

in partnership with Insane Oil of Omaha

### Your Amsoil Information News Source

## Product Highlight: Saber Professional Synthetic <u>2-Stroke Oil</u>

We tested <u>SABER Professional</u> at a 100:1 mix ratio compared to other two-stroke oils at 50:1, and the results are clear: SABER Professional dominated the competition in every area of performance. Even when using half as much oil, <u>SABER Professional</u> does a better job fighting carbon deposits that rob engines of power and reduce their service life. It helps landscapers, contractors and other professionals work more efficiently and cut costs.

<u>SABER Professional's</u> high-quality synthetic base oils burn more cleanly than other synthetic and conventional base oils. It eliminates carbon deposits that lead to stuck piston rings, clogged exhaust ports and plugged spark arrestor screens.

Mixing <u>SABER Professional</u> at 100:1 cuts oil costs by 50 percent or more while still providing unmatched protection and performance. It allows professionals the best of both worlds — reduced costs and increased protection.

SABER Professional passes the industry-standard smoke test at the standard rich mix ratio. When mixed at the SABER Ratio, smoke is virtually undetectable. Equipment operators subjected to smoke and fumes benefit from these low-emission properties.



### What's Inside?

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### **Congratulations:**

#### New Preferred Customer

Justin White Braggs, OK

Dustin Salm Vine Grove, KY

Brent Arnold Lincoln, NE

#### **New Catalog Customers**

Juan Garcia Highlands Ranch, CO

> Oliver Willich Kingston, NS



# What Does Saber Professional 2-Stroke Synthetic Oil Actually Do? Part 1

There are a number of issues when it comes to preventative maintenance and service of 2-stroke small engines. Over the next couple months I will be discussion various common issues with 2-stroke engines and solutions to prevent such issues.

This month we will be talking about the Spark Arrestor Screens. A Spark Arrestor is any device which prevents the emission of flammable debris from combustion sources, such as internal combustion engines, fire places, and wood burning stoves (see right column).

The problem of equipment-started fires in the 1900s led to the development and integration of the spark arrestor. In the 1950s, the forrest industry became interested in reducing the number of fires started by logging equipment and worked with the Society of Automotive Engineers to develop several tests to address this problem. Advancing engine technologies over the last 100 years have widely eliminated the production of large particulate matter from combustion engines. internal However, as engines wear, carbon deposits commonly build up on the internal walls of the engine. When these carbon deposits brake free, they exit through the exhaust port and present a possible fire hazard. Vehicles without proper functioning spark arrestors have started numerous wildfires.

A 2-stroke engine poses particular concern as the oil is mixed with the fuel. Thus every time the airfuel mixture is burned inside the engine, there is also oil being burned. As oil is burned, it produces an increased amount of carbon deposits which increases the rate at which the carbon builds up inside the engine. To reduce the chance of fires in 2-stroke equipment (specifically from the carbon buildup breaking free), spark arrestors are installed.

#### Spark Arrestor Basic Information



Spark Arrestors









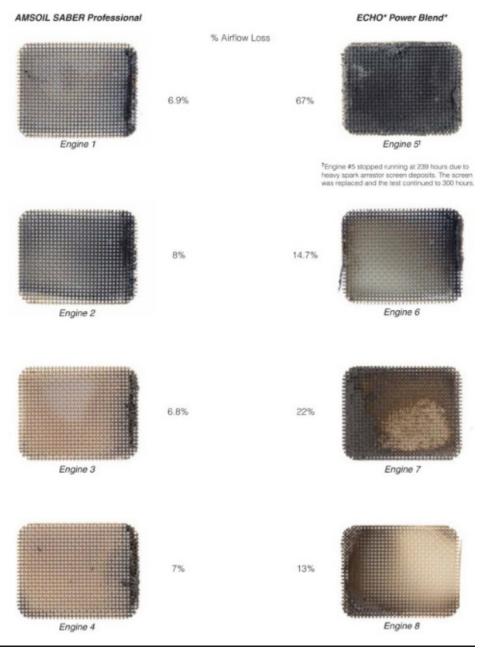
## What Does Saber Professional 2-Stroke Synthetic Oil Actually Do? Part 1 continued

If you watched the video on the previous page, you will have noticed that the guy in the video only uses Stihl Two-Stroke Engine Oil. He specifically said one method to that to prevent clogging and carbon build up on the Spark Arrestor is to use "good" two-stroke engine oil.

Ironically enough, he also talks about how it is a common problem to clean or replace the spark arrestor. I would build upon his statement by saying that if you want to use a "good" oil, use what the manufacturer says to use but know that the spark arrestor will get clogged. On the other hand, if you use a "great" oil, you won't be seeing the problem near to the extent that you will see it with the manufacturer's oil. Don't get me wrong, you will always have buildup, but by running a higher quality product, the carbon buildup is substantially reduced (see chart at right).



<u>Saber Professional</u> demonstrated low- spark-arrestor screen deposits. In contrast, screens on the trimmers lubricated with the manufacturer specified Echo product contained higher levels of deposits. The screen from engine 5 was nearly completely blocked with deposits after 239 hours of the 300-hour test and required replacement. On average, screens from engines using Echo Power Blend suffered 4x more airflow loss than screens from engines using Saber Professional.



#### Shop Talk... with Dr. Jonathan D. Olson, EdD ZO #10458

In light of the national and global issues with Covid-19, Amsoil has remained in operation and available to supply you with your product needs. Amsoil has also extended their current Preferred Customer and Catalog Customer promotion through April 30th. Orders of \$50 or more in Amsoil products will receive free shipping.

#### Use Promotional Code: FREESHIP

If you have not updated your information or e-mail address recently you can do so by e-mailing:

update@amsoil.com

Send us an email:

To: update@amsoil.com

Subject: AMSOIL Promos

Body: My account number/name is\_\_\_\_\_.

Or call 1-800-777-7094 (M-F, 7-7 CT).

As the nation begins to slowly open up, we highly encourage you to continue to place orders online for the time being. Products will be shipped to your door direct from the factory in Superior, Wisconsin. It typically takes 2-3 days to receive your order.

Call or e-mail me if you need any assistance.

### Dealer's Zone...By Don Olson, ZO #4901

## AMSOIL is Open for Business

AMSOIL is fully operational at all locations and ready to serve you. Several states where AMSOIL operates facilities, including our home state of Wisconsin, have issued shelter-in-place orders. In each instance, AMSOIL has been identified as an essential business and encouraged to remain open.

AMSOIL is an essential supplier to critical manufacturing sectors as defined by the Cybersecurity and Infrastructure Security Agency (CISA). Moreover, our products are relied upon by public and private utilities companies, hospitals, fire departments, police departments and other vital businesses and industries. Our customers are depending on us to meet their lubricant needs during these challenging times.

All AMSOIL employees who are able to work from home are now doing so, and those who must be on site have ample space to practice social distancing. We do not anticipate any disruption to our ability to take or ship orders.

Thank you for your business. We wish you good health and safety during these uncertain times.

