

in partnership with Insane Oil of Omaha

## Your AMSOIL Information News Source

# Product Highlight: Dominator Coolant Boost

AMSOIL Dominator Coolant Boost improves heat transfer for increased horsepower, reduces engine temperatures, and is radiator-safe.

AMSOIL Dominator Coolant Boost helps prevent corrosion in high-performance racing applications and is compatible with all water sources, including distilled, bottled and tap water.

AMSOIL Dominator Coolant Boost shortens warm-up time and is safe for use with antifreeze mixes.

If your engine seems like it is taking longer and longer to heat up every morning, your engine coolant may be loosing its ability to properly do its job. Give it a boost with <u>AMSOIL Dominator</u> <u>Coolant Boost</u>.

I also recommend checking your coolant with <u>AMSOIL Antifreeze</u> <u>Test Strips</u> to ensure your coolant is still protecting your vital engine components.



#### What's Inside This Issue?

What makes your vehicle stop?
p. 2-3
Congratulations
p. 4
Shop Talk with Dr. Olson
-New Vehicle Maintenance Chart

.....p. 4-5



## **Dealer Contact**

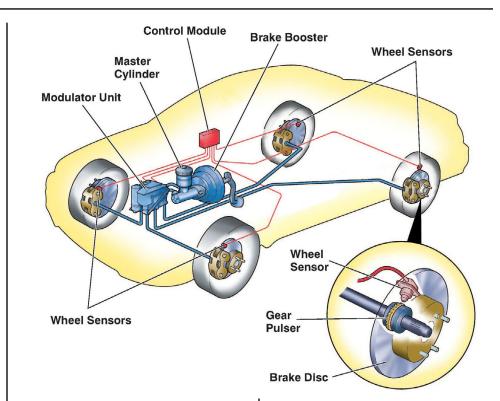
Lincoln - Olson Marketing Don & Peg Olson ZO Referral# 4901 402-310-6414 http://om.shopamsoil.com lubedealerdon@gmail.com

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

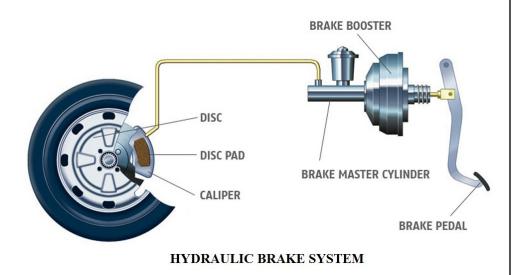
## What Makes Your Vehicle Stop?

The job of the brake system is to make your vehicle stop. Modern vehicles will have hydraulic brakes and many have electronic brake systems (more on this later). Hydraulic brakes (as shown in the diagram below) are activated when you push the brake pedal in the vehicle which pushes brake fluid through hydraulic brake lines and ultimately into the caliper. Inside the caliper, there is a piston that pushes on the brake pads, squeezing the brake pads against the rotor causing the vehicle to slow down.

Most modern vehicles will come with anti-lock braking systems (ABS) that can prevent skids in slippery conditions and keep you in control of your vehicle until you can stop safely. The ABS system (seen at top right) incorporates a few extra components, namely a control module to control when the brakes are activated and for how long they are activated. This system still being ran on hydraulic brake fluid and pressure with assistance of sensors.



Electric vehicles and hybrid vehicles will use regenerative braking systems. In these systems, the energy created during braking, that would normally be lost, is captured and used to charge the vehicle's battery. This technology has helped electric vehicles increase their efficiency and increase the distance the vehicle is able to drive before needing charged.



This past October 2022, I replaced my 2001 Ford F150 with a 2012 Ford F150. I had mentioned in the October issue of the newsletter that the day I picked it up from the dealership, there was a stuck caliper. After driving the vehicle for about 10 minutes I noticed smoke coming from the passenger side front tire.

I general, any time you have smoke coming from an area on your vehicle, it is a good indication that there is an issue. The vehicle's documentation stated that the dealership mechanic had serviced the braking system, replaced the pads, and the system was good to go. Rather than taking the vehicle back to the dealership, I choose to repair it myself as I have more faith in myself than the dealership.

continued on next page ...

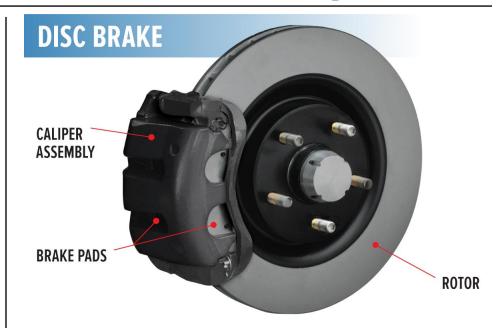
## continued...What Makes Your Vehicle Stop?

Smoke from the wheel generally means that the brake pad is stuck touching the rotor. As the wheel turns, it is rotating the rotor around the center hub. If the pad is always touching the rotor, heat will be generated.

A similar situation often occurs while driving down a mountain. People don't want to go too fast, so they will slightly apply the brakes for very long periods of time. This generates friction and causes the rotor to heat up. Smoke will begin to arise from the heated surfaces and eventually the system will fail, or even catch something on fire due to the high temperatures.

My vehicle's wheel assembly heated up and began melting the wheel skin (as shown in the video below).

In a system that is operating properly, when you release your foot from the pedal inside the vehicle, the braking process is reversed: The brake pads release their hold on the rotor, the fluid moves back up the brake lines to the master



cylinder, and the wheels can turn freely again.

I choose to replace the existing rotors with vented, drilled and slotted rotors. The upgraded rotors cost a little more money but are designed to better reduce the heat that is generated through the braking process.

I also choose to go with a little better quality brake pad which was said to provide better braking performance and longer life compared to the cheaper ones. The use of high quality products during the brake system service is also a must if you are wanting to ensure the best outcome possible. I used the following Amsoil products in this repair:

Amsoil Brake and Parts Cleaner

Amsoil Metal Protector

Amsoil Heavy Duty Metal Protector





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

I really dislike working in cold weather. Especially when the temperature gets as low as it has been getting lately.



In all honesty, anything under about 80 degrees is too cold for me.

I try hard to take care of my vehicles and perform the various preventative maintenance tasks throughout the year for the purpose of hopefully not having to work on my vehicle when the temperature is frigid outside. Each month I go through each of my vehicles and perform basic preventative maintenance checks. I have created a chart that I fill out and I can look back and see trends over the past months.

My current revision of this document can be downloaded by clicking on the picture below.

1 2 3 4 5 6 7 INTERVAL	7 8 9 10 11 12 MONTH
VEHICLE: MILEAGE:	DATE:
OK ADDED FLUID LEVELS METROD Engine OI OTTAINISSION FAUAL CONSTANTISSION FAUAL Banka FAUA Demonstration Faual Window Washer Faual	UNDER THE HOOD
TIRE TREAD & PRESSURE	GENERAL   0000 BAD SERVICED   Image: Instance of the service
Pressure Pail Pail Pail Pail Pail Pail Pail Pail	NOTES
LOW PULL	

With regards to the "Hot Oil Level" section, I will run my vehicle for 5-10 minutes until the oil warms up. I will then turn the vehicle off and let it sit for 5-10 minutes. This allows all of the oil to drain down back into the pan. As I check the oil, I draw an arrow on the diagram to indicate the vehicle's level. If at any point throughout the year I notice that the oil level is going down, I will add enough oil to bring it back up to the FULL line and I will log the number of ounces of oil I added. This helps me track oil consumption (if any) for my vehicles.

It is also worth to note that the vehicle should be parked on a level surface. This will provide you with the most accurate reading when you are checking your oil.

I have also included the document on the next page.

## Congratulations to NEW Amsoil Opportunists and Enthusiasts!

Congratulations		
New Catalog Customers		
Kyle Few		
Oregon City, OR		
Curtis McCardie		
Saint Charles, MO		
Vinnie Burcz		
Mount Morris, NY		
Frank Bault		
Portland, OR		
Josh Voskamp		
Woodstock, GA		
<b>D</b> 1 1 <b>D</b> 111		

Eduardo Trujillo Miami, FL



Jarad Shively Omaha, NE

Matthew Robertson Claymont, DE

Daniel Robinson Papillion, NE

Jeromy Stiastny Omaha, NE



