



Blades (See NOTE 2)	Maximum Continuous		Takeoff		Diameter Limits (See NOTE 2)	Approx. Max. Wt. Complete (For Reference Only) (See NOTES 3 and 7)	Blade Construction (See NOTE 10)
	HP	RPM	HP	RPM			
8470-0 to 8470-8	260	2700	260	2700	84" to 76" (-0 to -8)	53.0 lb.	Aluminum Alloy
8475-0 to 8475-4	310 or 260	2575 2700	310 or 260	2575 2700	84" to 80" (-0 to -4)	56.0 lb.	Aluminum Alloy
8475-4 to 8475-6	350	2700	350	2700	80" to 78" (-4 to -6)	55.0 lb.	Aluminum Alloy
8475-6 to 8475-14	310	2700	310 or 300	2700 2850	78" to 70" (-6 to -14)	54.0 lb.	Aluminum Alloy
8477-0 to 8477-12	260	2700	260	2700	84" to 72" (-0 to -12)	53.0 lb.	Aluminum Alloy
B7421	241	2343	241	2343	74"	43.0 lb.	Aramid Composite
<u>Counterweighted Propellers: Hub Model BHC-J2YF-2</u>							
C7663-0 to C7663-8	210	2800	210	2800	76" to 68" (-0 to -8)	56.5 lb.	Aluminum Alloy
C7666-0 to C7666-8	180 or 250	2850 2700	180 or 250	2850 2700	76" to 68" (-0 to -8)	61.5 lb.	Aluminum Alloy
C7681-0 to C7681-8	250	2700	250	2700	76" to 68" (-0 to -8)	61.5 lb.	Aluminum Alloy
C8459-0 to C8459-12	260	2800	260	2800	84" to 72" (-0 to -12)	58.5 lb.	Aluminum Alloy
C8465-0 to C8465-14	315	2575	315	2575	84" to 70" (-0 to -14)	60.5 lb.	Aluminum Alloy
C8465-6 to C8465-14	260	2700	260	2700	78" to 70" (-6 to -14)	59.5 lb.	Aluminum Alloy
C8467-0 to C8467-12	285	2700	285	2700	84" to 72" (-0 to -12)	62.5 lb.	Aluminum Alloy
C8468-0 to C8468-12	260	2700	260	2700	84" to 72" (-0 to -12)	60.5 lb.	Aluminum Alloy
C8470-0 to C8470-8	260	2700	260	2700	84" to 76" (-0 to -8)	59.5 lb.	Aluminum Alloy
C8475-0 to C8475-4	310 or 260	2575 2700	310 or 260	2575 2700	84" to 80" (-0 to -4)	62.5 lb.	Aluminum Alloy
C8475-4 to C8475-6	350	2700	350	2700	80" to 78" (-4 to -6)	61.5 lb.	Aluminum Alloy
C8475-6 to C8475-14	310	2700	310 or 300	2700 2850	78" to 70" (-6 to -14)	60.5 lb.	Aluminum Alloy
C8477-0 to C8477-12	260	2700	260	2700	84" to 72" (-0 to -12)	59.5 lb.	Aluminum Alloy

Certification Basis: 14 CFR Part 35 effective February 1, 1965 with amendments 35-1 and 35-2 thereto.  
Type Certificate No. P37EA issued February 26, 1971 under Delegated Option Authorization procedures of 14 CFR Part 21 Subpart J.

Date of application for Type Certificate: February 9, 1971.

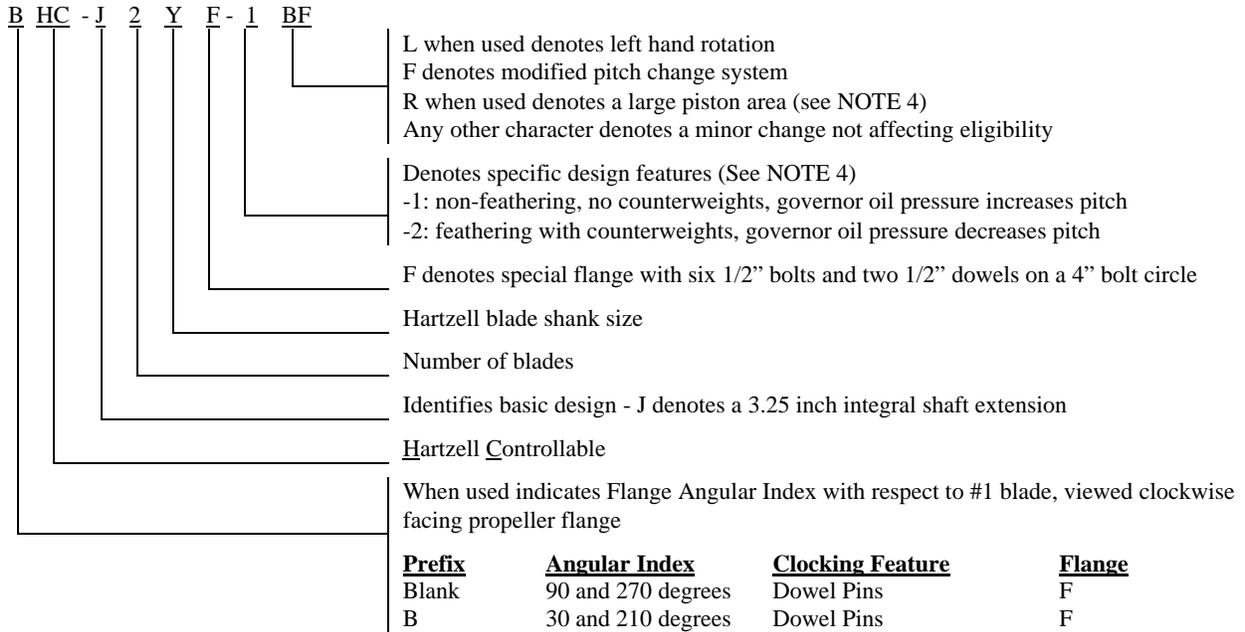
The following models were approved to the original certification basis:  
BHC-J2YF-1,2

Models added, updated or revised in accordance with 14 CFR Part 35 effective October 14, 1980 with amendments 35-1 through 35-5 include the following:  
BHC-J2YF-1

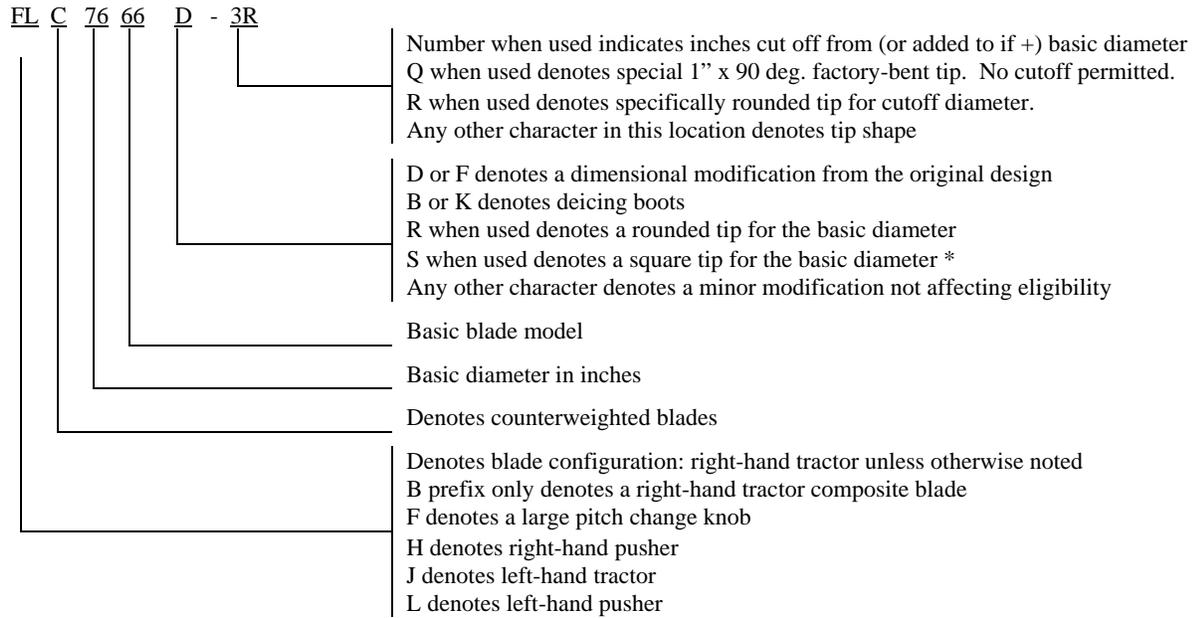
The following models were added, updated or revised in accordance with 14 CFR Part 35 with amendments 35-1 through 35-8 effective December 23, 2008.  
HC-J2YF-1, BHC-J2YF-1

Production Basis: Production Certificate no. 10

NOTE 1: Hub Model Designation



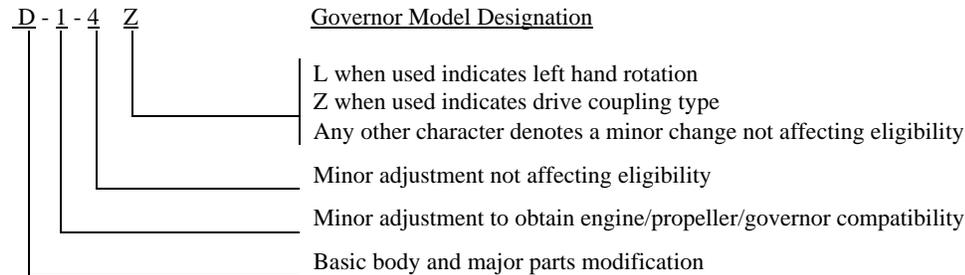
NOTE 2: Blade Model Designation



\* 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. (See NOTE 6)

NOTE 3: Pitch Control

(a) Approved with Hartzell governors per drawings C-4770 and C-4772. Wt.: 4.5 lb. (See NOTE 10)



- (b) The -2 models have counterweighted blades and use oil to decrease pitch. The -1 models do not have counterweighted blades and use oil to increase pitch. (See NOTE 4)
- (c) Maximum governor output pressure: 350 psi for all propeller models
- (d) All governors must be approved as part of the aircraft installation regardless of manufacturer. (See NOTE 10)

NOTE 4: Feathering

The -1 models do not feather.  
The -2 models incorporate feathering and unfeathering features.

Reversing

Not applicable

Piston size

The -2R model differs from the -2 model in that the -2R model has a piston area of 20.2 sq. in. and the -2 has a piston area of 16.25 sq. in.

NOTE 5: Left-Hand Models

The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model. (See NOTES 1 and 2)

NOTE 6: Interchangeability

- (a) Blades
  - (1) 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 80 psi at 70°F. Attached decal specifying air charge must be changed accordingly.
  - (2) Shot-peened blades may replace non shot-peened blades either individually or as a set (See NOTE 2)
- (b) Propellers

“F” type propellers with large pitch change knobs are interchangeable with corresponding propellers with the standard pitch change system. (See NOTES 1 and 2)
- (c) Ice Protection Systems

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

NOTE 7: Accessories

- (a) Propeller ice protection system (weight of ice protection equipment extra)
  - (1) Propeller models listed in this data sheet are approved for use with propeller ice protection equipment listed in Hartzell Manual 159( ) or in other Hartzell type design data.
  - (2) All propeller ice protection equipment must be approved as part of the aircraft installation regardless of manufacturer. (See NOTE 10)
- (b) Propeller spinner (weight of spinner extra)
  - (1) Approved with Hartzell and other manufacturers’ spinners when listed on Hartzell type design data.
  - (2) All propeller spinners must be approved as part of the aircraft installation regardless of manufacturer. (See NOTE 10)

NOTE 8: Shank Fairings      Not applicable.

NOTE 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. (inches)</u>	<u>Min. Dia. (inches)</u>	<u>Placards</u>
BHC-J2YF	F7663	TCM IO-360-A, -B, -C, -D, -E	76	72	none
BHC-J2YF	F7694-( )T	TCM IO-550-N, -P, -R	72	70	Avoid continuous ground operation between 1850 and 2100 RPM
BHC-J2YF	F8459(A)-11Q	TCM TSIO-360-GB, -LB	73	73	none
BHC-J2YF	F8459A-11Q	TCM TSIO-360-MB	73	73	none
BHC-J2YF	8475	TCM IO-520-B, -C, TCM TSIO-520-B, -D	80	77	none
BHC-J2YF	8475	TCM TSIO-520-E	78	77	none

NOTE 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 impact.

NOTE 11: Retirement Time

- (a) Life Limits and Mandatory Inspections
  - (1) Airworthiness limitations, if any, are specified in Hartzell Manuals 115N, or 145( ).

NOTE 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.

END