



RAM AIRCRAFT, LP

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ENGINES • PARTS • PROPELLERS • ACCESSORIES • STCs

ValueTime TSIO-520-NB - One replacement engine shipped Cessna 340/A & 414/A & RAM 325 hp T310/320

RAM OHE Continental TSIO-520-NB Engine

Specifications and installed items

- 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 - OHE
- Lifters - OHE
- Starter and starter drive - OHE
- Spark plugs - new
- Magneto Harness - Champion - new
- Magnetos - Champion Slick 6320 - NE [Pressurized]
- Fuel Injection System - OHE
- Metal baffles - Inner Cylinder & Lower Oil Cooler - refurbished
and painted - exchange
- Oil Cooler - OHE
- Oil Filter - new
- Breather, rod, and cap are Stainless steel - OHE
- Induction couplings intake manifold - new
- Balance: crankshaft and rod sets - exchange
- Core Return Policy - see: RAM Exchange Core Policy on
Page 2.

Kit Components

Packaged Separately and Included

- Fuel Pressure Regulator - OHE
- Throttle and control assembly - OHE

RAM OHE Engine

CMG TSIO-520-NB: \$39,900*

Shipped - exchange, or Custom Overhauled - exchange

TSIO-520-NB Optional Installation Kit

Recommended during Engine Overhaul

- Air/Oil Separator - OHE**
- Overboost Relief Valve - OHE**
- Coupler - turbo to throttle body - new
- Turbocharger - OHE**
- Turbo Controller - OHE**
- Intercooler - Exchange**
- PMA New Baffle Seals
- Misc. installation parts included in kit are medium pressure
hose, turbo gaskets, o-rings, baffle fasteners, nuts, bolts,
screws, washers, & placards.

TSIO-520-NB Optional Installation Kit: \$8,200

** These items are exchange parts. The customer must return their normal, run-out core part in exchange for the unit in the kit.

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.

Additional Specifications

- **RAM ValueTime TSIO-520-NB Overhauled Engine Warranty:**

100% Engine and accessories for one year, or 500-hrs, whichever occurs first. For complete details go to: www.ramaircraft.com/ramvaluetimewarranty

- **Airframe Eligibility:** The RAM ValueTime TSIO-520-NB Replacement Engine is suitable for Cessna 340/A, 414, & 414A airplanes that have stock 310 horsepower engines as well as RAM STC Series engines. A RAM overhauled engine is the only overhauled engine that guarantees compliance with your RAM STC. It is the perfect way to protect your STC and preserve the value of your airplane.
- **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. Non-serviceable core fees will be due and payable to RAM.
- **Items not included:** Vacuum pump, alternator, tach generator, hoses, turbocharger, air/oil separator, turbo controller, overboost relief valve, intercooler, air filter, metal baffles, baffle seals, exhaust risers and exhaust parts are not included with the RAM OHE engine 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.

*The ValueTime TSIO-520-NB Replacement Engine is already discounted and is not eligible for any discounts, rewards or credits.

Optional Parts & Engine Installation Items Recommended during Engine Overhaul

- **Turbocharger** - Stock Cessna 340/A, 414, & 414A & RAM Series II, III, IV, & VI - each - OHE: \$3,850 [Core Charge: \$600]
- **Turbocharger** - RAM Series V & VII - each - OHE: \$4,000 [Core Charge: \$600]
- **RAM PMA New SureStrand Baffle Seal Kit** - each - new: \$880
- **Turbo Controller** - OHE: \$1,415
- **Air/Oil Separator** - NE: \$235
- **Overboost Relief Valve** - OHE: \$622
- **Coupler - Turbo to Throttle Body** - PMA New: \$18
- **Intercooler** - Stock Cessna 340/A & 414 & RAM Series I, II, III, IV, & VI - Repaired, Exchange: \$1,000
- **Intercooler** - Cessna 340/A & 414 RAM Series VII - Repaired, Exchange: \$1,400
- **Intercooler** - Stock Cessna 414A & RAM Series I, II, III, & IV, - Repaired, Exchange: \$1,000
- **Intercooler** - Cessna 414A RAM Series VII - Repaired, Exchange: \$1,400
- **Wastegate and actuator** - each - OHE \$1,650 [Core Charge: \$300]
- **Engine shock mounts** - engine set of (4) - new: \$1,028
- **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: \$1,864 [2 per engine @ \$932 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: \$864
- **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 clutch.
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
- **RAM PMA Induction Flex Elbows** from intercooler to intake manifold - New - 414A: \$964 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.