

Your Amsoil Information News Source

Upper Cylinder Lubricant

In October 2019, Amsoil introduced their <u>Upper Cylinder Lubricant</u> product. Although I trust the Amsoil engineers to develop products that far surpass industry competitors, I don't use a new product until I have conducted my own background research into the theoretical aspects of the product. Much in the same, I don't recommend a product to customers unless I have analyzed the empirical research. More so, I regularly conduct my own research to validate the research of others.

In <u>Issue #99 - November 2019</u>, I began a journey into the world of <u>Upper Cylinder Lubricant</u>. Specifically, I was asking the questions 'why?' and 'what?' Why use <u>Upper Cylinder Lubricant</u>? What is the purpose of using it?

This topic proved to be much deeper than I anticipated and thus continued my findings into the theoretical research of 'Why' and 'What' the following two months:

<u>Issue #100 - December 2019</u>

Issue #101 - January 2020

continued on next page ...



What's Inside This Issue?
Upper Cylinder Lubricant Data
p. 1-5
Shop Talk with Dr. Olsonp. 5

Congratulationsp. 5	;
---------------------	---



Dealer Contact

Lincoln - Olson Marketing Don & Peg Olson ZO Referral# 4901 402-310-6414 <u>http://om.shopamsoil.com</u> lubedealerdon@gmail.com

Omaha - Insane Oil Dr. Jonathan D. & Stacey L. Olson ZO Referral# 10458 402-990-7940 (text or call) <u>http://insaneoil.com</u> info@insaneoil.com

Upper Cylinder Lubricant continued

You are more than happy to go back and review the many pages of research I shared through the newsletters in late 2019 and early 2020. However, I will summarize those findings to refresh your memory.

There are six key reasons for adding <u>Upper Cylinder Lubricant</u> to your fuel.

1. The harsh environment within new engines (especially with Ethanol Gasoline, Gas Direct Injection, and Turbochargers) are 30-40 times worse than older port fuel injector technology and require additional lubrication.

2. "Flash Corrosion", and corrosion in general, will occur on "dry" (unlubricated) metal components within the upper cylinder area, especially if using Ethanol fuels which absorb water.

3. Valve stems and valve guides that are not lubricated will generate friction (heat) and rubbing (metal abrasion) that can affect the seating and sealing of the valves inside the engine which can lead to engine noise and premature component failure.

4. Without an Oil Cushion on the valve faces and valve seats, the valve shock load (valve faces hitting valve seats during closure) is substantially increased and can ultimately lead to valve tuliping.

5. The small components inside fuel injectors (specifically the injector springs) can actuate 500 million times over 10 years. Without proper lubrication, those components will prematurely fail.

6. Fuel pump oxidation is a leading cause of fuel pump failure and is caused by a reaction between hydrocarbons (fuel) and oxygen (air). Fuel pump components that are not lubricated properly do not have a protective barrier to counteract the oxidation process.

All of this can be summarized by the following:

Your vehicle's engine and fuel system components are made of metal and have moving parts. Those parts need lubricated.

After conducting 3 months of research into the theoretical aspects of <u>Upper Cylinder Lubricant</u> I thought I had enough information to put together a simple research study to determine if there were any adverse effects of running <u>Upper Cylinder Lubricant</u> in my vehicles.

I am going to take a quick moment to jump back in time two years, to April 2019. We had just recently purchased a 2019 Jeep Compass, brand new from the dealer. It was in April that we hit the 500 mile break-in cycle on the engine and thus I completed an oil change, switching over to Amsoil. I also filmed the process and posted it to YouTube (click on the image at the bottom of the page), as I do with most of my repairs and vehicle service procedures.

Several months after posting the video, I received a comment on that particular YouTube video from an individual stating that his 2018 Jeep Compass burns through a quart of the dealer recommended Mopar Synthetic Oil every 1000 miles. Specifically, he was asking if it was normal. He even had said that after hitting 5000 miles, his wife was driving the vehicle and it shut off due to lack of oil.

This comment got the wheels turning in my head. I checked the oil on my 2019 Compass and did notice that the oil level was not as high as it previously was.

continued on next page ...



May 2021 - Page 2 of 5

Upper Cylinder Lubricant continued

I took a few months to do some research on this "oil consumption" issue and during that time grew fairly concerned that I had bought a lemon. I presented my findings in Issue #107 - July 2020. Essentially, what I found was that the type of engine installed in the Jeep Compass (and many other vehicles) is not very good. It has a long-known history of "using" oil but the dealership claims that it is "normal" and the manufacturer won't admit that either (1) the engine is poorly engineered or (2) the manufacturing process is not as precision as it should be.

Nonetheless, we own a 2019 Jeep Compass with a 2.4L Tigershark Inline 4-cylinder MultiAir engine. In April 2019, I switched from the factory OEM oil to Amsoil 0w-20 Signature Series Motor Oil. Knowing that this particular engine "uses" oil, I checked the oil every month, added oil when it was below the full mark, and recorded how much I added.

Over the course of one year (April

2019 to April 2020), we drove our Jeep Compass total of 8,634 miles and added 24 ounces of oil. This was well less than the individual that commented on my video, but it was still a brand new vehicle using almost an entire quart of oil in 12 months.

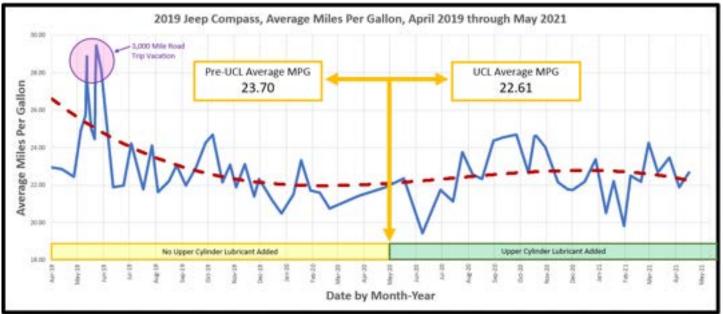
After doing all the research on Upper Cylinder Lubricant and all the research on the poor engine design in my 2019 Jeep Compass, I concluded that there is a high probability oil is getting lost via the piston rings not properly sealing the cylinder or any number of other area where oil is pumped throughout the engine and it not sealing properly. I had this idea that if Upper Cylinder Lubricant is designed to lubricate the Upper Cylinder, it could possibly also act as a lubricant to more effectively seal the engine from the inside. Essentially, if motor oil is working its way into the cylinder, then by introducing oil (Upper Cylinder Lubricant) into the fuel to lubricate the cylinder it might "seal" or at least slow down the "leak."

Thus, in May 2020 I started using <u>Upper Cylinder Lubricant</u> in our 2019 Jeep Compass.

It was already clear that there are many benefits to using <u>Upper</u> <u>Cylinder Lubricant</u>, but I wanted to know if it would reduce my oil consumption problem. Regardless if it worked, the <u>Upper Cylinder Lubricant</u> is still helping protect my fuel system and engine components adding life to my engine. There were also rumors that it would increase fuel economy.

To debunk the notion that <u>Upper Cylinder Lubricant</u> will raise your gas mileage, the chart below identifies the time frame before I used <u>Upper Cylinder Lubricant</u> and after I started. The average fuel economy is technically lower when using <u>Upper Cylinder Lubricant</u>. However, if you factor out the 3,000 mile road trip, the fuel economy is almost identical when comparing before and during use.

continued on next page ...

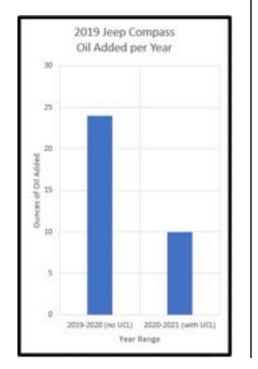


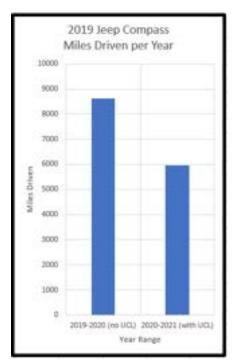
Upper Cylinder Lubricant continued

From April 2019 to April 2020, the Jeep Compass "used" 24 ounces of oil. In other words, I had to add 24 ounces of oil throughout the year to maintain a full level on the dipstick. During this time I did not use Upper Cylinder Lubricant. In April 2020 I performed an oil change, ran one bottle of Amsoil Performance Improver and begun using Upper Cylinder Lubricant each time I filled up more than 3/4 of a tank. From April 2020 to April 2021, I only added 10 total ounces throughout the entire year. During this time I did use Upper Cylinder Lubricant. Solely comparing these numbers is a little misleading and without further analysis one could conclude that by using Upper Cylinder Lubricant, the oil consumption issue was reduced significantly. However, as the number of miles driven varied throughout both time frames, it is important to take that information into account as we move forward.

From April 2019 to April 2020, we drove the Jeep Compass a total of 8634 miles. These miles were put on the vehicle before the use of <u>Upper Cylinder Lubricant</u>. After my April 2020 oil change, I ran a bottle of <u>Amsoil Performance Improver</u> and began using <u>Upper Cylinder Lubricant</u>. I continued to use <u>Upper Cylinder Lubricant</u> over the next 12 months, for a total of 5969 miles.

However, I only used <u>Upper Cylinder Lubricant</u> when the tank was less than 3/4 full. One bottle of <u>Upper Cylinder Lubricant</u> is sufficient for a fuel tank up to 25 gallons. The Jeep Compass has a fuel tank of 13.5 gallons. I did have a concern with oversaturating the fuel if I were to add a bottle when I hadn't used the vast majority of the fuel. Thus I limited my use of <u>Upper Cylinder</u> <u>Lubricant</u> to fill ups of more than about 9 gallons, but tried to drive until the tank was almost empty.

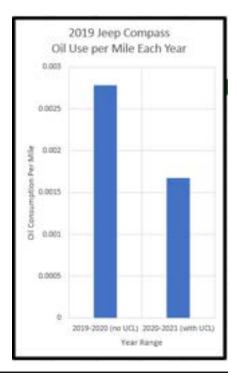




Oil consumption alone only tells us part of the story and mileage alone only tells us another part of the story. To get a clearer picture, we can determine the oil consumption per mile by taking our total oil consumption for the year and dividing the total miles.

Shown on the chart below we can see the results in terms of Oil Consumption per Mile driven. Oil consumption for 2019-2020 was .00278 compared to .001675 in 2020-2021.

After doing a little additional math to give us some clearly defined numbers, oil consumption in 2020-2021 decreased 66% compared to 2019-2020. I would conclude that the use of <u>Upper</u> <u>Cylinder Lubricant</u> is statistically significant in terms of methods to reduce oil consumption for a 2019 Jeep Compass with a 2.4L Tigershark Inline 4-cylinder MultiAir engine.



Shop Talk... with Dr. Jonathan D. Olson, EdD (Independent Amsoil Dealer #10458)

All this talk about Upper Cylinder Lubricant in pretty interesting but it is also important to note that there are many variables that factor in to oil consumption and many limitations to this study. As best as I could, in this study, I controlled as many variables as possible. It is also worth noting that this study only had two years of data and one vehicle. I plan on continuing to monitor the oil consumption as it is a known problem with these vehicles. I also plan on sharing the data and information with you in the future.

If there does come a point where it seems like there is no statistical significance between Upper Cylinder Lubricant and Oil Consumption I will likely continue to use Upper Cylinder Lubricant because of the primary benefits as noted on page 2 of this newsletter. An engine is metal and has moving parts. Those parts need lubricated to reduce friction and Neglect of preventative wear. maintenance practices is the leading cause of equipment degradation and breakdowns.

Dealer Contact

Lincoln - Olson Marketing Don & Peg Olson ZO Referral# 4901 402-310-6414 http://om.shopamsoil.com lubedealerdon@gmail.com

Omaha - Insane Oil Dr. Jonathan D. & Stacey L. Olson ZO Referral# 10458 402-990-7940 (text or call) <u>http://insaneoil.com</u> info@insaneoil.com

Do You Have The Correct Amsoil Account Type?

There are several key variables that determine which type of account is the best fit for you.

Catalog Customer - For people that purchase a few products to try out once a year. Total spent during a year is under \$125. Products are priced at MSRP (more expensive).

Preferred Customer - For people that use Amsoil annually as part of their vehicle/equipment care and maintenance. Total spent during a year is more than \$125. Product pricing is about 25% less than MSRP. Must register as a Preferred Customer (\$20/year).

Retail Account - For people that own a retail store front and want to carry Amsoil as a part of their inventory. Products are priced at the wholesale rate. Must register and verify your company with Amsoil.

Commercial Account - For people that own a business and use Amsoil in a fleet of vehicles/ equipment. You are not allowed to sell any products. Products are priced at the wholesale rate.

Dealer Account - For people that want to own an Amsoil Dealership business and generate income from helping individuals and businesses find the correct products for their applications.

Contact us (at left) to ensure you a have the right type of account.

Congratulations to NEW Amsoil Opportunists and Enthusiasts!

Congratulations:

New Catalog Customers

Carlos Mendoza Las Vegas, NV

William McKinzie Chapin, SC

Ryan Lambert Santa Rosa Beach, FL

> Roger Moore Valparaiso, IN

Dave Stupnick Medina, NY

Congratulations:

New Preferred Customers

Mike Waddell Prescott, AZ

Jacob Crouse Montgomery, PA

Alexis Fregoso Lincoln, NE

Kevin Hodel Dixon, CA

Jim Lapiana Longwood, FL

Brittany Piechota Palmer, MA

Bret Shafer Landcaster, OH