

PROJECT 700XX

Built by Duncan Racing

By the staff of Dirt Wheels

□ To really take advantage of what riding in the dunes is all about, you need horsepower. You can get away with using a lighter, 450cc machine, but the constant loads of deep sand and the high rpm of a 450 put a lot of wear and tear on the smaller motors. A big-bore ATV is the way to go out in the sand. If you're a Honda lover, your only option is the 700XX.

While our initial test of the 700XX didn't claim it to be great in the dunes, the aftermarket manufacturers have taken the past two years to prove us wrong. A combined effort between Duncan Racing, Roll Design and Elka Suspension showcased a way to have lots of fun in the sand aboard any year 700XX. Hang on!



MORE MOTOR

You can't have too much power in the sand. Whether you are riding the razorbacks, carving bowls or hill shooting, having extra power to move your machine in the sand is in any recipe for fun. However, if you do anything other than drag race, reliability should also be a main ingredient. If you break down miles from your camp spot or any other human who can tow you, pushing your machine back is not an option. In fact, even walking long distances through the dunes is next to impossible.

Duncan Racing headed up this project. They built the sand shredder alongside the ultimate 700XX trail machine we featured in the April 2010 issue. Speaking of reliability, Duncan has years of experience building solid motors for endurance racing in the desert from Southern California and Baja to the tough endurance test known as Ponte de Faux in France. Duncan engines have won them all.

For this Honda, Duncan installed one of their Stage One engine Kits. To start, they wanted to feed more air into the stock combustion chamber. To do this, the Duncan guys started the power upgrades by installing a Pro Design Pro Flow air filter (\$139). Pro Design also supplied a kill switch for the project. For fuel control, they went with a Vortex ignition/fuel controller (\$800). The Vortex system can accommodate an optional dual-mode toggle switch (\$50) that you can change on the fly depending on what kind of

pre-programmed setting you want to use with the fuel injection.

This is a perfect feature for dune riding. You can have a mellow power output with one setting for just exploring the dunes, and a more aggressive setting for shooting walls of roost or racing up hills. Choose your poison. On the ECU controller itself, you can turn one ten-place dial for different ignition maps and three (low, mid, top) dials to add or reduce the amount of fuel flow required for a certain need.

On the exhaust side of the engine, Duncan chose to install their signature Fat Boy system. The complete stainless steel head pipe and aluminum muffler fits nicely and has a competitive price tag of \$599. For dune applications, the Fat Boy muffler was run with no sound restrictions or spark arrestor. This system can be run and performs well without the ECU also.

Pieces from the Duncan catalog were found from head to toe on this duner. A chrome \$179 bumper replaced the stocker, and a billet aluminum DR block-off plate (\$15) sealed up the rear caliper after the parking brake was removed.

CHASSIS CHANGES

In stock trim, the Honda 700XX has a lot of body roll for a sport quad. Under acceleration, this sensation causes the front end to push and not steer too precisely. It's one of this big-bore Honda's biggest handicaps.

Duncan commissioned longtime partner Roll Design to build the first set of front A-arms for the fully inde-



◀ Most of the dune areas we ride in are huge, so having enough gas to have a good time and get back to camp is a must. The 4.8-gallon IMS tank can handle the task.

The Honda 700XX is not a great jumper due to its weight, but with the right power and suspension mods, this beast can be a blast in the dunes. ▼



Out back, MTA wheel spacers provided a 2-inch width extension on each side. This allowed Duncan to install 10-inch DWT wheels instead of using the stock 11-inch wheels, which no one sells paddle tires for.

CONTACT LIST

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AC Racing(714) 808-8330, www.acracing.com
Power Madd(800) 435-6881, www.powermadd.com
Quad Tech(949) 859-7823, www.quadtech-atv.com
Works Connection(530) 642-9488, www.worksconnection.com
Motion Pro(650) 594-9600, www.motionpro.com

Light up the night: Duncan also built us the ultimate trail 700XX we featured in the April 2010 issue. It had an amazing set of Ricky Stator lights on a custom mount that holds a huge Lowrance GPS unit on the back side.



PROJECT 700XX

700XX

pendent-suspended sport quad. Since that time, other companies like Houser Racing have built suspension components for the 700XX.

This project was outfitted with upper and lower A-arms in the front only at \$1599. The arms' main job was to dial in the steering geometry, add wheel travel and widen the machine a full 4 inches. Since this was a dune machine, we opted to pay an additional \$250 and ordered the A-arms with a cool chrome finish. Out back, MTA wheel spacers (\$179) were used to get the extra 4 inches of width and helped keep the costs down.

All four A-arms were outfitted with Elka's latest dune edition fully adjustable shocks. Wheel travel numbers were increased to 11.5 inches in the front and 10.5 out back. The stock wheel travel numbers are 10.5 inches and 9.9 inches, respectively. The Elka shocks retail for \$1670 per pair.

All this suspension and the above-mentioned power upgrades would get you nowhere without the proper tires. ITP supplied a set of 22-inch Sand Star paddles mounted on 10-

inch (front, \$67 each) and 22x10-inch (rear, \$89 each) DWT wheels with OMF beadlock wheels. The front wheels sell for \$230 each, and the rears are \$20 more. In case you are wondering, widening the quad with wheel spacers in the rear allowed the use of the 10-inch instead of the stock 11-inch size.

MORE FEATURES

Further enhancements in control were made by installing huge, IMS/Roll footpegs (\$199) and heel guards (\$199). More rider control was supplied by a set of \$95 Renthal handlebars mounted on a Roll Design \$329 steering stem using a GPR bar mount (\$85).

Under the rider, a soft QuadTech seat cover (\$125) was stapled on to help extend daylong rides. Those rides would not be long without extra fuel on board. For this project, Duncan used a huge 4.8-gallon IMS gas tank at \$279. This extended the range over the stock 3-gallon tank by more than 50 percent.

While we didn't have them on this machine, the trail 700XX Duncan built for us featured a huge set of Ricky Stator headlights mounted in a custom frame that also held a giant Lowrance GPS system. Both products extend rides and allow you to ride

700XX

safely into the dark and help you find your way back home.

SANDBOX

Enough of the details and prices; you probably want to know how the modified 700XX performed in our sandbox. We took several trips on the Duncan Project machine to different dune areas, and even put stock tires on it and rode it in the dirt.

The Honda is now ultra-wide and very stable. Elka's Dune Series shocks provide a supple ride over the choppy sand you find at busy dune areas full of tire tracks. The quad feels like it is floating, and you can't feel the bumps that you see passing underneath the tires. The QuadTech seat provides extra comfort when sitting down or jockeying from side-to-side on the machine. It's not a flashy cover like you sometimes see in the dunes; it's more function than flash.

You could really tell the motor was opened up and tuned for optimum performance. It has a throaty intake and crisp bark coming out of the rear end. The Duncan Honda could spin the ITP paddles like a 450 on an MX

700XX

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track. We had a blast ripping around the dunes, carving bowls and even launching the big-bore in the air.

Power was spot-on, and we loved how much torque the big machine had. Plus, we never had to rev it out to make it to the top of the dunes. There is a huge, steep hill at the front of Dumount, and this Honda could power up it without missing a beat with plenty of power to spare. In the dirt, the Roll/Elka combo was a great correction to how the stock machine pushes. You could carve tight trails quickly and precisely. It wasn't as good as a 450, but it was better than on any other IRS quad we have ridden.

The first time we rode a 700XX in the sand we didn't think we would be back. With the Duncan exhaust and intake upgrades this machine had, we are glad we did. We could lug the big black machine around the dunes all day with way more comfort than a straight axle machine or carve the dunes well and keep right up with any 450 around. Contact Duncan Racing at (866) 379-7223 or online at www.duncanracing.com. □



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