

# 125 CHALLENGER

# SUZUKI TM



Slim-line Suzuki forks work well up to a point. That point being speed. Alloy rims help keep unsprung weight down.

When Suzuki first announced that they were going to introduce a 125 motocrosser to complete their line, many Suzuki Duster owners across this land sat down and cried. They had spent their time and money on better suspension components, porting, carburetors, tuned expansion chambers, trick mufflers, and frame lowering kits trying to make their machines competitive. Now, their adoptive company was dropping the proverbial bombshell on them. Many Duster owners had invested well over \$1000 in their machines in an attempt to make them competitive with the European small bores, and superior to other Oriental equivalents. Was it for naught?

Maybe not.

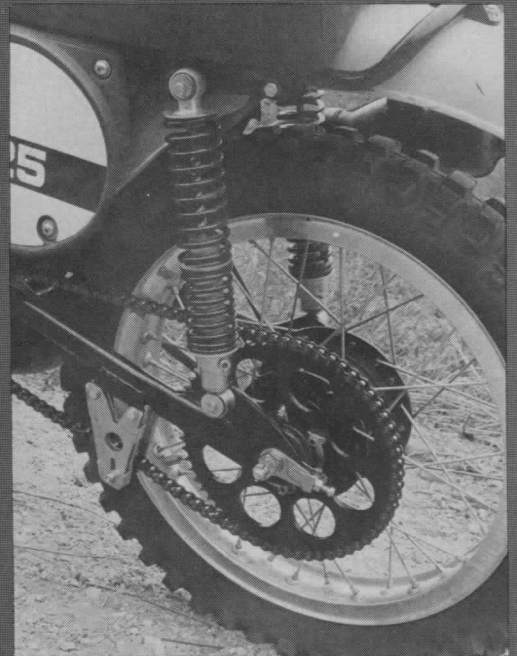
The Suzuki TM125 is a competitive motorcycle. It can win, but it all depends on the track it is competing on. In stock motocross trim the TM125 is one of the best TT machine in its class, losing only to Bultaco's easy sliding Pursang. The TM thrives on tight twisty courses without too many irregularities. It is an extremely quick handling motorcycle with a short wheelbase, and twitchy-quick manners. Flicking the Suzuki in and out of corners is no problem at all. It is difficult though, to get the machine to behave predictably in nasty terrain.

As has, until recent times, been the practice with Oriental small bores, the Suzuki has been fitted with poor suspension. It isn't all that bad, it's just that it can't compare to the current crop of machines coming in from Europe, nor the newer motocrossers (i.e., Honda) from Japan. The forks, though having nearly six inches of travel, are underdamped and have tendencies to top and bottom out. The latter phenomenon occurs with frustrating regularity.

Due to the steep fork angle, the bike takes smooth corners like it was on a rail. No washout. Yet the forks will allow the 21-in. front wheel to clatter across the chosen line in less than ideally smooth turns. But what the front end is doing is not nearly as disconcerting as what the back end does. It kicks and bucks worse than an outlaw horse at a midwestern rodeo.

Through smooth bends the TM125 is as tame as a two-week-old kitten, but don't

Far from perfect, but at the price, who's going to notice?



Shock absorbers had good dampening characteristics but were oversprung. Swinging arm should be longer. Chain guide is a welcome asset.

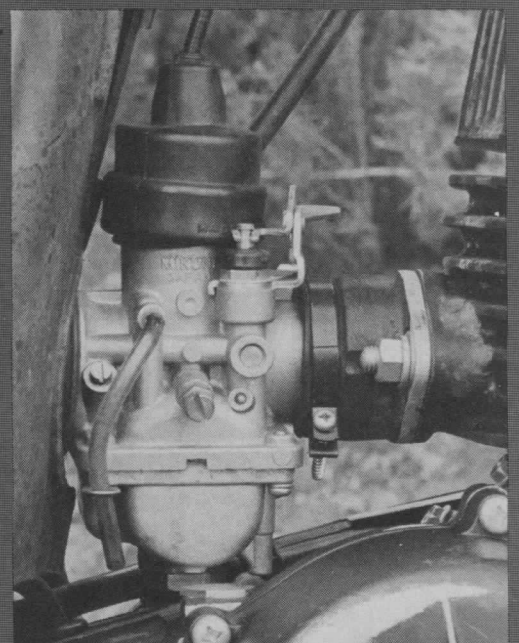
Compact engine unit is mounted high in the chassis. Clutch housing gets in the way while riding and the paint won't last more than a half hour.

ake it fast through one rough stuff or you might find your ear full of dirt. Dampening action of the shock absorbers is good, but the spring rates are too stiff. Maybe if Haystack Calhoun were to ride a TM he would like the shocks, but he's got about 400 lb. on most of us.

Another area where we felt the TM could be improved is in the swinging arm. In its stock length, the arm contributes heavily to rear end hop. The arm could stand to be an inch-and-a-half to two inches longer. This would alleviate much of the rear end pitching, and if the shock absorbers were to remain attached to their standard mounts, they would provide enough leverage to make the stiff springs of some use. Now that we've lambasted the faults of the Suzuki, let's tell you what it is about this little machine that made us start that third paragraph the way we did.

The frame is built like Fort Knox. If a motorcycle has excellent suspension, it is sometimes difficult to tell just how strong a chassis is because all abuse is absorbed by the suspension and little strain is transferred directly to the frame. But when, as in the case of the Suzuki, a motorcycle has questionable suspension, most of the punishment dished out by a rough track must be absorbed by the frame. The Suzuki's backbone gobbled up the punishment and never whimpered. The single downtube, split cradle arrangement keeps everything in place and working well.

Its flat black engine makes the Suzuki a flyer. Producing a claimed 18 hp at 10,000 rpm puts it in the same high rev category as the Bultaco we tested last month. There is no doubt the engine wants to spin. If you try to lug it down it will protest and load up. Cleaning it out is easy, but time-consuming. For this reason, Suzuki fitted the TM with a set of five, tightly spaced gears. Ratios are ideally spaced to the engine's powerband. First gear is tall, necessitating clutch slippage for quick starts, though lighter (120 lb. and lower) riders can just rev it up and drop the hammer. The Suzuki will scamper away. The transmission shifts in a manner that has become standard on most Japanese motorcycles. Positive, clutchless shifts are possible only if the throttle is rolled back during gear changes. It will not upshift under power no matter how hard



Mikuni carburetor, at 26mm, is small for such a high revving engine. A larger jug might earn you a few extra beans on top end.

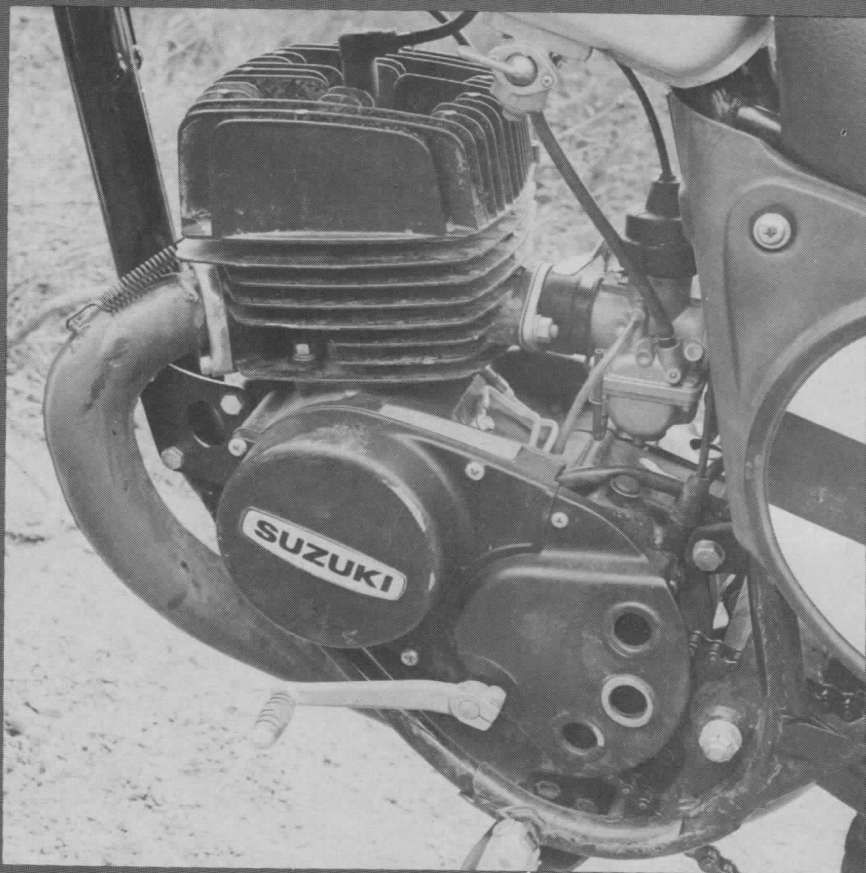
Exhaust port routes pipe past the left side of the single downtube. Transmission had to be shifted deliberately. No false neutrals were encountered.



Tiny front brake stopped the TM quickly. There was a great deal of cable stretch however. The rear brake doesn't work as well.



Design on the 125 follows established TM styling lines.



you try. If the bikes from Japan only had this one bug worked out, their transmissions might be considered the equal of many European trannies in performance, rather than inferior. Downshifting is another story. Press the lever, anytime, under any circumstances, and the next lowest cog is engaged.

When styling the TM125, Suzuki obviously decided to stick with the basic scheme that has brought them so much success with their larger MX machines. The yellow tank with its dark green stripe is complemented by yellow fenders and black striped side panels. Behind the right side panel (which also doubles as a number plate) is the oil injection tank. Most serious racers trash the injection system on the Japanese motocrossers and run pre-mix. With the Suzuki it is not possible to do this because the oiler not only lubricates the cylinder and its internals, but the main bearings as well. The mains are lubricated by direct oil flow rather than by a mist in the combustible mixture. One of the reasons that oil pumps are removed on some racers is weight. A few extra pounds off some motorcycles can mean a lot to a competitor. But weight is not of major concern on the Suzuki. Our official PC scales show that the bike tips in at 203 lb. with a dry tank. That makes it one of the lightest 125s around. The Takasago rims (a Japanese copy of Akronts) are strong and help keep the weight down. They do, however, come with mud trapping ridges.

Footpegs and the rear brake lever are of poor design. The pegs fold but are not spring loaded nor are they properly ridged. These faults would not be so notable were the Suzuki a better handling motocrosser, but in the rough it takes quite a bit of effort to stay atop the little screamer and the pegs by no means add to the rider's need for security.

When you take the Suzuki around a course, there are certain items which come under the head of Ultimate Importance. 1.) The easiest way to accelerate without having to fight the bike is to gas it *between* potholes. When you come to a pothole, neutral throttle it through. And be careful through whoopdies. 2.) Fear no corner. Even though the rough ones will be a handful, the Suzuki, thanks to its lean fork angle and meager 52.6 wheelbase, corners superbly. 3.) Don't jerk up too hard when leaping off a jump or you'll find yourself staring into a spinning front wheel. And 4.) Buzz the living heck out of it. The mill thrives on abuse.

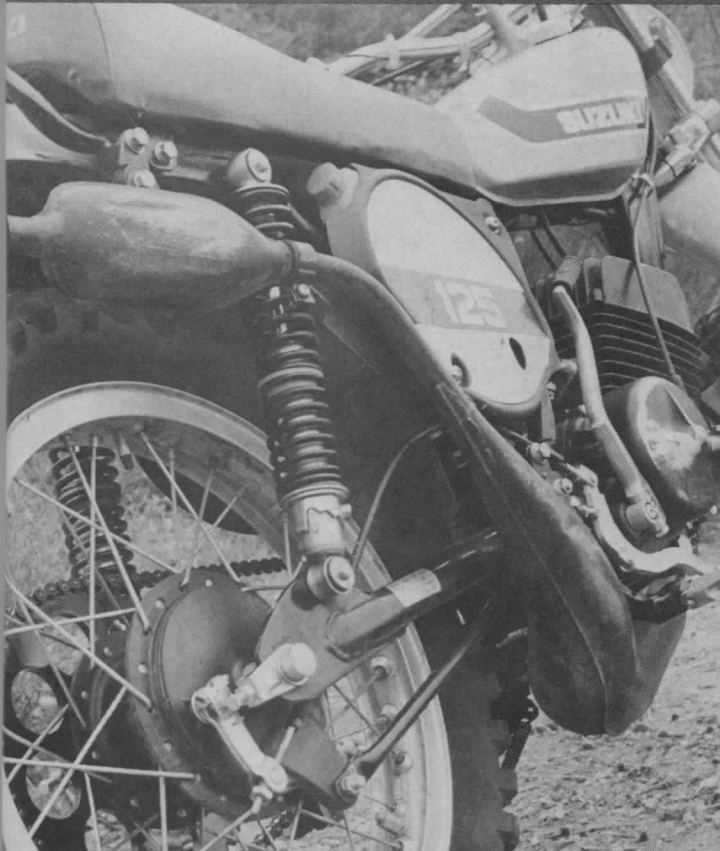
There is, of course, one item which will make the difference to many racers. The price. With all of its attributes, and its own share of drawbacks, the Suzuki TM125 Challenger retails for just \$636.

As we said, as is, on certain tracks, the TM125 can win. But if you have more than \$636 to spend, you can take a TM, extend the swinging arm, purchase a new set of shocks, and rework the forks. You would then have about \$750 invested and would have a fine handling, corners on a dime, faster than a speeding bullet, 125 motocrosser. What better purpose for 7½ bills?





Although inexpensive looking and poorly designed, both footpeg and brake lever are strong.

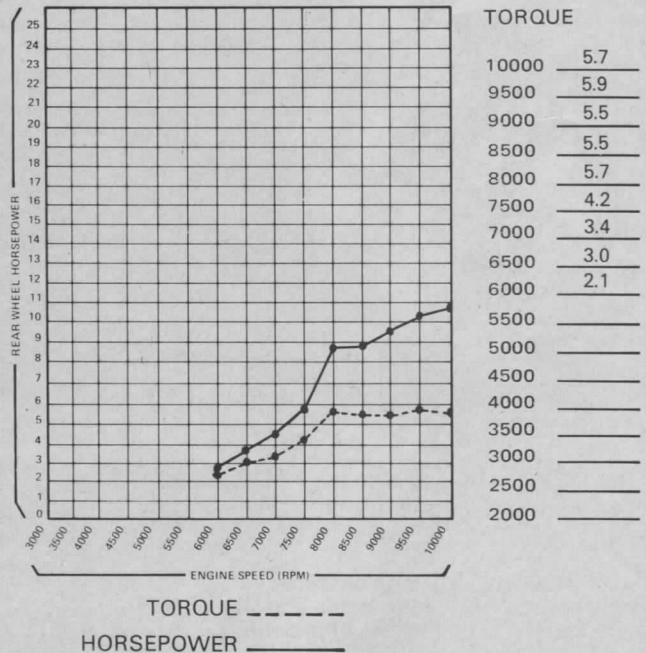


Low slung exhaust pipe is extremely vulnerable to damaging elements. For desert use, a skid plate would be warranted.

SUZUKI TM125 CHALLENGER



DYNAMOMETER TEST REPORT



SPECIFICATIONS

<b>PRICE</b>	<b>TRANSMISSION</b>
Suggested retail . . . . . \$636	Speeds . . . . . five
<b>ENGINE</b>	Primary drive . . . . . gears, helical
Engine type . . . . . two-stroke, piston-port, single-cyl.	Clutch type . . . . . wet, multi-disc
Horsepower/rpm . . . . . 18/10,000	Final drive . . . . . chain 3/8 x 1/2
Torque/rpm . . . . . 10/8000	<b>CHASSIS</b>
Bore and stroke	Length, overall, in. . . . . 79.1
in. . . . . 2.20 x 1.97	Wheelbase, in. . . . . 52.6
mm . . . . . 55.9 x 50.0	Ground clearance, in. . . . . 7.9
Displacement	Weight, overall, lb. . . . (actual) 203
cu. in. . . . . 7.5	Frame type . . . . . single downtube, split cradle
cc . . . . . 123	Tire size
Compression ratio . . . . . 7.5:1	front . . . . . 3.00-21
Carburetion . . . . . 26mm Mikuni	rear . . . . . 3.50-18
Ignition . . . . . PEI	