

YAMAHA RD60

Bigger than a minicycle, slower than a speeding bullet, it offers a sporty alternative for cross-town traffic.

The phrase "Mighty to Mini" is used by the largest motorcycle manufacturer and distributor in the world—Honda. However, the second largest manufacturer could also use it to describe their offerings to the public. True, they don't offer 40 models, but their line of more than 20 units range from a 60cc road machine up to their top-of-the-line TX750. That's quite a range of selection for a piano manufacturer with origins dating back into the nineteenth century. Yamaha, by no means, is a new hand at producing motorcycles. It's just that they've been building pianos and other musical instruments longer.

Several years ago, Yamaha elected to fit a reed valve setup to their dual purpose machines—the Enduros. At first, some thought of this as purely a sales gimmick. This, evidently, was before they had an opportunity to ride the bikes. The reed valve was a very practical addition to the Enduros.

A short time later, Yamaha equipped their three 1973 two-stroke road machines with the same reed valve (Torque Induction) setup. We can unquestionably state that the performance of the 250 and 350 RDs was greatly increased by this addition.

The smallest of Yamaha's fine line of motorcycles, the RD60, was introduced last year. We generally get so wrapped up in testing the larger and more powerful motorcycles that we tend to overlook the fine small bikes still available for the beginning or about-town riders. We feel that the RD60 is one of those fine small units.

The lightweight is one of the raciest-looking small bikes around. Because of its size, it is strictly a solo bike. The slender long tank and the $\frac{3}{4}$ -length saddle, that sweeps up in



the rear, are two reasons for this racy appearance.

In the last two years, Yamaha has seemingly gone to two different extremes. In 1973 some people said that their models were too flashy and the color was too outstanding. Frankly, we liked it. This year Yamahas reverted to an extremely plain paint scene. Many of the paint schemes for their 1974 street line appear rather nondescript. We liked the approach with the RD60 though. The olive green paint covers the tank, rear fenders and tail section on the saddle. Two white stripes separated by one black stripe attempt to set the tank off.

In order to keep the cost of this lightweight unit down, a minimum amount of chrome is used. The cylinder, instead of being fashioned from aluminum with a steel liner, as on the two larger RDs, features a cast-iron cylinder with the steel liner.

The cylinder's bore and stroke is 42 x 39.7mms. Engine capacity is 55-ccs. The engine compression ratio is a rather mild 6.9 to 1. As with the other Yamaha two-strokes, a conventional piston port induction system is used. As we mentioned earlier, this reed valve improves the performance of the two-stroke engine, particularly at slow speeds.

We were not overly impressed with the performance of the RD60. Don't read that unimpressed. Maybe that RD prefix threw us off. Carburetion seemed to be off somewhat, but once that was corrected the RD still did not perform like the firebreather we had anticipated. A few years ago we were riding machines exactly the same size, with the same performance characteristics as the Yamaha. Only at that time, we were thoroughly impressed with the performance of these lightweights. We expected a little bit more than





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what we used to get—progress they call it.

Our test unit had only three miles showing on the odometer when we began this test. Even so, the unit was run hard during our testing. The engine didn't miss one beat and it performed perfectly.

The gearbox, on the other hand, was somewhat of a stickler, and proved to be an inconvenience at times. The ratios of this five constant mesh unit are more than adequate for the power characteristics of the engine. Initially, the gearbox would not shift properly, either to a higher or lower gear. Shifting to a higher ratio at times caused a missed shift. We were also faced with a few sticky downshifts. The lever tended to hang up in one gear, making it quite difficult to select the next lower ratio. After approximately 30 miles of testing all the high spots or rough edges seemed to disappear, and the gearbox began functioning as it should. From then on it required the average amount of effort to select higher or lower gears.

The clutch is a wet multi-plate unit. Little effort is necessary to disengage the clutch. Engagement doesn't begin until the very end of lever travel. It became obvious to us that the clutch would not withstand too much abuse without overheating. Shifting can be accomplished by rolling off on the throttle slightly and engaging the next higher gear. But we did find it smoother and easier to use the clutch before engaging the next gear.

The starting procedure on the RD60 is very similar to that of any motorcycle on the market today. More than the usual number of kicks with the choke on were necessary to bring the engine to life. We suspect the reason is the reed valve. We ran into a similar situation on the RD250 some time ago. The valve acted as though it were sticking and not allowing the fuel mixture to pass through the ports into the combustion chamber. By leaving the ignition switch off and kicking the engine through several times with the choke on, the engine would generally fire on the first kick after the

ignition was turned on.

Both engine and exhaust noise is minimal. The quietness of the engine can, in part, be attributed to the cast-iron cylinder which does an admirable job of damping and absorbing engine clatter. The exhaust is quiet, but high-pitched, because of the high-revving engine. It redlines at 10,000 rpm.

The RD60 features the same Autotube oil injection found on other two-strokes models from Yamaha. The oil capacity is 1.1 quarts, which will undoubtedly take this small roadster many miles before requiring a refill. The oil tank has a plastic level gauge to permit the rider to easily check oil consumption. The filler cap is located beneath the saddle, and is reached quite easily.

On the highway the RD60 performs and handles as one would expect any small lightweight to do. The frame is a double down tube type with a single tubular backbone. This type of frame offers satisfactory support for the weight and performance of the RD60. The wheelbase is 46.7 inches.

The seat height is 29.5 inches, which makes this unit ideal for smaller and beginning riders, as well as accommodating to adults looking for an around-town commuter. The bike is noticeably larger than the average 75cc or 80cc mini cycle. Fully fueled, the RD weighs in at 180 pounds.

2.50 x 17-inch tires are found, front and rear. These rather small tires are more than satisfactory for the machine, and offer enough traction and stability for the speeds possible with the unit. Both brakes are 110mms in diameter, and have a shoe width of 25mms. Here again, because of the light weight and limited speed attainable, we felt that these brakes performed satisfactorily. Both had a good feel. Very little pressure was necessary before either was actuated.

The suspension system lived up (or down) to our expectations. The front forks did a good job of both smoothing out the road and damping the rebound over rough sections. The rear suspension was extremely lacking, not so much in spring rate, but in damping quality. Because of this the motor-cycle would tend to pogo when negotiating any corner that had ripples in it. The spring preload is not adjustable. The RD comes equipped with speedometer, tachometer, and non-resettable odometer. The instruments are easily read.

We found the seating arrangement more than satisfactory for our testers. The seat is well padded and spacious enough for even the largest of riders. The footpegs are rubber covered and mounted rigidly to the frame. They do not fold. Regardless of the speed or rpms, the RD did not produce an excessive amount of vibration.

Our outings with the RD60 were quite a change of pace compared to the larger, heavier, and faster machines we normally encounter. Riding this lightweight motorcycle was a trip in its own right. It was quite maneuverable during our around-town excursions. Because it is a 60cc unit, don't expect those four cubic inches to propel bike and rider with the same fervor the larger RDs do. Still, top speed was indicated at 55 to 57 mph at 10,000 rpm with a 150-pounder aboard. We suspect that engine life and reliability of the entire motorcycle would be prolonged by keeping the machine in the 35 to 45 mph bracket, which is certainly within (or above) around-town speed limits.

While the unit is racy in appearance, it seems well-suited to the needs of the beginning rider or the cross-town executive. That seems to be its proper niche, and as such, particularly in view of its very friendly price tag, it's one of the better buys around. ■



YAMAHA RD60

Engine type	single cylinder two-stroke
Bore and stroke	42 x 39.7mm
Displacement	55cc
Compression ratio	6.9:1
Engine red lines @	10,000 rpm
Ignition	flywheel magneto
Starting system	kick, in any gear
Carburetion	16mm Mikuni
Lubrication	Autolube
Type of transmission	constant mesh 5-speed
Clutch	wet multi-plate
Internal gear ratios	(1) 3.250, (2) 2.000, (3) 1.428, (4) 1.125, (5) 0.961
Final ratio	12.03
Countershaft sprocket	12
Rear wheel sprocket	42
Quarter mile acceleration:	
Terminal speed	52.46 mph
Elapsed time	23.21 sec.
Indicated top speed	55 mph
Length	71.9 in.
Seat height	29.5 in.
Wheelbase	46.7 in.
Ground clearance	5.9 in.
Listed dry weight	163 lbs.
Actual weight, full tank of gas	180 lbs.
Front tire size	2.50 x 17 in.
Front brake type	internal expanding
Front brake size	4.29 x .97 in.
Rear tire size	2.50 x 17 in.
Rear brake type	internal expanding
Rear brake size	4.29 x .97 in.
Lighting	15/15W
Battery type	6V, 4AH
Fuel tank capacity	2.1 gal.
Oil tank capacity	1.1 qt.
Gear box capacity	500cc
Front suspension	telescopic double damping
Rear suspension	spring over shock
Frame type	double down tube, single backbone
Color	green
Retail price, Los Angeles	\$401

DISTRIBUTOR

Yamaha International
6600 Orangethorpe Avenue
Buena Park, California 90620