

**Tests: Honda CB650, Suzuki RM400N,
Yamaha IT250, Yamaha XS1100 Special**
Computerized Motorcycle Testing

CYCLE WORLD

FEBRUARY 1979
\$1⁰⁰ UK 60p
America's
Leading
Motorcycle
Enthusiasts'
Publication

Suzuki RM400N

*Works Bike Performance
For Open Class Pros*



Backroad Biking In Baja

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WEST MONROE LA 71291

CYCLE WORLD

CYCLE WORLD TESTS

- 42 SUZUKI RM400N/*New Frame, New Forks, New Shock\$, New Motor, New, New, New.*
- 56 HONDA CB650/*Honda Leaves the Gadgets Out and Designs a Simple Four For Real People*
- 93 YAMAHA IT250F/*The Blue Rocket Has Learned How To Turn.*
- 115 YAMAHA XS1100 SPECIAL/*With Flash or Without, the Eleven is Still Big, Strong and Stable.*

FEATURES

- 52 THE RIGHT CROWD . . . AND NO CROWDING/*Good Vintage Racing Means Never Needing To Ask Who Won.*
- 65 BEHIND EVERY WINNING RACER . . . /*Would Bob Hannah Dominate Motocross as He Does Were Keith McCarty Not His Mechanic?*
- 101 A BIKER'S GUIDE TO BAJA/*Three Different Ways to Get Into, and Out Of, the Off-Road Motorcycling Paradise of Baja California.*
- 122 HUSQVARNA FOR 1979/*New Frames, Longer Forks and Real Airboxes.*
- 134 SEEKING PAVEMENT THRILLS ON A BUDGET/*Box Stock Road Racing Delivers High Thrills Per Dollar. Flying a Fast Hawk to Glory.*

TECHNICAL

- 37 COMPUTERIZED MOTORCYCLE TESTING/*An On-Board Computer Revolutionizes CYCLE WORLD'S Testing Program.*

COMPETITION

- 132 1978 TRANS-AMA SERIES/*Bob Hannah Wins It For America.*

EVALUATIONS

- 127 THE CAFE CAPER/*A Sports/Touring Sampler For The Longterm Suzuki GS550.*

DEPARTMENTS

- 8 Up Front 15 Letters 33 Roundup
- 142 Race Watch 151 Service
- 155 New Ideas 156 Slipstream

COVER

FLYING HIGH ON SUZUKI'S RM400N, *Photographed by Robert Monkton*

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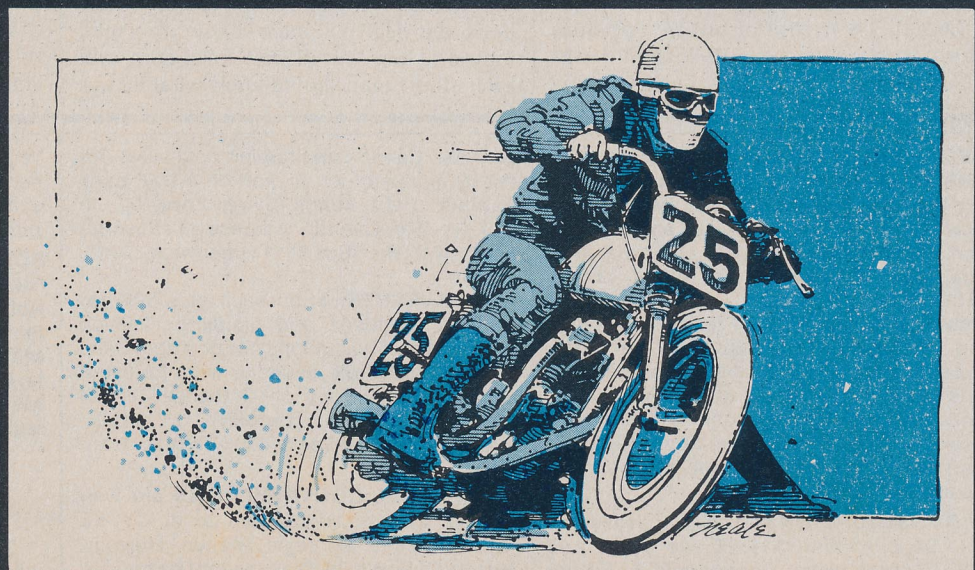
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YAMAHA IT250F

The Blue Rocket Has Learned How To Turn

■ We were highly impressed with our 1978 IT250 test bike. It had a potent engine, six-speed gearbox and many ISDT-influenced extras like quick detach wheels and snail chain adjusters.

We had a couple of complaints also. Fast riders quickly noticed a lack of steering precision and a tendency to push the front wheel in a slippery corner. The same riders thought the bike needed more suspension travel and ground clearance.

Yamaha's people listened and took notes.

When our 1979 IT arrived no one paid much attention. "Doesn't look like much is changed," was the normal reaction. True, the new bike looks almost identical to the '78 model. Same 3.2-gal. plastic gas tank, same good polypropylene fenders, same thick seat, same conical hubs, spokes and aluminum wheels. Yep, looks just like the old one, except for new tank and side plate decals. Your neighbors will never realize you sold the old scooter and bought a new one. But your buddy with the 1978 IT will



note the improvements. He'll spot the new smaller engine cases, new cylinder, new pipe and silencer, dogleg hand levers and longer travel suspension.

Best of all, you will notice the difference.

The first corner will instill confidence, the first wheelie will tell you the bike's balance has improved dramatically and the first really rough section will tell you the suspension has been improved.

The smaller engine cases and new cylinder shape appeared last year on the YZs. The countershaft sprocket is placed about one inch closer to the swing arm pivot and the side covers are more form fitting. Yamaha's 250cc engine in IT and YZ variations is basically the same, i.e. bore and stroke, compression ratio, clutch size and general design, but each is equipped for its own job assignment. The YZ has a 38mm carb, the IT has a 36. The IT exhaust pipe is tuned for mid-range push rather than top-end power, and the Mitsubishi flywheel/CDI magneto is large enough to keep the IT250 from bogging, and to slow acceleration.

This detuning hasn't hurt the IT's spirit, just refined it. The IT will out-drag many 250cc motocrossers and more than a few open class bikes. You can peg the 80-mph >

speedo in 6th. The 250 never loads up, or fouls its plug. If the engine does get stalled, pull the two-finger clutch lever and prod the slip-proof start lever and away you go again. Bump a stump with the gear lever and don't worry; the end is spring loaded. The brake pedal also has a spring-loaded folding tip, but the lever is made from flat stock and it sometimes bends before the end tucks in.

The frame looks unchanged, but it isn't. The general design, i.e. double front down-tubes, giant backbone housing the mono-shock spring and damper, are as they were. For added stiffness, the steering head is

wrapped and gusseted, which makes that section look sort of busy. The new engine cases required new mounts, a single welded steel one at the front, large aluminum plates on each side at the rear.

The major change, in specification and handling, comes from the steering head angle. It's two degrees steeper than was the 1978 model, 29.5° compared with 31.5°, and trail is reduced to 4.8 in. from 5.6. The wheelbase and swing arm portion of the wheelbase, so to speak, has not changed, and the pulled-back forks account for the minor shortening of the total wheelbase, from 56.4 in. to 56.0.

Swing arm is steel, unchanged from last year. It works well enough under most conditions, although (in common with the '78 IT250, which we had on test for the full year) when the bike is ridden hard into a corner and the tire's excellent traction gives a high side loading, the swing arm feels as if it's flexing, which translates into mild rear-wheel steering. Presumably cost considerations kept the IT from sharing the YZ's aluminum arm. Too bad, although we may have a cure in the works.

The chain guard is aluminum and does a good job of shielding the chain from mud thrown by the rear tire.

A tool bag is solidly mounted behind the seat and carries the normal supply of pot metal tools. They will suffice in an emergency. The bag is constructed from vinyl that looks flimsy but actually holds up well. The bag has a plastic plate in its bottom and a strap to keep tools and spare parts from pounding a hole through the material.

The speedometer face is new. Its numerals now stop at 80, allowing larger, easier to read numerals. In addition, the indicator needle is a day-glow orange color. The odometer is unchanged. It may be reset to zero by turning the reset knob backward or

enduro mileage may be corrected forward or back in tenths by pulling the knob out and turning.

Aluminum is still used for the case hugging skid plate. Riding in rocky areas can be costly if a decent skid plate isn't used, but they usually fill themselves to the top with mud when used in wet areas. To help alleviate this problem, a rectangular hole has been left in the bottom of the new IT plate. It won't completely eliminate the problem, but they are trying.

Enduro lighting remains unchanged: a 25 watt headlight and 5 watt taillight. Surprisingly, the 6-volt, no-battery system

provides a decent light. Certainly not a full blown racing item, but you won't have to worry about being caught by the darkness if that 40 mile loop turns into 70 miles. If the rider feels brave and wants to quicken the pace, a high beam is also furnished.

All of the F's control cables are large bodied, nylon lined, and carefully routed.

Hand levers are dogleg shaped, somewhat bendable, and they are easy to reach.

Wet weather riders will really appreciate the saw-tooth topped pegs, brake lever and raised ridges cast on the kick start lever to prevent slippage.

A rather hard seat foam is standard and >



requires considerable break-in before the sit-on-top-of-it feeling leaves. Once broken in, it should afford comfort for the life of the machine.

After the seat breaks in, everything feels properly placed and shaped. Bars are just the right width, brake and shift lever the right length, cleated pegs the right height and placement.

Riding the IT is a whole new experience. Pulling the front forks back has completely changed the IT's handling. It willingly goes where the rider points it, seldom tries to push the front wheel and has a more agile, precise feel. We did find one odd trait in the handling, though. The first time out several riders noticed a strange searching by the front wheel. It didn't affect control, but was annoying. It didn't feel like a geometry problem, more like an overly soft tire. We played with tire pressures but that didn't cure the problem. We replaced the tire with a new style 3.00-21 Goodyear Eagle and the problem was gone. The stock rim saver front tire has a very flimsy sidewall and the searching we felt had been tire flex. It may work fine in certain areas, but gave a spooky feedback

at our test sites. After the tire change, the bike could be ridden at frightening speeds down twisty trails, with precision on rocky paths, and generally with a high degree of rider control and confidence. Like always, Yamaha's superb brakes do their part and aren't bothered much by water. They will haul the IT to a controlled stop, with a minimum amount of effort, an important plus when riding extended distances.

Suspension travel on the F measures 9 in. front and 8 in. rear, about right for most enduro use. The forks are smooth and don't jar the operator. The rear wheel travel is controlled by yet another new-design monoshock. It has a large finned body and a single large spring. Damping is adjustable by inserting a flat blade screwdriver through a hole in the backbone and levering in a few clicks. Spring preload may also be adjusted but requires shock removal.

The added wheel travel is welcomed when deep gullies and such are charged into and the seat height hasn't been raised enough to cause added problems for shorter people.

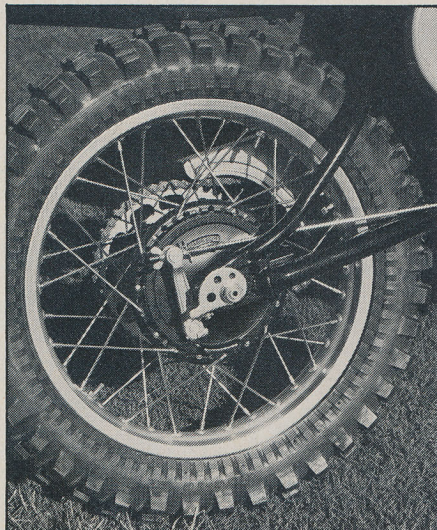
The year's changes add up to careful

and correct interpretation of the dirt rider's needs. The latest IT250 is a fine bike for a fast or serious rider. The major change, quickening the steering, will let the fast folks jam their way through the turns, while the steering hasn't been speeded to the point of dancing bars at full pace.

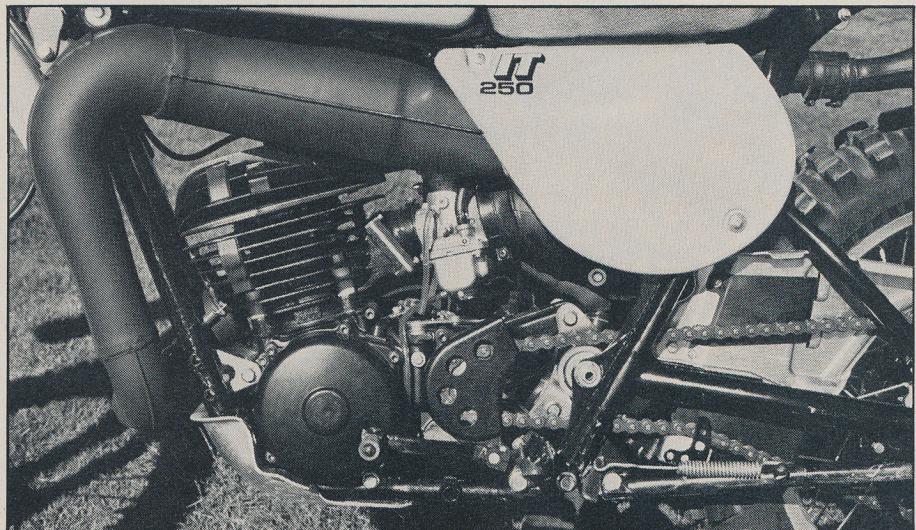
The novice and beginner also benefit from the rake change. The front wheel no longer skates on off camber turns and dodging through the woods requires less effort. The IT feels much lighter than it actually is, another bonus from the quickened steering. Although quicker, it's not so quick that the novice rider can't adjust and start to enjoy after a couple of hours riding time.

Good at hills, too, as traction is fine and the engine can be dialed carefully onto that elusive point between bogging the engine and standing the rig on its rear wheel.

All this sounds like an impressive package, and *impressive* is the word that best describes the IT250F.



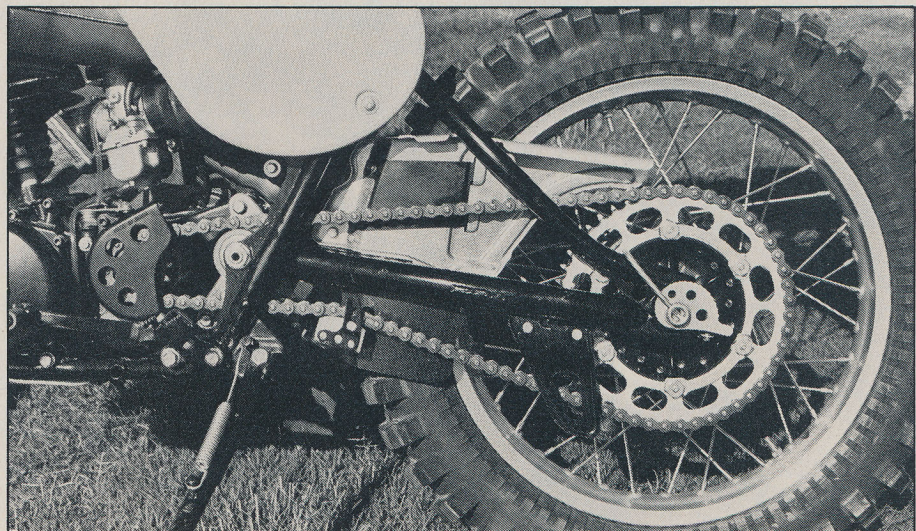
Rear brake linkage is a quick detach type for quicker tire changing.



The sprocket/swing arm relation has been improved. New pipe has larger center section. Shift lever has folding end.



Leading axle front forks are plush.



Rear wheel has snail adjuster, and a handle on axle. Excellent chain tensioner is long lasting.

YAMAHA IT250F

SPECIFICATIONS

List price\$1698

Suspension,
fronttelescopic fork

Suspension,
rearmonoshock

Front wheel travel,
claimed.....9.1 in.

Rear wheel travel,
claimed.....8.1 in.

Tire, front.....3.00-21

Tire, rear4.50-18

Enginetwo-stroke Single

Bore x stroke70 x 64mm

Piston displacement246cc

Compression ratio7.9:1

Claimed power.....na

Claimed torquena

Carburetion36mm Mikuni

Ignition CDI

Lubrication system.....premix

Oil capacity
(transmission)1.5 pt.

Fuel capacity3.2 gal.

Recommended fuel.....premium

Starting systemprimary kick

Air filtration.....oiled foam

POWER TRANSMISSION

Clutch.....multi-disc, wet

Primary drivehelical gear

Final drive# 520 chain

Gear ratios, overall:1

6th.....8.03

5th.....9.20

4th.....11.05

3rd.....14.03

2nd.....18.11

1st.....23.78

DIMENSIONS

Wheelbase.....56.0 in.

Seat height34.5 in.

Seat width6.5 in.

Handlebar width33.5 in.

Footpeg height12.7 in.

Ground clearance10.2 in.

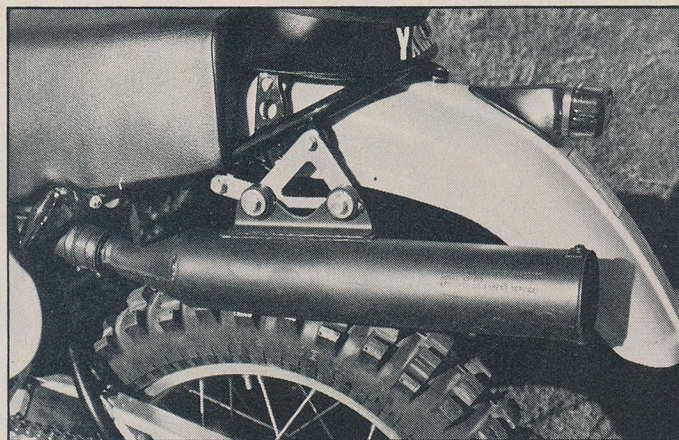
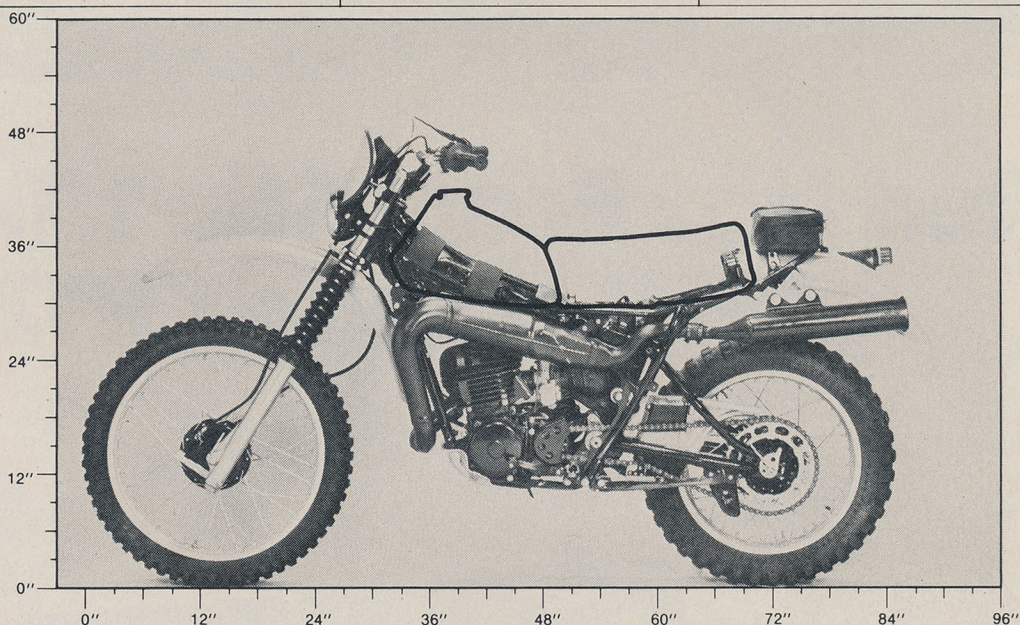
Front fork rake

angle29.5 deg.

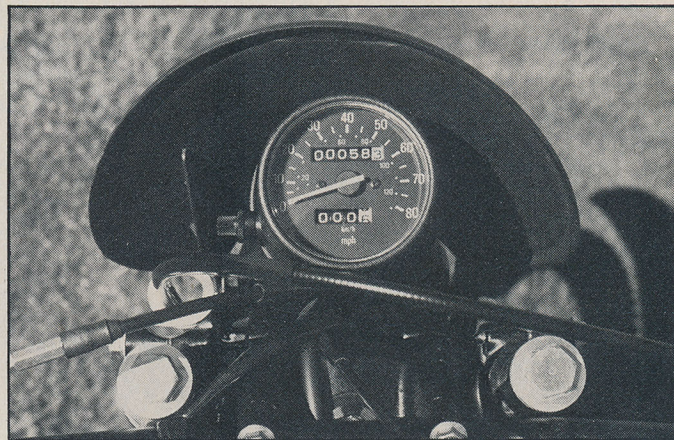
Trail4.8 in.

Test weight
(w/half-tank fuel)258 lb.

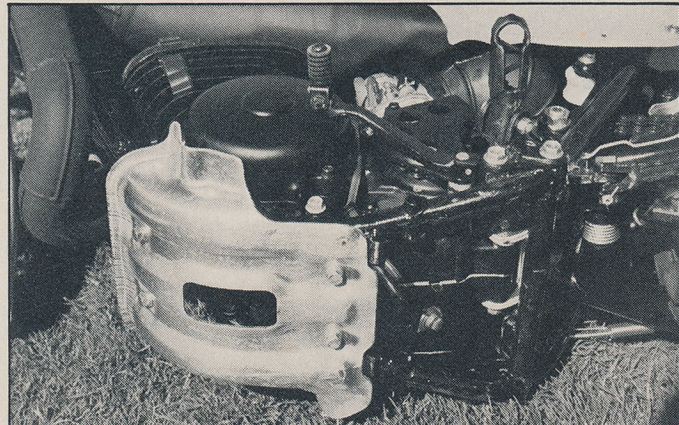
Weight bias, front/rear,
percent44/56



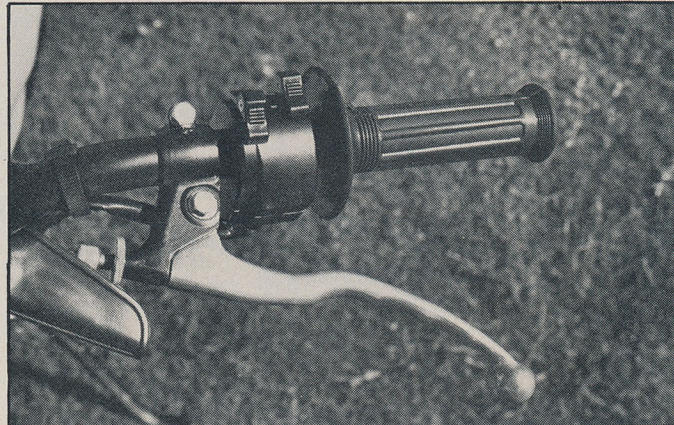
Silencer is solidly mounted but emits a tinny sound. Large fender keeps mud off the rider. Tool bag looks flimsy but holds up well.



Speedo is easier to read and control cables are large and well routed.



Aluminum skid plate has large hole in its bottom to allow mud etc. to escape.



Excellent dog-leg levers are furnished.