



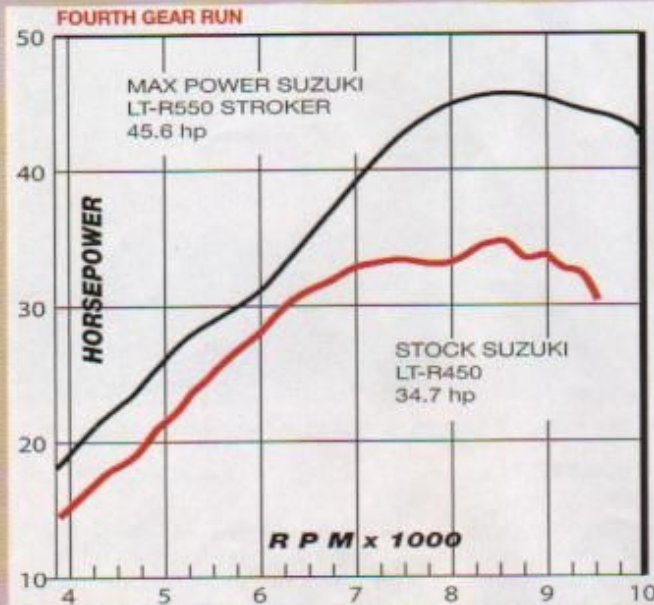
# MAXPOWER LTR550 STROKER

**We need a seatbelt!**

*Photos by Pat Carrigan*

**M**axpower/RPMs is known for building some of the biggest, most powerful ATV motors around. We know that. So when we got a call from Maxpower asking if we wanted to test their new LTR550 stroker kit, we tried to keep from giggling like schoolgirls. We waited for weeks to get our hands on what we were sure would be the fastest 450-chassis quad we've ever ridden, and when we finally got our hands on it, we didn't know what to do with ourselves. So we set off for Pismo, with two quads, a bunch of VP Racing fuel, and absolutely no patience!

# MAXPOWER LTR550



Not all dyno runs are the same. We've seen stock LTRs put out 40hp, and the tall gearing on our MaxPower machine threw off our numbers. We did both 3rd and 4th gear runs and 3rd was closer at about 53.7hp, but 4th gear better displayed the increase.



The CNC-machined, hard-anodized Ice Cube cylinder increases the cooling capacity of the big motor.



The exhaust is handled by a Rossier Engineering stainless/aluminum pipe with a Supertrapp endcap/spark arrester.

### WHAT'S DONE TO THE MOTOR?

Maxpower bored out and increased the stroke on the Suzuki mill, bumping displacement to 550.5cc. This was done by bumping the stock stroke of 62.8mm all the way up to 69mm, with bore jumping from 95.5mm all the way to 100.5mm. This effectively added 100.69cc of displacement to the motor, and with it came a race-only CP piston with an insane compression ratio of 13.4:1. The stocker runs 11.7:1 compression, and will only run on 90-plus octane fuel, while the 550 motor requires race gas, with the preferred diet being 100 percent C12 Race Fuel. The cranks are custom made, and the Xtreme pistons have a thicker skirt to deal with the increased side load from the longer stroke.

### HOW IS THE POWER?

From the seat of the pants, you won't be disappointed. The LTR is already a pretty quick machine, but the 550 kit makes it ridiculous. There is such a strong midrange hit that if you're not sitting on the tank, the machine would loop over backwards in third gear on pavement. In the dirt,

that translates to the most ridiculous berm-busting, sand-throwing, arm-wrenching power you would believe to be possible from a naturally-aspirated ATV. It honestly needs a pneumatic pushbutton shifter, because our feet don't move fast enough to shift it on time. We attacked the Pismo Dunes WORCS race with the machine, and it proved to be one of the most exhilarating rides we've ever been on.

### HOW ABOUT ON THE DYNO?

We ran our stock '08 LTR450 against the modified Maxpower machine, and even with the stock machine uncorked and running a Cherry Bomb, the 550 made 33 percent more peak power! That 33 percent increase will get you a claimed 40 pounds/feet of torque at the wheels, with peak horsepower

coming in at 60 at about 8400 rpm, claims Maxpower.

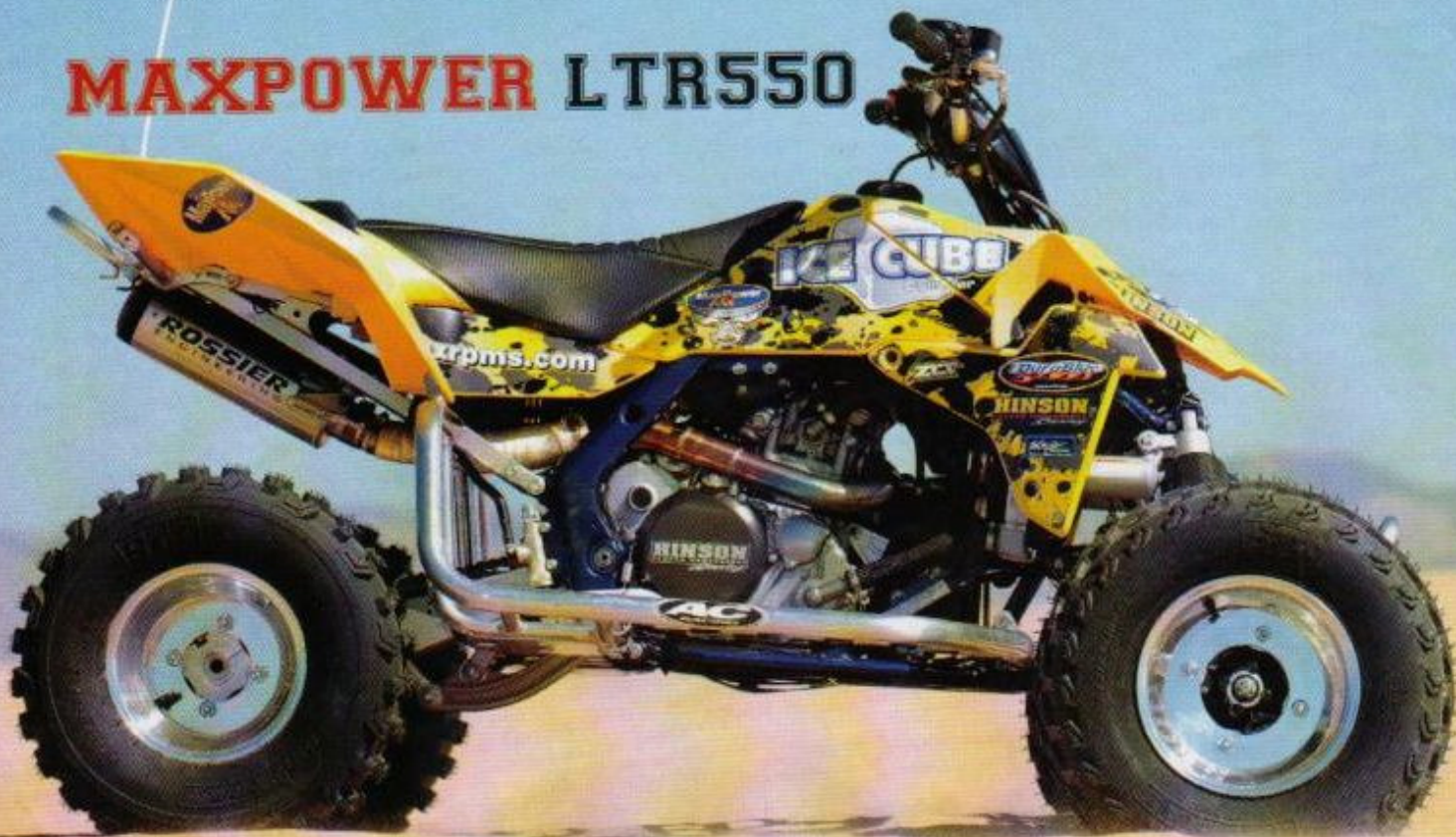
### SO, WHAT DO YOU GET WITH THE KIT?

The kit we tested came in at a healthy \$6439.97. The 550 stroker package comes in at \$2650 baseline, but that only includes the Ice Cube Cylinder, stroked and balanced crank, Xtreme piston kit, and all gaskets, with no install. We went ahead and gave ours the full head work, which includes flow bench porting for the specific application, larger Ti valves and seats, and goes for \$890. They will tear down your motor, clean the block, set up the kit and do a 73-point motor inspection for \$475. We also had custom-ground large-lift Web Cams (\$325), a larger injector (\$200), a full Hinson clutch kit (\$719.98), a Hinson clutch cover (\$200), Dyno Jet Power Commander (\$340), Rossier Exhaust (\$450), Fuel ATV Intake (\$189.99), and various chassis bits, such as A/C Racing bumpers and Nerfs, ITP wheels and tires, a Quadtech seat, Durablue axle, and Renthal bars and sprockets.

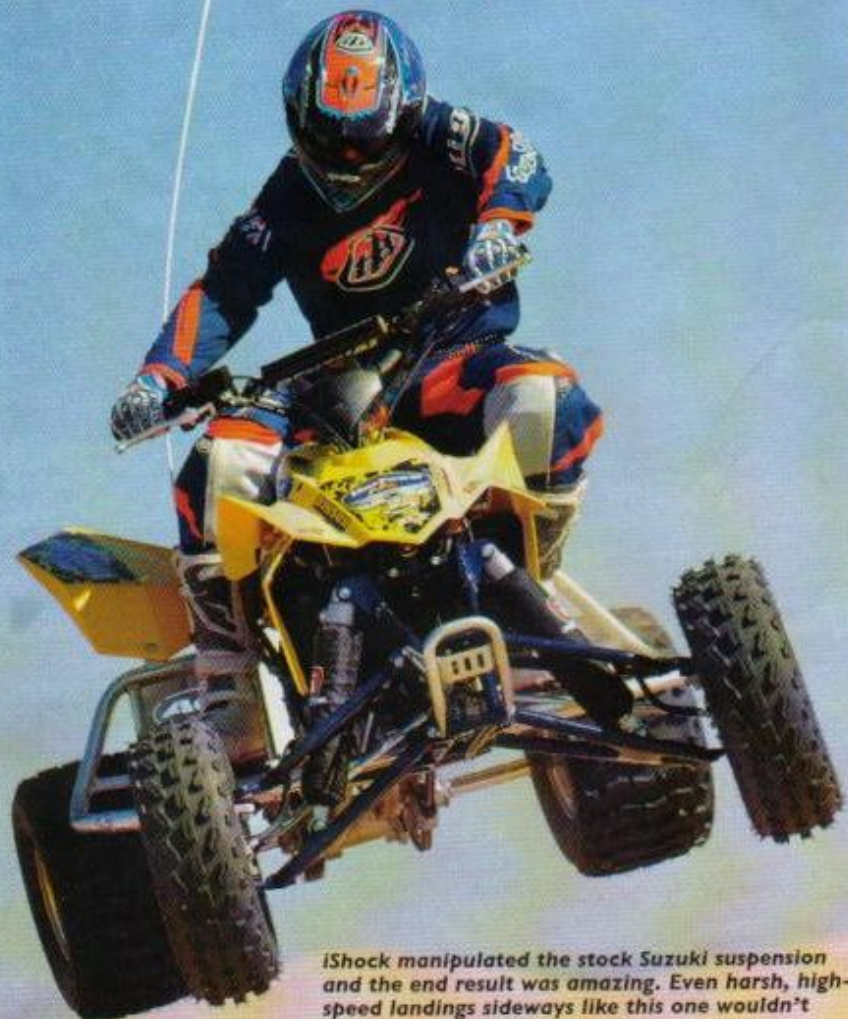


Sheer torque and power are the point here. Check out the huge roost it throws, even without paddles!

# MAXPOWER LTR550



This is what it looks like in the dunes. Take a second to wipe the drool off your chin.



*Shock manipulated the stock Suzuki suspension and the end result was amazing. Even harsh, high-speed landings sideways like this one wouldn't upset the Zuke.*

## WHAT IS THE MOTOR AIMED AT?

This motor is made for any kind of wide-open riding you can find. Desert and dune is the main focus, not track riding. The motor makes far too much torque to be rideable on the track, and would be impossible in the woods. Maxpower has smaller kits, like their 498 big bore or 502 stroker kit, that are more suitable applications for the track and the woods.

## WHAT IS OUR FINAL ANSWER?

This motor kit is amazing. Maxpower recommends a piston swap every 20-25 hours of riding, since the extremely high-compression build takes a toll on the piston. We love the added power, and it's amazing to ride in the dunes. The best part about Maxpower is that they not only dyno tune all of their built motor kits, but they take them out to the real world to test them, ensuring that your motor isn't going to be any type of ill-running, dangerous powerhouse. If you're a serious duner or offroad racer, this is definitely the motor you will hunger for. And if you're not a Suzuki owner, don't fret: Maxpower builds motor kits for the YFZ 450, Warrior 350, Raptor 350, 660, and 700, Grizzly 660 and 700, Rhino 660 and 700, 400EX, TRX450R, LTR 450, LTZ400, KFX400, KFX450 and more.

**CONTACT:** Maxpower/RPMs: (909) 673-9035; [www.maxpower-engines.com](http://www.maxpower-engines.com) □