

TEST: THE BENELLI ENDURO

It seems the Italians have their own special way of making motorcycles. They all seem to be short, very rigid, and about a decade behind the rest of the industry. In some cases Italian machines have pioneered certain aspects of motorcycling, Ceriani-styled forks and handlebars with crosspieces are a good example.

Enduro bikes are an offshoot of machinery built for International Six Days Trial type competition. They are dual-purpose machines and Italy has had her share of wins in these International events with their own products. Road racing is another story and Italy's dominance in the World Classics during the last three decades speak for itself.

The Benelli 175 Enduro is a curious motorcycle. It is short, 50 inches axle to axle. Tall, 32-inch seat height. And has smallish cross section tires for the intended use of this bike; 2.75 front and 3.00 rear by 19-inch diameter tires are very much out of place compared

to what you see on the market these days.

Yet, they build a functional piece of machinery, one that will do the job. The double steel tube cradle-type frame assembly is very rigid, partially due to its shortness and partially due to its all welded construction. Ground

clearance at its lowest point is 9 $\frac{1}{4}$ inches, that's where the side stand juts out. It has a closer to an 11-inch clearance factor to the skid plate which protects the bottom of the engine. Coupled to this short wheelbase, that's more than enough for bumping over all but the largest fallen timbers.

The Benelli is fitted with a pair of fenders that don't do much other than keeping a vertical spray off your goggles if you venture into wet places. The front one is high mounted and very small to allow maximum cooling to the cylinder. The rear fender is quite flat also, but serves its purpose as a place to fasten a taillight. Both are nicely finished with rolled edges and polished chromium plating.

The 2 $\frac{1}{4}$ -gallon fuel tank is another classic Italian innovation. This one has a tool compartment. Four loops are also welded to the top of the fuel tank so you can fasten something, Lord knows what. A single, hard to

find shut-off valve feeds the carburetor, and there is no crossover tube to connect the two panniers of the tank. I for one like this because it makes the chore of removing the tank a not so messy job. Actually, the fuel tank is practically level at the rear and a crossover tube isn't necessary.

A 6-volt battery lives under the seat and is hidden on both sides by a pair of number plates. This racy innovation does serve a purpose in hiding a bunch of electrics. The seat itself is one of the nicer features of the bike. Unlike early Italian breadboards this one is soft and well proportioned.

The Benelli's seating position is also fairly nice. The handlebars are not overly wide and the footrests are located just ahead of the nose of the seat where they should be. Their proximity to the brake pedal and shift lever is also very good. Passenger footrests come on the 175 Enduro, and it will carry two. Another added feature is a small luggage rack behind the seat, about right for carrying one six-pack.

The bike has a front wheel drive speedo and a high mounted exhaust pipe, but that's about as far as it goes towards being a serious enduro machine. The speedo does not have a

**With Four Speeds
Forward and 169cc's, It's
a Little Short of its Goal.**



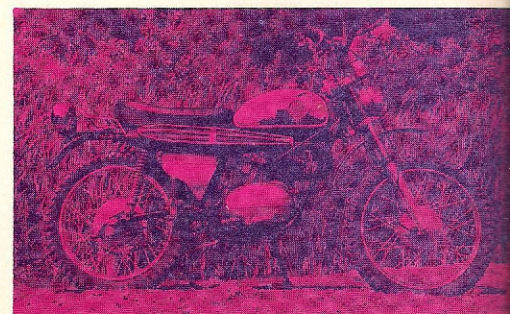


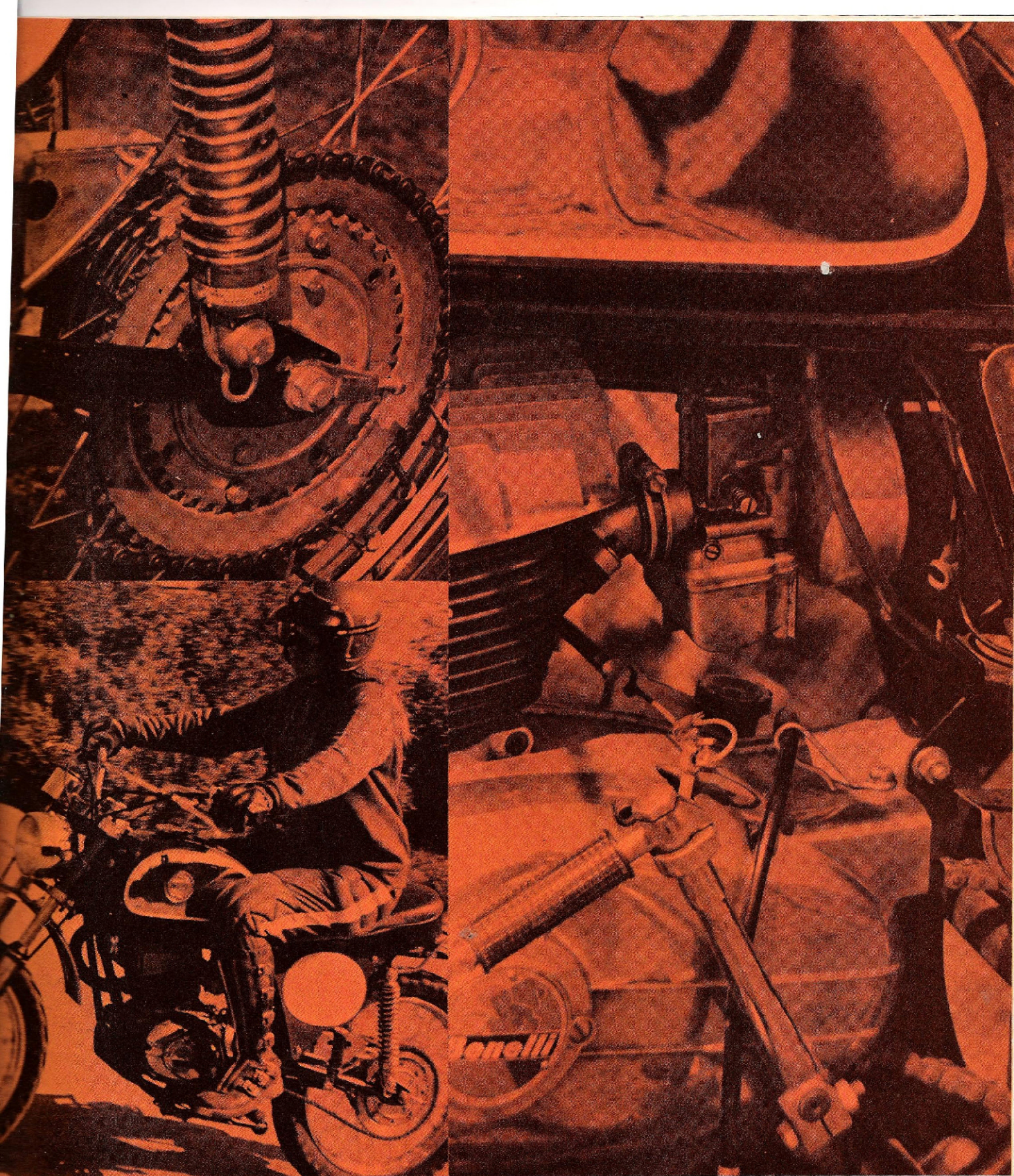
resetable odometer and the upswept exhaust pipe simply is in the way. It has some shielding on it but even that got hot enough for our test staff to feel during short rides.

The 40-tooth rear sprocket is fitted with a 60-tooth overlay to gear it down. With trail gearing the most we could wind the Benelli out to was 50 mph. This machine has a strong and predictable power curve, and in conjunction with a wide ratio gearbox,

the bike propels itself out in the boonies fairly well. Super speed shifts from first to second just gets a little wheelie but the bike does go forward.

The Benelli seems to be at its best in the choppy stuff where a combination of the long travel suspension, short wheelbase, and smooth power flow makes the bike behave nicely. The forks could use a little more cross up. We took it on some tight mountain trails and found it difficult in





the turns although it didn't have any problems from lack of power.

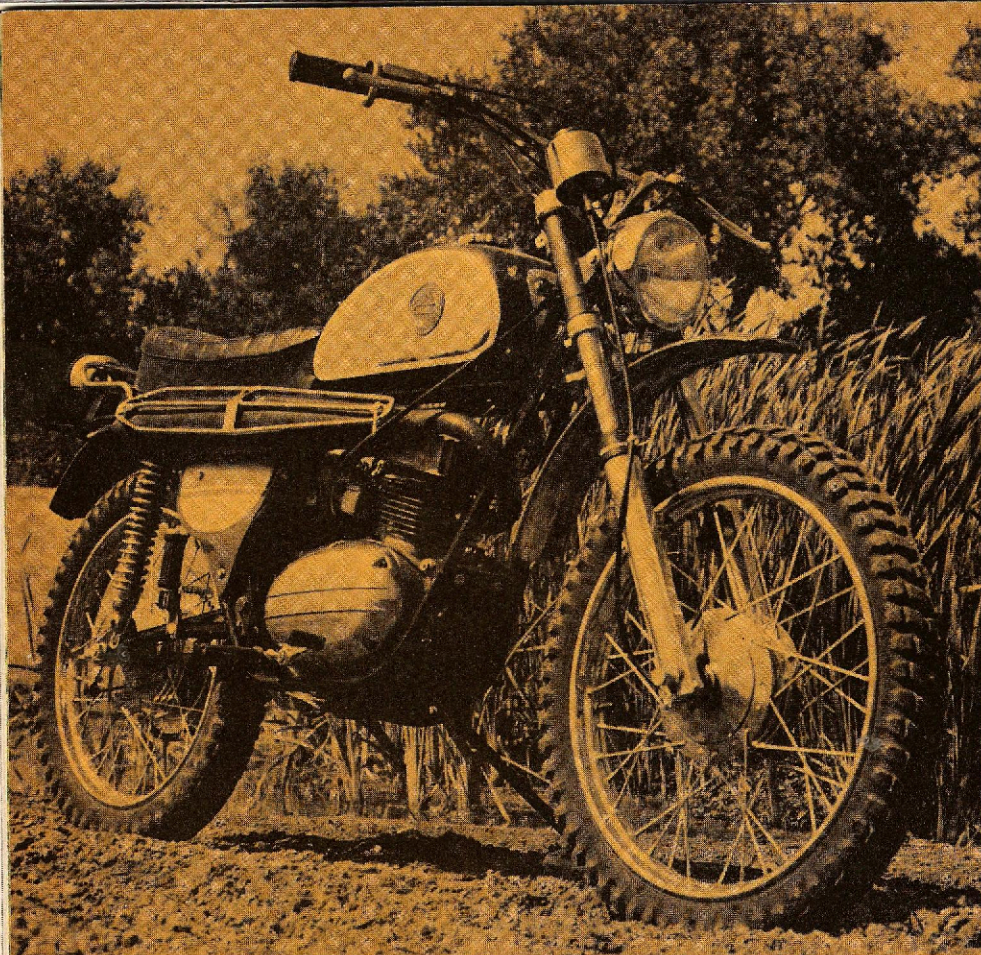
The Benelli engine is a simple piston controlled 2-stroke. It's fitted with a 22mm Dellorto center float carburetor that features a square slide. These carburetors are unique in themselves because the downstream side of the slide is forced against the carburetor body by the throttle return spring and makes an air tight seal. These center float units are designed to operate

in positions up to 45 degrees from level. Air filtration is handled through a wire mesh-type element that relies on carburetor spit back to keep it wet. Although crude, this system has proven very effective in all but the most severe dust conditions.

It uses a two ring aluminum piston with windows at the transfer ports. There is also a slight cut-away on the inlet side of the piston skirt to increase inlet duration. The little end of the

connecting rod has a bushing and the big end is fitted with rollers. The crankshaft is carried in ball bearings at both ends. Drive to the clutch is by gear with a multi-plate clutch assembly transmitting the power to the transmission. It has a four-speed sliding gear transmission that is indexed with shifting forks. Very simple, very functional.

Cold, the machine starts up on first kick using the richening device fitted



to the Del Lorto. It takes a little while for the engine to warm up, probably due to the slow heating characteristics of its cast iron cylinder.

A flywheel magneto generates the Benelli's electrical supply. The unit uses a battery for horn and stoplight but will work without. The magneto has a

primary coil to feed a secondary coil mounted on the frame. The generator part of the flywheel magneto keeps the battery charged and handles the rest of the lighting chores. And the lights aren't half bad either, you can see quite a ways with them on a dark night.

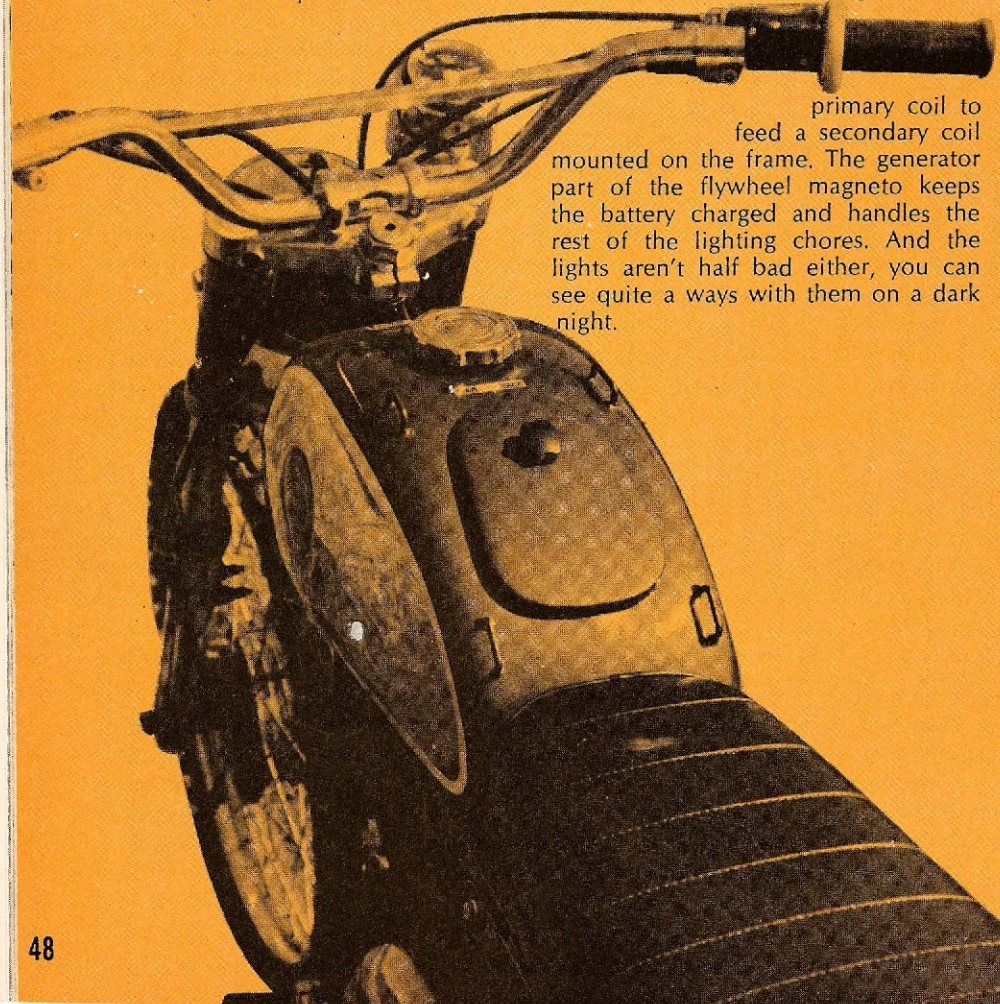


Marzocchi makes the forks and rear shocks fitted to this Benelli. Both units have good dampening control and produce a smooth ride that is predictable and controllable. The rear shock units are adjustable with a lever attached to the bottom. The front forks showed a slight amount of oil seepage past the seals but this is nothing to worry about.

The alloy control levers on the handlebars are very nice as is their positioning. The Marzocchi throttle is a feature that is destined to be copied. By using a cam arrangement the throttle pulls the cable in a straight line rather than around a drum. This simple system will more than double the life of an average throttle cable.

A cable also operates the rear brake. Through experience our test staff is skeptical of cable operated brakes. It seems too much energy is lost within the cables. On the plus side, the swing arm can move up and down and not affect the braking feel. We found these brakes, both front and rear, to be especially good for an off-road machine.

The overall finish of the Benelli Enduro is nice with generous amounts of polished chrome. The white stripe on the gas tank is real paint, not a stick-on as found on many motorcycles sold today. The little Benelli is a serious motorcycle, one you can have a lot of fun with both on the road and off.



MAKE BENELLI

MODEL 175cc ENDURO

PRICE AS TESTED \$699.00

MAXIMUM SPEED AS GEARED 50 mph

WEIGHT 223 lbs. WET: Tank 25% Full

ENGINE

Engine Type 2-STROKE
 Bore 60mm
 Stroke 60mm
 Displacement 169.56cc
 Compression Ratio 8:1
 B.H.P. at R.P.M. 16.4 AT 6,200
 Carburetor 22mm DELLORTO CONCENTRIC
 Ignition FLYWHEEL MAGNETO
 Starting System FOLDING KICK
 Lubricating System OIL MIST

DRIVE TRAIN

Clutch Type MULTI-DISC, WET
 Primary Drive GEAR (2.727)
 Countershaft Sprocket 14 TEETH
 Final Sprocket 60 TEETH
 Final Drive SINGLE ROW CHAIN (4.285)
 Gear Ratios Internal Overall
 1st 2.61:1 30.498:1
 2nd 1.60:1 18.696:1
 3rd 1.24:1 14.391:1
 4th 0.911:1 10.746:1

FUEL AND OIL

Oil Capacity IN FUEL
 Oil Recommended 2-STROKE
 Fuel Capacity 2.5 GALLONS
 Fuel Recommended REGULAR
 Approximate mpg 60

FILTERING SYSTEMS

Air WIRE MESH
 Oil SCREEN
 Fuel SCREEN

FRAME

Frame Type DOUBLE LOOP
 Weight Distribution FRONT: 47%, REAR: 53%
 Wheelbase 50 to 51 INCHES
 Ground Clearance 9.25 INCHES
 Peg Height 12.5 INCHES
 Seat Height 32 INCHES
 Handlebar Width 29.5 INCHES

SUSPENSION-TYPE

Front TELESCOPIC
 Rear SWING ARM

SUSPENSION-TRAVEL

Front MARZOCCHI 5 INCHES
 Rear MARZOCCHI 3 INCHES

TIRES AND WHEELS

Front 2.75x19 PIRELLI KNOBBY
 Rear 3.00x19 PIRELLI KNOBBY

IMPRESSIONS

	Poor	Good	Excellent
Throttle Response		●	
Acceleration		●	
Power Band		●	
Starting		●	
Engine Noise		●	
Muffling		81dB(a)	
Vibration		●	
Handling		●	
Choice of Tires		●	
Suspension		●	
Rider Comfort		●	
Transmission		●	
Instrumentation	●		
Lighting		●	
Toolkit		●	
Paint and Chrome		●	
Styling		●	
Mileage			●
Braking			●

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 Hatboro, Pennsylvania 19040