

I. General

1. Type / Models:

HC-C2Y / HC-C2YF-1, -2, -4, HC-C2YK-1, -2, -4, HC-C2YL-1, -2, -4, HC-C2YR-1, -2, -4
BHC-C2Y / BHC-C2Y F-1, -2
CHC-C2Y / CHC-C2YF-1, -2
DHC-C2Y / DHC-C2YF-1, -2

2. Type Certificate Holder:

Hartzell Propeller Inc.
Piqua, OH 45356
USA

3. Manufacturer:

Hartzell Propeller Inc.

4. Date of Application:

HC-C2YF-1:	Before 1963
HC-C2YF-2:	Before 1963
HC-C2YF-4:	Before 1980
HC-C2YK-1:	Before 1963
HC-C2YK-2:	Before 1963
HC-C2YK-4:	Before 1980
HC-C2YL-1:	Before 1963
HC-C2YL-2:	Before 1963
HC-C2YL-4:	Before 1980
HC-C2YR-1, -2, -4:	Before 1980
BHC-C2YF-1, -2:	Before 1963
CHC-C2YF-1, -2:	Before 1963
DHC-C2YF-1, -2:	Before 1980

The exact Date of Application was not recorded in individual EU Member States.

5. EASA Certification Reference Date:

24 March 1959

6. EASA Certification Date:

HC-C2YF-1:	16 July 1963
HC-C2YF-2:	16 July 1963
HC-C2YF-4:	18 April 1980
HC-C2YK-1:	16 July 1963
HC-C2YK-2:	16 July 1963
HC-C2YK-4:	18 April 1980
HC-C2YL-1:	16 July 1963
HC-C2YL-2:	16 July 1963
HC-C2YL-4:	18 April 1980
HC-C2YR-1, -2, -4:	18 April 1980
BHC-C2YF-1, -2:	16 July 1963
CHC-C2YF-1, -2:	16 July 1963
DHC-C2YF-1, -2:	18 April 1980

The EASA Certification Date has been taken over from individual EU Member States.

II. Certification Basis

1. **FAA Certification Basis:** Refer to FAA TCDS no. P-920

2. **EASA Certification Basis:**

2.1 **Airworthiness Standards:**

HC-C2YF-1, -2, -4, HC-C2YK-1, -2, -4, HC-C2YL-1, -2, -4, HC-C2YR-1, -2, -4, BHC-C2YF-1, -2, CHC-C2YF-1, -2 and DHC-C2YF-1, -2:

14 CFR Part 35 with amendments 35-1 through 35-6 effective 18 August 1990.

HC-C2YF-2, -4, HC-C2YK-2, -4, HC-C2YL-2, -4, HC-C2YR-2, -4, BHC-C2YF-2, CHC-C2YF-2 and DHC-C2YF-2:

14 CFR Part 35 with amendments 35-1 through 35-8 effective 23 December 2008 for paragraphs 35.15, 35.35(c), 35.36, 35.38, 35.41 und 35.43.

Note:

Application was made to EU Member States before EASA was established. Refer to Commission Regulation (EC) No 375/2007 of 30 March 2007 amending Regulation (EC) No 1702/2003.

HC-C2YR-1 with composite blade model N7605:

14 CFR Part 35 with amendments 35-1 through 35-6 effective 18 August 1990 plus CS-P paragraphs 240, 360, 370 and 380 effective 24 October 2003.

2.2 **Special Condition:** None

2.3 **Equivalent Safety Findings:** None

2.4 **Deviations:** None

III. Technical Characteristics

1. Type Design Definition:

The propeller type is defined by a propeller assembly drawing that includes a parts list. The earliest applicable drawing revision is shown below:

HC-C2YF-2, BHC-C2YF-2, CHC-C2YF-2, Drawing D-2271 dated 8 November 1963
DHC-C2YF-2, HC-C2YK-2, HC-C2YL-2,
HC-C2YR-2

HC-C2YF-1, BHC-C2YF-1, CHC-C2YF-1, Drawing D-2425 dated 26 August 1977
DHC-C2YF-1, HC-C2YK-1, HC-C2YL-1,
HC-C2YR-1

HC-C2YF-4, HC-C2YK-4, HC-C2YL-4, Drawing D-2265 dated 15 April 1989
HC-C2YR-4

HC-C2YF-2, BHC-C2YF-2, DHC-C2YF-2, Drawing D-2292 dated 28 July 1975
HC-C2YK-2, HC-C2YL-2, HC-C2YR-2

HC-C2YR-1 with composite blades Drawing 101974 dated 11 December 2006

2. Description:

The propeller is a 2-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation mode "Constant Speed". The -1 and -4 models do not feather, the -2 models incorporate feathering and unfeathering features. (See Notes 1 and 4).

The hub is milled out of aluminum alloy. The blade materials are:

- Aluminium alloy.
- Composite (N7605 blades only).

Optional equipment includes spinner and ice protection.

3. Equipment:

Spinner:	See Note 7
Governor:	See Note 3
Ice Protection:	See Note 7

4. Dimensions:

See Table of Section IV.

5. Weight:

Depending on Propeller-Design Configuration:
See Table of Section IV.

6. Hub/Blade-Combinations:

See Table of Section IV.

7. Control System:

Propeller governors: See Note 3

8. Adaptation to Engine:

Special flange: See Note 1

9. Direction of Rotation:

Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation. (See Note 5)

IV. Operational Limits

Blades (See Note 2)	Max. Continuous kW - rpm (min ⁻¹)	Take Off kW - rpm (min ⁻¹)	Diameter Limits (cm) (See Note 2)	Approx. Max. Wt. Complete (kg) (See Notes 3,7)	Blade Construction (See Note 10)
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Non-Counterweighted Blades – Hub models: all -1 and -2

7068-0 to 7068-10	224	2700	224	2700	177,8 to 152,4 (-0 to -10)	24,1	Aluminium Alloy
7280+ 1/2 to 7280-7	186	2700	186	2700	184,2 to 165,1 (+1/2 to -7)	23,2	Aluminium Alloy
7495-0 to 7495-6	186	2700	186	2700	188,0 to 172,7 (-0 to -6)	22,7	Aluminium Alloy
7496-0 to 7496-6	186	2700	186	2700	188,0 to 172,7 (-0 to -6)	22,7	Aluminium Alloy
7497-0 to 7497-6	186	2700	186	2700	188,0 to 172,7 (-0 to -6)	23,5	Aluminium Alloy
7663-0 to 7663-8	156	2800	156	2800	193,0 to 172,7 (-0 to -8)	20,9	Aluminium Alloy
7666-0 to 7666-8	134 or 186	2900 or 2700	134 or 186	2900 or 2700	193,0 to 172,7	23,2	Aluminium Alloy
7681-0 to 7681-8	186	2700	186	2700	193,0 to 172,7 (-0 to -8)	23,2	Aluminium Alloy
7692-0 to 7692-8	134 or 186	2900 or 2700	134 or 186	2900 or 2700	193,0 to 172,7	20,9	Aluminium Alloy
7694-0 to 7694-10	156	2800	156	2800	193,0 to 167,6 (-0 to -10)	22,5	Aluminium Alloy
7694-4 to 7694-10	231	2700	231	2700	182,9 to 167,6 (-0 to -10)	22,5	Aluminium Alloy
8052-0 to 8052-8	231	2600	231	2600	203,2 to 182,9 (-0 to -8)	23,0	Aluminium Alloy
8068-0 to 8068-8	212	2700	212	2700	203,2 to 182,9 (-0 to -8)	22,7	Aluminium Alloy
8459-0 to 8459-18	194	2800	194	2800	213,4 to 167,6 (-0 to -18)	21,8	Aluminium Alloy
8465-0 to 8465-14	175	2575	175	2575	213,4 to 177,8 (-0 to -14)	22,7	Aluminium Alloy

Blades (See Note 2)	Max. Continuous kW - rpm (min ⁻¹)		Take Off kW - rpm (min ⁻¹)		Diameter Limits (cm) (See Note 2)	Approx. Max. Wt. Complete (kg) (See Notes 3,7)	Blade Construction (See Note 10)
8467-0 to 8467-12	212	2700	212	2700	213,4 to 182,9 (-0 to -12)	23,6	Aluminium Alloy
8468-0 to 8468-12	212	2700	212	2700	213,4 to 182,9 (-0 to -12)	22,7	Aluminium Alloy
8470-0 to 8470-8	194	2700	194	2700	213,4 to 193,0 (-0 to -8)	22,3	Aluminium Alloy
8475+2 to 8475-4	231	2700	231	2700	218,4 to 203,2 (+2 to -4)	23,6	Aluminium Alloy
8475-4 to 8475-6	261	2700	261	2700	203,2 to 198,1 (-4 to -6)	23,2	Aluminium Alloy
8475-6 to 8475-14	231	2700	231 or 224	2700 or 2850	198,1 to 177,8 (-6 to -14)	22,7	Aluminium Alloy
8477-0 to 8477-4	231 or 194	2575 or 2700	231 or 194	2575 or 2700	213,4 to 203,2 (-0 to -4)	24,5	Aluminium Alloy
8477-4 to 8477-6	261	2700	261	2700	203,2 to 198,1 (-4 to -6)	24,1	Aluminium Alloy
8477-6 to 8477-14	231	2700	231 or 224	2700 or 2850	198,1 to 177,8 (-6 to -14)	23,6	Aluminium Alloy
9587-0 to 9587-2	238	2200	238	2200	241,3 to 236,2 (-0 to -2)	22,7	Aluminium Alloy
9587-2 to 9587-20	238 or 224	2200 or 2400	238 or 224	2200 or 2400	236,2 to 190,5 (-2 to -20)	22,7	Aluminium Alloy
<u>Non-Counterweighted Blades – Hub model HC-C2YR-1</u>							
N7605-0 to N7605-10	160	2700	160	2700	193,0 to 167,6 (-0 to -10)	19,5	Composite
<u>Counterweighted Blades – Hub models : all -2 and -4</u>							
C7068-0 to C7068-10	224	2700	224	2700	177,8 to 152,4 (-0 to -10)	25,8	Aluminium Alloy
C7495-0 to C7495-6	186	2700	186	2700	188,0 to 172,7 (-0 to -6)	24,5	Aluminium Alloy
C7496-0 to C7496-6	186	2700	186	2700	188,0 to 172,7 (-0 to -6)	24,5	Aluminium Alloy
C7663-0 to C7663-8	156	2800	156	2800	193,0 to 172,7 (-0 to -8)	22,7	Aluminium Alloy
C7666-0 to C7666-8	134 or 186	2850 or 2700	134 or 186	2850 or 2700	193,0 to 172,7 (-0 to -8)	25,0	Aluminium Alloy
C7681-0 to C7681-8	186	2700	186	2700	193,0 to 172,7 (-0 to -8)	25,0	Aluminium Alloy
C7692-0 to C7692-8	134 or 186	2900 or 2700	134 or 186	2900 or 2700	193,0 to 172,7 (-0 to -8)	22,7	Aluminium Alloy

Blades (See Note 2)	Max. Continuous kW - rpm (min ⁻¹)		Take Off kW - rpm (min ⁻¹)		Diameter Limits (cm) (See Note 2)	Approx. Max. Wt. Complete (kg) (See Notes 3,7)	Blade Construction (See Note 10)
C8052-0 to C8052-8	231	2600	231	2600	203,2 to 182,9 (-0 to -8)	24,7	Aluminium Alloy
C8459-0 to C8459-12	194	2800	194	2800	213,4 to 182,9 (-0 to -12)	23,6	Aluminium Alloy
C8465-0 to C8465-14	175	2575	175	2575	213,4 to 177,8 (-0 to -14)	24,5	Aluminium Alloy
C8465-6 to C8465-14	194	2700	194	2700	198,1 to 177,8 (-6 to -14)	24,1	Aluminium Alloy
C8467-0 to C8467-12	212	2700	212	2700	213,4 to 182,9 (-0 to -12)	25,5	Aluminium Alloy
C8468-0 to C8468-12	194	2700	194	2700	213,4 to 182,9 (-0 to -12)	24,5	Aluminium Alloy
C8470-0 to C8470-8	194	2700	194	2700	213,4 to 193,0 (-0 to -8)	24,1	Aluminium Alloy
C8475+2 to C8475-4	231	2700	231	2700	218,4 to 203,2 (+2 to -4)	25,5	Aluminium Alloy
C8475-4 to C8475-6	261	2700	261	2700	203,2 to 198,1 (-4 to -6)	25,0	Aluminium Alloy
C8475-6 to C8475-14	231	2700	231 or 224	2700 or 2850	198,1 to 177,8 (-6 to -14)	24,5	Aluminium Alloy
C8477-0 to C8477-4	231 or 194	2575 or 2700	231 or 194	2575 or 2700	213,4 to 203,2 (-0 to -4)	26,4	Aluminium Alloy
C8477-4 to C8477-6	261	2700	261	2700	203,2 to 198,1 (-4 to -6)	25,9	Aluminium Alloy
C8477-6 to C8477-14	231	2700	231 or 224	2700 or 2850	198,1 to 177,8 (-6 to -14)	25,5	Aluminium Alloy
C9587-0 to C9587-2	238	2200	238	2200	241,3 to 236,2 (-0 to -2)	24,5	Aluminium Alloy
C9587-2 to C9587-20	238 or 224	2200 or 2400	238 or 224	2200 or 2400	236,2 to 190,5 (-2 to -20)	24,5	Aluminium Alloy

Note: Weights apply to -1 constant speed hub with "F" flange. Add 0,55 kg for "L", "K" and "R" flanges, 1,36 kg for feathering - 2 hubs, 2,5 kg for feathering -2R hubs, and 1,82 kg for -4 model.

1. Maximum Take Off Power and Speed:

See Table of Section IV.

2. Maximum Continuous Power and Speed:

See Table of Section IV.

3. Propeller Pitch Angle:

See Note 3.

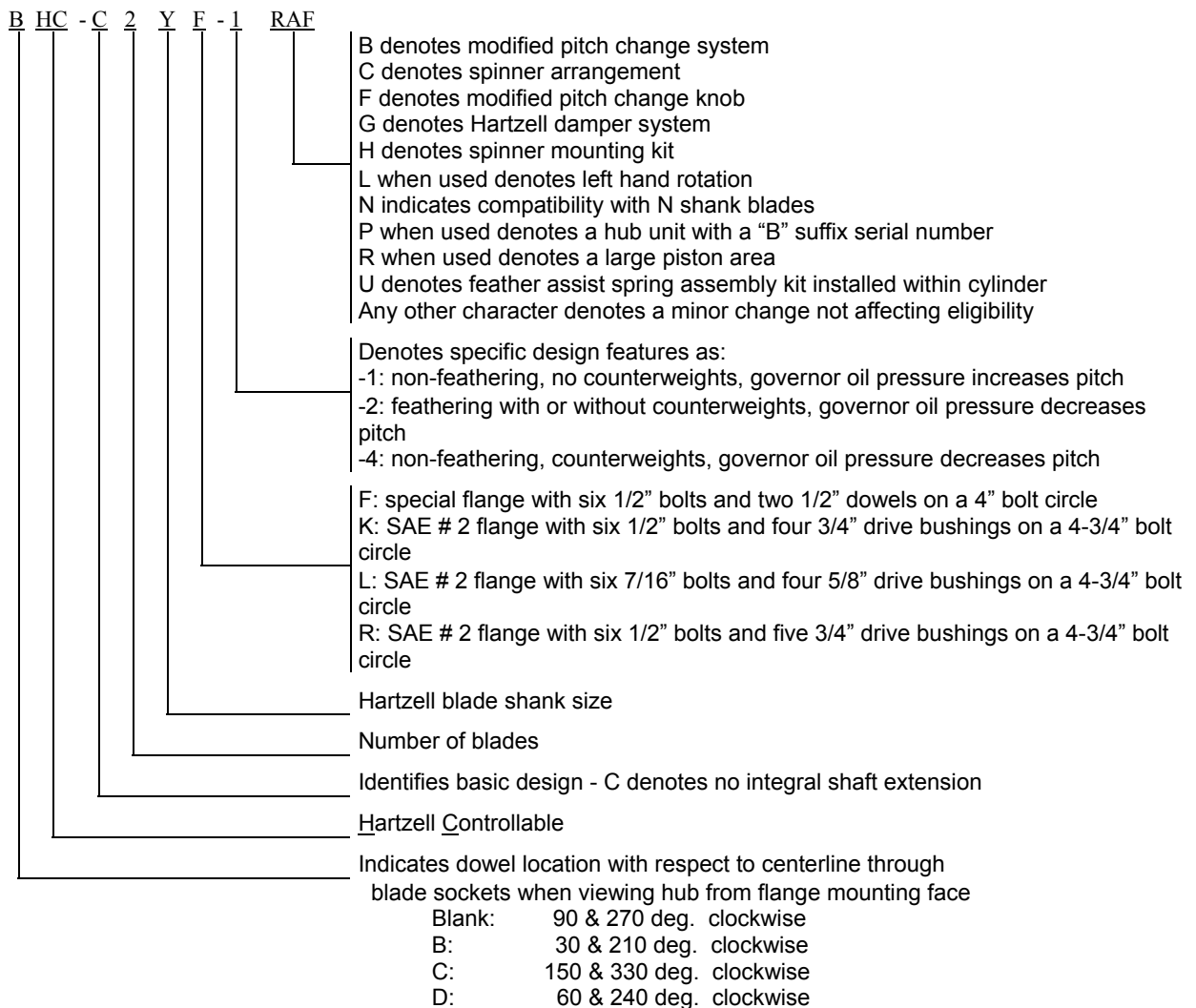
V. Operating and Service Instructions

Airworthiness Limitations	Hartzell Manuals 113B (*) for non-feathering models Hartzell Manuals 117D (*) for feathering models
Overspeed and Overtorque Limits	Hartzell Manual 202A (*)
Propeller Owner's Manual	Hartzell Manual 145, Revision 3 (*), July 2006 for propellers with composite blades Hartzell Manual 115N (*) for propellers with aluminium blades
Service Bulletins	

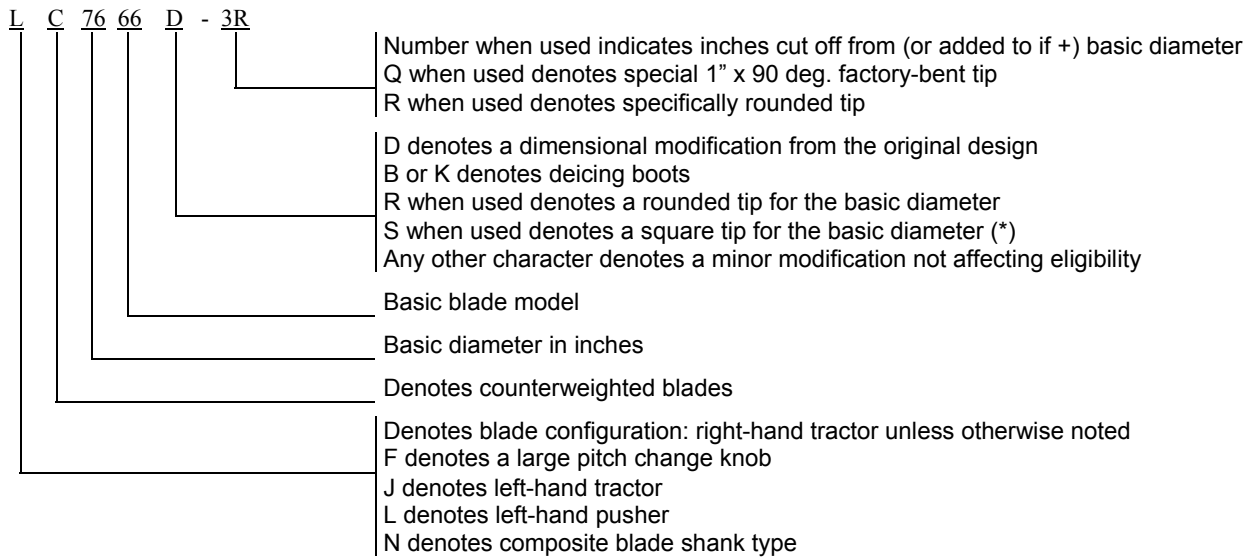
(*) or later approved revision

VI. Notes

1. Hub Model Designation (See Notes 2, 4, 5 and 6)



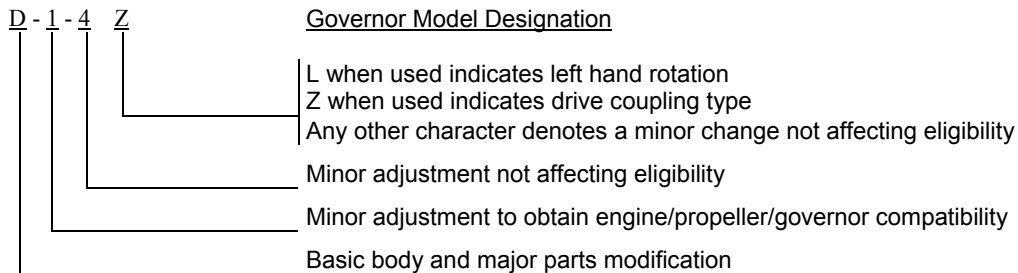
2. Blade Model Designation (See Note 6)



(*) : Blades may incorporate either round or square tips, yet may not be marked with an "R" or "S" in their model designation. This character is used to distinguish between two or more tip shapes available at the same diameter. Certain blades use "S" to denote shot peening of the exterior surface.

3. Pitch Control (See Notes 4, 6 and 10)

(a) Approved with Hartzell governors per drawings C-4770, C-4771 and C-4772. Wt.: 2,0 kg



(b) The -2 and -4 models have counterweighted blades and use oil to decrease pitch. The -1 models do not have counterweighted blades and use oil to increase pitch.

(c) Maximum governor output pressure: 2413,16 kPa for all propeller models

(d) All governors must be approved as part of the aircraft installation regardless of manufacturer.

4. (a) Feathering The -1 and -4 models do not feather. The -2 models incorporate feathering and unfeathering features.

(b) Reversing Not applicable.

(c) Piston size The -2R model differs from the -2 model in that the -2R model has a piston area of 130,32 cm² and the -2 has a piston area of 104,84 cm².

5. Left-Hand Models (see Notes 1 and 2)

The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model.

6. Interchangeability (See Notes 1, 2 and 3)

(a) Blades

Blades with counterweights (having "C" prefix) can replace non-counterweighted blades on feathering propellers (hub model suffix -2 or -2R) only, provided the air charge is reduced to 550,58 kPa at 21,11 °C. Attached decal specifying air charge must be changed accordingly.

Shot-peened blades may replace non shot-peened blades either individually or as a set

(b) Propellers

"F" type propellers with large pitch change knobs are interchangeable with corresponding propellers with the standard pitch change system.

Propeller models containing a "P" suffix, for example HC-C2YR-1BFP, may replace corresponding models without the "P" suffix, for example HC-C2YR-1BF. Propeller models without the "P" suffix may not replace those containing the "P" suffix.

(c) Governors

Hartzell governors with a "Z" suffix in their model designation may be used interchangeably with corresponding governors without the "Z". For example, the F-6-24Z is a replacement for the F-6-24 and the F-6-24 is a replacement for the F-6-24Z.

(d) Ice protection systems

Refer to Hartzell Service Letter HC-SL-30-260 for ice protection system component interchangeability.

7. Accessories (See Note 10)

(a) Propeller anti-icing (weight of anti-icing system extra)

(1) Approved with fluid feed boots listed on Hartzell approved type design data when installed in accordance with Hartzell specification H-S-2 or Hartzell Manual no. 133().

(2) Approved with fluid feed equipment listed in Hartzell approved type design data on propeller models for which equipment is available.

(b) Propeller deicing (weight of deicing equipment extra)

(1) Approved with Goodyear Ice Guards (electrical propeller deicer) when installed in accordance with instructions outlined in Goodyear Report no. AP-147 dated October 23, 1961.

(2) Approved with Goodrich electrical deicing kit 5EXXXX-X, 7EXXXX-X, 77-XXX, 67-XXX, or 65-XXX when the specific kit number is listed on Hartzell type design data and installed in accordance with Goodrich Report no. ATA 30-60-07.

(3) Approved with ice protection equipment when listed on Hartzell type design data.

(c) Propeller spinner (weight of spinner extra)

(1) Approved with Hartzell and other manufacturer's spinners when listed on Hartzell approved type design data.

(d) Propeller Damper C-1576

(1) Approved for use with Hartzell Propeller model HC-C2Y(). Wt: 3,63 kg

8. Shank Fairings: Not applicable.

9. Special Limits:

Table of Propeller - Engine Combinations
Approved Vibrationwise for Use on Normal Category Single Engine Tractor Aircraft

The maximum and minimum propeller diameters that can be used from a vibration standpoint are shown below. No reduction below the minimum diameter listed is permissible, since this figure includes the diameter reduction allowable for repair purposes.

The engine models listed below are the configurations on the engine type certificate unless specifically stated otherwise. Modifications to the engine or airframe that alter the power of the engine models listed below during any phase of operation have the potential to increase propeller stresses and are not approved by this list. Such modifications include, but are not limited to, the addition of a turbocharger or turbnormalizer, increased boost pressure, increased compression ratio, increased RPM, altered ignition timing, electronic ignition, full authority digital engine controls (FADEC), or tuned induction or exhaust. Also, any change to the mass or stiffness of the crankshaft/counterweight assembly is not approved by this list.

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
HC-C2YR	F7068-()	LYC IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -E1A, -F1A, LYC O-360-A1A, -A1AD, -A1C, -A1D, -A1F, -A1G, -A1H, -A1LD	172,7	170,2	Stabilized operation is prohibited above 84,7 kPa MP between 2300-2350 RPM and below 50,8 kPa MP above 2600 RPM
HC-C2YR	F7068	LYC O-360-A1F6, -A1F6D, -A1G6, -A1G6D, -A1H6, -F1A6, -G1A6 LYC IO-360-A1B6, -A1B6D, -A1D6, -A1D6D, -B1F6, -C1C6, -C1D6, -C1E6, -C1E6D	172,7	167,6	none
HC-C2YR-1BFP	F7497	LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -A1H, -A1P	188,0	182,9	none
HC-C2YR-1BFP	F7497	LYC IO-360-B1A, -B1B, -B1D, -B1E, -B1F, -E1A, -M1A	188,0	182,9	none
HC-C2YR-1BFP	F7497	LYC IO-360-A1A, -A1B, -A1C, -A1D, -C1A, -C1B, -C1C, -C1F, -D1A	188,0	182,9	Continuous operation is prohibited above 81,3 kPa MP between 2350 and 2550 RPM
HC-C2YR-1BFP	F7497	LYC IO-360-A1B6, -A1B6D, -A1D6, -A1D6D, -C1C6, -C1D6, -C1E6, -C1E6D LYC O-360-A1F6, -A1F6D	188,0	182,9	none
BHC-C2YF	7663	TCM O-300-A, -B, -C, -D, -E	182,9	177,8	none
HC-C2YF	7663	TCM IO-346-B	193,0	193,0	none
BHC-C2YF	7663	TCM IO-360-A, -B, -C, -D, -E	193,0	182,9	none

Note: MP = Manifold pressure

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
BHC-C2YF	F7663()	TCM IO-360-H, -HB	193,0	182,9	none
HC-C2YL	7663	LYC O-290-D2A	182,9	177,8	none
HC-C2YL	7663	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3B, -C3C, -D1A, -D1B, -D1D, -D1F, -E1A, -E1B, -E1C, -E1F, -E1J	182,9	177,8	none
HC-C2YL	7663	LYC IO-320-A1A, -B1A, -B1B, -B1C, -B1D, -B1E, -C1A, -C1B, -D1A, -D1B, -D1C, -E1A, -E1B, -F1A	182,9	177,8	none
HC-C2YK HC-C2YR	7666 F7666	LYC O-360-A1A, -A1AD, -A1C, -A1D, -A1F, -A1G, -A1LD, -B1A, -B1B, -C1A, -C1C, -C1F, -C1G, -D1A	193,0	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	7666 F7666A	LYC O-360-C1E, -C1F	193,0	182,9	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK HC-C2YR	F7666A-2Q	LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -B1A, -B1B, -C1A, -C1C, -C1F, -D1A	188,0	188,0	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK	7666	LYC IO-360-A1A, -A1B, -A1C, -C1A, -C1B, -C1C, -D1A	188,0	182,9	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK	7666	LYC IO-360-B1A, -B1C	188,0	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	F7666()-3Q	LYC IO-360-A3B6D	185,4	185,4	none
HC-C2YK HC-C2YR	F7666 F7666A	LYC O-360-E1A6D	188,0	182,9	none
HC-C2YK HC-C2YR	F7666A-2	LYC O-360-A1F6D	188,0	185,4	none
HC-C2YR	F7666A-()R	LYC TO-360-E1A6D	188,0	182,9	none
()HC-C2YK ()HC-C2YR	()7666()-4Q	LYC IO-360-B1A, -B1B, -B1D, -B1E, -B1F, -E1A, -F1A	182,9	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	F7666A-4Q	LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -B1A, -B1B, -C1A, -C1C, -D1A	182,9	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK	F7666A-4Q	LYC IO-360-A1B6	182,9	182,9	none

Note: MP = Manifold pressure

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
HC-C2YK HC-C2YR	7666-4Q	LYC IO-360-A1A, -A1B, -A1C, -C1A, -C1B, -C1C, -D1A	182,9	182,9	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK	7666	LYC IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -E1A, -F1A	188,0	182,9	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK	7666	LYC IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -E1A, -F1A	193,0	189,2	Avoid continuous operation between 2000 and 2250 RPM
HC-C2YK HC-C2YR	7666	LYC IO-360-A1B6, -A1D6, -C1C6, -C1E6	193,0	193,0	None when used with Hartzell C-1576 damper
HC-C2YK HC-C2YR	7666	LYC IO-360-A1B6, -A1D6, -C1C6, -C1E6	193,0	193,0	Avoid continuous operation between 2000 and 2400 RPM
HC-C2YK HC-C2YR	7666	LYC O-360-F1A6	188,0	182,9	none
HC-C2YK HC-C2YR	()7666	LYC IO-360-A1B6D	188,0	182,9	none
HC-C2YK HC-C2YR	7666A F7666A	LYC IO-360-C1C	188,0	184,2	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK HC-C2YR	F7666A	LYC TIO-360-C1A6D LYC TO-360-C1A6D	193,0	190,5	Do not operate above 121,9 kPa manifold pressure at engine speeds below 2400 RPM
HC-C2YR	F7666A	LYC IO-360-M1A, -M1B	193,0	188,0	Avoid continuous operation between 2000 and 2350 RPM
HC-C2YK HC-C2YR	F7666	LYC IO-360-A1B6, -A1D6, -C1C6, -C1E6	188,0	182,9	none
BHC-C2YF	8052	TCM TSIO-520-BE	203,2	198,1	none
HC-C2YR- 1BFP	F8068	LYC IO-540-D4A5, -D4B5, -D4C5, -T4A5D, -T4B5, -T4B5D, -T4C5D LYC O-540-E4A5, -E5B5, -E4C5	203,2	198,1	none

Note: MP = Manifold pressure

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
BHC-C2YF	F8459	TCM TSIO-360-E, -EB, -KB	193,0	190,5	Avoid continuous operation between 2000 and 2200 RPM with engine manifold pressure above 108,4 kPa. Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 RPM.
BHC-C2YF	F8459-()R	TCM TSIO-360-F, -FB, -G	193,0	190,5	Avoid continuous operation between 2000 and 2200 RPM with engine manifold pressure above 108,4 kPa. Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 RPM.
BHC-C2YF	F8459()-()R	TCM IO-360-ES	193,0	190,5	Avoid continuous ground operation between 1700 and 2100 RPM in cross and tail winds of over 10 knots.
HC-C2YF	8459	Franklin 6A-350-C1, -C2	203,2	193,0	none
HC-C2YL	8459	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3B, -C3C, -D1A, -D1B, -E1A, -E1B, -E1C, -E1F	167,6	167,6	none
HC-C2YL	8459	LYC IO-320-A1A, -B1A, -B1B, -B1C, -B1D, -B1E, -C1A, -C1B, -D1A, -D1B, -E1A, -E1B, -F1A	167,6	167,6	none
BHC-C2YF CHC-C2YF DHC-C2YF	8465	TCM IO-470-L, -LO	198,1	193,0	none
HC-C2YK HC-C2YR	8467	LYC IO-540-D4A5	195,6	190,5	Avoid continuous operation between 2500 and 2600 RPM above 84,7 kPa MP.

Note: MP = Manifold pressure

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
HC-C2YK HC-C2YR	F8467-8R	LYC IO-540-E4A5	193,0	193,0	Avoid continuous operation between 2500 and 2600 RPM above 84,7 kPa MP.
HC-C2YK HC-C2YR	F8467	LYC IO-540-R1A5 with RayJay turbocharger (up to 73,7 cm MP absolute)	195,6	190,5	none
HC-C2YK HC-C2YR	8467-()R	LYC O-540-B4A5, -B4B5, -E4A5, -E4B5, -E4C5	195,6	190,5	Avoid continuous operation between 2500 and 2600 RPM above 84,7 kPa MP.
HC-C2YK HC-C2YR	8467-()R	LYC IO-540-T4A5D	195,6	190,5	none
HC-C2YF BHC-C2YF	8468	TCM O-470-R	213,4	203,2	none
HC-C2YF	8468	TCM IO-470-D, -E, -F, -G, -H, -M, -N, -R, -S	213,4	213,4	Avoid continuous operation between 2100 and 2225 RPM.
HC-C2YF	8468	TCM IO-470-D, -E, -F, -G, -H, -M, -N, -R, -S	208,3	203,2	none
HC-C2YF	8468	TCM IO-470-D, -E, -F, -G, -H, -M, -N, -R, -S	198,1	198,1	Do not exceed 77,8 kPa MP below 2300 RPM.
BHC-C2YF	8468R	TCM IO-520-BA	213,4	213,4	none
BHC-C2YF	F8468R F8468AR	TCM IO-520-BB	213,4	213,4	none
HC-C2YL	8468 F8468 F8468R F8468AR	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3B, -C3C, -D1A, -D1B, -E1A, -E1B, -E1C, -E1F	203,2	188,0	none
HC-C2YL	8468-6Q	LYC O-320-A3A, -A3B, -A3C, -B3A, -B3B, -B3C, -C3A, -C3C, -D1A, -D1B, -E1A, -E1B, -E1C, -E1F	198,1	198,1	none
HC-C2YK	8468-10R	LYC TIO-360-A1A, -A1B	188,0	188,0	Avoid continuous operation between 1975 and 2200 RPM.
HC-C2YK HC-C2YR	8468	LYC O-540-B4A5, -B4B5	213,4	195,6	none
HC-C2YR	F8468AR	LYC O-540-B4B5, -J1A5D, -J3A5 LYC IO-540-W1A5, -W1A5D	205,7	195,6	none

Note: MP = Manifold pressure

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
HC-C2YF	8475	TCM IO-520-A, -J, TCM TSIO-520-A, -C, -G, -H	203,2	195,6	none
HC-C2YF	8475	TCM IO-520-D, -E, -F, -K, -L	198,1	195,6	none
BHC-C2YF	8475	TCM IO-520-B, -C, -CB, TCM TSIO-520-B, -D	203,2	195,6	none
BHC-C2YF	8475	TCM TSIO-520-E	198,1	195,6	none
HC-C2YK HC-C2YR	8475R	LYC IO-540-K1B5, -K1C5, -L1A5, -M1A5	213,4	213,4	none
HC-C2YK HC-C2YR	8475R	LYC IO-540-K1A5, -K1D5, -K1G5	213,4	198,1	none
HC-C2YK HC-C2YR	8475D	LYC IO-540-K1A5, -K1G5, -K1A5D, -K1G5D	210,8	198,1	none
HC-C2YK HC-C2YR	8475	LYC IO-540-K1A5, -K1B5, -K1C5, -L1A5, -M1A5	210,8	198,1	none
HC-C2YK HC-C2YR	8475	LYC TIO-540-A1A	203,2	203,2	none
HC-C2YK HC-C2YR	8475+2	LYC IO-540-K1A5, -K1B5, -K1C5, -K1D5, -L1A5, -M1A5	218,4	218,4	Do not exceed 81,3 kPa MP between 2300 and 2475 RPM.
HC-C2YR	F8477()	LYC O-360-A1F6, -A1F6D, -A1G6, -A1G6D, -A1H6, -F1A6, -G1A6 LYC IO-360-A1B6, -A1B6D, -A1D6, -A1D6D, -B1F6, -C1C6, -C1D6, -C1E6, -C1E6D	213,4	198,1	none
HC-C2YR	F8477	LYC IO-360-A1A, -A1B, -A1C, -A1D, -B1A, -B1B, -B1D, -B1E, -B1F, -C1A, -C1B, -C1C, -C1F, -D1A, -M1A, -M1B LYC O-360-A1A, -A1C, -A1D, -A1F, -A1G, -A1H, -A1P, -C1A, -C1C, -C1E, -C1F, -C1G	203,2	198,1	Propeller must be equipped with Hartzell model C-1576 damper assembly.
HC-C2YK HC-C2YR	F8477-6Q	LYC IO-540-D4A5, -D4B5, -D4C5	198,1	198,1	none
HC-C2YK HC-C2YR	8477	LYC O-540-A4A5, -A4B5, -A4C5, -A4D5, -E4A5, -E4B5, -E4C5	213,4	193,0	none
HC-C2YK HC-C2YR	8477-8R	LYC O-540-A4A5, -A4B5, -A4C5, -A4D5, -E4A5, -E4B5, -E4C5	193,0	193,0	none
HC-C2YK HC-C2YR	8477	LYC O-540-G1A5	213,4	210,8	none

Note: MP = Manifold pressure

<u>Hub Model</u>	<u>Blade Model</u>	<u>Engine Model</u>	<u>Max. Dia. (cm)</u>	<u>Min. Dia. (cm)</u>	<u>Placards</u>
HC-C2YK HC-C2YR	8477	LYC IO-540-C4B5, -C4C5, -D4A5, -D4B5	213,4	193,0	none
HC-C2YK HC-C2YR	F8477D-()R	LYC O-540-A4A5, -A4B5, -A4C5, -A4D5, -E4A5 LYC IO-540-C4B5, -D4A5	213,4	193,0	none
HC-C2YK HC-C2YR	8477	LYC IO-540-V4A5, -V4A5D, -T4A5D, T4B5D, -T4C5D	213,4	193,0	none
HC-C2YK HC-C2YR	8477	LYC IO-540-K1A5, -K1B5, -K1C5, -K1D5, -L1A5, -M1A5	203,2	203,2	Do not exceed 77,8 kPa MP below 2200 RPM.
HC-C2YK HC-C2YR	F8477A	LYC IO-540-K1D5	203,2	198,1	Do not exceed 77,8 kPa MP below 2200 RPM.
HC-C2YR	F8477-4	LYC TIO-540-AB1AD	203,2	198,1	none
HC-C2YF	9587A	TCM 6-285-B, -C	241,3	236,2	Avoid continuous operation on the ground between 1900 and 2300 engine RPM in winds above 15 MPH.

Note: MP = Manifold pressure

10. Propeller installation must be approved as part of the aircraft Type Certificate and demonstrate compliance with the applicable aircraft airworthiness requirements.

Propeller models listed herein consist of basic hub and blade models. Most propeller models include additional characters to denote minor changes and specific features as explained in Notes 1 and 2. Refer to the aircraft Type Certificate Data Sheet for the specific propeller model applicable to the installation.

Propellers with composite blades must be evaluated for bird impact resistance prior to approval on any type aircraft. Hartzell Propeller must perform tests and/or analyses based on aircraft configuration and operating conditions to determine the potential hazard as a result of a bird strike.
11. Retirement Time:
 - (a) Life Limits and Mandatory Inspections.
 - (1) Airworthiness limitations, if any, are specified in Hartzell Manuals 113(), 115(), 117() or 145().
12. Special Notes:
 - (a) Refer to Hartzell Manual no. 202() for overspeed and overtorque limits.
 - (b) Refer to Hartzell Service Letter HC-SL-61-61() for overhaul periods.
13. EASA Type Certificate and Type Certificate Data Sheet No. IM.P.130 replace the associated Type Certificates and Type Certificate Data Sheets of the EU Member States.
