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**HOW TO  
GASSIT!**

**250 ENDUROS: PE Suzuki vs IT Yamaha**

# DIRT BIKE

AUGUST 1978 • \$1.25 UK60p

**BLACK TRACK  
ATTACKER:  
HUSQVARNA 390CR**

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**SCOTTISH SIX DAYS  
SUZUKI DR370**

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**YAMAHA XST100**

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**OHLIN SHOCKS**



**Chuck Sun**



Retailers: See Page 72 for  
Special Display Allowance Plan

## Voted "Best In Class" and "Most Likely To Succeed"

By The Staff of DIRT BIKE

□ The business of testing motorcycles for a great zoot dirt publication is not always what it's cracked up to be. Sure, we get to play with all the very latest in dirt machinery, often before it's released to the public. But it never fails. There will come a few times during the

year when a cockroach will surface in our bottle of gear lube.

It seems to happen when testing the best machine in its particular category. Just when we've spent a fair amount of time developing a very meaningful and intimate relationship with a bike, the

distributor calls and says they need their bike back — yesterday.

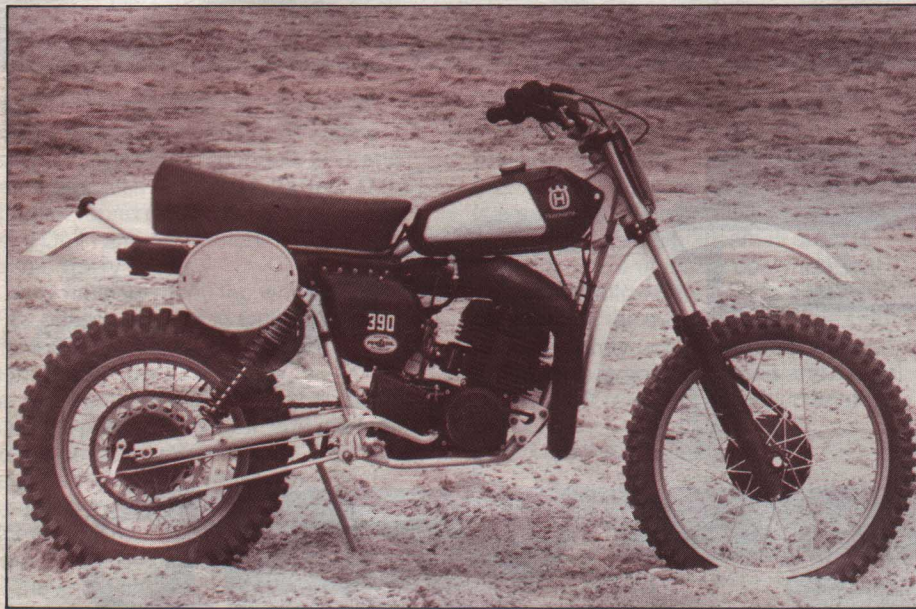
The only thing worse that could possibly happen is being told that a much-desired bike won't be available to you because they have all been sold.

This last situation was the case last year when we wanted to test the Husqvarna 390 CR. In the time we had spent fondling the 390 Autocrosser, all the CRs that hadn't been spoken for before they reached the dealer had been scooped up by a very fortunate few open-classers across the country.

Since we tested the 390 Autocrosser (October '77 issue), a considerable number of noteworthy improvements have been made to Husqvarna's motocrossers throughout the engine and chassis. Though the 250 CR we tested in February of this year and the 390 share identical chassis, with the exception of the shocks, we'll run through the lowdown once again.

Experienced gained from many seasons of Grand Prix competition and hundreds of hours of dyno testing went into the 390's powerplant. The engineers started with a clean sheet of paper and reshaped and reangled each and every port in the new production cylinder when they opened it up from a 360 last year. Eliminating the exhaust port bridge to form a single large port increased the top end's durability to a large degree. This reduces the possibility of seizures due to the higher temperatures of the bridge in relation to the rest of the cylinder. Unlike the new 250, the 390 does not have a replaceable liner. Unless dirt slips by the filter, the average racer should get at least a year's use out of the standard bore. Then, there are four overbores available. Not to worry.

The traditional single-ringed piston reciprocates within the massive cylinder finning. It pivots on your basic Swedish caged needle bearing. Rumor has it that this bearing is identical in proportions to the Maico's counterpart and costs about one third as much. Although Husky's parts prices seemed a bit high a few years ago, they have been frozen for the last five years and they are now the least expensive among the top five brands.



Lean, long and lanky.

Strict functionalism.



# HUSQVARNA



# HONDA 390CR

# HUSQVARNA 390CR

Down below, the big end of the drop forged steel rod rolls around a silver caged roller bearing. This silver caged bearing offers much greater durability than the steel and copper caged bearings used in years past. Silver is without a doubt the ultimate material for this application because of its superior heat transfer qualities. If there is even the slightest bit of friction present, hot spots cannot develop which can destroy the bearing.

Carburetion is handled by a 38mm Mikuni which bolts to Husky's usual eight-petal reed valve arrangement. Utilizing the reed system offers more efficient low-end and mid-range performance, lessens fuel consumption and makes overall carburetion more efficient by reducing the possibility of the fuel-air mixture being forced back through the carb.

Husky uses a very simple, efficient and foolproof to service air filtration system. The vertical plane arrangement and side mounting of the filter element provides easy servicing without the possibility of foreign matter entering the intake tract when removing the filter.

Exiting on the opposite side, a gently tapered and gracefully curving exhaust system, which was designed in conjunction with the big cylinder, helps to give you the correct power characteristics while muffling the mighty explosions. The new pipe will only warm your leg in extremely tight left-handers.

The beautifully cast magnesium alloy engine cases are now much stronger than those found on the 360 through the addition of several strengthening webs. Inside, the primary ratio was upped from 2.42:1 to 2.27:1 and the bearing surface on the shift forks was increased for easier and more positive shifts.

Where the Automatic's aluminum alloy engine cases bolt directly to the swingarm pivot, the CR's bolt solidly to the chassis at just three points, using aluminum brackets and fine Swedish hardware.

A Motoplat pointless CDI is housed under the new round side cover to make sure things keep popping at the right time without a hitch.

The chassis is masterfully crafted entirely of Swedish chrome moly steel. The swingarm is a good deal more rigid than the '77s, even though its weight is nearly identical. This trick was possible by switching to larger-diameter tubing with the same two-millimeter wall thickness for greater strength while eliminating the need for gusseting. Needle bearings are used at its pivot

point, and tapered needle bearings are used in the steering head.

Husqvarna's leading axle forks are the finest front suspension units to be found on any open class production motorcycle today. They use neither topping springs nor bushings at the tops of the sliders. The final few millimeters of extension is progressively slowed hydraulically. To absorb vibration and minimize rider fatigue, the handlebar clamps are mounted to the crowns through rubber cones. Because of this swept-back design and the properties of the rubber, this cushioned system provides an additional shock-absorbing effect as you ride. It all adds up to a fork with excellent feel and impact absorption with over 240mm (9.5 inches) of travel.

Rear suspension characteristics are controlled by a set of the new super shocks from Sweden, Ohlins. Their virtually fade-free performance, superior quality and design, in addition to their separate infinite adjustability for compression and rebound strokes, make them an excellent choice for any serious off-road competition application. Actual rear axle travel is just over 250mm.

Both brakes are equal in performance to the best production binders we have had the pleasure of clamping down on. They are smooth, strong and very predictable. The lever pressure gives you an excellent feel of what the wheels are doing, and neither unit is prone to fading. The rear drum is now cast in rather than pressed in to a newly designed conical hub to prevent the possibility of the drum coming loose under excessive heat situations. The width of the hub between the bearings has been increased for better absorption of wheel loads. Also, the spoke flanges are now farther apart. This makes the wheel, as a whole, stronger and less susceptible to breakage.

Two of the most eye-catching pieces on the 390 are the gold-painted, deep-well, alloy rims which are made by Husqvarna. The rims are quite strong and have held up very well. This deep-well configuration where the spokes attach was designed in to make tire changes much easier. The problem is that the bikes come with steel spikes to secure the tire to the rim rather than rim locks. These sharp little devils grab at the tire and tube throughout the tire-removal process and can easily puncture the tube. And when you get a flat, the spikes won't keep the tire on the rim. The exclusion of rim locks on



**Gorgeous from any angle. The CR loves to be ridden hard. Remind you of anyone you know?**

any motocrosser, especially a machine of this caliber, is utterly ridiculous. Having rim locks that keep a flat tire on the rim for a lap or so can mean a lot to a rider, especially if he's going for green stuff. The rear rim is a 17-incher wrapped with a 4.50 Trelle. By now you should know that we think 17-inch tires are the hottest thing since reclaimable exhaust gas water vapors for ballast in airships.

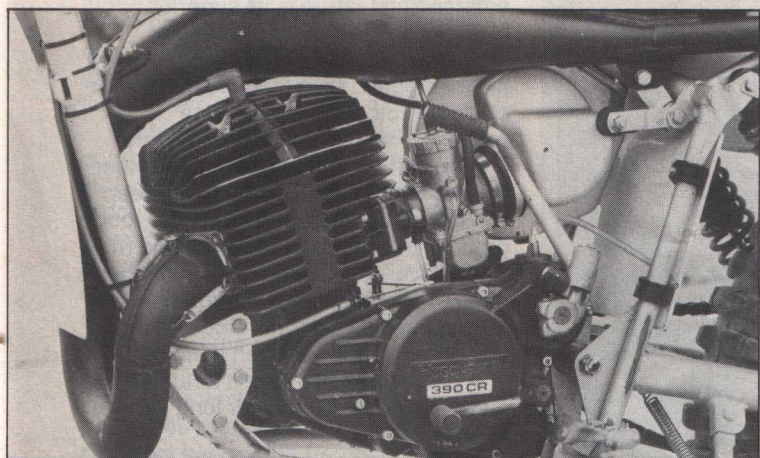
Overall, the appearance of the 390 CR is breathtaking. Its luxurious black and gold color scheme is reminiscent of the John Player Special Formula 1 Team Lotus machinery.

The gold-trimmed, lustrous black aluminum alloy fuel tank performs its task in a most dependable manner.

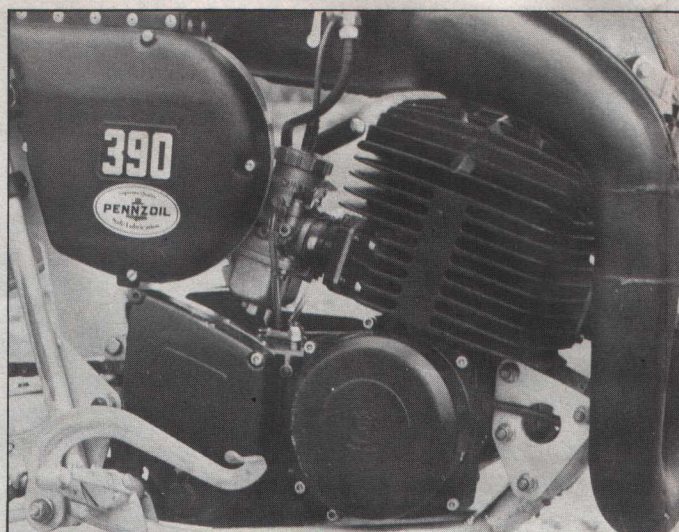
The lightweight, aluminum-based seat is amply long to allow you to sit well forward for tight turns and is extremely comfortable.

**The card is sideways. Keep your eye on the gate and your mind already in the first turn — excerpt from *The How-To's of Holeshooting by Gungo J. Calrose***

In the past, Husky has always had a very strong market for their motocrossers everywhere in the U.S.



Within is found the thunder of many a Swedish steed. Strength and beauty. Except for the kickstarter. It's an ugly weak point. They still haven't figured out how to get a decent amount of crank spins for your foot motion. Once you get used to it it's passable, though. Ours hit the swingarm pivot bolt to make things worse.



Wish we still had her. A nice feature of the brake pedal is that it offers good grip and still allows you to slip your boot off to release the brake without lifting your leg.



Very clean lines and no excess weight. Rubber-mounted bar clamps and nearly ten inches of travel.

except for Southern California. That was because the pre-'77 Huskys carried with them a reputation for poor cornering abilities on SoCal's most common natural terrain, hard, burnt and slick adobe and clay. In most all other parts of the country where they had genuine dirt (the rich, sticky black stuff our dreams are made of), riders had little problem cornering the Swedish screamers. Our deserts were full of them because they worked extremely well here until you came to a turn.

But all that has changed. While the new CRs are not nearly as dreamlike in their turning abilities as the CR Hondas, their hard ground habits have improved considerably over what was offered in

the past. Small-radius and hairpin turns will require some familiarization with the Husky's personality, but can soon be handled with ease. Medium-radius turns on up to big sweepers give the rider a feeling of total control and great stability. Even with high doses of throttle application, the rear end tracks smooth and predictably as you accelerate to speeds up to and including Warp 5. That is, after you modify the shocks. More on that later.

Now that you've read about the Husky's ever-so-slight idiosyncrasy, you will be pleased to know that from here on the CR only sounds better and better.

Long, controllable slides are very

easy to come by because of the CR's fine frame geometry, its smoothly building, very predictable power delivery, and the superior traction characteristics of the 17-inch rear tire. Again, there is much more handling precision available here than with the pre-'77 machines. Now you can pretty much just pitch it in and dial it on. Here, the great handling properties of the rear suspension and overall frame geometry come to light. When sliding through bumpy turns with the wire pulled tightly, there is very little tendency for the rear end to hop about or pitch from side to side. Just smooth, straight acceleration.

Without a doubt, the CR's single most

# HUSQVARNA 390CR



After outfitting the 390 with a set of whirling machetes driven off the front wheel, Chuck set out to blaze our test track.

## WHEN THE SUN SETS UP

At the conclusion of the National motocross season last year, Chuck Sun, ranked eighth best 500 rider in the U.S. at that time, took over as Husqvarna's number one American contender. Not too long ago he was kind enough to take a break in his busy training schedule to ride with us at the official (but very secret) Southern End Test Facility. At this time he filled us in on his personal set-up preferences for his practice 250 CR.

While his race bike is basically a stock CR wrapped around an experimental works frame with an inch or so of extra travel up front, his practice bike is almost totally stock.

It is interesting to note that when we checked out his race bike at the Racing World, California, National, he was running the same cylinder that Kent Howerton ran all last season. It was only on its first overbore. With that same cylinder he got a great start in the second moto and led the opening laps.

For suspension, he prefers to run Ohlins set up to the same dampening specs as ours (from A-3 to O-2) in place of the gas Girlings that come on the 250. He leaves the front end alone.

Like on his race bike, he uses a Gunnar Gasser throttle and Preston Petty Barrel grips. After experimenting with several other handlebar bends, he has returned to the stockers.

His front wheel is wrapped with the new 3.50 by 21 Trelleborg that is just starting to come over on the production 250s. There is a noticeable traction improvement compared to the old Trelties. Its size is actually closer to a 3.25 than a 3.50. Aside from these changes his practice bike is completely stock.

outstanding feature is its superior high-speed stability and handling abilities. Year after year the big Huskys have compiled an incredible number of off-road victories. These same properties are ever-present in every one of their big dirt pounders. Whether you're running at top speed over deep whoops or accelerating hard over rough ground, the CR tracks straight and true. As much as this is a product of the basic geometry, it is also an integral part of the suspension performance and the fine-line balance between each end. The CR feels lighter than it actually is and is very easy to ride for long periods of time.

As we said earlier, the forks are outstanding. They work very well in a wide number of situations, whether it be in sharp braking bumps, deep rolling whoops, or landing from high altitudes. Their seals, on the other hand, stink. After losing about a third of the oil past the seals during our first photo session with Husky's number one National motocrosser, Chuck Sun, we dismantled the forks for a looksee. For a quick fix we just cleaned the seals and switched from the stock 10-40-weight oil to 80 percent 10-weight and 20 percent 20-weight Bel-Ray fork oil. At this point we were very pleased with the forks' dampening properties and the seals even held up for nearly two 45-minute motos. Through our past experience with the Automatic we found that early-model Honda Scrambler seals work equally as well as the Husky's forks and should last at least a year.

The rear end, like the front, is practically a dream come true. The remote-reservoir Ohlins on our 390 were a vast



The CR's slim chassis and its light weight make it a joy to ride.

improvement over the gas Girlings that came on our 250 CR. Their superior quality and dampening performance, and ease of infinite adjustability dictate that we rate them top-notch.

We found that the stock shock dampening settings were a tad on the stiff side for both compression and rebound. A trip to Husky, where they gave us another set of Ohlins with two washers switched, put the fix on the rear end. They then felt right for everyone who rode the bike. It seems that most of the dealers have gotten complaints of harshness with the stock settings as well. If you are unhappy with yours, you can take them to your dealer and have him switch from A-3 to O-2 dampening. This means that the small washer on the compression side was reduced from a .20mm thick by 21mm diameter washer to a .20mm by 18mm diameter washer. On the rebound side, the smallest .18mm washer was reduced in thickness from .30mm to .25mm. The rear end could then handle anything and the shocks were virtually fade-free.



Running a close second to the CR's high-speed stability for top honors is its excellent power spread. From idle on up to wide open, we could hardly ask more from an engine. It comes on very smoothly and predictably till you are flat hauling ass. This type of torque is extremely usable and adds a great degree of versatility to the machine, as it is easily adapted to any track condition or design. But then, a good part of this fine feeling comes from the basic fact that the bike is a pure-bred open classer. Pure and simple. When you want to go, you're gone. If you make a mistake in a corner, you can scare yourself a little more going into the next one a bit hotter to make up the time lost. Although the RM looks better

## HUSQVARNA 390 CR

**PRICE:** (approx. retail, West Coast) \$1995

**ENGINE:** Two-stroke, reed valve

**DISPLACEMENT:** 384cc

**BORE & STROKE:** 83.0 x 71.0

**COMPRESSION RATIO:** 11.5:1

**CARBURETION:** Mikuni 38mm

**HORSEPOWER:** 36.7 at 7500 rpm

**CLUTCH:** Wet, magnesium

**PRIMARY DRIVE:** Straight-cut gear, 2.27:1

**TRANSMISSION RATIOS:**

- 1) 2.06
- 2) 1.55
- 3) 1.23
- 4) 1.04
- 5) 0.88
- 6) 0.77

**FINAL DRIVE:** Reynold 520, 4.08:1

13-tooth countershaft

53-tooth rear sprocket

**ELECTRICS:** Motoplat CDI

**LUBRICATION:** Pre-mix, 32:1

**RECOMMENDED OIL:** Pennzoil

**FUEL TANK CAPACITY:**

7.8 liters (2.0 gallons)

**FRAME:** Double-cradle, chrome moly

**SUSPENSION:**

Front: Husqvarna forks with 242mm travel

Rear: Ohlin gas shocks offering 254mm axle travel

**STARTING:** Non-primary kick

**WHEELS & SPOKES:**

Front: Husqvarna 21-inch rim with cross-3 spokes

Rear: Husqvarna 17-inch rim with cross-3 spokes

**TIRES:**

Front: 3.00 x 21 Trelleborg 544 Motocross

Rear: 5.00 x 17 Trelleborg 544 Motocross

**DIMENSIONS:**

Wheelbase: 144.6cm (56.9 inches)

Swingarm length: 47.0cm (18.5 inches)

Ground clearance: 32.4cm (12.75 inches)

Bars, height: 117.5cm (46.25 inches)

width: 86.3cm (34.0 inches)

Pegs, height: 46.0cm (16.0 inches)

width: 47.0cm (18.5 inches)

Seat height: 94.0cm (37.0 inches)

Fork angle: 29 degrees

Weight: 105.9 kilos (233.0 pounds)

without fuel; 43.7 percent on front, 56.3 percent on rear

**BRAKES:**

Front: 160mm cable-operated, conical

Rear: 160mm rod-operated, full-floating, conical

**WARRANTY:** 60-day

**PARTS PRICES:**

Piston w/ring, wrist pin and clips: \$42.33

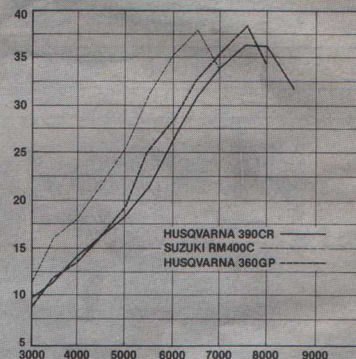
Rings: \$6.50

Cylinder: \$188.42

Clutch cable: \$5.64

Brake pedal: \$9.19

Brake lever: \$7.98



on the dyno chart, it's breaking the rear tire loose more between 5500 and 7500, where the CR is hooking up.

Fast shifts are easy to make and there is a minimum of wasted time moving the lever. If you miss one, it's only because you were sloppy. The clutch action is not as light as with some bikes, but it's not noticeably hard either. It never gave us a problem throughout our test.

### What else?

The CR has a very serious look about it. Very businesslike. In some areas it looks a little naked, in fact. Instead of a gaggle of breather hoses, wires, cables and side covers in its midsection, you find only an air filter clamped to a carburetor.

All of the hardware is first-class, and there are plenty of socket-headed cap screws and Nyloc lock nuts wherever they're needed. Likewise, all of the materials used for construction should

last a good long time before you have to think about replacing anything. The entire package is extremely well thought out, simple and straightforward.

### Hands down

Husky's 390 CR and 390 A are nearly tied for top open class honors. Both are clearly a good step ahead of their competition. It's up to you. To shift, or not to shift. That is the question. If only they had put a 17-inch rear on the Autocrosser.

The CR's sole purpose in life is to serve you by helping you to win motocross events. It's comparatively light, has excellent power and handling, great brakes, and a very comfortable riding position. Most any open classer will feel right at home on the bike. Although the CR lists for a bit more than most bikes, you get a very fine piece of machinery for the moolah. You get what you pay for. If it were our money we'd go for the gold and black. ■