



YAMAHA IT465

Once a Laughing Matter, Yamaha's Open Class Enduro Has Become Serious Competition

■ Yamaha's YZ motocrossers have a reputation for good handling, light weight, and competitive power. Yamaha's IT models, especially the open ITs, have a reputation for being heavy, foul handling and generally a poor choice for a serious enduro rider. We tested the 250 IT in May 1981 and it completely changed our opinion of the model. The 465 IT is even more impressive.



**CYCLE
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TEST**

Forget everything you have heard or remember about past open class ITs. It doesn't apply to the all-new IT465. Yamaha has done what serious Yamaha enduro riders have been doing for several years—made an IT out of a YZ.

Yamaha started with the first and most serious flaw—the frame. The IT465 has last year's YZ motocross frame. It's chrome-moly steel with a large single front down tube, heavily gusseted backbone, good triangulation in the mid-section and generally the same configuration as the 1980 YZ465G motocrosser. The main differences between YZ and IT are the enduro frame's rear loop, the better to carry the larger fender, tool bag and taillight, and the bolt-on tubes below the engine, which eliminate the need for a skid plate.

The IT also gets an aluminum swing arm, long overdue. It's not identical to the YZ465 arm. The main difference lies in the way the rear axle is adjusted and removed. The IT has an open ended wheel adjuster slot so the axle can be loosened and the complete wheel assembly slid out the rear of the swing arm, eliminating all of those loose parts being misplaced in the mud or whatever. The excellent quick release brake rod from past models has been retained, as has the slotted brake backing plate that eliminates the need for a protrusive static arm.

Up front the IT gets a double leading shoe brake just like the YZ. Stopping is strong and positive but not as grabby as the motocrosser, which means it's better. Brake shoes with a little more bevel on their leading edges are responsible for the improvement.

Both wheel assemblies have adequate sized spokes that won't need changing or beefing. Both tires, 3.00-21 front, 5.60-17 rear, are fine for most areas of the country, the fat rear doing a great job of hooking up

in loose shale and sand while protecting the rim. Long life is another side benefit of the 17 in. rear.

Unlike past ITs, the suspension won't sell the rider short: an aluminum bodied monoshock complete with remote reservoir allows 11.0 in. of controlled rear wheel travel. Leading axle KYB forks provide 10.6 in. of superb front wheel travel. The shock body is placed rearward like the YZ's and offers 30 easily adjusted rebound damping positions along with a range of settings for spring preload and nitrogen pressure. Additionally, Yamaha has both lighter and heavier springs available for special applications. The forks are equally adjustable by changing spring rates, oil weight and volume, and stanchion tube height.

Enduro niceties include a folding shift lever, folding brake pedal end, rear fender mounted tool bag, straight-pull throttle, hand guards, thick seat, narrow 3.4 gal. plastic tank, quick detach headlight/numberplate, odometer with magnifying lens, dog-leg hand levers, enduro lighting, efficient chain guide, ribbed kick lever end, large fenders, spark arrester/silencer that's quiet, and an oiled foam air cleaner that's removable without tools.

One of the big complaints about open ITs has been the type of power they produced: quick pipey power that didn't work well in mud and other enduro situations. Like the rest of the IT, forget all you remember. The H has one of the nicest enduro engines we've tested. The 465cc engine, based on last year's YZ, has a heavier flywheel, tamer porting, different pipe and silencer, different carburetor, and wide ratio transmission. Parts like the clutch, primary drive, cases, reeds and reed box, are the same as the YZ has.

The IT looks and feels like the new machine it is. Just sitting on a 465 IT tells some of the story—everything fits. The bar-seat-peg relationship is nearly ideal, hand and foot levers are positioned properly. The medium travel suspension is compliant and makes for a reasonable 36.7 in. static seat height that becomes even lower after the rider is aboard. Touching the ground with both feet is possible for people of normal height.

Starting the 465 isn't pleasant unless you're used to starting big two-strokes. Even then several brisk boots are normally required before a fire lights. The engine doesn't require hard kicks but rather quick kicks; the engine has to spin before

there's life inside. It gets a little easier after it's warm and a pro can sometimes start the beast first kick, but it's the exception, not the norm.

The heavier flywheel is apparent as soon as the engine fires. Revs are controllable yet quick. Warm-up is normal and clutch pull is fairly easy for an open bike. Starting in low gear with the wide ratio transmission and tractor-like engine power is a waste unless you're starting on a grade. Just use second if the ground is level. Power is produced from idle through the upper mid-range then the power band becomes noticeably flat. The engine is happiest when short shifted so the incredible mid-range power can be fully used. The smooth and progressive revs combined with the exceptionally quiet exhaust give a false impression of slowness. Impromptu drags against a YZ465H proved the IT almost as quick and a bunch more pleasant from a noise standpoint. The smooth power application combined with the fat rear tire makes climbing hills child's play. Any hill is easy. Even shale hills that're almost vertical are simple. In fact, the IT will climb those impossible looking shale hills in second most of the time! The hill really has to be bad before 1st is needed.

On one of our test rides a Suzuki DR500 and Honda XR500R were along. The IT465 did everything, including hill climbs, better than the four-stroke Singles. When the going gets really rough and speed is low, the large Singles with valves tend to spin the rear tire in bursts as the engines boom, boom along. The IT produces nice smooth power impulses, seemingly more torque and sheer horsepower, and is generally more pleasant and easier to ride. Gear selection is less important, the IT will happily crawl along in third gear, yet accelerate quickly without downshifting if the rider wishes. The large four-strokes usually react to such an action by burping and dying. So much for the Thumper reputation of torque superiority!

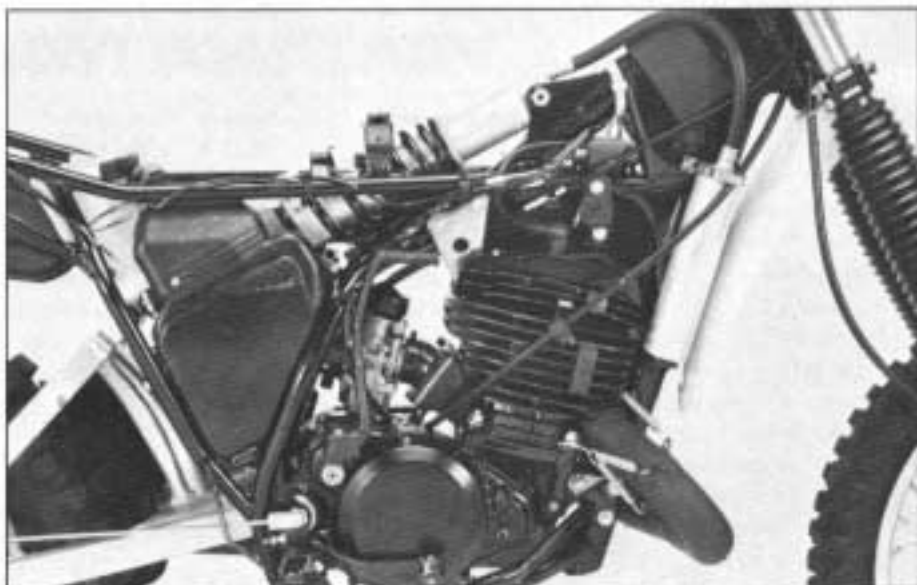
The same smooth application of torque and power makes the IT465 a pleasure to ride on tricky side slopes. The rear wheel follows the front with little tendency to slide down the slope. Many things contribute to this display of good manners, but it's mostly the end result of good geometry, smooth power delivery and the fat rear tire.

Even riders who dislike going up and down steep hills, which also means they're not very good at them, had little or no





Plastic airbox has an extended top to keep water out. Removal of the oiled foam filter is simple and doesn't require tools; pulling the rubber strap and removing the cover gives access.



Engine produces smooth torque that'll outdo any four-stroke Single we've tested. Last year's MX chassis lets you use it.



Odometer has a magnifying lens so numerals are easier to see.



Footpegs have an aggressive top and don't hold mud. Brake pedal end folds.



Spark arrester/silencer is forestry legal and best of all, it's super quiet.

trouble climbing hills steeper than they usually tackle. The bike doesn't try to loop or rear when climbing nearly sheer walls, nor try to get sideways when coming down.

We've had the test IT465 around for three months now, and every time Yamaha calls about picking it up, we find another excuse to keep it a little longer. The bike has proven well suited to use in the mountains, desert and wilds of Baja. The low seat height, excellent waterproofing and super engine make any ride great. And the stock gearing that we used in the mountains also worked fine for Baja's fast roads, thanks to the wide transmission ratios. Gas mileage is also a plus on the big IT. The narrow 3.4 gal. tank will take a fast rider 90 mi. or more.

The IT's only shortcoming is the lack of suspension travel across open desert, a problem common to most enduro bikes. But then a bike set up for the desert, one with motocross suspension, is too tall and top heavy for use in the mountains. The IT's suspension is middle of the road as far as travel goes. Most of our riders thought the medium travel approach was a good choice and just slowed down some in the desert. Anyway, it's only a problem, and slight at that, if you have a desert available to ride in.

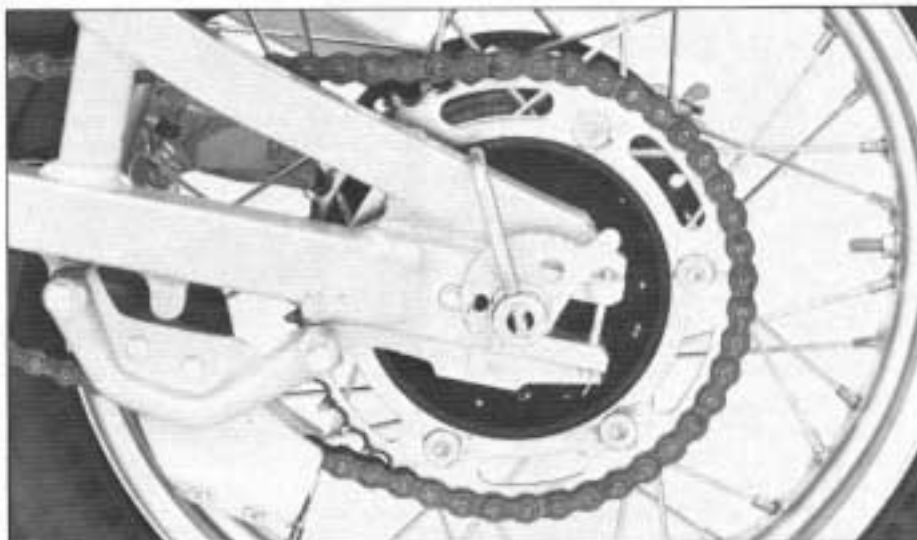
We experimented with different adjustments of the suspension and found the stock spring preload, stock rebound damp-

ing (the middle position) and stock fork setting (no air pressure and stock level 10 wt oil) best. The excellent owners manual explains how to change the settings. The manual also shows complete engine tear down and detailed maintenance of every part of the bike. Read it. You won't waste your time or be insulted.

The big IT is fairly light for a fully equipped open enduro bike but you'll know you're not riding a motocrosser if the bike is dropped on the side of a hill. It weighs 260 lb. with the tank half full of

premix. Lighter would be better but we couldn't see any way to take off much weight without removing many of the enduro components that make it so nice to use.

Our test bike had a small problem with the shifting. It shifted hard from day one. And it didn't get any easier after 500 mi. We sent the bike back to Yamaha for inspection. They performed a modification on the shift cam which cured the complaint. We won't detail the mod here—if you own an IT with the same problem, see >



Chain guide is strong and long lasting. Sprocket adjusters and open ended swing arm ease maintenance.

YAMAHA IT465

SPECIFICATIONS

List price	\$2099
Fork travel	10.6 in.
Fork stanchion tube diameter	38mm
Rear wheel travel	11.0 in.
Front tire	3.00-21 IRC
Rear tire	5.60-17 IRC
Engine	two-stroke Single
Bore x stroke	85 x 82mm
Piston Displacement	465cc
Compression ratio	7.1:1
Claimed power	na
Claimed torque	na
Carburetion	38mm Mikuni
Ignition	CDI
Lubrication system	premix
Primary drive	helical gear
Gear ratios, overall: 1	
5th	6.47
4th	8.25
3rd	10.85
2nd	14.43
1st	21.99
Oil capacity	1.5 pt.
Fuel capacity	3.4 gal.
Fuel tank material	plastic
Swing arm material	aluminum
Starter	primary kick
Air filtration	oiled foam

Frame material...chrome-moly steel	
Wheelbase	59.2 in.
Seat height	36.7 in.
Seat width	5.5 in.
Seat length	20.2 in.
Seat front to steering stem center	14.8 in.
Handlebar width	33.2 in.
Footpeg height	16.0 in.

Footpeg to seat top	21.0 in.
Footpeg to shift lever center	6.5 in.
Footpeg to brake pedal center	5.5 in.
Swing arm length	22.0 in.
Swing arm pivot to drive sprocket center	2.8 in.

Gas tank filler hole size	2.0 in.
Ground clearance	12.2 in.
Fork rake angle	28.5°
Trail	4.8 in.
Test weight w / half tank fuel	260 lb.
Weight bias, front / rear percent	46.9 / 53.1



Double leading shoe front brake is the same as the YZ's except it's less grabby. Brake cable has a heavy outside sheath to prevent flexing, housing is integral with the adjuster so the housing can't jump out.



Shock spring preload and rebound damping are easily adjusted.



Straight-pull throttle keeps the cable out of tree limbs etc.

your dealer, he should have a service update flyer that explains the fix.

Normally open bikes, even open enduro bikes, aren't much fun on tight trails and mountain use in general. The IT465 is an exception; it is nimble, quick and agile. Its

low center of gravity, super torque, power, smoothness, and precise steering combine to make trail riding great fun. Everything works with so much harmony that the weight and bulk of the machine aren't noticed.

The occasional fire road that ties many trail systems together is also a delight. The big IT slides like a flat tracker. Fully controlled full-lock slides are a cake walk, thanks to the flex-free chassis and predictable engine characteristics.

The size of the engine is another benefit if high elevations are ridden. High altitude means a loss of power, no big deal if you're riding an open bike. A real problem if you're on a 175.

After 1000 plus miles, we're very impressed with the IT465H. Nothing has broken or fallen off, although we tried! Both tires wore out and the rear has been replaced with another stocker, the front got a 3.25 Metzeler. Everything else, with the exception of the chain that's looking a little wasted, is holding up. Maintenance is proving easy and its not often needed.

If you've been waiting for an open class Japanese enduro bike that's aimed at the serious competitor—one that's fairly light, has a great engine, good suspension, strong frame, and super reliability, wait no longer; it's here. ☐