***-EMag / PMag:***

-Nick Ugolini LongEZ N29TM Apr 2012: I have had the latest PMag (series 114) ...around 4 years ...about 450 hrs ...no issues.  PMag had growing pains ...each of the early ones I had failed at some point, but, the company has been really good in supporting their customers.   Emag Air is now in the process of certifying their product concept with a slightly different design which is even more robust.   ...they will have two Pmag product lines....certified...and one for the experimental world ...easy to install ...ability to hook up to a computer to change timing curves,  internal setting etc.   I would buy another one too...

... agree with Ion on checking the pmag (or Lightspeed) timing by removing all the plugs, inserting them in the leads and put your finger over the spark plug hole (to be sure you are on the compression stroke) and making sure a spark occurs when you rotate the prop. ...leads to the proper plug from the coil is easier now ...coil ...labeled indicating which output goes to which plug, ...easy to get them mixed up...

-Ion 0-320 Long EZ N110EZ Apr 2012: ...my E-mag on the cool side...mounted the oil cooler above the accessory case to create a 'chimney' effect after shutdown. I heard the post-shutdown heat soak bakes and kills accessories... My big tip with ignition systems ...double check the timing by lining up all the sparkplugs on top of the engine and see what prop angle the plugs fire at. The Bendix mag makes a spark that's difficult to see in daylight and the E-mag spark looks like a flashbulb going off! Since I'm still hand-propping I'm very wary of a first start after any ignition system maintenance.

-Marc Zeitlin Apr 2012: [Reply to R. Sessions on P Mags]: I was an early adopter and had many troubles - you can read my saga ...here: <http://cozybuilders.org/Emagair_Info/> However, after my rebuild I had a LS EI and a mag. When the mag got weak, ...decided to try the P-Mag again - it had been 2.5 - 3 years since they had "fixed" the magnet mounting problems, and I still loved the idea of the thing. ...on the plane now for about a year and a half and 100 hours and it's working fine I don't think that any of the previous units I had ever lasted that long. I do believe that they have, indeed, discovered and fixed all of the electrical, firmware and mechanical issues at this point, and while I won't tell people to use them, I no longer tell them not to. Another couple of years with no problems and I'll change my tune.

- RICHARD RICHMOND Apr 2012: I had my Slick mag fail and replaced it with a P-mag.  I found Brad to be very helpful and the P-mag quite easy to install.  I have about 200 hours on the P-mag with no problems.  The benefits include better performance, ease of adjustment and engine clutter clean up (the P-mag is about half the size of the Slick mag it replaced).  The P-mag runs the bottom plugs while my Lightspeed runs the top, the two systems work well together as evidenced during run up.  I've also noted an increase in cylinder head temperatures while the exhaust temps dropped, indicating more fuel burn in the cylinders.   I use Denso plugs on both the top and bottom of my 320 with excellent results.

-Nick Ugolini LongEZ N29TM Apr 2012: My Pmag is on the "hot side" as I have down draft cooling.  I installed a blast tube with a homemade collar around the base.  I suggest to Brad he should sell some injected molded collars to make installation of a blast tube easier. ...measured the temperature adjacent to the pmag....about 120 f.  I guess a blast tube helps, but have no idea how much hotter the pmag would get without it.  The pmag meets the certification specs for a mag (200 f) and the electronics can handle 240 f (according to Brad).

-------- Original Message -------- Subject: Re: [c-a] Slick Mag removal/install revisited

Date: Wed, 21 Mar 2012 10:53:30 -0400

From: RICHARD RICHMOND <Richard.Richmond@catvservices.com>

To: Steve Stearns <steve@tomasara.com>

CC: canard-aviators@yahoogroups.com <canard-aviators@yahoogroups.com>

...I had to replace the mag on my 320 and it's not fun.  The newer ~~Emags~~ [Pmags] generate their own power (above about 800 RPM).  I mention this because the additional cost over a new mag is not that great and the Emag is much smaller and no problem to install and remove if needed.  I have a Lightspeed on the top and it works well but I found that the Emag in concert with the Lightspeed aided more power and fuel efficiency.  This configuration give you the best of both worlds as you're not dependent on aircraft power to keep the engine running (again at over 800 RPM) and you get the added benefit of active timing.  If you're currently running two mags replacing one with an ~~Emag~~ [Pmag] will give you a much smoother engine and better fuel economy.  I'm happy with both my Lightspeed and Emag....

-------- Original Message -------- Subject: Re: [c-a] Slick Mag removal/install revisited

Date: Wed, 21 Mar 2012 11:41:44 -0400

From: Harley <harley@AgelessWings.com>

To: RICHARD RICHMOND <Richard.Richmond@catvservices.com>

CC: Steve Stearns <steve@tomasara.com>, "canard-aviators@yahoogroups.com" <canard-aviators@yahoogroups.com>

A correction is due here... The E-Mag does NOT have it's own power source.  The E-Mag was the first design that Emagair came up with.  They later modified an E-Mag to be powered by it's own built in alternator that supplies power even if the system power is disconnected or fails. This became the P-Mag.  The E-Mag can't do this. ...You can see them at [www.emagair.com/P-MAGII.htm](http://www.emagair.com/P-MAGII.htm) ...

-------- Original Message --------

Subject: RE: [c-a] E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 04:44:20 -0400

From: Ken <kenezmiller@optonline.net>

To: 'Kevin Baker' <flykb@verizon.net>, 'Canard Aviators' <canard-aviators@yahoogroups.com>

...Early on in the development process, the EMags were failure-prone .... I recently installed two of them on a customer’s airplane ...Apparently the bugs have been worked out, and they were a joy to install and time.

Ken Miller

-------- Original Message --------

Subject: [c-a] Re: E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 11:46:07 -0000

From: GERALDS <jerryskipschneider@gmail.com>

To: canard-aviators@yahoogroups.com

I've had one for over a year. Love it!. EZ to install. EZ to set timing (60 secs.) .... great product!

-------- Original Message --------

Subject: [c-a] Re: E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 07:52:32 -0400

From: Jerry Schneider <jerryskipschneider@gmail.com>

To: canard-aviators@yahoogroups.com

I have the P-Mag. Love it! EZ To install. EZ to time. Set the prop at TDC and blow into the MAP sensor line. DONE! Mine's worked flawlessly for the past year. I'm considering taking out the old Jeff Rose and having dual P-Mags.

Jerry Schneider Cozy MKIV N85TT http://jerskip.com

-------- Original Message --------

Subject: Re: [c-a] E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 07:58:17 -0400

From: Harley <harley@AgelessWings.com>

To: Kevin Baker <flykb@verizon.net>

CC: Canard Aviators <canard-aviators@yahoogroups.com>

...considerable number of people are using them now since they've got all the bugs worked out. .... fantastic service .... Brad at Emagair has been upgrading them for me at no charge!...that is their policy!

... true electronic ignition, improving fuel consumption and performance. Don't take up any more space than the original ...magnetos. .... same p-lead wires the old magnetos used. Don't need to be rebuilt every few hundred hours. Easy installation. Can use auto spark plugs. Don't have any electronics that need to be mounted inside the cabin as other electronic ignitions do.

Don't need to be rotated to adjust like old magnetos were (turn the engine to top center on #1 cylinder and blow ...actually "puff"... into the MAP tube on the P-Mag...green LED comes on and you're done!). Auto adjusts for MAP variations, and probably more that I've forgotten at the moment.

Here are some comments from other owners: www.emagair.com/CommCust.htm

...Harley Dixon

-------- Original Message --------

Subject: Re: [c-a] Re: E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 10:15:01 -0400

From: Harley <harley@AgelessWings.com>

To: Dennis Purduski <dpurduski@howard-ind.com>

CC: canard-aviators@yahoogroups.com

On 8/22/2012 9:53 AM, Dennis Purduski wrote:

....Could you adjust the timing in flight,  like a Lightspeed ignition?

 Dennis Purduski

* + ...not normally needed, as the P-Mag adjusts itself based on internal advance curves and MAP.  ....Eicad program can be used to monitor and control it within limits if desired.  From the Emagair website: Advance Shift is a control that shifts the ignition's preloaded advance curve up and down (within preset limits). You can: Monitor the current Advance Shift and the current (moment to moment) firing angle (degrees BTDC). Change the Advance Shift setting while the engine running in order to dial in your preferred setting.  Store your preferred Advance Shift setting.  Storing a setting will overwrite and replace the factory default Advance Shift.  Status and Reporting Firing angle. RPM - This is a serial based signal, separate and apart from the tach output that is available on the connector plug.
	+ Buss voltage (As seen by the ignition).  Can be used to determine if the ignition is operating on internal backup power (P models only).
	+ Ignition firmware version. RPM Limit- Your max rpm safety limit.  Above this rpm the ignition will suspend firing.

Maximum Advance. A ceiling you set that will cap the maximum advance firing angle, no matter what value may be used for Advance Shift. Harley

-------- Original Message --------

Subject: RE: [c-a] Re: E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 10:50:38 -0400

From: Jeff Mallia <jjmallia@sykes-mallia.com>

To: 'Harley' <harley@AgelessWings.com>, 'Dennis Purduski' <dpurduski@howard-ind.com>

CC: 'canard-aviators@yahoogroups.com' <canard-aviators@yahoogroups.com>

...had 2 PMAGs for 8 years .... product seems to have matured and works quite reliably. ...customer service from EMAG is second to none. ....

... in flight setting of timing, it can be done by a serial connection to a laptop using their Eicad software. Also, one of the RV guys has developed the EI Commander (www.eicommander.com <http://www.eicommander.com>) which is a panel mounted monitor of your PMAG/EMAGS. .... monitor the operation, spark advance, spark synchronization of both mags, volts, rpm, internal temps and allow for up to three preset timing curves as well user defined ones as well.

Jeff Mallia Cozy III N46WM

-------- Original Message --------

Subject: Re: [c-a] Re: E-Mag/P-Mags ? comments?

Date: Wed, 22 Aug 2012 14:06:38 -0400

From: Harley <harley@AgelessWings.com>

To: vjdslk <vjdslk@surewest.net>

CC: canard-aviators@yahoogroups.com

.... older model 113. ...did indeed have magnet problems originally, ... since been replaced with a much more robust method of attaching the magnets (each magnet is now attached both with a key and keyway, and with a drilled hole and a roll pin instead of the set screw used originally.). All the new P-mags (versions 114 and later) have this fix, and any 113s that have been recently returned to Emagair for upgrades have also.

Harley

-------- Original Message --------

Subject: Re: [c-a] Advice re. Hand propping w PMags

Date: Sat, 25 Aug 2012 10:02:43 -0400

From: Harley <harley@AgelessWings.com>

To: Mike Tooze <miketooze@btinternet.com>

CC: canard aviators <canard-aviators@yahoogroups.com>

... wouldn't even consider the Rose system...go with two P-mags...easier to install, and from what I hear, less trouble in the long run... hand propping a p-mag, from the Emagair website: Yes and no. Even the P-MAG model needs some source of outside power at start-up. ... prop starting because the battery is "low", there is plenty of power for the ignition. ... "almost" dead ... probably have enough power for the ignition. ...if you're battery is removed .../totally dead, you cannot prop start ...It doesn't take much. We get plug spark (on the bench) with only a 9 volt flashlight battery.

Harley

-------- Original Message --------

Subject: Re: [c-a] Slick vs P-Mag

Date: Tue, 20 Nov 2012 06:57:50 -0800

From: Richard Richmond <Richard.Richmond@catvservices.com>

To: Dave <335dave@gmail.com>

CC: canard-aviators@yahoogroups.com

...I replaced my Slick with a P-mag (on my 320) and found many benefits. The P-mag is physically much smaller than the Slick and therefore easier to install and remove if needed. It also allows you to set the timing in any position once in place providing freedom to mount the unit in the most convenient angle. I have a Lightspeed on the top and the P-mag on the bottom and found the P-mag added noticeable improvement over the Slick in both power and fuel performance.