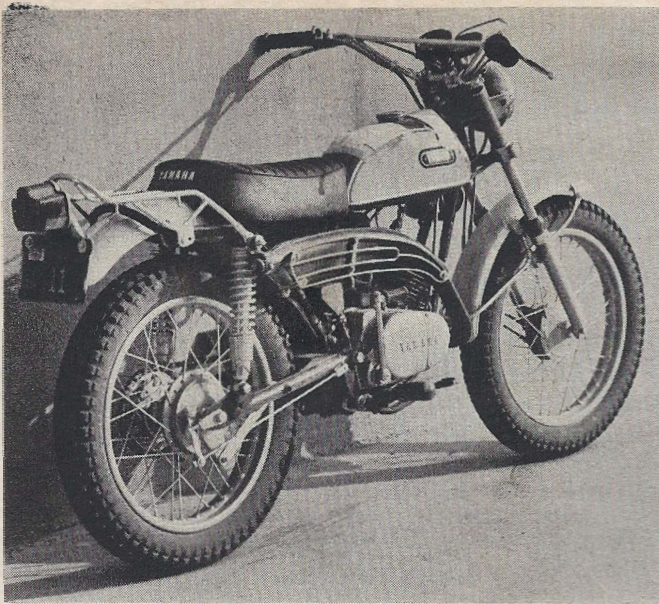


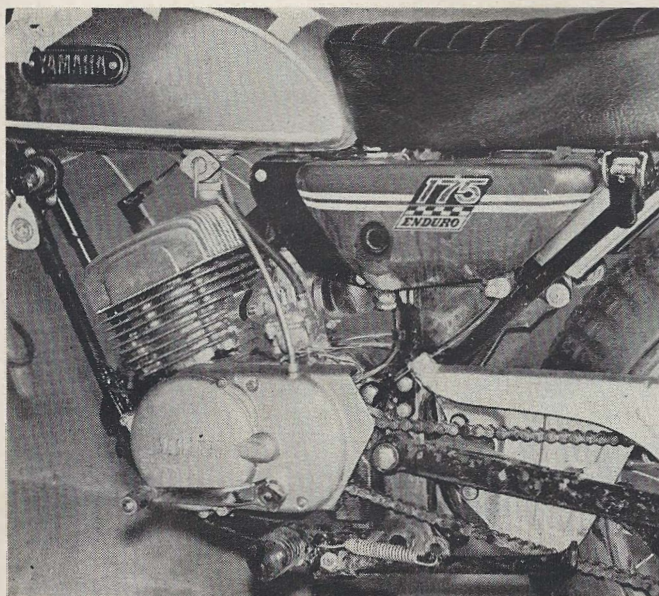
Right out of the crate, we put it through sheer hell — the taillight bulb broke!



RIGHT — Sandlot racing on a lunch break in Hollywood. A few days earlier 175cc Yamaha completed tough 85-mile enduro. Engine has instant response.

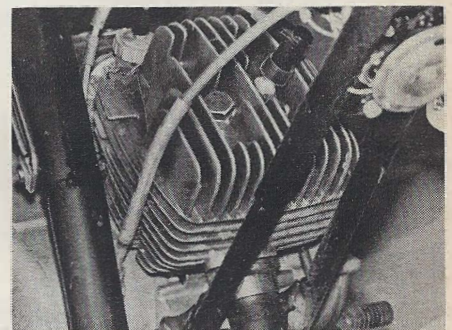


LEFT — Long 17 $\frac{3}{8}$ -inch swing arm is well-gusseted at front, but hinges on delicate-looking frame section. Wheelbase is 51 $\frac{1}{2}$ inches, ground clearance 8 $\frac{1}{2}$ inches with rider seated.

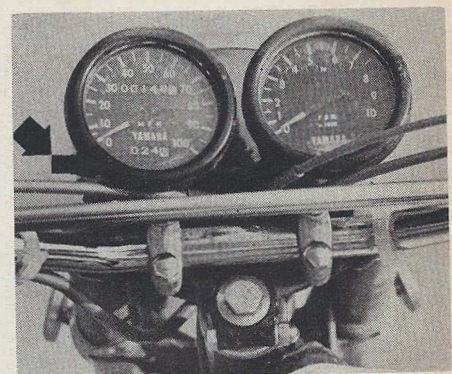


LEFT — Only hop-up equipment: an Iskenderian key ring. Bike was not touched after race, remained spotless. Note oil level window in tank, air cleaner behind it.

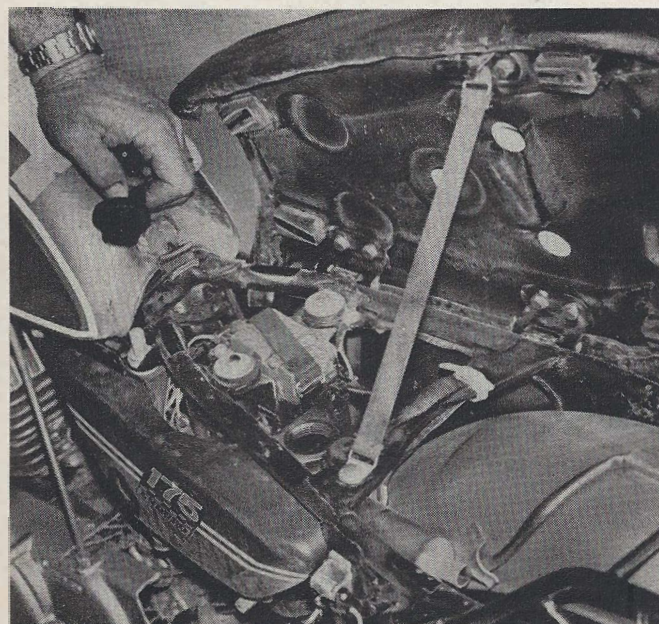
RIGHT — Check extra spark plug hole in head. Five-mile wide-open freeway runs didn't phase mill. Carburetor is 24mm.



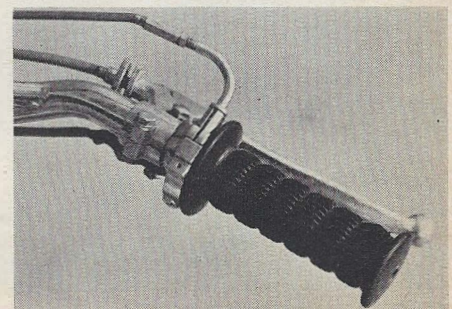
RIGHT — Still covered with the dust of competition are speedo and tach. Arrow shows trip reset.



LEFT — After a grueling ride, oil was barely down. Note tiny battery and rubber cord retainer for rear of gas tank; front of tank fits onto locating pegs on frame — no bolts to break.



RIGHT — One of the 175 Enduro's little niceties is the right-angle guide for throttle cable. Price of bike, out the door, is around \$650. You'll love it — I did!



photography: Gerry Stiles

THE BULLETPROOF TWO-STROKE

By Bob Greene ■ Nobody in his right mind wheels a new motorcycle off the showroom floor and goes racing that weekend. The pressures of editorial deadlines can drive a guy close to the brink, and that's exactly the treatment this month's Yamaha 175cc Enduro bike received. Until a few days ago all we could equate with Yamaha's latest trail bike was amazement at its startling sales rate and the observation that it sure was a cute little bear. What a difference a day makes.

The Yamaha 175 single merits the instant money you have placed on it, not because it is super-powerful or the epitome of handling — for I know of at least one 125 that will run and ride circles around it — but the Yamaha Enduro will navigate the roughest cross-country with exceptional ease and climb the most horrible rock and sand hill with indifference. And it will do it all day. It is a super bike in one respect: The most rank novice can haul aboard and pop the clutch without stalling the engine, and he can go any place he pleases despite his lack of experience.

Our proving ground this month was the historical mining area around Red Mountain, California; the occasion, the Last Chance Enduro sponsored by the new California Enduro Association. And believe me, there were times when I thought I had had my last chance, like the time the rear wheel did a giant "endo" directly over my head on one of the steeper cross-country descents. Eighty-five miles of this kind of horseplay left no doubt about the machine's attributes or its shortcomings. Let's take it from the starting flag.

The early stages of the course consisted of a deep, twisting sandwash dotted with pumpkin-like boulders that kept speed very low. In this situation the Yamaha did poorly, for steering at this speed was so uninspiring as to cause much footing and lack of confidence. As the rocks thinned out, however, and more speed became possible, steering got to be more predictable, and confidence returned. Farther on, when fire-roading, we were also able to detect a double standard of handling characteristics; the Yamaha and I could move along at a rather swift pace when the twisting dirt road ahead presented a readable way to go; but on occasion, when the trail darted surprisingly off to one side without warning, she was difficult to bring down with the usual assurance. Mulling the two situations over as the run progressed, I could only conclude that the cause stemmed from the engine's very high placement (above the axle line) and forward weight bias resulting from soft fork springs that "sack out" quite a bit when the rider is seated. Straight-line running, in deep, undulating sand hummocks, presented no problem even at a fair rate of speed. So since there is nothing that can be done at this late date about engine placement, were I to gird up for the next off-road bash, a pair of Victor Products helper springs would be added to keep the forks jacked up, or perhaps a slightly stiffer set of fork springs altogether. This is suggested more for handling than ride, for general comfort over rough ground was quite pleasant.

The rear shocks were the real paradox, for although they sopped up bad chuckholes with commendable reserve, handling foot-and-a-half-wide crevices with hardly a protest, they were prone to judder on closely spaced washboard and even some rough pavement, giving the impression that they were almost locking upon a series of light, fast impacts. But overall the ride must be termed good, as evidenced by the fact that after 85 miles of cobby ground, your scribe felt no pain.

The truly amazing aspect of the Yamaha 175 engine is its working latitude; it will handle anything from a walk to 65 mph, will climb almost any hill in second gear and absolutely take you up the side of a wall in low — this with showroom

gearing. The power is different from most, being stronger on the bottom and mid-ranges than on top, and this is the feature that makes the Enduro ideal for the novice or amateur rider — he can get out of a bad situation long after it would normally be too late. Of five-port design, the engine seems to thrive on abuse, giving no sign of heat or plug fouling during the entire outing. Fuel mileage too, was on the happy side, showing 50 miles per gallon for exuberant city work and only dropping to 41 mpg during our strenuous desert episode, hinting of an 80-mile minimum with its 1.9-gallon tank. Rated 15.6 hp at 7000 rpm, the 10.43-cubic-inch (171cc) powerplant has a bore and stroke of 2.598 by 1.969 inches (66 x 50mm) and a modest compression ratio of 6.8-to-1. The crankshaft rolls on ball bearings, the rod on rollers and the piston pin on needles. Power is delivered to the five-speed gearbox via helical primary gears. And this is one box where you don't miss a shift, with or without the clutch. Shifts are very short and positive — the most sure-fire Japanese box I've encountered. Another feature of the gearbox is that the engine can be started in any gear after disengaging the clutch.

A strong side observation regarding the engine is that its state of tune is extremely low-key; high performance has been purposely played down to guarantee utter reliability and low- and mid-range working torque. Personally, I was deeply impressed with performance but suspect that, for a rider of average or better experience, slightly more compression and perhaps more carburetion, plus meticulous port matching, would be a worthwhile exploration.

And if cleanliness is next to godliness, the Yamaha Enduro engine is a heavenly body; for, after its desert baptism, the engine was absolutely spotless. Even the gas tank, purposely filled to the brim, showed nary a leak around the cap. Although we didn't take advantage of it, there's an extra spark plug hole threaded in the head, permitting two plugs to be fitted and allowing the spark lead to merely be switched from one plug to the other in case of a flame-out. One thing about the engine that was puzzling: Both of the two header pipe retainer springs were broken after the race (excuse the word "race," but that's what this endurance run turned out to be after the first check), probably the result of improper heat treatment.

High praise must be given the entire motorcycle for the way it held together, especially the clutch, for it got merciless treatment while walking the bike over some of the super-bad hills made more antagonizing by maximum traffic and little or no approach. I was frankly amazed that it didn't go up in smoke. Nothing shook loose, for most of the exterior appointments — muffler, fenders, instruments, taillight, gas tank — are mounted on rubber cushions.

The Yamaha Enduro's charm lies not with its expert racing capacity, but in the stamina and many features it brings in a single package: Foolproof automatic oil injection with a visible oil level window in the tank. Flip-top saddle (and a dandy at that) that hides and protects the battery and generous foam air filter. Tachometer and speedometer, the latter with tenth-mile odometer reset forward or backward. Spring-loaded footpegs and a sidestand that is out of the way. Three-way adjustable rear shocks. Good-looking luggage rack. And exceptional overall appearance. All in a lightweight (229 pounds exactly, full of gas) chassis with a 50½-inch wheelbase. Our test model always started on the second or third kick. The lights and brakes were acceptable, and we thoroughly enjoyed the experience.

I suppose, if one were to attempt to draw a parallel with the automotive world, the Yamaha CT1 Enduro would most closely approximate the Volkswagen, and there are a bunch of bike makers who would like to have it so good. ■ ■