## TOOLS AND TECHNIQUES

## Disc Pad Silencers

What makes disc brake pads squeal? The squeal itself is caused by a pad that's vibrating back and forth very rapidly. To human ears, this vibration's frequency sounds like a squeal.

To silence the squeal, change this frequency. There's a variety of problems that can cause pad squeal, including warped rotors, rotors with the wrong surface finish, missing, broken, or fatigued brake hardware, overheated/glazed friction material, poor-quality friction material, or the incorrect friction material. And no matter how thorough your brake job is, some cars are more prone to squeal than others are.



These shims come four to a sheet. Some of you report that you're routinely installing these shims—in addition to the OE steel shims—whenever you replace pads on a car that's a known "squealer."

Once they've covered all the basics, some technicians try to silence the squeal by putting anti-seize paste or an anti-squeal chemical on the backs of the pads. Some guys fabricate anti-squeal shims from gasket paper-type material.



Trace the outline of each pad on the shim material and then cut out a set of shims with scissors or a razor knife. Don't let any shim material obstruct the parts of the pad that slide on the caliper slides or pins.



There's adhesive on both sides of each shim. Clean any rust, old lubricant, or anti-squeal chemical off the back of the pad. Peel off the protective paper, stick on the shim, and reinstall the pad.

The latest anti-squeal trick we've found is these self-sticking aluminum shims. These shims are inexpensive and convenient. Those of you who have used them report that they work well. And being metal, these aluminum shims should last longer than papertype shims do.

Available from: Lucas Girling

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