

LAST YEARS WORKS BIKE?

Massive changes

By The Staff of Dirt Bike



About two weeks before we received the 1980 YZ250 for a test, a comment was overheard at a local track. It went like this: "Naw. I'm not gonna get me a new YZ. All they did was stick a reservoir on it and diddle with the travel. I'll keep my 250F and wait till 1981. That's when the big changes are due."

With this sort of thought in the back of our minds, we met the Yamaha folks at Indian Dunes for the first testing session and went over the bike. In actual fact, the changes have been staggering. Without question, no single model year has ever received such a drastic change from the previous one, since Yamaha went to the monoshock concept.

Consider. The entire frame is different. New cases are the base for a fresh engine design. Forks are not only changed, but dramatically improved. The monoshock itself has been totally

redesigned and is now adjustable over a wide range. Even long-time Yamaha staples like the hubs and brakes have been changed and improved.

Still, changes don't mean progress (a glance at the 1980 Husky forks proves that), only riding and testing show what works. By the end of that first day of riding, four different riders had put in approximately 300 laps. In addition, the YZ250G was ridden and raced regularly for over a month. We also took the new "G" out to the desert on a play day, to analyze its behavior in sandy and high-speed conditions.

We are pleased to report that the YZ "G" is a totally new and improved bike. As you spend more and more time with the machine, you can see that this 1980 version of the YZ is extremely close to the works bikes of 1979. This is not an exaggeration, as we have had the chance to sling a discreet leg over a few works OW

machines, and the feel of the production '80 unit and the works '79 unit is close enough to be uncanny.

First impressions

Aside from the power output, the very first thing to register on the rider is the light feel of the YZ. With previous YZ250s, a certain amount of top-heavy weight made its presence known when the bike was leaned over for a turn.

Because of the lower structure of the top frame section and the relocation of the mono unit itself, an appreciable amount of weight has been removed and placed lower down near the center of gravity.

Not only does this reduction in weight help in the turns, but the reversal of the monoshock unit makes for simple adjusting of both preload and rebound damping. Even pressure checking is simpler, with the remote reservoir hanging out in the open.

Some care must be taken when getting on the gas hard, as the front end is now light enough to come up under power without a whole lot of warning. After an hour or so is spent on the bike, you'll be able to make allowances for this and it'll cease to be of concern, but most of our test riders indulged in eye-opening wheelies when exiting corners during the first few laps of hard riding.

The Yamaha people told us that the suspension would be slightly stiff for the first eight or nine hours of operation until all the seals, bushings and sliders seated in. We never noticed this, and felt that the suspension was plush from the very first stroke. Of course, the average dirt biker weighs just about the same as we do (about 200 pounds or so), so what felt right for us, should be right for Joe Average.

When riding any new test bike for the first few laps, one of the things we try to do is get the front end to push, or wash out in a turn. If we encounter this, we can then head back to the pits and hopefully make adjustments to

correct the steering, by raising or lowering the forks in the triple clamps, or playing with the preload at the rear. All of these things have a profound effect on steering.

Our first laps on the YZ were with all the settings on the recommended numbers. Rebound damping was set at 12 clicks from full firm, forks were left in the as-delivered position, no air was used in the forks and all suspension oil levels were as recommended in the owner's manual for the average rider.

With everything set up like that, we were very pleased that the front end of the YZ bit like a demon in the flat, hard turns. It was not necessary to hunt for berms to turn the bike. Last year, we reported that the YZ "F" model turned well compared to the "E" model. It's safe to say that the "G" is as

dramatically improved in the corners over the "F" model, as the "F" was over the "E."

Hot laps and cold facts

After all of the test riders put in a handful of laps each, we gassed up, checked the spokes, nuts and bolts, and then headed out for longer, more aggressive periods of riding. It was then that we found out that the YZ does not tire out the rider much, even when pushing hard. Two things made for this: the light weight and the ability of the suspension to soak up the annoying stutter-bumps remarkably well. You know what stutter-bumps are, right? Those chattering little ripples entering and exiting many corners. The ones going in are caused by heavy braking, and the ones going out are caused by hard acceleration. Either way, they pound a

rider harder than big bumps and make any bike hard to control when riding quickly over them.

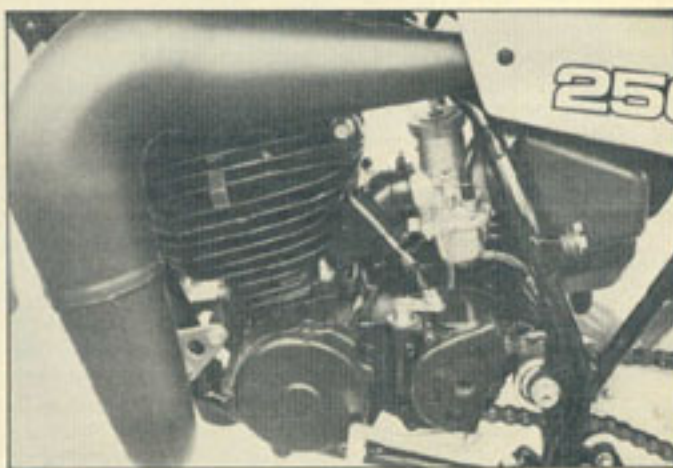
The first few inches of travel—front and rear—on the Yamaha are very soft, and this helps reduce initial impact felt from bumps and sharp-edged ruts. Strangely, there's no wallowing felt in the turns, as one might expect from such a plush initial movement.

There are 11.8 inches of travel at both ends, and while watching someone ride the bike at a decent pace, you can see that most of the travel is used quite nicely around the track. Still, the YZ does not bottom out easily over big jumps. Truly amazing!

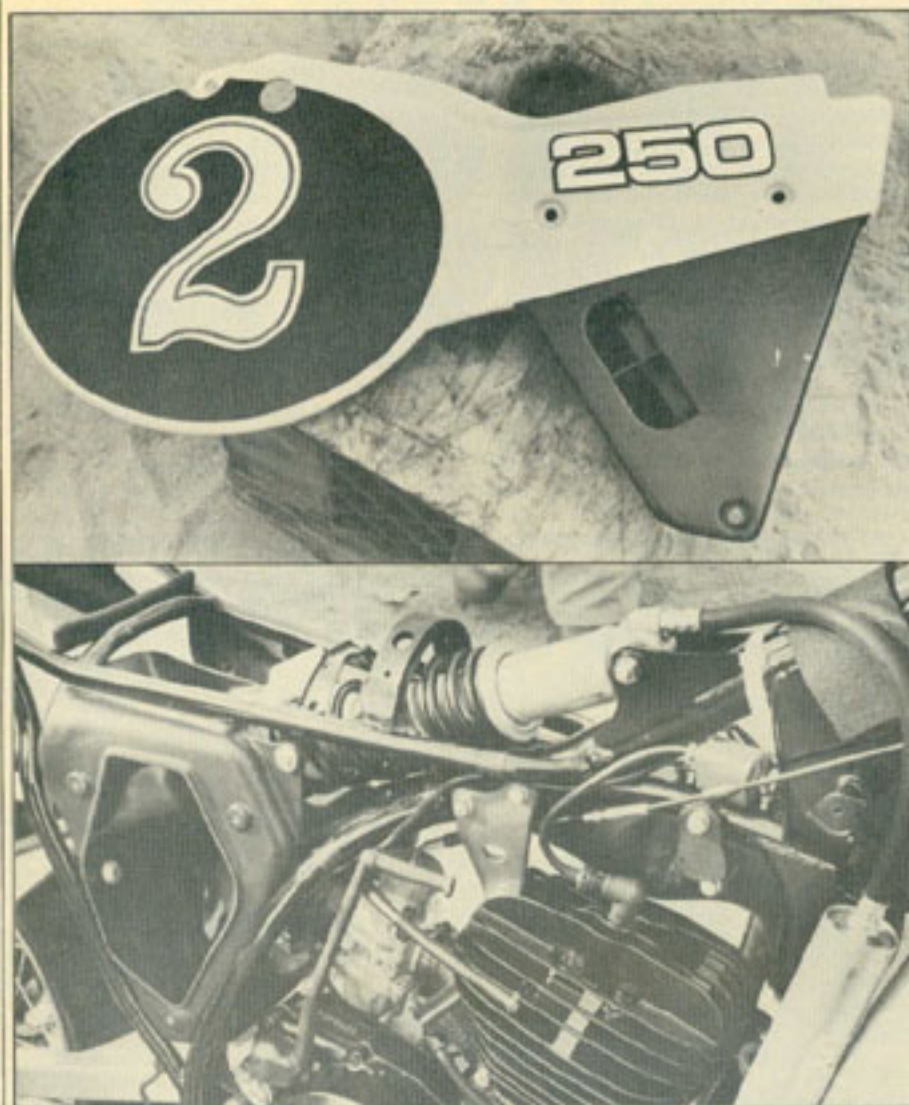
When stuffing the bike into a turn, it's not necessary to climb all the way up on the tank to get the front end to bite. Lazier riders—like the DB lard-



New exhaust pipe has an enormous head and belly section. It could use a heat shield to prevent leg burns.



1990 engine is not an updated "F" unit. It's new from the cases on up. Mono reservoir is mounted on the downtube this year.



Trick new air box hides under spiffy right side panel. Different top frame tube and redesigned monoshock can be seen clearly here.

butts—tend to stay basically where they plant their cheeks, especially when they get tired. Though not very scientific, this is one surefire way to tell if a front end sticks well in the corners.

We also found that we could dive in with the throttle on or off; it still held the line well and the front tire would not push or plow. Fast riders (or those with a high skill level) will no doubt extend the forks a few millimeters for increased stability without sacrificing the good turning habits.

With the standard settings, the only minor gripe we had was when braking on a slight downhill section with bumps. Here, the rear end would kick up a bit and chatter. Not enough to get the rider into trouble, but enough to make its action felt. Back in the pits, Ed Scheidler, the Mary Worth of Yamaha, made some minor adjustments to the fork height and the rebound damping, and the slight hop and chattering went away. A slight sacrifice in steering accuracy was felt by a

few riders, while the Expert-level riders liked Ed's adjustments better.

Power play

Even though the YZ is an all-new bike, the delivery of power is similar to the 'F' model. That is, not a whole lot at the very bottom of the rpm range, with a healthy early mid-range. The 'G' model pulls much harder than the 'F' all through the range and revs out much further on the top with more effectiveness than the older 'F.'

The punch at mid-range is truly impressive. It lets the rider virtually rocket out of a corner. And, with the improved frame and suspension, that blast of power is not wasted in wheel-spin, or with the rear end swinging wildly from side to side. The 'G' flat hooks up and gets with it. As we mentioned earlier, the only thing you have to watch out for, is looping out under heavy power in the lower three gears.

To get the most out of the way the YZ250 delivers its power, the bike should be ridden in the Hannah fashion. That is, exiting the corner a

gear higher than you think you should and fanning the clutch quickly to sneak the revs up into that strong mid-range. While this might sound too complicated, it becomes natural after a half-hour or so of riding.

This philosophy of sacrificing low-end power for mid-range and top end is an accepted factory approach in a no-compromise engine. It's felt that if you have to lug a works 250 down at the bottom, you shouldn't be on it.

Some riders might have trouble adapting to the way the power is delivered on the YZ250G, but none of our test riders had any difficulty. Naturally, some comparison must be made to the other bikes in the 250 class, but we can only give you a teaser for now. The 250 RM has more low-end power than the YZ, less mid-range snap and slight ly more on top than the YZ. That's all we'll tell you right now. You'll have to read the Suzuki test next month. And after we get done with all the 250s, a shootout is most likely.

With the kind of power that the YZ develops, using the gearbox quickly and easily is important. Last year, it was often difficult to upshift the YZ under power. It just would not go to the next gear unless the throttle was momentarily backed off and the clutch used. Now, all the rider has to do is leave the power on, use the clutch, and gear changes are slick and clunk-free.

Layout, controls and comfort

Even though the numbers tell you that the YZ250 has a 36.8-inch saddle height, the Yamaha is fairly low-slung for a new-generation long-travel bike. A 5'9" rider can sling a leg over it without too much trouble, and once in the saddle, the suspension sags enough to let that same rider touch the ground easily with both feet. The saddle also angles forward to meet the gas tank and places the rider just about where he should be.

Taller riders—those over six feet—may not like the layout and feel of the Yamaha. For them, it's too low and cramped, with the bars coming back and hitting them in the knees when they try to stand. Don't ask us how Mike Bell does it.

We cut a few inches off the stock bars and all of the test riders felt happier with the feel. Controls are the very nice Yamaha dog-leg levers, which fit the hands well, but seem overly long in the new age of shorty levers.

Pegs are located in just about the right position for ease of standing, and all controls are easy to reach and use without thinking about it.

One very welcome item is the slim area below the saddle. The single shock approach eliminates bulky side panels that tend to push the rider's legs from



the pegs when standing in a rearward position.

We heard a few complaints about burns on the left leg near the knee from the fat part of the expansion chamber. Shorter riders never mentioned this, but the six-footers whined and sniveled. Yamaha really should put some sort of a minimal formed wire heat barrier in that area.

Bits and pieces

Our bike started much easier than previous YZ250s, usually taking no more than two or three prods, hot or cold. Nothing gets in the way of a natural swing when booting the bike over, and the kickstarter flips in neatly and stays there.

It takes quite a while to warm up the engine to where it'll run clean, but none of the characteristic Yamaha piston slap was noticed when the engine was cold.

A very good system of guides and rollers keeps the chain from bad craziness and the swingarm pivot point and the countershaft sprocket are very close together.

A newly designed air box and filter are welcomed. The "G" has a tapered two-stage filter that slips easily out without taking a lot of crud with it.

The YZ250G is very sensitive to minor changes in the jet needle position. If detonation is detected, one notch richer usually does the job. Fortunately, the carb is easy to get to and the carb cap can be unscrewed without twisting or removing the carb.

A solid shift lever sticks out a bit farther than we would like to see. Even better... one with a folding tip, then location wouldn't be that critical.

The tires on our bike didn't seem to work all that badly, especially for standard items. There were Bridgestones at both ends. The rear is billed as a 5.10x18, but appears to be no

heftier than a normal 4.50. Our choice for dry going would be Metzlers, or at least a Metzeler up front.

A new rear hub is found on the "G" bike and it's smaller than what we're used to seeing on a Yammie. Still, the brakes worked well, and we prefer the action of this smaller unit to the way-too-grabby older-style hubs/brakes.

The wheelbase on the YZ is listed at 57.3 inches, but there are nearly two more inches of adjustment left in the rear axle slot. Moving the rear wheel back an inch or so has a dramatic effect on the handling, and cross-country riders would be well-advised to add a link or two and play with various settings for maximum stability at higher speeds.

As with all recent 250 YZs, the transmission is a six-speeder. With the stock gearing (14-tooth countershaft sprocket, 48-tooth rear sprocket), the top speed was frighteningly high. Our best estimate is right around 80 mph, based on the readings of an IT400 riding alongside the YZ250G. Our estimate, then, is as accurate as the IT speedo.

Attention to detailing is—in general—excellent, with the exception of an old-fashioned throttle, the solid shift lever and a sidestand that should have been left off. It sticks out too far and flops around when landing. Too, genuine racers should not even have a sidestand.

Minor changes to fenders and plastic pieces complete the package, which brings us to the all-important bottom line:

Summation

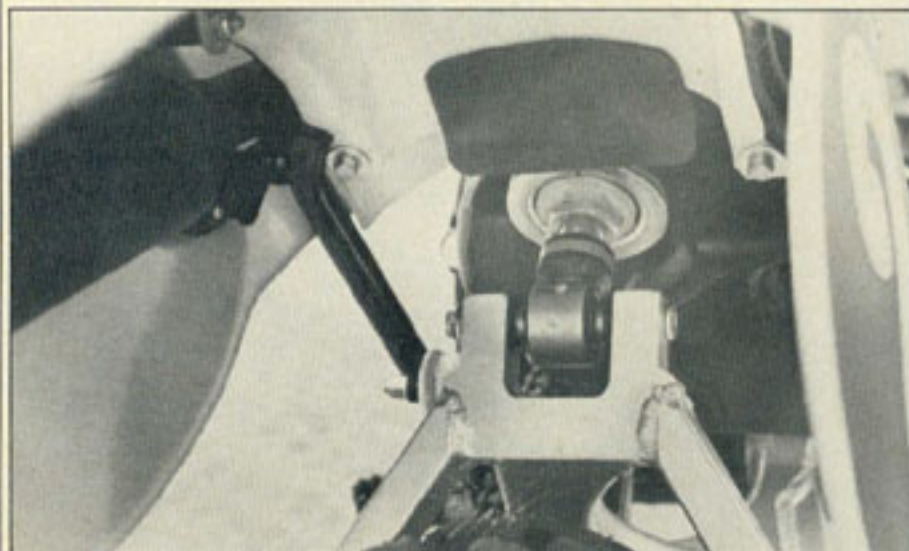
In their rather extensive advertising campaign, Yamaha boldly states that, "THE ONLY THING WE HAVEN'T CHANGED IS THE COLOR." Perhaps they should have considered that also, because far too many people are going

to think that the new bikes are merely slightly updated '79s.

The new YZ250 is so changed and so improved, that perhaps Yamaha should have driven the message home with a variation on their familiar blazing yellow. Ahh, wait. Maybe they should have just put the Hannah lightning bolt decals on the tank. And why not? The new YZ250G is close enough to the bike Hannah rode last year to deserve it. □

YAMAHA YZ250G Specifications

NAME AND MODEL	Yamaha YZ250G
ENGINE TYPE	Two-stroke single, reed induction
BORE AND STROKE	70mm x 64mm (2.8 inches x 2.5 inches)
DISPLACEMENT	246cc (15.0 c. l.)
CARBURETION	VM28SS Mikuni 38mm
FACTORY RECOMMENDED JETTING:	
MAIN JET	370
NEEDLE JET	P-8
JET NEEDLE	6F16-3
PILOT JET	60
SLIDE NUMBER	3.0
RECOMMENDED GASOLINE	Premium
RECOMMENDED OIL (MFR)	Yamalube "R"
FUEL TANK CAPACITY	7.6 liters (2.0 U.S. gallons)
FUEL TANK MATERIAL	Plastic
GAS/OIL RATIO	32:1
LUBRICATION	Oil in gas—pre-mix
AIR FILTRATION	Oiled foam
CLUTCH TYPE	Wet, multi-plate
TRANSMISSION	Six-speed, left-side shift
GEARBOX RATIOS:	
1	2.142
2	1.812
3	1.411
4	1.142
5	0.966
6	0.875
GEARING, FRONT/REAR	14/48
IGNITION	Hitachi CDI
PRIMARY KICK SYSTEM?	Yes
RECOMMENDED SPARK PLUG	Champion N2-G
SILENCER/SPARK ARRESTOR/QUALITY	
	Silencer only, average noise level for racer
EXHAUST SYSTEM	High-pipe
FRAME TYPE	Single downtube, split cradle
WHEELBASE	1455mm (57.3 inches)
GROUND CLEARANCE	310mm (12.2 inches)
SEAT HEIGHT AT TANK	905mm (36.8 inches)
STEERING HEAD ANGLE	30 degrees
TRAIL	132mm (5.19 inches)
WEIGHT WITH ONE GALLON GAS	224.5 pounds (214 dry)
RIM MATERIAL	Aluminum
TIRE SIZES:	
FRONT	3.00x21 knobty, Bridgestone
REAR	5.10x18 knobty, Bridgestone
SUSPENSION:	
FRONT, TYPE AND TRAVEL	Telescopic/air/oil 11.8 inches
REAR, TYPE AND TRAVEL	Monoshock, with remote reservoir 11.8 inches
INTENDED USE, MFR.	Motocross
COUNTRY OF ORIGIN	Japan
PRICE, APPROX	\$1898
PARTS PRICES, HIGH-WEAR ITEMS:	
PISTON ASSEMBLY, COMPLETE	\$38.78
RINGS ONLY	\$11.64
CYLINDER	\$131.88
SHIFT LEVER	\$7.90
BRAKE PEDAL	\$18.70
FRONT SPROCKET	\$8.28
DISTRIBUTOR:	
	Yamaha Motor Corp. U.S.A. 6555 Katella Ave. Cypress, California 90630
OVERALL RATING, FROM 0 TO 100, VARIOUS CATEGORIES, KEEPING INTENDED USE OF MACHINE IN MIND:	
HANDLING	97
SUSPENSION	97
POWER	96
COST	95
ATTENTION TO DETAIL	98
EFFECTIVENESS, STONE STOCK	97



Now it's no hassle getting to the preload and damping adjustments on the monoshock. Just reach under the rear fender and dial in what you want.