

# SMOOTHING OUT YOUR RIDE

## REAR WHEEL SPROCKET ISOLATOR FROM ALLOY ART

Sometimes it seems that the "V" in V-twin could stand for vibration due to the unique mechanical activity that takes place down in a bagger's drivetrain. First you have a couple of pistons and connecting rods moving up and down inside two cylinders. They are not operating in a completely balanced non-vibrating environment. This unbalanced motive power is sent to the transmission through a primary drive that uses a spring tensioned motor sprocket and chain assembly running back to the transmission. The bike's final drive runs a cog belt back to the rear wheel. On 2009-up models the wheel's drive sprocket has a rubber isolator that sits between the sprocket's hub and the wheel's hub.

Harley calls this system a compensator sprocket, which allows the hub to absorb some of the powertrain shock when starting off from a stop and when the rider lets off the throttle. If you ride hard, this isolator's flexible material can put a double bump in your drivetrain during hard acceleration.

The boys at Alloy Art have developed a new rear wheel isolator that eliminates this double bump. Their isolator is made out of a firmer injection molded polyurethane material. We installed one in a 2013 Street Glide and the bike's

throttle response and drivetrain tractability had a much more solid feel; if we hadn't ridden the bike, we wouldn't believe that one part could make such a big difference. The Alloy Art super Cush-Drive Isolator retails for \$39, which could just

be the best forty bucks you've ever spent on your bagger.  
—Wendell Christopher

**SOURCE:**  
Alloy Art  
[Alloyart.com](http://Alloyart.com)

**1.** The Alloy Art Cush-Drive Isolator is made out of a much more resilient material than the factory part.

**2.** The isolator is a tight fit inside of the rear wheel's hub. It is designed so that it can only be installed one way.

**3.** The isolator's fit to the sprocket is in such a way that it's thicker separators are used in the drive rotation.

**4.** The isolator is first set into the wheel's hub, and then the drive sprocket is set over it.

