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See us on the Web @ www.sensenich.com

SERVICE BULLETIN SB2019-1

EFFECTIVE DATE: 1-2-2019

SUBJECT: Life Limits For First Generation Composite Airboat Blades

AFFECTED PROPELLER BLADE MODELS:

- All first generation composite airboat blades without carbon fiber spars running along the blade centerline.
- All first gen airboat blades share the common feature of a straight metal leading edge (erosion shield) <u>and</u> having a blade model number with no number or the number "2" after the blade letter. See typical blades below:



As shown on left is the typical shape for narrow blade models L72H, L78H and R78H with 8.5" max chord width.

L79K2 and R79K2 have the same leading edge shape but are much wider chord (12").

Take notice of the straight metal erosion shield on the blade leading edge.

• Model number can be found on the metal data tag on the shank.

Affected blade models: L72H, L78H, R78H, L79K2, R79K2

(L72H4, L78H4, L79K4, etc) are not affected by this Service Bulletin

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BLADE MODELS NOT AFFECTED:

- In the early 2000's, all first generation blade models were updated to gen 1.5 to include integral spar caps in the ply schedule. This was indicated by the number "3" or higher after the blade letter.
- Ex.: L72H3, L78H4, R79K4, L79K5, etc...
- All blades with curved leading edges are not subject to this service bulletin.

This includes all swept leading edge blades from the "Q" blade onwards, regardless of any number after the blade letter. See blade models not affected below:

Ex.: L68W, R68W, L68V, L68N, L72N, L72Q, L74N, R74N, L79R, R79R, L79G, R79G, L79R, R79R, L79S, R79S, and all blades with "J" in the model number, L70JM, L72JN, L72JM, L72JW, L80JW, L82JR, R82JR, L82JX, R82JX, R88JW...

AFFECTED SERIAL NUMBERS:

There is no serial number cutoff since first generation replacement blades were manufactured for many years after introduction of spar blades. Use the blade serial number and Sensenich's table for "Born-on" dates for carbon blades below to determine the age of your blades.

				Recommended
				Retirement
Starting S/N		Ending S/N	Year	Year
1	-	1389	1999-2000	2015
1390	-	2781	2001	2016
2782	-	3983	2002	2017
3984	-	5488	2003	2018
5489	-	7238	2004	2019
7239	-	9405	2005	2020
9406	-	12103	2006	2021
12104	-	14864	2007	2022
14865	-	17998	2008	2023

Sensenich publishes the original manufacturing date for composite blades on our website. The blade serial number is located on the shank data tag and/or is engraved into the carbon fiber material on the blade trailing edge just outside the shank.

Sensenich strongly recommends blade retirement after 10,000 hours or 15 years from date of manufacture. Determining the total time on blades is many times impossible, thus reason for a calendar lifetime limit of 15 years.

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Click on our web link below for latest serial number information, or see our website supporting documents under Support Docs / Miscellaneous Docs / "Born-On" dates for Carbon blades.

REASON:

- Sensenich has received reports of first generation composite airboat blades with cracking in the shank or mid-blade region.
- First generation composite blades are constructed almost entirely of woven composite materials such as carbon fiber fabric and fiberglass fabric. A short unidirectional spar is present in the blade shank but it does not extend outside the hub clamping zone.
- Sensenich strongly recommends blade retirement after 10,000 hours or 15 years from date of manufacture. Determining the total time on blades is many times impossible, thus reason for a calendar lifetime limit of 15 years.
- The 10,000 hour / 15 year life limit for first generation airboat blades is based on average duty cycle assumptions for a recreational "ride type" airboat. Several use cases would reduce these life limits, including any racing use, modified engines with higher than stock compression ratio, and commercial operation.
- This service bulletin does not apply to newer generation blades (as described on previous page) which have full length carbon spars. Experience has shown that blades which incorporate full length unidirectional spar caps, referred to as "spars", have improved damage tolerance and better service life.

COMPLIANCE:

- Inspect blade metal data tags for affected model number.
- Check blade serial number versus the table for "Born-On" date for Carbon blades.
- Retire any affected blades that are over 15 years old or have over 10,000 operating hours.
- All first generation blades that were built in 2005 or earlier are over 15 years old and must be retired from service.
- Blades made after 2005 may have limited time remaining. Refer to the "Born-On" date for Carbon Blades to determine age.
- It is good practice to inspect blades for cracks before every boating excursion.

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CONTACT INFORMATION

Notify Sensenich of any crack occurrences or with any questions regarding this service bulletin:

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