

Baker Direct Drive 7

Baker Drivetrain was one of the earliest companies to come up with 6-speed transmissions for Harleys. When Harley-Davidson came out with their own 6-speed transmissions in 2006, the engineers at Baker Drivetrain noticed that while the vibration at cruising speeds was diminished, the performance off the line was sluggish. The lower gears seem to lug until you get into 4th gear and above. This is because Harley changed the ratio of the primary drive when it went to 6 speeds, which resulted in a higher 1st gear.

The Baker Direct Drive 7 lowers 1st gear to 3.76 from 3.34, and shortens the ratios between the subsequent gears ending with 1.00 in 6th. This has benefits throughout the power range giving peppier response all the way up through the gears.

Baker engineers also sought to reduce noise by incorporating helical-cut gears in 1st gear, and in gears 4 through 7. Helical gears operate more smoothly as they roll from gear to gear. They also are stronger than straight-cut gears because they have a significantly bigger surface area. Baker also reduced the weight of the mainshaft by only including 1st gear as an integral part. Baker feels this reduces "shift clunk."

The Baker DD7 is designed for easy installation, requiring no case modifications, shimming or adjustments. The many design innovations of the Baker Direct Drive 7 has earned it the V-Twin Expo Excellence in Motorcycling Award for Tech Product of The Year.

—Kit Maira



Photo: manufacturer