

# HARTZELL

## ALUMINUM HUB PROPELLER MODEL IDENTIFICATION

**B HC - C 2 Y F - 1 BF**

SEE NEXT PAGE

HUB MTG FLANGE	BOLT CIRCLE	DOWELS NO.	DOWELS DIA.	NO. OF BOLTS OR STUDS	TYP. ENGINE
F	4.00 in.	2	1/2	6 (1/2")	CONT.
L	4.75 in.	N/A	N/A	6 (7/16")	LYC.
K	4.75 in.	N/A	N/A	6 (1/2")	LYC,
R	4.75 in.	N/A	N/A	6 (1/2")	LYC
N	4.25 in.	2	1/2	8 (9/16")	GTS10520

BLADE SHANK Or RETENTION SYSTEM Y SHANK, ALUMINUM BLADE, INTEGRAL PITCH CHANGE ARM

NO. OF BLADES 2,3,4

BASIC DESIGN CHARACTERISTIC

		FLANGE DESIGNATION	DISTANCE FROM HUB PARTING LINE TO FLANGE FACE
C - STANDARD HUB		F	3.250
		K,R,L	4.187 (HC-C4YR-( ) 4.312
		N	3.375
		N	8.375
E - EXTENDED HUB		F,K,R,L	9.187
		N	7.187
F - EXTENDED HUB		R,L	7.187
G - EXTENDED HUB		F	4.250
H - EXTENDED HUB		F,N	7.500
I - EXTENDED HUB		R	6.187
		F	5.250
J - EXTENDED HUB		F	6.500
L - EXTENDED HUB		F	3.750
M - EXTENDED HUB		R	6.750

HC HARTZELL CONTROLLABLE

DOWEL PIN LOCATION

with respect to # 1 blade, viewed clockwise facing propeller flange:

- BLANK - 90 AND 270 DEGREES - CONTINENTAL,  
0 AND 180 DEGREES - LYCOMING
- B - 30 AND 210 DEGREES - CONTINENTAL
- C - 150 AND 330 DEGREES - CONTINENTAL
- D - 60 AND 240 DEGREES - CONTINENTAL
- E - 0 AND 180 DEGREES AND PROPELLER DECAL  
ALIGNED WITH ENGINE TC MARKS - CONTINENTAL
- P - 0 AND 180 DEGREES AND PROPELLER DECAL  
ALIGNED WITH ENGINE TC MARKS - CONTINENTAL

# HARTZELL

## ALUMINUM HUB PROPELLER MODEL IDENTIFICATION

**B HC - C 2 Y F - 1 BF**

### MINOR MODIFICATIONS (up to 5 characters)

#### -1 PROPS

- A - C2YF: DIFFERENT SPINNER MOUNTING PARTS;  
C2YK: DIFFERENT P.C. ROD, FORK
- B - 2 BLADE: DIFFERENT CYLINDER, P.C. ROD,  
SPRING, LOW PITCH STOP
- C - BHC-J2YF-1C: COMPOSITE BLADE
- D - A-2476-3 SPINNER MOUNTING KIT
- E - C4YF: B-2984 SPACER with B-1738 STUDS
- F - LARGE PITCH CHANGE KNOB, FORK
- H - A-2476-8 SPINNER MOUNTING KIT
- L - LEFT HAND ROTATION
- M - 3 BLADE: DIFFERENT CYLINDER, P.C. ROD, SPRING,  
LOW PITCH STOP
- R - 3 BLADE: LARGE CYLINDER AND PISTON
- J - LEFT HAND TRACTOR
- S - HUB EXTENSION

#### -2 PROPS - SEE NEXT PAGE

#### -4 PROPS

- A - 2 BLADE: A-2476-8 SPINNER KIT (attaches to hub)
- B - 2 BLADE: -2 CYLINDER, LOW STOP SCREW
- B - 3 BLADE: -2 CYLINDER, LOW STOP SCREW
- C - 2 BLADE: -2 CYLINDER, LOW STOP SCREW,  
and A-2476-8 KIT
- F - LARGE PITCH CHANGE KNOB, FORK
- L - LEFT HAND ROTATION

#### -5 PROPS

- A - C3YN: START LOCKS
- F - C3YF: NO START LOCKS

### SPECIFIC DESIGN FEATURES

- 1 - CONSTANT SPEED, NO COUNTERWEIGHT  
OIL PRESSURE TO HIGH PITCH, BLADE CENTRIFUGAL FORCE TO LOW
- 2 - CONSTANT SPEED, FEATHERING, OIL PRESSURE TO LOW PITCH, AIR CHARGE  
AND SPRING TO HIGH PITCH/FEATHER (some exceptions), MAY OR MAY NOT  
HAVE COUNTERWEIGHTS TO HIGH PITCH/FEATHER
- 4 - CONSTANT SPEED, OIL PRESSURE TO LOW PITCH, COUNTERWEIGHTS TO  
HIGH PITCH
- 5 - CONSTANT SPEED, FEATHERING, OIL PRESSURE TO  
LOW PITCH, AIR CHARGE, SPRING, AND COUNTERWEIGHTS TO HIGH PITCH/  
FEATHER (EXCEPT SOLOY PROP, SAME AS -2 EXCEPT TURBINE O-RING)

# HARTZELL

## ALUMINUM HUB PROPELLER MODEL IDENTIFICATION

**B HC - C 2 Y F - 1 BF**

MINOR MODIFICATIONS,  
up to five characters

**-2PROPS:**

**( )HC-(C,I,L,M)2Y(F,K,L,R)-2\_\_ PROPS**

- B** - 830-21 STOP UNITS
- C** - COUNTERWEIGHTS, 830-30 STOP UNITS
- D** - A-2476-14 SPINNER MOUNTING KIT
- E** - A-2476-4 SPINNER MOUNTING KIT
- F** - LARGE PITCH CHANGE KNOB, FORK
- G** - DAMPER INSTALLED & A-2476-16 SPINNER MTG KIT
- H** - A-2476-8 SPINNER MOUNTING KIT
- K** - SPECIAL AIR CHARGE DECAL, -3 MOUNTING STUDS
- L** - LEFT HAND ROTATION
- R** - 2 & 3 BLADE: LARGE DIA. CYLINDER AND PISTON

**( )HC-(C,I,L,M)2Y(F,K,L,R)-2C\_U\_ PROPS**

- C** - COUNTERWEIGHTS
- D** - A-2476-14 SPINNER MOUNTING KIT
- E** - A-2476-4 SPINNER MOUNTING KIT
- F** - LARGE PITCH CHANGE KNOB, FORK
- G** - DAMPER INSTALLED & A-2476-16 SPINNER MTG KIT
- H** - A-2476-8 SPINNER MOUNTING KIT
- K** - SPECIAL AIR CHARGE DECAL, -3 MOUNTING STUDS
- L** - LEFT HAND ROTATION
- U** - FEATHER ASSIST SPRING KIT IN CYLINDER

**HC-E2Y(R,K,L)-2(R)B( ) PROPS**

- B** - 830-21 STOP UNITS (non-counterweighted props)
- F** - LARGE PITCH CHANGE KNOB, FORK
- L** - LEFT HAND ROTATION
- R** - 2 & 3 BLADE: LARGE DIA. CYLINDER AND PISTON
- S** - A-2273 SPRING ASSY. IN HUB EXTENSION
- T** - B-1586 SPRING ASSY. IN HUB EXTENSION
- U** - FEATHER ASSIST SPRING KIT IN CYLINDER

**HC-(E,F)2Y(R,L)-2\_\_ PROPS**

- F** - LARGE PITCH CHANGE KNOB, FORK
- T** - B-1586 SPRING ASSY. IN HUB EXTENSION
- U** - B-1589/1589-2 SPRING ASSY. IN CYLINDER

**BHC-J2YF-2C\_\_ PROPS**

- C** - COUNTERWEIGHTS
- F** - LARGE PITCH CHANGE KNOB, FORK
- U** - B-1589/1589-2 SPRING ASSY. IN CYLINDER

**HC-F3YR-2\_\_ PROPS**

- F** - LARGE PITCH CHANGE KNOB, FORK
- U** - B-1589/1589-2 SPRING ASSY. IN CYLINDER

**(P)HC-(E,J,H)3Y(R,N,F)-2\_\_ PROPS**

- A** - E3YR-2: INTEGRAL HUB EXT. (no A, bolt-on extension)
- F** - LARGE PITCH CHANGE KNOB, FORK
- L** - LEFT HAND ROTATION
- T** - B-1586 SPRING ASSY. IN HUB EXTENSION
- U** - B-1589/1589-2 SPRING ASSY. IN CYLINDER

**(P,E)HC-(C,G,I)3Y(R,N,F)-2\_\_ PROPS**

- A** - C3YN-2L: DIFFERENT SPINNER MOUNTING KIT
- D** - C3YN-2: DIFFERENT SPINNER INSTALLATION KIT/ASSY.
- E** - C3YR-2: DIFFERENT SPINNER, B-1106 SPRING ASSY. USABLE
- F** - LARGE PITCH CHANGE KNOB, FORK
- K** - C3YF-2: DIFFERENT SPINNER, MOUNTING STUDS
- L** - LEFT HAND ROTATION
- U** - B-1589/1589-2 SPRING ASSY. IN CYLINDER

**HC-C4Y(R,F,N)-2\_\_ PROPS**

- E** - LONG STUDS WITH HUB EXTENSION
- L** - LEFT HAND ROTATION

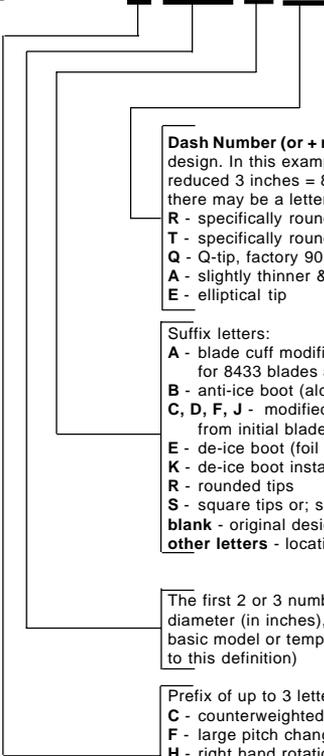
# HARTZELL

## Aluminum Blade Model Identification

Hartzell uses a model designation to identify specific propeller and blade assemblies.

Example: HC-C3YR-1RF/F8475A-6R. A slash mark separates the propeller and blade designations. The propeller model designation is impression stamped on the propeller hub. The blade designation is impression stamped on the blade butt end (internal) and is either on a decal or ink stamped on the blade camber side (external).

### prop model/F 8475 A-6R



**Dash Number (or + number)**, diameter reduction (or increase) from basic design. In this example, the nominal 84 inch diameter has been reduced 3 inches = 81 inch dia. (with some exceptions) there may be a letter following the dash number:

- R** - specifically rounded tip
- T** - specifically rounded tip
- Q** - Q-tip, factory 90 degree bent tip
- A** - slightly thinner & narrower tip fairing
- E** - elliptical tip

Suffix letters:

- A** - blade cuff modification or; 0 degree sweepback or; for 8433 blades a 1 degree sweepback; or Y shank pitch knob
- B** - anti-ice boot (alcohol) or de-ice boot (wire element)
- C, D, F, J** - modified blade, dimensional or blade twist modification from initial blade design
- E** - de-ice boot (foil element) or internal de-ice element (composite blade)
- K** - de-ice boot installed (foil element, different PN from B above)
- R** - rounded tips
- S** - square tips or; shot peening of blade surface
- blank** - original design, no changes
- other letters** - location of pitch change knob (Y shank)

The first 2 or 3 numbers indicate initial design diameter (in inches), the last 2 numbers indicate basic model or template (there are some exceptions to this definition)

Prefix of up to 3 letters:

- C** - counterweighted Y shank
- F** - large pitch change knob Y shank
- H** - right hand rotation, pusher
- J** - left hand rotation, tractor
- L** - left hand rotation
- blank** - standard blade, right hand rotation, tractor (Y shank + few others)