



# DUNCAN RACING DUAL-SPORT BANSHEE

At home on the trail or the dunes

By the staff of DIRT WHEELS

□ Duncan Racing has made a name for itself as one of the winningest performance companies in ATV racing. It has won races in virtually every type of ATV competition, from motocross to cross-country, flattrack to desert, ice-racing to sand drags. With a long list of top ATV pro riders using its products, there is little doubt that Duncan Racing knows the ins and outs of high performance.

What a lot of riders don't know is that it also makes a wide range of performance modifications to benefit the recreational rider as well as the racer. Loren Duncan, the man behind the company, recently built an all-new modified '97 Yamaha Banshee. He told us that by simply bringing out a change of wheels, tires, skid plates and extra lights, he could convert a full-on dune racing Banshee into a capable track and trail quad. Knowing Loren's well-deserved reputation for ultra-clean and well-thought-out race quads, we jumped at the chance to test this dual-sport quad.

## MOTOR MODS

Duncan offers a wide variety of engine porting, pipe and carb configurations for the Banshee as well as most high-performance sport quads. Depending on what you want to do with your machine, Duncan will set you up with the engine package it feels will work best for you.

◀ **Doug Eichner, fresh from victories at Pont De Vaux and the GNC 500 class, puts the Duncan Racing Dual-Sport Banshee through its paces at the dunes.**

Economy-minded customers can opt to install one of Duncan's bolt-on engine kits for the Banshee that consists of a Paul Turner midrange or high-rev pipe, Fat Boy aluminum silencers, DR fiber reeds, DR boost bottle, K&N filter and a Jet Pack, all for \$559. Duncan also offers more in-depth modifications, one of which is its "National" kit that includes all of the above plus porting and head mods, pre-jetted Keihin 34mm carbs, T-shirt, and technical instructions for installation of the kit for \$1775. A high-rev version of the kit uses Keihin 35mm PWK carbs instead of the 34s and includes a DR flywheel modification.

For our test unit we opted for the "National" midrange package with the 34mm Keihin PJ carbs and Paul Turner midrange pipes (with triple chrome plating). For an extra \$75 per pipe, Duncan will triple-chrome a set of new pipes for you; otherwise the pipes are left unpainted. Duncan also sells trick-looking two-piece Cascade exhaust clamps (\$60 per pair) that replace the stock leak-prone rubber units. The Fat-Boy aluminum silencers on our test machine were the new "Quiet" versions Duncan carries (\$179.95 per pair) with downturned sizers and are easily repackable.

We also had a Paul Turner Power-head installed, which is a replacement cylinder head that increases cooling capacity and offers interchangeable compression domes for altering engine compression on the Banshee. These units sell for \$299 and include everything you need for installation.

A DR Masterflow Intake system

(\$229.95) hooked up the new PJ carbs to the K&N filter and Outerwear cover. DR's new Pyramid reed valves were added to the reed cages (\$189 per pair) to get them up to snuff, and even the cranks were welded and trued to make sure the engine would handle the increased horsepower this kit puts out (\$75-\$100).

To make sure we would not have any problems with night vision, Duncan installed a Safari Light stator rewind (\$90) and DR adjustable timing plate (\$99.95) and flywheel modification to our test machine.

Since this is primarily a motor test, we will get to the evaluation right away. For more details of the various other items that were bolted on our test machine, be sure to check out the spec sheet. For now, let's see how this baby performs under fire.

## TRAIL TESTING

Our first test of the Duncan Racing Dual-Sport Banshee would be on fast fire roads and palm-shaded trails surrounding our secret test area in Southern California. In keeping with the dual-sport nature of this test, we had Duncan bring out a set of front and rear ITP Holeshoot tires mounted on Douglas .190 Red Label aluminum rims. For added protection from tree limbs and branches, we installed a set of Acerbis Rally brushguards. A complete set of DR/OMF engine and front skids completed our dual-sport package for the trial.

The combination of the midrange porting, Paul Turner midrange pipes and DR intake system gave the Duncan Dual-Sport Banshee a noticeable hit in the mid to upper power spread.





**Duncan Racing has several different engine kits for the Banshee. We wanted a kit that would be good enough for all-around duning but still had decent midrange for trailriding and fast fire-riding.**

The motor comes on strong from the middle of the powerband and hits with a strong burst on the top. While not possessing an abundance of torque on the bottom-end, the DR engine had impressive enough power in the midrange to make the transition to the top easy enough for an experienced Banshee rider.

The Roll Design +2" wider and +2" further forward (per side) A-arms (\$725) help smooth out the Banshee's cornering manners and make it a much more stable high-speed machine. We especially liked the larger-capacity IMS gas tank (\$174.99) for extended rides, as it holds up to 5.6 gallons of fuel and keeps the weight low and forward on the machine.

A DR steering damper kit helps keep the rider from having to battle the handlebars constantly flapping about and greatly aids the cross-country abilities of the machine. An RPM Dominator axle (\$369.95), Millennium rear bearing carrier



**IMS makes a handy replacement plastic gas tank for the Banshee that holds 5.6 gallons for long-distance cruising. The Paul Turner midrange Banshee pipes gave the machine a smoother midrange-to-top-end power spread.**

## DUNCAN BANSHEE

(\$269.95), anti-fade locknut (\$49.95) and Taper-Loc hubs (\$249.95) are essential to keeping the Banshee's back end alive at the faster pace the DR engine kit maintains. Stock Banshee axles are junk and will bend in severe use.

You would also be wise to replace the stock Banshee shift lever. The DR billet shifter (\$89.95) for the Banshee is a well-made unit that will not snap off and leave you stranded, something that the stocker will eventually do.

With Ohlins shocks up front (\$725) and a PPS revalved shock on the rear, the DR Dual-Sport Banshee suspension was more than up to the task when it came to thrashing around in the rough stuff. From jumps to bumps, whoops and ledges, our modified Banshee was a sweet-handling package. Cascade even came up with a special Dual-



**Adding a set of Acerbis Rally hand guards not only jazzes up the look of the DR Banshee, but they also provide more protection from brush and tree limbs.**



**Paul Turner "Quiet" Fat Boy silencers tone down the decibel level on the Paul Turner midrange pipes by a good 3-4 dB.**

**We were impressed with the hard-hitting power of the Duncan Racing "National" engine kit for the Banshee. It put out more than enough power to make it competitive in the dirt or the sand worlds.**

Sport seat cover for our test machine that had a special gripper material sewn into the center of the seat for extra gripping power in the saddle.

### SAND SETUP

After putting in our time on the trail, we loaded up our Dual-Sport Banshee and headed off for the dunes to convert it for sand slinging. We removed the Holeshots, the engine skids and Acerbis brushguards and installed a set of Sand Skate Razorbacks up front and Sand Skate I Comp Grooved paddles mounted on Douglas .190 Red Label rims on the back end.

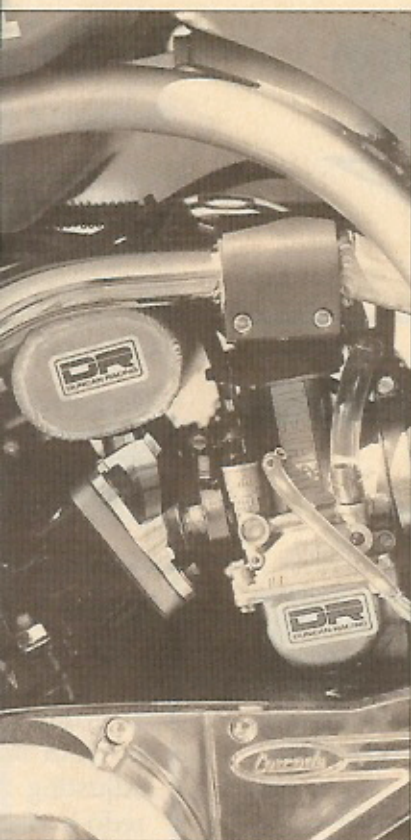
We also hooked up a set of Pro Comp lights to add more wattage for the Safari Stator rewind kit we had installed. Now we were ready for our dune expedition.

Engine-wise, the Duncan Racing Banshee midrange National kit



**OMF and Duncan Racing offer excellent engine skid plate protection that has proven itself time and again in the Baja 500 and 1000.**





## DUNCAN BANSHEE

came alive in the dunes. While we felt the engine ran well on the hard-pack, it was much more at home in the sand. The strong midrange and top-end hits are more easily absorbed by the sand and the paddles and the power transfers much more smoothly in this environment. While our machine was a compromise between midrange and high-rev performance, it definitely favored the high-end part of the spectrum.

For pure adrenaline-pumping performance, the DR Dual-Sport Banshee engine kit gets our vote of confidence for a kick-in-the-seat power package. It has power, speed, handling, good looks and a reputation for reliability. What more could you ask for?

For more information, contact Duncan Racing, 10734 Kenney St., Ste. A, Santee, CA 92071; (619) 258-6306. □

◀ **A DR Master flow intake manifold and boost bottle system combined with DR Pyramid Reeds and Keihin 34mm PJ carbs to give the machine a powerful midrange hit that exploded to a top-end rush that would make any horsepower junkie happy.**

### DUNCAN RACING DUAL SPORT '97 BANSHEE

#### Motor

Porting.....	"National" midrange
Pistons.....	Pro-X
Ignition/Timing.....	Stock ignition/Safari light mod/DR adjustable timing plate
Spark plug/gap.....	Champion N6YC/023"
Reed cage/ reeds.....	Pyramid reed valves
Crank.....	DR welded and trued
Head.....	DR/Paul Turner Racing (PTR) Powerhead
Flywheel.....	DR flywheel mod
Intake.....	DR Masterflow Intake system
Carburetor & mods.....	Keihin 34mm PJ carbs w/DR Superflow mod
Airbox/filter oil.....	Stock airbox, lid off, Pro Flow Flange, K&N, Outerwears/Maxima Fab 1
Pipe/silencer.....	PTR midrange pipe (w/Triple plate chrome/"Quiet" Fat Boy silencers
Fuel.....	Trick Racing gas
2-stroke oil/ratio.....	Maxima 92/32:1

#### Drive System

Clutch basket/plates/ springs.....	Hinson Billet Basket, DR-C33 Clutch kit
Clutch cover.....	DR quick change
Transmission mods/oil.....	DR trans mod/Maxima Endurance
Chain/tube.....	RK O-ring, Maxima chain wax
Gearing F/R.....	15T/40T

#### Front End

A-arms/width.....	Roll Design +2" Wider, +2" Forward (per side)
Spindles.....	Stock
Front shocks/wheel travel.....	Ohlins/9.5"
Steering stem.....	Stock w/DR billet handlebar clamp
Steering stabilizer.....	DR adjustable/rebuildable steering damper kit

F. hubs.....	DR billet aluminum front hubs w/caps
--------------	--------------------------------------

#### Rear End

Swingarm/length.....	Chromoly round housing/stock length
Rear axle/width/carrier.....	RPM Dominator/49"/RPM Millennium
Rear shock/wheel travel.....	Stock revalved by PPS/8.5"
R. sprocket hub.....	RPM
Axle locknut.....	RPM
R. hubs.....	RPM Taper Lock

#### Brakes

Caliper F/R.....	Stock
Pads.....	F&R Braking
Rotors.....	F&R Braking
Brake lines.....	DR Pro series steel-braided lines
Brake fluid.....	Maxima Hi Temp 550

#### Handlebars/Controls

Handlebar.....	Renthal
Handguards.....	Acerbis Rally
Throttle.....	Motion Pro CR
Clutch lever.....	YZ250
Cables.....	Motion Pro, Terminator clutch
Grips.....	Scott
Tether kill switch.....	Pro Design

#### Miscellaneous

Front bumper/grab bar.....	DR chrome F. bumper/DR aluminum R. grab bar
Skid plates.....	OMF
Seat.....	Cascade
Tank.....	IMS 5.6 gal.
Shifter.....	DR billet aluminum
Other special setups.....	Cascade Stator cover, W/P Cover, Dip Stick, R. Master cylinder cover, brake block off plate, chrome plating by Duncan Racing, front A-arms, tie rods, rear swingarm, pipes, end caps, footpegs, R. brake pedal, kickstarter, motor mounts and bolts, new Duncan Racing chrome fender decals



