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Complete SportGear kit, above, features a lengthened output shaft (main gear) with an integral retainer ring to keep the oil seal from falling out of the bore – a common problem with OEM and other aftermarket parts.

Our exclusive snap ring retainer also prevents axial movement of the shell bearing within the bore, one of the primary reasons for premature failure of the stock drawn cup bearing. Also shown are triple lip oil seal and four point bearing, standard. November, 2002 FOR IMMEDIATE RELEASE/NEW PRODUCT

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SportGear Newest Helical Addition

Johnson Engineering continues to revolutionize the art of transmission technology with their latest entry, the SportGear<sup>™</sup> fifth-gear replacement assembly for 1991 and up Buell<sup>®</sup> and Sportster<sup>®</sup> five-speed transmissions.

Johnson Engineering president Paul Johnson points to the undergeared shortcoming of the Buell as the inspiration for his latest design, one that allows (assuming adequate horsepower) the robust street fighter to achieve it's full top end potential without giving up acceleration characteristics in the sub-100 mph range.

"The rev limiter's redline at just over 7,000 rpm means that a stock geared bike will top out well short of it's real potential," according to Johnson. "Our computer generated helical design allows us to retain and even improve on the quickness through the first four gears, while introducing a huge step up in maximum performance levels that utilize 100% of the available power."

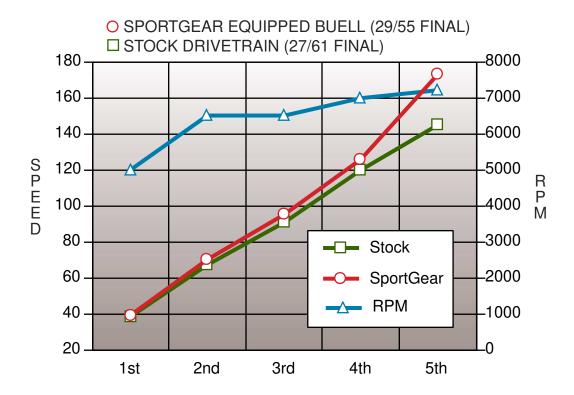
SportGear is designed so that, running the recommended 55/29 pulley setup, engine rpms in fifth gear are reduced over 16%, while first through fourth are reduced less than 5%. Essentially, the first four gears can be considered a close ratio box, with a large step to fifth for highway cruising, or a corresponding 30 mph (est.) top end increase.

In other words, simply swapping pulleys, while it can increase the top end or limit cruising revs, only bogs the bike down further through the gears. "SportGear is the only drivetrain product available that retains the efficiency of a direct drive with the performance characteristics of an overdrive," said Johnson.

He's also quick to point out that Sportster owners, especially the 883 crowd, can benefit significantly by installing SportGear. "Improving baseline performance on an 883 can be done by adding horsepower, but that's not necessarily cost effective. A much more efficient and effective route is to simply install SportGear for an immediate boost in around town acceleration."

(Click here to go to comparison chart on page two.)





In the chart above, we compared a Buell equipped with SportGear and our recommended final drive sprocket ratio for peak performance to a stock bike. The MPH axis is on the left, and references the data points on the lower red and green lines.

The top (blue) line represents RPM shift points (right axis) for both bikes and the data points correspond to the gear position in the red and green lines below.

Notice that although acceleration through the first four gears is nearly identical, top speed capability is markedly improved as a result of the performance upgrade.

In addition, oil seals, bearing, and shaft strengths are also upgraded significantly.

