

Prop



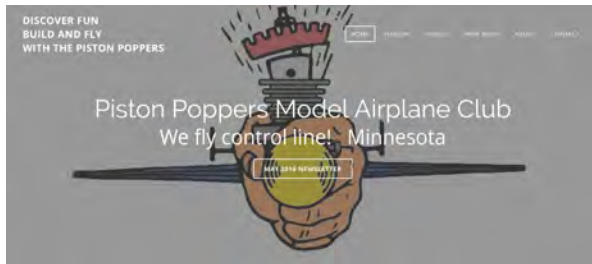
Wash

Prop Wash is a publication of the Piston Poppers Inc., an AMA U-control club

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Any articles for the newsletter are greatly appreciated and will be published as soon as possible.

March 2023



<http://www.pistonpoppers.com>

Meeting

Hope you can make it to the swap meet on March 30 at the EAA hangar, and the build session on April 8th at the EAA hangar.

Tony and Tom

The last club meeting was attended by John, Glen, Don and Tom. Tony attended by email. John gave the treasures report. We encourage people to officially sign up and send their dues to John.

We have three builds left at the EAA hangar. After that Don will host a tour and build session at Twin Cities Maker. They have space and won't charge us,

and their workshop has lots of power equipment to see, including CNC machines and LASER cutters.

>>> Our meeting on the last Thursday of March is also our swap meet. Bring your supply of engines, parts, NVA's, balsa, kits and other goodies. Bring some completed airplanes too. Tom raised the following question for the club:

>>> Should we invite others and rename it a garage sale? We could post at the hobby shops and directly invite airplane clubs, scout troops, and 4-H groups. Let us know your thoughts so we have time. If we do this we should be ready to sell some completed airplanes.

>>>

>> Build sessions are booked for Saturday April 8th.

>>> Don finished his T-38 Trainer. It is smooth and nice looking, but turned out heavier than what he desired.

>>> Folks shared lots of enjoyable stories and discussions of wing loading, tip weights, flight characteristics which indicate trimming, and what to watch for when the engine stops.

>>> Fuel concerns: Bill has offered to make octagon components and make a batch. Other sources are available but can get expensive with shipping. You also can't get a large quantity without paying hazmat fees. Brodak, and possibly PowerMaster BP, sell model airplane fuel.

>>>

>>> Show and tell: Tom brought Magnus Avis (Big Bird), the way-overweight yellow Magnum. He reviewed modifications he made to toenail a ST V60 into the crutch. The V60 replaced an St G51. He hopes the additional power will allow it to complete the pattern without sagging.

We look forward to seeing you next time. **Remember to send your dues to John.**

K&B 35 Stallions

Dave Vandegrift finds great enjoyment in collecting and identifying engines, so I asked if he could help. He said yes, so I sent him photos of two old K&B 35 Stallion engines.

First Engine: K&B 35 Stallion Model 83 started production in 1968.

I bought this K&B 35 new from a hobby store in Marshall, MN when I was quite young. It has a matte finish and a propeller bolt instead of a shaft and nut. Based on the model year, I was between 4th grade and 8th grade.

It mounted nicely on the Cosmic Wind my brother Mike's had made a few years prior. It was the first big airplane I ever flew. Having only started Cox 049's, it was a bit terrifying, especially when it started. I flew in the pasture at my sister and brother-in-laws farm.

The engine had (and still has) great compression, plenty of power and a 2-4 break! I remember putting the Cosmic Wind into a loop (my first one ever), and the engine suddenly accelerated on ascent. It was cool but I had no idea why it happened.



The Cosmic Wind survived safely as a display model at my nephew's house from the mid- 1970's until about 2014, at which time I resurrected it with my renewed hobby. It flew many times until it succumbed to multiple "injuries".

It was the first airplane I flew with the club, and already was beat up from prior flights. The K&B still ran well but I had to reinforce the beams with angle aluminum (due to crash fatigue), and strap on a muffler (which was more like a straight black pipe with some dubiously designed spiral wires inside). It was very loud.

Sean once flew her FAST through the entire pattern! I was astonished, impressed and inspired.

Second Engine: K&B 35 Stallion Model 105 started production in 1973.

I obtained this engine sometime in the years since I joined the Piston Poppers in 2014. It is very similar to the Model 83, but with a more robust exhaust port, webbing behind the venturi, and a shiny finish. K&B also did away with the propellor bolt, opting for a shaft and nut arrangement. I've never run this engine.



Several years ago, an elderly family friend named Marylyn gave me her late husband's P-38 lightning, it had hung on the wall for years and didn't appear to be in poor condition. I dreamed of mounting the two Stallions and giving it a flight or two. The engines mounted as if they belonged in the airplane.

My newbie plan crashed after calculating the wing loading. It would have been astronomical. John and Keith doubted it could get off the ground. I also found that all the wood


was dried up and brittle, and the pull test failed spectacularly.

Dave found these descriptions in his book of American made model airplane engines:


Carburetor choke area 21.5 sq. mm. No exhaust baffle. Bar type glow plug.

NOTE: The Series 64, 15R, 29R, 29F and .35 engines were all continued in production up through the 1967 model year. These engines as well as the green head, 19 R/C, 201, .35, .35C, .35 R/C, and Stallion .35 are listed on the parts list supplied with the Series 67 engines.


K&B took over Veco Products late in 1967 and continued production, with revisions, of much of that line. See Veco listing for details.




83 - STALLION 35 - May 1968 - .353 in'. Like 1963 Stallion 35 #70, but matte finish on all castings.




84 - TORPEDO 40 Series 69F - April 1969 - .399 in'. Similar to Series 66, but with internally milled bypass and enlarged intake. New back cover has four webs supporting center boss. KB 1L glow plug. Front rotary valve. Pressure cast wedge head. Teflon wrist pin pads. Exhaust now on right side.




85 - TORPEDO 40R/C Series 69F - April 1969 - .399 in'. Similar to Series 66, but with internally milled bypass. New back cover has four webs supporting center boss. Front rotary valve. Pressure cast wedge head. Bar type glow plug. Large square Multi-speed carburetor. Carburetor choke area 33.5 sq. mm. No exhaust baffle. Teflon wrist pin pads. Exhaust on right side.




86 - TORPEDO 40 Series 69R - May 1969 - .399 in'. Similar to Series 67, but with internally milled bypass. Rear rotary valve. Pressure cast wedge head. KB 1L glow plug. Teflon wrist pin pads. Late models have larger diameter front housing. Exhaust on right side.



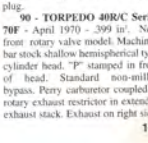
87 - TORPEDO 40R/C Series 69R - May 1969 - .399 in'. As #86 but, larger metal K&B carburetor. Carburetor choke area increased to 45 sq. mm. No exhaust baffle. Bar type glow plug. Teflon wrist pin pads. Exhaust on right side. Identical to standard 40 Series 69R except for carburetor and glow plug.



88 - TORPEDO 29R Series 70 - 1970 - .298 in'. Similar to Series 64 29R. Finless machined bar stock head. "Bulge" type bypass. Non-chromed standard laprod piston. Spinner standard. Larger front housing with small webs. Back cover has extra webs.



89 - TORPEDO 40 Series 70F - April 1970 - .399 in'. Front rotary valve, similar to Series 69F including internally milled bypass, but with machined bar stock squish band head welder fins. New case casting with longer exhaust stack. Exhaust on right side. KB 1L glow plug.



90 - TORPEDO 40R/C Series 70F - April 1970 - .399 in'. New front rotary valve model. Machined bar stock shallow hemispherical type cylinder head. "F" stamped in front of head. Standard non-milled bypass. Perry carburetor coupled to rotary exhaust restrictor in extended exhaust stack. Exhaust on right side.

make Class "D" Free Flight engine. Standard needle valve. "40" milled off of circle on bypass and "41" stamped in. Not advertised. "The Stroker" marked on box end.



99 - K&B 15 Series 72 - May 1972 - .149 in'. New design. Case/shaft housing cast in one piece. Rear drum valve. Schnerle porting. Matte finish. "K/B" cast on bypass. Pressure fitting in right upper back cover screw position.



100 - K&B 15R/C Series 72 - May 1972 - .149 in'. As #99, but with Perry carburetor coupled to rotary exhaust baffle, no pressure fitting. **NOTE:** Series 72 .15's returned to the factory were automatically retro fit with a new design solid crankpin crankshaft and a new harder cylinder liner and piston assembly.



101 - K&B 15 Series 72 - May 1972 - .149 in'. A short run of approximately 100 Team Race diesels were produced using the basic Series 72 engine. These featured variable compression. The contra-piston is in the cylinder head. Cox type peripheral jet carburetor used. **NOTE:** This carburetor type was the standard for the nine in Team Race engines regardless of make.



102 - K&B Schnuerle 40R - May 1972 - .399 in'. One piece finely sand cast case casting incorporates cylinder and shaft housings. 840 x 720 bore and stroke. Rear disc rotary. Exhaust on left side. Schnerle boost port on left side. Deep finned machined head. "K/B" cast on Schnuerle bump. "40" over "R" cast below exhaust stack. Fuel cutoff type carburetor. Dark matte finish on case. Approx. 125 engines built. **NOTE:** Designed by Roger Theobald.



103 still has replaceable threaded adaptor stud and drive plate unit pinned to shaft. Still referred to as Series 71F in ads.



104 - K&B 40F - July 1973 - .399 in'. Like 40F R/C #103, but no carburetor or exhaust baffle. Standard venturi with spray bar needle valve. Machined squish band head. Still referred to as Series 71F in ads.



105 - STALLION 35 - August 1973 - .353 in'. Same as 1968 Stallion except shiny finish. New case casting includes large flush web in exhaust. No throttle or exhaust baffle.

NOTE: July 1973 - Torpedos name dropped from all advertising and referred to only as K&B. Some ad pictures shown. This is when the dies were modified to remove "TORPEDO" from the bypass and replaced with the K&B logo. Castings now finished in a soft satin finish rather than matte. Return to serial numbers on most engines.

103 - K&B 40F R/C - July 1973 - .399 in'. New castings with K&B logo. Smaller (relative to later models) diameter on venturi. Machined hemispherical head. Crankshaft web changed to a one piece design but

Tom Sontag



MEETING NOTICE: