

TESTING THE SUZUKI 125 MOTOCROSSER

The Suzuki 125 is a Very impressive bike. Now 125cc motocross is a head-to-head battle between the Suzukis and Elsinores!

■ Racing successes are usually obtained only by expending huge amounts of money, and the profit-and-loss statement of most companies that participate require that some of this money be returned to the company through increased sales. Technical innovations are incorporated into machines and an effort is made to make the machine's appearance as much like its factory counterpart as possible. In some cases, these replicas are pretty near identical to the factory original, but others are not. This can be explained in one word — money. How much is the buyer prepared to spend? There are a greater number of buyers in the \$700 bracket than there are in the \$1100 bracket, and it is at the former that the Japanese seem to aim their advertising campaign. No one would argue with the fact that you get what you pay for in this world, and it is impossible to get a Rolls Royce at Ford prices. However, the Ford does just as good a job of transporting you around as the Rolls, but of course the manner in which you are transported is different.

Even with dollar devaluation, the Suzuki TM-125 is still an inexpensive motorcycle. It is well finished and quick, and with a good rider aboard will undoubtedly give a good account of itself, but compromises have been made in holding down the weight and keeping the price down.

Our test was conducted with a 170-pound rider, and we think this is a



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For the price, the 125 Suzuki is a real value and spare parts are reasonably priced. With a little more feedback on frame geometry coming from the racing program, this bike could be running consistently in front of its higher-priced competition.

little too much weight for a lightweight 125. To obtain the maximum potential from the machine, a jockey of 150 pounds maximum would be a fairer test.

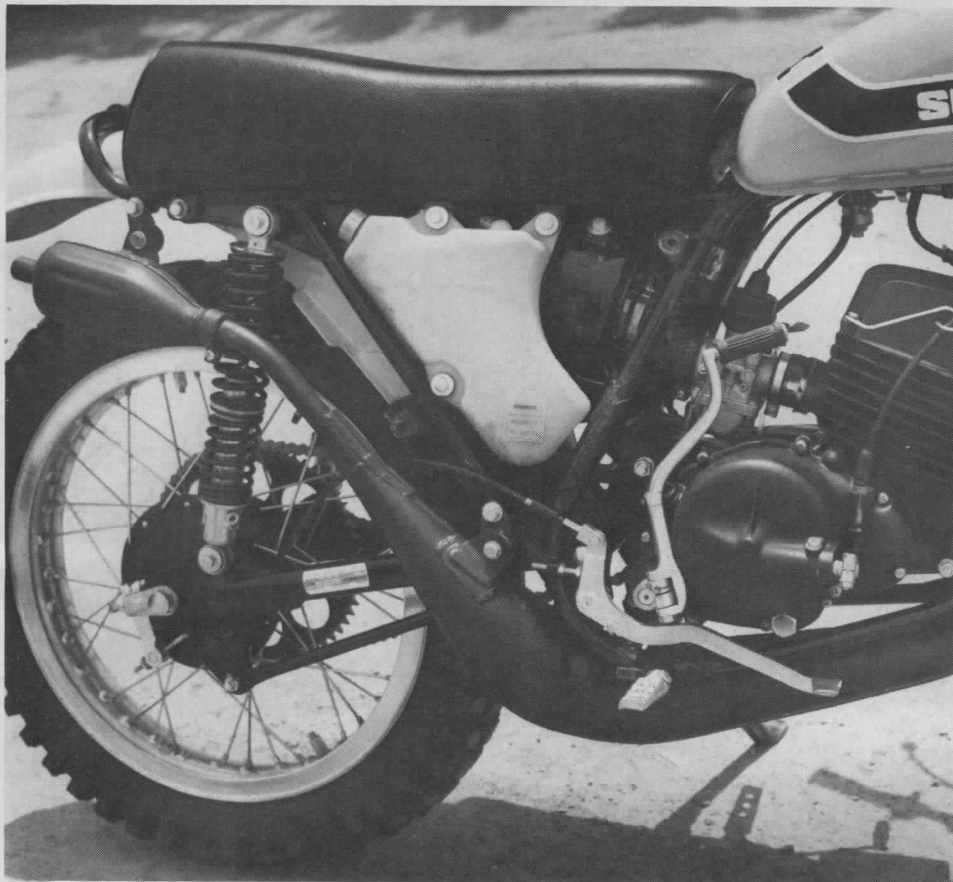
The TM-125 weighs in at around 189 pounds dry, and is probably one of the lightest 125's sold. The appearance of the bike is similar to that of the larger versions, which in turn resemble the works machines of Joel Roberts and Roger DeCoster. The frame has a single down-tube splitting into two beneath the engine and looping around the en-



gine to form a cradle. It would appear that saving weight on the frame has been a primary concern of the designers, since small-diameter tubing has been used for the cradle around the engine and the rear subsection. The single front down-tube is quite a large section, and well-gusseted to the strong head. Our 170-lb rider, upon inspecting the bike, expressed concern about the swing arm and footpeg mounting. The swing arm is a narrow oval-section tube. The cast alloy footpegs are bolted to a boss which is welded to the small-diameter engine cradle tubes, and like the swing arm does not look up to the job of taking the rider's weight after a jump. No problems were experienced with either item, however, during our test. The Japanese are at last copying the European manufacturers' brake pedal design. The brake pedal on the TM-125 is a metal strip with a small tab weld on the end. It is well-tucked in, easily operable, and in the event of a spill it would not damage easily.

The gas tank is steel and has a capac-

There are no problems with jumping this machine. If it is lined up straight, it stays straight and will come down straight.



ity of only 1.3 gallons. It's very narrow, enabling the rider to really lean the inside knee against the tank when cornering. The seat is well-padded, but we found that after only 20 minutes or so the inside of the rider's legs begin to get chaffed. This may be attributed to the handling, to be discussed later.

The front brake hub is a very neat package, painted or anodized black. It has a striking appearance against bright alloy rim and spokes. We were surprised to find that both wheels were shod with Akront alloy rims, made in Sweden. The front wheel size is 21 inches and takes a 3.00 Japanese tire.

The fork yokes are both polished alloy and sit atop a pair of forks with 5.7 inches of movement. An owner of the new TM-125 told us that the front spindle retaining nut came loose on previous models, but assured us that this has been licked on the 1973 TM-125. The sloping seat tends to ensure that the rider sits right up against the tank, and in this position the handlebars and controls are extremely comfortable. If, however, the rider is six feet tall or more, he may find the seated position uncomfortable because the knees are tightly bent, and must compensate by moving further back on the seat.

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black strip with the number 125 on it was not stuck on to the white area of the plate, but rather, the number is part of the white area. Thus it is impossible to put the rider's stick-on riding numbers on the plates without first either peeling off the complete oval and painting the area white, or making a new oval from white adhesive paper and sticking it in place. This should not be the case, since on a racing machine one expects this area to be left clear for numbering.

The oil tank holds just over a pint, and the oil pump delivers the oil very sparingly so it should be necessary to check the level only before and after a day of racing. The paper air cleaner element is susceptible to water penetration, and care should be taken in tackling wet sections of a motocross course.

The rear hub, like the front, is black, and the rim carries a 3.50 x 18 knobby tire. The Japanese shocks have five adjustable spring rate positions. Overall the TM-125 is an attractive bike with a



The little Suzuki engine will rev up to 10,000. At first, this may worry the rider, who may fear that it is about to blow. But it goes right on up.

black frame, bright yellow gas tank and yellow plastic front and rear fenders.

The owner's manual for the TM-125 has an excellent section called "Racing Tune-Up" which deals with carbureting the bike. This section was closely scrutinized when it became difficult to get the machine to run after repeated stops. At the bottom end the engine loaded up, and even with the tap turned off took two or three minutes to clear. When finally cleared, the gas tap could be turned on and the machine ridden away as long as the revs were kept high. Once underway, the carburetor was perfect in the middle and upper end of the rev band. Our first thought was to check the float level. This was what the in-

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structions said it was but adjusting the pilot air screw and throttle stop greatly improved the bottom end.

This little Suzuki engine will rev to 10,000 rpm and at first this is a little disconcerting to the rider, for it seems that the engine will explode as the revs keep building. While all this action is taking place in the engine, the rider keeps hooking up a gear, and in top gear this machine is really moving. Like all lightweight 125s it is possible to go through everything with the throttle as wide open as possible. The bike will bounce from rut to rut and bump to bump, and the most of the time you'll get away with it.

Even with a 170-pound rider aboard, performance is good down the straight, but leaves a little to be desired when cornering. This we believe may be due to our tester, who is on the wrong side of age 30 and does not believe in the good old U.S.A. method of cornering. This method of cornering (or perhaps we should say the southern California method of cornering) consists of smashing the machine at a high rate of speed into a berm, throwing up lots of sand, then coming out of the corner with the rear wheel completely without traction and the front wheel in the air pointing at the crowd. However, we found this method of cornering can be fun, providing you enjoy a high pulse rate and don't mind coming off once in a while.

The design of a 125 lends itself well to this technique, and the TM-125 is no exception. The wheelbase is short at around 52 inches and the weight is low, the majority of it located toward the rear wheel. A 3.50 x 18 rear tire is recommended. A small machine has to be ridden on the pipe, and consequently the rear wheel breaks loose very easily. As already mentioned, the riding position on the Suzuki is right up against the tank, but if the rider sits toward the rear of the saddle the front end becomes airborne too easily. We think the extra half-inch width of a 4.00 x 18 tire, or a longer swing arm, would help the grip problem.

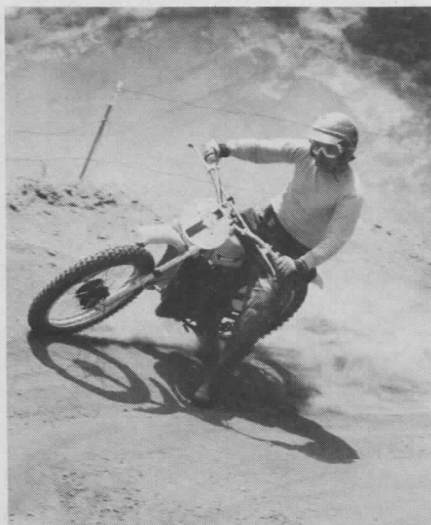
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The brake pedal on the 125 is a metal strip with a small tab welded to the end. It is well-tucked-in, easy to operate, and in the event of a spill would not break easily.

stays straight and comes down straight. We avoided extremely heavy landings since the rear shocks and forks tend to transmit the force of the landing to a heavy rider, and a 125 motocrosser is best suited for someone around that 150-pound mark. The brakes are more than adequate in scrubbing off speed and neither brake locks under the heaviest braking. The gearbox is almost flawless, the only fault being that it is possible to find neutral when changing higher gears. The reason we don't know which gear is that in gearboxes with five or more speeds we can never remember what gear the machine is in. The secret is to keep hooking up the pedal until

Like all lightweight 125s, it is possible to go through everything with the throttle wide open. Traction was generally good, but it could use another half inch or so of rubber on the rear.



The handlebars are as spare as you could ask for. The kill button can be found on the left side. Note the slim tank.

there is nothing left and stomp on it if the engine starts to go off the pipe.

For the price, the TM-125 is undoubtedly a good value, and spares are reasonably priced. However, although the Suzuki designers have obviously learned a lot — from the experience of Joel Robert and Roger DeCoster on the race track — about what is required to create a top motocross machine, only a portion of this information is finding its way into the production machines. When more feedback on frame geometry is built into the production models, the TM-125 will be capable of consistently running in front of its more expensive counterparts. ●

The bike will bounce from rut to rut and bump to bump, and you will usually be able to get away with it. The 125 is an impressive motorcycle, well finished and quick.





BASIC SPECIFICATIONS

Price	approx. \$ 636.00
Engine	
Type	single cylinder, 2-stroke
Bore56mm
Stroke50mm
Cubic centimeters displacement	123cc
Carburetor size & type	VM 26 SC Mikuni
Ignition system type	pointless electronic ignition
Lighting system type	NA
Air filter size & type:	paper filter
Gearbox	
Overall ratio, first	31.00
Overall ratio, second	23.1
Overall ratio, third	18.12
Overall ratio, fourth	15.22
Overall ratio, fifth:	13.23
Overall ratio, sixth	NA
Shift pattern	one-down, neutral, four-up
Can be kick-started in any gear?	yes
Dimensions	
Wheelbase	52.6 inches
Weight	189 pounds
Front tire size & tread	3.00x21 knobby
Rear tire size & tread	3.50x18 knobby
Length	79.1 inches
Handlebar width	36.8 inches
Ground clearance	7.9 inches
Fuel capacity	1.3 gallons
Engine oil capacity	1.2 pints
Details	
Folding footpegs?	yes
Self-cleaning footpegs?	yes
Tire-to-rim clamps?	yes
Alloy rims front & rear?	yes
Handlebar-mounted kill button?	yes
Speedometer?	NA
Odometer?	NA
Odometer read in tenths?	NA
Odometer resettable backwards?	NA
Tachometer?	NA
Muffler?	yes
U.S. Forest Service-approved spark arrestor?	no
Head & tail lights?	NA
Brake light control-actuated switches?	NA
Horn?	NA
Fuel tank material?	steel
Front fender material?	plastic
Rear fender material?	plastic
Full-floating rear brake?	no

Performance Specifications

Weight with 165-lb. rider and full tanks	363 lbs.
Rated horsepower @ rpm	NA
Pounds (with rider) per horsepower	NA
Pounds (with rider) per cubic centimeter	2.87
Number of speeds in transmission	5

Handling Specifications

Weight distribution, % front/% rear	56/44
Center of gravity (approximate)	
Crankshaft center to ground	15.75 inches
Crankshaft center to rear axle	26 inches
Footpeg to rear axle	19.75 inches
Footpeg to ground	12 inches
Front suspension	
Steering head angle (rake)	30 degrees
Trail (axle setback from steering axis)	5 inches
Fork travel, compression	5.7 inches
Fork travel, rebound	5.7 inches
Rear suspension	
Swing arm length, pivot to axle	17 inches
Swing arm pivot to ground	15 inches
Swing arm pivot to crankshaft	9 inches
Rear chain run (countershaft sprocket to rear axle)	21.5 inches
Shock travel, compression	3.5 inches
Shock travel, rebound	3.5 inches
Height of seat from ground	31.5 inches
Length of seat	21 inches



Performance & Handling Opinion
(rated 1-to-10 on a scale of 10)

Power (within displacement class)	9
Ability to maintain rear wheel traction	7
Vibration	9
Ease of starting	6
Ignition waterproofing	9
Air intake & carburetion waterproofing	7
Oil leakage	10
Fuel leakage	10
Front fork dampening	9
Tendency of front tire to skid in turns	9
Ease of lifting front wheel with handlebars	9
Steering response to effort at handlebars	9
Rear wheel tendency to lock up or hop when braking	9
Rear shock absorber dampening	8
Stability in deep sand or mud	7
Seat padding and comfort	9
Convenience and operation of controls	10