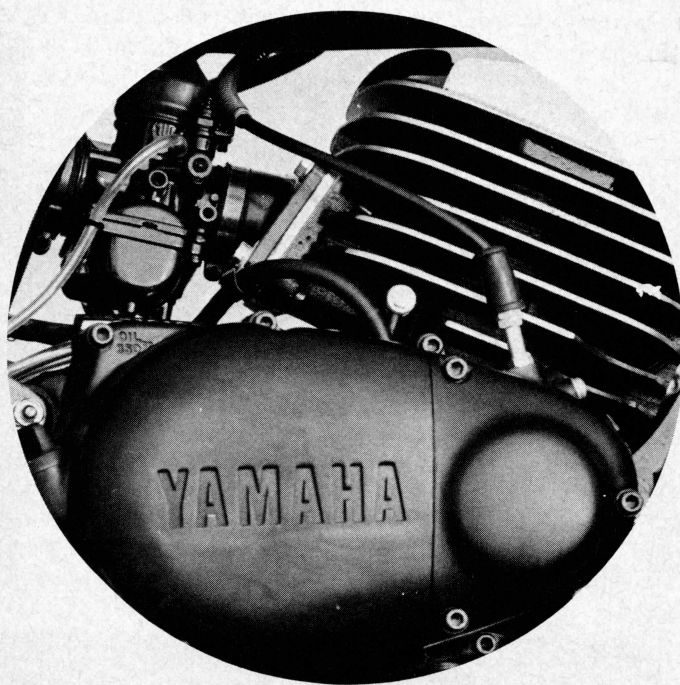


# YAMAHA MX175B





Also-ran Performance For A Little  
Less Than The Price Of A Winner



■ SOONER OR LATER, every dirt rider wants the best. It's human nature. But the best is often unattainable. And even if it was, initial and maintenance costs would be too big a burden for most budgets to bear. Manufacturers realize this and that's the reason cost-conscious bikes like Yamaha's 175 MX exist.

This year's model, labeled the MX175B, is literally the exact same machine that Yamaha sold last year as the MX175A... but with a new paint job. The traditional Yamaha racing yellow color scheme is gone. The new machine is white, with appropriately regional "Balboa blue" and black stripes and trim. The fuel tank still comes with that confounded cork sealing ring that falls off when you remove the vented cap. Side panels, which also serve as number plates, cover the electrics for the CD ignition on the right side, and the exhaust pipe and oil tank for the injection system on the left.

Both panels are secured by Dzus fasteners. The only problem with the fasteners is that a screwdriver blade or some such object is needed to get to them. Should anything behind the side plates need attention while on a long ride, you'd better have a dime tucked away somewhere in your leathers or a screwdriver taped to the handlebars.

Yamaha does provide a small toolkit with the MX175B, but no provisions are made on the bike for toting it around with you. In keeping with common practice among Japanese motorcycle manufacturers, both fenders are made from highly-flexible plastic.

The engine is simply a bored-out 125. The 125's 50mm stroke has been retained, while the diameter of the cylinder has been increased by 10mm to its present width of 66mm. This gives the Yamaha an effective capacity of 171cc. The compression ratio is a moderate 7.0:1 (corrected). This makes starting the Yamaha a breeze, in spite of the shortish kickstart lever. Depress the choke on the 28mm Mikuni, turn the petcock to the down position, and stab away. If the engine is >

**Cycle  
World  
Road  
Test**



# YAMAHA 175B





cold, three or four kicks might be required. If warm, one tromp does it.

Once churning, the mill produces little noise for a machine that is designed to be operated exclusively off-road. Part of the muffling credit goes to internal baffling in the exhaust pipe itself. But there is a question to be considered here. Is the internal silencing, which undoubtedly interrupts proper gas flow and pressure wave effectiveness, worth it in lieu of attaching a silencer/spark arrester on the tip of the exhaust pipe to replace the spark arrester that now resides there? If you look at the Yamaha as a motocrosser, then the answer is an obvious no. But although Yamaha calls this machine a motocrosser, none but the very naive would ever buy one explicitly for that purpose. The spark arrester on the machine is Yamaha's indication that even they understand that. Therefore, the design of the Yamaha pipe is well thought out and properly executed... if not for MX, then at least for what this machine does best. And that is play riding.

Just plain goofing off. Pulling wheelies, sliding around, or going on long trail rides in the forest or the desert. That's where the spark arrester comes in. Actually, if you can find an enduro in which non-street-legal machinery can compete, and the event isn't going to be an extremely difficult one, you can ride it on the Yamaha. All you need is a speedo (not optional

on the rich side, with the oil pump adjusted similarly, but our 175 was spot on at all times. Altitudes during testing never rose to more than a few hundred feet above sea level, so we don't know for sure what will work up in the high mountains, but a 150 main jet with the needle dropped all the way (clip in the top notch) was perfect for us.

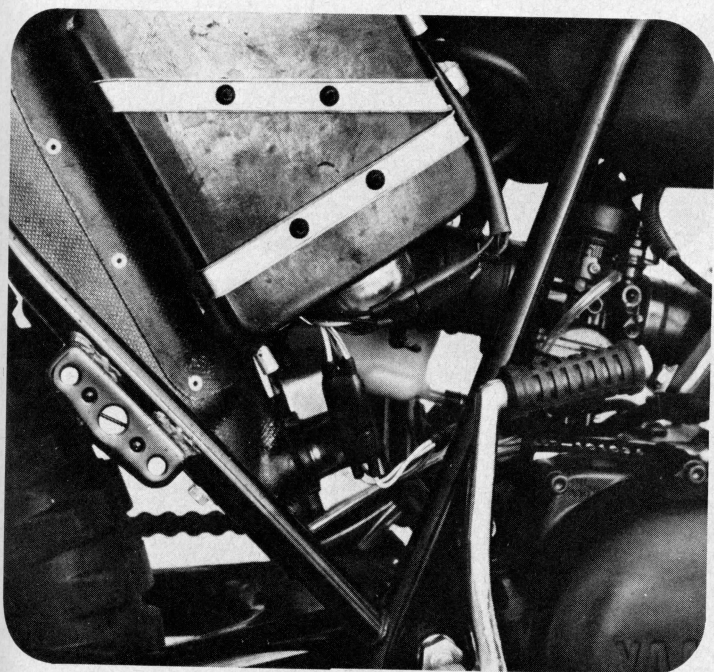
One of the features that was not perfect for us, nor even close to adequate, was the physical layout of the machine. The chassis is practically identical to the one on the 125 MX, and the dimensions are also reminiscent of the 175 Enduro's (CW April '74). Everything is too small. There really isn't a problem if you're very young or even if you're old and happen to be a midget. But others will find that when seated, the knees interfere with handlebar movement. Moreover, the standing position will earn you the lead in the remake of "The Hunchback of Notre Dame." Maybe this footpeg-seat-handlebar relationship was purposely designed by Yamaha, who may have expected the machine to be most popular among the smaller or younger riders. But if that is the case, then they shouldn't have sprung the rear end as though Cannon were going to ride it.

The forks are okay, although they could use more-precisely-controlled damping and more travel. A Number One Products Fork Kit and a couple of items from Webco will correct these ills for those who insist on racing the Yamaha. For the rear, it seems foolish to waste a pair of Thermal-Flow shocks (which we've never found to be all that great), on a goof-off bike. The overwhelming majority of riders who purchase an MX175B will never encounter a situation in which they will need the additional oil volume or the reservoir cooling fins that are the strong points of the dampers. These shocks are expensive to manufacture and their presence on this machine only serves to keep costs needlessly high... something we should be trying to avoid in these inflated times. If the shocks worked, that'd be another story, but in stock trim they don't. Pure and simple.

Then, to make matters worse, if you install a pair of accessory shocks that work, you'll find out that the swinging arm flexes like a tall tree in a tornado. You then have to either reinforce the swinging arm, or buy a different one. But suppose you are stubborn and are going to race the Yamaha anyway, because of certain things like rock-wall reliability, low purchase price (comparatively speaking), low parts prices and the fact that you like a good stiff challenge. If that's the case, then you might as well purchase a swinging arm with F/M shock positions for a long-travel rear end. While you're at it, make sure that the new swinging arm is at least an inch and a half longer than the stock one. At a mere 53 in., the wheelbase could use some stretching.

Up to now we've mostly concerned ourselves with certain physical aspects of the MX175B. While there are still more that warrant mention, let's break away for awhile and talk about what riding the Yamaha feels like. First, divorce yourself from the feeling of crampedness, then look for an area that isn't extremely rough so that the inadequate suspension doesn't kangaroo you onto your ear.

You'll run out of first gear right away. The bike is geared low. Shift up, noticing the smooth operation of the gearbox and the fact that the Yamaha will accelerate briskly. If you want to slide it through the corners, the Yamaha is willing... even with the short wheelbase. It's not the snappy engine response or good weight distribution that make a slider out of a bike that wasn't designed to be one, although these are contributing factors. It's the tires that enable you to play Kenny Roberts. They are called—obviously by someone with a poor sense of humor—knobbies. You could get better traction by changing to almost anything short of trials universals.



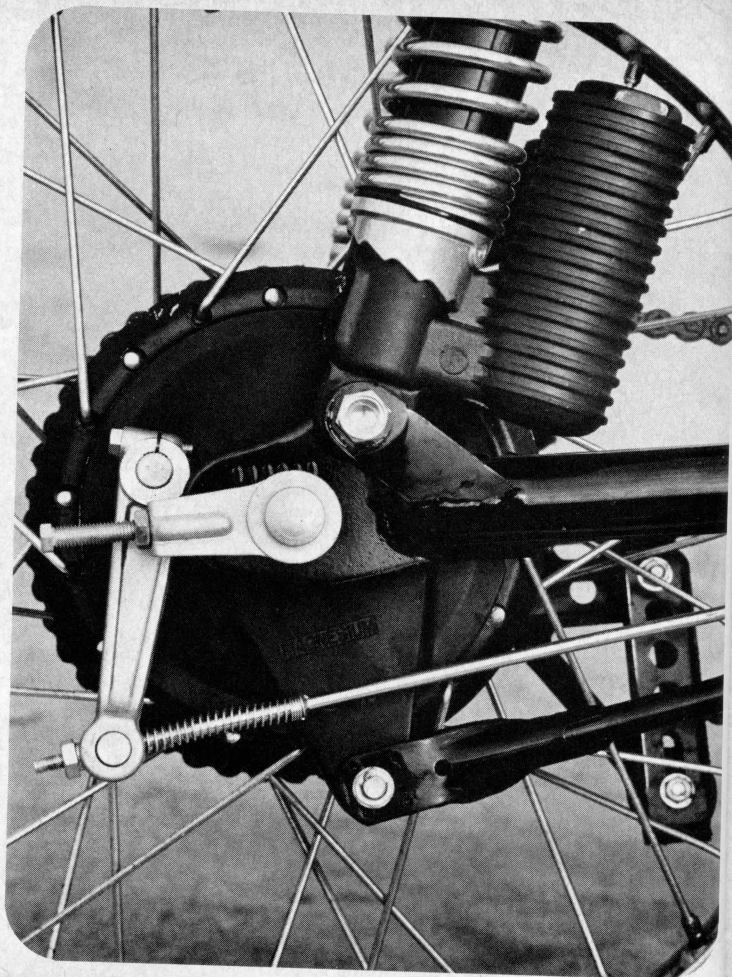
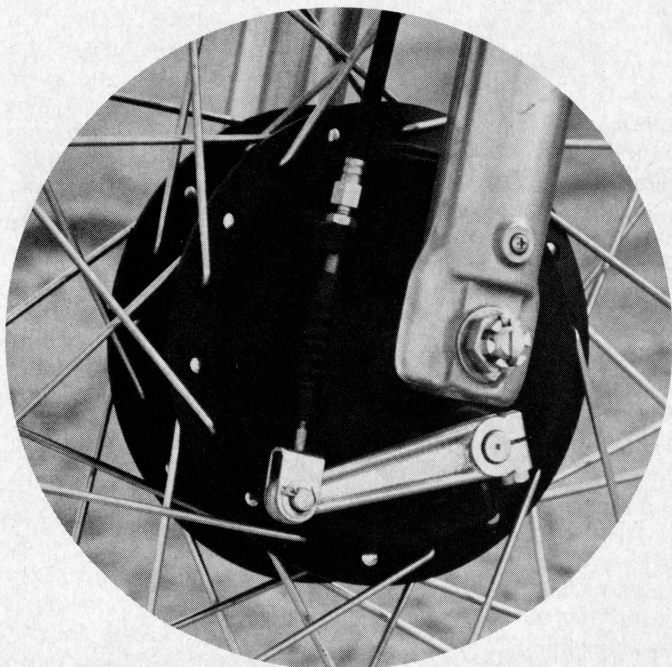
equipment) and suitable time-keeping gear.

To be honest, this is the engine that Yamaha should have put in its enduro 175 in the first place. Performance-wise it is great. While it doesn't have the super power of a Can-Am or Penton, it has more off-idle snap than either. But the power isn't all down low. As the rpm build, the power builds, with surprising smoothness. No violent surges.

The transmission is a close-ratio unit. With as broad and usable a powerband as the Yamaha has, it certainly could use more-widely-spaced ratios. Or, keep the existing ratios and add a sixth gear to give the bike a more reasonable top speed. Of course, more gears mean a higher price tag and that goes against the grain of a play bike.

Even though the fuel tank holds only 1.6 gal. of gasoline, the reed-valve, seven-port cylinder is thrifter than one might expect. Also, the oil-injection tank, which can hold just shy of one-half quart of lubricant, can go two tanks of gas before requiring a refill. Most of Yamaha's MX test bikes come jettied





Photography: Fernando Belair, Walt Fulton, D. Randy Riggs



t  
s  
p  
s  
e  
c  
li  
a  
p  
m  
th  
li  
ri  
Fl

an  
bu  
Or  
yo  
me  
aft

co  
siz  
ser  
Ak

17  
thi  
lar  
the

C  
C  
P  
(  
R  
F  
R  
S  
W  
D  
F  
R  
C  
C  
T  
Br  
lg

Ca  
Cr  
Co  
Sh  
Br



If you're fortunate enough to be riding on a loamy or tractive surface, then you'll see how well the little Yamaha steers. Very well, as a matter of fact. And when it comes to pulling wheelies to impress your friends, the Yamaha's on your side. It is balanced well and it is short. That means that it's easier to keep it up once you get it there. As geared, a novice can ride monowheel through the first three gears with just a little practice, while a seasoned showoff can probably take it all the way through to redline in fifth.

Since most MX175B buyers aren't dyed-in-the-wool competitors, they'll probably spend as little money as necessary to make the machine truly rideable. For them, the forks pass as they are. The shocks can be cured by using softer springs and lighter oil. Start with five weight and work your way up. Some riders we know like the way ATF works in their Thermal-Flows.

Once you get the suspension dialed, enjoy the bike. There are some obstacles that the machine is not capable of tackling, but the majority of them can be conquered with a little effort. One thing is for sure, at 195 lb., the 175 isn't going to wear you down during a long day's ride. That's also going to make it much easier to load into your van or truck late in the afternoon when you're kaput.

The light weight is attributable to a goodly number of components. The hubs, for example, are cast alloy and small in size. Both brakes are strong, although the rear one is overly sensitive (ever heard that before?). The rims are ridged Akronts that are just dandy for a play machine.

A year ago, when Yamaha announced that it would have a 175 racer in its model line-up, we wondered why. After some thinking it became apparent. In the Western states—particularly Southern California—desert racing is very popular. But there is no 125 class out there. After the 100s you can ride

anything up to a 175. That took care of the West. But in the Middle and Eastern states, 175s have their own class in motocross. That, then, figured for the rest of the U.S. The MX175B: One motorcycle designed to satisfy markets in two geographically different areas.

Whether or not the Yamaha is suitable in those differing markets depends on how serious a rider you are. If your main objective is having fun, the 175 MX will provide hours of it. On the other hand, if you need to be competitive, Yamaha's medium-sized MX will only bring disappointment. It's a mass-produced bike fabricated within a fixed budget. It was never really meant to win.



## YAMAHA MX175B

### SPECIFICATIONS

|                                  |                               |
|----------------------------------|-------------------------------|
| List price                       | \$1095                        |
| Suspension, front                | telescopic fork               |
| Suspension, rear                 | swinging arm                  |
| Tire, front                      | 2.75-21                       |
| Tire, rear                       | 3.50-18                       |
| Engine, type                     | reed-valve, two-stroke Single |
| Bore x stroke, in., mm           | 2.59 x 1.96; 66 x 50          |
| Piston displacement, cu. in., cc | 10.43; 171                    |
| Compression ratio                | 7.0:1 (corrected)             |
| Claimed bhp @ rpm                | 1.83 @ 8500                   |
| Claimed torque @ rpm lb.-ft.     | 11.1 @ 8500                   |
| Piston speed @ rpm ft./min.      | 2776 @ 8500                   |
| Carburetion                      | UM28SC Mikuni                 |
| Ignition                         | capacitor discharge           |
| Oil system                       | automatic oil-injection       |
| Oil capacity, pt.                | 0.96                          |
| Fuel capacity, U.S. gal.         | 1.59                          |
| Recommended fuel                 | premium                       |
| Starting system                  | primary kick, folding crank   |
| Air filtration                   | oil-wetted foam               |

### POWER TRANSMISSION

|                        |                      |
|------------------------|----------------------|
| Clutch                 | multi-disc, wet      |
| Primary drive          | helical gear         |
| Final drive            | 428 single-row chain |
| Gear ratios, overall:1 |                      |
| 5th                    | 12.50                |
| 4th                    | 14.26                |
| 3rd                    | 17.89                |
| 2nd                    | 24.51                |
| 1st                    | 37.04                |

### DIMENSIONS

|                                     |           |
|-------------------------------------|-----------|
| Wheelbase, in.                      | 53.0      |
| Seat height, in.                    | 31.5      |
| Seat width, in.                     | 8.5       |
| Handlebar width, in.                | 33.5      |
| Footpeg height, in.                 | 11.5      |
| Ground clearance, in.               | 9.4       |
| Front fork rake angle, degrees      | 30        |
| Trail, in.                          | 5.51      |
| Curb weight (w/half-tank fuel), lb. | 195       |
| Weight bias, front/rear, percent    | 43.6/56.4 |

### PARTS PRICING

|                              |                           |
|------------------------------|---------------------------|
| Cylinder                     | \$60.48                   |
| Cylinder Head                | 23.40                     |
| Piston                       | 14.46                     |
| (1) Set Rings                | 7.24                      |
| Rear Shocks (each)           | 40.29                     |
| Front Hub                    | 20.24                     |
| Rear Hub                     | 29.12                     |
| Spokes (each)                | front .19<br>rear .22     |
| Wheel Rims (bare each)       | front 50.00<br>rear 45.00 |
| Drive Chain (standard)       | 9.20                      |
| Front Fender                 | 10.62                     |
| Rear Fender                  | 7.80                      |
| Clutch & Brake Levers (each) | 3.25                      |
| Clutch Cable                 | 3.08                      |
| Throttle Cable, complete     | 14.00 (top section 7.00)  |
| Brake Cables                 | 3.04                      |
| Ignition Parts               |                           |
| Coil                         | 13.78                     |
| Magneto Assembly             | 99.14                     |
| Carburetor                   | 30.00                     |
| Crankshaft                   | 60.00                     |
| Connecting Rod               | 11.24                     |
| Shift Lever                  | 3.88                      |
| Brake Pedal                  | 5.28                      |