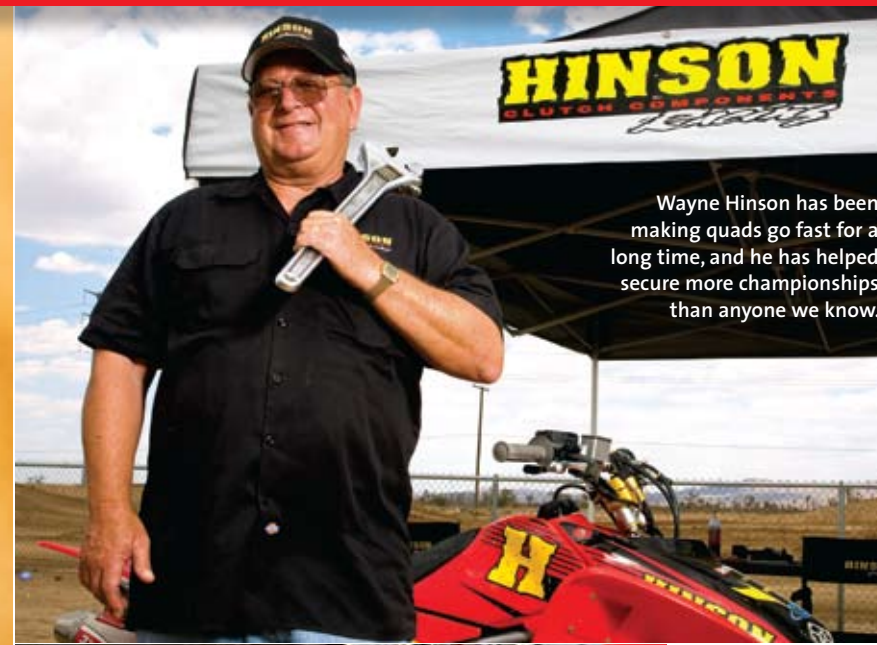


# THE HINSON FACTOR

*Wayne Hinson tells us what it takes to build a race-ready TRX450R that will run forever.*

**IN TODAY'S EXPANSIVE SPORT ATV MARKET**, with all the new fuel-injected, 50-inch race-width ATVs available from the OEMs, the 46-inch-wide, carbureted TRX450R Honda might seem a little outdated to some. While the TRX may not sport fancy long-travel suspension right off the showroom floor, the truth is that the TRX has been one of, if not the most, solid platforms to build a race bike from in recent years. Whether it is the holeshot- and championship-winning performance proven in the ATVA Nationals, or the rock-solid reliability it has proven in the deserts of Baja, the TRX450R has made its mark in every major form of ATV racing since its release in 2004.

WORDS BY **NICK NELSON** PHOTOGRAPHY BY **ADAM CAMPBELL**



Wayne Hinson has been making quads go fast for a long time, and he has helped secure more championships than anyone we know.



**AND WITH TODAY'S ECONOMY**, more and more people are looking to update their current ride versus letting go of seven or eight thousand bucks for an updated machine. Luckily for these people, the Honda has remained virtually unchanged since 2006, and the previous generation 2004/2005 models only require a little more compression and a carb to bring them up to speed.

We sat down with Wayne Hinson, otherwise known as the "Quadfather of ATV Racing," and discussed just what it takes to build a race-ready TRX450R that will run forever. For those of you who don't know Wayne's history, he was the man who helped secure multiple championships for his good friend Gary Denton throughout his amazing racing career. Hinson's intense desire to win meant his rider needed the best possible equipment. This need led to the design of one of the key components in ATV racing today—the Hinson Clutch Basket. With Wayne's help, Gary Denton went on to win a staggering eight straight AMA National Championships before he retired. When Gary left the scene, Wayne went on to help Doug Gust win a few more

championships. In most recent years, Wayne acted as the race team manager for the Yoshimura Suzuki ATV race team. To say Wayne Hinson knows how to set up a machine for racing would be the understatement of the year.

### RIDE TIME

**THE FIRST TIME WE** threw a leg over this Honda was at a night session at Milestone Ranch MX in Southern California. Wayne came out to tune with his son Bryan Hinson, while photographer Adam Campbell and myself got to spend the night hammering laps on it. The machine worked great, as Wayne and Bryan had already spent a previous track day tuning it. The engine felt very mellow, but strong enough to always have power on tap. The steering on the Honda was precise and predictable as was the feel while jumping it. The Walsh/Fox combination dealt us no repercussions whenever we over-jumped stuff or hit hard on any flat landings.

For a "true to form" test of a race ATV, the night track at

Milestone is not really worthy. It has a tendency to stay so smooth that most any decent bike feels great. With that being the case, we had *Quad Magazine* contributing photographer and test rider Adam Cambell race it at the Glen Helen ITP QuadCross race. This race happened to be the day after the Glen Helen round of the AMA Outdoor MX Series, so the track was incredibly rough. To top it off, the big hill was included in the course. After spending a couple Thursday mornings at Glen Helen testing with the Hinson family, Adam realized that this was possibly going to be the best-setup bike he had raced in a long time by far.

Sunday morning, after sandbagging his way into the 30-plus intermediate class, Adam took the TRX to the line. When the gate dropped, he pulled a huge holeshot on the entire class and went on to easily win the race (he also finished second in the 30-plus expert class that gated with them, so we have to give him some props). After two super rough Glen Helen motos, we interviewed Adam for some more feedback.

Adam was quick to state that it had been a long time since he

had raced a Honda and that he had forgotten how comfortable they were and how well the brakes worked. "The single finger-braking feel was amazing—they just work," added Adam. He also mentioned that the Honda is the best-shifting bike he'd ridden. When asked about the two killer holeshots he nabbed, he said the quad didn't feel that fast, but that it just always seemed to get killer traction. "The steel clutch basket really helps anytime you need traction, and the BTL clutch really helps in the choppy downhills. On the big downhills, I was able to accelerate longer and brake later. The BTL clutch gets rid of the engine braking that causes your suspension to hop. This allows you to easily slide through the nastiest of downhill turns and power out of them," he added. All in all, you could not ask for a better setup at this rough Glen Helen track.

And on a last note, having never raced with a Precision Stabilizer, Adam is now hooked and won't be racing again without one. "The rougher the track got, the more my bike seemed to be working better than everyone else's quad!"

### 1. SUSPENSION

First and foremost, the thing that needs to be addressed to win MX races is suspension. The fastest bike in the world won't get you anywhere if it doesn't handle. Wayne recommends the Fox/Walsh combination after the tremendous success they had with the Suzuki team. The Float X Evol shocks are infinitely adjustable and can be fine-tuned at the track without ever having to even remove them from the ATV. (Fox Float Evol with DSC \$1,495; www.foxracingshox.com)

### 2. A-ARMS

The lightweight, ultra-responsive Walsh Racecraft A34 Flow A-Arm Kit has graced the front end of many championship-winning race quads, and it's no coincidence. The Walsh A-Arm/Steering Stem setup minimizes bump steer and provides incredibly responsive steering, as well as utilizing super-strong tie rods and a great motion ratio for the shock. (Walsh A34 Kit \$1,500; Walsh Stem and Mount \$410; www.walshracecraft.com)

### 3. REAR END

Every MX race quad needs an axle to bring the rear end width out to match the front, and the RPM is considered by many to be the best. Lost Creek Cycles supplied a RPM axle for the Honda and a Fox Podium X rear shock is used as well. The axle is adjustable in width, which Wayne adjusts according to different track conditions. The guys at Fox have the rear shock very close right out of the box, and with a little know-how it can be amazing after a day or two of testing. (RPM Axle \$410; Fox Podium Shock \$895; www.lostcreekcycles.com, www.foxracingshox.com)

### 4. ENGINE

The next thing that needs attention is the engine. While you don't need a monster motor to be successful on a MX track, the stock TRX450R is incredibly choked up to pass emissions. The 2006-09 motor comes stock with a very sufficient 12:1 compression ratio and a FCR carburetor. Emissions are met by restricting the cam, jetting, and exhaust. Wayne added a HRC cam, Yoshimura exhaust, and properly dyno-tuned it to turn it into a pump-gas engine that is holeshoot capable, yet mellow enough so that it won't wear you out. The other advantage is that the stock Honda reliability is left virtually untouched. The Yoshimura exhaust is designed to create a very linear power curve making maximum horsepower without sacrificing rideability. (Yoshimura TI Pipe \$845; HRC Cam \$273; www.yoshimura-rd.com)

### 5. CLUTCH

The addition of a Hinson BTL clutch is another key component in this build. Adding a Hinson clutch to any race quad is a good preventative measure to protect against failure, but adding a BTL (Back Torque Limiter) clutch also brings MotoGP-developed slipper clutch technology to the masses. The BTL has a fully adjustable slip range to provide better braking control, as well as completely getting rid of kickback under braking, which is a huge advantage on a MX track. Hinson opts for a heavier steel basket to provide the same type of traction advantage as a heavier flywheel without the disturbance to the engine performance. Wayne says the steel basket creates ungodly traction with no negative effect on brute power. (Hinson BTL Clutch \$1,150; Hinson Steel Clutch Basket \$270; www.hinsonracing.com or 909-946-2942)

### 6. NERFS

AC pro-peg Nerf bars with long-lasting, super-aggressive, stainless-steel foot pegs are used to improve stability as well as really help control. They utilize a sharp, oversized foot peg to keep you connected to the race bike at all times. (AC ProPeg Nerfs \$408; www.acracing.com)

### 7. STEERING STABILIZER

If you've ever ridden with a Precision stabilizer, then you already know. The Precision stabilizer has quickly become a staple in every form of ATV racing. Racing without a damper altogether is unheard of, and the Precision stabilizer is the only one actually designed for a quad. It can literally make your ATV safer to ride, as well as easier to hold onto for longer periods of time. (Precision Steering Stabilizer \$485; www.precision-rp.com)

### 8. TIRES

The TRX comes with an all-purpose set of tires that are too big for motocross applications. Hinson chose to run ITP beadlocks in the rear and an ITP rolled edge wheel in the front. The wheels are wrapped in ITP's new QuadCross tires. It's a hard combination to beat on any MX track. (ITP QuadCross tires and beadlock wheels \$720; www.itptires.com)

### 9. CONTROLS AND BILLET

Renthal supplies the Fat Bars, levers, grips, chains, and sprockets. Renthal has made a name in the industry by producing super-strong, comfortable handlebars, and its sprocket and chain line is hard to beat. (Renthal Fat Bar \$90; Sprockets and Chain \$180; www.renthal.com)

### 10. ENGINE PROTECTION

The Pro Design air filter support ring is also a necessity. The billet support ring keeps the airbox from crushing under the clamping force of the hose clamp—this helps ensure a proper seal every time you install your air filter. Another "must have" from Pro Design is the OG Pro Design Case Saver. Pro Design was the originator in aluminum case savers that disperse the load/impact of a thrown chain, lessening the chance of broken cases. (Pro Design Air Filter Kit \$130; Case Saver \$30; www.prodesignracing.com)

### 11. THE HUMP SEAT

People have been installing Quad Tech seat covers on their quads for years to achieve that cool-guy factory look. Now it's not just about looking cool—the Quad Tech hump seat is all about function. The race tested and designed hump in Quad Tech's Suzuki Hump seat gives the rider a point of reference for traction off the starts, as well as helping to keep the rider's rear in proper position when hill climbing, accelerating, or riding in the mud. (Quad Tech Hump Seat \$185; www.quadtech-atv.com) \*

