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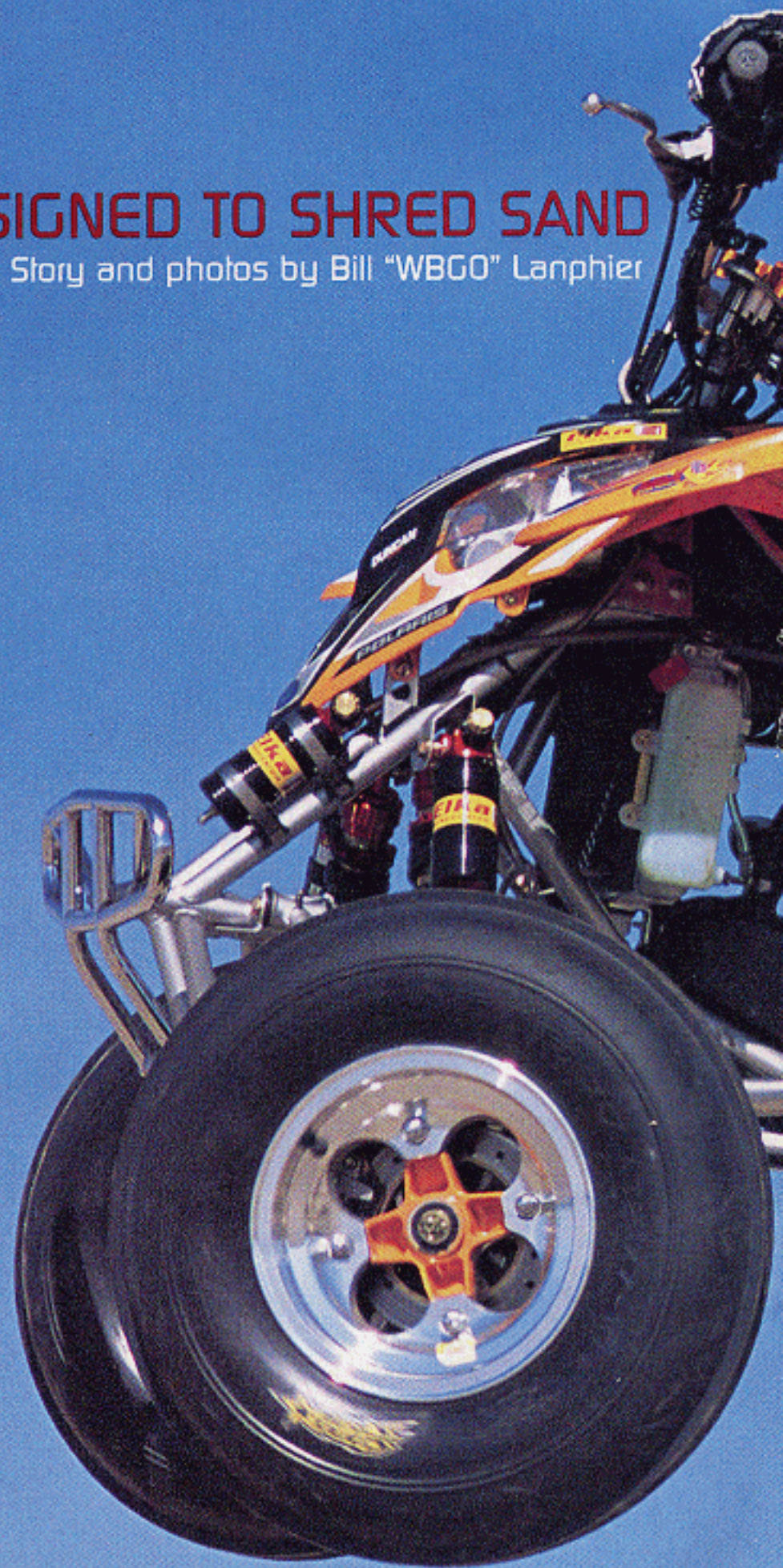
DUNCAN RACING PREDATOR DESIGNED TO SHRED SAND

Story and photos by Bill "WBCO" Lanphier

2

3

4







The Polaris Predator isn't one of the lighter performance quads, but Elka shocks help smooth out the ride and soften hard landings.

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# BUILT TO DUNE

**A**s you saw in our April issue, Polaris' Predator, even with that big engine, isn't the fastest performance quad, it comes in last on an MX track and, for all-around aggressive riding, it's not our top choice. But it does do pretty good on the trails, it's comfortable, and for someone who wants to buy American, the Predator is the one. Now, let's take it to the dunes and make it even better.

"First of all, we're not trying to make it into a racer," says Duncan Racing's Loren Duncan. "Most Predator owners don't want to spend a ton of money on the machine. Our goal here is to enhance the performance and ridability for a reasonable cost." Duncan says that with a few mods, the Polaris is not only a nice duner, but works well on the trails, too.

To make the machine more competitive, Duncan says the three most important mods are a pipe, a better air filter system and ignition. "Compared to the other performance quads, the Predator lags back around Honda's 400EX. Stock, the power is weak everywhere. With these mods, it's right up there with the 450R and YFZ for recreational riding. For smoothness, it's a little less ridable than the 450R and doesn't have the same bottom end, but it is more ridable than the YFZ.

"Those three mods all work together," continues Duncan, "and without them, the Predator will never get off the couch. To start with, the stock airbox system is poor. The filter attaches to the lid making for reliability and performance issues. We replaced the system with the Pro Design Pro Flow kit, which bolts the filter onto the front of the airbox and keeps the front boot from popping off the back of the carb."

Then, Duncan's Fat Boy Exhaust system is added. Unlike most systems, two stainless steel head pipes run almost all the way back to the single muffler. "It's a pain in the neck to build, but it's lighter than stock and provides the best performance available," says Duncan. Each system comes with a jet kit, is stamped with a serial number, and has a lifetime warranty against defects in materials and workmanship. "No one else will do that!" Duncan proudly proclaims.

Duncan Racing's Lenny Duncan puts the modified Predator through its paces on a sunny day at California's Pismo Dunes.





# BUILT TO DUNE

The third engine mod to the Predator is a programmable, Vortex X10 ignition. "The stock rev limiter is way too conservative," says Duncan. "The Vortex provides 10 different curves and all are better than stock." A thumb switch on the bars allow

selecting either of two curves on the fly. The up position is preset to curve No. 1 on the Vortex unit itself. The down position selects any of the nine remaining curves.

Duncan tells us all these mods provide the most gains in the mid- to top-RPM





# BUILT TO DUNE

The Troy Lee Designs version of the Predator is a good looker to start with. Add Douglas wheels and ITP Sand Star tires and you have a sweet looking duner.



## We Dune It

The weather at the Pismo Dunes can be a hit-or-miss proposition. On this visit, we were lucky. Sunshine, warm weather and no wind. However, lots of rain in the area left the sand damp just below the surface. Dry sand robs power and damp sand robs even more — the Predator was up against a wall.

Our first order of business was to compare the mildly modified Predator to a heavily modified Honda 450R we had on hand. The Predator was behind, but not by as much as we expected: Impressive! The Duncan Predator pumped out nice mid-range and top-end power, a noticeable improvement over the stocker. The bottom end wasn't quite as strong, but a dune machine needs to rev and the speeds are higher in the dunes. So, that was not a big deal.

We couldn't tell a seat-of-the-pants difference when switching the Vortex ignition from one position to another. But, as Duncan later explained, the two curves (out of 10) that were programmed may have been similar. Some curves were for higher rewing, others were for torque.

The Elka shocks offered excellent performance. They provided a plush enough ride, but didn't bottom in the whoops and rough stuff. The wider rear axle further improved stability in whoops and in turns.

Those aggressive dual-ribbed front Sand Stars looked like they might hook and dive in turns, but that was not the case. Turning was very precise and predictable. In the damp sand, we found that the rear Sand Stars hooked up a little too much in turns and tried to straighten out the quad. But in drier sand, they created great powerslides.

We're big fans of steering stabilizers, even in the dunes, and the GPR unit offered plenty of adjustability. In the rough parts of Pismo (with more visitors and the available riding areas shrinking, most of Pismo gets choppy), we cranked on a little more damping and could relax our death-grip on the bars.

Sure, the Predator is a confident quad and fun to ride, but without help it lacks the skills to stay with some of its competitors in the sand and on the MX tracks. Duncan Racing made this Predator a better all-around play bike and the mods made it a blast in the dunes.



range. During a 300-yard drag, the modified Predator is 40 bike lengths ahead of a stocker, Duncan says.

To complement the motor mods, the Duncan Predator has a host of several other nice goodies. The Polaris Troy Lee Predator

comes from Mountain Motorsports in Utah with nerfs already installed. To this, high quality Elka shocks have been added all around. Front and rear Sand Star tires from ITP are mounted on Douglas new cast-aluminum wheels. Other goodies include GPR

steering stabilizer, Team Industries rear axle and hubs, plus a Duncan Racing front bumper.

What does all this add up to? Duncan puts it this way: "It takes a quad that not everyone would consider buying and transforms it into a heck of a nice ATV." **ATVS**



**A**ftermarket A-arms are beyond what most Predator owners are looking for, but the Elka shocks and GPR steering stabilizer are nice additions.

**A**n Elka shock graces the back. Team Industries axle and hubs provide a more stable platform for aggressive riding.

**T**he Predator's engine isn't a powerhouse, but Duncan's mods wake it up nicely.

**T**win headpipes extend back to about the "D" on the Duncan sticker. Unlike Looney Tuned twin exhausts, the Duncan system runs a single muffler.

**T**he Pro Flow kit is crucial, according to Duncan Racing. It secures the filter and allows the engine to breathe easier. Pictured here is a K&N filter and also available is a setup for Uni (foam) filters.

**T**he Vortex ignition setup includes 10 preset maps on the unit and a two-position selector on the handlebars.



# Duncan Racing Polaris Predator Pricing

Complete Fat Boy 4 exhaust system	\$599 (w/HQ muffler, add \$50)
Pro Design Pro Flow Kit (w/K&N filter)	\$179
Elka Elite piggyback front shocks (rebound and high- and low-speed compression adjustable)	\$1,545
Elka Elite remote reservoir rear shock (rebound and high- and low-speed compression adjustable)	\$950
ITP Sand Star front tire (21 x 7-10)	\$48 ea.
ITP Sand Star rear tire (20 x 11-10)	\$63 ea.
Douglas Wheel 10 x 5 Quad Rok cast-aluminum front wheel	\$62 ea.
Douglas Wheel 10 x 8 Quad Rok cast-aluminum rear wheel	\$65 ea.
Team Industries rear axle	\$399
Team Industries rear hubs	\$139
GPR steering stabilizer	\$425
Duncan Racing front bumper	\$169

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Mountain High Motorsports, (801) 565-1300

