



For replacement of your TNIO-550B engine, the best engine choice would be our *GAMISPEC™ TNIO-550B*. The *GAMISPEC™ TNIO-550B* Engine would be procured from RAM Aircraft, Waco, TX or other select engine builders and built to tighter than “new” factory tolerances. It would start as a NDH, IO-520BA or BB or IO-550B core and be overhauled with new CM G (formerly TCM) “*Taperfin Barrel*” style cylinder power assemblies. The “*Taperfin Barrel*” style cylinders offer improved cooling and are exclusively approved under our STCs. The salient tolerances for assembly of the engine would be controlled according to our specifications and requirements. In our opinion, this would be a preferable option due the improved quality of the components and assembly. It could be expected to run smoother, produce more power and last longer with fewer maintenance issues. The engine carries an excellent three years’ *parts and labor* warranty that can be serviced at most any FBO.

All *GAMISPEC™* Engines are assembled to “*factory new*” or better tolerances. In addition, all *GAMISPEC™* Engines have:

1. Dynamically and/or statically balanced rotating components to better than OEM factory-new limits i.a.w. proprietary *GAMISPEC™* engine specifications
2. New, Continental cylinders with the *Taperfin Barrels* design providing improved cooling and more uniform airflow and improved valve guide tolerances for longer top end life, flow-balanced for smooth engine operation. These cylinders also weigh 4 lbs. less than the conventional style.
3. Conforming Intercylinder Baffles for the *Taperfin Barrel* cylinders
4. Piston ring gaps individually set to minimum dimensions
5. All cylinder deck heights matched to crankshaft centerline
6. Newly-overhauled Rocker Arms
7. New engine logbook indicating zero time since major overhaul
8. One hour minimum dyno time with data available to you (depends on engine builder)

9. RAM Camshaft for optimized power output
10. Bendix 1200 Series Magnetos
11. Three Year "GAMISPEC™ Warranty- Parts and Labor and, of course
12. *turboGAMInjectors*® Precision-Balanced Fuel Injectors

**GAMISPEC™ Engine Component Details:**

Crankcase- liquid penetrant inspected, squared and machined for matched deck heights  
Crankshaft- magnafluxed (magnetic particle inspected), ultrasonically inspected, polished journals, counter-weight bushings replaced, dynamically balanced  
Connecting Rods- magnafluxed, bushed, honed on centers, balanced and matched  
Rocker Arms- magnafluxed, bushed, honed, wear surface finished and contoured  
Internal Gears- magnafluxed  
New Hydraulic Lifters- matched for bleed down  
New CMG *Taperfin* Style Cylinders-valve guides measured and replaced as necessary, valves and seats lapped and checked for seal  
Pistons-matched weighted, oversize rings custom fit to each barrel  
Newly-Overhauled Fuel system- Converted to TAT turbonormalized system including fuel pump, fuel servo, newly overhauled *turboGAMInjectors*® fuel injectors  
Newly-Overhauled Bendix Magnetos with new wiring harness and spark plugs  
Newly-Overhauled Starter Drive Adapter with Niagara Air Parts Spring  
Custom Painted Case

**New Parts Included as a minimum:**

Crankshaft Main Bearings  
Connecting Rod Bearings  
Connecting Rod Bolts and Nuts  
All Gaskets, Seals, Hoses  
Counterweight bushings, pins, plates and retaining rings  
Cylinder Assemblies  
RAM Camshaft and Cam Gear  
Upper Deck Air Lines  
Hydraulic Lifters  
All Accessory Gear Bolts  
Cylinders assemblies including Valves and Valve Guides, Inner and Outer Valve Springs and Keepers,  
Rocker Arm Bushings, Rocker Arm Shafts  
Pistons, Piston Pins, Piston Pin Bushings, Rings  
Oil Cooler and Oil Vernatherm Valve  
Springs (oil pressure, starter clutch)  
Ignition Harness  
Champion or Tempest Fine Wire Spark Plugs