



RAM AIRCRAFT, LP

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ENGINES • PARTS • PROPELLERS • ACCESSORIES • STC'S

TSIO-520-NB

**Cessna 340/A & 414/A
& RAM 325 hp T310 / 320**

RAM OHE Continental TSIO-520-NB Engine

- Horsepowers:
310 hp, or 325 hp, or 335 hp.
Set up per factory specifications,
or per applicable RAM STC's.
- TBO - 1600 hrs.
- SAP Millennium Cylinders - NE
- Crankcase - heavy w/ 7th studs - OHE
- Crankshaft - OHE
- Camshaft - RAM High Efficiency - NE
- Starter and starter drive - OHE
- Spark plugs - new
- Magneto harness - Champion - new
- Magnetos - Champion Slick 6320 - NE
[pressurized]
- Fuel injection system - OHE
- Oil filter - new
- Induction couplings
intake manifold - new
- Metal baffles - refurbished
and painted - exchange
- Baffle seals - RAM *SureStand* red silicone
rubber - new
- Oil cooler: Flushed and
inspected - exchange
- Breather, rod, and cap are
Stainless steel - OHE
- Air / oil separator - inspected
and repaired - exchange
- Balance: crankshaft
and rod sets - exchange
- Core Return Policy - see: RAM Exchange
Core Policy on Page 2.
- Also see:
[RAM Value Options & Compliance Items.](#)

OHE = Overhauled Exchange
NE = New Exchange - OEM or PMA
New = New Outright - OEM or PMA
New Items = Subject to test time,
ferry time and inventory time.

Kit Components - Packaged Separately and Included

- Coupler - throttle body to intake - new
- Throttle and control assembly - OHE
- Turbocharger - OHE
- Turbo controller - OHE
- Overboost relief valve - OHE
- Intercooler - inspected and repaired - exchange
- Air filter - RAM - new
- Spare accessory gasket set - new

RAM OHE Engine

CMG TSIO-520-NB: \$54,766

Shipped - exchange, or Custom Overhauled - exchange

Additional Specifications

- 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 minimum accrual rate of only 30 hours per month, thus extending coverage over four years. For complete details go to www.ramaircraft.com/ramtbowarranty
- One Engine at a Time:**
 Anticipating an upgrade from 310 hp to a 325 hp or 335 hp RAM Upgrade Package, purchase one engine now. Match it in the future with a second RAM OHE engine.
 The first RAM engine will be set-up to deliver 310 hp. Later when paired with a 2nd RAM OHE engine, both will be tuned to the higher horsepower as applicable to the STCs and propeller options appropriate to the specific STC'd horsepower upgrade.
- Exchange Core Policy:** Engine, crankcase, crankshaft, internal gears, exhaust, accessories, propeller, governor, and hardware items are only sold on an exchange basis, based upon the customer's exchange of like type and normal runout cores as removed from subject aircraft, and serviceable to RAM's overhaul specifications. Cores should be returned within 30 days of RAM OHE engine shipment, or immediately with a RAM installation.
 Non-serviceable core fees will be due and payable to RAM.
- Items not included:**
 Vacuum pump, alternator, tach generator, hoses, wastegate, exhaust risers and exhaust parts are not included unless specified by a RAM Work Order Supplement.
- Crankcase Upgrade:** RAM overhauls engines using only heavy crankcases. Upgrade light exchanged core crankcase to heavy crankcase. Ask your RAM Sales Consultant for current prices.
- Crankshaft Upgrade:** RAM only uses large diameter VAR crankshafts. If the exchanged core crankshaft is not a large diameter VAR crankshaft additional upgrade charges apply. Ask your RAM Sales Consultant for current prices.

Optional Parts and Engine Installation Items

- Wastegate and actuator** - each - OHE \$1,650 [Core Charge: \$300]
- Engine shock mounts** - engine set of (4) - new: \$1,040
- Engine control cables** - throttle, prop, mixture, alternate air, and cowl flaps - each - RAM PMA new: Call
- Exhaust slip joint w/hardware** - each - RAM PMA new: \$355
- Exhaust risers** - Stainless steel - PMA new: \$1,740
 [2 per engine @ \$840 each]
- Fuel and oil - primary hose kit - Teflon™** with integral fire sleeve - per engine - new:
 340: \$1,751 340A: \$1,556 414: \$1,740 414A: \$1,928 414A Series VII: \$1,720
- Hydraulic Landing Gear hose kit - Teflon™** per engine - new:
 414A: \$599 414A Series VII: \$516
- Teflon™ Heavy Duty Air Conditioner Hose Kit** - per airplane - new:
 340: \$700 340A: \$681 414: \$652 414A: \$578 414A Series VII: \$570
- Propeller unfeathering accumulator:**
 Source for contaminating engine oil. RAM recommends older accumulator be disabled unless replaced by a newer unit. [Core charge: \$400] Each - OHE: \$875
- Vacuum pumps** - Dry type -Tempest AA442CW Each - NE: \$1,535
- Upgrade** from standard massive plugs to fine wire spark plugs. Per engine - new: \$840
- RAM Parts Catalog** - Additional parts. Ask for a free copy.
- New 100 amp Alternator Package:**
 Hartzell Engine Technologies ALV9610 with nut, thrust washer, cotter key, and overhauled alternator drive hub. When purchased with an engine RAM will install for no additional cost. (Retail \$2,181) Only when purchased with a RAM engine: \$1,662 each - Exchange
- Cooling Shroud Kit** for dry vacuum pump - New: \$58 each
- New RAM PMA Induction Flex Elbows** from intercooler to intake manifold - New -
 414A: \$824 each 340/A & 414: \$824 each
- Cylinder Upgrade Options:**
 - Upgrade SAP Millennium cylinders to nickel: \$1,700 per engine.
 - Ask your RAM Representative for current market prices for CMG cylinders.