

INST-032519

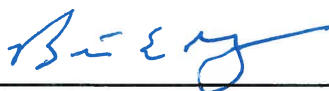
INSTRUCTIONS FOR INSTALLATION OF HARTZELL  
4C1-F650A1/76C04(B)-0.6  
PROPELLER ON CIRRUS SR22T AIRCRAFT  
STC SA04440CH

LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Date
IR	All	Initial Release	12/16/2019
A	All	Added Section (B) for Cirrus factory installation of STC	1/31/2020

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

FAA Approved



Brian E. Meyer  
STC ODA administrator  
Hartzell STC ODA-100082-CE

Date

1/31/2020

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**INSTRUCTIONS FOR INSTALLATION OF HARTZELL  
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***Please read these instructions and the Instructions for Continued Airworthiness before starting installation. If you have any questions regarding installation of this STC, please contact Hartzell Propeller at:***

***Phone: (937) 778-4379 or  
1-800-942-7767***

***E-mail: techsupport@hartzellprop.com***

**GENERAL**

These STC installation instructions provide the necessary information to install either a 4C1-F650A1/76C04B-0.6 propeller or 4C1-F650A1/76C04-0.6 propeller with Hartzell model 107593(P) aluminum spinner on the following airplanes:

**Table 1. Aircraft included in this STC**

<b>Aircraft Model</b>	<b>Continental Engine Model</b>
SR22T	TSIO-550-K

It is the responsibility of the installer to verify compatibility of this STC with previously approved modifications installed on the airplane.

**APPLICABLE MODELS**

This STC propeller conversion applies to all Cirrus aircraft listed in Table 1, equipped with the listed 315 HP engine. No other aircraft / engine combinations are applicable.

**NOTE: This instruction consists of two sections, Section A if the propeller is being installed in the field as a retrofit, and Section B if the propeller is being installed at the Cirrus factory.**

**Section A: Field Installation of STC**

- A.1 Remove the original propeller and spinner per the applicable Cirrus Airplane Maintenance Manual procedures.
- A.2 If installing a propeller without ice protection, install the spinner bulkhead on the new propeller hub per Hartzell Propeller Owner's Manual 480 using the "Installation of a Metal Spinner Bulkhead on a Propeller Hub" instructions in the "Bulkhead Installation" section of the manual. Propellers with ice protection include the spinner bulkhead preinstalled as part of the ice

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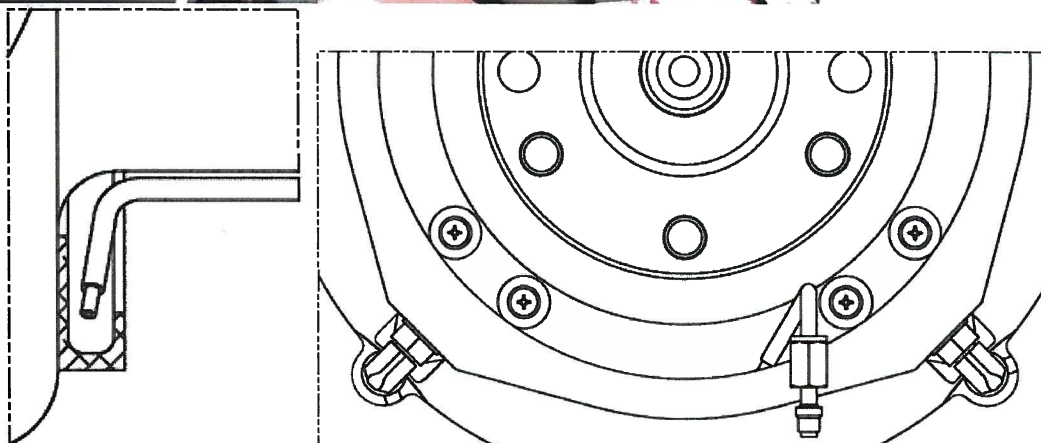
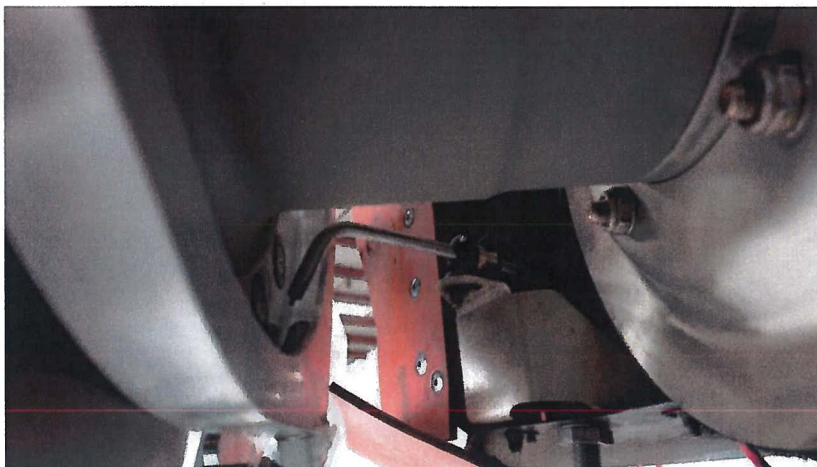
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protection installation. Ice protection system details and configuration specifications are provided in Hartzell Manual 180, reference Anti-Ice Kit Part # 107638.

A.3 Install new propeller and spinner dome on aircraft in accordance with Hartzell Propeller Owner's Manual 480 and Spinner Maintenance Manual 127. Follow installation instructions for "Installation of "F" Flange Propellers" in Manual 480. Also reference the Cirrus Airplane Maintenance Manual section appropriate to the aircraft S/N and the configuration being modified.

**For propellers with ice protection:**

A.4 Position the anti-ice slinger ring feed tube centered in the slinger ring groove with the orifice just below flush with the inboard lip of the slinger ring groove. Ensure adequate clearance to rotating components See images below. Reference Hartzell Manual 180 for blade feed tube positioning, do not position per the Cirrus AMM.



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A.5 Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS-032519T to the existing Pilot's Operating Handbook and FAA Approved Airplane Flight Manual. Revise weight and balance records to show:

Removal of original propeller and spinner

Item	Model	Weight [lb]	Arm [in.]
Propeller (with ice protection)	PHC-J3Y1F-1N/N7605(C)B	61.5	48.0
Propeller (without ice protection)	PHC-J3Y1F-1N/N7605(C)	58.3	48.0
Composite Spinner	102870	2.30	48.0
Aluminum Spinner, polished	A-2295-11P	4.45	48.0
Aluminum Spinner, painted	A-2295-11	4.75	48.0

Installation of the appropriate Hartzell propeller and spinner:

Item	Model	Weight [lb]	Arm [in.]
Propeller (with ice protection)	4C1-F650A1/76C04B-0.6	63.8	48.0
Propeller (without ice protection)	4C1-F650A1/76C04-0.6	62.6	48.0
Spinner	107593(P)	4.8	48.0

- A.6 Perform Post-Installation Checks in accordance with Hartzell Propeller Owner's Manual 480. Due to no pilot propeller control, high speed full throttle taxi may be necessary in order to cycle the propeller and purge the system of air.
- A.7 Make the appropriate logbook entries and return aircraft to service with FAA Form 337 referencing this STC.
- A.8 Perform a functional check-flight using normal procedures, note maximum RPM setting and adjust governor high-RPM stop if necessary.
- A.9 Post-installation dynamic balance of the propeller/engine combination is recommended, but not required, per Chapter 6 of Hartzell Propeller Owner's Manual 480.

**Section B: Cirrus Factory Installation of STC**

- B.1 If installing a propeller without ice protection, install the spinner bulkhead on the new propeller hub per Hartzell Propeller Owner's Manual 480 using the "Installation of a Metal Spinner Bulkhead on a Propeller Hub" instructions in the "Bulkhead Installation" section of the manual. Propellers with ice protection include the spinner bulkhead preinstalled as part of the ice

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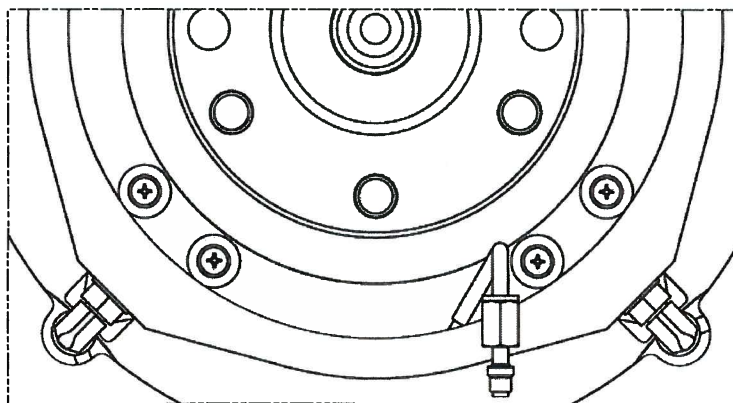
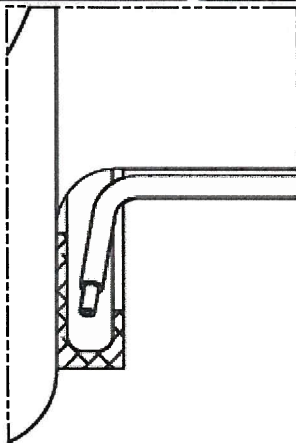
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protection installation. Ice protection system details and configuration specifications are provided in Hartzell Manual 180, reference Anti-Ice Kit Part # 107638.

B.2 Install propeller and spinner dome on aircraft in accordance with Hartzell Propeller Owner's Manual 480 and Spinner Maintenance Manual 127. Follow installation instructions for "Installation of "F" Flange Propellers" in Manual 480.

**For propellers with ice protection:**

B.3 Position the anti-ice slinger ring feed tube centered in the slinger ring groove with the orifice just below flush with the inboard lip of the slinger ring groove. Ensure adequate clearance to rotating components See images below. Reference Hartzell Manual 180 for blade feed tube positioning, do not position per the Cirrus installation drawings.



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B.4 Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS-032519T to the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

B.5 Update AFM equipment list with the appropriate information below:

Item	Model	Weight [lb]	Arm [in.]
Propeller (with ice protection)	4C1-F650A1/76C04B-0.6	63.8	48.0
Propeller (without ice protection)	4C1-F650A1/76C04-0.6	62.6	48.0
Spinner	107593(P)	4.8	48.0

B.6 Perform Post-Installation Checks in accordance with Hartzell Propeller Owner's Manual 480. Due to no pilot propeller control, high speed full throttle ground run may be necessary in order to cycle the propeller and purge the system of air.

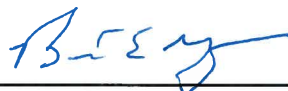
B.7 Post-installation dynamic balance of the propeller/engine combination is recommended, but not required, per Chapter 6 of Hartzell Propeller Owner's Manual 480.

B.8 Perform a production flight test using normal procedures, note maximum RPM setting and adjust governor high-RPM stop if necessary.

B.9 Make appropriate logbook entries prior to issuance of Airworthiness Certificate.

END

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