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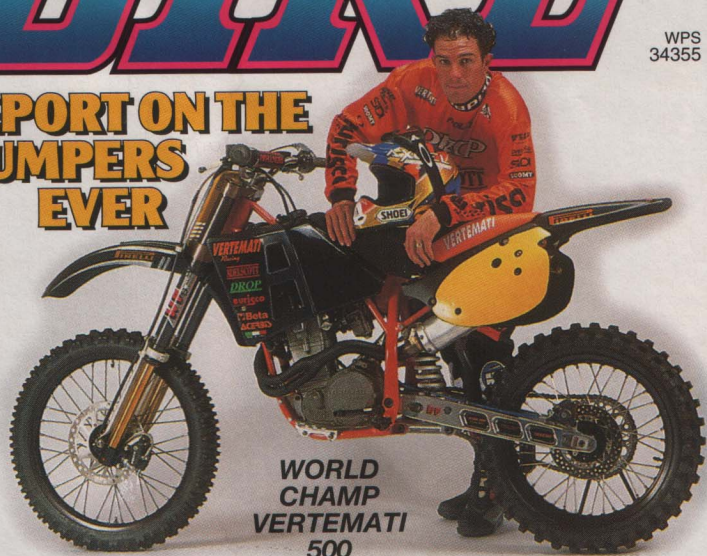
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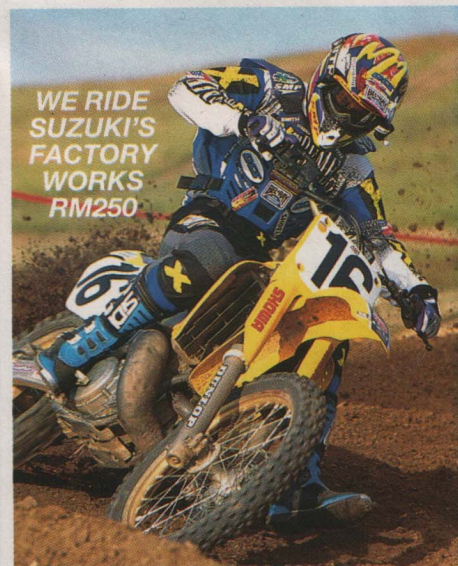
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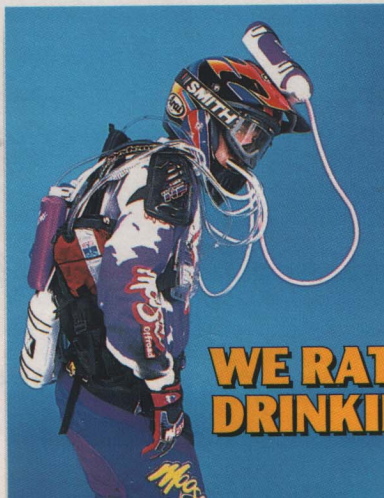


400cc 4-STROKE SHOOTOUT: HONDA vs. HUSKY vs. KTM vs. HUSABERG vs. CCM vs. SUZUKI!



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RARE BREED

And you thought a TM250 was weird

By the staff of DIRT BIKE

Can you imagine what goes on at Honda or Yamaha when they decide to come out with a new model? A list of the resources used must look something like this:

Meetings held: 126.

Memos written and faxes sent: 9944.

Copy machines worn out: 6.

Hours of telephone conversation: 10,299.

Conversations translated from Japanese to English, then back to Japanese, resulting in complete gibberish: 4100.

Employees terminated: 22.

Employees hired: 24.

Employees who go nuts and require heavy medication: 7.

Coffee consumed: 890 gallons.

Employees who feel like they have given birth to a grand piano afterward: 2900.

This, on the other hand, is what went on at TM when it decided to come out with the new 300 enduro:

Faxes sent: 2.

Content of faxes:

American importer: "Is it possible to make a 300cc enduro bike?"

Factory: "How many would you like?"

Small companies work differently.

WHAT DOES TM STAND FOR AGAIN?

TM, if you remember, is a group of Italians who got together on a weekend and couldn't decide what to do after the card game. So they started a motorcycle company. At first they gained notoriety for building full-size 80cc enduro bikes. Remember when Poland won the ISDE a few years ago? Probably not, but the Poles sure do. They did it by putting almost their entire team on TM 80s and dominating that class. Since then, TM has gotten into GP motocross, and American Chris Smith turned a few heads when he was top American in the 125 class at the ISDE last year.

The TM 250 came into being in '94, and now the 300 is a logical outgrowth of that. The bike is, in fact, identical to the 250 except for the piston bore. That does

you no good if, like 99% of Americans, you have never seen a TM 250, so a description is in order. The bike is virtually a works machine. That means it's hand-built. Robots don't weld the frame together, Italians do. The engine cases are rough-cast, just as prototype Japanese bikes would be—only that's the finished product in TM's case. The smooth, die-cast cases that you see on Japanese production bikes are only practical if it will be making thousands of units. TM might make hundreds.

The motor is similar to that of a Honda. No big deal—so is a new Suzuki. In fact, a Honda piston will fit into the 250. For

the 300, TM found a piston that is 6mm larger. The engine already had a counterbalancer, which made it easy to squelch vibrations caused by the bigger piston.

A counterbalancer on a two-stroke might be unusual, but what makes the engine really strange is the hydraulic clutch. The left side of the handlebar has a master cylinder, just like the brake on the right side. A hose transfers hydraulic fluid to the engine, where it lifts the pressure plate off the Honda-like clutch plates.

Most of the components look pretty cool and works-like. The triple clamps, hubs, brake lever and odd parts are all machined from billet aluminum. Then there's



Hard hitter: The TM hits harder than a works 125 motocrosser. It's kind of fun. ►

the fuel tank, which is a massive aluminum work of art. It's a shame they defaced it with comic-book pink radiator shrouds and so-so graphics. Suspension components are by Ohlins and Marzocchi.

TERRIFYING MIDRANGE

So how does a 300 compare with a 250? It's faster! This is a little scary because the 250 already was just about the fastest enduro bike you could buy. The 300 gained a little more torque way down low (barely above idle) and gained a bunch in the middle of the powerband. When the bike hits that midrange burst, it really takes off. The wheel spins, the front end comes up, and the bike takes off. After all that happens, you get a little breather, because the 300 runs out of revs quickly. However, no other bike we have tested in years hits as hard and with as much intensity in the midrange. When the TM is on the pipe, we can't imagine any enduro bike, 250, 300 or 360, that could keep up.

As you might guess, dealing with that sudden burst of power requires some getting used to. If there's traction, no problem. You get the bike in the meat of the powerband, yank up on the shifter and watch the scenery go by faster and faster. If the traction isn't as good, then you have to learn to be good with the clutch. You keep the revs up and try to control wheel-spin with the clutch. With most bikes the clutch would go away instantly, but the hydraulic engagement makes things much more consistent. Free play doesn't increase as the clutch heats up, so you can dish out a lot of abuse.

So with such a hard-edged powerband, you would think that the TM would be almost impossible to ride in super-tight, difficult situations, right? Wrong. The tighter and slower the obstacles, the better the bike works. Like we said, the power right above idle is great. Down at that level, the TM is a virtual trials bike. You can climb up rock piles and never lose traction. Unlike riding the bike fast, you never have to touch the clutch; in order to stall the engine, you have to deliberately try to do so. The bike has two distinct and almost contrasting personalities. At speed, the bike is a rocketship shifting into hyperspace. At low rpm, it's a Sherman tank. The TM isn't interested in dealing with anything between the two extremes.

TM 300E



Engine type	Case-reed, liquid-cooled 2-stroke
Displacement	294cc
Bore and stroke	72.0mm x 72.0mm
Carburetion	38mm Keihin
Fuel tank capacity	3.5 gal.
Gearing	13/51
Lighting coil	Yes
Spark arrester	No
EPA-legal	No
Running weight w/no fuel	243 lb.
Wheelbase	58.7" (1490mm)
Rake/trail	NA
Ground clearance	15.2" (385mm)
Seat height	37.8" (960mm)

Tire size and type:

Front	90/90-21 Pirelli Sandcross
Rear	140/80-18 Pirelli Garacross

Suspension:

Front	Marzocchi conventional, adj. comp./reb., 12.2" (310mm) travel
Rear	Ohlins aluminum piggyback, adj. prel./comp./reb., travel NA

Country of origin	Italy
Suggested retail price	\$6750 (approx.)

Distributor/manufacturer: Motoman
P.O. Box 1037
Chino, CA 91762
(909) 391-3278

PARTS REPLACEMENT COST

Piston set	\$189.00	Clutch plate (driven)	8.46 (7)	Rear sprocket	59.95
Rings	29.58	Air filter	20.00	Front brake pads	33.01
Clutch plate (drive)	12.20 (8)	Front sprocket	41.46	Rear brake pads	37.76

TERRAIN MANAGEMENT

When it comes to handling, the TM does two things extremely well. It goes straight and has a cushy ride. Those two things usually contradict one another. Usually bikes with soft suspension do everything except go straight. The Marzocchi fork is a lot like that on new KTMs, except maybe a little softer. The stock spring rate is about 0.40 kg/mm, and we wouldn't hesitate to increase that to an 0.44 or so. Stock, the bike is great in slow stuff, when you are fighting through roots, rocks and trees, but it's easy to hit bottom at faster speeds. The rear is similar. The stocker is easy to bottom on a GP or MX track, but just fine at jungle warfare.

Even with soft springs, though, the TM is a super-stable motorcycle, even compared to other super-stable motorcycles like a Yamaha WR250. The TM's front end absolutely, positively stays put and doesn't headshake without extreme provocation. The TM has more going for it than a lack of headshake, too. The bike always holds its line and never does anything spooky.

It even turns reasonably well. It holds its line and handles ruts extremely well. Its biggest disadvantage is the size of the fuel tank. It might be an aluminum work of art, but it's big and makes the seat go straight up in front. That means you can only get so far forward before you run into a wall. Then you have to move your weight forward by bending at the waist.

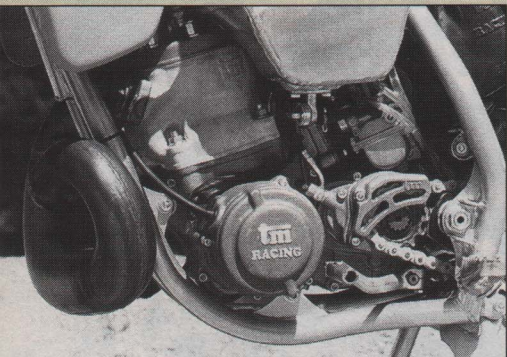
Another thing about aluminum fuel tanks: even though there is an inch or so of seat padding between you and the tank, the unflexing aluminum still is rather hard on the more tender parts of your body.

TELL MORE

Okay, here's the staggering part. Yes, the TM is the fastest, softest, most stable and most exotic enduro bike you can buy. It's also the most expensive. The price starts at \$6750, then you add \$150 for the large gas tank. If you only need a two-gallon MX tank, forget that part. Then you have to get rid of the stock rear rubber, which is a Pirelli Eco tire. They are required in Europe, but are almost useless for anything except a tire swing here in the U.S. Then you make the fork and shock stiffer. If you are tall, you will need a taller seat. Stock, the TM is a little cramped—no worse than an RMX, but certainly not spacious. If you absolutely can't handle the hard hitting midrange, try a Dynoport pipe. That smooths things out considerably. By the time you are done, you can easily spend about \$8000 for a two-stroke dirt bike.

Of course, that's part of the appeal of a TM. If you spill that kind of change, you are guaranteeing that you will be the only TM rider on your block. You might even be the only TM guy in your state. If that appeals to you, then go for it. We can only tell you if a motorcycle is good or bad—the TM 300 is good.

We can't, however, tell you if you can afford one. □



How did this bike come into being? The U.S. importer asked the factory if building a 300 was possible. It was.