


# **Trail Rider**

**Eastern U.S. Off Road Riding and Racing**

- 
- **TM 144 MX**  
**Small Bore Bullet**
- **Kaurimoto TMT4**  
**Tire Changer**
- **Maico 660**  
**2 Stroke Monster Build**

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\$4.95





Photo by Art Pepin





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## TM MX144

### The little Engine That Could

Small bores, no doubt they're huge fun but can they actually be an alternative to what we're accustomed to? As an older (and larger...) woods rider, our bikes have increased in cylinder size on a linear basis as the years clocked by. Like most of us, this guy started out on 125's and loved the lightweight, flickable feel they offer. As time progressed and pounds increased, engine displacement increased proportionately. We've grown used to calling for more power in so many aspects of our lives. Would it be possible to regress somewhat in our dirt scoot choices? To be honest, this heavier fella had been doubtful. Could reverting back to bikes of younger days actually prove to be fun? We're open-minded; we'll see.

A recent phone call from our friend Brett Bavisotto of Bonjoe's Cycle Sport in Grand Island, NY, our local TM dealer, with an offer to race their new TM MX144 at the 80th Sandy Lane Enduro sure sounded appealing. Having been buried in snow here in Maine for the last several months, we were chomping at the bit for ripping some of South Jersey's sweet sandy single track. Bonjoe's team is dead serious about bike prep and our test mount wasn't going to be another generic, out-of-the-crate bike test. Bonjoe's was going to set the little 144 up to suit the rider; in this case, a somewhat portly older rider. It's rare that we get to ride custom-tailored bikes. This was going to be a hoot!

Our test bike was an MX model, set up for aggressive woods racing. It would be sprung and valved for the rider and application, being south Jersey sand and endless whoops. Ken McCurdy from TNT Suspension Development offered his expertise to help with the woods revalve, along with installing heavier springs front and rear. G2 Ergonomics offered up their hand guards and COR Moto

Graphics supplied the trick Trail Rider Magazine/Bonjoe's Cycle Sport full graphics package. This was shaping up to be a pretty cool test and event, certainly as close to a factory ride as this guy has ever seen!

Regular readers will recall our recent test of the TM 300EN and all of its trickness. The MX144 is a very similar machine, perfect hand-welded, twin spar TM-designed aluminum frame, along with a works-like tubular aluminum sub frame. Billet hubs, triple clamps, brackets and rear brake lever complete the factory bike feel. Italians are known for beauty and style and TM displays their heritage proudly; they build gorgeous machines.

As for the powerplant, like all TM engines, the 144 is built entirely in-house at their factory in Pesaro, Italy. The 144 is not just another big bore 125; it's specifically built for the displacement. Where their 125 yields a bore and stroke of 54mm X 54.2mm, the TM144 is a 56mm bore and a relatively long 58.2mm stroke. TM's approach has two positive effects over the typical big bore 125. First, increasing the stroke greatly increases the low-end torque. Second, by using a slightly larger (than a 125) but still very light weight piston, you get a very lively, quick-revving engine, typical of a small bore 2-stroke. Like all full size





TM 2-strokes, the 144 is fitted with an electronically controlled, servo-operated power valve that communicates with the CDI box. TM's power valve system produces a very powerful yet linear delivery compared to mechanical/centrifugal power valve design. TM's electronic power valve has the ability to open or close throughout the rpm range, allowing for a great blend of torque and peak power.

Being a hand-assembled engine, the cases and cylinder ports are hand-matched, something unheard of in a production machine and typically left to professional 2-stroke tuners. The gearbox is a 6 speed, close ratio. Spacing was ideal for a fast woods machine, well spaced in the lower gears, the top two a bit wider for faster/transfer sections. The gearing on our test bike was stock at 13t front, 52t rear.



Suspension is handled with a KYB 48mm Twin Chamber fork and the rear shock, built entirely in house at TM, utilizes standard components. This fork and shock combination is a package that any knowledgeable suspension tuner will be able to fine-tune and service with ease.

Technical mumbo jumbo aside, how did we like the little TM? Well, it was a lot of fun on so many levels. As mentioned above, our test for the TM144 would be a race test, the 80th Annual Sandy Lane Enduro, held in the pine barrens of South New Jersey. Let me tell you what I really liked — this bike was set up for the rider. Before even firing up the motor, suspension sag was checked and set, as it should be, with me as the rider, in full gear. Rider sag was set at 100mm, something I would appreciate later in the day. Once suited up and into the woods, my first impression is how cleanly the TM was jetted. It ran crisp all throughout

the power band with not even the slightest bit of leanness. Brett from Bonjoe's had ridden this area just a couple of weeks before and set the bike up with a pair of Michelin StarCross 5 Soft (terrain) knobbies. This combination proved to work very well in the fine sand and loose loamy soil of South Jersey. Being from New England, I'll admit, I'm a bit of a fanatic on proper tire selection. Our terrain demands an entirely different approach to gaining traction. It's such a bonus to have had the expertise on hand to make the proper choices when needed.

Starting on row 42, there was a well-defined sandy, well-whooped trench leading our way through the Pine Barrens. This is where I really appreciated having the expertise or proper bike set-up. What this New Jersey rookie soon realized is what would be considered proper set-up for New England terrain would be a chore to deal with in the Jersey sand. The hard compound Michelin StarCross tires stuck like glue in the sand. I'll admit, being used to rocks and roots, it took a few miles before I started to trust the combination, but once I did, it was a magical experience. Another highlight that I didn't fully appreciate until deeper into this ridiculously tight enduro was the fact that Bonjoe's were adamant on setting proper rider sag. I'll admit, I was skeptical of only 100mm of sag, and was wondering if it was going to shake its head like a wet Labrador when the speeds picked up. Well the reality is the speeds never picked up during this event. It was an entire day of super-tight switchbacks, sawing the bars lock to lock for several hours. This set-up proved to be ideal. The lightweight 144 turned effortlessly and the tight fork rake was very well appreciated. With so much snow pack on the ground home in Maine, it had been several months since this guy had been on a bike. I was now very happy to be on such a lightweight ride; it wasn't wearing me out at all.

We got a decent break during the gas stop. Approximately 35 miles into the race, I met up with Brett from Bonjoe's. We briefly discussed how



everything was working. Other than some slight deflection on the sharp-edged pine roots, for a big kid, this little 144 was doing a fantastic job. Brett made a couple quick clicker changes and away we went. As the race progressed, the light-weight and easy-turning TM really began to shine. As a rider fully suited up at 235 pounds or so, all the components of the 144 were getting a work-out. Especially the clutch, it got flogged mercilessly but never complained. Even with my size 13 Gaerne's stomping the shifter like an angry moose, the gearbox never missed a beat with no false neutrals to be found. As the day progressed, the small bore continued to impress. Heavy guys on small bores can be problematic, but the TM proved to be a sturdy, durable mount.

At this point into this rather windy ride report, the most impressive trait of the TM144 was how much torque it had for a small bore. Yes, the clutch got fanned mercilessly, but it does have remarkable low-end torque for a small bore. During the second half of the event, what I thought was going to be a day of goat path riding through pretty pine trees was a brutal torture test of switchbacks and endless whoops. As the roll chart was nearing the end, I found myself actually riding a gear or two high and just twisting the throttle. This is where the electronically controlled power valve really shined. This is a small bore that can handle a fair amount of lugging. Nice when you're getting tired.

Riding the TM144 in the first race of the season

proved to be a real treat and renewed this guy's faith and interest in small bores. It's a featherweight that can be lugged and it absolutely loves getting its neck wrung. In fact, during the final straight and trying my damndest to make up lost time, I'm sure this little TM was revving so high only dogs could hear me coming!

I've always felt bikes are tools and there will always be the right or better tool for the job. For the Sandy Lane Enduro, I really liked this machine. It was a very tough, tight event and as I learned to trust it and just wring it out, it proved to be a great tool for this job. Incredibly durable and it really delivered.

In closing, there's no question the TM is in a different



Photos by Art Pepin





league. If you're a "dare to be different" rider, you'll really like the TM brand. Is it expensive? Some might consider it so, but for a hand-built quality machine, it's not ridiculously priced at \$8495 full retail. Surprisingly, for such a specialized, low production machine, parts pricing is very affordable. For example,

the hand-made billet rear brake lever retails for \$59.95, where an aftermarket billet lever for a competing brand retails between \$125 and \$179. TM's own rear sprocket retails for only \$41.95. Even though it might be considered pricey initially, it's actually right on par with maintenance costs of other mainstream brands. As exotic as the TM brand is, they are gaining in popularity. Aftermarket companies such as Pro X, Twin Air, Vertex, Wossner, Pro Circuit, EBC, Motion Pro and SMC offer replacement components.

#### TM144 Specs and Info:

##### MX144

19" Rear Wheel  
No Lighting Coil  
Lightweight Flywheel  
Ignition and powervalve mapping for peak performance

##### EN144

18" Rear Wheel  
Lighting Coil  
Heavy 12oz.  
Ignition and powervalve mapping less aggressive for softer power delivery

