INSTRUCTIONS FOR CONTINUED AIRWORTHINESS FOR

HARTZELL 4C1-F650A1/76C04(B)-0.6

PROPELLER ON CIRRUS SR22 AIRCRAFT

STC SA04468CH

LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Date
IR	All	Initial Release	July 09, 2020

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

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APPLICABLE MODELS

This STC propeller applies to the approved combination of airplanes and engines listed in Table 1.

Aircraft Config	Aircraft Serial Number Range	Max TOGW (lb _f)	Engine Model	Engine Power/RPM Takeoff Rating
SR22	0002 – 3914	3,400	IO-550-N	310 HP / 2,700 RPM
SR22	3915 & subsequent	3,600	IO-550-N	310 HP / 2,700 RPM

Table 1. Aircraft included in this STC

INTRODUCTION

The subject STC approves replacement of the original approved propeller and spinner models listed in airplane Type Certificate Data Sheet A00009CH with a 4C1-F650A1/76C04(B)-0.6 on the aircraft listed in Table 1.

The information contained in these Instructions for Continued Airworthiness (ICA) supplements or supersedes the information provided in the aircraft service manuals only in those areas listed. This ICA is organized to match the format of the Airplane Maintenance Manual (AMM).

Current ICA and service letters are maintained and distributed via www.hartzellprop.com.

CHAPTER 4 – AIRWORTHINESS LIMITATIONS

NOTE: The Airworthiness Limitations section is FAA approved and specifies maintenance required under 14 CFR §43.16 and §91.403 unless an alternative program has been FAA approved.

There are no new (or additional) airworthiness limitations associated with this equipment and/or installation.

CHAPTER 5 – TIME LIMITS & MAINTENANCE CHECKS

All required maintenance, inspections, time intervals, and procedures for the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller are found in Hartzell Propeller Owner's Manual No. 480 (Manual No. 480). The 4C1-F650A1/76C04(B)-0.6 propeller's recommended time between overhaul (TBO) is detailed in Hartzell Service Letter HC-SL-61-61Y. Propeller

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overhaul must be accomplished by a certified propeller repair station with the appropriate rating.

All propeller inspection requirements contained in the Cirrus SR22 Airplane Maintenance Manual remain unchanged and should be complied with as provided in Chapter 5. Procedures unique to the composite blade construction are provided in the Maintenance Practices section of Manual No. 480.

Due to the composite construction of the propeller blades, in the event of a lightning strike, in addition to the lightning strike inspection criteria provided in the Cirrus SR22 Airplane Maintenance Manual, refer to Manual No. 480, Chapter 5, Special Inspections - Lightning Strike-Propeller, for detailed information on propeller lightning strike inspection and disposition.

CHAPTER 6 THRU CHAPTER 28

NO CHANGE.

CHAPTER 30 – ICE PROTECTION

30-00 Ice and Rain Protection

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

30-05 Ice Protection – Distribution: Basic Ice Protection

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

30-06 Ice Protection – Distribution: Basic² Ice Protection

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

30-07 Ice Protection - Distribution: FIKI

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

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30-10 Ice Protection - Airfoil

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

30-40 Ice Protection - Windows, Windshields, and Doors

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

30-60 Ice Protection - Propeller

This section describes the portion of the Ice Protection System pertaining to the propeller. This includes the slinger ring and the anti-icing propeller boots. Grooved rubber boots are fitted to the root end of the propeller blade. Fluid is dispensed into the slinger ring where centrifugal force directs it to four individual feed tubes. Each feed tube aligns with grooves in the rubber boot which delivers fluid to the blade's leading edge.

Maintenance practices related to the ice protection components of the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller are given in Hartzell Propeller Ice Protection System Manual No. 180. Airplane anti-ice feed tube alignment with propeller slinger ring is given in Installation Instructions INST-021320.

30-80 Ice Protection - Detection

This chapter and section of the Cirrus Airplane Maintenance Manual remain applicable to the noted airplane models and serial numbers with the Hartzell 4C1-F650A1/76C04(B)-0.6 propeller installed.

CHAPTER 31 THRU CHAPTER 57

NO CHANGE.

CHAPTER 61 – PROPELLER

61-00 Propeller – General

The Hartzell 4C1-F650A1/76C04(B)-0.6 is a composite, four-blade, constant speed, governor-regulated, direct-drive propeller that uses engine oil pressure to increase blade angle. As installed on the Cirrus SR22, the propeller governor is controlled automatically via the power lever without the use of a separate propeller control lever.

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The propeller troubleshooting procedures of the Cirrus SR22 AMM are applicable to the Hartzell 4C1-F650A1/76C04(B)-0.6.

61-10 Propeller Assembly – Maintenance Practices

The maintenance practices of the Cirrus SR22 AMM are applicable to the Hartzell 4C1-F650A1/76C04(B)-0.6.

Additional maintenance details of the Hartzell 4C1-F650A1/76C04(B)-0.6 including scheduled and unscheduled maintenance, preventative maintenance, inspection, adjustment/test, and servicing can be found in Manual No. 480 available at www.hartzellprop.com.

61-20 Propeller Control

The propeller control maintenance practices of the Cirrus SR22 AMM are applicable to the Hartzell 4C1-F650A1/76C04(B)-0.6.

CHAPTER 71 THRU CHAPTER 115

NO CHANGE.

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