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VOL. 14, NO. 4 APRIL 1978 PDC \$1.25

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FOURS**

BIG BORE CONVERSIONS

**IT-400 YAMAHAS
THEN AND NOW**

**SUPER MINIS
BIG BUCK XR
AND RM**



**READY FOR
BLAST-OFF
YZ-100E YAMAHA**



MODERN CYCLE

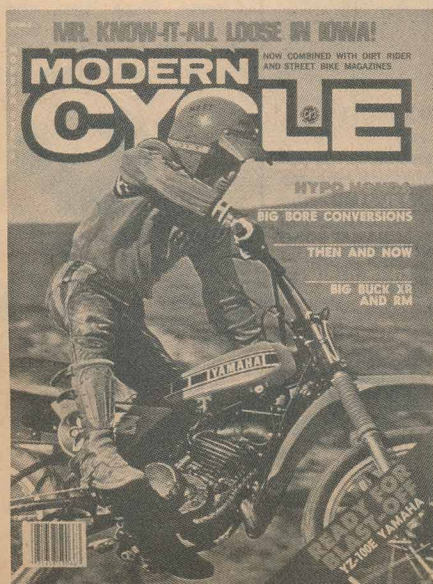
VOL. 14, NO. 4 APRIL 1978

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ON THE COVER: Matt Whiting piloting the YZ-100E Yamaha rocketship. Photo by Owens.

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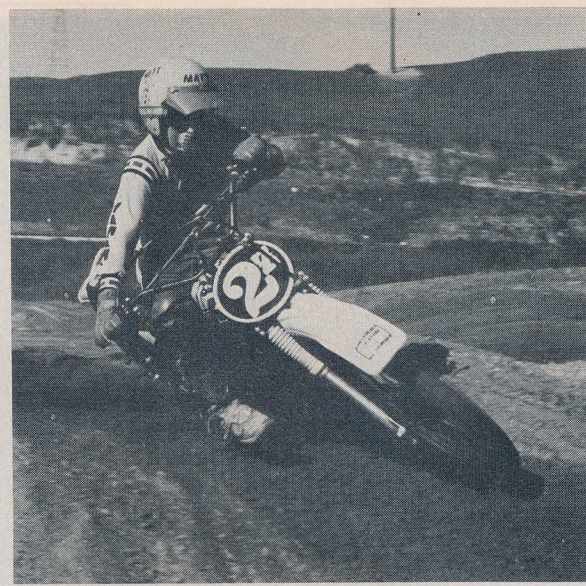
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YAMAHA'S SIX-SPEED, 100cc ROCKETSHIP

Matt Whiting on the YZ-100

BY RICHIE LOUIS

There are only two groups of people who are going to be unhappy about the release of the Yamaha YZ-100 mono: the accessory manufacturers and the competition.

The businessmen will be burnt because they're going to have to beat their brains out to find something to sell the rider for this bike. It's so complete as is, that the rider will not have to buy anything to be totally competitive in the 100 class.

Nothing. Nada.

And the competition. We haven't tested the new RM-100 Suzuki yet, but to be as good as the new Yammie, it's going to have to go a long, hard way. The bike is *that* good.

Think about it for a moment: you're getting a six speed twenty horsepower, monoshocker, with terrific suspension . . . all in a 100cc package.

There are racers out in the larger classes that wish they had some of the goodies of the 100 YZ.

To add to the package, everything on the bike is plastic. Fenders, side panels and even the gas tank. Even spiffy boots are in place over the fork legs. Stock.

A leading axle set of forks ride up front and they are the finest acting units we've experienced to date on any

bike under 250cc's.

Now, the good part.

The YZ-100 is rated at 20 butt-kickin' horsepower at—get this!!—11,000 rpm. That's right. You didn't see a typo! We said 11,000 rpm.

Normally, you'd only see an engine with about \$1500 worth of modifications putting out this kind of power.

But, like the man said, how do it work?

Good enough to win, we reply.

Our test rider, John Rudder, entered the bike at a Sunday event at racing world and got first place in the 100 cc class. Riding in the same event, (but scored separately) were some 125 Hondas. He also beat them.

But, for the real acid test, John entered the 100 YZ in the 19th annual Dirt Diggers Grand Prix, held on November 5th and 6th. He rode in the 100cc Novice, Amateur and Expert combined race. Entering the Novice class, John got fourth overall and 1st Novice, beating out a huge number of Amateurs and Experts in the process. And he had to start in the last row of an 80 bike field.

Not one bike pulled the YZ-100 up the longest uphill straight, including the factory sponsored bikes and sleeved down Elsinores.

Three top District 37 Experts finish-

ed in front of him. And not by a wide margin. While John is a good rider, he felt that the mono YZ gave him a decided edge over the rest of the field.

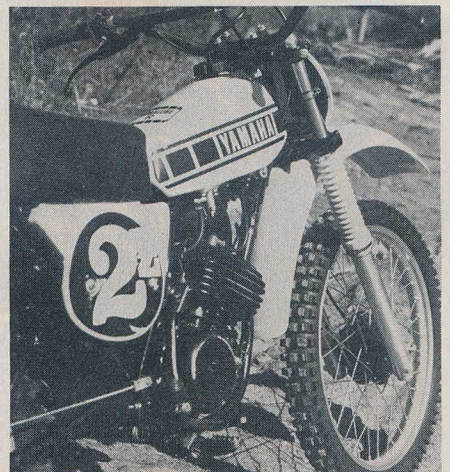
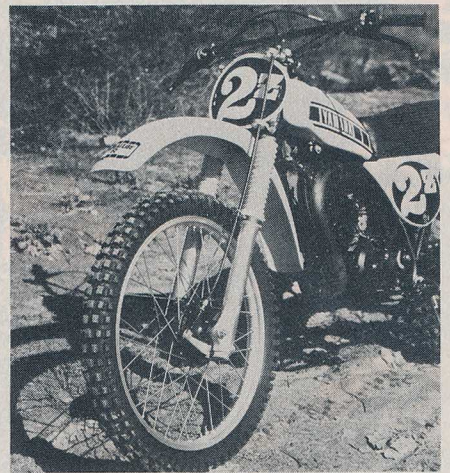
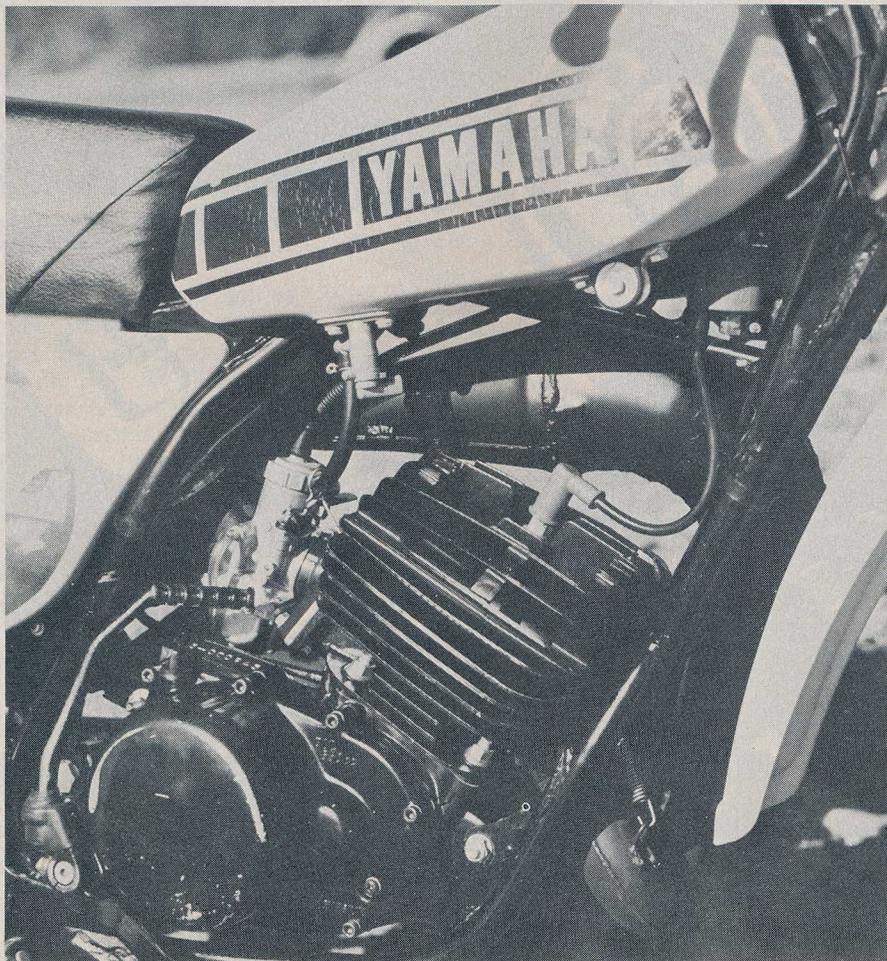
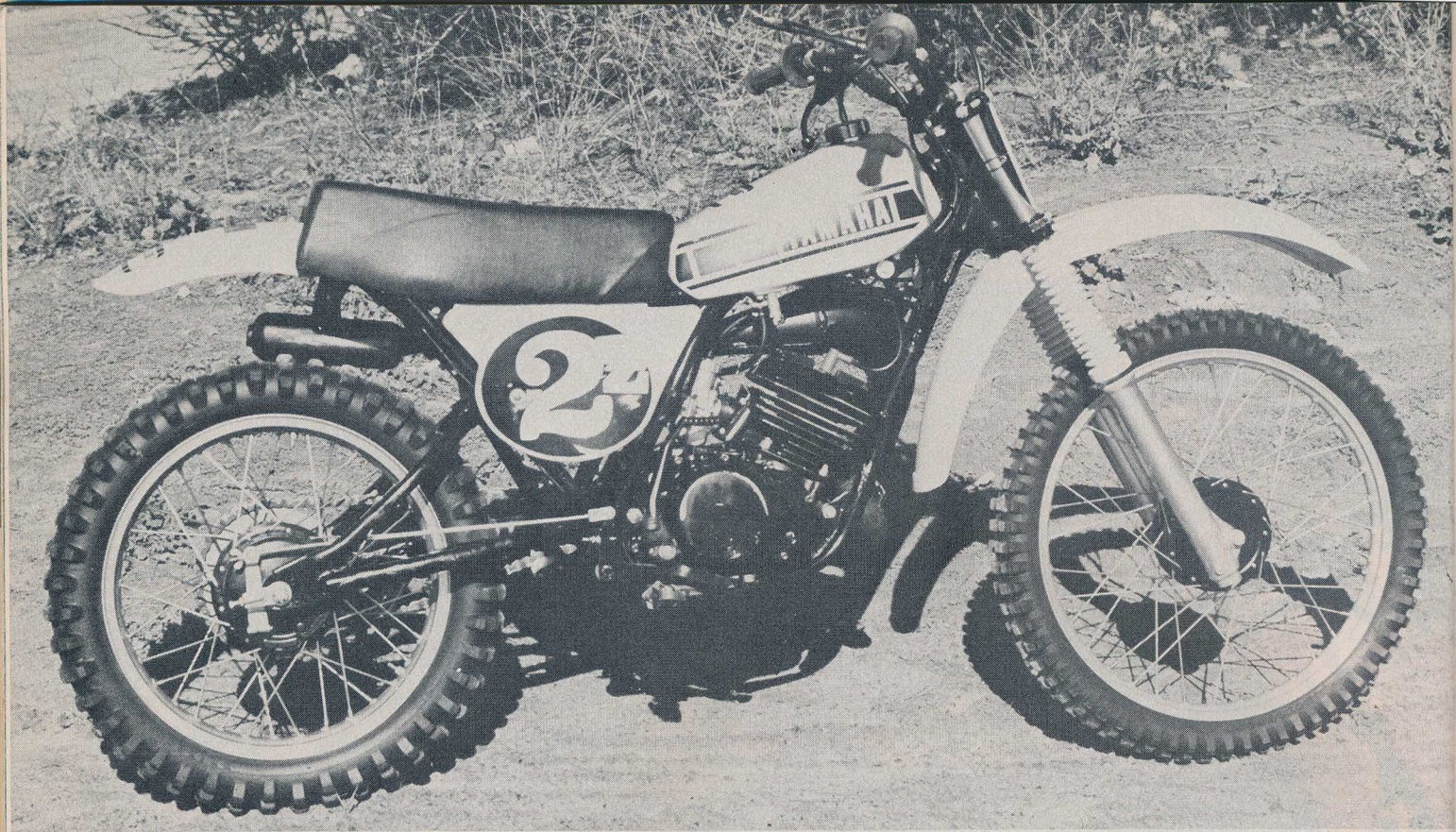
No special preparation was done to the bike, not even waterproofing. We ran it as it was delivered.

When we asked John for his comments on the bike, he was enthusiastic: "It's fast and the suspension is right on for racing. At first, I thought it was too stiff, but when I hit the tough sections on the 3.5 mile Grand Prix track, I was glad I had the beefy springs. There's a little bit of push in the front end—you really couldn't call it wash out—you just have to take the flat corners with the power on. It makes you ride the turns fast."

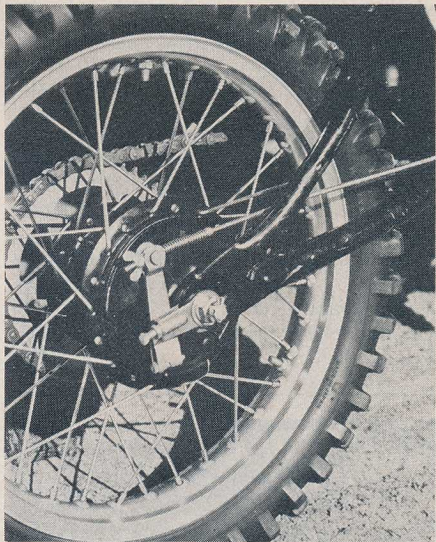
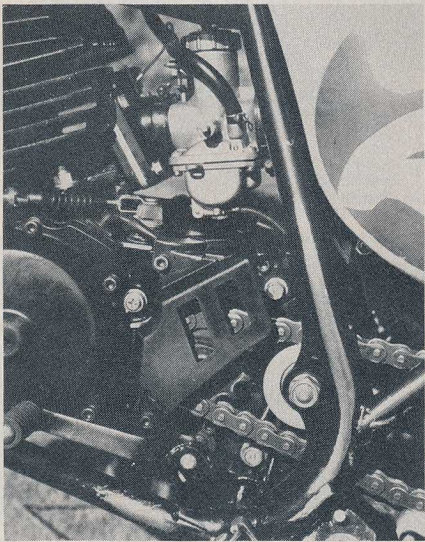
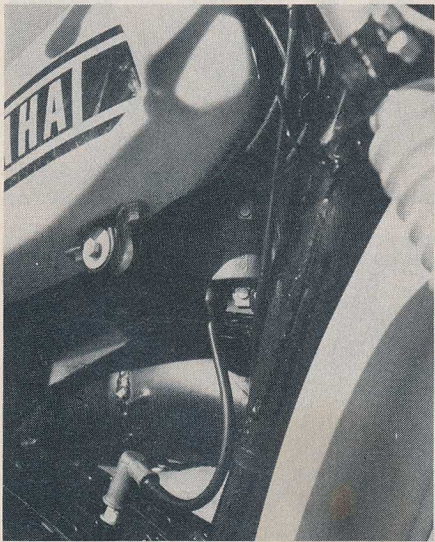
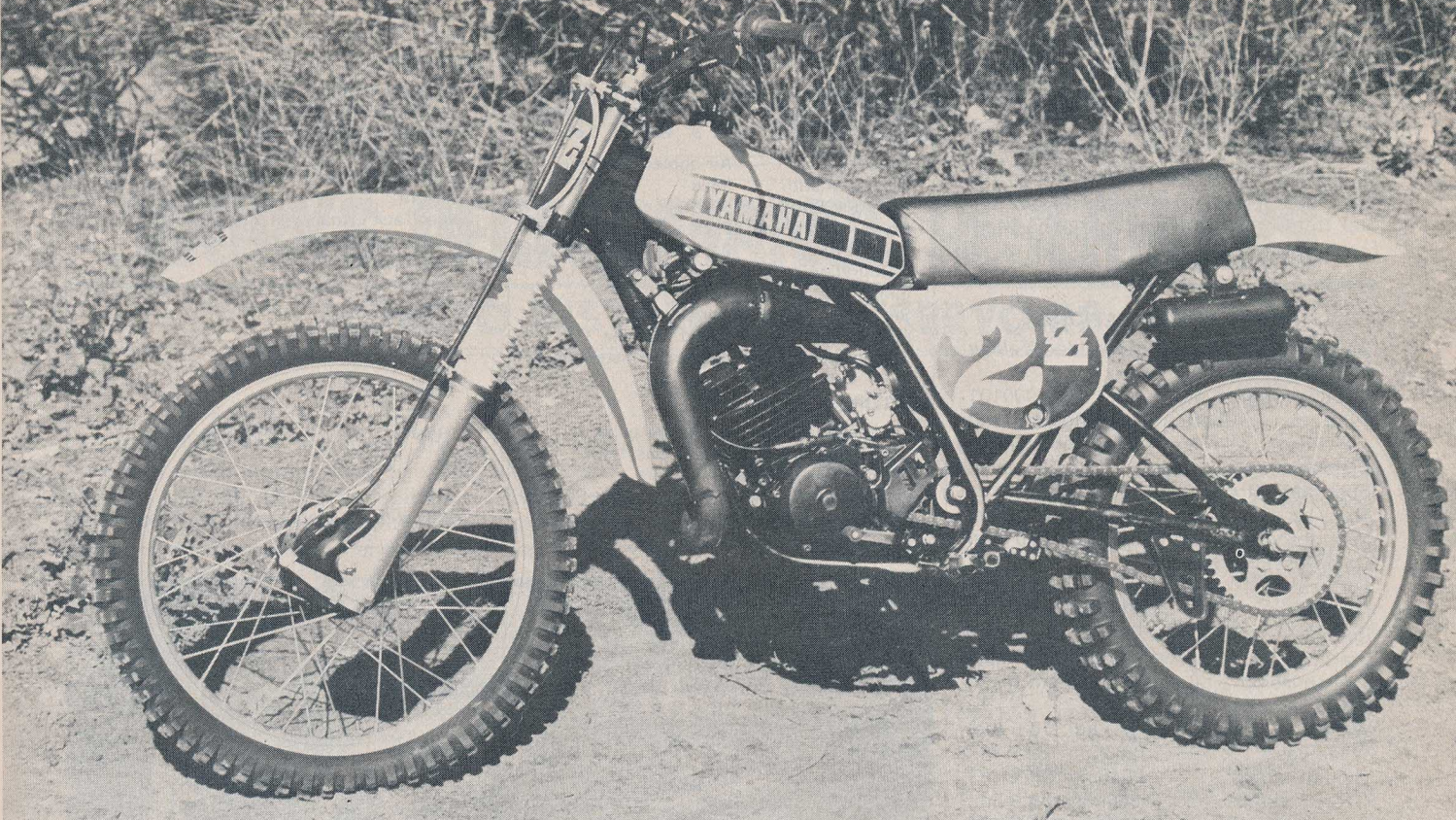
When we asked him what he would change about the bike if it was his own, he replied, "I might stick a Metzeler on the front and take the kickstand off. That's about it. The bike is a perfect 100 racer as is."

John had ridden last year's 100 YZ and we asked him to compare the two bikes. "No comparison. Last year's bike was fast, but it was also squirrely at certain times. This bike feels bigger and more stable. Especially in the fast sweepers. I've never ridden a better 100. In fact, it's better than most 125s I've been on. Including the modified ones."





Radial head kept things cool. The accessory manufacturers are going to have to work hard to find something to put on the YZ-100.



We had the YZ-100 for a long time before this report was written and the bike was thrashed quite a bit. It was ridden quite a few times in addition to the regular racing just on play days. Even though we kept a close eye on things, none of the nuts and bolts showed a tendency to loosen up. Other than the normal spoke tightening done on any new bike, the YZ acted like it was bullet proof. Nothing broke. Considering the huge power output, this is quite amazing. The way the power comes on might determine

Nice touches. Nylon roller over swingarm pivot, good tensioner and excellent pegs. whether or not the bike is for you. There's really nothing at all down low in the rpm range, and the power comes on in stages. If you nail it hard at low revs, the inlet tract moans and the bike doesn't move forward at all. But, once the revs to build at mid range, the engine pulls nicely. However, when the revs are allowed to climb, the YZ-100 goes absolutely berserko nuts. It gives a mean burst of power that's over rather quickly, demanding that you

catch another gear, or waste time over-revving. And when you're talking about 11,000 plus rpm, you had better shift. If you can work the gear shift lever fast enough, few bikes around will accelerate with it. Even bigger bikes, especially on tight twisty tracks. So, if you're a sharp enough rider to keep the YZ-100 on the gas and keep the gear shift here stirring around madly, then the bike is for you. However, if you are not talented enough to ride the bike in a full racer manner, then perhaps you had better look elsewhere.

The YZ-100 mono is definitely out of the play bike category and demands a decent rider to extract all the potential built into it.

Some riders will buy this bike and go slower. It'll simply be too much bike for them. This is a genuine racer. The real thing. And you had better be ready for it.

YZ100E SPECIFICATIONS

Color Competition Yellow

ENGINE:

Starting engine no. 2K5-000101

Type 2-stroke, air-cooled, reed valve, single

Displacement 98cc

Bore and stroke 50x50mm

Max. hp 20 bhp @ 11,000 rpm

Max. torque .. 9.8 ft./lbs. @ 9500 rpm

Compression ratio 7.2:1

Lubrication Premix

Carburetion (1) VM30SS Mikuni

Ignition CDI

Starting Primary kick

Transmission .. 6-speed constant mesh

CHASSIS:

Weight 83 kg (183 lbs)

Wheelbase 1365mm (53.7 in.)

Overall length 2040mm (80.3 in.)

Overall width 890mm (35.0 in.)

Overall height 1125mm (44.3 in.)

Seat height 866mm (34.1 in.)

Ground clearance .. 280mm (11.0 in.)

Caster (rake) 61 degrees

Trail 117mm (4.6 in.)

Suspension:

Front Telescopic fork, leading axle

Rear Swingarm (Monocross suspension)

Brakes:

Front Drum (leading trailing)

Rear Drum (leading trailing)

Tires:

Front 2.75-21/Type: Knobby

Rear 3.50-18/Type: Knobby

Fuel capacity 1.3 gal.

Oil capacity Primixed @ 20:1

Price NA

COLOR

Competition Yellow

ENGINE

Type Air cooled, 2-stroke
 Displacement 98cc
 Bore and Stroke 50 x 50mm
 Compression Ratio 7.2:1
 Max. Torque 9.8 ft.-lbs. at 9,500 rpm
 Carburetion Mikuni VM30SS
 Ignition C.D.I
 Starting Primary Kick
 Lubrication Mixed gasoline
 Transmission 6-speed, constant mesh

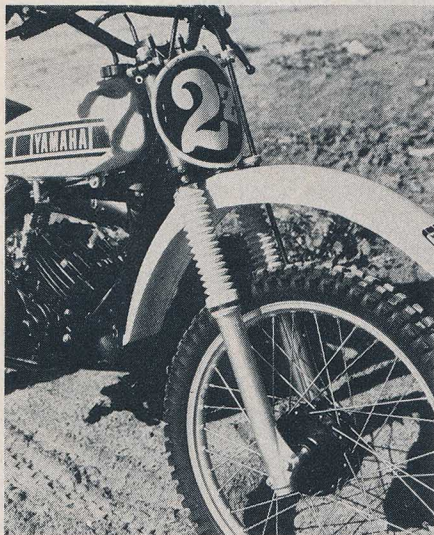
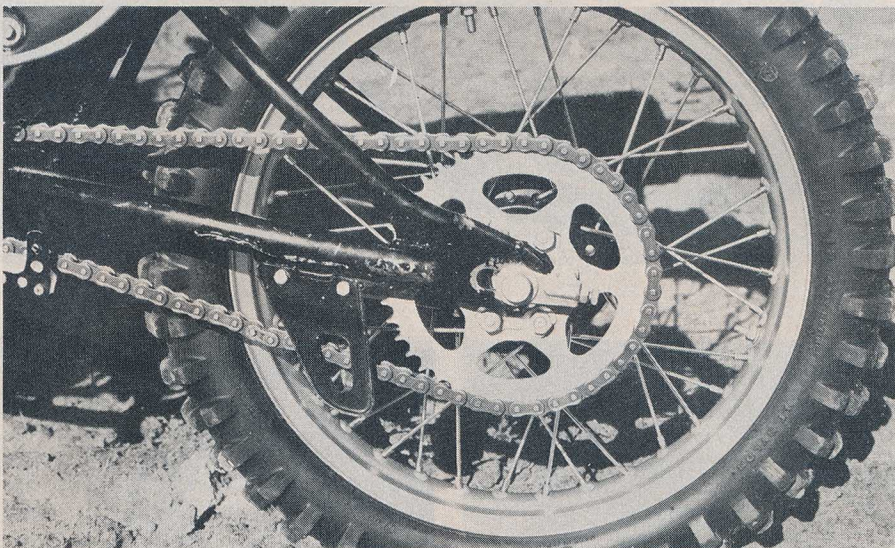
FEATURES

Six-speed Close Ratio Transmission
 Lightweight Dent Resistant Gas Tank
 Flexible Polypropylene Fenders
 Yamaha Torque Induction Reed Valve System
 Monocross Suspension

CHASSIS

Overall Length 80.3.
 Overall Width 35.0"
 Overall Height 44.3"
 Wheelbase 53.7"
 Ground Clearance 11.0
 Weight 183 lbs.
 Fuel Tank Capacity 1.3 gals.
 Oil Tank Capacity Not Applicable
 Suspension
 Front Telescopic Fork
 Rear Swing Arm
 Brakes
 Front Drum
 Rear Drum
 Tires
 Front 2.75 x 21
 Rear 3.50 x 18

Specifications subject to change without notice.



Superb forks with leading axles. They felt stiff for lighter riders at first, but under actual racing conditions, they proved to be about ideal.