

CYCLE ROAD TEST

YAMAHA DT3 ENDURO 250



PHOTOGRAPHY: BILL WILKINS & DALE BOLLEA

• It's pretty well understood what the 250 Yamaha Enduro is like—more people have ridden this particular off-road fun bike than any other machine in the popular 250 enduro category. About 70,000 units have been sold in America since the DT1 with the white tank arrived in 1968, and most of those owners have let three or four others take a spin. Word gets around fast with this kind of exposure. People know it's a pretty good, pretty reliable, pretty solid bike.

Cycle's main job in testing the '73 is finding out how much better or worse this new model is compared to previous versions. Should you trade in your '70 or '72 Yamaha on the DT3, keep your old bike or go buy a Suzuki? If you've never owned a bike before, should you join the thousands of riders who have learned on a new Yamaha Enduro?

When this bike is used within the confines of its purpose, it won't disappoint anyone except the guy who'd complain about finding a \$10 bill instead of a \$20. The excellent rider who's been serious on certain European machines will notice a performance and handling difference, but he won't find any oil leaks or

ble pinch bolts in the lower triple clamp. In fact stronger forks all-the-way-around don't require the accessory fork braces commonly found on previous models in years past. The whole front end stayed stable under enormous loading from deep, high-speed leans while playbiking on a dirt field in Nevada. Occasionally when just enough rain falls on just the right kind of sandy soil a rider can lean to the point where huge rooster tails spray from both tires and the mirror is nearly dragging. The idea is to make great circles and esses and figure-eights all over the field, wide open in the highest gear the engine will pull. For the Yamaha this is third gear, or about 38-40 mph. Steering out of a hard left-hander directly into a charging right-hander applies just about every kind of load in a physics book on the front end, and it's easy to feel any flexing. Other bikes joining in the fun wobbled quite a bit. Not the Yamaha.

This same afternoon of play beneath threatening Nevada skies emphasized the incredible amount of full-bore running (abuse?) the DT3's rugged engine could take, and survive. The pungent, disconsolate aroma of the hot engine penetrated a Bell Star in spite of 40 mph breezes. And still the Yamaha cut circles and dug its sides in the earth without a missed beat or any other sign of protest.

All through two weeks of commuting at 60-65 mph (5800-6200 rpm) there was nothing but consistency from the 246cc two-stroke. One whiskered plug in 890 miles of testing marred a perfect record. Up above 5200 rpm, where the pipe cuts in and the slow power build-up turns into a sudden surge, the engine is quite strong and belies its moderate 15-cubic-inch capacity. However, keeping the tach needle between 5200 and the 7500 redline means one must endure constant engine noise—which is considerable and just plain unpleasant. Rather low decibel readings of 83 dB(A) on the left side and 84 dB(A) on the right don't reflect the barking drone which permeates helmets and precipitates disdainful glares from motorists interrupted by the din. The engine just plain makes too much noise.

Putting along at moderate engine speeds reduces racket considerably. A comfortable long-trip cruising speed is 55 mph, though top speed is 69 mph and the engine spins happily, but noisily, at 65 mph. A large gap between fourth and fifth gears makes the top cog almost an overdrive for pavement cruising and long, straight fireroads. Still, it would be nice to have a six-speed transmission at times, with the extra ratio tucked between the existing fourth and fifth speeds so uphill climbs wouldn't sap road speed quite as much. But six speeds is a bit much to ask in a mass dirt playbike.

(Text cont'd on page 72; charts overlaid)



While the new shocks firm up street riding, the DT3 is better off-road than DT1.

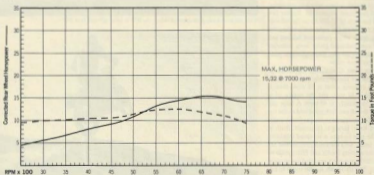
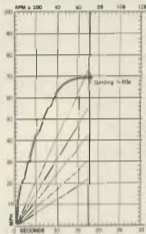


Neither front forks nor rear shocks would bottom out upon landing after high jumps.

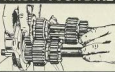


YAMAHA DT3 ENDURO 250

Price, suggested retail	.....	\$899
Tire, front	..... 3.00 in. x 21 in., Dunlop Trials Un- road	
Brake, front & rear	..... 4.88 in. x 19 in., Dunlop Trials Univ.	
Brake S&W ratio	.....	1.075 in. x 5.81 in.
Specific brake loading	.....	35.92 lb./sq. in.
Engine type	.....	Two-stroke reed valve single
Bore and stroke	.....	2.76 in. x 2.52 in., 78mm x 64mm
Piston displacement	.....	15.81 cu. in., 246cc
Compression ratio	.....	9.8:1
Carburetor	.....	1, 28mm Mikuni
Air filtration	.....	Oiled polyurethane foam
Ignition	.....	Magneto
Rhe @ rpm (Idemac)	.....	24 @ 7000 rpm
Mph/1000 rpm, sea level	.....	10.4:1
Fuel capacity	.....	2.5 gal
Oil capacity	.....	3.4 quarts
Lighting	.....	6v, 35 watts
Battery	.....	6v, 4 ah
Gear ratios, overall	..... (1) 24.65 (2) 17.41 (3) 12.69 (4) 9.73 (5) 7.45	
Wheelbase	.....	53 in.
Rake/Trail	.....	36°/5.7 in.
Seat height	.....	32 in., with rider
Ground clearance	.....	5.75 in., with rider
Curb weight	.....	285 lbs., with full tank of gas
Test weight	.....	449 lbs., with rider (includes)
Instrument(s)	.....	Speedometer, odometer, tachometer and 1/4 odometer
Standing start 1/4 mile	17.94 seconds, 68.99 mph
Top speed	68 mph
Sound level (California Standard)	83.5 dB(A)



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YAMAHA Continued from page 40

Shifting is near perfect—outside of an occasional non-scheduled stop in neutral when aiming for 1st or 2nd. Light clutch action and a weld-like grip stayed intact throughout the testing ordeal, and in 890 miles no play developed between the rear-wheel sprocket carrier and damping rubbers inside the hub. Even the chain survived with only one adjustment. Drive-line performance on the DT3 is a long way from the loose cabbage of early DT1s.

Engine specifications are slightly more exotic than some two-strokes because of Yamaha's "Seven Porting" and "Reed Valve Torque Induction." In addition to intake, exhaust and two transfer ports, Yamaha incorporates two extra transfer ports and a hole in the piston skirt for passing the charge from the reed chamber into the crankcase—for a total of seven. "Torque Induction" is a catchy marketing phrase but a technical misnomer. It's merely a flashy label for a standard reed-valve induction system fitted to all Yamaha Enduros last year.

In this inlet system a normal charge enters the crankcase through the regular inlet port, but after the piston skirt covers this port, additional mixture may enter the crankcase from the reed chamber via a hole in the piston skirt. This greater filling capacity results in faster throttle response and more pulling power in the mid-range and at high revs. The difference is quite noticeable over the old piston-port Enduros of pre-1972 vintage. And mileage suffers not one iota—40.5 mpg average, dirt and street. Indeed it's hard to fault this easy-starting, seemingly bullet-proof engine—except for its bark.

Another near faultless quality is braking. After an initial grabby period when new, the rear brake quickly developed a long, progressive action which holds its own against extended hard usage with only minimal fade. A fully-floating backing plate helps eliminate hop while braking on chappy off-road surfaces. There are similar good qualities up front, except for a sloppy fit where the fork tub locates inside the backing-plate anchor-slot. A simple shim will eliminate all play and shouldn't add more than a few seconds to Yamaha's production time.

Other minor changes will solve the few shortcomings left after five years of evolution. The gas cap leaks—profusely. A positive detent stop in the middle of the turn-signal switch would prevent turning one flasher on while turning the other off. The kickstarter could tuck in nearer the frame to eliminate entanglement with the rider's calf, and the brake lever could move in an inch to increase usable footpeg area. A better seal around the oil-filled steering damper would cure the DT3's only oil leak. Obviously the problems are minor, but they should be corrected in the same way Yamaha has dealt with former problem areas. For instance certain engine and frame def-

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iciencies in early models led to greater wall thickness and tube diameter in the whole frame, heavier gaskets on an all-new steering head, a beefier kickstarter boss, a larger head with more fin area and thicker-section engine cases. This sturdier construction, plus turn signals, accounts for the DT3's heftier weight of 289 pounds fully gassed, up from 264 pounds in 1970.

Handling in the dirt is not as delicate because of the added 25 pounds of weight, but superior suspension makes it more precise and controllable. The back end especially is much more stable both in rough terrain and when sliding. It's hard to fall off at enduro or trail riding speeds—and that wasn't easy to say three years ago.

Evaluating the off-road effectiveness of the new front tire size depends much upon geographical location. The 21 works well in the mud and soft dirt back East but is less desirable on hard-packed roads out West. There's a lot of personal preference, hearsay, rumor, misdirected advice and blind faith surrounding the choice of front wheel and tire sizes for off-road riding. Whether the 21-inch wheel and its 3.00 Trials Universal pattern tire helps or hinders the Yamaha's off-road handling is debatable. Overall steering and ability to negotiate rough terrain is certainly superior to the DT1. Faster speeds are safer and easier to maintain without as much fatigue as before, since the DT3 is simply a lot easier to ride than the old white pelicans.

If you like your old Yamaha, you'll like this one a lot more. Suzuki, Kawasaki and Honda make models which are not significantly better. Stick to the purpose intended, let the Parsangs play among themselves, and you won't miss with a DT3. ☺



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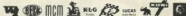
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