



RACE READY MINI

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Have you ever gone to a race and heard what sounds like a swarm of bees racing around the track? If you answered yes, then you saw one of many youth class races that seem to have an increasing number of entries at every event. If you are a parent of a kid who wants to be a part of that group, you have to think of the high price tag to build a competitive machine for them to race. The price tag on some of the machines you see kids racing around on could blow you away, as they could be comparable to the cost of building a full sized 450cc racer. With very limited option of race-ready mini ATVs, many parents need to start from the ground up to build a competitive machine. The Pitster Pro FXR Mini ATVs now expands their options. Pitster Pro has been building pit and mini moto bikes for quite a few years, noticed the demand for a quality ATV in the youth performance market and felt that they needed to step up to the plate. While there are a few companies that dominate this market, very few come off the showroom floor ready for competitive racing. Already having a solid engine package that has been proven in their pit bikes in both competition and recreational use, Pitster Pro started researching what they needed to do in order to fill the void. First on the list was a frame/suspension package that would hold up to extreme conditions and perform equally as well. This is why Pitster Pro turned to James Giddings at Giddings Machine Racing to design their long-travel chassis to maximize the FXR handling.

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The frame is made of chromoly steel and features a dual A-arm front end that boasts 8 inches of wheel travel while the rear has a trick-looking machined

aluminum alloy swingarm that provides 9 inches of travel. An added bonus to the long-travel front end is the ability to adjust caster settings, which you won't find on any other youth ATV. To complement the suspension components, GPX DNM piggyback shocks are used and provide preload, compression, and rebound adjustability to allow riders the capability to fine-tune the handling to best suit their needs. The task of stopping this nimble machine is done through dual-piston calipers in front and rear, while again the rear features a trick reverse-mounted master cylinder that allows for proper clearance of the engine's reverse kick-starter. To complete the rolling chassis, which sports a 45-inch overall width and 60-inch length, Carlsile Holeshoot-style tires are mounted on aluminum wheels for great strength and good looks.

Now what sits inside of the frame is what Pitster Pro really prides themselves on. The FXR line of Mini ATVs come available with your choice of a 90cc electric start four-stroke air-cooled engine or a 125 and 150cc kick-start power-plant. Little engines like these are nothing new to the company since they're one of the most well known pit-bike companies in the U.S. and have proven themselves on the track time and time again. For our testing, we chose to take the 125cc engine in our mini ATV since that is what the four-stroke displacement limit is for many of the 90cc race classes. The transmission in this machine is a 4-speed close ratio that utilizes a 5-plate wet manual clutch to transfer the power to the drivetrain. Delivering the fuel is done through a hybrid carburetor of sorts since this unit looks like a cross between a Keihin PE carburetor up top and a Mikuni VM-style carburetor lower. From there the air/fuel mixture runs through the 2-valve overhead cam head that also is mated to a high-flow exhaust system that has a clean-looking aluminum canister at the tail end of the machine. Since this machine is designed specifically for racing, it does not come with lights, but the ignition system does feature a lighting coil.

Before we get to the performance of this machine, we also want to note that the FXR 125 also comes standard with many items that other companies would leave in your hands to purchase and install. The first is a set of alumi-



num nerf bars and front bumper for increased protection while you're banging bars with other riders. While the finish and flexibility of the nerf bars leaves a bit more to be desired, it is still better than having nothing at all. The machine gets further protection in the way of a full chassis skidplate as well as an aluminum rear sprocket and rotor guard. The guard sandwiches the rear sprocket and chain, minimizing the possibility of damage from impact with rocks or anything else that might pop up and end your day of riding. Up top on the oversized handlebars, there is a quick-adjust clutch lever, and wrap-around hand guards that are mounted on oversized handlebars as well as a pre-installed kill switch. They have thought about everything to make this bike as race ready as possible while at the same time keeping the cost from running out the roof. For the price you pay for this machine, it's hard to believe what you get for a standard package.

SIZING IT UP

To put the FXR 125 through the paces, we took it out to Milestone MX Ranch in Riverside, CA. This is where we met up with Kyle Gillespie who is a regular in the youth classes of the WORCS racing series. His regular ride is a Cobra chassis that has been outfitted with a YZ 80 engine so the size of this machine is comparable to what he is used to riding. This will allow him to give us a good evaluation and comparison to his current race machine. Once geared up, Kyle threw a leg over the FXR and headed out to the Vet Track, which features plenty of tabletop jumps and a variety of turns that range from fast sweepers to hard 180 corners. This allowed him to test the nimbleness of the quad and also the power of the engine in pulling out of the turns to its wide-open top speed.

One of the things that I noticed as soon as the engine was started was that it has quite a bark to it. For being a two-valve cylinder head engine, this thing revs quickly and with attitude. As

Kyle started his first laps on the track it was apparent that the engine had some good power but seemed to lack a bit in the top end. Growing more and more comfortable on the track, Kyle would charge the corners and rail the berms or whip the rear end around the 180s and the motor pulled hard out of both. Since this track was set up for larger bikes, many of the jumps were built to scale for their size. For this reason we went to the mini-moto track that featured step-up, step-down, and double jumps as well as tight corners and a decent-sized whoop and rhythm section. In all actuality it was a mini supercross track, and it was the perfect testing grounds for this quad.

Kyle proceeded to look over the track and see what he felt comfortable doing since he was on a new machine. It didn't take him much time to start charging every obstacle without hesitation while we were snapping pictures. If anything, he looked more comfortable on this tighter and more technical track than he did on the vet track. Not every jump was a perfect landing, but the suspension soaked up the imperfections and increased his confidence to push the envelope a little farther each lap. One jump in particular had a hole right at the base of the take-off that made him cautious his first couple of laps as he rolled the jump and sized it up. Within a few more, Kyle just hammered down on the throttle and cleared the double, railed the corner and blitzed through the whoop section in Third gear without lifting off the throttle.



+ handles well, snappy power, good protection comes standard

- transmission gearing too close, seat profile hard for smaller riders to maneuver around, could use a stronger front master cylinder

- a good first attempt at a competitive mini race ATV that could stand a few more refinements.

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Once we got the shots we needed, I asked him what he thought about the overall feel of the bike. To him the stand-out things were the explosive power out of the corners and the light feel. Kyle said it was having the ability to come out of a tight corner and clear some of the jumps that didn't have much of a run was really nice, and

the nimbleness allowed for him to make corrections in mid-air with ease. For being a bone-stock ATV he was very impressed. In the corners the bike went exactly where he wanted it to go, and in the rough he never felt uncomfortable like the machine would get away from him. When comparing it to his race machine, he felt just as comfortable on the FXR even with the short amount of seat time he had on it.

On the opposite end of the spectrum he felt that the transmission gearing was too close for off-road racing or any kind of track that had long straights. Another issue he had was with the reverse kick-starter and his boot getting hung up on the rear fender when he would follow through on the kick. It's just one of those issues you have when dealing with a reverse-kicking engine and not necessarily a fault. Finally, the only other thing he felt would make a good change was the seat foam. The seat on this machine was very squared and made sliding from side to side while cornering a bit difficult for him. He felt that if the foam was lowered and rounded a bit, the seat would be perfect. Adding to this list from my own evaluation was the front-brake master cylinder performance. While lighter riders take less effort to stop, I had to fully bottom out the brake lever to get strong stopping power. It's my belief that a better master cylinder could remedy this problem. In the end when you look at what you're getting for the price you're paying, this machine can't be beat.

Since this came from a pit bike company and the company video shows full grown adults burning laps on it, I handed it off to a few Pro and Pro-Am off-road racers from the WORCS series that happened to be at the track that day as well. While this was a huge change from the 450cc machines they were there practicing on, they came off the track with huge smiles on their faces. When asked what one word described this machine for them, I got the exact same reply: FUN! They knew it wasn't the fastest thing in the world but they were surprised at the power it did have and how well the suspension soaked up the jumps that they flat-landed without compressing their spines. The next thing out of their mouths was where could they get one? Is this the new pit bike for fullsize riders? Quite possibly. Many of our fullsize riders feel that a few of these on a track all at the same time would be a very fun time.

OVERALL

Does Pitster Pro have the next machine to dominate the Mini ATV market? I'm not going to say yes, but I do believe they have an excellent platform to start out with and give the current competition a run for their money. For the price of \$3,595.00 you get a good performing bike that seems to handle really well and can deliver quite a punch. If you feel the need for more power beyond what the engine can produce, that is easily remedied by doing some engine upgrades that are readily available through Pitster Pro or many of the other companies that produce Pit Bike components. For now this is a very fun bike that has a lot of potential for advancement and growth in an ever expanding youth ATV market and after this test we look forward to seeing bigger and better products to come from this company.



Pitster Pro FXR 125 Mini Racer

Retail price:	\$3595.00
ENGINE	
Type:	Single-cylinder, 4-stroke SOHC air-cooled
Displacement:	125cc
Bore x stroke:	54.3x53mm
Cooling:	Air-cooled w/oil cooler
Carburetion:	22mm Moltk
Starting:	Reverse-kick
DRIVETRAIN	
Drive system:	428 chain drive w/eccentric adjustment
Transmission:	Close-ratio 4-speed w/manual clutch
SUSPENSION (TYPE/TRAVEL)	
Front:	Dual Control Arm/8"
Rear:	Long Travel w/ GPX DNM Piggy Back Shock/9"
TIRES/BRAKES	
Front tires:	Carlisle 19x6x10 AT
Rear tires:	Carlisle 18x6.5x8 NHS
Front brakes:	Dual-piston calipers
Rear brakes:	Dual-piston w/wave rotor
DIMENSIONS	
Wheelbase:	43.0 in.
Wet weight:	225 lb
Ground clearance:	8 in.
Length/width/:	60/45
Fuel capacity:	3 liters
Seat height:	29 in.
ELECTRICAL	
Headlight:	none
Instrumentation:	none
Colors:	white