Network 5073747099

Poplar Grove Airmotive, Inc.

CRS YYBR664L

SUGGESTED ENGINE BREAK-IN PROCEDURES

After starting the engine ensure a normal warm up, but avoid prolonged ground running. Follow the airframe manufacturer's recommendations for takeoff power. When possible, reduce power to the climb power setting specified in the operator's manual. Establish a shallow climb angle to insure good air speed for proper cooling. Use more cowl flaps than normal or step climb to help in this process. Adjust mixture per aircraft operating handbook. Excessive heat is the primary cause of cylinder bore glazing. Make every effort to keep your operating temperature well into the green arc.

If the engine is normally aspirated (non-turbocharged) it will be necessary to cruise at a low altitude to obtain the required cruise power levels. We recommend a density altitude less than 5,000 feet to allow the engine to develop sufficient cruise power for a good break-in.

Do not run the engine above 75% power in a cruise setting or the probability of glazing cylinder bores is increased. Glazing cylinder bores require cylinder removal, honing, and installing new piston rings. *Poplar Grove Airmotive does not warranty this condition.* Your ability to keep the engine temperature well in the green arc and within a power range of 65% to 75% power will be the key to a successful break in.

Descend at low cruise power while closely monitoring the engine instruments. Avoid long descents at low manifold pressure and rapid descents, as this will cause the engine to cool to rapidly.

There is only one objective to be accomplished during the break-in: the stabilization of oil consumption. Record all oil additions and flight hours in such a manner that quart per hour of flight is known. During this portion of the break-in, which could range 25 to 100 hours, mineral oil *must be* used in the engine. Change oil and inspect filter after approximately 10 hours – then 35 hours – then per your normal schedule, however, do not use AD (ashless dispersant) oil until consumption stabilizes.

Engine oil recommendation for Piston Ring Seating

Aeroshell 100	**SAE 50**	**Above 60 degrees F**
Aeroshell 80	**SAE 40**	**30 degrees – 90 degrees F**
Aeroshell 65	**SAE 30**	**0 degrees – 70 degrees F**
Phillips 20W-50	**Type M**	**Winter Months**

PGA-SEBI
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- No touch-n-go
- Run hard
- keep RPM up