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INST-060617

INSTRUCTIONS FOR INSTALLATION OF HARTZELL HC-E3YR-1RF / F7693F+2 PROPELLER ON PIPER PA-32RT-300T, PA-32R-301T, & PA-32-301T AIRCRAFT STC SA04274CH

LOG OF REVISIONS

Revision	Revised	Description of Revision	Date
	Pages	·	
IR	All	Initial release.	2/9/2018

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 2/9/18

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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-E3YR-1RF / F7693F+2 propeller with C-3575-P aluminum spinner on the Piper PA-32-301T (Turbo Saratoga), PA-32R-301T (Turbo Saratoga SP), and PA-32RT-300T (Turbo Lance II) aircraft equipped with Lycoming TIO-540-S1AD engines.

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 Turboplus Aircraft Systems' intercooler (STC SA2935NM).

APPLICABLE MODELS

This STC propeller conversion applies to all Piper PA-32-301T, PA-32R-301T, and PA-32RT-300T aircraft listed in Table 1, equipped with Lycoming TIO-540-S1AD engines.

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Table 1. Applicable airplanes by serial number.

Model	Serial Number Range	
PA-32-301T	S/N 32-8024001 through 32-8424002 except for the following ¹ : 32-8024031, 32-8024032, 32-8124011, 32-8124017, 32-8124018, 32-8124035, 32-8124036, 32-8224011, 32-8224013, 32-8224014, 32-8324006, 32-8324015, and 32-8324016	
32R-8029001 through 32R-8629008, and 3229001 through 32R-32R-301T 3229003 except for the following ¹ : 32R-8029121, 32R-8129041, 32R-8229065, and 32R-83		
PA-32RT-300T	32R-7787001, 23R-7887002 through 32R-7987126 except for the following ¹ : 32R-7887036, 32R-7887081, 32R-7887222, 32R-7987050, 32R-7987085, and 32R-7987122	

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 Piper service manual section appropriate to the aircraft S/N and the configuration being modified.
- 4. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS-060617 to the existing Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
- 5. 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.

¹ Refer to TCDS A3SO Note 7.

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<u>Installation</u> of Hartzell HC-E3YR-1RF / F7693F+2 propeller and Hartzell C-3575-P spinner:

Weight of propeller and spinner = **78.2** lbs Moment arm = **15.8** inches

- 6. Perform ground engine run for a functional and leak check of the Hartzell propeller installation.
- 7. Make the appropriate logbook entries and return aircraft to service with FAA Form 337 referencing this STC.
- 8. Perform a functional check-flight using normal procedures, note maximum RPM setting and adjust governor high-RPM stop if necessary.
- 9. 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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