

CESSNA 185 SKYWAGON



CESSNA 185 SKYWAGON ON PK 3050A

FLOAT SPECIFICATIONS

PK 3050A

Displacement	3510 lbs.	Length	234.0"
Max. Design Weight	3525 lbs.	Max Beam	32.0"
Installation Weight	579 lbs.	Max Height	29.0"
Reserve Buoyancy on Cessna 185	105%		

AIRCRAFT PERFORMANCE

AIRCRAFT SPECIFICATIONS

Top Speed	136 kts.	Gross Weight	3350 lbs.
Cruise Speed (75% power)	126 kts.	Empty Weight	2310 lbs.
Stall Speed	53 kts.	Useful Load	1040 lbs.
Rate of Climb	950 fpm	T.O. Horse Power	300 h.p.
		Wing Area	174 sq. ft.



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CESSNA 185 SKYWAGON

P.K. 3050A Amphibious Float

PK Floats Inc. is pleased to announce the certification of their new PK 3050A Amphibious Floats. STC # SA00213BO for Cessna 185 was received April 1, 2005.

This new float is the lightest in its class in the industry. Tipping the scales at 579 lbs installed on the Cessna 185.

The PK 3050A has a long list of new and innovative designs and materials. Some of the new features are all stainless steel hydraulic cylinders, stainless steel main landing gear swing arm and composite nose gear springs and water rudder blades. Both floats have standard storage compartment of 100 lbs each.

Installation time will be greatly reduced due to the power pack being located in the right hand float.

The variable deadrise bottom design and the addition of a rear hydrobooster makes the float an outstanding performer.

FLOAT STRUCTURE

The structural configuration is of conventional aluminum sheet metal design, the side panels are .032" with an .040" thick bottom and deck. Floats contain 6 water tight compartments with 8 full bulkheads.

The bottom is further stiffened by longitudinal extruded hydroboosters (four forward and two aft). These effective hat sections riveted to the outside of the skin greatly increase performance, resist bending loads on the aft structure, and reduce spray on the tail of the aircraft.

In addition, there are partial bulkheads and skin stiffeners fastened at strategic points throughout the entire structure.

The keel section is a "Y" shaped extrusion, the bottom of which is 1/2" thick by 1/2" wide running the full length of both forebody and afterbody. This keel section, together with associated structure, is strong enough so that more than one half of the aircraft weight can be supported at one point between bulkheads.

CORROSION PROTECTION

All aluminum skins, bulkheads and individual detail parts of the floats are chemically treated and then epoxy primed.

Following assembly, the exterior of the floats are cleaned, detailed and painted with two coats of aluminum pigmented lacquer. (Options: can be urethane painted)

Because of the low beam loading, forward mounted shields and aft hydroboosters the spray heights are kept at a minimum; therefore, propeller tip erosion and airframe corrosion is kept at a lower level than competing installations.

MAINTENANCE & REPAIR 3050A

The basic design is completely free of any stretched skins or compound curvatures. The float skins and bulkheads can, therefore, be repaired in the field under emergency conditions with ordinary hand tools.

PERFORMANCE

The basic hydrodynamic configuration of the float is a variable deadrise design. The float is almost completely free of either upper or lower limit porpoising. The high sternpost angle permits short radius turns and sufficient freedom of aircraft rotation at takeoff without dragging the float transoms.

Rough water operations are unsurpassed because of the deep "V" design of the float bottom.

Takeoff from smooth water, under adverse temperature and altitude conditions is superior because of the variable deadrise bottom (with the "V" shallowing toward the step), and because the sharp edged hydroboosters effectively reduce the beam, and therefore the drag of the wetted area. The forward and aft end of the hydroboosters are open, permitting air to enter and flow through their full length where it vents the float step and helps break the suction during takeoff.

FEATURES

STOWAGE COMPARTMENT-All 3050A floats come with a roomy storage area capable of holding 100 lbs. each.

BILGE PUMP-A high quality brass bilge pump is supplied with each set of floats.

CLEATS-At the request of users who wanted a clear deck, cleats were moved to the sides. (They can be relocated to the top by the user, if he/she so desires.

LIGHT WEIGHT-Floats were weighed using certified scales, not engineered or calculated weight, under FAA certification

AFT BOTTOM HYDROBOOSTERS- reduces spray on aircraft tail and increases strength of float structure.

FLAT DECKS-The distinguishing flat decks are one of PK's most popular and appreciated features.

HYDRODYNAMICS-Deep "V" variable deadrise bottom; sharp, air-vented hydroboosters discussed above under performance, are unique to PK's innovative design. (Variable deadrise bottom is a change in hull angle between nose and step)