

INST_121212

**INSTRUCTIONS FOR INSTALLATION
OF HARTZELL HC-G2YR-1BFP/F7894-1.5 PROPELLER
ON CESSNA 172RG AIRCRAFT
STC SA03373CH**

LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Date
IR	All	Initial Release	12/12/12

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

FAA Approved



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Hartzell STC ODA-100082-CE

Date

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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 HC-G2YR-1BFP/F7894-1.5 propeller with 105127() composite spinner on the Cessna 172RG "Cutlass RG" aircraft (the spinner alphanumeric suffix in parentheses will indicate finish and color).

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

APPLICABLE MODELS

This STC propeller conversion applies to all Cessna 172RG aircraft from serial number 172RG0001 through 172RG1191 equipped with Lycoming O-360-F1A6 engines.

1. Remove the original propellers and spinners 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 Composite Spinner Bulkhead on a Propeller Hub" instructions in the "spinner pre-installation" section of the manual.

NOTE: When installing the bulkhead begin installation with spacer A, wave washer B, and washer C between spinner bulkhead and propeller hub, install the remaining washer behind the bulkhead under the nut on each hub-clamping bolt (4 places). Nuts are torqued per Manual 115N.

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3. Install new propeller and spinner dome on aircraft in accordance with Hartzell Owner's Manual number 115N. Follow installation instructions for "Installation of "R" Flange Propellers" in Manual 115N. Also reference the Cessna service manual section appropriate to the aircraft S/N and configuration being modified.
4. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS_121212 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, over the existing placard, in full view of the pilot:

**CONTINUOUS OPERATION IS
PROHIBITED BETWEEN 2000 – 2300 RPM
WITH LESS THAN 8" MAN. PRESS.**

The placard is to be made locally with a color that contrasts to the background. Suggested placement of the placard is shown below.



Suggested Placard Location,
over existing propeller
placard

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6. Revise weight and balance records to show:

Removal of the original propellers and spinners

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

Example:

Weight of propeller = 55.8 lbs (from 1980 172RG equipment list)

Moment arm = -43.7 in.

Weight of spinner = 3.4 lbs (from 1980 172RG equipment list)

Moment arm = -43.8 in.

NOTE: The combined weight of a McCauley B2D34C220/80VHA-3.5 propeller and Cessna spinner removed from the 1985 172RG used during STC development was 59.2 lbs. It is recommended the installer weigh the removed propeller to confirm this weight in order to accurately calculate the new weight and balance.

Installation of Hartzell HC-G2YR-1BFP/F7894-1.5 propeller and Hartzell 105127() spinner:

Weight of propeller and spinner = 59.4 lbs

Moment arm = -43.7 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 STC.
9. Fly a functional check-flight using normal procedures, note maximum RPM setting and readjust governor high-RPM stop if necessary.
10. Post-installation dynamic balance of the propeller/engine combination is recommended, but not required, per Section 61-00-15 of Hartzell Owner's Manual 115N.

END