

YAMAHA 1981

YAMAHA GOES FOR THE NEW BIKE
MARKET—WITH A VENGEANCE!

By Dave Hetzler



Normally when you go to a new motorcycle presentation, you find out there's really very little that's actually new. It's the same old machine repainted, with a little more chrome here and a little less there. But when you strip off all the foofaraw, you've still got the same old model. So, when we trekked up to Las Vegas to see the 1981 Yamahas we weren't sure what to expect. As always, there had been rumors about something new and exciting, but it didn't seem likely that there would be too much to get thrilled about. With the 1100, Yamaha still had the machine with the most mid-range torque. Last year they had introduced the 650cc Maxim, one of the nicest bikes to come along in quite some time; and as far as their racing bikes were concerned, Yamaha had won just about everything there was to win in all types of racing, both here and in Europe. So it seemed it might be just another ho-hum year.

Boy, were we wrong!

Yamaha has gone straight for the throat of the big road bike market with two completely new machines. Ducati, Moto-Morini and Harley-Davidson are the target for these new models, of this there can be little doubt. For openers, the engine powering these two new

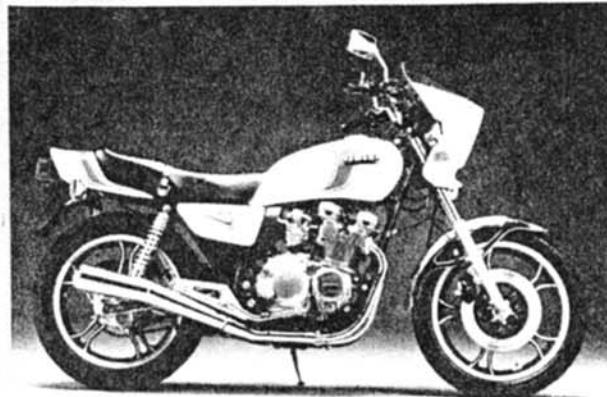
XV920RH



YZinger 50



Seca 550



Midnight Maxim 650



bikes is a V-twin in the classic style of the H-D motor. But there all resemblance ends. Yamaha's V-twin is a 75-degree overhead cammer with dual carburetors. Of course the spark is provided by a fully transistorized system that is a "set it and forget it" proposition.

The valvetrains on the two V-twins have several distinctive features. Instead of two drive sprockets, and their cam chains, being stacked on one side of the engine, the camshafts are driven from opposite sides of the one-piece crank. The lower drive sprockets are gear-driven and located inboard of the drive gears in order to keep the top-end width as narrow as possible.

This engine comes in two different displacements: 750cc and 920cc. Their respective names and/or model designations are Virago and XV920-RH. Both bikes are chain-driven and feature a fully enclosed chain-drive system to keep oil off the pants leg.

Perhaps the most interesting item on both machines is the monoshock rear suspension system that Yamaha uses on both their road-racing and motocross bikes. It has been well proven on the race tracks around the world; it was just a matter of time before the road bikes were equipped with it.

Also new this year is the Seca 750, a 4-cylinder DOHC machine with a fully computerized monitoring system built into the instrument panel. This

system features several sensors, placed at various points around the motorcycle, monitoring seven functions. When the bike is started, the system automatically checks on all seven items: whether the kickstand is up, the brake fluid level, engine oil level, battery fluid level, headlight, taillight and stoplight, and the fuel level. If any one of the levels or conditions are improper, the main warning light flashes and the LCD readout for the area in question remains displayed. If all areas check out properly, the panel will blank out, except for the fuel gauge LCD, which constantly indicates the fuel level. Under way, the rider can push a button and the system will run through the check at that time, in effect giving the rider complete knowledge about what's going on.

The Seca 750 also has an anti-dive front suspension. As we all know, when the brakes are applied the front forks compress, taking away wheel travel. Yamaha's anti-dive system corrects this, and yet it can sense the difference between a hard bump and a normal washboard. Hopefully, in the future this arrangement will show up on other machines in the Yamaha line-up.

The XS1100LH has a unified braking system this year. In essence, all this is just the mating of one of the front discs to the rear wheel disc so that the foot pedal, normally used only for the

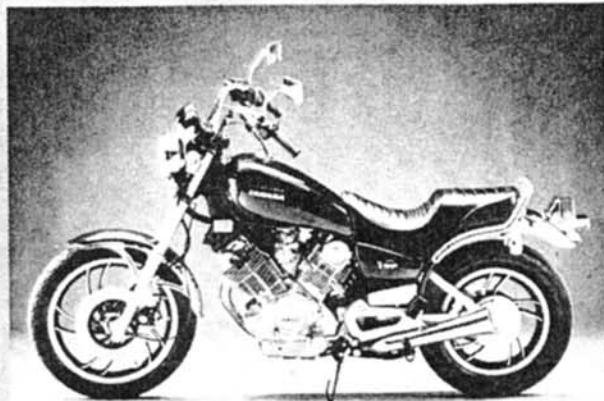
rear brake, also operates one of the two front discs. The handbrake now works only on the other front disc caliper. This system isn't new; however, that's not to take anything away from Yamaha, because they are the first of the big four to give it a go. Until we actually get a chance to try the bike, we can't say if we like it, but for the inexperienced rider it should be a good way to go.

Yamaha's YZ 125 motocross bike is wearing a radiator this year. One of the big complaints of all two-stroke-riding motocross racers is the fact that after a few minutes into a moto, the bike begins to lose power. As the engine gets hotter, the less volume of air can be stuffed into the crankcases. Water-cooling helps keep engine-operating temperatures down, and consequently, the bike runs strong the whole race. Factory racing machines in the past have been water-cooled, but no one has offered it to the public on any large scale. This year Yamaha is, and they should be commended for it.

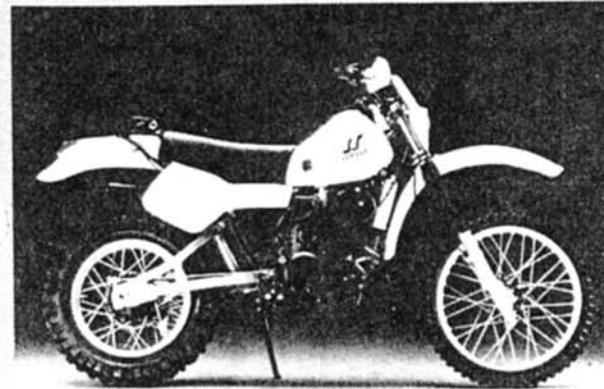
Many other new items have made their way to the production machines, and we'll be looking at them during our tests in the coming year. Yamaha has a new slogan for 1981: "Yamaha, the way it should be." If their bikes actually test out as well as they looked sitting at the presentation, they should be pretty good!

HR

Virago 750



IT-465



Seca 750



YZ 125

