

INST_010614

INSTRUCTIONS FOR INSTALLATION

**OF HARTZELL HC-C3YR-1RF/F7282 PROPELLER and HARTZELL 835-47(),
835-52(), 103629() SPINNERS**

**ON PIPER MODELS PA-28R-180, PA-28R-200, PA-28R-201, PA-28RT-201
AIRCRAFT**

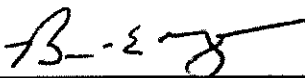
STC SA4528NM

LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Date
IR	All	Initial Release – Replaces previous Installation Instructions Rev. A, 1/27/97	

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

1/9/15

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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 Hartzell HC C3YR-1RF/F7282 propellers, 835-47() and 835-52() metal spinners, and 103629() composite spinners on the Piper "Arrow" 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'ed propeller and spinner conversion applies to Piper PA-28R-180, PA-28R-200, PA-28R-201, and PA-28RT-201 aircraft, all serial numbers.

1. Remove the original propellers and spinners per the applicable aircraft maintenance manual procedures.
2. Install the spinner bulkhead adapter ring on the ring gear following Hartzell Owner's Manual 115N instructions in the "spinner pre-installation" section of the manual.
3. Install propeller and new 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 Piper service manual section appropriate to the aircraft S/N and configuration being modified.

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4. Install the following placard between the tachometer and the manifold pressure gauge:

**“AVOID CONTINUOUS OPERATION BELOW 15 INCHES HG
BETWEEN 1950 and 2350 RPM”**

5. Remark the tachometer as follows:

Green Arc	500 to 2700 rpm
Red Radial	2700 rpm

6. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS_010614 to the existing Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
7. 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 = 66.3 lbs (Hartzell HC-C2YK-1BF/F7666A-2R)
Moment arm, Aft Datum = -1.9 in.

Weight of spinner = 4.7 lbs (Hartzell 835-52)
Moment arm, Aft Datum = -1.9 in.

NOTE: It is recommended the installer weigh the removed propellers to confirm this weight in order to accurately calculate the new weight and balance.

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Installation of Hartzell HC-C3YR-1RF/F7282 propeller and Hartzell 835-47(), 835-52(), or 103629() spinner:

Weight of propeller = 67.7 lbs.
Moment arm, Aft Datum = -1.9 in.

Weight of spinner, 103629() = 3.5 lbs
OR:
Weight of spinner, 835-52() = 4.7 lbs
OR:
Weight of spinner, 835-47() = 4.7 lbs
Moment arm, Aft Datum = -1.9 inches

8. Perform ground engine run for a functional and leak check of the Hartzell propeller installation.
9. Make the appropriate logbook entries and return aircraft to service with FAA Form 337 referencing STC.
10. Fly a functional check-flight using normal procedures, note maximum RPM setting and readjust governor high-RPM stop if necessary.
11. 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