



# THE CHAMPION

This World Champion machine is awesome, without being hostile. In fact, it's surprisingly easy to ride.

During the almost 70 years Husq-varna has been manufacturing motor-cycles, they have been very active in many categories of racing, including road racing. But in the years after World War II, they came to concentrate their greatest efforts in rough scrambles, which became known as motocross. Their achievements in this brutally competitive sport are almost legendary. To date, they have won

more World Championships in the 250cc and 500cc classes combined than any other brand. During the early Sixties, when the 500cc class was still dominated by the big four-stroke singles, Husqvarna won several World Championships with their beautiful four-stroke single, with riders like the great Rolf Tibblin, a two time World Champion.

Then in 1966, CZ bored out their



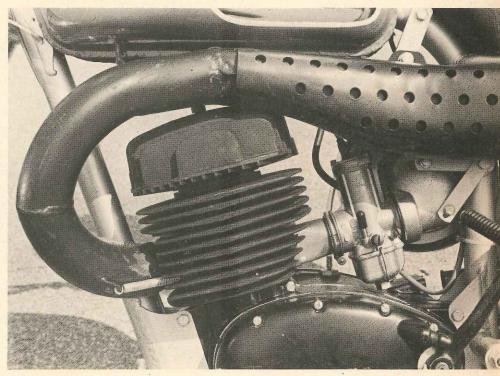
The design of the 400 Cross is lean and functional, with no superfluous additions anywhere. Except for the engine and front brake, the bike is identical to the 250.

250cc two-stroke machine to 360cc, and the 300-pound 500cc four-stroke machines were no longer competitive in Grand Prix motocross. Paul Friedrichs, on his 360 CZ, won the World Championship in 1966, 1967 and 1968. The other factories who hoped to remain competitive had no choice but to develop their own big bore two-stroke engines. The original step up for most brands was to 360cc, but the search for ever more power soon dictated jumping to 400cc or more. Bengt Aberg won the World Championship in 1969 and 1970 on a 400 Husky, and is in the thick of the race this year. The search for more power will see the introduction of even larger two-strokes in the future, as a 455cc Husky motocrosser is currently being campaigned in Europe. One can only view with awe the men who will race them, because the Husqvarna 400 Cross is more motorcycle than all but the very best riders in the world can efficiently utilize. This is not to say that only a few riders in the world can ride the machine. Any competent rider can manage it all right, but there will be a lot of power still on tap that he will never use. Well, perhaps better too much than too little.

When we made arrangements with the distributor to test the new MI series 250cc and 400cc Husqvarnas, both machines were made available at the same time. Needless to say, we were delighted with our good fortune. In order to do justice to a test of such superb machinery, we sched-

both machines ridden extensively by the staff. One staff member alone logged about 15 hours on each machine, after which he felt like applying for Medicare. But the results were well worth the effort, because we feel we obtained a far more comprehensive picture of the performance of both machines than we would have if less time had been available to conduct the test.

One problem with conducting a simultaneous test of these machines is that, of necessity, one report must be much shorter than the other to avoid ridiculous redundancy. Other than the engines, the two motorcycles are identical, except for the front brake. The 400 Cross has a front brake of 65/16 inches diameter, the same size as the rear brake. The 250 Cross has a front brake diameter of 5½ inches. With the added power, the larger front brake on the 400 is

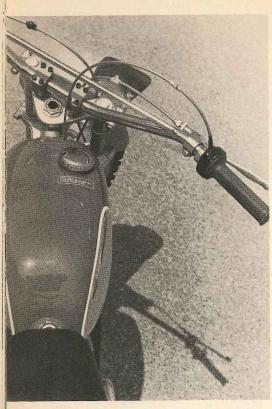


The massive 400 engine is a jewel of quality construction. The 36mm Bing concentric carburetor provides ample fuel/air volume. Note two-piece exhaust header pipe.

uled five consecutive days of testing on the motocross course at Saddleback Park. We felt that this much riding of both machines, which were new, would give us an accurate appraisal of their performance, allowing a rider who was unused to the bikes to accustom himself to their ways before making any judgments. In addition, riding the 250 would better prepare the rider for the awesome 400. The plan worked very well, with

a good idea. After all, it will go faster in a shorter period of time. The additional weight of the larger front brake is virtually unnoticeable, and besides, if you want to lighten the front end, just open the throttle and hang on.

All of the details of the 250 Cross test then, other than power, apply equally to the 400 machine. To repeat the specifics of the frame, suspension and other components here would serve no purpose. Suffice it to say, the 400 Cross is an equally superb handling machine, with the added plus of a lot more power. And it should be emphasized that the addition of more power does not in any way make the machine seem to be inadequately engineered. The motorcycle is amply



The 400 gas tank has the cap on the right side. The rear tank bolt can be seen peeping out in front of the seat. Note tape on throttle to keep out dust.

constructed to contain the bigger powerplant. The 400 Cross is a joy to ride.

The compression ratio of the 400 is 10½ to 1, which gives it ample power with a very wide band. In spite of no compression release, the big engine is reasonably easy to kick through. Maybe some ladies couldn't manage it, but any healthy man should have no problem. The engine starts very easily, almost every time on the first kick. After the first couple of days of cold starts using the carburetor tickle button before kicking, we tried it without the tickle. It still fired right up.

The carburetor is the Bing 36mm unit, which performed its chores admirably. It was jetted a bit on the rich side, but posed no problem as long as we kept the power on. At no time did the engine ever seem to run out of fuel/air mixture to burn. The transmission worked flawlessly without using the clutch. The gearbox ratios are somewhat higher than the 250 transmission, because of the additional torque available to drive the nearly equal weight along. And the width of the power band was continually amazing. You could just keep accelerating in the same gear, long after you expected it to be time to shift. We would like to see the long throw of the shift arm shortened. The



The air cleaner box is designed to allow a straight flow through the Bing carburetor. Our test bike was equipped with a Filtron element to cope with the California dust.



The front brake on the 400 Cross is slightly larger than on the 250. The difference in weight is not noticeable. Akront wheels are standard front and rear.



best part about the power is its "soft" feeling. It doesn't come on with a lurch that leaves you hanging on, out of control. The power surge is steady and predictable, with a feeling of complete control in your throttle hand. You can dial on as much as you need, and then some. The four-speed gearbox gives ample speed range for any motocross course we've ever seen. In fact, shifting into fourth is often optional for the average rider. The engine usually has plenty of power left in third gear, but at the same time it has the torque to pull fourth gear, if lower RPM's comfort you.

The greatest advantage of the massive power of the 400 is its ability to overcome your errors on the course. If you get out of shape so you can't

shift at the proper time, there's always enough power to keep pulling in whatever gear you're in. This is a nice feature, because it can mean the difference between keeping running or stalling right out there where everybody can see you. Occasionally, we did stall the engine, and again, restarting was no problem. A kick or two and we were rolling again, wishing the motorcycle was ours to keep forever.

Every motocross course has a variety of terrain, including bumps and uphill sections. It is here that the brutal torque of the 400 Cross is most useful. With a slight twist of the throttle, you can aviate the front wheel at will, cancelling the effect of bumps on the front and powering over them

on the rear wheel. On rough uphill sections, this is especially enjoyable, and you soon find yourself able to guide the machine to a large extent by shifting your weight while the front wheel is airborne. And if you get out of shape going uphill, just back off the throttle for a moment while you correct; turn it on and you're off. It is the kind of unending, flexible power that cannot be described, but must be experienced.

And anywhere the terrain will allow it, you can go as fast as you like. The top speed of the 400 Cross is probably in excess of 70 mph, with stock gearing. There are very few places on any

motocross course in the world where even the world champions can go that fast without crashing.

The head on the 400 utilizes only one spark plug. During the course of our testing, on the fourth day to be specific, we fouled the plug. Inspection of the plug showed it to be damp, indicating too large a main jet in the carburetor. Since it was a new machine, it was probably best to break it in that way. An owner who preferred might change to a smaller main jet after the engine had a few hours running time. But in our case, we decided that it had been running like a bomb for many hours now, so we didn't

even try a hotter plug. We just replaced it with another standard unit, and it ran the rest of that day and all of the next.

Looking back on the test, it doesn't seem possible that any motorcycle could be so free from legitimate criticism as the Husqvarna is. But that's the way it is. The machine is the end product of years of evolutionary development; of careful modification with a specific goal always in mind, to go faster on a motocross course. And the 400 Husky will go as fast as anyone in this country can ride. And faster than most.

Swede Carlson.







## **HUSQVARNA 400cc CROSS**

#### ENGINE

Typesingle cylinder piston port two stroke
Bore and stroke81.5mmx76.0mm
Displacement
Compression Ratio 10.5:1
Ignition FEMSA flywheel magneto and coil
Carburetion 38mm Bing Concentric
LubricationPremix gas/oil

#### DIMENSIONS

Seat height	31.5	in.
Wheelbase	54	l in.
Ground Clearance		
Dry weight	231	lbs.

#### WHEELS AND BRAKES

Front tire size	3.00x21 in.
Front brake type	internal expanding
Rear tire size	4.00x18 in.
Rear brake type	internal expanding

#### **TRANSMISSION**

	wet multi-plate
	1st 2.36:1, 2nd 1.60:1,
	3rd 1.27:1, 4th 1.0:1
Final ratio	7.7:1
Countershaft sprocket	12T
Rear wheel sprocket	53T

### GENERAL

Air Filtration	********	********	 dry	paper
CADACITIE	c			
CAPACITIE	3			

Fuel	tank	2.2	gal.
Fuel	reserve		
	box		

#### FRAME AND SUSPENSION

Front suspension.... telescopic double damping Rear suspension.. adjustable spring over shock Frame type...... tubular single downtube

COLORS

Red

PRICE AS TESTED \$1320

#### DISTRIBUTORS

Eastern:
Penton Imports
1354 Colorado Ave.
Lorain, Ohio 44052

Western: Med International 4790 Palm Ave. La Mesa, Calif. 92041