HUSQVARNA 250
WR CROSS COUNTRY

Cycle Test

PHOTOGRAPHY: DAVE HOLEMAN, DALE BOLLER, JOHN ULRICH, ROBIN RIGGS

In the dirt bike world strict lines are drawn between racing and enduro machinery. Husky's 250 WR fits cleanly between the two.

● POPULAR BELIEF HOLDS THAT ALL HUSQvarnas are high-strung, bug-eyed race bikes. It is only natural that people accept the mystique as fact. Husqvarna, after all, has left its mark on virtually every segment of off-road competition. Last year Husky took home the 250cc World and 500cc National Motocross Championships, the AMA's Number One enduro plate, top American honors in the ISDT and overall wins in Baja and at the Mint 400.

The fact is, however, that not all Husqvarnas are hot-blooded racers. An example is the 250cc WR Cross Country. Though looking like a member of the Husky racing fraternity, the 250 WR is actually a mild-mannered trail bike—a pleasant, subtle version of Husqvarna's racing machinery that is tame, manageable and quiet. The 250 WR is a playbike in racing trim.

The race-bike/play-bike look-alike concept, while commonplace, is executed differently by various companies. The Japanese manufacturers generally install a de-tuned top-end on a motocross engine, put a granny-low and overdrive fifth in the gearbox, replace the racing magneto with a heavier flywheel and lighting coil, soften the suspension, and add a spark arrestor, speedometer and lights.

The typical European approach is different. The continentals retain all the motocross performance specifications, bolt up enduro lighting and fit a muffler on the end of the expansion chamber. These alterations produce an enduro *race* bike.

The enduro *play* bikes have the racer look, make excellent trail machines and are adequate for occasional competition. Enduro race bikes combine racy appearance with matching performance and seldom recognize trail bike subtleties.

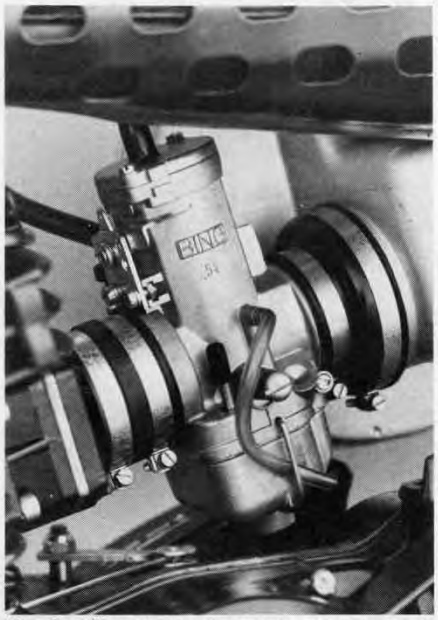
Husqvarna's 250 WR walks a narrow line between these two executions. The WR has no enduro equipment, but uses Husky's new cross-country racing chassis. Suspension is improved from last year, but it is not the same as fitted on the latest motocrossers. The engine is identical with earlier power plants, but its performance is softened through restrictive exhaust muffling. And the six-speed gearbox incorporates broad ratio spans rather than the closely-spaced gearing of the race bikes.

Husqvarna has sprinkled fresh improvements into proven designs with the 250 WR, but little is completely new about the Cross Country. The engine is the same tried-and-true reed valve two-stroke that has been in production for the last few years. It has the same reed valve block, cylinder porting, pipe and carburetor size as last year's WR. The carburetor, though, is new. Husky now equips all the 250s and 360s with model 54 Bings which use a richener-type choke and overflow tickler. Mahle pistons are superceded by Kilbenschmidt castings. The full-circle crankshaft flywheels are the same as those used in other Husky models (except

The 250 WR engine is identical with the motocrosser except for wide ratio gearbox and muffled exhaust.

Magura cam levers are fitted with larger cables. All controls work smoothly. Kill button is standard.

Newly designed Girling gas shocks have improved damping system. Dual springs deliver better ride.



The Bing 54 carburetor is rubber mounted on both ends. It includes starter jet choke and tickler.

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the Automatic). Only the big end pin location is different. Also interchangeable with the other Huskys are the straight-cut primary drive spur gears, clutch, and gearbox assemblies. Internal tooth-counts of the close (motocross) and wide (cross-country) ratio gearboxes are different, but transmission assemblies and gearsets are interchangeable because the crankcases are identical. In place of the Motoplat CDI system (supplied on most other Husky models) the 250 WR comes with a Femsa points-type ignition with a lighting coil and a heavy external flywheel. A subtle change has occurred to the magneto cover, which is round rather than square; the square covers would snag on the ground, rocks or stumps and cause damage to the right side crank-case. The Mikkola-type chassis (a design taken from Heikki's 1974 500cc world championship machine) is retained, with one invisible but major change: the fork rake angle is pulled back a whopping two degrees. The older frames have a 32° angle; the new chassis steering head is placed at 30°.

New-design shocks and springs are fitted on the WR. Last year's Girling nitrogen-charged shocks were plagued with damping fade during long, hard rides, caused by expansion and contraction differences between the cylinder wall (body) and damper piston. Heat expansion of the cylinder caused a blow-by problem; gas and oil would escape past the piston ring as the end gap increased. A new ring design is said to have cured the problem. In addition, the new shocks have dual-rate springs. Up front, the WR comes with the late-type fork which has more travel (up to 8¼ inches from 7½ inches), better damping control and smoother action. The wheel assemblies and tires are a mixture of parts from the motocross and cross-country models. The rear wheel is the same one used on all the over-175cc models. It is a magnesium casting, conical in design. The front wheel incorporates a French-made, full width aluminum hub. Both rims are Akront "Green Labels" and the tires are from Barum.

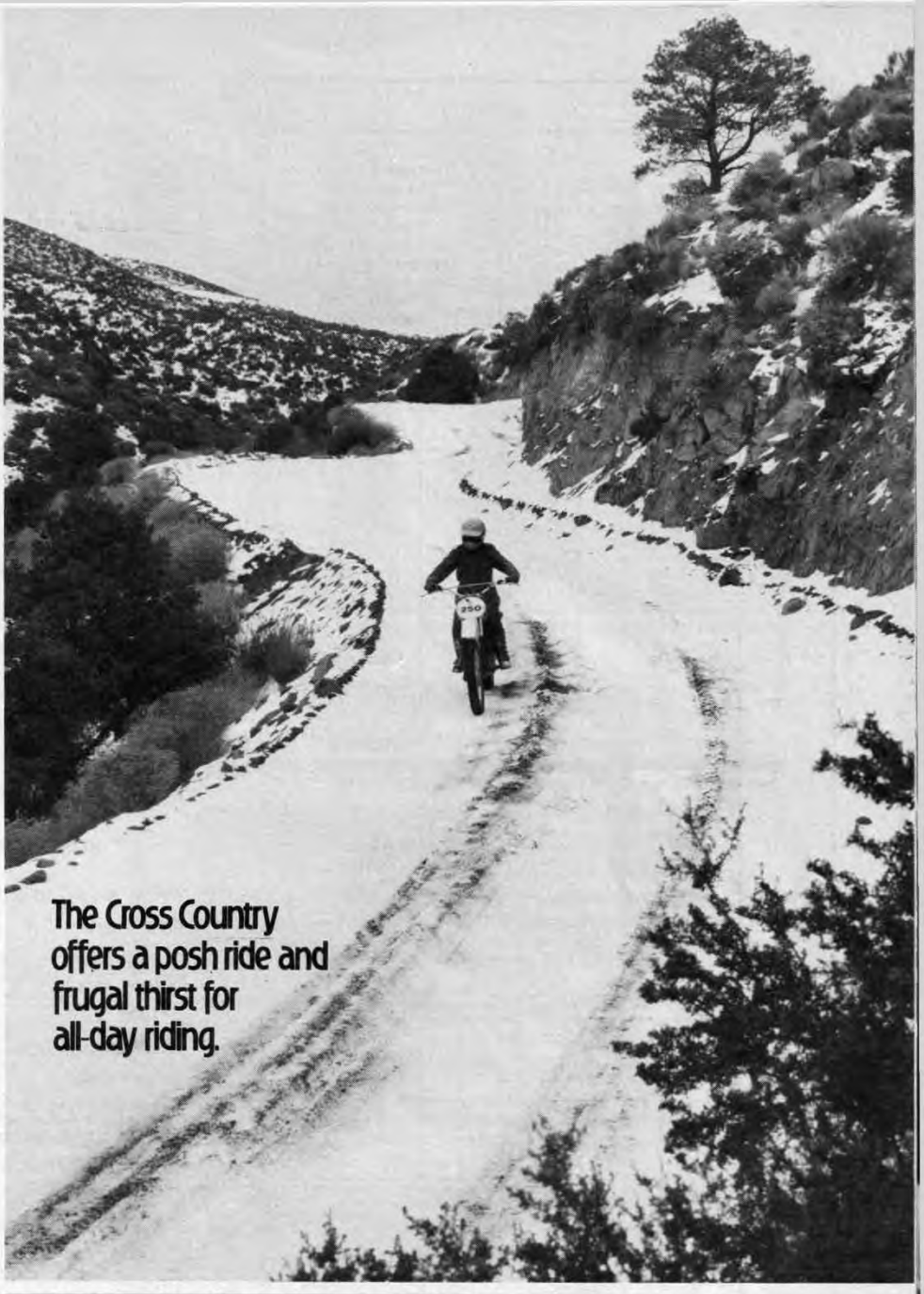
Husky equips the WR with their three-gallon steel gas tank. Magura's superb cam levers and quarter-turn throttle are standard. The cables are the late-type, which have larger housing and wire diameters and work smoother and last longer. The improved plastic fenders are thicker, deeper and longer than the shortlived old models. During the 600- to 700-mile duration of our test we encountered only a couple of problems, but both were major failures. Our test bike arrived with some break-in miles already accumulated; we still ran a tank of gas through the engine before hammering on it. Only ten miles from our truck we detected a sporadic high-pitched squeal coming from one of the wheels. After a couple of crashes

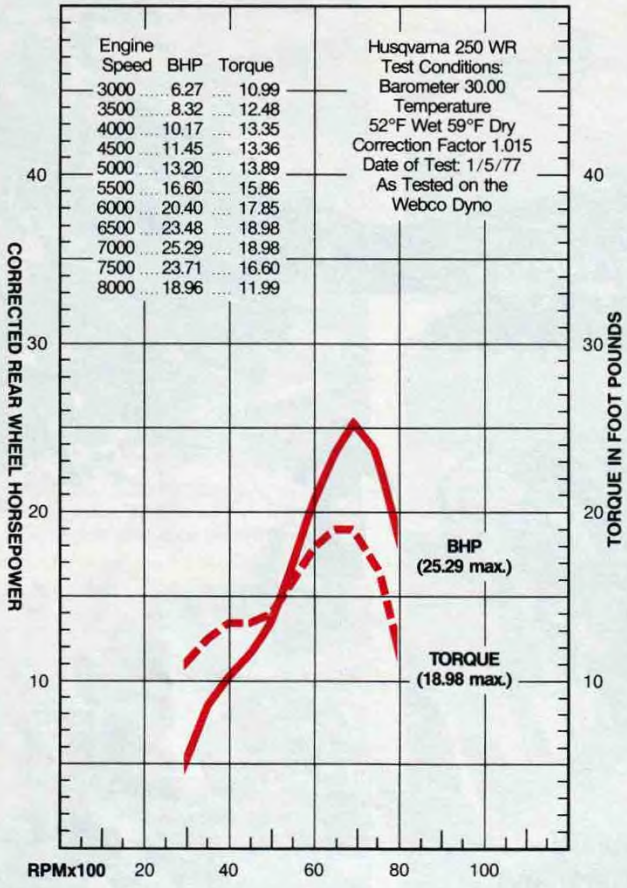
(caused by front wheel washout), we removed the wheel and found a broken brake shoe return spring. By this time the steel fragments had permanently damaged the liner and brake shoes. Just prior to returning to our truck from our first outing, the engine seized. We were accelerating onto a fire road when the engine pinged twice and stuck just as we shifted into sixth gear. There had been no prior indications of overheating, detonation, leaning-out or fuel starvation. After the engine cooled it started on the first kick, but it never ran as well or as quietly as it had before. The piston seizure had stuck the single ring.

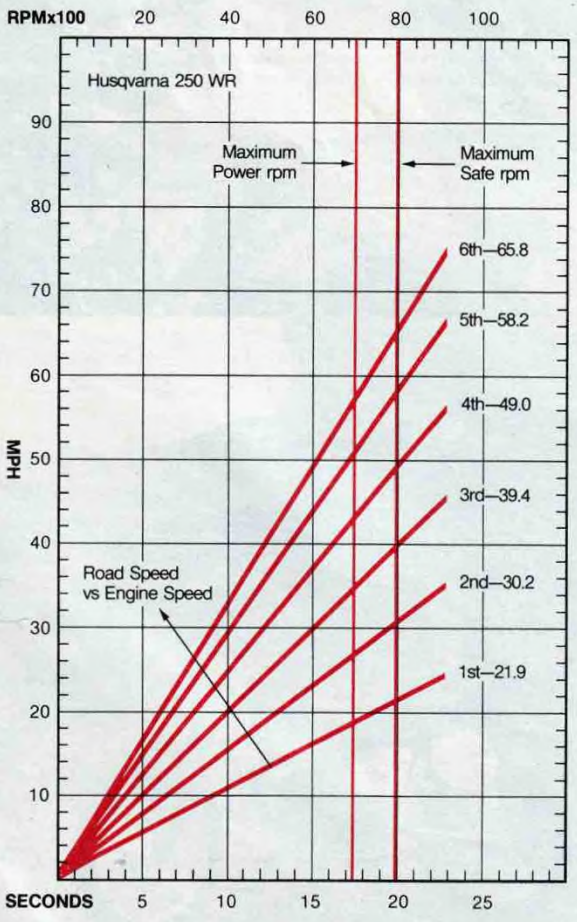
Prior to running the 250 WR on the dynamometer, Husqvarna's service department cleaned up the top end, installed a new piston assembly and hunted for the problem's source. The dyno run proved to be fatal. While bringing the engine up to operating temperature (350° to 400°) another piston seizure occurred. We disassembled the top end, cleaned up the bore and installed a used piston which promptly stuck when the cylinder head temperature hit 375°. After another top-end rebuild we returned to Webco's dynamometer for one last try. This time the new piston was given an abundant amount of clearance (around .006-inch), the main jet size was increased from a #190 to a #205 and the needle raised one notch. The over-jetting proved effective in preventing a seizure, although it compounded the engine's rough-running at lower crankshaft speeds. And with this jetting, the bike would not be rideable in the field. The main jet was reduced one size (to a #200) for one dyno pass but the result was a slight reduction in the dynomometer torque reading.

As the dynomometer figures show, the 250 WR has a rather narrow total power range—only 5000 rpm. The engine's useable range is from 5500 to 7500—a thin 2000 rpm.

The first time we started the Husky we were greeted with an annoying and painful problem. The newly reshaped kick crank causes the rider's toes to get jammed head-on into the foot peg at the bottom of starter arm's arc. To avoid this discomfort the rider must place his foot far forward on the crank so the sole of his boot will bottom on the peg. This shortens the cranking stroke, but saves the toes. The bulky Skyway spark arrestor/silencer works very well to muffle the exhaust bark. Its long-range service life, however, is not particularly good. After a few hundred miles or less, if the Husky is ridden extensively at slow speeds the spark screen gets plugged with oil deposits and engine power diminishes. It must be cleaned regularly or removed permanently. The rubber flapper at the exhaust outlet fatigues after 500 miles or so and sharply raises the noise level. The engine is quieter than a Penton but busier-sounding than a Suzuki. Vibration is minimal,







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Price, suggested retail	$1695
Tire, front	3.00/3.20-21 in. Barum
rear	4.25-18 in. Barum 525A
Brake, front	140 x 25mm (5.5 x .98 in.)
rear	160 x 25mm (6.3 x .98 in.)
Brake swept area	36.3 sq. in.
Engine type	Reed valve, two-stroke
Bore and stroke	69.5 x 64.5mm (2.74 x 2.54 in.)
Piston displacement	245cc (14.95 cu. in.)
Compression ratio	12.3:1
Carburetion	1-36mm Bing 54
Air filtration	Oiled foam
Ignition	Femsa, points
Bhp @ rpm	25.29 @ 7000
Torque @ rpm	18.98 @ 6500
Rake	30°
Mph/1000 rpm, top gear	8.2
Fuel capacity	11.8 liters (3.0 gal.)
Transmission oil capacity	1.6 liters (1.7 qt.)
Electrical power	Flywheel generator 6V/35W
Battery	none
Primary transmission	Spur Gear 2.41 (29/70)
Secondary transmission	⅝ x ¼ in. Reynold chain
	4.42 (11/53) (1) 27.41 (2) 19.84
	(3) 15.12 (4) 12.14
	(5) 10.23 (6) 9.04
Wheelbase	142 cm (56 in.)
Seat height	800mm (31.5 in.)
Ground clearance	270mm (10.6 in.)
Curb weight	105.7 kg. (233 lbs.)
Test weight	178.3 kg. (393 lbs.)
Average fuel consumption	28–35 mpg.

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and at less than WFO speeds, hardly noticeable. Induction drone is subdued by a set of aluminum and rubber baffles located over the intake opening on the air cleaner cannister.

Power transition from minimum to maximum torque is very gradual and non-alarming. The 250 WR doesn't have the arm-stretching power surge inbred into most motocrossers. In any gear, at any speed, the rider can roll open the throttle and the Husky will accelerate ahead evenly. The engine's power spread is four-stroke-like and extremely pleasant to deal with.

Gear staging of the wide-ratio gearbox gives the rider a broad choice of gearing to meet situations ranging from walking speeds to wide-open fire-roading. Gear selection is arduous when the Husky is new. As miles and hours are put on, shifting action improves. After 500 miles or so the gearbox works normally, though never with the slick-shifting smoothness of the KTM, Honda or Suzuki six-speed transmissions.

Riding comfort of the Husqvarna is exceptionally nice. The long, deep saddle is evenly contoured for its full length and doesn't have camel-hump-like mounds or gullies in it. Footpeg and handlebar positions and shapes permit a rider to sit bolt upright and avoid cramping. Standing on the pegs is less successful, because the old-style Husky up-pipe protrudes out the bike's left side and interferes uncomfortably with the rider's leg.

The WR's improved suspension and new steering geometry make the Husky handle markedly better. The shock and fork actions are, for the first time, perfectly matched. The dual-rate shock springing lets the back wheel move smoothly over slightly cobby ground as well as compensating accurately for high-speed whoops and ditches. The fork works with comparable smoothness and accomodates all terrain undulations without sticking or hesitating.

As expected, the 250 WR steers noticeably quicker than before because of the tucked-in head angle. But the dramatic change in rake angle doesn't eliminate all the characteristic Husqvarna traits from the WR's handling. Front wheel traction and handling are definitely more precise—but not at the expense of extra-quick steering. Most of the Husqvarna steering vagueness is gone, but the WR still feels long. The Husky tendency to wallow in fast, choppy turns is less apparent. For both fast cross-country and tight mountain trails, the new steering and handling are appreciably better.

The improvements made to the chassis are to an extent devalued by the engine's sluggish performance. The WR is neither fast nor slow. Compared to enduro/playbikes like the Suzuki PE or Honda MR, the

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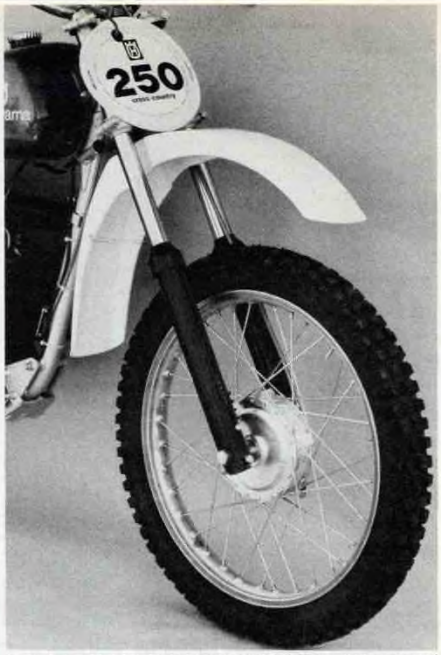
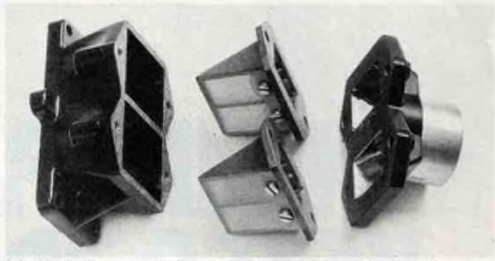
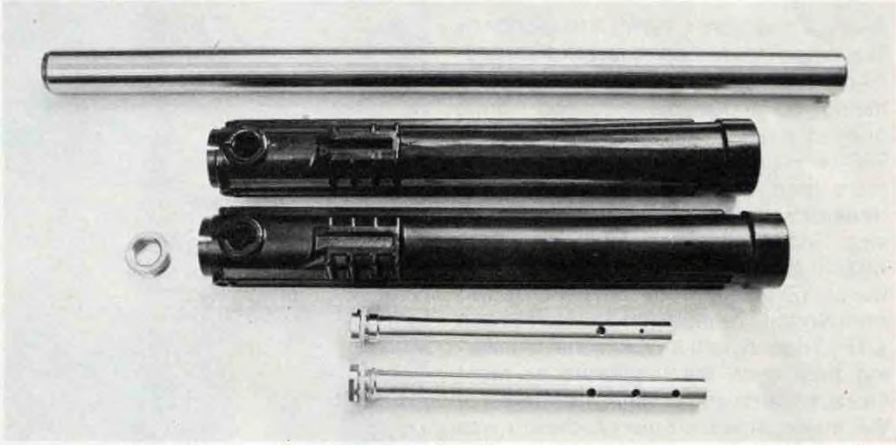


Late-type Husky fork has supple action, more travel less stiction. New fenders are thicker and stronger.

Rubberised swing arm bushings (left) are superceded by needle bearing set for rigidity and durability.



Reed valve assembly includes aluminum castings and phenolic petals. WRs and CRs use 36mm Bing.



The revamped fork retains the old stanchion tube and uses longer sliders and damper rods. Oil flow has been increased by adding more holes and enlarging their diameters. Damping action is vastly better.

Now that this information is a part of public record from the hearing, it will be interesting to see if the State Police and Safety Office print up the same old lies in their annual traffic and accident summaries to "prove" how well the helmet law is working.

While I would not be foolish enough to flatly state that helmets are useless in all circumstances or applications, I find that the nationwide helmet laws are not doing the job that we have been led to believe that they would. For every documented reduction in deaths due to head injuries, there appears to be an increase in deaths due to neck injuries and helmet-caused deaths. At best, there is no change in total deaths but, more importantly, there are too many cases of total deaths increasing after a helmet law goes into effect.

From you, I would like an acknowledgement that we, The Anti-Helmet Law Lobby, are not pumping out untrue propaganda but in fact have established that helmet laws are not working. One important note, in conclusion, is that we are not necessarily anti-helmet, but are definitely anti-helmet *law*.

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250WR holds its own in acceleration and may have a slight edge in top speed. The Husky will work better through lengthy whoop-de-doo sections, but a PE 250 will climb hills with less effort. A Can-AM TNT, Penton or Hercules Enduro will cream the WR in an acceleration contest, and while the Husqvarna handles better than the Can-Am, both the Penton and the Hercules will suck the handgrips off the WR in a rigorous cross-country section.

We would hope that the problems we had with the engine and front wheel are peculiar to just our test bike. Still, failures aside (which would be covered by Husqvarna's generous warranty policy), the WR left us more than slightly confused, grasping for an understanding of the role the bike is expected to play. Husqvarna thinks of it as an enduro bike, and while it would certainly be adequate for that task, it'll cost the buyer another $100 or so to equip it with speedometer and lighting assemblies. It's fun to ride cross-country and entirely capable of safely traversing the most challenging kinds of terrain, but face it: the bike doesn't have a lot of motor, at least not compared to formal cross-country specialists, and it does cost a ton of money. Maybe its moderation is its message. That, and the lettering on the tank which reads, "Husqvarna." If the bike has a home, it is as a very amenable, very trendy and very expensive play-bike. That particular home is hard to find—and there aren't many of them. ◉