

ICA\_011007

**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS**

**FOR A**

**HARTZELL HC-C2YR-1BFP/F7497 PROPELLER**

**ON MOONEY M20(A-G,J) AIRCRAFT**

**STC SA02414CH-D**

**LOG OF REVISIONS**

Revision	Revised Pages	Description of Revision	Date
New	All	Original Release	1/10/07
A	2	Update low pitch blade angle	5/21/08
B	All	Added spinner model 103585; references to Hartzell Manuals 115 and 148 on page 3.	1/7/10
C	All	Added spinner model 835-58(P) to page 3, removed spinner models from page headers; corrected grammar	11/8/10

NOTE: All changes are indicated by a black vertical line along the left margin.

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**Section 1-3 General Information – Propeller**

The Hartzell HC-C2YR-1BFP/F7497 propeller for the Mooney M20(A-G,J) is a constant speed, variable pitch propeller, controlled by a governor that is set by the pilot for constant RPM operation.

<b>Aircraft Model</b>	<b>M20A-D, G</b>	<b>M20E, F, J</b>
Propeller Mfg.	Hartzell	Hartzell
Type	Constant Speed	Constant Speed
Model	HC-C2YR-1BFP	HC-C2YR-1BFP
Blade	F7497	F7497
Pitch Angle (High)	29.0 ± 1.0°	29.0 ± 1.0°
Pitch Angle (Low)	14.8 ± 0.2°	15.7 ± 0.2°
Diameter	74" Maximum 72.5" Minimum	74" Maximum 72.5" Minimum
Approved Governors	See TCDS 2A3 or TCDS P-920	See TCDS 2A3 or TCDS P-920

Additional propeller information can be found in Hartzell Propeller Owner's Manual 115N.

**For Product Support contact:**

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**Section 2 – Ground Handling, Service & Inspection**

**WARNING:** DO NOT use a “yoke jack” under the propeller to jack or raise the aircraft nose.

Airworthiness Limitations

NOTE: The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no life-limited components used in the STC installation.

Section 2-37 – Propeller Inspection

All required maintenance, troubleshooting, inspections, time intervals and procedures are provided in Hartzell Propeller Owner’s Manual 115N that is provided with each propeller. Recommended Time-Between-Overhaul (TBO) limits for the STC propeller are also provided in Hartzell Service Letter 61.

The propeller diameter is 74”. Field repair of small nicks and scratches may be performed by qualified personnel in accordance with FAA AC 43-13-1( ) as well as procedures specified in Hartzell Propeller Owner’s Manual 115N. Propeller overhaul must be accomplished by an approved Propeller Repair Station.

Spinner Inspection

Refer to Hartzell Manual 115, Section 5 “Inspection and Check”, for model 835-54(P), 835-58(P) or A-2295-5(P) aluminum spinner inspection and maintenance information.

Refer to Hartzell Manual 148 for model 103585 composite spinner inspection and maintenance information.

**Section 3-5 – Propeller Installation & Removal**

Refer to the STC Installation Instructions INST\_011007 and Hartzell Propeller Owner’s Manual 115N for propeller installation and removal procedures. Reference procedures for “K” and “R” flange propellers.