

HUSQVARNA 500 XC & 500 WR

Only Husqvarna offers riders an option in enduro mounts. What do you favor? Deep woods? Wide-open terrain? Go ahead—match the bike to your riding needs.

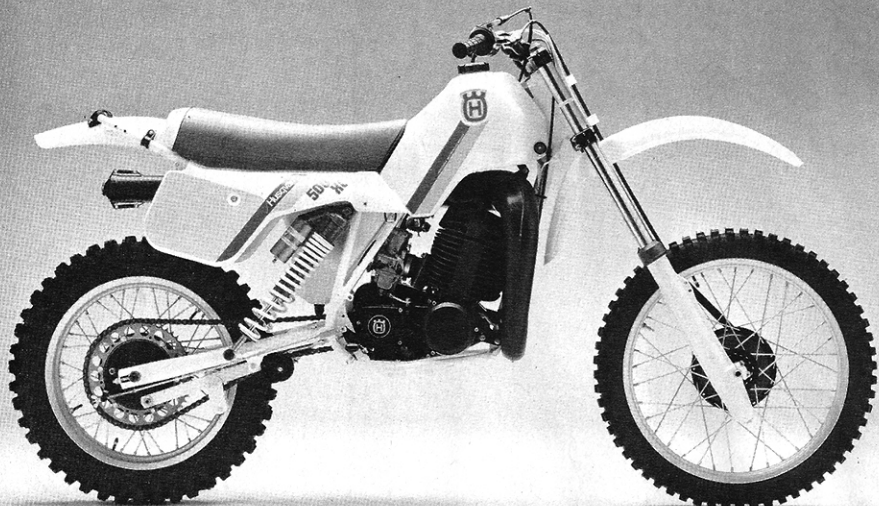


“One size fits all.” In the clothing business, that’s the universal sign for trouble. How many times have you tried on such a garment only to discover the label should have read, “one size fits none”? The one-for-all concept doesn’t really work in the clothing business; as any well-dressed man knows, only custom tailoring gives a perfect fit.

Most motorcycle manufacturers apply the uni-fit philosophy to their off-road machines. You want an enduro bike? Here’s our version—the same for the guy who traces knuckle-banging deep woods trails as for the guy two thousand miles away who squirts through sand washes and down white-knuckle desert roads at 75 mph. How can one model suit such different riders’ needs? The answer is simple; it can’t, not without fine-tuning—an off-the-rack bike gives an off-the-rack fit.

Husqvarna is different: Husky, the custom tailor of the dirt world, offers three open-class machines: in addition to a big-bore motocrosser, the Swedish company stocks a pure enduro machine, the 500 WR, and a desert/hare-scrambles/grand prix bike, the 500 XC. Together these three bikes fill the bill for almost every type of off-road riding and competition. By subtly shaping one basic engine/chassis setup, Husqvarna molds both the 500 WR and the 500 XC, two distinct machines for two





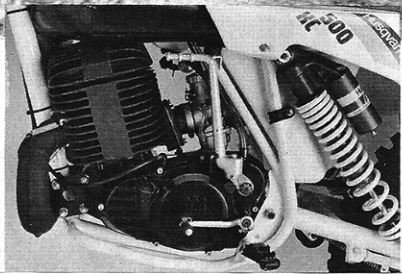
HUSQVARNA 500s

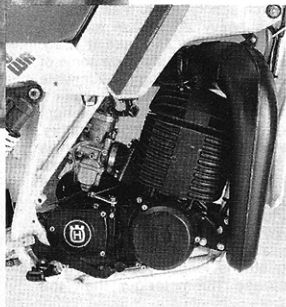
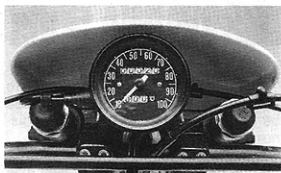
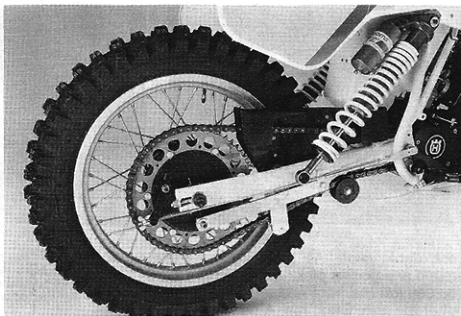
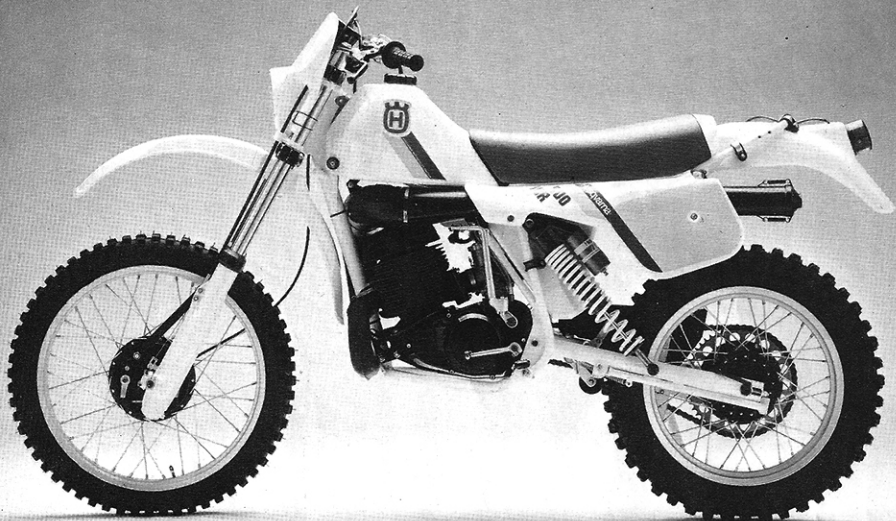
distinct kinds of riders.

Last year Husqvarna boosted the XC's displacement to 488cc while leaving the WR a 430. Now both bikes wear the 500 title; a new crankshaft and longer connecting rod increase engine stroke 10mm, raising the 1984 WR to the XC's 84.0mm dimension. Diameter remains 86.0mm, but both 500s use a piston with a skirt 10mm longer than the 430's. This year the WR shares Husqvarna's new-style cylinder with the XC and CR. All three 500s feature a four-transfer-port design that supersedes the 430 WR's two-transfer-port layout, and a new bridged intake port with additional window-type ports replaces the twin finger-type boost ports that formerly reached up from the bridged intake. The enlarged WR cylinder also incorporates Husky's new



Husqvarna's 500 engines are chameleons of dirt performance. They can crawl along without raising a puff of dust, or bound from one berm to the next, or rip over an 80-mph barrier.

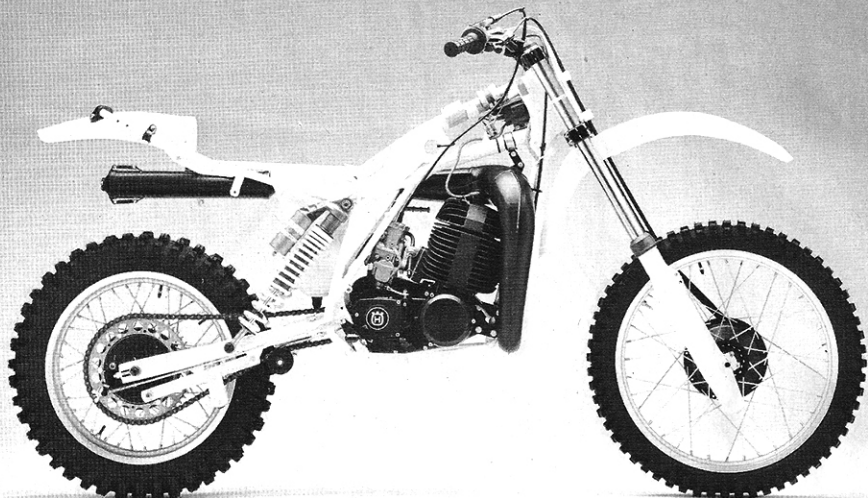




large-volume eight-petal reed valve in place of the 430's twin V-block reed setup. A new rubber-encased manifold ensures a positive, leak-proof seal, and the XC and WR use identical 40mm Mikuni round-slide carburetors. A soft rubber manifold connects the carb to the airbox. Remove the filter element and you can slip the manifold out of the airbox—a practical design which eases carburetor access. Both bikes breathe through a large oiled-foam-element air filter housed in a new airbox made of a tougher material for increased durability. The single retaining clip provides quick access for filter servicing. In the WR a small airbox lid shields the filter in really wet slogging.

The XC and WR differ subtly in state of tune. Husqvarna uses different pipes, ignition systems and varying engine compression so the XC engine delivers a bit more top-end punch, while the WR features a slightly wider power spread. Both bikes share identical six-speed gearboxes and primary and final reduction ratios. The 500 XC and WR are geared taller than last year's 430 WR: the 1984 bikes use a 13/53 pairing; the 430 was equipped with 12/53 sprockets.

Thanks to a new, longer kickstart lever, these big bruisers kick through in a snap. The added length provides substantially more mechanical leverage, and your foot easily clears the footpeg, not the case with the old setup. The longer lever does have its drawbacks, however; mounted on the left side of the engine, the kickstarter was already awkward to use, and the extra height exacerbates the problem. *Cycle's* shorter testers preferred to start the Husqvarnas while standing on

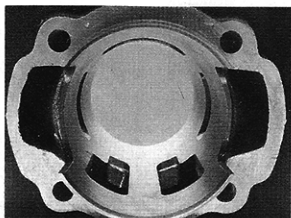
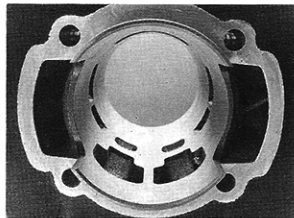


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the left and kicking with the right leg; taller staffers sometimes managed to start the 500s left-legged while astride the bike, but they too needed to dismount occasionally to kick.

The 500s usually start readily; three or four kicks and you're under way. The displacement increase hasn't hampered the Husqvarnas' engine flexibility; in fact, the XC and WR are more versatile than ever. At low speed the 500s plunk along contentedly. Slow, feet-up riding is a breeze, and the rider pays no penalty for right-hand mistakes; if you must chop the throttle, just roll the power back on. Simple. Down low, these engines are friendly and easygoing. Spur the engine into the fat portion of the powerband, however, and the 500s change character.

The 430 WR had an almost four-stroke nature, steadily gaining speed as rpm increased, but never coming on the pipe with a strong two-stroke surge. Both the XC and WR deliver a big jolt of honest Swedish horsepower midway through the rev range, and the power builds relentlessly all the way through the top end. The new WR is much more akin to the 500 XC than to last year's small WR. When you wick up either '84 bike, it leaps forward unrestrained. Gas either out of a corner, and the rear end eases out in a nice



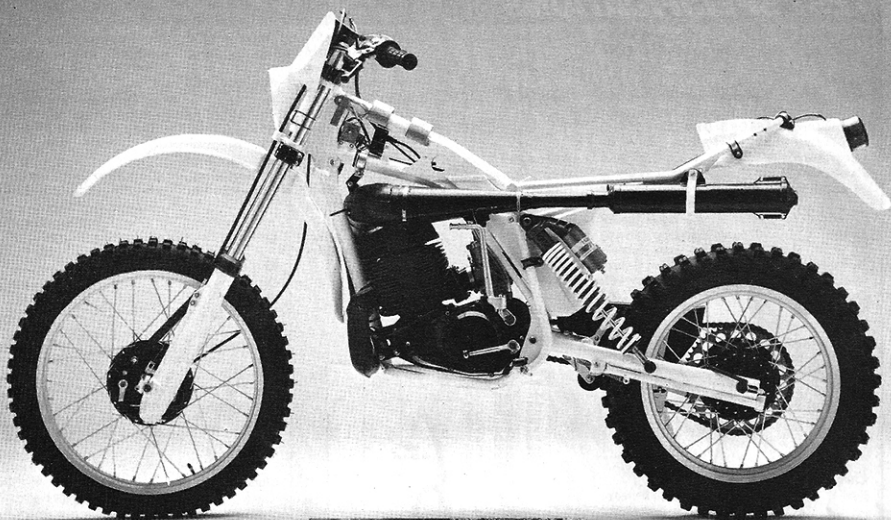
controllable slide. As the bike drifts around and begins picking up traction, you can loft the front end and wheelie out of the turn. Great fun. A good deal of flywheel effect leaves the 500s' power surge controllable and friendly.

Although the Husqvarnas' gearboxes require a moderately long throw at the shift lever, gear changes are crisp and sure. And the six speeds allow plenty of options. Lugging the engine reduces noticeable engine vibration, but keeping the engine speed up leaves surplus power readily at hand. With stock gearing you can travel from walking speeds to almost 100 mph. Gearing down to a 12/53 combination might be sensible for the average trail rider. Calculated top end still works out to about 90 mph, and the change eases the strain on the one weak link in the Husqvarnas' drive train—the clutch. Although the 500s

The new 500 cylinder (left) uses four transfer ports and two window-type ports above the bridged intakes for cylinder filling. The 430 had two transfers and twin finger-type ports that reached up from the intakes.

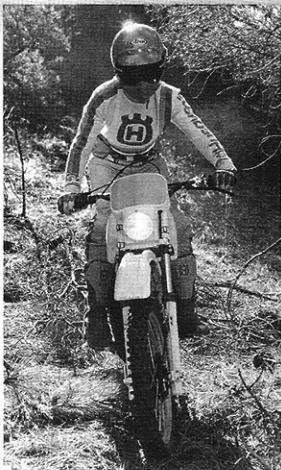
use clutch springs stiffer than those in the 430, heavy abuse can heat the clutch sufficiently to make it drag. Lower gearing would eliminate some of the clutching at crawling speeds while sacrificing little top-end ability.

The WR and XC share identical frames with new steering geometry. Gone are the days when Husqvarnas had 30-plus degrees of steering rake and six inches of trail. All 1984 Husqvarnas feature 28.5 degrees of rake—a radical departure for the Swedish company. The WR has grown 10mm in wheelbase, all in the swing arm. The XC's swing arm is longer yet, giving it a wheelbase 18mm longer than the WR's.



A brief spin on the '84 bikes reveals unmistakable changes in steering. The big WR, always quick-handling for an open-class motorcycle, is now more agile than ever. The new WR responds to steering input with uncanny precision and quickness, a trait masking its 254 pounds. Woods riders who must thread sawed-off handlebars through tight, twisty three-lined trails will welcome the '84 WR, delightful in super-tight going.

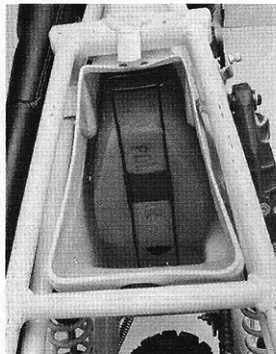
With the new frame, the '84 WR makes a few concessions through sand and over rocks; on nasty trails



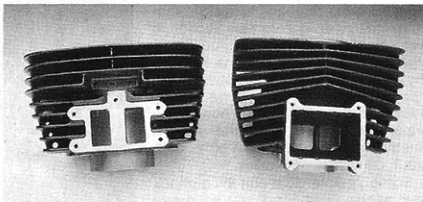
lined with rocks the size of grapefruit and bowling balls, the 500's front end deflects more readily than the older 430's, and it knifes in sand unless you sit far back and keep the power on. The improved agility, however, is worth the tradeoff.

Steering geometry changes cause the XC to steer more quickly in '84 also; that's good or bad depending on your riding terrain. Quicker steering makes the XC more versatile, true, but hardcore desert riders don't give a damn about versatility; they prize high-speed straight-line stability and sure-footed sand-tracking above all else. The XC, though it still works well in the desert, has lost some of that sure-footedness to better suit fireroading and trail riding.

The 500's new quick-steering demands a good front tire—something the stock Trelleborg is not. Although the OEM rubber is adequate, a sticky



A single clip holds the oil-foam air filter in place to make servicing easy. The large airbox is now made of a stronger, more durable material. The taller 500 cylinder (right) accepts a large eight-petal reed block, while the older 430 used two smaller reed valves.



TEST SPECIFICATIONS

Make and model Husqvarna 500 XC
Price, suggested retail (as of 10/14/83) . . . \$2995

Engine

Type Two-stroke, reed-valve-inducted
single-cylinder, air-cooled
Bore and stroke . . .86.0 x 84.0mm (3.39 x 3.31 in.)
Piston displacement 488cc (29.8 cu. in.)
Compression ratio 9.5:1
Carburetion (1) Mikuni 40mm round-slide
Exhaust system . . . Upswept expansion chamber
with silencer and USFS-approved
spark arrester
Ignition Capacitor-discharge, external-
rotor magneto
Air filtration Oiled foam element
Oil capacity 1.7 qts. (1.6 l)
Bhp @ rpm 43.33 @ 7000
Torque @ rpm 33.65 @ 6500

Transmission

Type Six-speed, constant-mesh, wet-clutch
Primary drive Straight-cut gear, 70/39, 1.79
Final drive . . . #520 chain, 13/53 sprockets, 4.08
Gear ratios (transmission) (1) 34/13, 2.62
(2) 29/16, 1.81 (3) 26/19, 1.37
(4) 24/23, 1.04 (5) 22/25, 0.88
(6) 20/27, 0.74

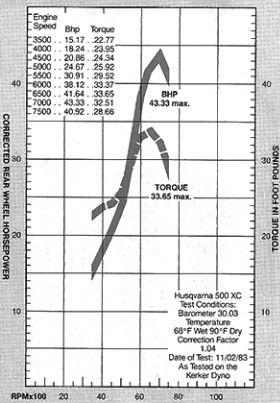
Chassis

Type Single-downtube, full-cradle,
chrome-moly frame; oval-section
chrome-moly swing arm
Suspension, front . . . Leading-axle, air-adjustable
fork with 40mm tubes and
11.8 in. (300mm) of travel
rear (2) gas-charged,
piggyback-reservoir shock
absorbers, adjustable for
spring preload, producing 13.6 in.
(345mm) of rear-wheel travel
Wheelbase 59.0 in. (1498mm)
Rake/trail 28.5°/5.2 in. (131mm)
Brake, front Cable-actuated, double-
leading-shoe drum
rear Rod-actuated, single-
leading-shoe drum

Wheel, front 1.60 x 21 Nordisk
aluminum alloy rim
rear 2.50 x 18 Nordisk
aluminum alloy rim
Tire, front 3.00 x 21 Trelleborg Deep Grip
544 Motocross
rear 5.00 x 18 Trelleborg Ten-Masters
Motocross 744
Seat height 37.3 in. (948mm)
Ground clearance 12.3 in. (311mm)
Footpeg ground clearance . . . 14.1 in. (359mm)
Fuel capacity 3.3 gal. (12.5 l)
Curb weight
(w/one gal. gas) 250.0 lbs. (113.4 kg)
Test weight 410.0 lbs. (186.0 kg)

Customer Service Contact

Husqvarna Motor Corporation West
4925 Mercury Street
San Diego, CA 92111
(619) 565-1414



Make and model Husqvarna 500 WR
Price, suggested retail (as of 10/14/83) . . . \$3115

Engine

Type Two-stroke, reed-valve-inducted
single-cylinder, air-cooled
Bore and stroke . . .86.0 x 84.0mm (3.39 x 3.31 in.)
Piston displacement 488cc (29.8 cu. in.)
Compression ratio 9.0:1
Carburetion (1) Mikuni 40mm round-slide
Exhaust system . . . Upswept expansion chamber
with silencer and USFS approved
spark arrester
Ignition Capacitor-discharge, external-rotor
magneto
Air filtration Oiled foam element
Oil capacity 1.7 qts. (1.6 l)
Bhp @ rpm 41.49 @ 7000
Torque @ rpm 34.04 @ 6000

Transmission

Type Six-speed, constant-mesh, wet-clutch
Primary drive Straight-cut gear, 70/39, 1.79
Final drive . . . #520 chain, 13/53 sprockets, 4.08
Gear ratios (transmission) (1) 34/13, 2.62
(2) 29/16, 1.81 (3) 26/19, 1.37
(4) 24/23, 1.04 (5) 22/25, 0.88
(6) 20/27, 0.74

Chassis

Type Single-downtube, full-cradle,
chrome-moly frame; oval-section
chrome-moly swing arm
Suspension, front . . . Leading-axle, air-adjustable
fork with 40mm tubes and
10.6 in. (270mm) of travel
rear (2) gas-charged,
piggyback-reservoir shock
absorbers, adjustable for
spring preload, producing 11.8 in.
(300mm) of rear-wheel travel
Wheelbase 58.3 in. (1480mm)
Rake/trail 28.5°/5.2 in. (131mm)
Brake, front Cable-actuated, double-
leading-shoe drum
rear Rod-actuated, single-
leading-shoe drum

HUSQVARNA 500s

Metzeler or Dunlop K139 up front will make either Husky much more sure-footed, especially over dry, hard-packed surfaces.

Although the two 500s share basic suspension designs, the components differ. Both forks are 40mm, but the WR uses shorter sliders and damping rods, therefore offering less travel than the XC—10.6 inches versus 11.8. Both carry air caps, though Husqvarna recommends running zero psi. Stiction is almost nonexistent, and the quality of travel is excellent; Husqvarna is keeping up with the times in the suspension department. One long-time Husky headache has resurfaced, however—leaky fork seals. Despite recent Husqvarna forks proving oil-tight, both wept oil within 150 miles.

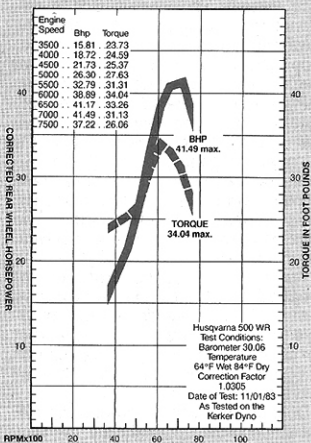
Some people discredit twin-shock rear suspension, and just to prove



Wheel, front	1.60 x 21 Nordisk aluminum alloy rim
rear	2.50 x 18 Nordisk aluminum alloy rim
Tire, front	3.00 x 21 Trelleborg Deep Grip 544 Motocross
rear	5.00 x 18 Trelleborg Ten-Masters Motocross 744
Seat height	37.0 in. (940mm)
Ground clearance	12.6 in. (320mm)
Footpeg ground clearance	13.9 in. (353mm)
Fuel capacity	3.3 gal. (12.5 l)
Curb weight	
(w/one gal. gas)	254.0 lbs. (115.2 kg)
Test weight	414.0 lbs. (187.8 kg)

Customer Service Contact

Husqvarna Motor Corporation West
4925 Mercury Street
San Diego, CA 92111
(619) 565-1414



them wrong the dual Ohlins setup works as well as most single shocks. Husqvarna's rear suspension system, ITC (Immediate Track Control), uses Ohlins shocks that contain a position-sensitive damping system in addition to the usual speed sensitive damper. By incorporating this secondary system, which increases compression and rebound damping only when the shock nears full compression, the Ohlins produce progressive damping.

In actual use, this suspension system provides a plush ride through the initial portion of travel, then stiffens as the shocks begin to bottom. Although the WR and XC shocks use identical damping rates, the WR's shorter damper rod and additional internal spacer limit shock travel. These, along with the shorter swing arm, account for the difference in rear-wheel travel: 11.8 inches for the WR, 13.6 inches for the XC. The two bikes also use identical

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progressive-wound springs; while this spring suits the WR well, a slightly stiffer spring would improve the XC, especially for high-speed use.

Brake systems, too, are identical: a single-leading-shoe drum rear and a double-leading-shoe drum front brake. Even a heavy dew seemed to cause previous Husky brakes to lose their power, but these new brakes are quite water resistant; normal stream crossings hardly impair stopping power. Once the brakes are fully drenched, just a short period of brake dragging brings back power, and unlike old units these suffer no permanent loss in stopping ability. Although these are the best Husqvarna brakes in history, don't mistake that to mean the best on the market today. Honda, equipping many of its off-road bikes with excellent front disc brakes, has raised the standard considerably. Improved as the Husky brakes are, they offer only average braking power and require considerable lever pressure.

Believe it or not, all 1984 models will carry plastic tanks. This departure from tradition makes sense; plastic tanks are less expensive than aluminum and weather damage much better. The new 3.3-gallon tanks are one-tenth-gallon larger than last year's. Despite the 500s' voracious appetites, the WR and XC should still provide a range of 50 miles or so.

Both 500s feature upswept expansion chambers with silencers and USFS-approved spark arrestors, making them legal for use in National Forests. The silencers on our 500s blew fiberglass packing down to the arrestors' particle-trapping screens. After a while the fiberglass accumulated, choking off the muffler; if your Husky starts losing power, check the exhaust system first.

The WR includes a taillight and a good 45-watt headlight; should you decide to hook up a high-wattage lighting unit, the SEM electrical system is already wired with two 70-watt lighting coils. The XC's Motoplat electrical system is wired up with a single 35-watt lighting coil; a headlight just bolts on. The WR also features an excellent VDO speedometer/odometer for enduro time keeping.

Husqvarna's custom-tailoring job doesn't come cheap. The WR, at \$3115, and the XC, at \$2995, sit well on the upper rungs of the pricing ladder. But the difference in cost between the Husqvarnas and the one-size-fits-all bikes buys something valuable. Go ahead—look at your riding terrain and decide which features suit you best. Then choose either the 500 WR or XC. You must agree: it's nice to have a choice. ■