RAM OHE Continental TSIO-520 Engine Overhaul Specifications

RAM OHE Continental TSIO-520 Engine Exchange

- Engine dynamic parts and tolerances overhauled within new limits per Continental overhaul manual, or better per RAM specifications
- Certified crankcase housing used that meets RAM's standards for application and installation of new internal parts or parts overhauled to new limit tolerances - OHE
- Comply with all AD's
- Comply with Service Bulletins through category three (3)
- Applicable steel parts magnaflux inspected
- All engine counterweights, gears and castings replaced as required.
- Rod & rocker arm bushings, bearings, seals, valve springs, valve keepers, intake & exhaust valves - new
- Cylinders - SAP Millennium New Steel
  - Cylinder Package - NE
  - Through-hardened steel barrels
  - Volumetrically matched intake and exhaust ports
  - Intake valve seats - venturi type (rounded)
  - Intake valve guides - with improved oil control seals
  - Connecting rod cap to rod mating surfaces resurfaced and honed to new limit tolerances
  - All grind areas are steel shot peened
- Rods are balanced for both total weight and end weight to within one (1) gram maximum weight variance between the heaviest and lightest per set of six rod assemblies
- Balance: pistons & rings by vendor specs; pins RAM specs. - exchange
- Reference lines, push rod housing and applicable external steel hardware - cadmium plated
- External aluminum parts - primed and painted
- Crankcase - heavy - incorporates RAM's 7th stud cylinder pad to cylinder base hold down/clamp assembly - OHE
- Camshaft: RAM high-efficiency [T210/T206 w/ - M & -R = Continental / Superior]
- Crankshaft to new limit tolerances at std., or .010 under
- Crankshaft assembly with counterweights, bushings, pins and internal gears installed - balanced to RAM specifications
- Continental Maintenance Manual M-0 through bolt service bulletin complied with alternate STC compliance.
- Cylinder pad through bolts - new

Cylinder Upgrade Options

- Upgrade steel cylinders to ACA nickel: $2,400 per engine.
- Ask your RAM Representative for current market prices for Continental cylinders.

Fine Wire Spark Plugs

Made of iridium alloy, these spark plugs produce a more efficient spark for extended plug life and better engine performance. Upgrade from standard massive plugs to fine wire spark plugs.

Per engine - new: $660

Definitions:

OHE = Overhauled Exchange
OEM = Original Equipment Manufacturer
PMA = Parts Manufacturer Authority
NE = New Exchange - OEM or PMA
New = New Outright - OEM or PMA
New Items = Subject to test time, ferry time and inventory time.
Accessory Specifications:

- Applicable where item is included in specific engine sales package.
- Starter and starter drive - OHE
- Magnetos - Champion Slick - pressurized 6320 - NE
- Magneto Harness - Champion - new
- Spark plugs - new
- Turbocharger - balance to Mfr.'s specifications - OHE
- Turbo controller and throttle body - OHE
- Overboost relief valve - OHE
- Fuel injection system - OHE
- Intercooler - (as applicable) cleaned and pressure tested - exchange
- Intercooler - (Series VII) improved - larger 140 in³ - OHE
- Induction couplings & clamps - new
- Air filter - RAM PMA new
- Oil breather system - inspected and repaired
- Oil cooler: Flushed and inspected - exchange
- Oil filter - new
- Oil pressure relief valve kit & spring - new
- Metal baffles refurbished & painted per spec. sheet. Gaps sealed.
- Baffle seals - RAM SureStand - red silicone rubber - new
- Specifications applicable to RAM's overhaul of TSIO-520-NB, -LB, -WB, -VB, -EB, -M & -R engines, with necessary adjustments for fuel system, induction system and turbocharger system as applicable

Subject to Change:
Specifications are subject to change due to availability of PMA new or factory new parts; vendor, factory, or RAM overhauled parts; or re-use of low-time parts at customer's request. As applicable to RAM's FAA approved DER, DAR, STC and PMA authority, parts or procedure changes will be made at RAM's discretion when in the customer's best interest.

Not Included:
Vacuum pump, alternator, tach generator, hoses, exhaust risers and exhaust parts are not included with the RAM OHE engine unless specified by a RAM Work Order Supplement.

Exchange Core Policy:

- Engine, crankshaft, crankcase, exhaust, accessories, propeller, governor, and hardware items are only sold on an exchange basis, based upon the customer's exchange of like type (e.g. heavy crankcase, large diameter VAR crankshaft, etc.) and normal run-out cores as removed from subject aircraft, and serviceable to RAM's engine overhaul specifications.
- Cores should be returned within 30 days of engine shipment, and immediately with a RAM installation.
- Non-serviceable core fees are due and payable to RAM.
- If cores are found non-serviceable or dissimilar, the applicable core fee will be invoiced with payment due to RAM within 30 days.

RAM Overhauled Engine TBO Warranty:
100% Engine and accessories, for the 1st year, or 500-hrs, whichever occurs first. Thereafter, the engine only is warranted on a prorata basis to TBO at RAM's reduced accrual rate of only 30 hours per month, thus extending coverage over four years. For complete details go to www.ramaircraft.com/ramtbowarranty

Unfeathering Accumulator:
Due to its tendency to contaminate the engine oil supply, if installed, the propeller unfeathering accumulators will be disabled unless optionally replaced with an overhauled unit. Each - OHE: $1,795