BIGGEST 125 MX SHOOTOUT EVER

CYCLE GUICLE

7 DYNAMITE BIKES!!!!

- ★ HONDA CR125M
- *SUZUKIRM125B
- *YAMAHAYZ125D





... AND INCLUDING THE FIRST TEST EVER OF 4 NEW EUROPEAN 125s:

- ★ BULTACO 125 PURSANG
- *** HUSQYARNA 125 CR**
- **★KTM 125 GP**
- * MONTESA CAPPRA 125 VB



ALSO:

MOTO MORINI 31/2:

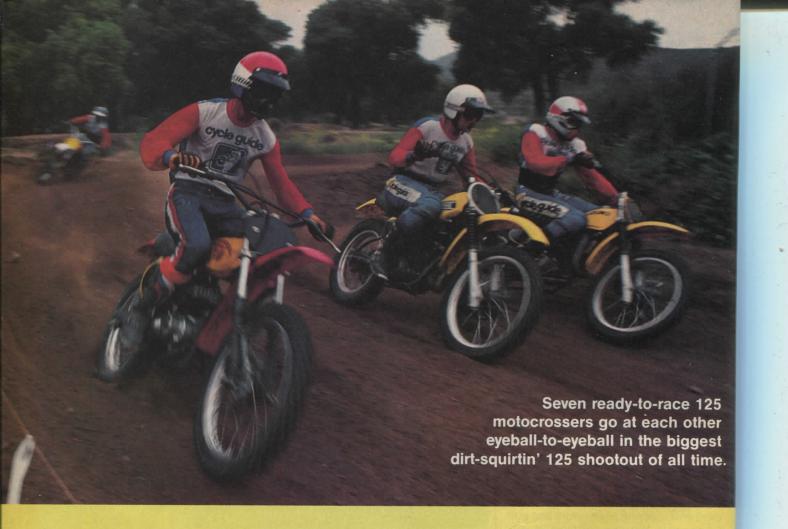
BEST HANDLING STREETER IN THE WORLD?

HARLEY-DAVIDSON MX250:



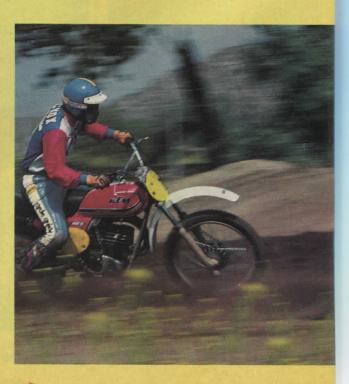
PREVIEWING THE ROCKET REX REPLICA





SHOWDOWN





24 CYCLE GUIDE/AUGUST 1977

- BULTACO'S GEARED-PRIMARY 125 PURSANG
- HONDA'S REDDER-THAN-EVER CR125M
- HUSQVARNA'S LATEST LEADING-AXLE 125 CR
- KTM'S LONG-LEGGED 125 GP
- MONTESA'S NEWEST CAPPRA 125 VB
- SUZUKI'S SCREAMING YELLOW RM125B
- YAMAHA'S INCREDIBLE YZ125D

In the beginning, it promised to be one of the best things we'd ever done. We would round up every competitive production 125 motocrosser commonly available in this country—Japanese and European—and have the best, most fun-filled, action-packed, tell-it-like-it-is shootout ever.

In the end, we felt we succeeded. But in between, during three weeks of changing tires, fixing broken motorcycles, cleaning cruddy air filters, adjusting and lubing chains, tightening spokes, driving to various racetracks, driving home from various racetracks, loading bikes into vans, unloading bikes from vans, mixing Full Bore oil with Mobil premium, measuring everything measurable, troubleshooting numerous engine maladies ranging from trivial to terminal, keeping records of every single thing that happened and clicking off over 60 rolls of film, we weren't so sure. The "fun" part—chasing each other around on

seven of the neatest 125 berm-crunchers in existence—had been so frequently punctuated by maintenance and logistical needs that our "dream comparison" began feeling more like a nightmare. Taking care of seven high-strung, all-out race bikes while also trying to transport them to racetracks, ride them and evaluate them proved to be a monumental hassle.

One day near the end of the test, sitting half-dazed amongst seven muddy motorcycles and surrounded by a disheveled pile of frayed tie-down straps, oily gas cans, worn spoke wrenches, crumpled spec sheets, empty film cassettes and an odd collection of spare, broken and supposedly optional parts, the weary staff of *Cycle Guide* reached a unanimous agreement: The next time someone—anyone—suggests a multi-bike motocross shootout, we immediately go for his jugular vein and use it to tie him to the starting gate just prior to the first moto of the U.S. Grand Prix.

Of course, we aren't really serious about that threat. The conclusions we reached in our seven-bike shootout could not have come about by testing each motorcycle individually. The fiercely competitive nature of motocross and the similarity of the machines almost dictates that to get the real, hard facts all the available bikes must be put together and let go head-to-head. So fear not; there will be more comparison tests in our future.

If you're like us, you may be mildly surprised at the results of this comparison. If you're not, consider yourself an exceptional 125 motocross authority, for everyone involved in this test—our staff, plus a wide variety of racers ranging from novice to pro, including super-fast, super-talented John Hateley, American Motorcyclist Association professional in both motocross and flattrack—was not prepared for the outcome.

THE CONTESTANTS: About ten





motorcycle manufacturers are currently involved in 125 motocross in this country either by making competitive production one-two-fives or by racing works machines in national competition. Out of those ten, we were able to get seven bikes.

Naturally, we included the Japanese 125s, starting with the terrific Yamaha YZ125D we tested in our March 1977 issue and the potent Suzuki RM125B we tested last May. Yamaha elected to give us a brand-new YZ, while Suzuki opted to tune and refurbish the same RM we tested before, since it had proven to be a real hauler. We also picked up a new redderthan-ever Honda CR125M. Kawasaki has no 125 MX model (aside from some leftover 1975 KX125s) at present, so we had just three Japanese bikes to test.

From the other side of the Atlantic we acquired a much-changed Bultaco 125 Pursang, a highly-refined 1978 Husqvarna 125CR, a highly-regarded KTM 125 MC5 GP and a not-too-common Montesa Cappra 125 VB. Not only were the Bultaco and Husqvarna the very first of their kind in the country, the Montesa and KTM 125s had never before been tested by an American magazine. So all four of our Eurocrossers were exclusively tested for the first time in our shootout.

We desperately wanted to include a new

Maico 125, but the first U.S.-bound bikes were just being assembled while our test was being conducted. And our hopes of getting an all-new, water-cooled Can-Am 125 were dashed when we learned that production of that model was not scheduled until after the test.

Actually, we almost had to settle for five bikes. The folks at KTM Imports sadly informed us that they were completely sold out of 125s and wouldn't have any more until after the test. Luckily, one of their better dealers-ISDT medalist Eric Jensen of Super Cycle in Eagle Rock, Californiaagreed to loan us a brand-new 125 GP he had on the sales floor. We really appreciated Eric's cooperation-he's as good a person as he is a rider.

The Montesa, too, was extremely "iffy" until the last minute. The West Coast distributor had no new Cappra 125 VBs in stock and barely pieced a used one together for our test. The bike had been raced a few times by Bruce McDougal and came to us with a couple of minor parts which were either non-stock or broken. The stock cylinder had been ported by McDougal's tuner, so a 1976 VA cylinder was installed-which was no big deal except that no one at the distributorship knew for sure whether the VA's porting was the same as the VB's. We accepted the bike anyway and kept reminding ourselves during the test that there may be some small discrepancies between the results obtained with our Montesa and those which might be obtained with a perfectly new stocker.

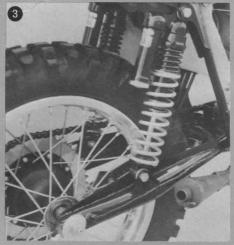
We talked to the people at Penton Imports in Ohio and asked them to participate in the comparison. They said they didn't want to, for two reasons: First, they admittedly do not pursue the sale of 125 motocrossers with the same enthusiasm they do their bigger bikes; and second, the KTM 125 is essentially the same as the Penton, so if we tested a Penton and a KTM, our story would be filled with repetitions and redundancies.

Any other manufacturers, either by their own admission or in our hopefully expert judgment, do not make competitive 125s; if they do, they are not for sale in this country.

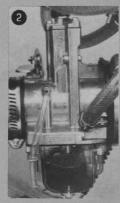
THE RULES: First and foremost on our priority list was to find out which of the seven bikes would get a reasonably competent rider around a typical motocross track the fastest, the easiest and with the most consistency. We didn't really care whether the winner cost more, was harder to work on, was the noisiest or was the crudestlooking. All of those factors, and others, were taken into consideration; but the name of the game is to win, and to do that you need the fastest, best-handling bike you can get.

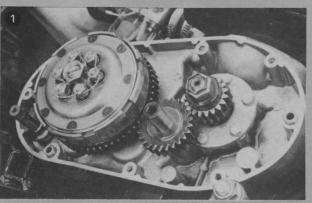
We are aware that a large percentage of the bikes being raced in this country has been modified, and that enough after-





1. A unique three-piece geared primary drive eliminates a traditional Bul weakness-the primary chain-while allowing the same engine cases and gearbox to be used. 2. An Americanmade 34mm Lectron carburetor is standard equipment. 3. The factoryinstalled Betor shocks are less than good; the S&W shocks that come in the crate are better.





HONDA

1. The only new features on the '77 front fork are accordion-type fork gaiters—red, of course—and painted silver sliders instead of the traditional polished alloy legs. 2. The swingarm features improved versions of the stamped, one-piece legs innovated by Honda on last year's CR125M.





market pieces are available to turn perhaps the worst bike of our seven into the best. But we weren't testing accessories; we were testing motorcycles as they roll out of the crate, and that's how we rated them.

We were not testing tires, either, so we asked Cosmopolitan Motors to supply us with Metzeler motocross/enduro knobbies for six of the bikes—4.00 x 18 on the rear and 3.00 x 21 on the front. The KTM is the only bike fitted with those tires at the factory. Metzelers are unquestionably the best rubber for the hard, slick adobe racetracks of the Southwest, and using them on all the bikes permitted us to more accurately measure differences in steering and overall handling.

We allowed each bike to be "tuned" within reasonable limits. This included adjusting any adjustments provided, changing fork oil weight and level, altering the air pressure in suspension units, cutting existing fork spring spacers, reshaping control levers, changing handgrips, jetting carburetors and in one case, changing the gearing. We felt these small changes were things that just about anybody could and should do to any bike to make it fit a particular course and the riding conditions at virtually no expense.

THE BIKES: Comparing motorcycles from Spain, Sweden and Austria with those from Japan provides an interesting study of how these widely varying manufacturing societies chose to design a 125

motocrosser. The Husky and KTM, for instance, use the same chassis and basic engines found in their 250 and Open Class machines. The Bultaco also shares many of its major components with bigger-displacement models. But the Montesa and all the Japanese 125s are unique to themselves, sharing precious few pieces with their bigger brothers.

All seven engines displace within half a cubic centimeter of one another, but they



got there with three different sets of bore/stroke numbers. The Montesa, Bultaco, KTM and Suzuki have 123.6cc displacements with 54mm bores and strokes. The Yamaha and Honda use 56mm bores and 50mm strokes to yield 123.1cc. The Husky has a less-common 55 by 52 bore and stroke to reach 123.5cc.

The Montesa, KTM, Bultaco and Honda have conventional piston-port intake systems, while the Yamaha and Husky are fitted with reed-valve intakes. The RM Suzuki utilizes the best of both worlds, sporting a piston-port system working in conjunction with a reed valve that passes mixture directly into the crankcase. The beauty of Suzuki's case-reed arrangement is that it provides much of the powerbandwidening benefits of a normal reed valve without requiring holes in the back of the piston or cutting of the intake side of the piston skirt, both of which can shorten piston life.

The seven 125s furnished us with six different makes or sizes of carburetors to contend with. The YZ and RM use 32mm Mikunis, the Honda has a 30mm Keihin, the Husky is delivered with a 32mm Bing, the KTM comes with a 34mm Bing, the Bultaco proudly owns an American-made 34mm Lectron and the Montesa sports a whopping 36mm Bing.

Things must be looking up at the Motoplat factory in Barcelona these days, for all the European bikes in our shootout

SHOWDOWN



came equipped with that popular Spanish magneto CDI system. The Bultaco, Husky and KTM are fitted with external-flywheel Motoplats and the Montesa uses an internal-rotor version. All the Japanese bikes, on the other hand, use internal-rotor magneto CDI units. The most important aspect of the differences in magnetos is not in the spark produced, but in the added crankshaft inertia furnished by the greater mass of the external flywheels on those three European machines.

All but one of the six-speed 125s employ straight-cut gears as a method of getting the power from the crankshaft to the wet clutch. Only the YZ125D uses helical gears, which are generally less clankety

than straight-cuts. The Bultaco by far has the most interesting primary. Up until now, the Buls have used a chained primary drive, but the ultra-high rpm spun by the 125 sometimes caused chain problems that even the higher-torque 250 and 370 Pursangs didn't have. So this newest 125 has a geared primary that uses three straight-cut gears: one on the crankshaft, one on the clutch and one in between. The intermediate gear was needed for two reasons: to keep the same crankshaft-to-mainshaft distance. thus allowing the use of the existing engine cases; and to get the transmission to turn in the same direction as it did with the chain drive, thereby eliminating a redesign of the entire gearbox. The designers could have gotten around the problem by making the engine turn "backwards," but decided

Four of the bikes—the Honda, Suzuki, Yamaha and Montesa—have primary kickstarting, which means they can be started in gear by disengaging the clutch before kicking. The others must be in neutral before starting. Not coincidentally, those same four machines have kickstarters on the right side, while the Husky, KTM and Bultaco have them on the left.

against such a move.

Single-downtube frames are the most prevalent on the 125s, with only the Montesa and KTM sporting double front downtubes. Six of the frames are constructed of a high-tensile steel which is each particular country's version of chromoly. Only the Yamaha has a mild-steel

frame—which is rather ironic because despite its huge, through-the-backbone De-Carbon shock and all the usual monoshock gussets and bracings, it is the lightest at 195 pounds. The RM weighs just a pound more at 196 and the Honda and the Montesa are at 197. The rest of the bikes show their big-bore cross-breeding on the scales. The Husky tips the Toledos at 205, the Bultaco weighs 206 and the KTM bulks in at 208.

The Montesa has the steepest steering head angle (28 degrees) and shortest front wheel trail (4.6 in.). The KTM offers 28.5 degrees and 4.9 inches, while the Bul and Husky have identical 30-degree head angles. The Bultaco's front wheel trail, however, is the second longest (5.6 inches) and the Husky's, at 5.7 inches, is *the* longest. The Yamaha and Honda are the most rakish at 31 degrees, with 5.4 inches of trail on the CR and 5.47 on the YZ.

Leading-axle fork assemblies are the current hot tip in motocross and all of our contestants bear such units, except for the eight-inch-stroke, in-line-axle fork on the Bultaco. The Honda wears a 7.7-in. Showa fork; the Montesa is fitted with eight-inch Betors; the KTM carries 8.8-in. Marzocchis; the RM sports 9.1-in. Kayaba air/spring units; the YZ also has air/spring Kayabas, but with 9.3 inches of travel; and the Husky bears a 9.6-in. fork of its own manufacture. All three Japanese machines wear rubber accordion fork boots over their stanchion tubes, while the Old World bikes have exposed tubes.

In the rear, the Honda's forwardmounted Showa gas shocks allow 6.2 inches of axle travel, the Bultaco's forward-mount gas bag S&W shocks give 6.5 and the Montesa's forward-mount Betor gas units provide 6.6 inches of travel. Then there's a jump of more than two inches to the Suzuki's forward-mount, laid-down, remote-reservoir Kayabas which yield 8.8 inches, the exact same amount provided by Yamaha's gas-charged DeCarbon monoshock. The KTM's Marzocchi, integralreservoir shocks allow 9.6 inches, but the Husky is the travel king at the rear as well as the front. Super-long Girling gas emulsion shocks with dual springs yield 9.9 inches of rear axle movement on the 125

It's interesting to note that the Bultaco leaves Spain with Betor gas reservoir shocks, but the crate is popped open when the bike hits Bultaco International in Virginia Beach, Virginia, and the S&Ws-and the Lectron carb—are dropped inside. The reason for this unusual approach is that the U.S. distributor conducted tests and found that the Betor shocks were inadequate and the Lectron carb markedly improved the bike's performance. But stiff Spanish import/export laws make it virtually impossible to get large numbers of foreign-built accessories into Spain, and equally difficult to get motorcycles out if they contain imported goods. So the problem is circumvented by putting the desired pieces in the

crate once the bike reaches the U.S.

Elsewhere, the 125 'crossers all offer more-or-less standard motocross fare—unbreakable plastic fenders of various shapes, lengths and widths; cross-braced handlebars; some sort of rubber or vinyl lever covers; oiled foam air filter elements lurking inside airboxes of different designs; cleated footpegs; and long, thickly-padded seats.

The Bultaco, Montesa and KTM have fiberglass fuel tanks, the Husky's and Suzuki's are aluminum, the Yamaha's is unbreakable plastic and the Honda's is steel. The Bultaco and Honda have downswept exhaust systems, and all the others except the Husky utilize through-the-frame upswept exhausts. The unique single-front-downtube, no-center-downtube design of the Husqvarna frame allows the upswept exhaust system to be tucked neatly out of the way along the left side of the bike without being threaded through or behind any frame members.

The area in which these seven specialized machines vary the greatest is price. The Honda is the least expensive, going for just \$896. The Yamaha is the next cheapest at \$998, with the Suzuki on the block for \$1025. The Bultaco is the least-expensive European marque, offered for \$1100. The big numbers start with the \$1435 Husky, the \$1565 Montesa and the super-expensive \$1785 KTM. Please understand that these are suggested retail prices which can and will vary from one time and place to another.

ENGINES AND GEARBOXES: From a sheer horsepower standpoint, the RM125B is the rocket of the bunch. When the conditions are right it can out-accelerate most of the others with impressive ease. The Yamaha is almost as fast as the RM, and so is the Husky. The KTM is slightly slower than those three, then comes the Bultaco, the Honda and the Montesa.

Of course, the "conditions" are not always just right; in fact, the object of motocross is to deal with whatever conditions the terrain offers, good or bad. And it is this variance in traction and terrain, combined with the different styles of power delivery on these 125s, that usually allows three or four of them to accelerate with near equality.

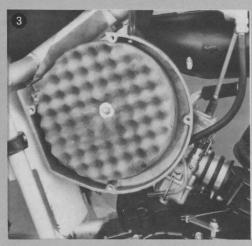
The Japanese bikes are unquestionably powerful but their power delivery is quick and light-flywheeled compared to the European machines. So when traction is not ideal, more of the Japanese bikes' power goes up in wheelspin than that of the European bikes.

The Husqvarna seems to combine the best qualities of both worlds. It has crisp response, good horsepower, enduro-like low end and a wide powerband similar to the Yamaha's but with more flywheel inertia than any of the Japanese machines. In simple terms, this means the Husky engine is as much at home on the smoother, faster tracks as it is on the slow, slick, twisty ones.

Not that the Suzuki or Yamaha engines



1. The reed-valve engine pumps out potent top-end power and amazing, enduro-like, low-end torque. 2. The Girling gas-emulsion shocks are superb, delivering almost ten inches of travel, effective two-stage springing and excellent damping. 3. Nothing elaborate about the airbox—just a simple, easy-to-work-with arrangement that really works.



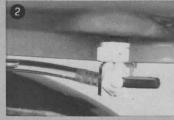
HUSQYARNA





KTM

1. Cramming the air filter element through this undersized hole requires a magic touch, a bit of luck and some voodoo incantations. 2. The lever-type fuel petcocks on the outsides of the tank can be turned off unintentionally by a long-legged rider's knees. 3. Frame tubes, braces and holes everywhere; but the frame is more rigid and flex-free than most.









don't work on those difficult tracks; they do, and they work well. But the Husky is the most tractable of those three very powerful 125s. On long, not-too-cobby straightaways, though, the Suzuki is capable of zipping past the Husky like a midnight freight train with the Yamaha not far behind.

Then there's the KTM, the Austrian king of tractability. The heavy-flywheeled engine never, ever cuts loose with a big burst of wheel-spinning, traction-defeating power. It's electric-motor smooth, as steady and predictable as an open-class bike-but obviously not as fast. On a wet track or one with terrible traction or steep, sharp, uphill turns, the KTM is a match for any of the other bikes. When the track is fast and traction is ripe, the Suzuki, Husky and Yamaha will pull away from the KTM-not quickly, but ever so steadily.

The Bultaco's engine is a lot like the KTM's except it seems to have perhaps too much flywheel for some situations. Like the KTM, it does well on the tight, slick, tricky stuff, but it has an even harder time keeping up on faster parts of the circuit. With a sharp rider on the right course, the Bul could give any other stock 125 some trouble; but until it gets a bit more power and/or a bit less flywheel, it will be at a slight disadvantage on most tracks.

The Honda has good potential acceleration, but suffers because the surge of usable power is too uncontrollable and shortlived. Its engine is the most noticeably peaky of the bunch, and the power delivery is of the all-or-nothing variety typical of earlier Japanese motocrossers. To make matters worse, the CR's chassis doesn't get power to the ground as efficiently as the others do, resulting in even more wheelspin and wasted power. On a relatively smooth, non-demanding course, the CR can cut respectable lap times. The tougher the course gets, the harder it becomes to get the Honda's rear tire connected to the track for very long and the lap times consequently get slower.

The Montesa doesn't have competitive power on smooth tracks or on rough tracks. "Off the pipe," the VB is sluggish and easily bogged; in the powerband it runs cleanly but not with enough vengeance or in a wide enough rpm band to keep up with the other six bikes.

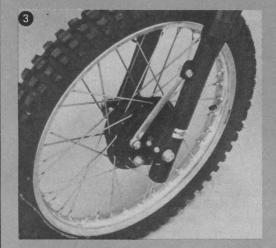
Perhaps there indeed was a difference between the 1976 125 VA cylinder fitted to our test bike and the stock '77 VB cylinder. If so, it could explain, in part, why our bike was the slowest of the seven. Even still, the VB porting will have to be drastically improved over the VA model to get the engine up to a competitive level. And the huge 36mm Bing carb does nothing to help the engine run cleanly or produce usable power over a wide rpm range.

In most of the play races we staged during the test, the Husky, Suzuki and Yamaha could always be found running together, almost as if they were tied together with an invisible rope-provided the riders on those three were of the same approximate skill level. The KTM frequently could be seen mixing it up with



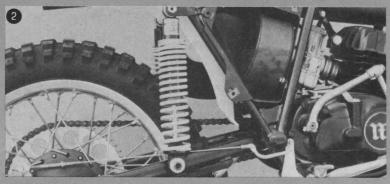


MONTESA





1. The swingarm pivot mounting—a tube welded at the junction of the rear frame uprights—is unusual and strong. 2. The Betor gas shocks won't get the job done very well or for long. A large foam air filter element purifies the atmosphere before it reaches the huge (for a 125) 36mm Bing carburetor. 3. The Betor fork had too little damping and too much spring.



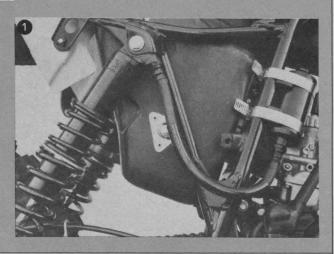
SUZUKI



1. The Kayaba reservoir shocks generally provide good rear-wheel control but don't like sharp, abrupt bumps. 2. With a little rudimentary tuning, the air/spring fork's behavior can be improved considerably over stock. 3. The RM's engine is capable of unleashing the fiercest acceleration of the seven bikes when the rear suspension cooperates.







Seowdown



that trio, although its "soft" power delivery wouldn't allow the rider to catch up if he made a mistake. On the other hand, most of the testers agreed that the KTM engine was the easiest to deal with when they were tired, like the way you are at the end of a long moto, so they were less prone to make mistakes.

The Bultaco generally couldn't keep pace with those four, at least not for long. The Honda would do fairly well until it beat and worried its rider into submission, and the person on the Montesa usually only got a brief glimpse of the other six bikes as they passed by.

All seven of the 125s were geared reason-

ably, with damned few unusable gears and no excessively-wide or ridiculously-narrow ratio gaps between gears. First gear on the KTM was way too low for anything but trials riding or climbing a twisty trail on the side of a steep hill-must be its ISDT heritage or something. It also had wider ratio spreads than the other bikes. Fortunately, the engine's powerband is wide enough to pull those gear changes without falling off the pipe. Should you find a need for closer gear spacing, dropping one tooth on the countershaft will make the KTM's last five gear ratios almost identical to the Husky's first five.

Second-gear starts were ideal on the KTM, and first gear got the other five out of the gate just fine. A couple of lightweight, hotshoe riders managed some holeshot-quality starts on the Suzuki in second gear, but the standard-size people in the crowd preferred first.

The Yamaha was consistently the hardest to get off the line cleanly because of the clutch's toggle-switch engagement characteristics. Either the engine bogged or the bike stood up in a big wheelie. The Honda

and Suzuki had the second and third grabbiest clutches, with the Bultaco next, then the Montesa and the Husky. The KTM had the most progressive clutch, which worked with the heavy flywheels to make the bike a predictable charger off the start-

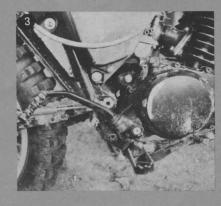
ing line. The Japanese bikes and the Husky shift





AHAMAS

1. Shamelessly stripped of its body parts, the through-the-frame monoshock arrangement and stamped steel backbone are evidenced. 2. Ah, yes, the old poke-the-screwdriver-through-thehole-and-adjust-the-damping trick. It's a handy, useful feature. 3. Our test bike's kickstarter arm stop went south, allowing the pedal end to swivel around backward.







flawlessly. The Husky's lever requires a slightly longer and harder jab to engage the next gear, but not so much as to be an aggravation. And an advantage of the Husky's design is that it is harder to kick the gearbox into a false neutral should you inadvertently bump the lever.

The Montesa isn't prone to miss shifts, either, but it has the most incredibly long lever throw any of us can recall-two-anda-half inches in each direction, to be exact. The Husky's throw is about an inch and a half, the KTM, Bultaco, Honda and Suzuki require around an inch of movement and the Yamaha's lever moves just three-quarters of an inch. The Montesa, as a result, makes you lift your entire left leg way up off the footpeg to upshift, and point your toe radically earthward to downshift. The most ridiculous aspect of this mechanism is that nothing happens in the gearbox until you've moved the lever two inches, indicating that the design is clearly an engineering screw-up.

Our KTM was stiff-shifting when we first got it and frequently refused to down-shift without a lot of tap-dancing on the shift lever. As more and more time was logged on the engine, the shifting loosened up and our testers reported they were no

longer fishing for gears.

Too bad we can't say the same for the Bultaco. It started out by missing an upshift or downshift now and again, and by the end of our test was good for as much as two misses per lap, depending upon who was riding it. Some riders had more trouble than others, but every rider complained of shifting hassles with the Bul. The gear selector mechanism felt mushy and indefinite, and there was no way of predicting when a gear change would miss or which two gears the transmission would be in between after the miss. Sometimes the gearbox overshifted past the intended gear, sometimes it didn't quite make it into the gear. We know from experience that Bultacos generally shift quite well, so we assume this bike had a problem all its own. Still, check it out thoroughly if you're considering a new 125 Pursang.

HANDLING: Although lengthy suspension travel itself does not insure good handling, you can gauge the overall chassis behavior of these seven bikes by their wheel travel figures. But if you attempt to use the front end geometry figures to determine how each bike should steer, you'll

soon end up a babbling idiot.

The Honda and Montesa are definitely in the basement when it comes to overall handling. The Honda's suspension is brutally harsh compared to those on the other bikes, causing it to skitter and bounce around and keep the wheels out of contact with the ground. Let's face facts: the CR is essentially a 1974-75-76 motorcycle that was good in its day but shows its age when up against the best new machines.

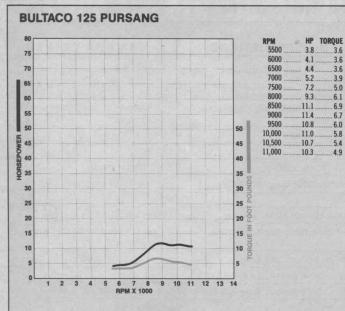
The Montesa isn't much better, but in a different way. The leading-axle Betor fork has no perceptible damping in the first half

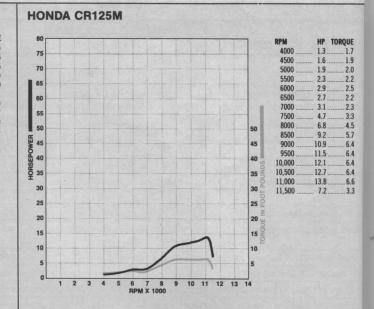
SHOWDOWN SPECIFICATIONS

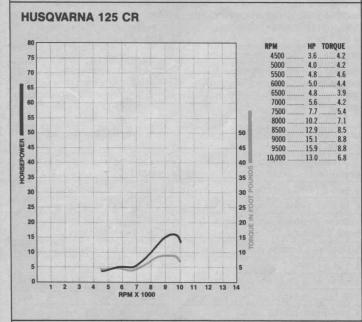
			BULT 5 PU	THE RESERVED				HON	DA	CR1	25M		н	JSQ	VARI	NA 1	25 0	R
Engine type	two-st	roke					two-st	roke		1			two-st	roke				
Cylinder arrangement	vertica	al sing	gle				vertica	al sing	le			177	vertica	al sing	le			
Port arrangement	The second secon	ers, o			ntake, ort, one			ers, or			rt, one		one re four tr one ex	ansfe	rs, on	e boos		
Bore and stroke	54mm	x 54	mm				56mm	x 50r	nm				55mm	x 52r	nm			
Displacement	123.6	cc					123.10	cc					123.50	cc				
Compression ratio	14.0:1	(unc	orrect	ed)			7.5:1	(corre	cted)		7	Die.	13.5:1	(unco	orrect	ed)		
Ignition	exterr	nal-fly	wheel	magn	neto C	DI	intern	al-roto	or mag	gneto	CDI		exterr	al-fly	wheel	magn	eto CE)I
Charging system	none		Table.			-	none						none		FIRE			
Carburetion	34mm	Lect	ron sli	de/ne	eedle		30mm	Keihi	n slide	e/nee	dle		32mm	Bing	slide	needl	е	7
Air filter	washa	able o	iled fo	am el	lement		washa	able oi	led fo	am el	ement		washa	able oi	iled fo	am el	ement	
Lubrication	pre-m	ixed f	fuel ar	nd oil			pre-m	ixed f	uel an	d oil	No.		pre-m	ixed f	uel an	d oil		
Primary drive	three	straig	ht-cut	gears	s, 3:1	ratio	straig	ht-cut	gears	s, 4:1 r	atio		straig	ht-cut	gears	3.89	1 ratio	0
Clutch	wet, 6	drive	plate	s, 6 d	riven p	olates	wet, 6	drive	plate	s, 5 dr	iven p	lates	wet, 6	drive	plate	s, 5 dr	iven p	lat
Starting system	kick,	in neu	utral o	nly			prima	ry kicl	(kick, i	in neu	tral or	nly		
Final drive	width); 11-t oth re	ar who	gearbo	itch, 1 ox spre rocket	ocket,	width); 14-t	ooth g	gearbo	tch, 5/ ox spro rocket,	cket,	width); 13-t oth rea	ooth g	-in. pi gearbo eel spr	x spro	ock
Front fork	Betor	, 8 in.	(203n	nm) tr	avel		Show	a, 7.7	in. (19	95.6m	m) trav	rel	Husq	varna,	9.6 in	. (244	mm) t	rave
Rear shocks	travel	, 5-wa adj. da	ay adj.	spring	rear w g prek n-adj. g	oad,	wheel preloa	a, 6.2 I trave ad, no as pre	l, 5-wa n-adj.	ay adj. damp	spring	9	travel	non-	adj. sp	oring p	reload	d,
Front brake		, sing	le-lead	ding s	hoe,			, single		ling sh	noe,			, singl		ling sh	ioe,	
Rear brake	drum opera		le-lead	ding s	hoe, c	able-	drum, opera		e-lead	ling sh	noe, ca	able-	drum		e-lead	ding sh	oe, ro	od-
Front tire	3.00	x 21 F	Pirelli k	knobb	у		3.00	x 21 B	ridges	stone	knobb	у	3.00	x 21 T	rellebo	org kn	obby	
Rear tire	4.00	x 18 E	Dunlop	knob	by		4.10	x 18 B	ridges	stone	knobb	у	4.00	x 18 T	rellebo	org kn	obby	
Frame		ar chi down		steel	l, singl	е	100000000000000000000000000000000000000	ar chro		steel	single			ar chr downt		steel,	single	9
Steering head angle	29 de	grees	from	vertic	al		31 de	grees	from	vertic	al		29 de	grees	from	vertica	al	
Front wheel trail	5.6 in	1. (142	2mm)				5.4 in	. (137	mm)	H.			5.7 in	. (145	mm)			1
Wheelbase	54.8	to 55.	6 in. (139 to	141c	m)	54.5 1	to 55.5	in. (1	138 to	141cn	n)	56.61	to 57.5	5 in. (1	143.7	0 146	cm
Weight	207 II	bs. (9	4.1kg)				197 II	bs. (89	.5kg)	WE W			205 11	os. (93	3.2kg)			
Weight distribution	44.69	% fron	t, 55.4	% rea	ar		44.7%	6 front	, 55.3	% rea	r		44.69	6 front	t, 55.4	% rea	r	
Ground clearance	10.6	in. (26	69mm)	, at ex	xhaust	pipe	8.75 i	in. (22	2mm)	, at ex	haust	pipe	12.7	in. (32	2.5mr	n), at	frame	
Seat height	35.8	in. (90	09mm))			35.3 i	in. (89	6mm)				37.2	in. (94	5mm)			
Handlebar width	33.6	in. (85	53mm))			33.4	in. (84	8mm)	1112			33.5	in. (85	1mm)			
Footpeg height	15.6	in. (39	96mm))			12.9	in. (32	8mm)				15.7	in. (39	9mm)			AN
Instrumentation	none						none						none					
Fuel tank	fiber	glass,	1.7 ga	al. (6.5	5L)		steel,	1.8 g	al. (6.	8L)			alum	inum,	2.1 ga	al. (7.8	L)	
Top speed	63 m	ph (1)	01kph)			65 m	ph (10	4kph))			64 m	ph (10	2kph))		
Sound level per SAE J331a	100.4	4 db(A	4)				104.1	db(A)				99.2	db(A)				
Available colors	yello	w, with	h red	fende	rs		red						yello	w, with	white	e fend	ers	
Suggested retail price	\$110	0					\$896						\$143	5				200
GEAR	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	
INTERNAL GEAR RATIO	2.51			1.27	1.12	1.0	2.13	1.61	1.30	1.09	.958		2.06			1.04	.880	
OVERALL GEAR RATIO	34.26	Brees.	20.06	1		13.65	32.20		19.68			13.32		24.63			13.93	12
		63				5.74	45			-68	4 14 8 3	The state of	1			1	5.62	

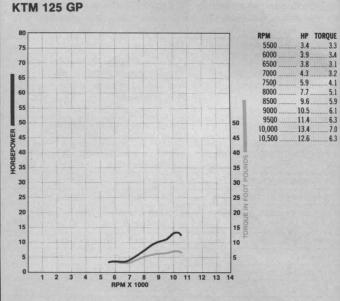
K	TM 12	5 0	àP			NON		A CA	APPR	RA		SUZ	ZUKI	RM	125	В		YAN	IAH	A YZ	125	D
two-stroke					two-s	troke					two-s	troke	1.0	Maria			two-s	stroke				
vertical sin	gle				vertic	al sin	gle				vertic	al sin	gle				vertic	cal sin	gle			
One piston transfers, t exhaust						fers, o			ntake, ort, one		case-		intake		intake, ransfei		four		ers, or		lled int	
54mm x 54	lmm				54mn	n x 54	mm				54mr	n x 54	mm		Mar.		56mr	m x 50	mm			
123.6cc					123.6	СС					123.6	icc			Maria.		123.1	1cc				
N/A		hije.	THE P		17.5:1	l (unc	orrect	led)		TOTAL SE	8.0:1	(corre	ected)				7.8:1	(corr	ected))		
external-fly	wheel m	agne	eto CI	וכ	intern	al-rot	or ma	gneto	CDI		interr	nal-rot	or ma	gneto	CDI	d high st	inter	nal-ro	tor ma	agneto	CDI	
none					none						none					RESTREE	none	9				30
34mm Bing	g slide/ne	eedle	9		36mm	n Bing	slide	/need	le		32mn	n Miku	ıni sli	de/ne	edle		32mr	m Mik	uni sli	de/ne	edle	
washable o	oiled foan	n ele	ment		wash	able o	iled fo	oam el	lement		wash	able c	oiled fo	oam e	lemen	t	The second second	le-cov		vashat	ole oile	ed
pre-mixed 1	fuel and	oil			pre-m	nixed f	fuel ar	nd oil			pre-n	nixed 1	fuel ar	nd oil			pre-n	mixed	fuel a	nd oil		
straight-cut	t gears, 3	3.65:	1 ratio	0	straig	ht-cu	gear	s, 3.42	2:1 rati	0	straig	ht-cu	t gear	s, 3.4	4:1 rat	io	helic	al gea	rs, 3.2	227:1	ratio	
wet, 5 drive	e plates,	5 dri	ven p	lates	wet, 8	3 drive	plate	s, 7 d	riven p	olates	wet,	7 drive	plate	s, 6 d	riven	olates	wet,	6 driv	e plate	es, 5 d	riven p	plat
kick, in neu	utral only				prima	ary kic	k				prima	ry kic	k				prima	ary kid	k			
# 520 chai width); 12-1 57-tooth re 4.75:1 ratio	tooth gea	arbox	x spro	ocket,	width 56-to); 12-1	tooth o	gearbo	itch, 1, ox spro rocket,	ocket,	width 59-to); 14-1	ar wh	gearb	itch, 5 ox spr rocket		width 51-to	h); 12-	tooth ear wh	gearb	ox spro crocket	ock
Marzocchi,	, 8.8 in. (2	224m	nm) tr	avel	Betor	, 8 in.	(203n	nm) tr	avel		Kayal	oa, 9.1	in. (2	231mn	n) trav	el	Kaya	ba, 9.	3 in. (236mr	n) trave	el
Marzocchi, wheel trave preload, no gas pressu	el, 5-way on-adj. da	adj.	spring	g	travel non-a	, non-	adj. sp amping	pring	rear w preload -adj.		whee prelo	I trave	el, 3-w	ay adj . damj	n) rear . sprin ping, r	g	(224r sprin	mm) re	ear whoad a	dj., ad	3.8 in. avel, 1: lj. dam	5mr
drum, singl full-width h		g sho	oe,			, sing	le-lead b	ding sl	hoe,			singl		ding sl	noe,			n, sing		ding s	hoe,	
drum, singl operated	le-leading	g sho	oe, ro	d-		, sing e-oper		ding sl	hoe, p	ull-	drum opera		e-lead	ding sl	noe, c	able-	drum		le-lead	ding s	hoe, ro	od-
3.00 x 21 N	Netzeler k	nob	by		3.00	x 21 F	Pirelli k	nobb	y		3.00	(21 IF	RC kn	obby			3.00	x 21 E	Bridge	stone	knobb	ру
4.00 x 18 N	/letzeler k	cnob	by		4.00	x 18 F	Pirelli k	nobb	y		4.10	(18 IF	RC kn	obby			4.10	x 18 I	RC kn	obby		
tubular chr		eel, d	doubl	е				steel	, doub	le				steel	single	е	mild	steel,	press	ed bar	ckbone	e,
front down		A! -	-1			down						downt						lar en				
28.5 degree		ertic	aı				from	vertic	al					vertic	al					vertic	al	
4.9 in. (125 56 to 57.2		0 1 4	Fom)			n. (117		0.74-	144.5	>		. (129		1101	440.7			in. (13				
208 lbs. (94	,	0 14:	ociii)						141.5	cm)				140 to	142.7	cm)					142.4	cm
44.7% from		roar	1000				9.5kg) t. 54.6						9.1kg)	0/ ===				lbs. (8	- 0,			
10.3 in. (26			ame		THE REAL PROPERTY.				rake pe	dal				% rea	-					8% rea		
37 in. (940)		at III	airio		-		91.5mr		are be	Juai	10.00		9mm)	, at fra	ine), at fra	anne	
34 in. (864)							3mm)					(838)						in. (89				
16.2 in. (41							13mm)		17.00			-	8mm)					in. (85		,		
none					none						none	(00	311111)				none)			
fiberglass,	2.5 gal. (9.4L	.)				1.7 ga	1. (6.5	L)			num.	1.7 ga	al. (6.5	L)	Marie Control		tic, 1.7	gal	(6.51.)		
66 mph (10							(11kph)						1kph)		-,			ph (10		-		
97.2 db(A)					N/A:	exhai	ust sys	stem h	roken		99.5	db(A)				,	97.5	db(A)				
red, with w		lers	A LOS	74 33			hite fe				yellov	' '	C I I E C	THE PARTY			yellov					
\$1785		R			\$156		47	111	1		\$102						\$998					
					M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																T. A. L.	
1 2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
2.57 1.77	1.33 1	.04	.884	.724	2.21	1.76	1.42	1.14	.956	.807	2.33	1.75	1.41	1.19	1.04	.956	2.46	1.87	1.50	1.25	1.09	1.
44.55 30.68	23.05 18	.03	15.32	12.55	35.22	28.05	22.63	18.17	15.23	12.86	33.86		20.48		15.16	13.87		25.71			14.95	13.
		37.0	Total Control	ENTERED IN						The same			20.10		20.20	20.07	00.110	-0.71	20.01	17.14	14.55	10.
1.76 2.55	3.40 4	.34	5.11	6.24	2.19	2.75	3.41	4.24	5.06	5.99	2.31	3.08	3.82	4.46	5.17	5.65	2.32	3.05	3.81	4.57	5.24	5.

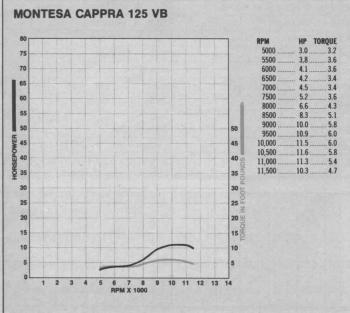
SHOWDOWN

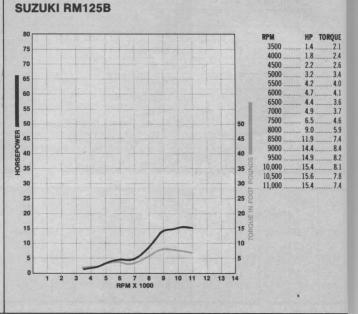


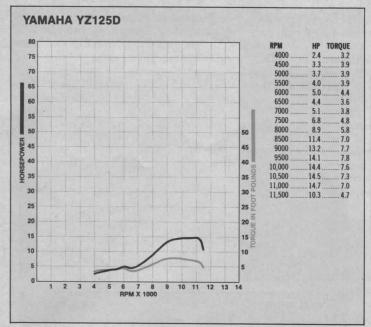














of its stroke, and at about the halfway mark the springing turns from slightly mushy to overly stiff. So while the fork is trying to decide whether it's a pogo stick or a rigid strut, the front wheel doesn't have much luck finding its way around the track. The rear shock springs are just plain too soft, allowing about half the wheel travel to be used up when the rider sits on the seat.

With all the other things that are wrong, god knows if the rear damping is even in the ball park.

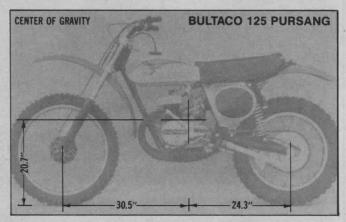
The Bultaco's suspension becomes decent after you make matching boat anchors out of the stock Betor shocks and bolt on the S&Ws that come in the crate. Still, the rear spring rates are a tad too stiff with the straight 100-pound S&W coils.

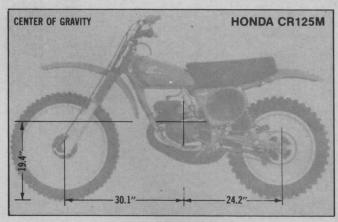
We tried a pair of 95/125 S&W springs and liked them a lot because they provided better rear wheel control. The in-line-axle Betors up front worked nicely for a while until the springs sacked out and allowed over two-and-a-half inches of the eightinch travel to be used up just supporting the weight of bike and rider.

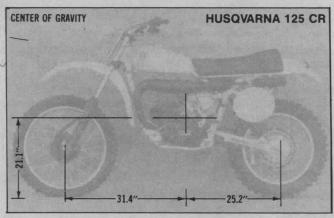
The KTM has a really good chassis once



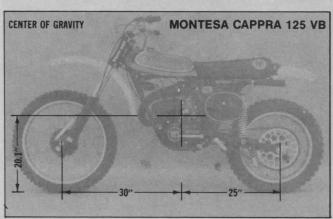
SHOWDOWN

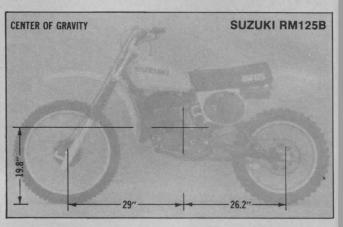


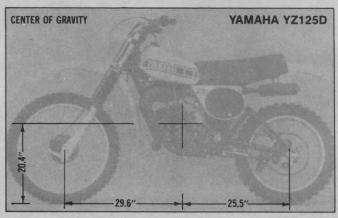












you get it properly tuned and broken in. Our bike had too much oil in the fork legs when we received it, causing the nonvented fork to get extra stiff during the last third of the travel due to lack of air space in the tubes. Draining and refilling with 180cc of 10-weight cured the problem and allowed the Marzocchis to do their job well. The Marzocchi shocks at the rear make the wheel behave superbly if you're 185 pounds or heavier, although they'll fade after 20 or 25 minutes of hard use. Slightly softer springs and a wee bit more damping would probably improve the rear end even more and make it work better for

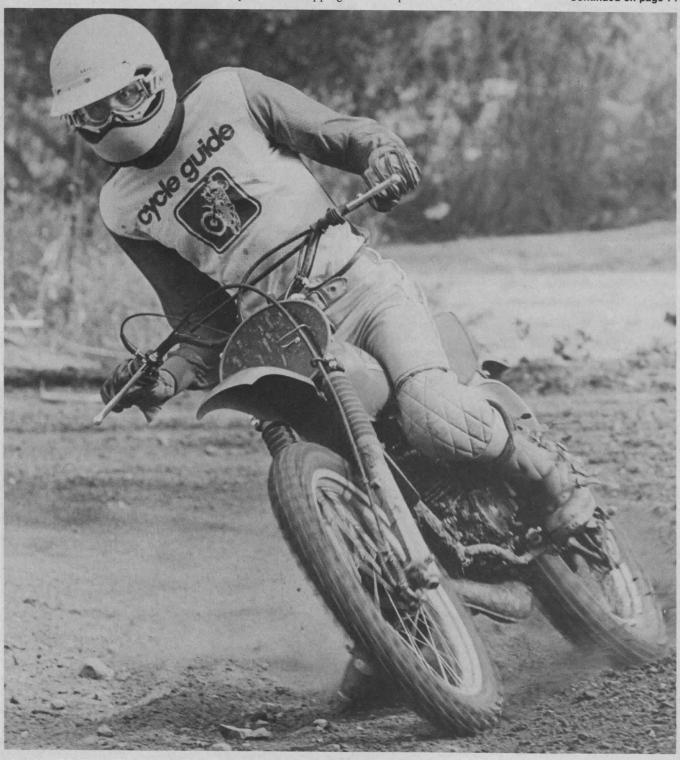
the average-sized 125 rider—who is smaller than the 5-foot-10, 165-pound national average.

The RM Suzuki rolls out of the crate with a very good front suspension that quickly and easily can be made better. The Kayaba fork is delivered with 20-weight oil, about 20 pounds of air in the tubes and a five-inch-long spacer atop each of the light fork springs. In that condition the front end didn't respond well to choppy bumps and ripples and the bike didn't steer as well as expected. By changing to 10-weight oil, cutting an inch off of each spacer and dropping to 17-18 pounds of

air, the fork responded beautifully to those same ripples, the bike steered much better and there was about the same amount of infrequent, barely-perceptible bottoming as with the original settings.

The Suzuki's Kayaba reservoir shocks behave impeccably over all types of terrain except on some ripples and that abrupt, square-edged species of bumps especially common on well-used adobe racetracks. The shocks have a smidgen too much compression damping to handle that stuff, so the rear wheel gets off the ground and the back of the bike dances up and down

Continued on page 71



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SHOWDOWN

Continued from page 43

more than on the KTM or Husky. Otherwise, the rear end of the RM tracks perfectly and is well-behaved.

The Yamaha's fork works noticeably better than the Suzuki's, even though both are made by the same company and may even share some internal pieces. With 10weight oil and 15 pounds of air, the YZ's front end glides over bumps like a Harley 74 over an Interstate highway. Only the Husky's fork is as good.

The YZ's rear end works with equal proficiency to smooth out the terrain, with the extra bonus of having a far wider range of adjustability than any of the other six bikes. The monoshock spring preload adjuster requires you to remove the shock unit from the bike (about three or four minutes' work) to get at it, but a vast range of damping variation can be had by merely poking a screwdriver through a special hole in the pressed steel backbone and turning a slotted damping adjustment wheel. When you get all the adjustments at both ends of the YZ dialed in, its overall suspension behavior is tremendous.

The Husqvarna's front fork has .3-inch more travel than the Yamaha's and is generally just as superb. The only real difference is that the Husky's spring fork doesn't have the wide adjustment capabilities of the Yamaha's air/spring unit. Still, the 125 CR uses its 9.6 inches of travel quite freely to effectively cushion the severest of motocross terrain.

The rear suspension on the Husky is the best of the lot. The Girlings keep the rear tire on the ground most often, which gets more power to the ground, allows the rider to maintain better control and lets him keep the throttle open longer and in more rough places.

Overall, the Husky's suspension was just the slightest bit better than the Yamaha's, which was marginally better than the Suzuki's, which was noticeably better than the KTM's. The Bultaco's suspension was somewhere below the KTM's, and the Honda and Montesa suspensions were rated the worst.

The Yamaha is unquestionably the beststeering bike of the seven. It goes precisely where you aim the front wheel in all kinds of turns-rough, smooth, slow, fast, bermed or flat. And despite having the third highest center of gravity, you can effortlessly flip the bike from side to side as though you were a slalom skier or pitch it down into a tight turn and it will show very little tendency to highside. During our play races every rider noticed how well the Y.Z worked when using the inside line on most corners.

The Husky and Suzuki were not as nimble or as willing to turn as the Yammie. We expected this on the Husky, for it is a physically big bike with the highest center



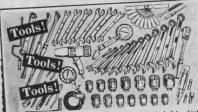
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of gravity and the greatest amount of front wheel trail. But we didn't expect it on the RM. It has the second-lowest center of gravity-a commendable engineering feat considering how much suspension travel it offers-and the third shortest front wheel

The Husky will turn those sharp corners with exceptional precision, but it takes a more forceful effort to overcome its slight, but ever-present tendency to sit up while turning. On faster or rougher corners the stability of the bike's geometry surfaces and the steering is deadly accurate.

The Suzuki, too, seems to resist those tight, flat turns or efforts to quickly pitch it over into sharp lean angles. As the turns get faster or bermier, the RM gets better and ultimately becomes nearly as accurate as the Husky. The front fork adjustments we mentioned earlier go a long way in improving the Suzuki's steering over its stock behavior.

The Bultaco surprised us all-at least when the rear suspension could keep the wheel on the ground-by steering around the inside of many corners about as well as the Yamaha. It didn't seem to mind being leaned over and, like the YZ, it was very controllable when the rear end hung itself out in a big broadslide. The Husky, on the other hand, appeared to resist slides, which isn't a bad thing, either. The Bul's suspension was the only thing that kept it from steering on a par with the Yamaha in the rough turns.

The KTM and Montesa have similar geometries and almost identical centers of gravity; yet the Austrian bike steers much better than the Cappra, not quite as nimbly as the Bultaco or Yamaha, but equal to-and sometimes better than-the Husky or Suzuki. Like the Husky, the KTM is a big bike, using the same chassis and basic engine as the 250 GP and 400 GP. The KTM, though, has quicker geometry and a lower center of gravity than the Husky, so it turns more willingly and accurately on slow, flat corners with no apparent loss of stability at higher speeds.

The Montesa's steering should be nimble and quick, but the erratic, unbalanced action of the suspension prevents consistently good steering. The Honda is in somewhat the same boat, able to slip around corners tucked in on the very inside if the turn isn't very rough. When bumps appear, however, the CR's steering agility disappears and the bike is prone to jump around and not follow the rider's orders.

Again, in the handling evaluations, the same three bikes-the Husky, Yamaha and Suzuki-always seemed to circulate the racetracks stuck together like Siamese triplets. The KTM would hang right in there, too, with the Bultaco a formidable challenger through the tight, smooth sections but unable to cope with the rough stuff as well as those first four. The Montesa and Honda were just not equipped to handle at a competitive level.

COMFORT AND RIDE: Two of our



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seven bikes are decidedly *un*comfortable to ride hard on a rough motocross course. The others range from about an average level of comfort to absolute plushness.

The Honda is the most bone-jarring of the group, delivering enough punishment to tire its rider's hands, forearms and upper body nearly twice as fast as the best of the 125s. Oddly enough, the Honda has the best seat, a deliciously-thick, overstuffed saddle which is the only reason the CR isn't intolerable.

The Montesa doesn't give its rider such a brutal pile-driver treatment, but the seat is the thinnest and least comfortable, and the front end is forever wiggling and twitching and trying to wrench the handlebars out of your hands.

The Bultaco has a wide, thick, comfortable seat which helps immeasurably to dampen the slight choppiness of the rear suspension. Its handlebars also wiggle every once in a while but surprisingly enough, the Bul isn't tiring to ride for long periods.

The KTM ended up with the secondfirmest seat, but it was one of the hardest we'd ever seen when the bike was new. The saddle softened up considerably after a few days of riding and, with great help from the suspension, made the KTM acceptably comfortable on rough terrain.

The Suzuki has the third-best seat and an excellent suspension which absorbs the abuse of a long, hard moto. Only the sharpest square-edged bumps get through the stiff compression damping of the Kayaba shocks to deliver an uncharacteristic jolt to an otherwise pampered rider.

The Yamaha and Husky are just about tied for first place in comfort. The YZ has the second-best seat, while the Husky's is comparatively firm. But the Husky's rear suspension is slightly more plush and forgiving. Overall, though, both bikes are equally comfortable.

None of the motorcycles has any unreasonable seated or standing riding position requirements or unacceptably awkward control placements. The Honda, Montesa and Yamaha have the most compact seatto-handlebar-to-footpeg layouts, with the Suzuki a little more spacious and the Bul, KTM and Husky exhibiting the riding positions of the full-sized bikes they really are. The Suzuki forces you to bow your legs when you're trying to get your weight back while jumping because of the shock bulges in the side number plates. The Bul and KTM suffer from mild versions of the same problem, but the hassle can be adjusted to after you get used to it.

The Montesa vibrated the most, but some of the shakes were caused by a broken brace between the cylinder head and frame. On the other hand, the vibration could have caused the brace to break in the first place.

The rest of the bikes were just about even in vibration levels, with the Yamaha and KTM having a few rpm ranges where their vibes seemed a bit worse than on the



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other machines. The Bultaco was very smooth and so was the Suzuki, with the Husky and Honda somewhere in the middle. Rubber-mounted handlebars on the Husqvarna help to keep most of the engine vibration from the rider's hands, although it still can be felt in the tank, seat and pegs.

The KTM is the only bike of the group which does not have spring-loaded footpegs—a near-travesty in this day and age. We didn't like the flat, closed design of the KTM's pegs in the mud, and those on the Montesa were just as bad. The rest of the bikes use open-center, cleated footpegs which are far superior in the mud.

BRAKING: We were pleasantly surprised to find that not one of our 125s had

touchy, over-sensitive brakes.

The Husky has a pair of the nicest, mostpowerful, yet most-controllable brakes we've ever tried. We could lock up the front wheel on pavement at 60 mph if we so desired, yet we never locked it accidentally in the dirt. There was so much progression in the brake and so much feel in the lever that we could easily meter out exactly the amount of stopping power we wanted. The Husky's rear brake was also powerful but perfectly progressive.

The brakes on the three Japanese bikes and the Montesa were all in the same neighborhood, but the Yamaha's and Suzuki's seemed better because their suspension systems kept the wheels on the

ground more effectively. Those brakes were almost as good as the Husky's and powerful enough with sufficient feel to usually prevent accidental lock-ups.

The KTM's rear brake is another well-designed stopping device, but the front brake is on the mushy side. And both of the Bultaco's brakes require the greatest lever and pedal pressure to stop or slow the bike.

The Husqvarna has a full-floating rear brake that works well during hard braking on rough ground, but it, along with the rear brakes on all the other bikes, will still get the rear wheel to hop and chatter noisily during certain types of stopping.

The Husqvarna and KTM are fitted with Magura levers which use plastic thumb wheels to lock the cable adjusters in place. Both bikes had reoccurring cases of excess front brake and clutch cable slack caused by the inability of these lock nuts to be tightened sufficiently without flexing, ultimately letting the cable adjuster back off. It was sometimes impossible to get the Husky through a moto-long ride without losing all the front brake. Steel thumb wheels from earlier Magura levers would cure the problem completely.

RELIABILITY AND SERVICEABIL-ITY: Wow! We could write a book on this subject alone. Our bikes suffered two major failures, an incredible number of lessdisastrous problems and aggravated us with some needless maintenance hassles.

The most monumental of our DNFs occurred when the Suzuki quickly and permanently lunched its connecting rod big-end bearing. In all fairness two factors must be taken into consideration here: (1) This was the second full-scale test of that particular RM; (2) One of our testers had unintentionally run the gas tank dry just before the incident, which seemed to be the major contributing factor to the failure.

Still, the bike had been checked over by Suzuki's set-up people before our test and given their stamp of approval; and we've run lots of motocrossers out of gas before without wasting the big end. We don't have any other evidence that big-end failures are a problem with the RM125B, so don't shy away from one because of our problems. But don't run it out of gas, either.

The second biggie was also a blow-up, this time with the Bultaco. On the last day of our test the left-side wrist pin clip parted company with the piston and did a thorough job of chewing up all the top-end components. Repairs would have required a piston, rings, con rod and bearing, a bore job, a new head and complete disassembly and cleaning of the engine.

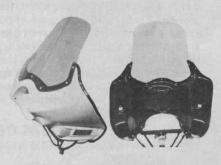
The Suzuki was otherwise reliable before and after it "went nova." The Honda and the Husky shared a similar failure: a profuse leakage of oil past both fork seals. That makes us six-for-six with Husky fork seals in the last year. We tested two Husqvarnas last August, and all four of their fork seals blew out, too.

Here's some good news... and some bad news from Honda.

First the bad news—due to the high demand for bikes the supply of 1977 models at your Honda dealership may be limited. Now for the good news—Honda is working to get some '78 models to dealers early. So be on the lookout, some '78 models will be available soon.

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The Bultaco suffered a few other ailments, like continued hard starting, a seepy crack in the fiberglass tank, several cases of a stuck float on the Lectron carb, a lost engine center case screw and four spoke nipples on the front wheel which had their threads ripped out while we were riding the bike. And the front fork continually spewed oil out of the breather holes in the stanchion nuts.

The Yamaha's kickstart lever DNFed on the second day of riding when the stop that limits how for the kick pedal swings outward went away and let the pedal turn around backward. The YZ also lost the rubber air valve protection cap on the top of the right fork leg, one spoke nipple in the rear wheel backed itself inside the rim and the middle rear fender bolt fell out.

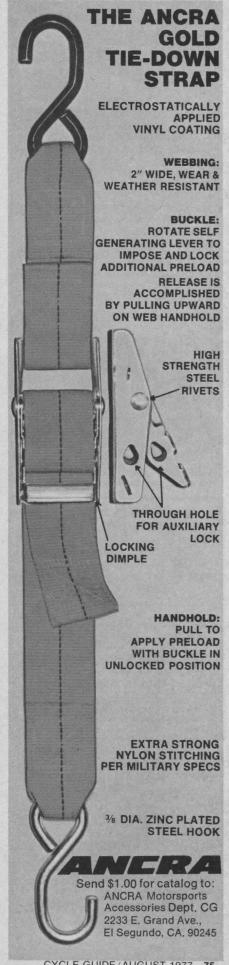
The KTM's gas tank slipped out from under its mounting clip behind the steering head and started flopping around. The gas tank was none the worse for wear but when we removed the seat to fix the tank. we discovered another problem. The rear seat-mounting brackets did not line up with the mounts on the frame. Someone had forced the bolt, and in so doing, stripped the threads on the bolt and in the frame. A smaller bolt with a nut on the inside solved the problem.

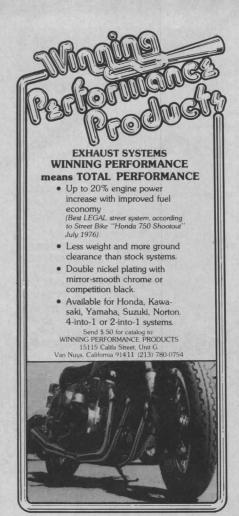
One of the front-wheel spoke nipples on the KTM also broke, the clutch cable end pulled off the first time we squeezed the lever and our long-legged riders often turned the fuel petcocks off accidentally with their knees. The location and design of the petcocks makes them much too vulnerable.

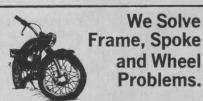
Our Montesa arrived with the head-toframe brace and chain guide side plates already broken. Then the muffler broke off, probably because someone had welded a non-stock Bassani spark arrestor on the very end of the muffler and the bracket was not strong enough to handle the extra load.

After doing routine maintenance on the bikes we decided that both the KTM and Suzuki airboxes had some design problems. The Suzuki's air filter element is larger than the hole in the top of the airbox through which it must be removed; so when you pull the filthy element up through that opening it scrapes off a lot of the crud which has accumulated on the foam, and the dirt can fall down into the hose leading to the carburetor.

The KTM's system is equally asinine. It uses a large-diameter, round foam element (made by Husqvarna and identical to the one found on all Huskys) that must be jammed through a narrow, oddly-shaped opening much smaller than the filter itself to be installed. If you use grease to seal the edges of the element, stuffing it through that hole will scrape about half of the grease away and leave it hanging in the opening. Worse yet, you can't see or feel your way around the entire perimeter of the element once it's in there, so you have no idea whether or not it is seated properly. We know-while cleaning the element we







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The KTM also has Allen-head fork pinch bolts whose Allen sockets are too shallow for secure engagement with a wrench; the right chain adjuster lock nut is located inconveniently behind the rear brake arm where it's almost impossible to get at; and a tensioner-less chain guide system lets the drive chain droop and flop around when the suspension is at full extension.

The Bultaco's rear wheel refused to line up with the front wheel until we moved the left-side cam-type chain adjuster four notches ahead of the right one. The Montesa's adjusters were almost as bad—two notches off to the right—and its detented increments were so large we had to wait until the chain was almost jumping over the sprocket teeth before adjusting it.

The Husky was the best starter of the seven, requiring just one kick every time, even when stone-cold. The KTM was the second easiest and most predictable to fire up, and—except for the Yamaha and Bultaco—all the others were two-to-three-kick starters. The YZ took an occasional fit and needed about 10 or 15 kicks, and the Bultaco never started on less than five or six. The Pursang frequently called for over 20 kicks and sometimes had to be pushed. The Bul's problem seemed to be in the Lectron carb. We tried adjusting the existing metering needle to no avail, but we had no other needles to experiment with.

CONCLUSION: Now that all the evidence has been presented, the inevitable question must be asked: Which of these seven motorcycles is the best?

Well, that all depends. It depends upon the order of your priorities, for one thing. It can also depend upon where you live, what kind of racetracks you race on, where you can get the best deal, who is the dealer you would most like to do business with and how much money you have to spend. If any or all of those things are factors in your motocross life, then there are three winners, three bikes capable of getting to the checkered flag first, almost anywhere, almost anytime. They are the Yamaha, mainly because of its nimble handling and unbelievably good steering; the Suzuki, mainly because of its awesome horsepower; and the Husqvarna, mainly because of its overall competence and versatility in every aspect of motocross.

If none of those things mean anything to you; if initial cost is not a factor; if the high cost of parts and maintenance is immaterial; if a scarcity of dealerships doesn't turn you off; if having the motorcycle that will give you the absolute best chance of winning on motocross tracks of all sizes and shapes and textures is what matters most to you; then the Husqvarna is the bike to go after.

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The KTM is also an excellent 125, but overall, it offers few advantages over and above the others. For the most part, it is either equal to or slightly behind the Husky, Suzuki and Yamaha. And then there's the cost-\$1785-which is a huge amount of cash to hand over for a 125, especially one that has so many little details needing attention. It is competitive on many types of racetracks, but so are those other three. We ranked the KTM a close

The Bultaco is puzzling. It seems right on the verge of being very competitive but a few areas still need work-like the suspension, carburetion and power/flywheel balance. It is priced exceptionally low for a European-\$1100-which might motivate some people to buy one and spend a few more bucks to make it right. All things considered, though, we ranked it fifth.

We weren't sure whether the Montesa or the Honda finished last because we didn't know how much of the Montesa's ill behavior was representative of the breed. It doesn't matter, though, because neither one is even close to competitive in its current state, and it would take a pile of money and time to bring them up to the level of those first three, if indeed you could. A point in the Honda's favor, though: It is a wholly-engineered, relatively well-thought-out motorcycle, as opposed to the sort of mix-and-match flavor of the Montesa. The Honda's problem is that it was engineered and thought out over three years ago and very little new thinking has gone into it since. So last or next-to-last, the Honda is out of the hunt.

Fame and success are especially fleeting in motocross. For example, had we done a 125 shootout in 1974, the Honda CR 125 of that model year probably would have won. The Yamaha YZ125X won our first 125 comparison in '75 and the Suzuki RM125A topped the second annual 125 shootout in 1976. And now the Husky 125 CR has won our third annual 125 compari-

We must confess that we aren't particularly enamored of the term "shootout," with its "High Noon" overtones of gunfighters, Main Street showdowns and the like. But one finds it hard to avoid drawing such an analogy when sizing up today's motocross machinery. Every couple of months, a new brand usually earns King of the Hill honors, and a constant stream of newcomers drifts along to challenge Number One. Every time a new model shows up, the King must seriously wonder whether it's all over, whether the new kid will gun him down and earn the distinction of being the best around.

As melodramatic as it may sound, the new Husky is currently the fastest 125 gun on Main Street. But Husqvarna had better watch out, because newer, stronger 125s will surely be along at any time, and they're going to be gunning for the 125 Husky.

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