Title: NoVibeHeat; An Innovative Perforated, Noise Dampening, Heat Shielding Shim Design

Patent Pending: WO 2021/234533 A1

Author: Gino Fronzoni



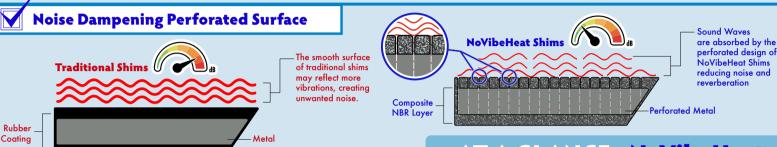
The Problem

Traditional shims offer insignificant thermal barrier properties that could lead to hydraulic fluid overheating within the brake piston circuit which can contribute to brake fading problems. Additionally, the manufacturing process requires the use of toxic chemicals and is not environmentally friendly.

The Solution

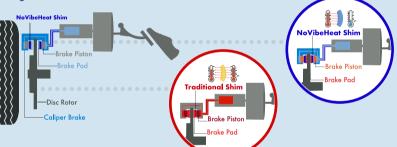
NoVibeHeat shims offer distinct and substantial design improvements that uniquely position this product above all leading competitors across three key vectors including: noise dampening, heat shielding, and a 100% VOC free production process.

NoVibeHeat shims stand to disrupt the status quo, offering a quieter, safer, greener alternative with unmatched design flexibility to meet broader performance criteria.



Heat Shielding - Thermal Layer Design

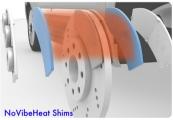
Of the approximate six million accidents per year in the USA, brake failure contributes to roughly 22%^[1] of all mechanical related factors. NoVibeHeat shims deliver a significant technological advantage by providing superior thermal barrier properties that prevent wet point brake fluid boiling that could lead to fading or failure.



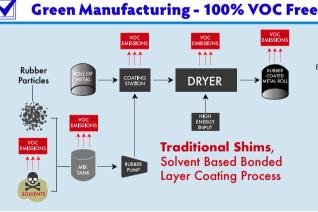
AT A GLANCE - NoVibeHeat

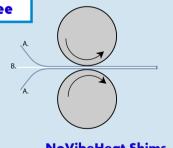
Traditional Shims	NoVibeHeat
Standard	High
Low	Superior
Toxic Solvents Required	100% Solvent Free
Limited	Superior
	Standard Low Toxic Solvents Required

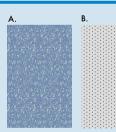




[1] USDOT (2018), NHTSA Traffic Safety Crash Stats, DOT HS 812 506, pg. 2





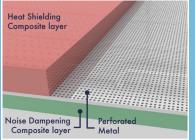


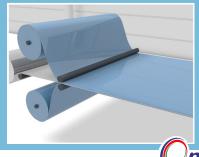
- A. Nitrile Butadiene Rubber (NBR) and advanced material composite
 - B. 0.4 mm Metal Perforated Sheet

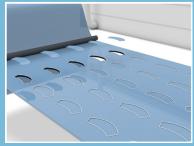
NoVibeHeat Shims, A 100% VOC Free Manufacturing Process

NoVibeHeat is produced using a patented environmentally friendly process that eliminates 100% of solvents and consumes a fraction of the energy required to produce traditional bonded layers of solvent coated NBR rubber shim materials.

A Multilayer Innovative DESIGN: NoVibeHeat | Composed of two layers of advanced material composite bound with NBR and a metal perforated sheet.









NoVibeHeat shims feature an innovative, perforated noise dampening, heat-shielding design, and a green manufacturing process while offering unlimited design flexibility.