

DA40-NST-EASA
INSTRUCTIONS FOR INSTALLATION
OF A HARTZELL HC-C2YR-1BF/F7495S PROPELLER
AND A-2295(P) SPINNER ON DIAMOND DA 40 AIRCRAFT
STC SA01850CH



LOG OF REVISIONS

Revision	Revised Pages	Description of Revision	Approved	Date

EASA STC EASA.IM.A.S.01644
dated 30/09/2005



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

Approval / Authority   Date 07. OKT. 2005

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INSTRUCTIONS FOR INSTALLATION OF A
HARTZELL HC-C2YR-1BF/F7495S PROPELLER
ON DIAMOND DA 40 AIRCRAFT

GENERAL

The following Diamond Aircraft Industries modifications are required for installation of the Hartzell propeller STC:

MÄM 40-013/a	Alteration to Trim Range - Increased trim range required for autopilot installation.
OÄM 40-109a	Improvement of Engine Cooling
MÄM 40-066	WCC Exhaust Manifold

The following modifications are considered compatible with, but not required for the Hartzell propeller STC:

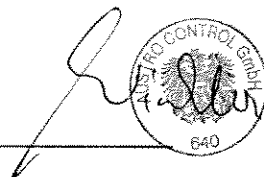
MÄM 40-113/a	LRT Rudder (standard w/ S/N 40.363 and up)
OÄM 40-071/b	Long Range Fuel Tanks
OÄM 40-063	Towing Device Installation
OÄM 40-077	MT-P420 Governor
OÄM 40-078/a	Winterization Kit - winter kit associated with the cooling improvement (OÄM 40-109/a)

Any modifications that change engine induction or exhaust systems, change engine ignition timing, increase horsepower or otherwise alter the specifications of the Lycoming IO-360-M1A engine defined in Type Certificate Data Sheet 1E10 are not approved with this STC without specific written authorization from Hartzell Propeller Inc.

All propeller governor models listed in FAA Type Certificate A47CE or others that demonstrate compatibility with this STC propeller, and that have a maximum output pressure of 350 psi are compatible with the Hartzell propeller and may be installed via a separate STC or Diamond modification.

It is responsibility of the installer to verify compatibility of this STC with previously approved modification or to contact Diamond Aircraft Industries to verify compatibility of this STC with other aircraft modifications not listed above.

Date 07. OKT. 2005



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**INSTRUCTIONS FOR INSTALLATION OF A
HARTZELL HC-C2YR-1BF/F7495S PROPELLER
ON DIAMOND DA 40 AIRCRAFT**

SECTION 1: New production aircraft

1. Install new propeller and spinner in accordance with Hartzell Owner's Manual number 115().
2. Re-mark tachometer with a green arc (normal operating range) from 500 to 2700 RPM and a 2700 RPM redline.

The green arc can be marked with Operating Range Decals from Aircraft Spruce and Specialty (www.aircraftspruce.com), P/N 10-03905 or equivalent green decal, tape, or paint. If needed, Advisory Circular AC 20-88A provides guidelines on marking aircraft powerplant instruments.

On VM 1000 equipped airplanes, in addition to re-marking the green arc on the display glass, add a placard on the unit next to the VM 1000 identification plate stating "The tachometer display arc on this unit has been re-marked in accordance with STC SA01850CH."

3. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement DA40-AFMS-EASA to the existing Diamond DA 40 Airplane Flight Manual.
4. Incorporate the following information in the aircraft weight and balance records:

Installation of Hartzell HC-C2YR-1BF/F7495S propeller and Hartzell A-2295(P) spinner:

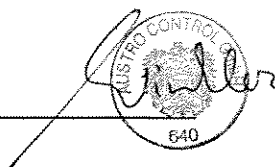
Weight of propeller and spinner = 59.3 pounds,
Moment arm = 15.0 inches (aft of datum).

5. Add the following items to the Equipment List:

Airplane Serial No.:		Registration:		Date:	
Description	Type	Part No.	Manufacturer	S/N	Installed
PROPELLER	HC-C2YR-1BF/F7495S		Hartzell Propeller Inc.		
SPINNER	A-2295(P)		Hartzell Propeller Inc.		

6. Make the appropriate logbook entries referencing STC SA01850CH in accordance with the applicable national registration requirements.

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INSTRUCTIONS FOR INSTALLATION OF A
HARTZELL HC-C2YR-1BF/F7495S PROPELLER
ON DIAMOND DA 40 AIRCRAFT

SECTION 2: Field installation of the propeller kit

1. Remove the original propeller and spinner.
2. Install new propeller and spinner in accordance with Hartzell Owner's Manual number 115().
3. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement DA40-AFMS-EASA to the existing Diamond DA 40 Airplane Flight Manual.
4. Revise weight and balance records to show:

Removal of the original MTV-12-B/180-17 propeller and propeller spinner:
Weight of propeller and spinner = 46.4 pounds,
Moment arm = 15.0 inches (aft of datum).

Installation of Hartzell HC-C2YR-1BF/F7495S propeller, Hartzell A-2295(P) spinner:
Weight of propeller and spinner = 59.3 pounds,
Moment arm = 15.0 inches (aft of datum).
5. Re-mark tachometer with a green arc (normal operating range) from 500 to 2700 RPM and a 2700 RPM redline.

The green arc can be marked with Operating Range Decals from Aircraft Spruce and Specialty (www.aircraftspruce.com), P/N 10-03905 or equivalent green decal, tape, or paint. If needed, Advisory Circular AC 20-88A provides guidelines on marking aircraft powerplant instruments.

On VM 1000 equipped airplanes, in addition to re-marking the green arc on the display glass, add a placard on the unit next to the VM 1000 identification plate stating "The tachometer display arc on this unit has been re-marked in accordance with STC SA01850CH."

6. Add the following items to the Equipment List:

Airplane Serial No.:		Registration:		Date:		
Description	Type	Part No.	Manufacturer	S/N	Installed	
PROPELLER	HC-C2YR-1BF/F7495S		Hartzell Propeller Inc.			
SPINNER	A-2295(P)		Hartzell Propeller Inc.			

7. Make the appropriate logbook entries referencing STC SA01850CH and return aircraft to service in accordance to the applicable national registration requirements.

Date 07. OKT. 2005

