



Light Sport Repair E-Flyer

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We carry Pennzoil 2 cycle air cooled engine oil

SEPTEMBER 25, 2009

NUMBER 12



PARACHUTE
AIRWORTHY INSPECTION
& REPAIRS ON SITE
\$125.00

Includes a series of tests to determine airworthiness. The result of this inspection is a document recording the pass/fail of each test performed. We test & record the fabric porosity, line strength, fabric rip strength, attachment points, seams, line trim and more. During the inspection we also record any physical damage that we recommend for repair & provide an estimate. We can repair damaged chutes and replace broken lines

**16 Hr. Repairman
Inspection Courses
PPC & Airplane**

**Call us for Details
574-948-0065**

FUEL INTAKE CONTROL

The float system of the carburetor consists of 2 plastic float elements operating on a metal hinge. The floats are arranged each side of the carburetor venturi so that the carburetor can be tilted vary far in all directions without impairing operation. The object of the float is to maintain the fuel level in the float chamber constant.

When the fuel has reached a specific level in the float chamber, the floats lift the hinge mounted on the pin until the float needle is pressed against the seat of the float needle valve, thus preventing any further supply of fuel. When the engine draws fuel from the carburetor, the level in the float chamber drops and so does the float. The float needle opens the valve again and allows fuel to flow in from the tank.

The float needle valve regulates the fuel supply in conjunction with the floats, but is may not act as a positive stop valve when the engine is at a standstill. Minute foreign bodies may be deposited between the valve seat and the needle tip, thus preventing complete closure of the valve. When stopping the engine, therefore, the fuel cock on the tank should always be closed. A must, if the tank is located above the carburetor, but also recommended with the fuel tank in lower than carburetor position. In addition the fuel should be filtered before it reaches the carburetor. The filter should be selected so that foreign bodies greater than 0.1mm are filtered out and the fuel supply is not impeded to too great an extent.

The float needle contains a spring loaded plunger which contacts the float hinge. This absorbs vibrations of the float. In addition the float needle is connected to the float hinge by the retaining spring to prevent it from moving between hinge and valve seat and thus reducing the fuel supply. Spring and retaining guide make a considerable contribution towards keeping the fuel level in the float chamber constant.

When fitting a new float valve, set the float hinge parallel to float chamber by bending the hinge lobe accordingly. With the hinge parallel, the dimension should be approximately 10.5mm. The float chamber is secured to the carburetor housing by a spring clip. A seal is provided between float chamber and carburetor housing. The space above the fuel level is connected to atmosphere by two ducts, If these ducts are blocked, an air cushion forms above the fuel level. The fuel will not lift the float sufficiently to close the needle valve, and the carburetor overflows.

The vent duct openings to atmosphere are provided with a hose which prevents ingress of dust and water into the carburetor. Velocity pressure must never act upon venting ducts as it would influence pressure in the float chamber, and therefore after the air/fuel mixture.

FLY-INS & EVENTS

Smokey

Mountain Fly-in

October 9-11, 2009

Midwest LSA Expo

October 1-3, 2009. Mt. Vernon Outland Airport, Mt. Vernon, Illinois. Midwest LSA Expo. Inc. specifically created the event to educate aviators about all facets related to the LSA industry including the many different aircraft types, available engines, and LSA performance; promote the sale of LSA's, the use of LSA aircraft for flight training and in rental fleets; and promote economic development in the southern Illinois region.
[Midwest LSA Expo.](#)

Smokey

Mountain Fly-in

October 9-11, 2009
Mosheim, Tennessee
Call Jim at (423) 327-2035 or email him at:
leay@charter.net.

Copper State Fly-In

October 22-23-24
COPPERSTATE is the largest Fly-In of its type in the western United States and the fourth largest Fly-In in the United States. It is held at the Casa Grande Municipal Airport (KCGZ) in Casa Grande, AZ. Casa Grande is located approximately halfway between Phoenix and Tucson. Visit our website at:
<http://www.copperstate.org>

PRE-OWNED PPC'S http://www.lightsportrepair.com/for_sale.htm



1999 Dual Controlled Buckeye Dream Machine with 2000 Timberwolf Trailer - \$13,000

Rotax 582 Blue head with E-drive was just rebuilt April 2009 to 0 hours
Reason for rebuild was customer goes by Rotax Planned and Necessary Maintenance Procedures
Original hours 59.4-Dual controls-3 blade 62" Ivo Prop-Apco 500 parachute-Chute bag/line socks
10 gallon fuel tank-Unique Instrument panel-Comtronics helmets with dual comm II intercom
Garmin GPS-External antenna-Icom A-6 Radio-2 Sporty JD200 Radios-Frontal bars
New Buckeye CG Brackets-Nylon Risers-N numbered-Annual is up to date -Landing lights, parachute lights - **2000 Timberwolf trailer** comes with large toolbox and metal and wood ramps, also includes 2 fuel cans and tie downs



SKYRANGER - BUILT IN 2008

\$32,500

N numbered

- Rotax 912 80 HP Cruises at 100+ mph
- 27 hour Total Time on Engine and airframe
 - VFR Instrumentation
 - Ballistic Parachute
 - Wheel Pants (Not installed)