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# Beetle Flyer

A publication of:

Great Plains Aircraft Supply Co., Inc. • PO Box 222, Bennington, NE 68007

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## **Merry Christmas & Happy Holidays.**

It's hard to believe that 25 years ago in the late fall of 1982, this business "Great Plains Aircraft" was started. As we celebrate our anniversary year, we would like to express a great big "THANK YOU" to all customers, past and present.

Sometimes we wish we would have kept a log book to record all the things that have taken place during those 25 years. If any of you remember the early 80's, interest rates on homes were between 14 and 18%, inflation was up, and you couldn't find a job or sell a house. Great time to start a business? But we did, and we did endure! Four moves, three trucks, three homebuilt's and a spam can, a toy hauler which was traded for a 5th wheel, and doing the transition from 30 to 55. It has been an exciting 25 years to date; with many more years to follow.

If there ever was a little engine that "Could" it certainly has to be the VW air-cooled Type 1 engine. From engines in dune buggies, aircraft, portable saw mills, inboard motors for boats, airboat engines, engines cut in half, generators, and countless other uses that we will never know, this engine has done it all. It's continued popularity keeps new products coming for it and continued redefining older products that are used in or on it. Unlike the Corvair, which has limited availability of "new parts", every part of this 70+ year old design can still be found "brand new". Crankshafts, heads, piston & cylinder sets, rods, gears, engine cases, etc... are all available "new" and from a variety of manufacturers.

## **2007 In Review.**

The year started out with our usual trip to exhibit at the Sun & Fun Airshow in April. Because our regular assistant - Keith could not go this year, Linda and I had to do all of the driving. After arriving safely, with the help of friends we put the booth up and got the VW workshop ready. The workshop was well attended for the 5 days we ran it. We will do the same format for the 2008 airshows. We will publish this information on the web site closer to the airshows.

A mere 3 months later and we were off to EAA AirVenture. It was a great show, if you missed it. We could only wrangle 3 days to conduct the VW engine workshop, so it was a condensed version of the 5 day school. There were on average 50 to 80 workshop attendee's for each session. We're working to see if we can't expand this workshop to 4 days for 2008. If you've never attended one, a VW motor is assembled and the accessories are added to it. This is followed by a cooling workshop one day and a fuel systems workshop on the last day. No need to sign up, just show up - especially if you want to learn about 4 stroke - 4 cylinder engines in general and VW conversions specifically.

## **Meet Keith Mots.**

If you have ever been to Sun & Fun in the last 23 years and you stopped by our booth, you've probably met Keith. Canadian Keith hails from Winnipeg, Manitoba. He has been helping us at Sun & Fun since 1984. This year he couldn't make Sun & Fun but made up for it by attending the EAA Oshkosh AirVenture Airshow - this was only his second trip there.

Years ago in 1973, a friend and I were touring central Canada on our "bad" Honda CL350's. The camp ground was full at Whiteshell Provincial Park. This is where I met Keith and a few other great Canadians - in the overflow sand camping lot. They invited us to come and see Winnipeg, which we did. We then of course had to show our manners and invite them to the states. Thirty five years later Keith still comes south at least twice a year and we head north once in a while.

When Keith is not explaining the virtues of VW engines - which is the other 51 weeks of the year, he can be found working for Manitoba Telecom Services. Fishing, camping, boating, snowmobiling and small pin bowling are a few of his interests and hobbies.



Camping Oshkosh 2007 - (left to right) Martin Roberts, Keith & Steve

## **Maintenance.**

Does your aircraft sit for a long time? If you have the steel-painted black valve covers, you may want to check the inside of the valve covers for any signs of rust. When aircraft sit for prolonged times, moisture accumulates in the engine. If paint is missing from the inside of the valve cover, it will rust over time. Three solutions, first - *fly your aircraft more!* Second, repaint the valve cover or third, replace the steel valve cover with our clip on stainless steel valve covers. They run only \$26.95 per set and will last a life time. If you don't like the stainless clip on sets, we also carry the EMPI brand U-channel bolt on aluminum valve covers. The U channel fits over the lip on the head, and provides a leak free valve cover.

By the way - stock valve covers will seal just fine if the valve cover, cork gasket and head are prepped prior to installing the valve cover. For starters, put the gasket in the valve cover and hold it against the head. Look for any part of the valve cover that may hit the head, especially at the round corners of the head. Next, using a good spray adhesive, spray the valve cover gasket seating area and only ONE side of the gasket. After it tacks up, mate the gasket to the valve cover. LEAVE the HEAD SIDE of the GASKET DRY. Valve cover gaskets leak when a sealant like 3-H Permatex or blue or red silicone is applied and make the gasket slippery.

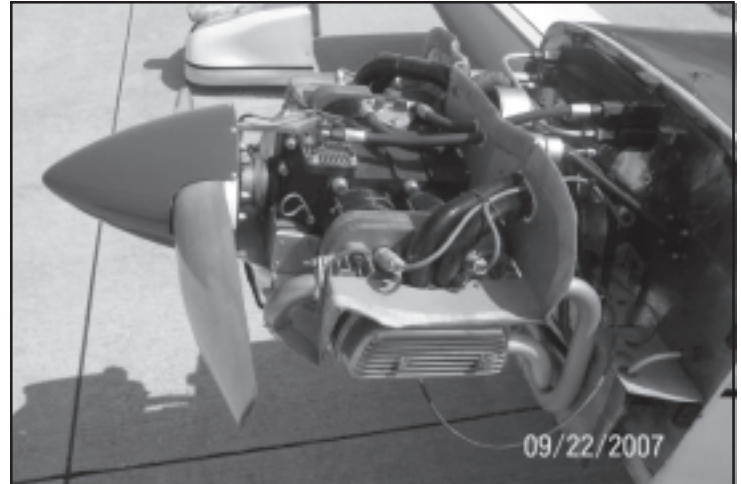
So you have had your engine running and it continues to leak from the rear seal area. What do you look for? For starters, remove the gland nut and make sure the dowel pins are below the surface of the flywheel. If that's ok, remove the flywheel and rear seal. Use a piece of safety wire and try to insert it in the oil drain galley, located at the 6:00 position on the studless case half. Many times one gets carried away with sealant and it may "squeeze" into this cavity and prevents the oil from draining back to the case. It has to go somewhere so it leaks out around the seal if this cavity is blocked.



**FYI - Sonerai Wing Spar Cap Strips are back in stock. Priced at \$329.95.**

## **KR Turns 35.**

The KR series of homebuilt aircraft celebrated the 35th Anniversary this year in what appears to be a permanent home in Mount Vernon, IL. The weather was great, host Larry Flesner and the airport manager - Chris Collins, did an outstanding job of making things flow smoothly and ensuring that everyone felt welcome.



By count there were about 20 different KR's there. Six were Corvair powered, a lot of VW's and a smattering of aircraft engines powered KR's. A closed course race was held on Saturday morning, the afternoon saw an engine forum and the evening brought on the airport dinner and awards. A great weekend fly-in with lots of flying and flying tales.

## **Oil Filter or No Oil Filter?**

Do I need one or not? If one looks at the number of VW engines produced, without an oil filter, one can make the argument that changing oil frequently, every 25 hours offers about the same protection as having a filter. It is also a fact that an oil filter will clean a lot of smaller particles out of the oil than the VW oil filter screen will capture. If you are on the oil filter side of the argument, we now offer a billet high pressure oil filter with a washable element. The price for the filter assembly is \$89.95.



## **Sonerai Ribs**

We have 2 sets of Sonerai II or IIS ribs and 1 set of Sonerai I ribs for sale - at a reduced price. The aluminum wasn't 100% flat when they were cut and have some very minor "flash back" on them. Flash back deposits a small amount of cut aluminum back on the source material. Most of it is about the size of a pin head and is very minor. Can't sell them for full retail. Will take 25% off either the U-form set or we will form them for you.

## **NEW ITEMS: Batteries.**

This last year we have also added to our inventory **absorbed glass mat batteries** (sealed gel cell). The first battery weighs in at 23 lbs. and has 400 cold cranking amps. It measures 6-9/16" L X 5" W X 6-7/8" T. It's primary use is for RV's and other aircraft that use aircraft engines or large auto engines. The second one is for KR's, Sonerai's, Sonex's, etc., that use a VW or Jabiru. This battery weighs 13 lbs, has 240 cold cranking amps and measures 6" L X 3-7/16" W X 5-3/4" T. The larger battery is \$129.95 and the smaller one is \$89.95. Both can be shipped by standard UPS without any hazmat fees.



## **Exhaust Tubing.**

We have expanded our collection of exhaust tubing and kits this last year as well. We now offer our mild steel mandrel bent tubes in 1.500", 1.375", and 1.250" diameters. We have all the sizes - available in 90's, 45's and 180's as well as straight pipe available in 1' or 2' lengths. The U-Build Exhaust Kits come with the following parts: 6 each 180° bends, 4 each 90° bends, 2 each 45° bends, 1 slip tube, and 4 flanges. Cost is \$110.95 per kit.

## **Tailwheels - IN 3 SIZES - And a NEW Caster to Fit All 3!**

Three tails to tell – We now carry 3 different sizes of our ever popular low noise tailwheel. It is available in 4", 5" and 6" diameters. The 4" wheel fits in our aluminum caster as made for the Sonerai aircraft. The 4" and 5" tailwheels are 1.5" wide and the 6" wheel is 1.625" wide. If your tired of having your aircraft sound like sound like your inside a guitar or metal box when your taxing, one of these tailwheels will quiet your cockpit noise down. We are currently casting a new caster that will fit all three. Watch the web for it's premier!

## **Fork for Master Cylinders.**

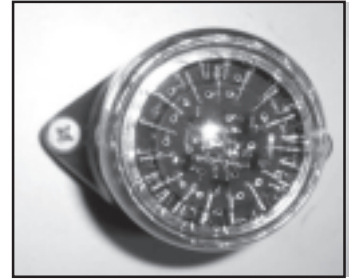
If you're going to be using our **heel/toe master cylinders** in an up right position, we now stock a **fork** that replaces the large button on the brake. Simply unscrew the button used for heel brakes and install a -28 check nut and then the fork. The forks run only \$3.99 each.



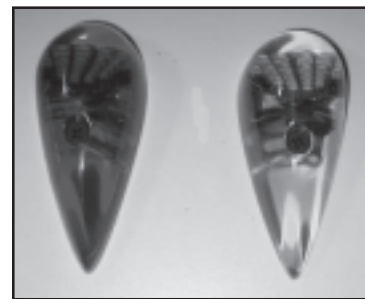
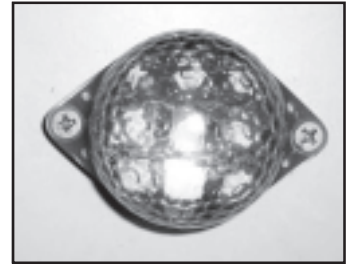
## **LED Position & Anti-Collison Lights.**

The last new item we've added to our inventory is our **LED position and anti-collision lights**. These LED lights do not require an external power inverter - but does require a battery. They only draw .36 amps per side and meet or exceed the illumination angle of 110° required for night flying.

The tail light is also an LED Bright White light. It will pulse while in operation. Drawing only .24 amps, it does not require an external power supplier or flasher module. The illumination angle is 140° as required for general aviation.



The anti-collision light draws a mere 1.6 amps. It is usually mounted on top of the vertical stabilizer. The lights carry a manufacturers direct warranty of 5000 hours of operation.



The set of lights (wing position, tail, and anti-collision) are priced to save you a few dollars on the set, costing \$965.00. The wing position lights run \$332.00, the tail light is \$213.00 and the anti-collision light is \$448.00. The lights operate on voltages from 10 to 17 VDC.

## **WWW.GPASC.COM Updates.**

If you haven't been to our web site for a while, it's getting fresh faces. Watch for additional changes! Linda of course does all the web design, shopping cart, etc. [gpasc.com](http://gpasc.com) is the address. The catalog, which is the same as our paper catalog is downloadable on-line. You can print out the entire 2008 catalog or just the pages of interest. If you still require a paper version, they are still available for \$4.00 to cover the cost of printing and mailing. We also have a new e-mail address which is [info@greatplainsas.com](mailto:info@greatplainsas.com). Be sure to change your contact information in your web mail program if you need to.

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