

Brake Lubrication: Not a Contradiction

Proper lubrication is necessary to help brakes perform quietly, smoothly and deliver long, dependable service. This can be a hard concept to grasp initially, since the first thing anyone learns about brakes is that they use friction to stop a vehicle. It's true, nonetheless.

In fact, a certain amount of lubrication is built right into brake pads and shoes. Without substances called "friction modifiers" in the friction-material formulation, pads and shoes could be so aggressive that they could operate roughly and quickly wearing out drums and rotors—as well as make a lot of noise.

But even with quality friction modifiers built in, where there is "friction" between moving parts the result is vibration. It's the engineer's and technician's jobs to control the vibration – to dampen it as much as possible and/or move it out of the audible range.

Vibration control is one reason technicians need quality brake lubricants. The other more obvious reason is wear prevention.

Stopping noise with Bendix® Ceramlub™

As brake pads are forced into contact with rapidly-spinning rotors, friction between the working surfaces induces vibration in the pad assemblies. It's necessary to absorb that vibration.

Using a liquid noise suppressor was once a common, noise-control strategy. It is used less nowadays. Resilient shims are now more common and for several years, many manufacturers have called for the use of lubricant between pad plates and calipers. Unlike shims, which typically fit just between the backs of pads and the calipers, lube may also be used where edges of pad plates touch calipers and their mounts.

This is a demanding environment for lubricants. Technicians need to use a quality brake lubricant like **Bendix® Ceramlub™ High Performance Synthetic Brake Lubricant** to accomplish the job and avoid problems.

Here's why: Certain kinds of grease can attack elastomers (flexible parts) used in some braking systems, and shouldn't be used at all. Meanwhile, temperatures at the brake pad can reach as high as 1000° F (in a fade situation) causing ordinary greases to run. This opens up the possibility of lube flowing into areas where it does more harm than good. For example, grease on rotor or pad's working surfaces will change friction characteristics, making brakes slip or grab. And because of the open-to-the-elements design of disc brake calipers, and the fact that cars and trucks encounter harsh environmental conditions every day, it's merely a matter of time before a splash or spray will wash off any ordinary lubricant that hasn't run off.

That won't happen with Bendix Ceramlub. It uses 100 percent synthetic-based oils blended with unique, pressure solids and elevated concentrations of corrosion inhibitors. With over 30 percent solid content and no petroleum, silicon or Teflon®, it is able to withstand extreme operating conditions and will not run on account of heat. It cannot be washed or sprayed off and is safe for elastomers, rubber and plastic components.

Only a thin layer of this high pressure-resistant, dry-film, boundary lubricant is needed to fill surface roughness. Unaffected by salt, weather or brake fluid, it lasts the life of brake pads and shoes, protecting against dirt and corrosion.

Experienced technicians understand the importance of brake lubrication, and with its superior performance and longer lasting, unique formulation Bendix Ceramlub is sure to get the job done.

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