

SHOOTOUT

DAYS OF FUTURE PAST

1963 Lito 500 vs. 1971 Husky 400 vs. 1985 Honda 500

By the Staff of DIRT BIKE

No one needs to be reminded just how far technology has advanced off-road motorcycling, but a retrospective is always interesting. Remember the days when six inches of suspension travel was the hot ticket? What about the first time you saw a single-shock rear suspension on a production machine? And watercooling—it hasn't been all that long since it was just an engineering fantasy. Keeping in mind that most of the

changes that produced what we consider to be "modern" motocross bikes came within the recent past, what then do you suppose it was like to ride an off-road machine almost a quarter century ago? The idea was intriguing, to say the least, and we decided to round up a few representative machines to see just how far things have come in the past two decades. The oldest was a 1963 Lito 500, the newest a 1985 CR500 Honda, and in between, a 1971 Husqvarna 400CR.

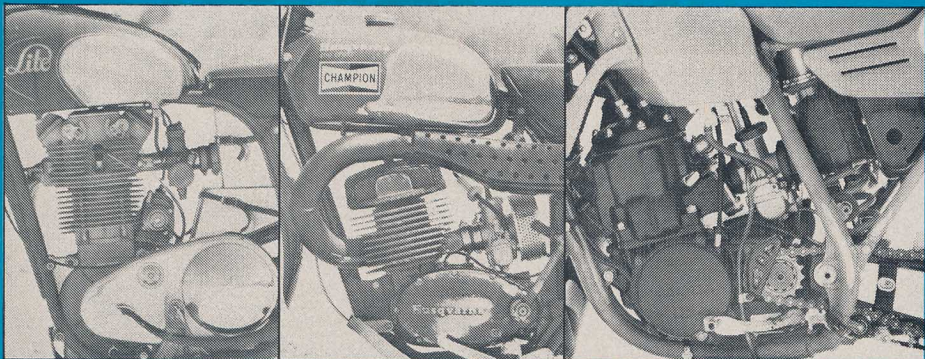


Because the suspension is so tall, the Honda is tougher to lay over in the turns than the Husky 400. The best technique is to stay relatively upright and simply blast the berm with the 500's mega-horsepower.

◀ *It's possible to throw the Lito around in the corners, but there's considerably more effort required when compared with either the Husky or the Honda. The forward footpeg location makes such maneuvers awkward, and the relatively high center of gravity makes flinging the bike almost impossible.*



Jumping the Husky is no problem, as long as the bike doesn't gain much altitude. With only about half the suspension movement of the Honda, it's tough to handle stadium-type obstacles.



A classic: Lito's 500cc thumper is a conglomeration of parts from several manufacturers. The bottom end was designed and manufactured in Sweden by the Albin Motor Company; the cylinder, head and piston were made by Mahle of Germany. The chrome primary case houses a Norton clutch, and the four-speed gearbox is vintage BSA. Like the Lito, Husqvarna's 1971 400cc machine is a four-speeder and shifts on the right. The motor, while not as strong as Honda's CR500 monster, still puts out a respectable amount of power. One of the most brutally efficient motors of all time: Honda's 1985 CR500 is more than a match for any production Open class engine. The big red machine can do it all—from the tightest motocross work to flat-out desert charging.

A FEW MOMENTS WITH KAJ BOURNEBUSCH

In the late '50s and early '60s, Lithograph of Sweden, a privately owned printing company, produced 30 hand-built factory motocross machines under the Lito name. The 498cc machines were used by many of the top Swedish riders including Ove Lundell and Gunnar Johansson, as well as Italian Champion Emile Ostero. Another Swede, Sten Lundin, won the 1961 World Championship as a factory Lito rider. The machines were built under the guidance of Kaj Bournebusch, whose father owned the Lithograph Company and saw the venture as a way of helping his son's motorcycling career.

The machine we rode (number 23 of 30) is owned by Kelvin Franks of Franks Racing in Santa Ana, California. When Kelvin isn't hard at work fabricating custom ATVs, one-off frames, swingarms, or a multitude of other motorcycle-related machine shop items, he spends some time restoring his collection of vintage off-road iron. Before we

rode the machine, Kelvin explained a bit about the design and construction of this unique motorcycle.

THE PIECEMEAL MOTOCROSSER

Many of the components found on the Lito were borrowed from other manufacturers. The engine itself—an overhead valve pushrod model—is a perfect example. The bottom end was made in Sweden by the Albin Motor Company, while the cylinder, cylinder head and piston were built by Mahle of Germany. The forks are Italian Ceriani telescopics with approximately 5½ inches of travel. The rear suspension is controlled by a set of Girling shocks that yield a total of three inches. While that may seem primitive, Kelvin says that many of the machines of that era actually rode on unsuspended hard-tail frames. The rear swingarm was borrowed from a BSA, as was the four-speed, right-side shift gearbox. A primary chain running on the left side of the engine connects the



FUTURE PAST



Honda's CR500 is the obvious choice for jumping. You'd have to be crazy to try anything radical on the Lito—it's designed to stay low to the ground.

crank to a Norton clutch, since the BSA item wasn't quite as good as the Norton units of the day.

The wheels are both standard BSA parts. The Lito's rear wheel is actually a BSA front wheel, complete with a spindly cross-one spoke pattern. The entire rear sprocket/brake unit remains in place during tire changes, saving the pit crew a lot of aggravation.

The frame is built from Swedish chromoly to Lito specifications. Among the most unusual items on the bike are the footpegs. Instead of the cleated, folding units we're so used to seeing, the Lito's pegs are welded steel pyramids bolted rigidly to the frame. The hand-fabricated aluminum oil tank and airbox ride just behind the engine; the motor breathes through a 30mm Amal carburetor, and exhaust is carried through an unmuffled chromed steel pipe. The gas tank is also aluminum, and like the oil tank and airbox, is held in place by a leather strap.

WINDING IT UP

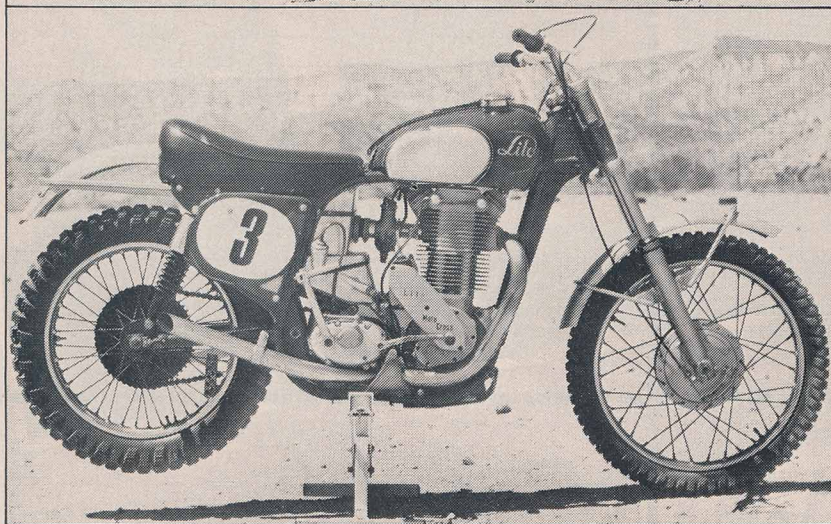
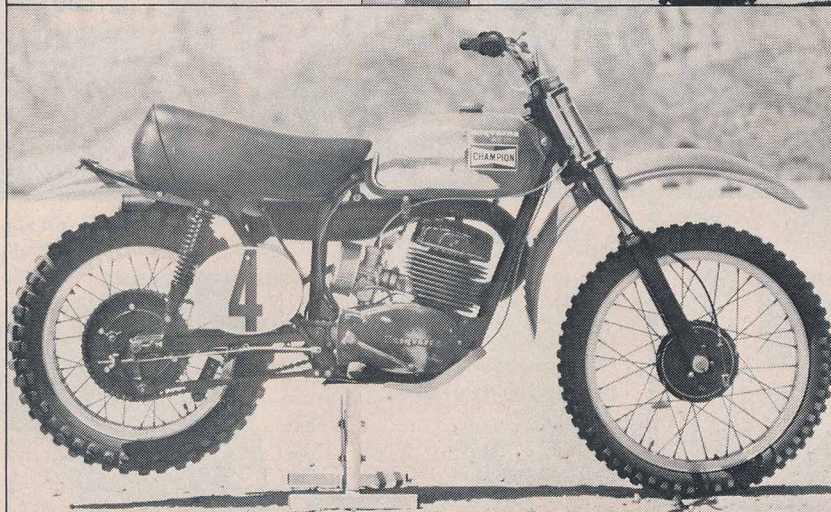
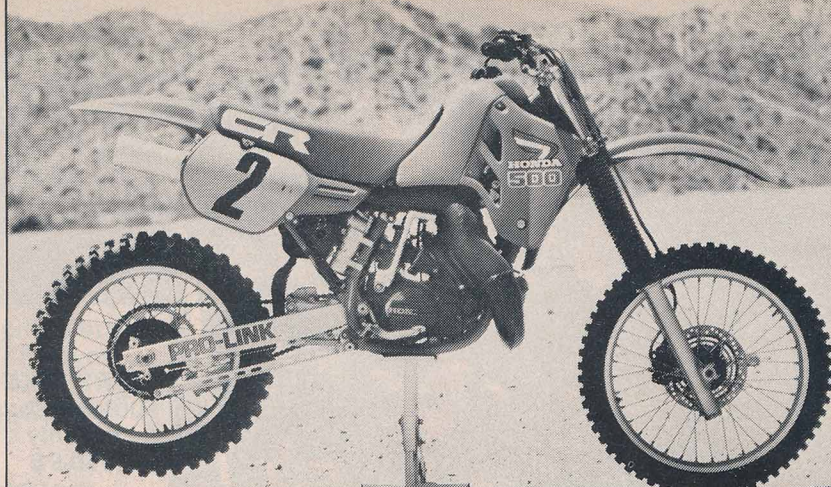
The Lito is surprisingly easy to start, even though there's no compression release. Moving the piston just past compression and giving the kick lever a stiff boot is usually enough to get things moving, and it almost always started on the second kick. Even though the machine runs a straight exhaust, it's very quiet—it actually makes less noise than most two-stroke 125s.

The riding position isn't what most people would be comfortable with, the biggest problem being the forward-mounted footpegs. It looks as though their placement was dictated by the position of the engine in the frame—the gearbox prevents proper positioning on the right, while the primary case intrudes on the left.

The seat height isn't a problem—even the shortest riders can deal with a 30-incher, but the handlebars are unusually wide by modern standards.

On the track the machine is surprisingly quick for a 330-pound motocrosser, provided the terrain isn't too rough. Double jumps are out of the question—the Lito is simply too heavy and has too little suspension travel for such antics. In the corners the weight of the bike is even more apparent. While the big Swede will cruise around a hard-packed ledge, it plows right through the soft, sandy stuff.

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	1963 LITO 500 MOTOCROSS	1971 HUSQVARNA 400CR MOTOCROSS	1985 HONDA CR500R
Engine type	Single-cylinder, OHV, air-cooled, 4-stroke	Single-cylinder, air-cooled, 2-stroke	Liquid-cooled, single-cylinder, 2-stroke
Displacement	498cc	396cc	491cc
Bore and stroke	74mm x 100mm	81mm x 76mm	89mm x 79mm
Carburetion	30mm Amal	36mm Bing	38mm flat-slide Keihin
Horsepower (claimed)	38	40	60
Transmission	4-speed	4-speed	5-speed
Ignition	Lucas Wader Magneto	Fesma Magneto	CDI
Frame	Double downtube, full-cradle, chromoly	Single downtube, chromoly	Single downtube, split-cradle, chromoly
Suspension:			
Front	Ceriani telescopic, approx. 5.5 in. travel	Husqvarna telescopic, approx. 6 in. travel	Showa air/oil telescopic, adj. comp. 12.0 in. travel
Rear	Girling shocks, approx. 3.0 in. travel	Girling shocks, approx. 4.5 in. travel	Pro-Link, single Showa shock, adj. comp./reb., 12.0 in. travel
Seat height	30 in.	31.5 in.	37.8 in.
Ground clearance	8.5 in.	9 in.	13.4 in.
Weight, claimed	330 lbs.	231 lbs.	232.5 lbs.
Price, approx.	\$3000	\$1320	\$2598
Country of manufacturer	Sweden	Sweden	Japan

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STEPPING AHEAD—TO 1971

After a ride on the Lito, the 1971 Husky looks and feels like a works machine. The main advantage of the "newer" bike is its relatively low weight: While the Lito weighs in at 330, the Husky is an absolute flyweight at just 231 pounds. Much of the weight savings is in the engine department—the Husky's two-stroke mill weighs about half as much as the Lito's 500 thumper.

The suspension on the Husky, while nowhere near as sophisticated as that of the CR500 Honda, is still improved quite a bit from that found on the Lito. The Husqvarna telescopes offer six inches of movement, and the rear Girdlings compress a total of 4½ inches. Like the Litograph machine, Husqvarna's 1971 Open class CR shifts on the right and brakes on the left.

The 400cc motor makes surprisingly good power over a very broad range. This engine, bolted in a 1985 chassis, would be competitive against most of today's bikes. With a five-speed transmission the Husky would be better suited to high-speed desert work, but back in '71, lots of riders simply geared up the four-speeders and won on them anyway.

Over the rough the machine is quickly pushed to its limits, but it's stable enough to move at a surprisingly quick pace with a good rider aboard. The reasonably light weight allows for some modern-day aerial maneuvers and perhaps an occasional small set of doubles.

One area where the Husky really excels is in the corners. The low overall height allows the rider to plow the machine deeply into corners without struggling against a high center of gravity. This technique is especially effective when really soft, deep sand is encountered—it's a simple matter to get the bars dragging in the dirt. On smooth, slick corners the 400 is a slidin' fool. Once again, the relatively low overall height combines with a controllable powerband to allow the rider to dial in just the right amount of sideways movement. This kind of maneuvering can be especially difficult on a machine with a 36-inch saddle height.

BACK TO THE PRESENT

Comparing either the Lito or the Husky to Honda's 1985 CR500 is like comparing a crossbow to a .44 Magnum. If a fast intermediate had the Honda, say, ten years ago, there's a good chance he'd have been able to win a World Championship on it. There's just no substitute for the great power, suspension and handling we've come to expect from our beloved 1985 motocrossers.

On a two-minute lap over typical MX terrain, the Honda is capable of running at least 20 seconds faster than the Husky, which in turn is another 20 seconds ahead of the Lito—which comes as absolutely no surprise.

One thing we did find, however, was a new respect for the men who raced motorcycles like the Lito and the Husky, and as much admiration for the machines of the past as for the technology of the present. □

HUSQVARNA 510TE

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ter, down 5mm, ki...ck. Once again, top dead center, down five and—brick wall. After a good 15 attempts, the air suddenly got thinner, the bike heavier and our bodies weaker. Finally, a last, gasping, wimpy boot at the kickstarter brought the TE roaring to life!

The Husky people tell us there's a technique to starting the four-strokes. We tried their method, a couple hundred others, bribes, coaxing and elixirs. Nothing worked! Until suddenly we found the right combination and it barely required more than a sneeze to light up.

Our Husky was brand new, and we found that the more we rode the big Swede, the easier it got to start. The big thumper required at least ten hours of break-in time to loosen up the mill, which could account for the initial starting difficulty. By the end of the third day we had the Hooska starting psychology wired, and while it never got to be "first kick every time," it improved a great deal.

BITS AND PIECES

We slipped on a pair of nifty Husky Products fork and disc guards. They help keep the forks from getting dinged and sewage from entering the disc brake.

At first our front brake felt pathetic. As time and miles wore on, the stopping power increased. In the end we felt the unit was efficient, progressive, but not brutally strong. The rear stopper performed flawlessly and, though it's affected by water, does an excellent job of hauling the machine down from speed.

The speedo cable is a joke. It whipped and fluttered like a piece of dental floss and finally got caught in the front wheel. We zip-tied it to the forks and ended the problem.

Husky's new side-breather airbox is easy to service, filters well, and is high enough to keep the machine very waterproof. We like it.

We never fiddled with the forks. In stock trim they performed excellently and never bottomed with a harsh clanging. The rear Ohlins was magical. Just set the sag (rider on the machine) to 3.5 inches, and the straight-line stability and cornering tactics of the TE are fiendish. As we said, it's the best-handling Hooska we've ever ridden!

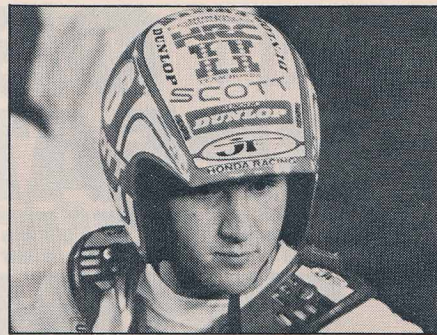
The air scoops mounted to the tank look trick and help direct a cooling flow to the cylinder. Our machine seems to have a long throw on the shifter, but was smooth and precise. The clutch action never faltered, and it seemed to crave abuse.

MAGIC IN THE NIGHT

Although the 510TE Husky is not the fastest four-stroke around, or the easiest to start, it is an enchanting piece of machinery. Its handling manners are unsurpassed; it consumes vicious terrain and spits out stability, turns like a motocrosser, and in the end, is a plain gas to ride. Both the four-stroke enthusiast and the Husky devotee will love the big Swedish thumper. It could be the best four-stroke ever. □

BITS & PIECES

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Ron earned the 125cc National Championship number one plate as a team Honda rider, but has signed with Kawasaki for the '86 season. Good luck on Team Green, Ronnie!

LECHIEN TO RIDE FOR KAWASAKI

Rumors, rumors, rumors, that's all we hear around contract time from the Big Four Japanese manufacturers. However, this is no rumor! Ron "the Machine" Lechien has signed to ride for Kawasaki in 1986 for an undisclosed amount of long greenbacks. Lechien, who has just had the crown fitted for his first-ever National title (which he won while riding for Honda) will take his Number One Plate over to Team Green and contest the '86 season on the KX production bikes. The proposed AMA racing format would allow Ron to ride half the season on 250s and the other half on 500cc machinery. It will be interesting to see how the '85 125cc National Champion fares on the middle-weight and big-bore machinery.

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1986 AMA RACING FORMAT CHANGE

The AMA is considering changing the racing format for 1986 in hopes of making the points chase closer. The plan was originally drafted three years ago in an attempt to improve spectator interest and attendance at the outdoor motocross Nationals. Under the proposal, there would be a series of five 250cc events, followed by five 500cc races, each with a 125 class. The 125 class would be open to Pro-Am, Junior and Expert riders, with the overall series winner moving to the 250/500 Nationals the following year.

Implementation of this plan would force all of the currently established big-name riders to compete in 250/500 National races together, with a resulting increase in the intensity of competition. The lineup at the outdoor Nationals would closely resemble that of a stadium Supercross, and hopefully this will result in greater spectator interest and attendance. Because all of the major manufacturers do not currently offer 500cc machines, there will be no combined 250/500 points to determine a Grand National Champion. The AMA will meet with manufacturers' representatives, promoters and the media on September 27 to consider this and other proposals. Stay tuned for more developments. □