GSC SYSTEMS (2004) Ltd.

(Propelling the world) #8 2440B 14th Avenue VERNON, BC V1T 8C1 (250) 549-3772 Phone (250) 275-8441 Fax

CONGRATULATIONS ON YOUR RECENT GSC SYSTEMS PROPELLER!!!!!

GSC Systems has been providing propellers for pilots all over the world since 1985.

In order to make sure you get the longest life from your GSC Systems propeller, we recommend you read this and all instructions provided to you carefully and file these papers away where you may refer to them at any time. Proper maintenance and care of your propeller will assure the longest life span for your GSC Systems propeller.

Your GSC Systems Propeller is manufactured from a quality selected rock eastern hard maple hardwood. The hub is machined from 6061 solid stock aluminum on our own CNC equipment. The leading edge protection that is optional and the root encapsulation is a 2 part polymer done with RTM equipment. The finish on your blades is an automotive clear with U/V protection.

All the hardware supplied is aircraft grade AN hardware. All propellers are strictly maintained and final balance is done after the finishing work. Your propeller should not require any additional balancing.

Your propeller has been specifically fabricated to your specifications and special care has been taken to provide you with the best possible product. Please contact us immediately if you have any questions or have any immediate concerns. Enjoy your GSC Systems propeller!!!!!

TBO TIME

<u>ATTENTION:</u> All owners of the GSC ground adjustable hardwood propellers, we, the manufacturer of the GSC propeller are imposing a TBO time on all our wooden ground adjustable propellers of either 5 years or 500 hours whichever comes first.

We recommend that when this time has been reached, your propeller be returned to our factory for inspection. Please contact our warehouse to get necessary information on shipping method required to return goods to us.

OPERATING INSTRUCTIONS

ATTENTION: THESE TIPS MUST BE READ BEFORE OPERATION YOUR GSC PROPELLER

- 1) Ensure that installation instructions are followed precisely and that prop attachment bolts are not torqued more than 100 in/lbs and a visible gap between hub halves is necessary. Use a quality torque wrench.
- 2) An initial visual inspection for cracks, nicks or any missing finish on the prop and subsequent inspections before each flight are recommended.
- 3) Inspect and check torque of propeller attaching bolts after initial 5 hours of operation. Subsequent checks at 20 and 50 hours for bolt tightness is recommended. Thereafter check every 6 months or 50 hours for bolt tightness, as well check that tracking and pitch are being maintained. GSC recommends that you do a Pre flight inspection of your propeller.
- 4) Do not use the propeller as a tow-bar to move your aircraft.
- 5) Avoid running up in areas containing loose stones and gravel.
- **6)** Place the propeller in a horizontal position when stored for lengthy periods. Propellers should be rotated periodically when parked.
- 7) If your wooden propeller is stored in the elements, it is advisable that a propeller sock be used. These socks should be a material that is both waterproof not allowing rain to enter but breathable, not causing moisture to be trapped under the sock.
- **8)** To maintain a like-new appearance, your propeller can be waxed periodically with an automotive wax. Clean prop first with a mild soapy solution.
- **9**) Assume that your propeller is **non-airworthy after any kind of impact** until qualified personnel have inspected it.
- **10**) If your propeller begins to show any of the following damage, it should be retired from service:
 - a) A deep cut across the wood grain
 - b) A long, wide or deep crack parallel to the grain
 - c) A separated lamination
 - d) An appreciable warp (discovered by inspection or through rough operation)
 - e) An appreciable portion of wood missing
 - f) Obvious damage or wear beyond economical repair
 - g) A delamination of the leading edge protection
- 11) Max propeller RPM to be used can be determined by the following formula:

576,000

3.14 X DIA in Inches

We hope that you have had a chance to go over all these steps and we encourage you to follow these instructions carefully as well as the assembly instructions to get the best service from your GSC Systems propeller.

<u>VERY IMPORTANT</u>: If you are planning on selling your GSC prop, please insure that operating tips and installation instructions accompany the prop. If you are not the original owner of this prop, please contact the original owner and check to see if operating tips and installation instructions were followed.