

INST_040416

INSTRUCTIONS FOR INSTALLATION
OF HARTZELL HC-C2YR-1BFP / F7894 PROPELLER
ON TEXTRON / CESSNA 177RG and F177RG AIRCRAFT
STC SA04200CH

LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Date
IR	All	Initial Release	4/10/17

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

MAY 1, 2017

INST_040416

**INSTRUCTIONS FOR INSTALLATION
OF HARTZELL HC-C2YR-1BFP / F7894 PROPELLER
ON CESSNA 177RG AIRCRAFT**

STC SA04200CH

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 HC-C2YR-1BFP / F7894 propeller with 106848() composite spinner on the Cessna 177RG and F177RG "Cardinal RG" aircraft. The spinner suffix in parentheses will indicate finish and color and does not affect eligibility.

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

This STC is compatible with STC SA03623AT for the installation of Powerflow Systems, Inc. tuned exhaust system.

APPLICABLE MODELS

This STC propeller conversion applies to all Cessna 177RG aircraft from serial number 177RG0001 through 177RG1366 and Cessna F177RG aircraft from serial number F177RG0001 through F177RG0177, equipped with Lycoming IO-360-A1B6D engines.

1. Remove the original propeller and spinner per the applicable aircraft maintenance manual procedures.
2. Install the spinner bulkhead on the new propeller hub per Hartzell Owner's Manual 115N using the "Installation of a Metal Spinner Bulkhead on a Propeller Hub" instructions in the "spinner pre-installation" section of the manual.
3. Install new propeller and spinner dome on aircraft in accordance with Hartzell Owner's Manual number 115N. Follow installation instructions for "Installation of

INST_040416

**INSTRUCTIONS FOR INSTALLATION
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STC SA04200CH

“K” and “R” Flange Propellers” in Manual 115N. Also reference the Cessna service manual section appropriate to the aircraft S/N and the configuration being modified.

4. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS_040416 to the existing Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
5. Install the following placard on the instrument panel near the manifold pressure gage in full view of the pilot:

**CONTINUOUS OPERATION IS PROHIBITED
BETWEEN 2000 – 2300 RPM WITH LESS
THAN 10 INCHES MANIFOLD PRESS.**

The placard is to be made locally with a color that contrasts to the background.

6. Revise weight and balance records to show:

Removal of original propeller and spinner

Check equipment list in Pilot's Operating Handbook/FAA Approved Airplane Flight Manual for appropriate propeller weight and moment arm.

Installation of Hartzell HC-C2YR-1BFP / F7894 propeller and Hartzell 106848() spinner:

Weight of propeller and spinner = **59.0 lbs**
Moment arm = **19.7 inches**

7. Perform ground engine run for a functional and leak check of the Hartzell propeller installation.
8. Make the appropriate logbook entries and return aircraft to service with FAA Form 337 referencing this STC.
9. Perform a functional check-flight using normal procedures, note maximum RPM setting and adjust governor high-RPM stop if necessary.
10. Post-installation dynamic balance of the propeller/engine combination is recommended, but not required, per Chapter 6 of Hartzell Owner's Manual 115N.

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INST_050117


**INSTRUCTIONS FOR INSTALLATION
OF HARTZELL HC-C2YR-1BFP / F7894-1.5 PROPELLER
ON TEXTRON / CESSNA 177B AIRCRAFT
STC SA04200CH**

LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Date
IR	All	Initial release.	Dec. 5, 2017

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

FAA Approved



Brian E. Meyer
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Hartzell STC ODA-100082-CE

Date

12/12/17

INST_050117

**INSTRUCTIONS FOR INSTALLATION
OF HARTZELL HC-C2YR-1BFP / F7894-1.5 PROPELLER
ON CESSNA 177B AIRCRAFT**

STC SA04200CH

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 HC-C2YR-1BFP / F7894-1.5 propeller with 106848() composite spinner on the Cessna 177B "Cardinal" aircraft equipped with Lycoming O-360-A1F6(D) engines. The spinner suffix in parentheses will indicate finish and color and does not affect eligibility.

It is the responsibility of the installer to verify compatibility of this STC with previously approved modifications installed on the airplane. This STC is compatible with the installation of Powerflow Systems, Inc. tuned exhaust system (SA02115AT).

APPLICABLE MODELS

This STC propeller conversion applies to all Cessna 177B aircraft listed in Table 1, equipped with Lycoming O-360-A1F6 and O-360-A1F6D engines.

Table 1. Applicable airplanes by serial number.

Manufacture Year	Serial Number Range
1970	17701371 through 17701530, except 17701472
1971	17700002, 17701531 through 17701633
1972	17701634 through 17701773
1973	17701774 through 17701973
1974	17701974 through 17702123
1975	17701472, 17702124 through 17702313
1976	17702314 through 17702522
1977	17702523 through 17702672
1978	17702673 through 17702752

INST_050117

**INSTRUCTIONS FOR INSTALLATION
OF HARTZELL HC-C2YR-1BFP / F7894-1.5 PROPELLER
ON CESSNA 177B AIRCRAFT**

STC SA04200CH

PROCEDURE

1. Remove the original propeller and spinner per the applicable aircraft maintenance manual procedures.
2. Install the spinner bulkhead on the new propeller hub per Hartzell Owner's Manual 115N using the "Installation of a Metal Spinner Bulkhead on a Propeller Hub" instructions in the "spinner pre-installation" section of the manual.
3. Install new propeller and spinner dome on aircraft in accordance with Hartzell Owner's Manual number 115N. Follow installation instructions for "Installation of "K" and "R" Flange Propellers" in Manual 115N. Also reference the Cessna service manual section appropriate to the aircraft S/N and the configuration being modified.
4. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS_050117 to the existing Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
5. Install the following placard on the instrument panel near the manifold pressure gage in full view of the pilot:

**CONTINUOUS OPERATION IS PROHIBITED
BETWEEN 2000 AND 2300 RPM WITH LESS
THAN 8.0 INCHES MANIFOLD PRESS.**

The placard is to be made locally with a color that contrasts to the background.

6. Revise weight and balance records to show:

Removal of original propeller and spinner

Check equipment list in Pilot's Operating Handbook/FAA Approved Airplane Flight Manual for appropriate propeller weight and moment arm.

Installation of Hartzell HC-C2YR-1BFP / F7894-1.5 propeller and Hartzell 106848() spinner:

Weight of propeller and spinner = **58.8** lbs

Moment arm = **21.0** inches

7. Perform ground engine run for a functional and leak check of the Hartzell propeller installation.

INST_050117

**INSTRUCTIONS FOR INSTALLATION
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STC SA04200CH

8. Make the appropriate logbook entries and return aircraft to service with FAA Form 337 referencing this STC.
9. Perform a functional check-flight using normal procedures, note maximum RPM setting and adjust governor high-RPM stop if necessary.
10. Post-installation dynamic balance of the propeller/engine combination is recommended, but not required, per Chapter 6 of Hartzell Owner's Manual 115N.

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