

# HARTZELL ENGINE TECH. ALTERNATORS

## HARTZELL ENGINE TECHNOLOGIES ES4020 SERIES ALTERNATORS - FACTORY NEW



Chrysler Style - FAA/PMA Approved Proven, Tested, & Trusted. As the OEM, Hartzell Engine Technologies offers factory new alternators engineered specifically to meet the challenges and increased demands of today's aircraft electrical systems. Each unit is aviation designed & developed, no automotive parts used. For decades these alternators have been powering Lycoming/ Continental engines with unmatched performance and reliability.

| Volts/Amps | Description | Model No.   | Part No. | Price |
|------------|-------------|-------------|----------|-------|
| 24V/85A    | Belt Driven | ES-4024LP   | 08-15656 | .     |
| 24V/85A    | Belt Driven | ES-4024LP-2 | 08-15657 | .     |
| 24V/85A    | Belt Driven | ES-4024LP-3 | 08-15658 | .     |

## HARTZELL ENGINE TECHNOLOGIES ES-10024 AIRCRAFT ALTERNATOR - FACTORY NEW



Introducing the brand new ES-10024 28volt / 100amp aircraft alternator. The ES-10024 alternator is a direct replacement for TCM part number 656802. The ES-10024 is a field proven design that has been in use for over 5 years with thousands of alternators operating on the world's top selling aircraft. Prestolite Style - FAA/PMA Approved. Lightweight, cost effective, 2 yr. warranty.

| Model No.   | Volt/Amp | Drive | Replaces      | Part No. | Price |
|-------------|----------|-------|---------------|----------|-------|
| ES-10024V-2 | 24V/100A | --    | --            | 08-15651 | .     |
| ES-10024B-6 | 24V/100A | Belt  | Piper 651-756 | 08-15652 | .     |

## HARTZELL ES7024-14 ALTERNATOR



Hartzell Lightweight Alternator ES7024-14. 28 Volt, 70 Amps. Weight: 7 lbs. Replaces TCM part number 657199.

**Features:** • All aircraft quality parts, no automotive parts • High altitude brushes • High speed bearings • High temperature varnish on rotor and stator • No modifications necessary for Retro-fit into any existing Ford style applications • Two year warranty .....P/N 08-07444 .....

## HARTZELL ES10024 ALTERNATOR



Introducing the brand new ES-10024 28 volt / 100amp aircraft alternator. The ES-10024 alternator is a direct replacement for TCM part number 656802. The ES-10024 is a field proven design that has been in use for over 5 years with thousands of alternators operating on the world's top selling aircraft. Prestolite Style - FAA/PMA Approved. Lightweight, cost effective, 2 yr. warranty.

**Features:** • Up to 9.6 lbs. weight savings (per engine) • OEM Direct Replacement • More power at engine cruise • Built in noise cancellation • Rugged design for extreme conditions • More economical than overhauled units • Two year warranty. **Specifications:** • 28 Volt / 100 Amp Prestolite Style • Replaces TCM part number 656802 P/N 08-07443 .....

## HARTZELL ENGINE TECHNOLOGIES ES-6024D ALTERNATOR



This unit is based on the highly reliable, field proven 100A ES-10024 and extensive certification testing has demonstrated a marked increase in efficiency and performance compared to the legacy Continental Crittenden unit it replaces. Aside from the improvement in reliability, two additional advantages offered by this alternator is that owner/pilots will really appreciate are improvements both in cut-in and idle speed performance – with over double the power output at idle!

Benefits of the new HET ES-6024D alternator include:  
• Dramatically increased reliability and estimated MTBF compared to legacy Crittenden alternators • Overall efficiency increased by six to 10% over the entire operating range, resulting in lower operating temperatures • Output at engine idle speed more than doubled to ~23A.

The ES-6024D alternator has been FAA PMA certified as a direct replacement for the 60A Continental Crittenden alternator on Continental -520 and -550 series engines. It replaces Continental alternator models 646843, 646490 and 642055 found on various twin Cessnas, Beechcraft Bonanzas and Barons, early pre-glass panel Cirrus SR-22s, and the Cessna TTx-series aircraft including early Corvalis and Columbia models .....P/N 07-18097 .....

## HARTZELL ALV-9610 ALTERNATOR



Lighter, Tougher, and Proven! Introducing the brand new ALV-9610. The ALV-9610 alternator is a direct replacement for gear driven heavyweight alternators on the Continental 520 & 550 engines. Weighing under 13 lbs., the ALV-9610 is up to 9 lbs. lighter than current heavyweight options. The ALV-9610 is a field proven design that has been in use for over 5 years with thousands of alternators operating on the world's top selling aircraft. FAA/PMA Approved.

See Service Bulletin Document on our website regarding coupling SB11-3  
**Features:** • Up to 9.6 lbs. weight savings (per engine) • OEM Direct Replacement • More power at engine cruise • Built in noise cancellation • Rugged design for extreme conditions • More economical than overhauled units • Two year warranty. **Specifications:** • 28 Volt / 100 Amp Prestolite Style • Max Continuous Oper. Speed: 10000 rpm • Type Drive: Gear • Min. Speed for Regulation: 2400 rpm • Max. Operating Altitude: 35000 rpm • Weight: 12 lbs • Rotation: Bi-Directional • Replaces TCM part numbers: 642056, 646491, 646842, 649304, as well as ALV-9510 .....P/N 08-07442 .....

## HARTZELL ENGINE TECHNOLOGIES ES-6012-6 ALTERNATOR - FACTORY NEW



ES-6012-6 - 12V/60A Belt Driven alternator created for six-cylinder Continental engines. This unit is based on the highly reliable, field proven 100A ES-10024 and extensive certification testing has demonstrated a marked increase in efficiency and performance compared to the legacy Continental Crittenden unit it replaces. Aside from the improvement in reliability,

two additional advantages offered by this alternator is that owner/pilots will really appreciate are improvements both in cut-in and idle speed performance – with over double the power output at idle!

Benefits of the new HET ES-6012-6 alternator include:  
• Dramatically increased reliability and estimated MTBF compared to legacy Crittenden alternators • Overall efficiency increased by six to 10% over the entire operating range, resulting in lower operating temperatures .....P/N 08-15659 .....

## HARTZELL ENGINE TECH ALY-6521 ALTERNATOR



Hartzell/Prestolite Alternator. 12 Volt, 60 Amp. Overhauled by Aerotech of Louisville. Belt drive, pulley not included. Exchange Sale and Core Return Required.....P/N 07-27106 .....

## ALTERNATOR DRIVE COUPLINGS



Overhauled alternator drive couplings for the gear driven TCM alternators. Additional core charge added to purchase at time of checkout

**Part No. 646655R**

**Applicable to engine models:** IO-520, TS10-520, 10-550, GTS10-520 .....P/N 07-00641 .....

**Part No. 635796R**

**Applicable to engine models:**

C-75, C-85, C-90, C-115, C-125, C-145, E-165, E-185, E-225, O-200, O-300, GO-300, GIO-300, IO-240, IO-360, TS10-360, & LTS10-360 P/N 07-00642 .....

## HARTZELL FAA/PMA BRUSH SETS

| Mfr. Part No. | Description                  | Part No. | Price |
|---------------|------------------------------|----------|-------|
| ALE-1013AS    | Hartzell Brush Set           | 07-00963 | .     |
| 10-1020       | Hartzell Carbon Brush Set    | 07-02713 | .     |
| ALV-1012S     | Brush Set Package            | 07-03225 | .     |
| ALE-2013AS    | Carbon Brush Set             | 07-18138 | .     |
| 90-2526       | Hartzell Brush Set           | 07-18766 | .     |
| AMA-19S       | Prestolite Brush Set         | 07-20460 | .     |
| ALV-1015S     | Hartzell Brush Holder        | 07-24501 | .     |
| 10-9000S      | Hartzell Brushes             | 07-19977 | .     |
| 15-5005S      | Hartzell Brush Holder Assy   | 07-19976 | .     |
| 11-1013S      | Hartzell Brush Holder, 14v   | 07-24519 | .     |
| ES646348      | Hartzell Brush, Str Positive | 07-24694 | .     |
| 40D1542S      | Hartzell Brush               | 07-24725 | .     |
| 90E53-1S      | Hartzell Brush               | 07-24808 | .     |
| 7025480001S   | Hartzell Brush Assembly      | 07-24812 | .     |
| 7024512001S   | Hartzell Brush Piece Pt Pkg  | 07-24830 | .     |
| ALU-3045BS    | Hartzell Brush Assembly      | 08-13833 | .     |

CORE CHARGES APPLY TO ALL NEW AND OVERHAULED HARTZELL UNITS.