

In the sport of motocross, the difference between winning and losing is measured in seconds. And the superior motocross machine is measured by the small differences that, in turn, give the racer those extra seconds.

The new Yamaha YZ80B is the ultimate of the mini-motocrossers. It's a true racer's machine. .a scaled-down version of the factory works machines that brought Yamaha its national and international motocross championships. The YZ80B features a lightweight, high-tensile-strength tubular steel frame engineered to the same stress specifications as the full-sized works machines. And its tough, light construction give the YZ80B a superior power-to-weigh ratio.

The YZ80B is not everyone's machine. It reflects the hand-craftmanship necessary in the building of a truly professional motocrosser. Young racers will have more than the pride of ownership Yamaha's finest small motocrosser. They'll also have those few extra seconds, alone, at the finish line.







# **Features**

Torque Induction engine

The engine of the YZ 80B has been perfectly matched to the rigors of the motocross track with its aluminumcylinder-head construction and unique Torque Induction system. This aluminum-head construction features not only a greater power-to-weight ratio, but also has better heat-dissipating characteristics for a much more stable operation. YAMAHA's exclusive Torque Induction combines a pressuresensitive reed-valve assembly, for positive fueling on demand, and a specially-designed 7-th port, for completely purging the engine of burned gases, to yield quicker response and more power delivered to the rear wheel over the lower- and middlespeed ranges. The spirited 2-stroke engine of the YZ 80B is easily able to match its power-torque output to the continually varying conditions of a motocross track so that

when this mini-motocrosser is ridden, you'll get a better idea of what motocrossing is all about.

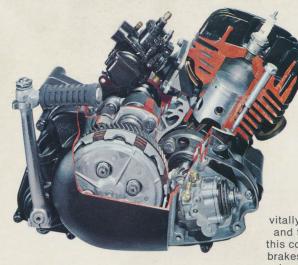
### **Transmission**

In the design of dirt bikes, the transmission is of vital importance, and if designed correctly, it can put you out in front and keep you there. The YZ 80B utilizes a 5-speed gearbox that is positive acting with its short-stroke, shift and is durable with all bearing surfaces specially heat-treated for extra hardness. Also, the gear ratios have been selected to most efficiently utilize the power band of the machine so that ample power will be maintained in reserve for better acceleration.



## Frame

The frame of the YZ 80B is the worldfamous double-cradle type. This superb design is well-known throughout the major motocross circuits for its ability to stand up under the worst punishment while carrying the engine at an optimum location for better balance and maneuverability.





# Front forks

In the past when bikes were bought for off-the-road use, the front forks were generally replaced with a more durable type, and the choice was usually the enduro style. Taking note of this and adding the data gained from motocross tracks around the world, YAMAHA engineers have utilized a long-travel-stroke, enduro type front cushioning system for the YZ 80B. With these forks, excellent shockabsorbing characteristics are gained while maintaining optimum machine maneuverability and stability.



Rear shock absorbers The springs on the rear of the new YZ 80B have been beefed up so that they can carry a heavier load without bottoming out. The cushioning effect is just right for quick maneuverability over any

motocross track condition without sacrificing machine stability or operating efficiency. Also, comfort is large. and this fact alone means a lot in the way of reducing rider fatigue over a really severe course

**Brakes** During the thick of any motocross race. control is vitally important, and to maintain this control, good brakes and braking techniques are a must. The



YZ 80B features brakes that have a large shoe area for more stopping power and better heat dissipation. The special brake construction is such that neither water nor dust can get inside the drum and affect the brake operation. Therefore, the YZ 80B has got the brakes, and the rest is up to the



The gasoline tank features new coloring for the new YZ 80B to set off its increased performance characteristics. Designed and installed on the bike to not only give beauty with functional aerodynamic styling, but also molded to give better maneuverability when knee-gripping is necessary. Ample capacity to see you through the longest race and light in weight to further increase the machine's power-to-weight ratio.

# **Tires**

One trip around some of the better motocross tracks will unfold a large variety of track surface conditions, and mud and dust are the



basic elements. Knowing that traction is important to keep the machine under the rider is about half of what is required...the other half consists of building a tire that won't give out about the time the machine negotiates a stump. The knobby-tread design on both the front and rear is for control and traction, and the fourply rating hangs in there when all the rest have had it



2500 SHINGAI IWATA-SHI SHIZUOKA-KEN JAPAN