HONDA MT250 ELSINORE

The On-Road/Off-Road Concept Means You Can't Have One Without The Other...

Cycle World Road Test

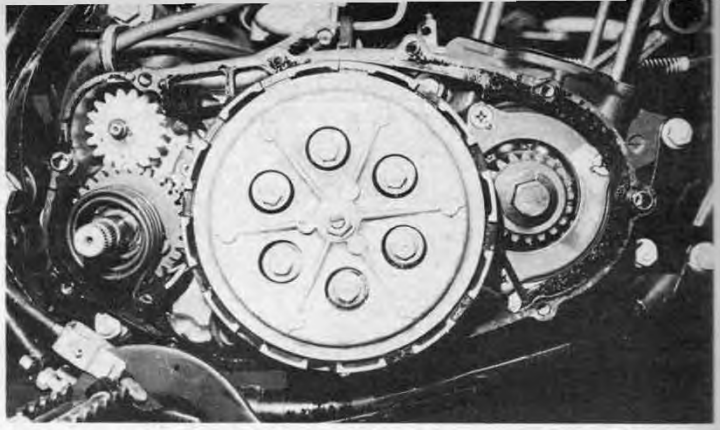
■ HONDA'S ENGINEERS could have taken their new on-road/off-road two-stroke and developed it to mind tweaking proportions, with features and trick pieces that would have had leather clad riders muttering over their beer. They could have...but they didn't.

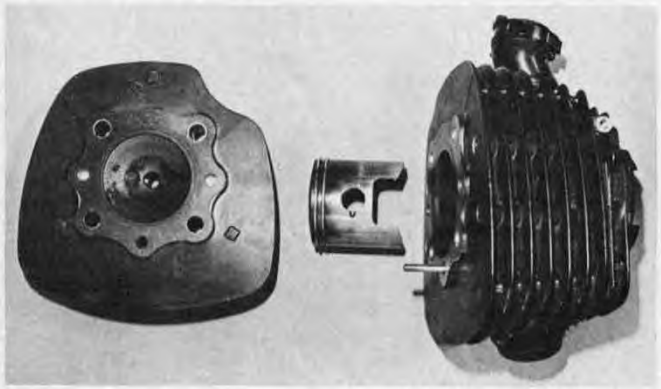
Not too long ago those same engineers rocked the dirt riding world on its heels with an unbelievably *right* CR motocross racer. Was it unreasonable to expect the same concoction of wizardry from the version with lights? Perhaps it was, because the shift of emphasis from dirt to street is readily apparent in the new MT example.

Basic single loop cradle frame design is closely patterned after that of the racing version, but both steering rake and trail have been reduced on the MT. Gusset plates can be found where the single downtube and toptube join at the steering head, and strengthening webs are used at other critical stress areas, as well. Though one of the frame's rear support tubes is bent inward to provide clearance for the MT's exhaust system, the big difference between the CR and MT model frames is the material they're made from.

The CR ignores cost considerations and puts strength and light weight ahead of everything else. Its frame is chrome moly. The MT won't get the severe pounding of a motocross track, and a broader sales market necessitates a lower purchase price. Its frame is mild steel. So is the swinging arm. And yes, the MT250 picks up some weight because of it.

Too, rather than use a feather light aluminum alloy material in the triple-clamps, Honda has again gone to steel with street legal "Elsie." More steel means more weight, and it's concentrated at the front end, besides. >





A few components have been borrowed from the XL250, again, with cost considerations in mind. Most of these items have minor changes to fit the MT. The beautifully machined and finished fork tubes and slider legs are a good example, being nearly identical to the ones fitted to the XL. Not only do the units have 7.1 in. of useable travel, but they also support the axle with four-bolt clamps. A little extra security never hurts. Valving is close to perfect, so the front end simply glides over everything. How large the bump is doesn't seem to matter. The forks even soak up little ripples that most units ignore.

It's unfortunate that we can't praise the rear suspension. Honda could have easily used the superb rear shock units from the CR, but instead made one more switch. The items fitted in place on the MT model only perform satisfactorily up to a point...and the point just happens to be the end of the pavement. In the dirt the five-way adjustable shocks do lots of bottoming and slamming, making control more of a problem.

Another disappointment for many riders will be the steel wheel rims. Honda has shown us, both with its XL250 and the new CR250, that it is capable of supplying some of the finest rims around. Instead, we find more steel, and more weight.

XL model wheels hubs are used, which are shaped conically and made from aluminum alloy. The units are light, but not as light as the ones fitted to the racing version. However, they do provide better pavement braking forces, and work well in the dirt, too. Both front and rear units are cable operated. We did experience some rear wheel hop on a particularly rough downhill that was pockmarked with deep ruts. This is one instance where a full floating backing plate might have done some good. A plus is both brake units' resistance to dirt and moisture. Linings will last longer, and the rider is able to make a stop after a charge through the wet.

A manufacturer must carefully consider the tires fitted to a dual-purpose type motorcycle. Street safety and traction is of utmost importance, but dirt performance cannot be overlooked. Honda's choice on the new machine is about ideal. A Nitto NT-102 tire is used both front and rear, and the tread design and rubber compound works on the street or off. The tires were a big factor in letting us record an amazingly short stopping distance from 60 mph. Of course, large knobby tread design works best for most off-road situations, but this type of tire is dangerous for street use.

After many years of four-stroke production, the new Honda ring-ding is quite a switch. Our testing showed that the new unit is quiet, smooth, tractable, and on par performance wise with most machines in its class. But that's understandable, because the MT250 offers no radical concepts. Refined basics is more like it.

The new engine unit closely follows current trends in Japanese two-stroke Single design. Engine and transmission are in the same unit and power from the crankshaft is transmitted to the clutch by helical gears. At the top of the unit we find an aluminum cylinder head with cast-in webs between the cooling fins to help deaden noise and prevent breakage of the fins. The spark plug is centrally located in the combustion chamber while another hole, which is filled with a dummy plug, is offset to the left when seated on the machine. The hole is threaded and can be used to install a compression release, or it can be used to carry an additional spark plug.

Generous fin area on both the head and cylinder aid in keeping the MT250 running cool. The cylinder not only has cast-in bridges between the fins, but also has four larger diameter holes running about halfway down its length. These are filled with what looks like a rubber hose with a steel rod in the center. The bridges help significantly in quieting the "rattle" created by the piston moving inside the cylinder, a typical two-stroke sound. The lack of mechanical noise is immediately apparent to the rider when the Elsinore is fired up.

Large ball bearings support the pressed together crankshaft. Rollers are used at the connecting rod big end and the piston pin rides in caged needle bearings. Oil for lubricating the engine's power producing internals is delivered by a variable displacement pump. The pump's mechanism is driven by a plastic gear which engages behind the clutch outer housing. Oil delivery from the pump is controlled by engine rpm and the amount of throttle opening. Injection is through the inlet manifold, and a plastic 1.4-quart tank allows plenty of miles before replenishment is necessary.

The engine draws air through a somewhat complicated system of ducting, to an oiled foam filter element. Beginning just under the seat base, air flows into a small opening fitted with a plastic grating. The grating acts as a lid to prevent large objects from being drawn into the system. A rubber tube leads from here to a metal air box and the filter element itself. Air finally reaches the piston-valve 28mm Keihin carburetor via another rubber duct.

Though the filter element is easily reached for servicing, the ductwork and airbox can be a nightmare should the need arise for removal. And the need arises when the time comes to service or check the battery. By the time the rider has removed the parts necessary for battery access, he's forgotten the reason for it all. Most owners will adopt a "to hell with it" attitude and hope that their luck (and battery) stays charged.

Except for battery location, electrics are typically Honda, and that is to say first rate. A familiar flywheel/magneto system contains lighting coils and an alternator supplies charge to the 6V battery. Most switches are convenient with the exception of the key ignition and emergency kill. The key switch is down under the fuel tank and the off-run-off device makes the rider take his hand from the grip to use it.

The headlight, front turn indicators, reflectors, tachometer and speedometer all mount on a common rubber cushioned bracket. Ample shock protection is also provided for the rear turn indicators and large taillight assembly.

Tough, strong flexible plastic is used for fenders, side cover, and the inner portion of the chain guard. The front fender is high mounted and features a vinyl flap at its leading edge. An inner brace was needed inside the rear fender to help support the taillight. Though the light is easily seen at night by following motorists, it would be nice if it were somewhat lower. As it is, the rider hits his leg when climbing on the machine.

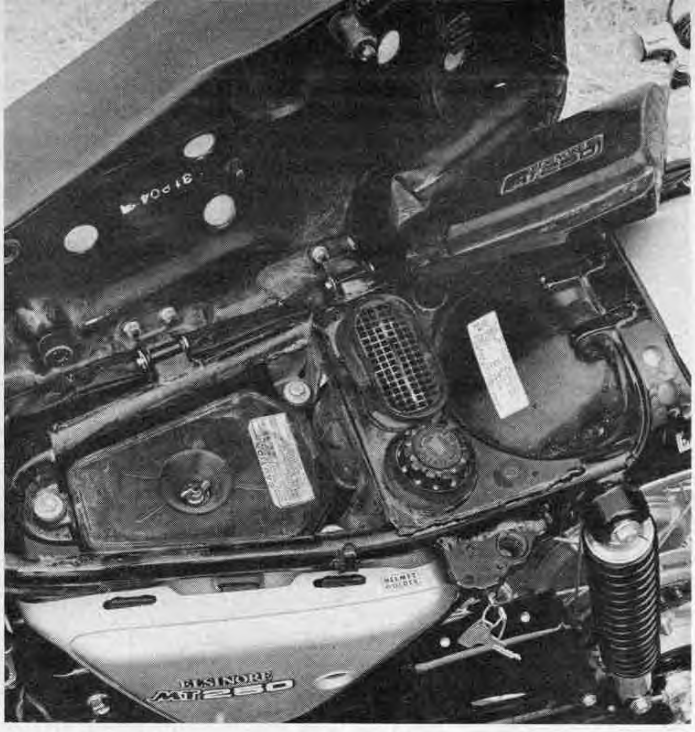
So far, we have seen a rather typical Japanese dual-purpose machine. The MT250 is not a trend setter, not by any stretch of the imagination. Once you climb on and go for a spin, however, your opinion begins to change.

For riders falling into a general size category, everything about the new MT250 fits. It is comfortable from just about any viewpoint. Sure, exceptionally large or small riders might not fit into the scheme of things, but everyone else will.

Seat height, length, and width is perfect. Padding is ample, and the finish of the vinyl covering prevents the rider from sliding around. There are no ridges or styling gimmicks that will put blisters on your butt after a day's ride....Or a week's ride. Attractively styled, the seat flips up to expose the tool kit compartment and other goodies. The locking latch has one fault. The rider must use his key each time he wants to flip up the seat. The lock should be made so that it can be left in the unlocked position.

Footpeg location on a machine like the Elsinore can make or break a good riding position. But Honda came through again. The pegs are spaced ideally, right at the proper height, and are positioned so they are comfortable standing or seated. The units are spring loaded and fold back on an angle, but for perfection the rubber covering must go. Cleated metal would be more proper.

A rider on a dual-purpose motorcycle usually does his riding both standing and sitting. Nothing on the machine should be allowed to interfere with either of these riding positions. On the MT250, this must have been a prime consideration. There is ample distance from the seat to the bars to place them spot on for stand-up riding. On top of that, >



they fall in the exact location for sit down comfort. Distance between the gum rubber grips will probably satisfy everyone and their precise amount of rise makes them complete.

Small, but noticable creature comforts abound. The bendable alloy levers are contoured and beveled so that nary a crease will mar the softest of fingers. The ball ends are rubber covered, and the nicest dust covers on any motorcycle keep grit out of the hinge point. Clutch pull won't strain a 3-year-old's grip, and cable action of the front brake allows perfect feel. Lighting and horn switches are an easy thumb's move away.

The Honda people have a quiet policy that is well-known, and the Elsinore isn't about to smear that reputation. This particular muffler/silencer combination makes the MT one of the quietest two-strokes you'll *never* hear. The unit sweeps upward out of the cylinder and takes a 180-degree bend back toward the rider on the right side of the machine. Here it tucks in close to the frame and continues rearward to a point about 6 in. behind the rear spring damper unit. The heat shield is a broad, smooth aluminum piece that won't dig into the rider's leg. When standing, the muffler does touch the rider somewhat, but it's not enough to be a bother. A nice touch is a deflector plate at the pipe's outlet that angles exhaust gases downward and keeps oil deposits off the machine.

The new Honda starts easily and will idle most of the day without complaint. Naturally, primary kick starting is featured, so it's not mandatory to find neutral before kicking the engine through.

Putting the transmission in gear produces only a "snick," not a "clunk." The all-indirect ratio five-speed unit is extremely smooth and silent in operation, with moderately wide spacing between the gears. Shifts can be made easily with the clutch or without.

Underway, the rider is comfortable, more comfortable than on any machine of this type we have ever ridden. But when rough ground is part of the terrain, the rear shocks start to nullify that comfort.

Power is ample, but not earth shattering. And the Single quits producing abruptly at 7000 rpm, so the rider must shift at that point. Nothing is gained by trying to wind out a few more revs. Where the MT power is impressive, is at the lower end. This new Single isn't the least bit hesitant to "grunt." Even with relatively high street gearing, our 250 Elsinore outclimbed several other machines, and they had the advantage of knobby tires and more displacement.

Most important is that Honda has the right combination of geometry to make the MT handle properly. There is no fear of high-siding with this one. The critical, important basics are all here. All that is needed is a weight reduction plan, especially at the front of the machine. As it stands, the MT is front end heavy, which makes it difficult to loft the wheel over ruts or obstacles. This can be crucial out on the trail.

Honda's new MT Series Elsinore is the perfect machine for a rider who doesn't want to push too hard in the dirt. It is the most ideal 250 two-stroke dual-purpose machine for the street. Serious dirt riders, however, may be disappointed, because, like us, they will probably be expecting more.

Still, the MT we tested was a short step ahead of the competition. The point is, it could have been a big jump ahead. With just a few changes, Honda could still pull it off.

HONDA MT250 ELSINORE

SPECIFICATIONS

List price	N.A.
Suspension, front	telescopic fork
Suspension, rear	swinging arm
Tire, front	3.00-21
Tire, rear	4.00-18
Brake, front, diameter x width, in.	6.29 x 0.96
Brake, rear, diameter x width, in.	5.51 x 0.96
Total brake swept area, sq. in.	35.6
Brake loading, lb./sq. in. (160-lb. rider)	12.22
Engine, type	two-stroke Single
Bore x stroke, in., mm	2.76 x 2.54, 70 x 64.4
Piston displacement, cu. in., cc	15.2, 248
Compression ratio	6.6:1 (corrected)
Claimed bhp @ rpm	N.A.
Claimed torque @ rpm, lb.-ft.	N.A.
Carburetion	28mm Keihin
Ignition	flywheel magneto
Oil system	oil injection
Oil capacity, pt.	2.8
Fuel capacity, U.S. gal.	2.2
Recommended fuel	premium
Starting system	kick, folding crank
Lighting system	6V alternator
Air filtration	oil-wetted foam
Clutch	multi-disc, wet
Primary drive	helical gear
Gear ratios, overall:1	
5th	6.94
4th	8.66
3rd	11.22
2nd	15.19
1st	21.61
Wheelbase, in.	56.5
Seat height, in.	32.5
Seat width, in.	9.0
Handlebar width, in.	33.0
Footpeg height, in.	12.0
Ground clearance, in.	9.8
Curb weight (w/half-tank fuel), lb.	275
Weight bias, front/rear, percent	44/56
Test weight (fuel and rider), lb.	435
Mileage at completion of test	202

TEST CONDITIONS

Air temperature, degrees F	75
Humidity, percent	58
Barometric pressure, in. hg.	30.25
Altitude above mean sea level, ft.	383
Wind velocity, mph	2-5
Strip alignment, relative wind:	

PERFORMANCE

Top speed (actual @6951 rpm), mph	76
Computed top speed in gears (@7500 rpm), mph:	
5th	82
4th	66
3rd	50
2nd	37
1st	26
Mph/1000 rpm, top gear	10.9
Engine revolutions/mile, top gear	5503
Piston speed (@7500 rpm), ft./min.	3175
Lb./hp (160-lb. rider)	N.A.
Fuel consumption, mpg	55
Speedometer error:	
50 mph indicated, actually	47
60 mph indicated, actually	57
70 mph indicated, actually	66
Braking distance:	
from 30 mph, ft.	26
from 60 mph, ft.	109
Acceleration, zero to:	
30 mph, sec.	4.3
40 mph, sec.	6.0
50 mph, sec.	7.8
60 mph, sec.	10.5
70 mph, sec.	16.0
Standing one-eighth mile, sec.	12.37
terminal speed, mph	64.79
Standing one-quarter mile, sec.	17.28
terminal speed, mph	71.65