


KITPLANE APPLICATION GUIDE											
Manufacturer: Van's Aircraft Inc.											
Aircraft Model(s): RV-4, RV-6, RV-7, RV-8	 (click to enlarge)										
Applicable Engines: XP-360 180 hp @ 2700 rpm O-360 180 hp @ 2700 rpm IO-360 180 hp @ 2700 rpm											
Propeller Model & Components: <table border="1"> <thead> <tr> <th>COMPONENT</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>Propeller</td> <td>HC-C2YR-1BF/F7496-2 (72" diameter)</td> </tr> <tr> <td>Propeller</td> <td>HC-C2YR-1BF/F7496 (74" diameter)</td> </tr> <tr> <td>Spinner</td> <td>VAN'S</td> </tr> <tr> <td>Governor</td> <td>VAN'S</td> </tr> </tbody> </table>		COMPONENT	DESCRIPTION	Propeller	HC-C2YR-1BF/F7496-2 (72" diameter)	Propeller	HC-C2YR-1BF/F7496 (74" diameter)	Spinner	VAN'S	Governor	VAN'S
COMPONENT	DESCRIPTION										
Propeller	HC-C2YR-1BF/F7496-2 (72" diameter)										
Propeller	HC-C2YR-1BF/F7496 (74" diameter)										
Spinner	VAN'S										
Governor	VAN'S										
Features: <p>SUPERIOR XP-360 NEW HARTZELL "BLENDED AIRFOIL" DESIGN FOR USE WITH SUPERIOR AIR PARTS XP-360 WITH 8.5:1 COMPRESSION PISTONS</p> <p>LYCOMING (I)O-360 NEW HARTZELL "BLENDED AIRFOIL" DESIGN FOR USE WITH LYCOMING 180 HP ENGINES WITH 8.5:1 COMPRESSION PISTONS INCLUDING ELECTRONIC IGNITION AND FADEC</p> <p>Compact Series Propeller Aluminium Hub/Aluminium Blade Construction Constant-Speed Non-Feathering</p>											
Specifications: <p>74" OR 72" DIAMETER 2-BLADE PROPELLER</p> <p>6 YEAR 2400 HOUR TBO</p> <p>Performance Testing:</p> <p>VAN'S AIRCRAFT HAS COMPARED THE NEW 74" DIAMETER PROPELLER TO THE ORIGINAL 72" HC-C2YK-1BF/F7666A-4 PROP, IN FLIGHT, ON AN RV-8 TEST AIRCRAFT AND DETERMINED THE FOLLOWING:</p> <p>1) CLIMB PERFORMANCE HAS INCREASED APPROXIMATELY 60-70 FPM.</p> <p>2) CRUISE PERFORMANCE INDICATED AN INCREASE OF 4 STATUTE MPH.</p>											

PFA4
3 pages.
HARTZELL
DOC.

Page 1

NOTE: TESTING OF THIS PROPELLER ON THE SUPERIOR AIR PARTS XP-360 ENGINE EQUIPPED WITH ELECTRONIC IGNITION AN/OR FADEC HAS NOT BEEN DONE AT THIS TIME.

Restrictions:

SUPERIOR XP-360 RESTRICTIONS:

Hartzell Propeller Model HC-C2YR-1BFP/F7496 is vibrationally approved when mounted on Superior Air Parts model O-360-B1A2 and IO-360-B1A2 engines rated at 180HP at 2700 RPM with magneto ignition and installed in Van's Model RV-6A and similar single engine tractor aircraft. There are no operating restrictions.

Diameter range is 74 to 72 inches.

Hartzell Propeller Model HC-C2YR-1BFP/F7496-3 is vibrationally approved when mounted on Superior Air Parts model O-360-B1A2 and IO-360-B1A2 engines rated at 180HP at 2700 RPM with magneto ignition and installed in Van's Model RV-6A and similar single engine tractor aircraft with the following operating restrictions.

1) Continuous operation is prohibited above 22" manifold pressure below 2050 and 2250 RPM.

2) Diameter range is 71 to 69 inches

Testing of this propeller on the Superior Air Parts XP-360 engine equipped with Electronic Ignition and/or FADEC has not been done at this time.

Regarding the Hartzell HC-C2Y(K,R)-1BF (P)/F7666A-2 propeller model:

For experimental operators using this propeller is vibrationally approved when mounted on Superior Air Parts model O-360-B1A2 and IO-360-B1A2 engines rated at 180HP at 2700 RPM with magneto ignition and installed in Van's Model RV-6A and similar single engine tractor aircraft with the following operating restrictions.

1) Continuous operation is prohibited above 20" manifold pressure below 1950 and 2300 RPM.

2) Diameter range is 74 to 73 inches.

3) Limit operations above 2600 RPM to takeoff. As soon as practical after takeoff reduce RPM to 2600.

Propeller vibration characteristics and stress amplitudes on a reciprocating engine installed are primarily mechanically generated by the engine. Any modification to the standard engine configuration to

Page 2