



DUNCAN RACING SUZUKI LT525R

The biggest, baddest, production two-stroke

STORY AND PHOTOS BY
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Once upon a time, two-strokes ruled ATVing. The 250 class turned the joke three-wheelers into legitimate motocrossers and duners that could climb the tallest and steepest walls of sand. Then, Yamaha upped the ante with its 350 twin. But the same year, Suzuki shook up ATVing in an even bigger way. Like 500cc big. The LT500R remains the largest-displacement, mass-produced two-stroke quad ever. The legendary quad still shakes the ground and has developed a cult following.

Duncan Racing's Loren Duncan snagged this one for himself in the early 90s, built it up, and has been riding it ever since. "The aftermarket has kept the machine alive," says Loren, explaining the stock motor wasn't really that fast. But it has great potential for modification.

To this end, Loren has outfitted his 500 with a pipe, porting, and carb — the three most important mods. The pipe really opens up the breathing, the rear transfer ports are redirected, and the stock Mikuni is replaced with a slightly larger Keihin, which is easier to jet and provides easier starting. A slightly larger bore bumps up the displacement, while Duncan's Powerhead bumps the compression up to 9:1, compared to the rather low 7.2:1 on the stocker.

Loren explains that during the first year of production, 1987, the motor had some issues. But, they were straightened out on the '88 through the final year of production, 1990. Blown head gaskets on the '87 were fixed by adding an additional head bolt, the intake tract was made smaller to increase





It's been 18 years since Suzuki discontinued its LT500. But, it's still a great machine, particularly with Duncan's mods which now designate it as a LT525R. This 525 will easily pull just about any gearing you can bolt on, and this quad is probably capable of well over 100mph. Whew! That's Lenny Duncan throwing America's biggest production 2-stroke into a sweeper at Hollister Hills in northern California, above right. We like the suspension action of the Ohlins, especially when coupled with Laeger's swingarm. The setup adds two inches of travel. Duncan's K&N filter kit (left) creates a dirt-tight seal.



velocity, and the flywheel rivets were strengthened. But Suzuki never addressed the airbox design, which allowed the motor to suck dirt. Duncan's K&N air filter kit addresses this issue.

What's it like riding a modified LT500R? We hooked up with Duncan at a hilly OHV area in northern California to find out. Duncan's statement, "Riding the 500 is like riding a very fast couch," is right on the money. It's a big damn thing and wants to go fast. No wonder it was the choice for Americans racing Europe's big beach and dune races, where speeds were well over 100 mph. The LT just bulls its way over massively rutted sand.

If you couldn't hear the big two-stroke, you might at first think you were on a 450 four-stroke. This LT525 cranks out astounding low-end torque. But then it revs out in traditional two-stroke fashion. It's more power than anyone would ever need.

The ergos are at the big end of the spectrum, too. The LT is heavier, longer, and wider than Honda's 450R, for example. The relationship of the bars/pegs/seat suits a big rider. And the T-shaped seat design was an industry first.

Loren says the shocks on the stock LT500 were very good, but they would fade. So, this machine is outfitted with Ohlins. They feel plenty plush and probably could soak up the biggest dune buggy ruts. Also, they are set up to work with the plus-two inch Laeger's swingarm, which keeps the front end down in hard acceleration. We found steering to be very precise and the ride is very stable at speed.

Even though it's now been 18 years since the LT500R was discontinued, you still see them at big dune areas, and we spotted a couple at Glamis during New Years. Duncan estimates there are as many as 10,000 LTs still ripping around the dunes and trails. After all, once you get used to the sound and pull of a big two-stroke single, there ain't no going back.

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DUNCAN RACING

SUZUKI LT525R

BASICS

RIDER: Leonard Duncan

BUILDER: Duncan Racing International

SPONSORS: Duncan Racing

International. Paul Turner Racing
Exhaust,

Escondido Cycle Center, ITP Tires,
DWT Wheels

MACHINE

QUAD: 1990 Suzuki LT500R

CLAIMED WET WEIGHT: 410-lbs.

FRAME: Stock

MOTOR

MOTOR: DR/PTR National Kit

BORE & STROKE: 88 x 86mm

PORTING: PTR National by Loren
Duncan at DRI

HEAD: PTR Billet Powerhead

COMPRESSION: 9:1

DISPLACEMENT: 525cc

PISTON: Wiseco

RODS: Stock

REED VALVES AND CAGE: Pyramid

CRANK: Trued and rebuilt By DR

IGNITION/TIMING: Stock

CARBURETOR: Keihin 39mm PWK
w/Super Flow mods

AIRBOX/FILTER: Stock/ DR clamp on
K&N kit

PIPE/SILENCER: PTR/Fat Boy 2

FUEL: VP C12

DRIVE SYSTEM

CLUTCH FIBERS & STEELS: DR C25

CLUTCH BASKET: Hinson

TRANSMISSION: Stock, DR blueprinted

CHAIN: O-ring

SPROCKETS: Sunstar

GEARING F/R: 14/40

FRONT END

A-ARMS & SPINDLES: Stock

FRONT SHOCKS/TRAVEL: Ohlins/10"

REAR END

SWINGARM: Laeger's round housing
+2" chromoly

REAR AXLE/CARRIER: Team/Laeger's

REAR SHOCK/TRAVEL: Ohlins/11"

TIRES/WHEELS/HUBS/BRAKES

TIRES: ITP Sand Star

WHEELS: Douglas

BRAKES: Stock with Crown Series
steel-braided lines

PARKING BRAKE BLOCK-OFF: DR

HANDLEBARS/CONTROLS

HANDLEBARS: TAG T2

THROTTLE: Motion Pro CR Twist

CLUTCH LEVER: Honda CR

CABLES: Motion Pro

GRIPS: TAG T2

DETAILS

FRONT BUMPER/GRAB BAR: DR
chrome/stock chromed

SEAT COVER: ONE

BODY PLASTIC: Stock with Maier
nose piece

GRAPHICS: Custom DRI

FOOTPEGS: Stock chromed by
Pacific Plating

POLISHING: DRI/Jim Brown

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