



A Flash Of Finesse In A Contest Of Magnum Force



PHOTOS: JIM BROWN

Husqvarna's newest off-road machine—one of their best so far! Mike Gaspar and Mark Kariya grabbed these shots of Mitch Boehm putting the 400 Cross Country through its paces.



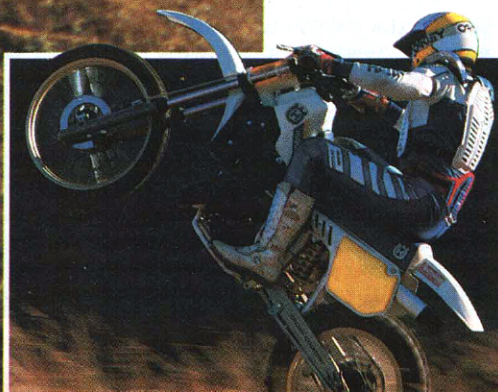
Husqvarna 400 Cross Country



The focus of complaints about Husqvarna motorcycles have been pretty consistent over the past few years. Customers pronounced the Swedish bikes too heavy, the fork not up to par with Japanese offerings and the vibration unacceptable. In off-road and enduro racing, the growing feeling was that the 500cc Huskys were simply too brutal and uncivilized. Riders lamented the passing of the venerable 430cc model—that is, until the magic 400WR engine was designed. The 400 made both the air-cooled and water-cooled versions of the 500cc Husky engine anachronistic for enduros and Husky soon ousted the 500 from their lineup in timekeeping trim.

In response to customer requests for a cross-country model of the same machine, Husqvarna designed the 400 Cross Country ("Cross Country" replaces the old, alphabet-soup "XC" designation).

Can a Cross Country chassis with the civilized, low-vibration 400 enduro powerplant replace





Making time through the brush is what the 400 Cross Country does best.

4th 1.645:1
5th 0.880:7
6th 0.741:1

CHASSIS

- Frame.....Steel, single downtube split into full cradle
- Rake/trail27°/4.7 in.
- Front suspension.....Husqvarna leading-axle air/spring fork, 40mm stanchion tubes, 11.8 in. travel (claimed)
- Rear Suspension.....Husqvarna single-shock system with Ohlins piggyback reservoir gas/oil shock, 10-position adjustable compression damping, 14-position adjustable rebound damping, infinitely variable preload, 14.0 in. travel (claimed)
- Brakes.....Front—Brembo single-piston caliper disc
Rear—Single-leading shoe drum
- Wheels.....Front—1.60-21 Nordisk
Rear—2.50-18 Nordisk
- Tires.....Front—3.00-21 Metzeler MXR
Rear—4.50-18 Metzeler Multi-Cross

MEASUREMENTS

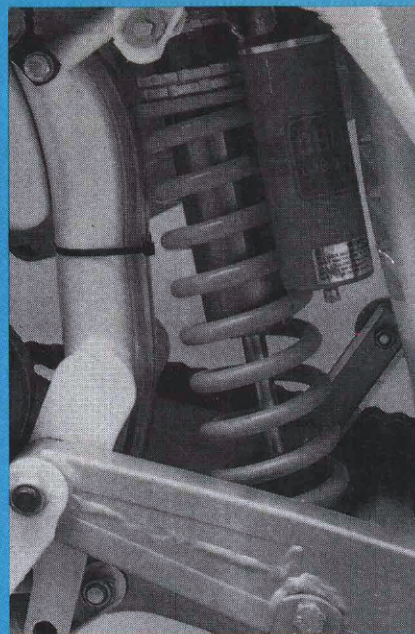
- Weight (wet, no fuel).....235 lb.
- Weight (wet, tank full).....256 lb.
- Weight distribution.....108/127.5 lb. (47/53%)(Fr/rr, wet, no fuel)
- Weight distribution.....125/131 lb. (48/52%)(Fr/rr, wet, tank full)
- Wheelbase.....59.0 in.
- Fuel capacity.....3.5 gal.
- Reserve capacity.....No reserve
- Sound test.....103 dbA
- Ground clearance.....14.4 in.
- Seat height.....38.2 in.
- Swingarm length.....22.5 in.
- Swingarm pivot to center of countershaft.....3.3 in.

PARTS/COST

- Maintenance manual.....\$30.86
- Carburetor jets.....Main jet—\$3.20
Pilot jet—\$2.70
Needle jet—\$3.78
Needle—\$9.76
- Sprockets.....Front—\$13.99
Rear—\$45.94
- Handlebar levers.....\$31.94 ea.
- Shift lever.....\$37.02
- Piston kit (complete).....\$87.89
- Rings only.....\$16.06
- Cylinder.....\$373.13
- Head.....\$99.98
- Clutch plates.....Friction (7)—\$12.04 ea.
Aluminum (6)—\$9.52 ea.
- Air filter.....\$21.28
- Brake shoes.....Front—\$8.99 ea.
Rear—\$12.23 ea.
- Chain.....\$68.03
- Seat.....\$128.82
- Fenders.....Front—\$19.35
Rear—\$22.92
- Fuel tank.....\$159.86
- Cables.....Throttle—\$11.95
Clutch—\$11.95
Front brake (hose)—\$35.94

OPTIONS

- Shock spring: (stiffer or softer).....\$83.00
- Lighting kit.....\$99.95



Shock linkage provides massive wheel travel and should be more durable with maintenance.

TECHNICALLY SPEAKING

Past Husqvarna models have changed relatively little from year to year. However, in the case of the '86 400 Cross Country, what looks like a new model simply cobbled together from existing parts really has some intelligent changes.

In fact, the plastic parts are some of the only items that are unchanged from '85. The unusual single-tube, giant backbone chrome-moly frame is essentially the same in material and geometry but features a removable rear-frame section to aid in repairing crash damage and adjusting the shock.

The piggyback-reservoir Ohlins shock is a rerun, but the damping specs are new and were arrived at by testing in the U.S. with American riders. The linkage arms are better sealed against the elements this year as well and feature zerk fittings for the first time.

There are still 10 clicks of compression damping and 14 clicks of rebound damping on the shock, but the optional stiff spring used in '85 is the standard spring this year—a much needed change. (In '85, we had to install stiffer springs on the rear of every Husky we tested.)

Husqvarna spent even more time developing the fork. They still manufacture it themselves, using 40mm inner fork tubes. The best part of owning a Husky fork has always been its ease of maintenance, and it still disassembles via one 13mm bolt at the bottom of the fork leg.

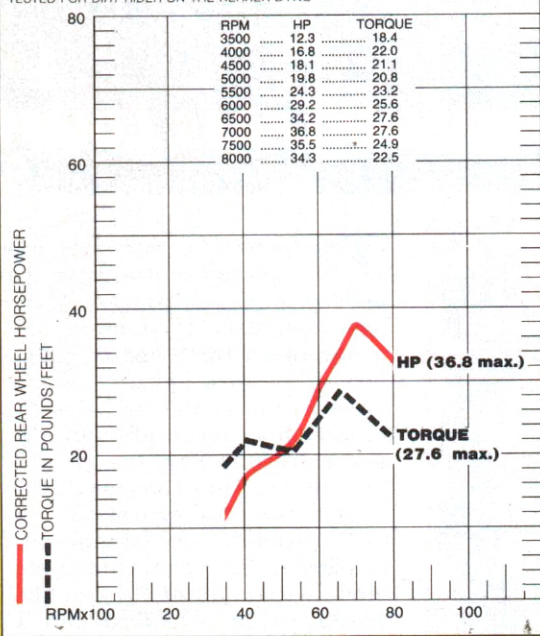
Internally, there are now two Teflon bushings instead of one for the

- Serial number.....Frame: 2053 0121
Engine: X P0 9440
- Price.....\$3235
- Number of dealers (U.S.).....300+
- Warranty.....30 days, limited to frame, engine and limited components
- Customer service.....Husqvarna Motorcycle Co.
4925 Mercury St.
San Diego, CA 92111
619/565-1414
2187 James Rd.
Columbus, OH 43327
614/231-0722
- Type.....Liquid-cooled, two-stroke single with reed valve
- Displacement.....395.6cc
- Bore x stroke.....82.5 x 74mm
- Compression ratio.....12:1

- Horsepower/rpm (measured).....36.8 @ 7000 rpm
- Torque/rpm (measured).....27.6 @ 6500 rpm
- Carburetion.....38mm Mikuni
- Exhaust.....Single steel expansion chamber into aluminum silencer/spark arrestor
- Ignition.....Motoplant internal rotor CDI
- Lubrication.....Premix (32:1 recommended)
- Air filtration.....Oiled polyurethane foam element
- DRIVE TRAIN
- Transmission.....Six-speed
- Primary drive.....2.300:1 (gear)
- Final drive.....3.470:1 (15/52)
- Gear ratios (internal).....1st 2.615:1
2nd 1.813:1
3rd 1.368:1

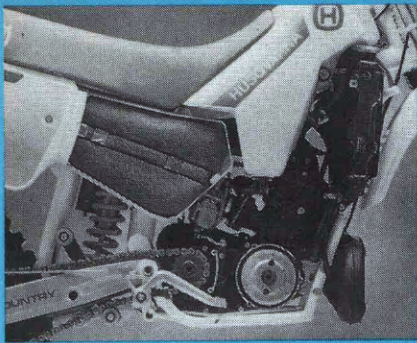
ENGINE HORSEPOWER/TORQUE

TESTED FOR DIRT RIDER ON THE KERKER DYNO



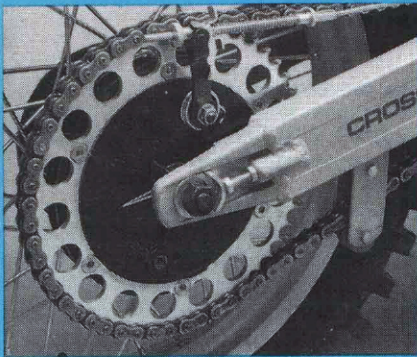
REDLINE REPORT

Like all the new 400 engines from Husqvarna, the 400 Cross Country has a superbly smooth powerband and torque curve. At all but the lowest rpm the Cross Country made more than 20 foot-pounds of torque. This bike had the least horsepower of the three 400 engines we have had on the Kerker dyno. The engine should be identical to the 400WRX we tested last year. The only difference seems to be the muffler/spark arrestor. The 400WRX used a larger, round silencer spark arrestor, but the 400 Cross Country has an oval aluminum muffler with a much smaller cross-section. It must require a smaller spark arrestor core as well, and that core is probably more restrictive—restrictive enough to cause the power loss. Our 400WRX made more than 40 horsepower and the Cross Country made 36.8 at 7000 rpm. The bike was more responsive with an Answer oval spark arrestor silencer from Husky Products, but we didn't get the bike back on the dyno with it.



Removing plastic parts reveals the large air cleaner, lighting coil CDI and small radiators.

Non-floating, quick-change rear brake was trouble-free.



fork's outer tube to slide on. Just above the bottom bushing is a valley machined in the fork's inner tube to help break the hydraulic stickiness that forms when oil gets trapped between the two smooth, closely machined surfaces. Also, the internal machining of the parts appears to be more carefully finished than before. The new fork is further distinguished from the older unit by the absence of paint on the fork's outer sliders.

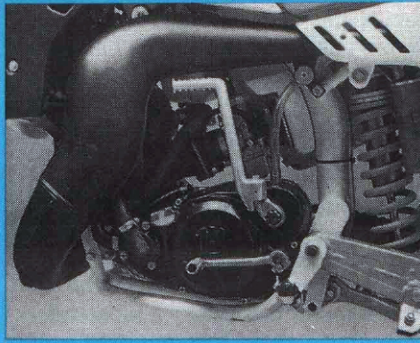
Husqvarna made no changes to the engine, and being so universally acclaimed, we wouldn't expect them to. The 400s have proven themselves highly reliable and competent performers. The engine has a lighting coil CDI (though no lights are supplied) and a six-speed, wide-ratio transmission.

The Cross Country's wheels have not changed from the '85 XC and CR, and the same Brembo cast-iron disc is used as well. Metzeler still supplies the tires, but the front is now a MXR instead of a Motocross. As expected, the tires wore well and worked well, and we had no flats.

While the disc brake is unchanged, a new, smaller, square master cylinder is used. In addition to being less vulnerable to crash damage, it stops the bike better and has a more solid feel at the lever.

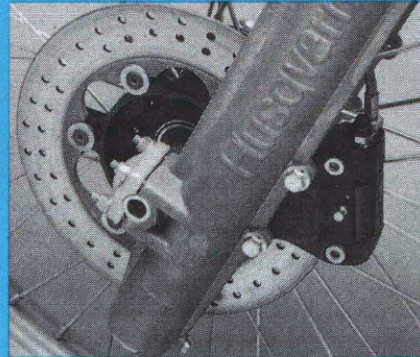
A welcome and long overdue change are new exhaust pipe mounts. No more torn rubber, no more broken metal band or spring mounts and far less vibration are the benefits of the new mounts. Thanks, Husky.

Now, about those fork springs....



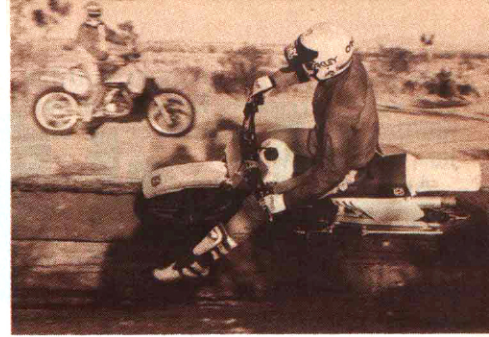
Husky left the engine unchanged, but pipe tucks in well and there is a new shift lever.

We found the front disc brake stopped well but required a firm pull.



Square aluminum brake reservoir replaces plastic, round one of '85.

New vibration-damping pipe mounts keep vibes away from rider.



If you are Mike Bell, even a tallish Husky looks fairly small.

Husky's long-legged six-speed 500 in the desert? We don't think so—at least not completely—and neither does Husky, since both models are offered. However, the 400 Cross Country is certainly a good alternative for most desert racers and trail riders. All our staff members except Bob Carpenter feel the 400 is the better mount for racing. Bob, a former single-digit desert expert, is better able to use the power of the bigger engine. For riders who can and will use all the power of the 500, the bigger bore is the better way to go.

For the rest of us, how does the 400 Cross Country measure up? From a performance standpoint, the 400 is not far removed from the 1985 400WRX Husky, since the technical differences are limited to a disc brake and more rear-wheel travel.

The 400 Cross Country runs essentially like an enduro bike with long travel suspension. The 400 engine should win new friends on the starting line of races that have dead engine starts; for an Open classer, it fires readily with a light kick. Carburetion on our bike was clean for a Husqvarna—as on all the 400 enduro models we have tested.

There have been no port changes since the inception of the 400 engine, but the power was smoother on the single-shock 400s than on our original 400WR test bike. The only difference has to be the pipe. Power output is best described as electrically smooth. The dyno shows that the power curve flattens out in the midrange, though performance is good at high and low rpm.

That flat spot, a heavy flywheel and too-tall gearing makes the bike a bit lazy as it begins a new gear. It seems sluggish and slow when you first ride it, but put a few miles on the bike and you learn to rev the engine just a bit longer in each gear. You need to treat it more like a torquey 250 than a small Open bike to let it catch that next gear with authority. After you have the engine figured out, you'll realize that it also pulls well down low.

Our Cross Country test bike was slower than the 400WRX we tested. The WRX made a full 40 horsepower on the dyno, and the Cross Country couldn't quite make 37. The 400WRX used a round steel muffler with a spark arrester while the Cross Country uses the

new Husky oval aluminum muffler and spark arrestor. Either the new muffler is more restrictive or our bike just wasn't a fast one.

An Answer oval Equalizer muffler, add-on spark arrestor and two teeth added to the rear sprocket wake the bike up while still allowing a full 85-plus mph.

Once you close the gaps in the wide-ratio, six-speed transmission with the larger rear sprocket, the Cross Country is ready to motivate. Fortunately, the chassis takes far less getting used to than the engine. The bike is stable; it slides and steers well both at high speed and on rough downhills. Even in snow, the Husky keeps its front end where it should be.

We took the 400 out on a flat, slick motocross course with no berms and, even though the bike was completely out of its element, we liked the way it handled. The rear suspension comes well-damped and sprung this year, unlike the '85 single-shock Swedes. There also seems to be better control over the rear wheel.

But the news about the new fork is not as good. For big landings or whoops, the fork is smoother than previous Husky forks; however, the new one is undersprung and works poorly on downhills and in rough whoops. Also, it takes all kinds of hits well except

sharp, sudden blows—as when you hit desert-issue rocks at high speed. The fork on our test bike could handle a rock field well but made a loud clank and jumped in the air if it encountered an unexpected rock. We know the older Husqvarna fork can work, so we should be able to get this one up to scratch. Our first move will be to check the internals of the fork, then go to 21 lb./in. ATK fork springs.

Although we may criticize the details, we found the Husky a pleasure to ride in many ways. The handling is excellent, and the rider has plenty of room to move around. We put in many miles of desert riding and a tough, snowy enduro, where we heaped abuse on the clutch. The 400 Cross Country came away unscathed. The clutch has a very light pull for an Open bike, regardless of country of origin. One bolt came loose, but then, we never checked the bike or tightened loose fasteners, either. Nothing broke, the bike did not vibrate too much and we never broke any exhaust pipe mounts.

It's too bad the details of the bike didn't come together better, especially since the machine is premium priced. Nevertheless, this is the most trouble-free and dependable Husky we've tested. Despite its blemishes, the 400 Cross Country is *Dirt Rider's* cross-country mount of choice. **DR**



PHOTO: MARK KARIYA

This is one bike that encourages just playing around.

OPINIONS

I've thoroughly enjoyed every 400cc Husqvarna I've tested, and the Cross Country with its desert suspension seemed just the ticket for the riding I enjoy.

However, I was quite disappointed at first: The gearbox seemed to have gaps insurmountable for the engine, and the suspension was both harsh and too soft. But turning up the rear spring preload, installing stiffer fork springs, changing the spark arrestor and slightly lowering the gearing turned the bike into what I had hoped it would be. I liked it enough to change my entry to the Open class—I always used to ride a 250 if I had a choice—for the Barstow-to-Vegas classic hare and hound.

I like the bike; I just wish more of the work had been done for me at the factory.

—Karel Kramer

Age/Ht./Wt.: 30/6'1"/180 lb.
Motorcycle(s) currently raced/ridden:
Honda CR500R, Husqvarna 510TX,
Yamaha YZ250N
Riding ability: B enduro rider

I expected a whole lot more of the Husky 400 Cross Country than the bike delivered, even after a thorough test. Oh, sure, 93 tough miles in the Bad Mountain Enduro did help me get to know the 400 more intimately (pushing a bike 75 percent of the way up an icy bottleneck hill will do that), but the problems still exist. I'm supremely disappointed with the fork. After all the work and technical changes Husqvarna went through, I expected the fork be at least a *little* bit better. The 400 engine is not as torquey as the 400WR engine we last tested. It needs to be revved more and the gear spacing is too wide. Oh, well.

—Bob Carpenter

Age/Ht./Wt.: 25/5'9"/190 lb.
Motorcycle(s) currently raced/ridden:
Honda CR500R
Riding ability: Expert

NEW! HUSKY'S "PROOF 2-000" PROJECT BIKE

Husqvarna Motorcyklar AB constructed this twin-cylinder, 800cc liquid-cooled two-stroke project bike "to test some new concepts in design, performance and styling." The triple-disc-equipped, 302-pound, six-speed bike reportedly is easy to ride off-road despite its incredible power delivery. Husqvarna has no plans to produce the bike at present.

