YAMAHA'S NEW TRAILMASTER 100



By Patrick Keating

Although "trailbikes" in the true sense of the word have only been on the cycle scene a brief time, there is a vast difference between Yamaha's newest entry in this category, the "TRAILMASTER 100," and early models.

The first bikes to take to the hills and dales were street bikes plain and simple. But when the riders discovered how much fun it was to ride "in the rough stuff" they started making modifications to their mounts to improve handling characteristics and vibration problems.

The influence of these first trailriders was readily seen in the first bikes manufactured specifically with trailriding in mind. They had knobby tires, lower gearing for greater traction, stronger suspension, and were lightweight, small displacement machines. As trailbikes became an increasingly large and important part of the overall market, riders became more sophisticated. They wanted more and more features not previously offered. And with the keen competition of many brands on the market, they have been getting what they want.

started making The "ultimate" can never be REPRINTED FROM CYCLE GUIDE MAGAZINE

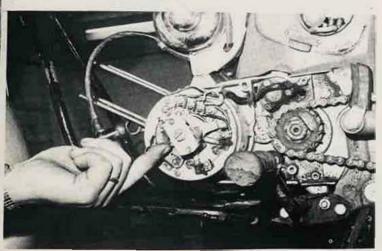
reached because there will always be new ideas, new improvements, new technological advances. That's progress. But Yamaha's new single cylinder 100cc trailbike is, to our way of thinking, coming close to the ideal.

Yamaha's Trailmaster 80 (which the 100 replaces) really helped put the company on the map. It was tremendously reliable and amazingly rugged. You could almost drop it off a cliff, go down and pick it up and continue riding. But riders still found ways to improve it. They mounted larger wheels, put on different fork plates to give a longer fork rake and those that were more concerned with speed than reliability installed Yamaha's "GYT KIT."

So when Yamaha sent the proto-

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Twelve-volt System is new Yamaha feature. Big battery has ample reserve and lights are bright when engine is not running.

Wheels of new 100 Trailmaster are 18" diameter. Rugged knobbies are 3 inches wide. Front forks have greater travel than 80cc model.

Spark mechanism in Trailmaster's ignition system is displayed. Starter/dynamo is employed.

type of its new 100 trailbike to its United States branch for testing and evaluation they realized that the Americans might have some features they wanted incorporated before production. The prototype was turned over to a new research and development headed by former district manager Jack Hoel. Hoel, with the help of several test riders, a designer from Japan, warranty manager Tony Murphy and George Lanyon, a district manager, put the bike through its paces and practically rebuilt the prototype at Yamaha's U.S. headquarters.

When the bike was sent back to Japan a scant two months before production was to begin, none of the Americans believed the factory would be able to incorporate all of their recommendations for perhaps six months or a year, if then.

But to their delight, when the prototype, as it would be produced, was returned to the United States all of the sweeping changes they had requested had been incorporated into the new model. The result was "A bike built to fit the American rider" as Jack Hoel puts it.

Features that make the 100 Trailmaster so nearly ideal are numerous. The engine is an improved and larger version of the rotary valve two stroke engine used in Yamaha's eighty, not just a larger bore, but a bigger huskier unit—none of the parts are interchangeable. And of course it has the convenient oil injection system which has proved to be efficient and reliable. Its larger wheels with heavier duty rims carry 3.00 x 18 inch knobby tires as compared to the 2.75 x 16 inch knobbies on the old eighties. And the extra two inches combined with a new and better frame give the 100 much better ground clearance (around 9 inches) than its little brother. It has longer forks with greater shock travel, and they are covered with rubber boots for greater protection from dirt and the elements.

Other niceties are things like the new skid plate which is mounted to the frame rather than the engine, a three quarter seat, a chain guard device which not only helps the chain run true but also prevents the center



Rubber sleeves protect front fork springs in Yamaha. New bike was designed particularly for U.S. market.



Trailmaster does not have rocker-shift lever. Four speed gearbox is same as used on 100 Twin.



Chain guard is much appreciated item on 1967 model. Chain is protected from center stand also.

stand from hitting the chain when a rough bump is encountered, and a very important feature, a dual rear sprocket which can quickly be changed to accommodate the rider's nceds. The four speed transmission is the same as the one employed in Yamaha's Twin Jet 100 and shifting is much surer and smoother than on the eighties. Also the foot-heel shift which used to bother dirt riders has been eliminated. A real convenience to dirt riders is the fact that the bike can be started in any gear mererly by disengaging the clutch. This eliminates things like hunting for neutral when stalled on a steep hill. An up-

swept pipe with spark arrester is used. The electrical system is 12 volt battery-generator and it has the convenience of electric starting.

Handling on the bike can only be described as superb. An experienced rider could make the Yamaha Trailmaster 80 do most anything he wanted. It was a most forgiving bike, compensating for his mistakes. But the 100 is much better. You have to ride it to believe it.

The Trailmaster 100 looks bigger than it actually is and it performs the same way. With the small rear sprocket it will peak out at around 70 mph



Jim Salisbury Yamaha service instructor examines engine of Trailmaster. Powerplant is all-new, shares no parts with 80cc predecessor.

wind, surface of ground, and other variable factors. The larger sprocket will slow it down about 15 mph but with it a rider can take on the steepest hills with confidence.

I could find very little to criticize on the 100. I personally prefer a tubular frame to a pressed steel one An up- depending on the size of the rider, but this factor is more a matter of REPRINTED FROM CYCLE GUIDE MAGAZINE

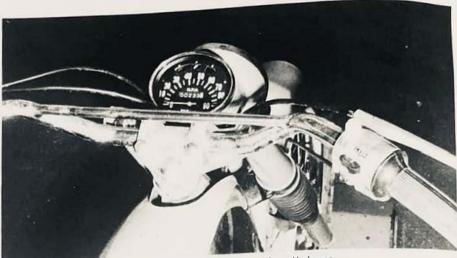


Street and trail sprockets are paired on rear wheel. With low gearing 100's engine will turn high enough to achieve 55 mph; 70 mph is possible with street sprocket.



Prototype model spent much time in Yamaha shop being modified. Factory has incorporated changes into production versions.

esthetics than it is of practicality, the pressed steel frame having proven itself not only on countless Yamahas but on many other brands as well. With the 100 modestly priced in the neighborhood of \$400 it should be a real best seller.



Speedometer has big, readable markings. Handlebars have designed in crossbar. Emphasis seems to be on function throughout.

Prototype of Trailmaster was subjected to severe. and unnatural, abuse during testing and evaluation program carried on by Yamaha International's

