U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION TYPE CERTIFICATE DATA SHEET NO. P2BO	P2BO REVISION: 8 AVIA PROPELLER LTD. MODELS: V510, V510T, and V510AG March 21, 2012

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P2BO) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's and other approved instructions.

TYPE CERTIFICATE HOLDER: Avia Propeller Ltd.
Beranovych 65/666
199 00 Prague 9 – Letnany
Czech Republic

TYPE: Constant speed; hydraulic variable pitch, See Notes

ENGINE SHAFT: Flanged: 4.25” bolt circle

HUB MATERIAL: Steel (forged)

BLADE MATERIAL: Aluminum Alloy (Duralumin, forging)

NUMBER OF BLADES: 5

DESIGN SERIES: V510, V510T and V510AG

HUB	BLADE NOTE 2	MAXIMUM CONTINOUS HP / RPM KW	<TAKE OFF> HP / RPM KW	NOMINAL DIAMETER inches/cm	APPROXIMATE WEIGHT lbs./kg.
See NOTE 1	068-1100	800 2080 597	800 2080 597	90.5in / 230cm	180 lbs. – 184.4 lbs 81.7 – 83.7 kg.

CERTIFICATION BASIS: The U.S certification basis determined under Section 21.29 of the FAR and Bilateral Airworthiness Agreement between the United States and the Czech Republic is FAR 35, effective February 1, 1965, Amendment: 35-1 to 35-6 inclusive.

Civil Aviation Authority Czech Republic (CAA CZ) originally type certificated this propeller under its Type Certificate Number TOLZ-89-04. The FAA validated this product under U.S. Type Certificate Number P2BO. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Czechoslovakia.

TC (IMPORT) NO. EASA.P.029

TC APPLICATION DATE: May 10, 1990

TC ISSUED: November 24, 1992 for V510, V510AG; Added March 30, 1998; V510T added August 15, 2000, revised April 5, 2002, and November 1, 2002

IMPORT REQUIREMENTS: To be considered eligible for installation on U.S. registered aircraft, each propeller to be exported to the United States shall be accompanied by a Certificate of Airworthiness for export endorsed by the CAA CZ on behalf of the European Community which contains the following language:

(1) This propeller conforms to its United States type design (Type Certificate number P2BO) and is in a condition for safe operation.

(2) This propeller has been subjected by the manufacturer to a final operational check and is in a proper state of airworthiness. Reference FAR Section 21.500 which provides for the airworthiness acceptance of aircraft engines or propellers manufactured outside the U.S. type certificate has been issued. Additional guidance is contained in FAA Advisory Circular 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers and Related Products, Imported into the United States.

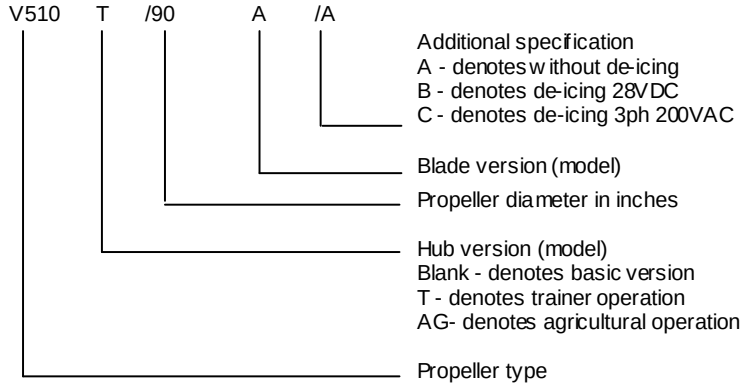
NOTES

NOTE 1: Hub Model Designation.
068-0000 propeller V510 V510T, V510AG

NOTE 2: Blade Model Designation.
(a) 90A – Basic blade model designation, blade drawing P/N 068-1100, clockwise rotation (propeller diameter 90.5 in.)
(1) 90A/C – blade with de-icer (3 ph 200 VAC)
(2) 90A/B – blade with de-icer (28 VDC)
(3) 90A/A – blade without de-icer

NOTE 3: Propeller designation.
The complete propeller designation is a combination of propeller hub, propeller blade and additional specifications as shown below.

PROPELLER MODEL DESIGNATION



NOTE 4: Pitch control.
(a) The propellers are approved for flight operation with propeller speed governors which are listed in Avia Propeller Service Bulletin No. 3

(b) The propellers are approved for flight operation with propeller overspeed governors which are listed in the propeller parts list P/N R-068-0000

NOTE 5: (a) Feathering. The propellers incorporate feathering and unfeathering features when equipped with appropriate mounted instruments (see Note 4and 8), positioning the blades into feather position.

Blade feathering is accomplished by:
(1) by oil pressure – all versions
(2) by outweighing moment of counterweights – all versions

(b) Reversing. All propeller models incorporate reversing feature when equipped with appropriate mounted instruments (see Note 4), to position the blades into reverse position. Maximum reverse angle is minus 24˚ for V510, V510T, and V510AG propellers.

NOTE 6: Right hand rotation variant.
(a) The approved propellers are right hand rotation when viewed from the pilot seat.

NOTE 7: Interchangeability of the propeller blades. Not applicable.

NOTE 8: Accessories.
(a) The propellers are approved for flight operation with the accessories according to Avia Propeller Service Bulletin No. 3

(b) Propellers de-icing according to Avia Propeller Service Bulletin No. 4

(c) Propeller spinner according to Avia Propeller Service Bulletin No. 2
Weight of the propeller spinner is included in the total weight of the propeller

NOTE 9: Shank Fairings. Aerodynamic cover of the blade root. Not applicable.

NOTE 10: Special Limits. Life limited components for the AVIA V510 series propellers.

Life limited components of the AVIA V510 propeller series are listed in Operation and Installation Manual.

Time Between Overhauls (TBOs) – is listed in Avia Propeller Service Bulletin No. 1

NOTE 11: Operating and Service Instructions: for AVIA V510 Series Propellers.
Instructions for continued airworthiness are listed in these documents:

Version (model)	Overhaul Manual (Part Number)	Operator's, Installation and Maintenance Manual (Part Number)
V 510	E-1461	E-1500
V 510T		E-1500
V 510AG	EN-1370	E-1500

NOTE 12: Special Notes. (a) Aircraft installations must be approved as part of the aircraft type certificate and demonstrate compliance with the applicable aircraft airworthiness requirements.

NOTE 13 Service Information: Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the CAA CZ. Any such documents are accepted by the FAA and are considered FAA approved.

- Service bulletins,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

END