# The Importance of Using AvBlend in Your Engine

### **During Pre-Assembly**

Blueprint utilizes a special fusion process to treat all critical metal surfaces BEFORE assembly.

Why? Because AvBlend keeps friction surfaces cool (better heat dissipation, less distortion) during the Break-In Period. One of the most important functions performed by AvBlend is its ability to keep friction surfaces relatively cool while it is being broken in.

Too much heat during this critical period while the metal is seating itself into its job can easily cause brittleness, loss of flexibility and a tendency to break down under sudden and severe strains often times scuff and gaul. AvBlend allows metal to temper itself and is tempered and conditioned under actual working conditions.

AvBlend allows the metal to assume the right degree of suppleness and hardness for the job it's expected to do during its entire life. This is known as WORK TEMPERING (Energizing) and can only be accomplished under conditions where excess friction heat is eliminated. AvBlend stays with the metal.

The penetrating quality of AvBlend (Energizing) is accomplished by the heat and static electricity generated by the moving parts at work. AvBlend stays with the metal, keeping the pores open and in top condition.

#### **During Assembly**

Blueprint uses AvBlend right into the assembly oils and greases to insure positive surface lubricity upon the very first time our engines start.

#### **During Test Run Up**

Blueprint installs AvBlend into the engine oil supply during the test run because it stays in the metal during the critical first 30 seconds of initial start up until the motor oil reaches all moving parts. Positive lubricity is achieved during the first 30 seconds of start up where 70% of engine wear occurs.

#### In Service Use

AvBlend is an important part of Blueprints overhaul program and is to be used at each oil change for continuous year round protection. AvBlend's Micro-Lubricating action keeps parts better lubricated during inactivity, start up and operation. Years of proven field performance in protecting critical parts such as lifters, camshafts, bearings, oil pumps, turbo chargers, critical exhaust valve/guides, cylinder wall bores/pistons /rings and other parts is your best insurance in reaching TBO in optimum operating condition. Carbon free combustion chambers in aircraft engines are an absolute must for peak safety in take-off, climb and cruise performance.

## Founder Joe Lencki's Comments on Using AvBlend

The product was developed after years of patient research, and proven on the speedways to control a condition that exists in all engines and the working parts of almost all mechanical units requiring lubrication.

Prior to World War Two, I found that the first few minutes of operation of a new or rebuilt racing engine were the most dangerous. At this time the susceptibility of damage from lack of proper lubrication was greatest. This same condition also prevails although in a lesser degree, every time a cold engine is started.

In disassembling and inspecting the various parts of the engine along with other parts of the racing cars such as transmission and rear axle gears, they were found scuffed, pitted and galled.

This condition caused a loss of peak performance because of abnormal friction and blow by losses. Science did not provide a means of insurance to relieve this condition.

During the war in the building of aircraft engines for our large B29 bombers, I found that this condition prevailed and it was a required necessity to disassemble all engines after their first preliminary or green test run of only a few hours to rework and repair the damage that was caused by the lack of proper lubrication, yet every precaution was used to try to control this condition such as selecting the best and proper oil, pre-oiling the engine before starting and heating the oil to the proper temperature so that it would flow freely but all to no avail. The Micro-Lubricating properties of AvBlend address these important issues.