

Y2K-4

All-Out Lightweight 4-Speed

One of Jerico®'s performance advantages over its competitors is the extensive technical relationships it has developed from over 20 years of working with top performing race teams in various professional racing series. The Y2K-4 was designed in response to Stock car teams' demand for a 4-speed transmission manufactured for going the fastest for the shortest amount of time. It had to satisfy opposing goals: be extra lightweight and efficient, but retain the renowned Jerico® gear ratio adjustability to track types, effortless shift action, and durability.

The Y2K-4 exceeds these demanding performance requirements by using:

- A rotating mass lighter than any other NASCAR-legal transmission to ensure instant response but maintain its strength under racing horsepower loads.
- The lightest total static weight achievable with reliable operation. The Y2K-4 uses an A206 aluminum case and weighs just 69 lbs., which can be as much as 20-lbs. lighter than competing brands. Although difficult to obtain and machine, Jerico® uses this aircraft quality alloy because it is the strongest aluminum available and best for this intense application.
- Gear teeth with a width of only 0.835-inch to reduce rotating weight. Original gears in Jerico® 4-speeds come in widths from 1.085-1.170-inch.
- Redesigned straight-cut lightweight gears in the main and cluster shafts for lightness and less frictional losses. Plus, caged needle thrust bearings are included between gears and cluster faces to reduce friction. Less friction means more horsepower is delivered to the rear axle.
- A counter shaft using four sets of caged roller bearings. Using caged roller bearings on this shaft in the Y2K-4 increases the surface area to the bearings, which results in long life, improved efficiency, and greater load-carrying capacity.
- Double-row caged bearings in the tailhousing, which replace bushings used in the standard 4-speed. The bearings are more efficient and can carry more load, and allow using a lower level of transmission oil to further reduce overall static weight and fluid drag. Our precision machined and hardened slip yoke made from a 4340 steel forging is required (P/N 1350YMW).
- Machined gears from VAR (Vacuum Arc Remelt) premium steel, hot-rolled specifically for Jerico®. All gears are extensively CNC machined in-house to ultra-



Light, But Legal - Y2K-4 transmission internals have a rotating mass lighter than any other NASCAR-legal transmission.

precise tolerances, according to our straight-cut design that has proven to be without peer in the competition marketplace.

- Installing Jerico®'s race-proven and proprietary 6-lug dog-ring and slider shifting mechanism for superior shifting "feel," and to eliminate breakage-prone synchronizers. The dog-ring / slider design makes for clean, positive, and reliable gear shifting. In fact, the faster the RPM, the smoother the gear engagement.

Every part of the Y2K-4 that can be optimized for minimal weight, friction and maximum performance has been addressed. In chassis dyno tests versus competing transmissions, the Y2K-4 has achieved an average of a four horsepower gain to the rear wheels. Back-to-back track tests at the restrictor-plate tracks of Daytona and Talladega have produced times 0.1--0.2-seconds quicker than comparable transmissions. When a faster 4-speed is available, we'll build it. Until then, there is the Y2K-4.



Light, But Durable - The Y2K-4's cluster and gears (top) are lightweight, but just as durable, as our typical 4-speed cluster and gear (bottom).