improve product consistency, reduce weight and unnecessary costs.

The new TITAN EXP cylinder assemblies are much more than a random assortment of new parts. The list of features and benefits is impressive. Just take a look at the illustrated cylinder assembly.

For more information on ECi products and service, please visit our website at [www.eci.aero/exp](http://www.eci.aero/exp) or contact Customer Service.

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