

INSIDE A HONDA BAJA MACHINE

Built by
Duncan Racing
International

By the staff of *Dirt Wheels*
Photos by Pat Carrigan

Score International's Baja 500 takes place every June across the deserts and over the mountains near Ensenada, Mexico. It's the hardest desert race to win. While the Baja 1000 may seem tough, it's not. Ride the 1000 at a moderate pace, have no mistakes or breakdowns, and the race is yours.

To win the 500, not only does your 10-11-hour run have to be flawless, your machine has to be reliable and fast. Because at this event, the competition runs wide open and rarely slows down to save equipment. Every nut and bolt has to be proven tough and perform just a little better than the parts on the competitors' equipment.

Prior to this year's Baja 500, we took an inside look and a test ride of Team Christy's Honda 450 that competes in the top professional category known as Class 25. Team owner Craig Christy started off this build on the right track. He chose to compete on a Honda. Sure, winners of Baja events have used Yamahas, Suzukis and Can-Ams, but Honda still has the best reputation for reliability. Even today, Honda has more Baja wins than all other manufacturers combined.

Team Christy's next decision on this build to hire Duncan Racing to prepare this race quad was equally as important. Not only is Duncan Racing the closest race shop to the Mexican border, the team has built race-winning ATVs for riders all over the world for over three decades.

BAJA BUILD

Christy's Baja machine started life as a 2005 Honda TRX450R. Many motor builders prefer using the older powerplants. They claim the transmission is stronger and oil capacity is greater. Yes, these little details count. Furthermore, you can pick up almost brand-new 2004-2005 TRX450s here in California for under \$3000. Just check out Craigslist.

To make this quad battle-ready, DRI strips the Honda down to its frame and welds on their own gusset kit for \$450. The DRI guys know the few weak points of the Honda. Before reassembly, the frame gets powder-coated locally by Powder 1.

The list of new chassis components this racer receives is extensive. For suspension components, Duncan and Christy rely on Roll Design products. Here they are using the Lobo MX II A-arms, equipped with Elka Stage 5 long-travel shocks (\$3500).

BAJA MACHINE



Out back, the swingarm is special order, a 1/4-inch Roll Design swingarm (\$1495). Elka products are also found throughout, which include a shock (\$1045), linkage (\$395) and reservoir mount (\$145). An rpm axle (\$448) and Team (\$249) bearing carrier are both Baja-proven components and fill out that swingarm. Small items like a DRI parking-brake block-off plate and chain guard help finish off the tail end.

RELIABLE SPEED

What DRI really does is takes its time massaging the motor, not only to make sure it lasts through continuous hours of run-time, but it must be fast too. To do this, the motor gets a DRI HP4 head kit (\$1595). That service includes specialized porting, a billet X22 Baja camshaft, heavy-duty valve springs, brand-new valves, and seats with titanium retainers. Below the head, a 12:1 compression JE piston \$225 is installed into a fresh cylinder and crankshaft.

On the outside of the modified Honda powerplant, a \$499 Fat Boy 4 complete stainless exhaust system is utilized. This system is so bulletproof, Duncan Racing offers a lifetime warranty on every inch of it. For Christy's build, he opted to spend an extra \$99 to have the muffler anodized blue. We really applaud this team for building a bright race machine—

especially in the desert, the brighter machine you have, the better. It helps your crew spot you prior to pit stops, and it even looks good after it gets dirty.

On the intake side of things, Duncan prepares every one of its full builds with the \$175 Pro Design Pro Flow intake kit. Pro Design also provides the team with the ignition kill switch, along with multiple tethers for all the riders. On this racer, a custom-carb 40mm FCR kit was utilized as well at \$499, replacing the stock CV carb. This team uses an OEM push-pull twist-style throttle off of a Honda dirt bike.

For the ignition, a Vortex X10 programmable CDI at \$499 gets plugged in. Even without fuel injection, you can use this programmer to make precise adjustments for peak performance. VP Racing fuel is used to fire the powerplant, and it is delivered in large quantities through an IMS gas tank with a quick-fill dry-brake system (\$479).

MORE CHASSIS COMPONENTS

To get all that power to the ground, a Hinson clutch basket (\$259) has wrapped itself around a \$199 DRI clutch kit. To house everything, Duncan built a \$199 quick-change cover. This way if any repairs are needed during the race, things will happen faster, with less risk of drop-

This machine has a kickstarter and a battery for the headlights. That's one of those Baja tricks that will help the team beat the desert.



Team Christy relies on the older 2004-2005 Honda motors for their race team. This powerplant has better oil capacity and a more durable transmission.

BAJA

ping and loosing bolts in the sand. An RK O-ring chain rotates around a 15-tooth front and 37-tooth rear Sunstar sprocket. Top speed is estimated around 90 mph.

The tire of choice in Baja for many top teams used to be Maxxis RZR's. Lately more teams (including last year's Baja 500 winner Josh Row) have been switching over to DWT tires. DWT has started marketing a super-thick, 12-ply tire for these applications. They also have the tire in utility sizes too. For Christy's Honda, the 23-inch front and 22-inch rear tires were mounted on equally strong DWT Rock Out wheels. Tire pressure can be run incredibly low in these stiff tires. The team starts each race with 3 psi up front and only 2 psi out back. The hubs out back remain stock, and Team-brand hubs are riding on stock spindles at the front end. The brake components are stock at both ends, with the exception of Crown-series steel-braided brake lines.

FINISHING TOUCHES

To direct this 350-pound racer, a Roll Design anti-vibe steering stem (\$349) is equipped with a GPR stabilizer (\$459) and topped off with a set of Fasst Co. Flexx bars at \$329. More fatigue-fighting products that are utilized are Spyder grips and PowerMadd handguards (\$79). When riding long distances, you would be surprised by how much having good grips and handguards help.

To provide even more comfort for Team Christy's riders, a Quad Tech desert racing seat and \$199 huge Roll Design footpegs are employed. Connected to those footpegs, are a set of custom-chromoly DRI heel guards. This is one of the many pieces that just might be slightly stronger than what the competitors are using. Nice touch. DRI also added their signature front bumper (\$179) and installed a modified PRM rear grab bar at \$89.

To operate the Hinson/DRI clutch, a Works Connection Elite perch and lever (\$129) are used, along with a brand-new Motion Pro cable. You wouldn't believe how many races have been lost due to a broken throttle or clutch cable. This is one of those \$20 parts that can cost you a win. A Works Connection hot-start lever has also mounted up. Finally, to protect the underside of this racer, a \$249, thick, aluminum OMF skid plate runs under the entire length of the frame.



In desert races, the jumps are not usually that big. However, sometimes there are unexpected booby traps built by the spectators. Your quad and rider have to be ready for these high-speed obstacles.

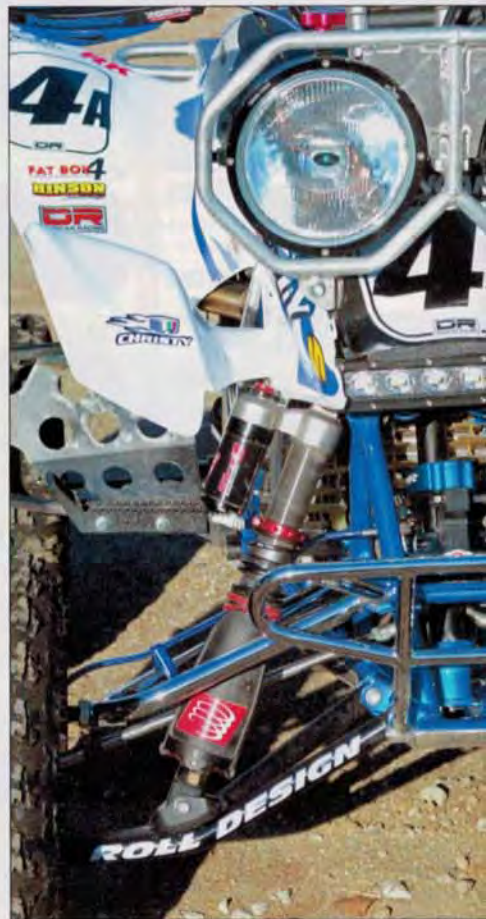
Doug Roll probably has more Baja wins than any other A-arm builder. That combo, along with Elka suspension, has proven tough, as well as plush, for the most punishing jobs. ▶

TEST RIDE

Riding a purpose-built Baja racer is different than testing any other trail or race 450. Desert quads are big beasts. They have to be to hold up to the punishment of Baja. They sit tall and are usually very comfortable. The Team Christy Honda is no different. From the Roll Design footpegs and Quad Tech seat to the Fasst Co. Flexx bars and Spider grips, these components are set up for long hours in the saddle.

The large, 22- and 23-inch tires are the hardest parts to get used to. Gearing is usually set up tall, too, so unless the ground is really slippery, it's hard to even peel out on a desert quad. Instead, you can tell the Duncan motor is built for smooth, rideable torque, not arm-jerking power. You can lug the motor to get it going and let it rev a long way before you have to shift to the next gear.

It takes about 10 miles to get used to a big sport quad like this. The taller setup forces the rider to use a little more body English around tight corners. The transition between sitting and standing is shorter than an MX quad, so your legs don't get tired quickly.



The Honda is set up to soak up 1-2-foot-tall, high-speed whoops and square-edge bumps like cracks in a sidewalk. You can't really wheelie a machine like this over much; instead, you drive right through the obstacles. The tall tires also help soak up the G-outs and other holes. And, the holes



BAJA

◀ Roll Design footpegs provide a huge platform for the riders to stand on. They help fight fatigue. The custom-steel heel guards will hold up much better than aluminum.

More Elka and Roll products are found on the back end of this Baja Honda. Another trick are the 12-ply DWT run-flat tires. A flat at any race can cost you the win. ▶



in the desert are getting big. The unlimited cars and Trophy Trucks are using 39-40-inch tires, so most race-courses are pretty chewed up these days.

Duncan's engine work moves this 350-pound racer across the desert better than the stock engine does with a stock chassis. The power doesn't tire the rider out, and there is always torque on tap no matter what gear you are in or how deep the sand is. You can tell this power package would also be perfect for in the dunes and definitely for trail riding. It feels crisp and clean and never struggles. It's not hard to kickstart and feels ultra reliable. It's no wonder why Team Christy is now a force to be reckoned with in all of the desert races in the

Southwest and Baja. His Duncan Honda 450R is built not only to be fast, it's flawless and could help the results of any racer or trail rider.

THE HUMAN ELEMENT

We have to give credit to the rider and crew members as well. No matter how well built your race machine is, a solid, experienced team that works well together is a big part of this team's success. For the races throughout the year, this team relies on riders such as Craig Christy, Doug Eichner, Dave Scott, Robin Fawcett, Andy Lagzdins and Jeremy Sanchez. The chase team and shop-crew members include Leonard Duncan, Beau Nilsson, Meng Chau, Brant Wiwi, Scott Schellinger, Sylvester Ruiz, Janelle Kloosterman, Jesse Palmer,

Andy Ebner, Billy Niccom, Avila Kroll, Analise Smith, Justin "Perro" Gilbert, Captain Dan Christy and Captain Bill Morgan. Team Christy's list of sponsors reads as follows: Duncan Racing, Elka Suspension, DWT Tires and Wheels, Roll Design, Spider Grips, Fat Boy 4 Exhaust and In Reach. To follow the team at this year's Score International Baja 500, log on to www.racetheworld.net on the morning of Saturday, June 1st, and look for the live streaming/tracking link, then select Craig Christy in the quad section. To have any brand quad engine modified or complete quad built to the same precise tolerances as this one, contact Duncan Racing International at (619) 258-6306. □