Project Bike

BBR Motorsports/Hot Cams/Dunlop Yamaha TT-R150

There are few things as fun as a hopped-up mini – especially when it doesn't cost an arm and a leg.

By Jean Turner Photos by Mark Kariya

ook closely... this is actually a 2005 Yamaha TT-RI25 project bike – not one of the new-generation TT-Rs. So why the blast from the past? Well, in this challenging economic climate, many people are digging things out of the garage rather than buying new, so

we thought we'd do the same. Besides, when you're planning an overhaul, doesn't it make more sense to replace used parts instead of new ones?

Our project TT-R150 is a prime example of what you can come up with if you're willing to invest the time and elbow grease. It also goes to show that a shiny "new" ride doesn't necessarily have to come straight off the showroom floor, nor does a full custom build have to break the bank.

Our builder, Jay Clark, started with a used TT-R125LE (bigwheel version with electric start). BBR Motorsports supplied a 150cc cylinder and piston kit, which Clark paired with a Stage one Hot Cam. Of course, jetting changes were necessary for the beefed-up mill, but fortunately quite simple (up one size on the pilot and main jets). In addition to the motor work, slimming down the flywheel at a machine shop also helped liven up the little TT-R motor. For optimum respiration, Clark fitted the 150 with a BBR air-filter kit and drilled out the airbox to maximize air flow. FMF supplied a new header and Powercore 4 silencer which completed changes in the motor department.

> Suspension was handled by Race Tech, who treated our TT-R to a full rebuild on both the fork and shock, including new springs. The aim was to not only freshen up the suspension, but stiffen it so it could better accommodate heavier riders.

Some new bodywork, like the BBR frame cradle, helped to not only toughen up the little trail weapon, but also add a bit of a bling factor. Renthal handlebar and Works chain, BBR chain guide, Dunlop MX51 tires and of, course, a full set of custom graphics, courtesy of Speed Graffix, put the finishing touches on our project TT-R.

Getting to the fun part, now we can talk about the ride! There are few things as fun as a hopped-up mini – especially one that's big enough for some real trail rides. Now, whether this build was intended for adult play-riding or for kids trail-riding is open to interpretation... but either way, the I50 came through with flying colors. Both myself and my II-year-old nephew, Sean, logged time on the BBR/Hot Cams/Dunlop TT-R150

Don't be fooled by the "bling" factor – a custom build doesn't have to break the bank.

PAPERIO

Sure, it looks new... but our base model was actually a used 2005 Yamaha TT-R125LE.





(Top) Slick custom graphics put the shine on our project 150. (Above) The pipe guard came in handy for protecting against burns in a tip-over. (Above right) Our project bike sported an FMF Powercore 4 silencer and Dunlop MX51 tires.

and there was plenty for each of us to love about the little Yami.

The 150cc four-stroke mill puts out great power; the lighter flywheel makes it quicker-revving, but not in a barky pit-bike way. The extra cc's really seem to make the difference on the low end, and torque is steady and smooth and the motor keeps pulling strong through the midrange. Its ability to tractor up hills is particularly impressive. Under adult weight, it can crawl up tricky trails and rock faces with ease. In the same conditions, a stock TT-R125 would fall flat on its face, but as long as there is traction, the TT-R150 kept things moving forward. In sand, however, you can forget about it – you won't be

going very far.

The revalved suspension makes it easy to put the extra ponies to work. Often times on a minibike, even stock speeds can be dangerous, because one ill-placed bump can bottom out the fork with a "thwack" and practically break



your wrists. But the Race Tech suspension was up for whatever challenge we dished out. The midstroke has very good support and doesn't blow through on bigger hits, which gives peace of mind at speeds over 30 mph. Bottoming resistance is also superb – in fact, I don't recall bottoming it at all.

For such a short wheelbase, the 150 also has good stability. Even in rocky conditions, the front end never got too busy. Its behavior on the trail is pretty good everywhere, and definitely a big improvement over stock. Although we did very little in the way of shaving weight off the TT-R, our project 150 has such a light feel on the trail due to its power improvements. A stock 2005 Yamaha TT-R (while still a blast to ride) can barely get out of its own way, which makes it feel heavy and sluggish, but our 150 is plenty responsive and quick on its feet.

The chassis improvements also tighten up the overall package – and not only due to the suspension upgrade. The BBR frame cradle not only does a good job of protecting the underbelly, but also adds some tensile strength to the frame. Without some added rigidity, it would probably take very little time to bow out the steel frame – especially under adult weight.

After a few weeks of fun on the little TT-R, it occurred to me that kids sometimes ride minibikes. So I decided to take my nephew out for a trail ride on the 150. At 11 years old, he has seriously outgrown his 65cc two-stroke but hasn't had the opportunity to get on anything bigger. He also hadn't had the privilege to ride a "magazine bike" until then, so this was quite a momentous occasion.

The morning of our trail ride, Sean stood on the sidewalk ogling the shiny TT-R in the bed of my truck as though it were James Stewart's own race bike. "Is this really the bike I get to ride?" he asked with a smile creeping over his face under his wide eyes. We may joke about the "performance gains" of running stickers and graphics, but joking aside, that kind of stuff really means something to kids. Would the memory of your new bike under the

BBR/HOT CAMS/DUNLOP TT-RI50 PARTS LIST

BBR Motorsports, Inc	www.bbrmotorsports.com	888/668-6227
BBR 150 cylinder and piston kit w/ gaskets		\$ 309.95
BBR Frame cradle		\$199.95
BBR Rear chain guide		\$69.95
BBR Air filter kit		\$79.95
125 Powercore 4 Muffler w/ SS Header		
FMF Roostguard		
	www.hotcamsinc.com	515/402-8005
Stage one Hot Cam 4019-1		\$159.95
	www.racetech.com	951/279-6655
	/springs	
Rear-shock rebuild/spring		
	www.pivotworks.com	515/402-8000
Upgraded swingarm bearings		
Renthal www.renthal.com		877/736-8425
7/8" bar (611-01, Pit Bike bend)		
Dual-compound grips (G151 MX Grip)		
Chain (C272, RI Works Chain)		
	www.speedgraffix.com	888/919-SPEED
	kit	
	www.worksconnection.com	800/349-1475
Elite Perch		
Factory II Stand (not pictured)		
Dunlop Tire www.dunlopmotorcycle.com		800/845-8378
MX51 front tire MX51 rear tire		
MAST rear tire		N/A

Christmas tree be as vivid if it was unfinished metal? The impressive aesthetics of the 150 made the day a special experience for Sean before he even got on it (I didn't bother telling him it was five years old and used). So if you can't yet afford a new ride for junior, slapping some custom graphics on his or her existing one might take you a long way.

The same torquey power that hauled me up hill climbs was still docile and friendly enough for my nephew and proved to be an excellent bike for him to hone his skills on. He's far from a beginner, but the first time on a bigger bike is still very much a learning experience for most. The bigger bike also meant a longer trail ride - another rite of passage for Sean that day. But with the upsizing came some inevitable tipovers, and although we talked about how much lighter the TT-R feels, that's only in the handling department. When picking the bike up off the ground, the dead weight is definitely still there. All other things my nephew was able to do independently (especially thanks to the handy E-button), but uprighting it after a get-off required a helping hand every time and proved to be a source of frustration for him. Though he was red-faced and dropping f-bombs by the end of the ride, it took less than 10 minutes of recuperation at the truck before he was back on it, riding circles around camp until dark.

Our only other grievance with the TT-R is that it's quite a grouch in the morning, and on a cold morning it's stubborn as a mule to get started. (But I can't hold that too much against the TT-R since I'm not a morning person, either.) The TT-RI50 gave us very little to complain about especially given that we couldn't even ding it for the price tag. The total of parts and accessories comes in at under 2400. Add that to a starting cost of a used TT-R which you can usually find around 1500 or less, and you have a virtually new, custom-built trail-ready mini for under four grand. And you don't even have to tell junior that it's used! **CN**

The extra cc's really made a difference in the low- to mid-range and Race Tech suspension let us put the power to work.