

## RIDER Magazine, November 1985

Although this article refers specifically to the Yamaha 700 Maxim-X Model XJ700X, it applies equally to the 750 Maxim-X Model XJ750XS. The two models were identical in every respect except for engine displacement and related performance. While tariffs limited the sale of Maxim-X's to 700cc in the United States, Canada, and other countries, received the 750cc counterpart in the form of the XJ750XS. No question, Canadians enjoyed Maxim-X performance in excess of that touted in this article.

### YAMAHA Maxim-X

#### A Wolf In Cruiser's Clothing

Want to describe a sportbike? No problem. Start with clip-on handlebars and a fast, powerful motor. Add a café-style fairing and rearset footpegs and you've got one, ready to roar. How about a touring machine? They're self-explanatory. Standards? A little tougher, yet they still follow a definite pattern. But what makes a cruiser a cruiser? Not high, ape-hanger bars. Some of the latest boulevard bombers have flat bars. How about a torquey, rock-and-roll V-twin engine? Wrong again, ethyl breath. Check out the Magnas, Maduras and LTDs. It must be the low seat height. Well, yeah, but how low is low? Is it 26 inches, like a Wide Glide, or 30, like the Shadow?

No, it's not the seat height, engine or shape of the handlebars alone that qualify a new bike for cruiser consciousness. To have it, a motorcycle must first deliver a strong styling statement, a visual knockout punch. Keeping this in mind, the 1985 Yamaha Maxim-X is certainly a cruiser. Chrome abounds, along the "power path" that sweeps through the Maxim-X from the airbox to the mufflers, and on the bullet instruments and detailing. What isn't chrome is brushed aluminum, deep red or black, from the engine cases to the seat. The rear wheel is nearly solid, but different on either side, adding a mysterious touch to its dragstrip look. A rakish front end and teardrop gas tank confirm the cruiser statement.

From here, attempting to pin a type category on the Maxim-X gets a lot tougher. The comfortable bar-seat-peg relationship is more like that of a standard or touring bike, with footpegs placed under the seat and a flat, palms-down handlebar. Unlike most cruisers with long, narrow seats that offer little or no support, the bucket on the X is shaped perfectly for most derrières and works with the suspension to cushion bumps.

Instead of a more traditional engine that relies on character rather than speed for its popularity, the motor in the XJ700X operates with high-performance, five-valve technology borrowed from its sibling in the sportbike world, the Yamaha FZ750. The cylinder block, valve gear and two upper tiers of the three-tiered head are all FZ spec. On the "Pure Sports" FZ, however, the crankcase slants the cylinders forward 45 degrees. By locating the carbs above the cylinders - underneath a hollow section of the FZ'S gas tank - the fuel/air mixture gets a straight shot at the intake ports. Unfortunately, this layout would be completely impractical for the Maxim-X, requiring all sorts of blasphemous styling butchery. Yamaha solved the problem by using the five-speed crankcase from previous models, which cant the cylinders forward only 14 degrees. Modifying the lower tier of the head allowed the style-conscious designers to locate a set of sidedraft carbs in a more practical spot behind the cylinders, leaving the clean lines of the teardrop tank and swoopy frame unmolested.

The XJ700X still benefits from the high-flow, five-valve head in two important ways. The bike is perfectly happy to growl around at walking and low city speeds, making

tractable power and turning heads with aggressive exhaust note. Put a little muscle on the twistgrip, though, and the bike forgets its cruiser styling, unleashing a 16-horsepower advantage over the standard, air-cooled Maxim in a heady rush. The power comes on strong from about 7,000 rpm and keeps climbing right up to the 10,000 rpm redline. More controlled riding delivers about 44 miles per gallon (U.S.), with a low of 36 (U.S.) and a high of 55 (U.S.). The 3.4 gallon (U.S) tank has a range-to-reserve of about 115 miles, with a fuel warning light politely informing the operator he's about to go on reserve.

Combine these comfort and power characteristics with a cruiser chassis and what do you get? A great bike for the straights but, "Holy highside, get on the brakes!" when a corner comes up, right? Not this time. The chassis and suspension on the Maxim-X work in harmony to produce exceptional handling. Instead of just lengthening the forks, Yamaha also raised the steering head in the frame to bring the flat bars closer to the rider, achieving the desired chopper look without sacrificing stability. In addition, an aluminum fork brace at fender level reduces torsional flex. There is a small amount of fore-and-aft flex - a consequence of the long forks - evident under heavy braking or when crossing stutter bumps. Eliminating this flex would require either extra large or shorter stanchion tubes, either of which would violate the desired styling envelope.

Aside from this minor flaw, the air-adjustable fork produces a compliant, but firm, ride at its minimum pressure of 6 psi, and handles loads and back roads with ease at higher pressures. The rear shocks are another story. Adjustable for spring preload only, these units do a good job of controlling the torque reaction of the shaft drive, but are too stiff for commuting or cruising. Like the fork, they perform best when the bike is blitzing the back roads or loaded for touring.

The rear drum works well, providing strong, linear feel without grabbiness or easy lockup. The dual discs up front are straight off the Venture and V-max, and work even better on this much lighter bike.

Compared to its less-expensive brother - the air-cooled, \$2,999 two-valve Maxim - the \$3,499 Maxim-X may be a little frenetic for the serious cruiser. For even if you can't easily define the cruising motorcycle, the rider is easily stereotyped - a profiling, unhurried kind of guy who prefers boulevards to backroads and flat torque curves to mountainous peaks. If you fit into this group but still get that strange glint in your eye when you approach a corner or pull up next to another bike, the Maxim-X may be the perfect blend for you.

*Mark Tuttle Jr. - RIDER November 1985*

**Yamaha Maxim X**  
Retail Price \$3,499  
Warranty 12 months, unlimited miles  
Service Interval 3,800 miles

**Engine**  
Type Transverse inline 4 cyls  
Displacement 697 cc  
Bore & Stroke 68 x 48 mm  
Valve Train DOHC, 5 valves per cyl  
Carburetion Mikuni BS33 x 4  
Lubrication System Wet sump, 3.7 qt  
Ignition TCI  
Transmission 5-speed  
Final Drive Shaft

**Chassis**  
Frame Double cradle  
Suspension, front Telescopic, adj. Air pressure  
rear Dual shocks, adj. spring preload  
Brakes, front Dual discs  
rear drum  
Tires, front Bridgestone, 100/90 H19  
rear Bridgestone, 130/90 H16  
Wheelbase 59.8 in.  
Seat Height 29.9 in.  
Wet Weight 515 lbs.  
Load Capacity 521 lbs.  
Total (GVWR) 1036 lbs

Touring performance  
Fuel Capacity 3.4 gals.  
Gals. to Reserve  
Average MPG 44  
Range to Reserve 120 miles  
RPM at 60 MPH 4,700

**Instruments**  
Speedometer, odometer, tripmeter, temp gauge, indicator lights  
for turn signals, high beam, low oil level, low fuel level,  
neutral