



HONDA'S NEW RACER— THE CR250

Most readers by now should be pretty well dialed in on the CR250M Elsinore, at least as far as its reception by the press is concerned. We were among the publication type people banging on the door to get our eager hands on this supposedly revolutionary new Honda, taking a "numbered ticket" and waiting for our number to be called, so to speak. By the time our turn came around we had heard many glowing reports from other scribes in the publishing business about what a fantastic and utterly perfect machine the 250 was. Far be it for us to disagree with such uniformly emphatic and positive statements without having first hand information ourselves. Readers of this test report are no doubt in the same position we found ourselves while waiting for the bike. Everybody has been raving about it—is it really that good? Perhaps some readers are still a bit skeptical just as we were before we threw a leg over it. After all, every now and then, the press has gone a bit overboard. We were eager to ride it but reluctant to get overly pumped up about the Elsinore.

Honda's two-stroke racer didn't come about overnight. We estimate that they have been in the design and development stages for a minimum of five years. And Honda is not the stranger to the intrigues of two-stroke technology that many may suspect. They used to manufacture them in the good old days and their public disavowal of the "ring-dings" didn't stop their technological research into this type of powerplant. Since Honda's entry into the U.S. market in 1959 all of the employees from the janitor on up to top level management have talked nothing but good old reliable four-stroke power. But we feel certain that all the while upper management realized that one fine day they would have to do away with the heavier and less powerful four-stroke for competitive off-road use.

For some time now Honda has had approximately fifty percent of the motorcycle sales in this country without really getting involved in the off-road competition market. It now appears they fully grasped that fine old concept of nonchalantly laying back. The other manufacturers forged (or stumbled) ahead and opened up the market for off-road racing machinery. Honda just kept their cards in close to the vest and watched the other companies make their mistakes, while keeping a close eye on market trends.

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Meanwhile back in Japan they were busy testing and developing a production unit that would hopefully be more than just competitive with the best motocrossers in the world, including works units. Obviously they selected 1973 to spring their two-stroke bombshell.

Honda has succeeded in building a machine that should establish a new standard of quality and performance for the rest of the industry to set its sights on. Honda of course will reap the rewards of their research and development efforts over the last few years with what should be an easy sell-out of the 6,000 unit slotted for production this year. Those six thousand purchasers will receive more than they are paying for. At \$1,145 the Elsinore is less expensive than any popular European 250. Even those riders who don't purchase a CR250M will probably benefit in the long run.

Whatever machine they choose in the future will most likely reflect manufacturer efforts to match or surpass the standard set by the Elsinore.

When first mounting the CR250 the rider should be quite aware of his proposed plan of attack. He should know where he wants to go and how he wants to get there. The first impression is that of exceptional torque for a racing machine (more about this impression of torque later) and the acceleration is nothing short of fantastic. In fact this lightweight will accelerate so much faster than anything else that we have ridden (in the 250 class) that it is quite easy to find yourself into the next corner way over your head. Honda told us that only one rider-bike combination (a 400 Maico) had been able to beat them during impromptu drag racing sessions. They also told us about giving other 250's a head start while they kick started and still being able to overtake them easily, popping wheelies as they did. While factory people do tend to get a bit over exuberant at times we think they may not have been exaggerating. The bike is a veritable rocket.

The really neat feature about the Elsinore is that it is often possible to use at least one higher gear than anticipated, based on experience with other machines. Here again the initial impression is amazing torque but we will go into what we feel the real explanation is later. Spinning the wheel and spending a lot of time sideways in first or second loses time. The Elsinore's ability to be a cog higher permits the powerplant to slingshot bike and rider out of the corner at a fantastic rate. This quickness can't be put aside by claiming low gearing either. We clocked maximum speed in fifth gear at 66 mph.

There seems to be power in reserve in most situations. We took the bike out of the desert and gave it a good varied workout. Even if it was a gear too high for a particular situation it would still keep plugging until it quickly got into its "jet takeoff" power range. It wouldn't stall and we didn't foul a plug while subjecting it to deliberate lugging situations. The maximum rpm figure is 7500 and various reports on horsepower have pegged it at just under thirty at the wheel.

We found the gearbox exhibited the usual Honda smoothness. When we had a problem with the locking tab in the clutch (explained later) on the motocross course our staffers elected to keep on riding even though the

clutch was inoperative. The bike was ridden for over an hour non-stop and shifting was as smooth without the clutch as with it. Just a touch on the shift lever would effect a gear change. Neutral was difficult to find at stops until we became accustomed to the light touch of the gearbox. Only a very light tap on the lever is necessary. The easy shifting is an asset when negotiating rough terrain. It was necessary to move the left foot back a bit on the footpeg to prevent the toe from tapping the lever down a notch. Other than our initial problem with the clutch its performance was perfect during the entire test. With as much horsepower as a unit like the CR puts out, a clutch either works or it doesn't. Honda's does.

We weren't really skeptical about Honda's ability to produce a high horsepower engine but we were concerned about the kind of frame that they would design to transmit the horsepower to the ground. There are several high powered off-road racers on the market but some have exhibited definite problems getting power to the ground. The owners' manuals are

not very explicit about how the rider should hang onto the bike once that power does get a bite. Honda's entry definitely merges manageability with brute power. The frame is strong enough, as well as being properly designed, to tame all those surging ponies. It has been suggested that some manufacturers employ "water pipe" to build frame. Honda has used only the best strong and lightweight chrome moly tubing. We believe this is a first for a production bike from a major modern manufacturer. All the wiggles and shakes seem to have been removed.

Another important consideration related to handling is the choice of suspension units. The Elsinore didn't once swap ends when riding fast over the whoop-de-dooos. Only rider error could induce any bucking which was quickly corrected by the suspension units. It is obvious that the front forks and rear shocks are balanced to each other. The front forks have 7.1 inches of travel and the shocks have 4.1 inches. Damping on both these units is above average. The rear shocks are five-way adjustable. Although our

testers' weights vary by fifty pounds all preferred the soft setting through the bumpy terrain. The stiffer settings would be useful for a course with series of jarring jumps. There are two springs on each shock. In effect these two act as one progressively wound spring.

The triple clamp and stem that hold the front forks are built to allow the fork tubes to be either pulled up or pushed down. This will either increase or decrease the rake and trail. There are five grooves cut in both tubes near the top. These are reference points that allow the rider to adjust both left and right fork tubes to each other at the same height without guesswork. By pulling the fork tubes up the machine is lowered and the trail is shortened. Pushing the fork tubes down raises the front end and lengthens the trail. A rider that doesn't push the CR to its maximum may appreciate less trail as the machine handles quicker and will turn a corner with less effort. Faster riders (particularly desert) will probably prefer the longer trail setting. This setting has more effect on retarding any potential inclination toward swapping ends when running really hard over the ripples. Beyond a doubt the steering geometry and components used to achieve it are far superior to any out-of-the-box motocross or off-road machines on the market today from Japan. And the handling matches or exceeds the popular European competition units.

What is interesting about the impressive handling of the Elsinore is the approach Honda has used to effect the results. They seem to have ignored or gone against the "book" here and there in building their chassis. Initially it was a bit of a mystery why a machine with such a long wheelbase (57½ inches) and 5⅞ inches of trail steered so amazingly well. We noted that other publications seemed equally perplexed. A glance at the chassis figures might lead one to assume that they were looking at a real turkey. But the reverse is true of the Elsinore. It is entirely predictable, easy to handle and responsive. We decided to investigate this enigma.

Honda's chassis dimensions show some interesting thinking. We have long felt that Maico definitely had one of the better handling dirt bikes so we thought it might be interesting to compare the Honda to a 250 Maico. We measured the Honda and Maico chassis to come up with some comparative information. Take, for example, swinging arm length. The Maico has an arm length of 20¼ inches; the Honda is only 18½. We found that the engine sits farther back in the Honda. This engine location plus its power explains why it's always easy to loft the front end of the Honda when traversing cobby surfaces.



The Honda wheelbase measures 57½ inches, while the Maico is 55. So although the Maico is shorter the engine sits farther toward the front wheel. Another tip off that the Honda's weight bias is directed toward the rear is the distance from the footpegs to the rear axle. The Honda measures 22½ inches while the Maico is 24. This moves the rider to the rear a bit more. Consequently the major portion of weight is farther over the rear wheel on this new Japanese motocrosser. We found, after measuring most of the popular motocross bikes sold today, that they are all much closer to the Maico than the Honda.

Another interesting figure is the distance from the center of the crankshaft to the center of the rear axle. This measurement on the Honda is 29½ inches. The corresponding measurement on the big M is an even 31. However, we found that the center of gravity of the Maico is one inch lower than the Honda. Unlike a number of long wheelbased motocrossers with lots of power (such as the Suzuki 400 MX) this one can be steered (perhaps throttled is a better word) around a

corner without using a lot of muscle. A good deal of the steering can be effected with the throttle rather than physical effort. Because of the obvious rearward weight bias a good portion of the rider's time is spent with the front wheel just skimming or above the surface.

Why does it steer so well? There seems to be a good deal of controversy over this point since the Elsinore seemingly contradicts basic chassis geometry design. At first we were puzzled too, but a subsequent outing with the unit some weeks after our initial encounter substantiated our suspicions. Honda has neither violated nor developed any new basic chassis geometry rules. A long wheelbase, long trail bike will resist turning—unless it is used at speeds with exceptional throttle response and power. At slower speeds behavior will not violate what the engineering books say, unless the throttle immediately dials in instant power so that the bike slides around rather than steers. Honda has done two things to offset the expected. They have developed a truly impressive throttle response for an explosive

engine and they have literally shoved everything to the rear so that the front wheel is exceptionally light and just glides over terrain. We suspect the same movement to the rear on other units with a long wheelbase would produce somewhat similar results, if throttle response was satisfactory.

We are quite convinced that the two major factors contributing to the throttle response are the carburetion and the expansion chamber. The design of the exhaust pipe is an important key to the performance of any two-stroke engine. (The Editor's racing sidecar picked up 15 mph top end with a specially designed pipe.) The carburetion is such that the rider can slow way down and yet when he rolls on the throttle the bike will accelerate smoothly without hesitation until the engine quickly moves up to its jet assisted takeoff power band.

As we hinted earlier we don't really think that the power spread is as wide as Honda claims. As far as racing engines go it is fairly wide, but compared to more normal machinery it isn't anything exceptional.

We feel that several factors con-



tribute to this confusion about the power range. Because of the lack of flywheel affect the revs do rise very quickly up to the power range. Also the close ratio gear box is greatly responsible. Very few revs are lost when shifting to a higher gear. This was really demonstrated to us while blasting through a sand wash. We were in third gear and when he shifted up to fourth we expected that usual bogging down experienced when shifting in deep sand. Not so. The revs came up so quickly we weren't really prepared. This type of performance in sand is indeed impressive.

We do agree that the Elsinore can be ridden a gear higher than many other bikes in the same situation, just as Honda claims. Here again we feel that the excellent carburetion is responsible, rather than a "torquey" engine. The fuel feeding is so clean and the revs rise so quickly that the engine gets up on the pipe in an amazingly short period of time.

An inspection of the innards of the

powerplant reveals that the power generated is the result of diligent research and development over what must have been a significant period of time. We checked port timing with a degree wheel as well. We discovered that Honda has adopted many of the same design features already seen in the high output two-stroke engines. At the same time they have ignored most of the "trick" things. Instead they stayed with the basic design principles which over the years have produced performance with high reliability. We suspect that many first time investigators of the powerplant will be quite surprised. Honda seems to have ignored some of the heretofore unquestioned requisites for developing maximum horsepower. We will touch on that as we delve into the engine.

Removal of the side covers reveals nothing extraordinary. Taking off the left hand cover we find a conventional magneto. No flywheel is in evidence. This is certainly one contributing rea-

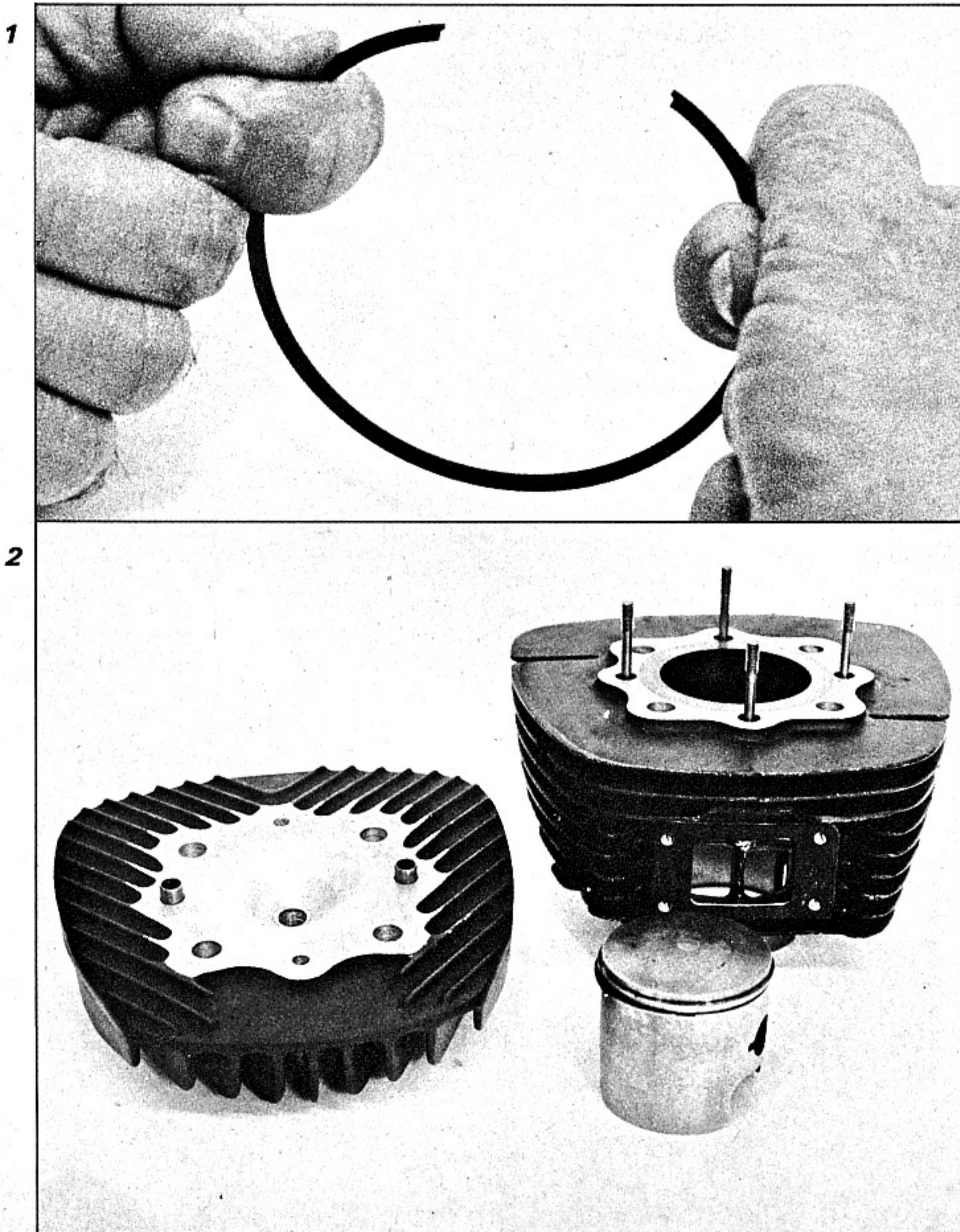
son why the CR250 picks up revs as quickly as it does. The ignition system does its job. Power was always there through the entire range of any gear. We found throttle response at higher rpm very crisp and precise.

Honda has retained the contact breaker ignition system because they feel it is simpler than a CDI ignition. There are arguments both for and against both systems, but with the contact breaker setup the average rider at least has a better idea concerning where his spark is originating and what to do should he get no spark. The Santa Clarita River was dry during our visit to Indian Dunes for the motocross portion of our testing and we didn't choose to turn a hose on the Elsinore. Honda is however quite emphatic that their ignition system is waterproof. If it matches that on their XL250 it should be totally submersible, not just water resistant.

The right side cover houses a very conventional primary drive system terminating in a wet clutch of equally orthodox design. The only thing about the clutch assembly that was even the least bit unusual was the bonded friction plates. The flutes between each gripping patch were cut away at a tangent. Normally they are cut as spokes in a wheel. We would suspect this greatly assists in getting rid of oil and impurities between the plates. Also, due to the tangent design, each trough or cutaway is longer and covers more area on a given clutch plate.

The only problem we encountered with our test unit involved the clutch and the incident served to prove how serious Honda is about the Elsinore. After approximately one hour of riding time we picked up a loud rumble in the engine and the clutch ceased to function at all. Thanks to George Etheridge and Gary (believe it or not) Ryder, who were there to aid and abet during our initial encounter with the 250, this problem was solved in a matter of minutes. The locking tab that supposedly held the clutch hub nut wasn't doing its job. We talked to George about ten days after returning the bike and he indicated that America Honda had immediately wired Japan informing them of the problem and that two machines they had just received were equipped with a different locking tab. He also told us that all future units would incorporate this improvement.

We found a very conventional crankshaft, but bearings are very large. What seems unusual about the crankshaft is the seeming indifference of the factory to reduce crankcase volume to a minimum. Please note that we used the word seeming. The designers drilled big holes in the flywheels and trimmed excess material to give them the balance factor they were looking for.



The net result is an open area in the lower end of the Honda that is probably larger than most two-strokes we have investigated.

This of course is a complete contradiction of what has been accepted as the norm for high output engines. People have automatically assumed it was necessary to keep crankcase volume to a minimum. (Several years ago we conducted some tests using a

single cylinder Yamaha engine. In these tests we were trying to determine just how important crankcase volume really was. By carefully removing metal we increased crankcase volume by almost 15%. The dyno showed no measurable loss or gain. It seems apparent that Honda discovered the same thing during their development and we're sure that their tests were more extensive than ours.)

Just to the rear of the crankshaft, in its own compartment, is an equally conventional-looking five-speed close ratio gearbox. What is out of the ordinary is the degree of fit and finish on the shifting mechanism itself. Dry shifting this mechanism by hand lets the investigator feel that the entire operation is running on ball bearings. Tolerances are extremely close, with a minimum of clearance between shifter fork pins and the drum. Obviously the designers have done all of the right things. The gear box can be shifted quickly, smoothly and effortlessly, with or without the clutch.

Directly above the crank cases sits the large cylinder casting which houses a steel liner. It was at this point that we began to get the message about how Honda achieved such an impressive powerplant. An examination of the cylinder itself reveals several interesting design concepts. To some performance enthusiasts the shape of the exhaust port may seem unconventional. A bit of digging will prove that the go-cart boys have been employing this type of exhaust design for a goodly number of years. By putting a widened eyebrow at the top of the exhaust port, as well as squaring off the top of the port itself, the exhaust gases can find their way out much faster. Honda is the first motorcycle manufacturer to utilize this design approach.

At first glance one would assume that the bridge between the exhaust port was designed to keep the piston rings from dropping in and possibly catching and breaking on the rather flat top portion of the exhaust port.

1
The piston rings are both strong and flexible. The ability to distort this much without breaking is a reliability plus factor.

2
The air flow underneath the cylinder head is directed in toward the hot spots and helps keep the head barrel cool. There are eight hold down points for the head cylinder. Note the two dowels to locate the two components.

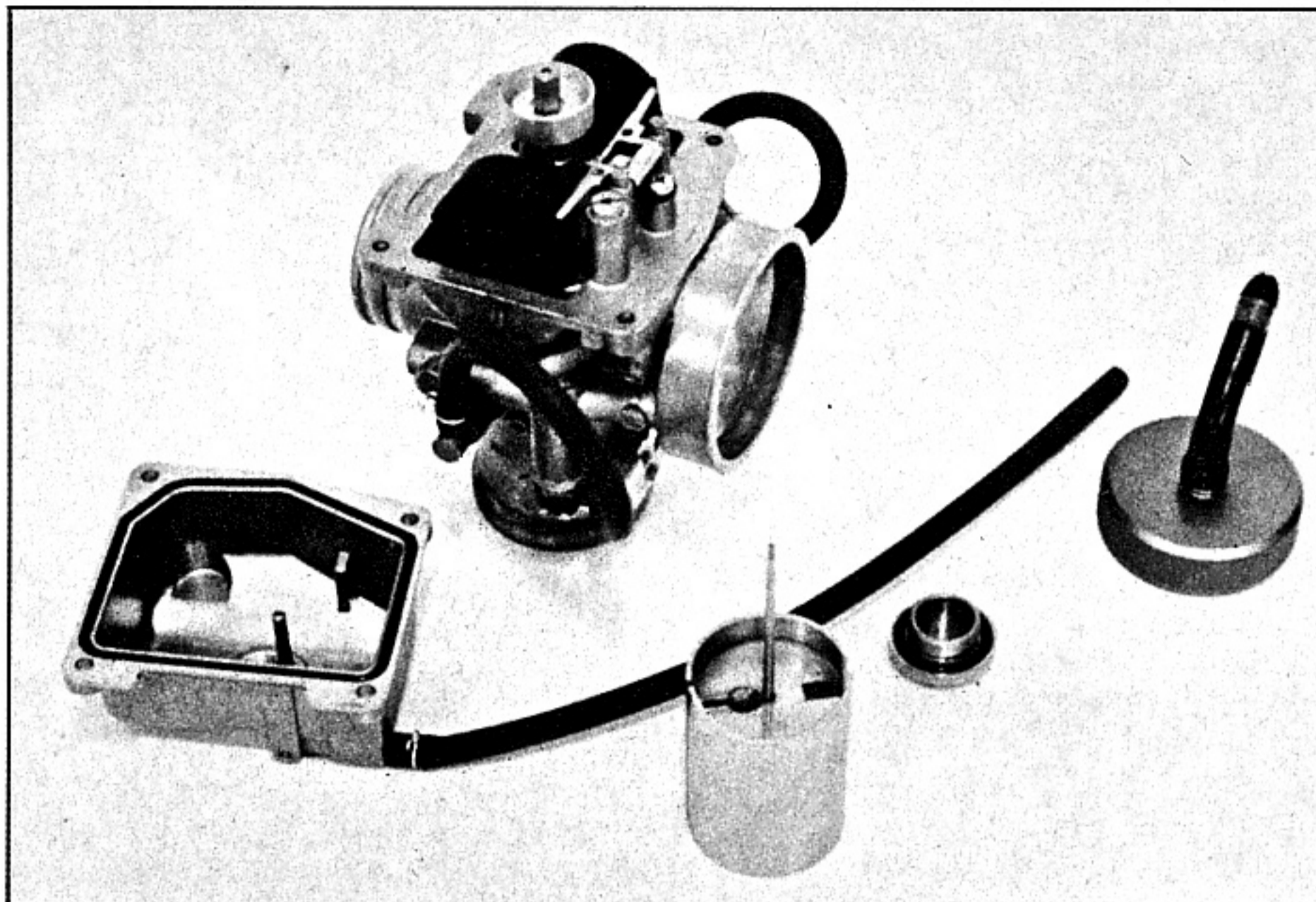


the bridge itself is relieved. The rings actually only come in contact with the very top of the bridge. We were somewhat puzzled why Honda chose to leave the complete bridge in instead of removing the lower portion which does not touch the piston rings. We can certainly understand the designer's concern at keeping the piston rings from falling in the exhaust post and thereby endangering rings and liner life.

Aside from their rather large volume the transfer ports themselves are shaped quite nicely. They are radiused neatly to provide as smooth a path as possible, and help direct the incoming charge in the proper direction prior to the mixtures entry into the cylinder. Although the transfer itself is in a normal position Honda has chosen to use rather large boost ports cut well toward (almost touching) the very rear of the cylinder. The boost ports are definitely bigger and more differently shaped and directed than those of any other similar machine. Both boost ports are quite close to one another in the rear of the cylinder directly above the intake port.

The intake port itself has caused a great deal of controversy. We are not sure just why Honda elected to go with two different size intake ports within the same system. The left port is 5mm taller than the right. A number of opinions have been ventured. In talking to several of the Honda folks who have been involved in the R&D effort we noticed that they can't seem to agree on exactly why the port is shaped as it is. Whatever the theory is, we are sure that Honda has put in a lot of development work. This port arrangement has already shown up in some of their automotive engines. This is why we are quite sure the size, shape and the area of both ports bear a meaningful if clouded relationship to each other. Perhaps only a computer somewhere in Japan has the complete answer.

Honda went all out and developed a brand new cast aluminum carburetor works. A good measure of the throttle response, power range and maximum muscle produced by the power plant can be traced to this new unit. The Keihin carburetor has a number of interesting features. It has not only a replaceable idle and main jet, but also a replaceable air correction jet. The main jet is located in a deep pocket in the center of the carburetor. This pocket acts as a baffle to prevent the main jet from receiving a bump induced surge of gas followed by a momentary engine hesitation because of an over rich condition. The carburetor has a large float bowl that will hold plenty of fuel (racing two-strokes are very thirsty). A neoprene ring is used to seal the bowl against the bot-



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3 The new magic carburetor has some interesting features. Among them is a series of jets (unlike other carburetors) to handle minute carburetion adjustments. It really pays off.

4 The standard piston has a heavily etched surface along with a high silicone content. The etching serves as oil retention pockets for better lubrication.

5 You'll notice Honda has not made any effort to plug the holes in the flywheels nor minimize crankcase area. Also check the main bearing.

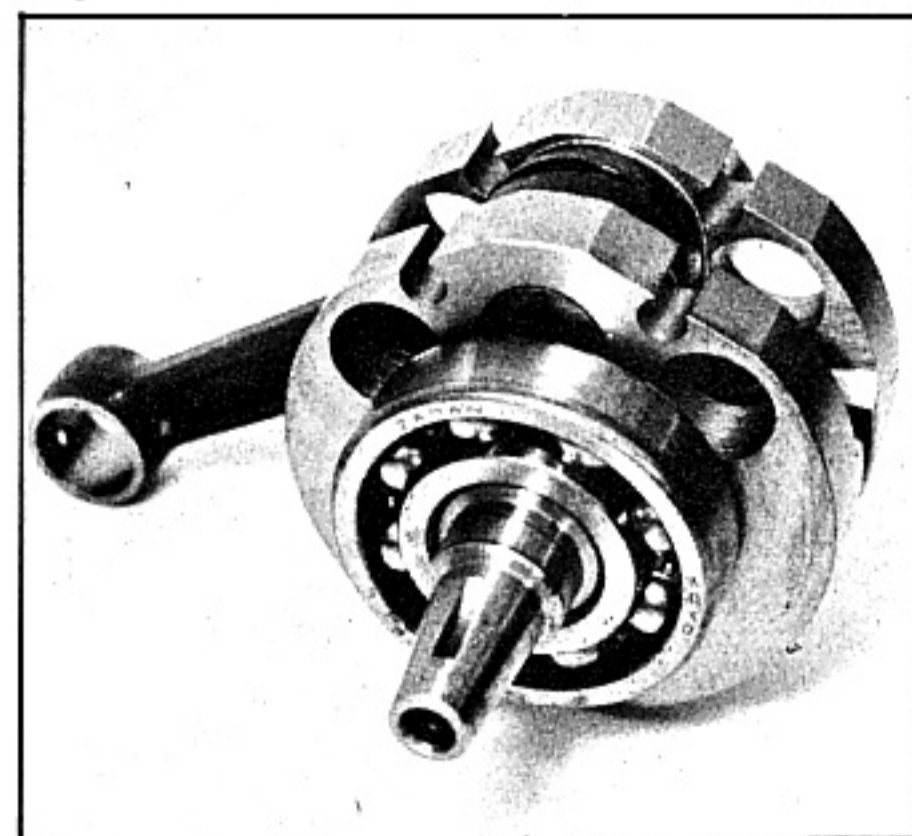


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tom of the carburetor body rather than the more conventional fiber gasket. The floats are made from a foamed plastic. The slide itself is chrome plated brass, which some people may question as being too heavy, but the chrome plating wears well and the weight of the brass helps return the slide to the closed position. Venturi diameter is 34mm.

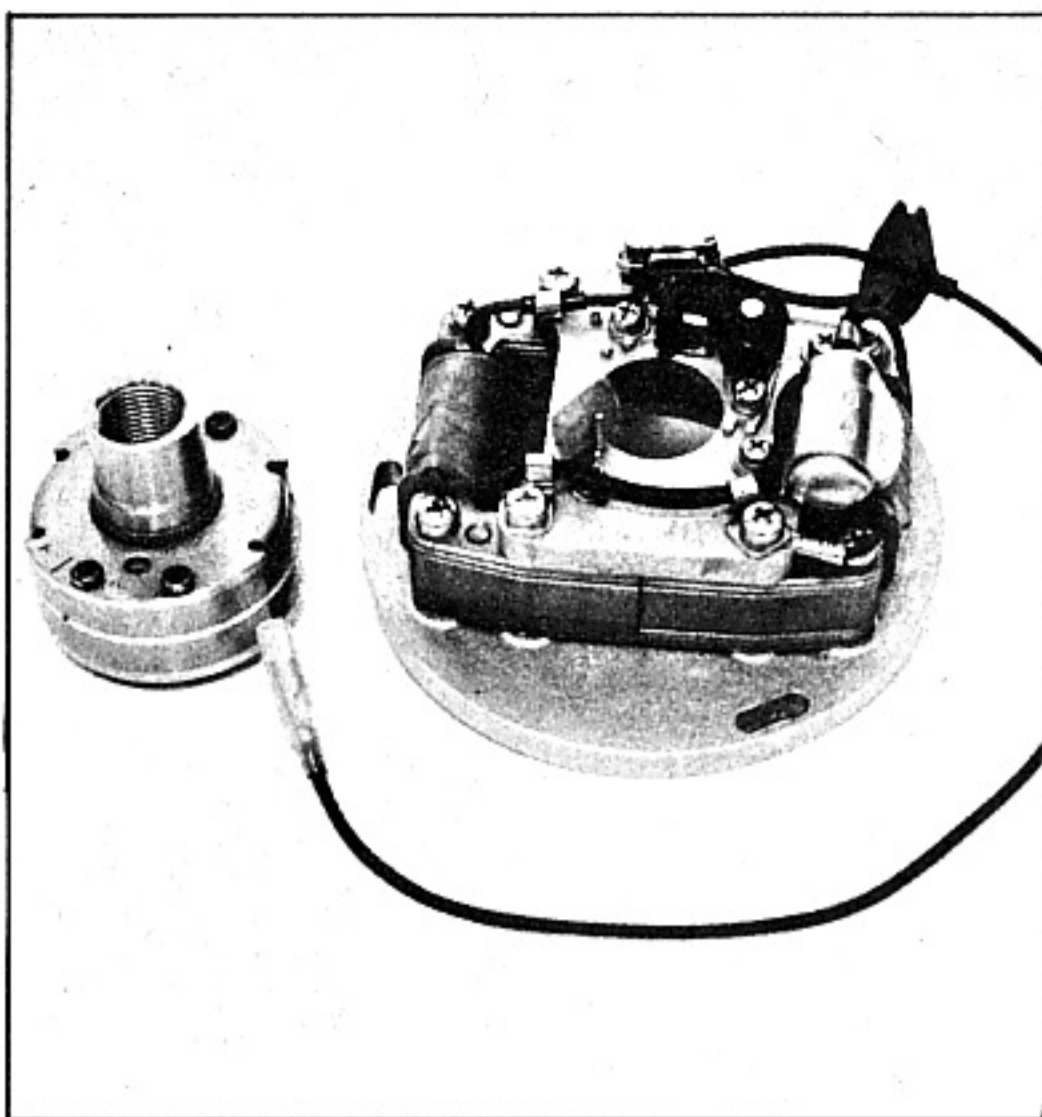
Sitting on top of the cylinder we find a generous head casting of rather orthodox design. The only thing out of the ordinary here are the cooling fins located underneath the cylinder head. These direct air to those areas that most need it. There is more than sufficient area on top of the head to cool the engine even during summertime desert outings.

The combustion chamber itself is also rather ordinary looking. However, instead of using just four big cap screws or bolts to hold the head in place Honda has incorporated four additional small studs as well. This certainly helps to minimize warpage and prevent leakage under particular-

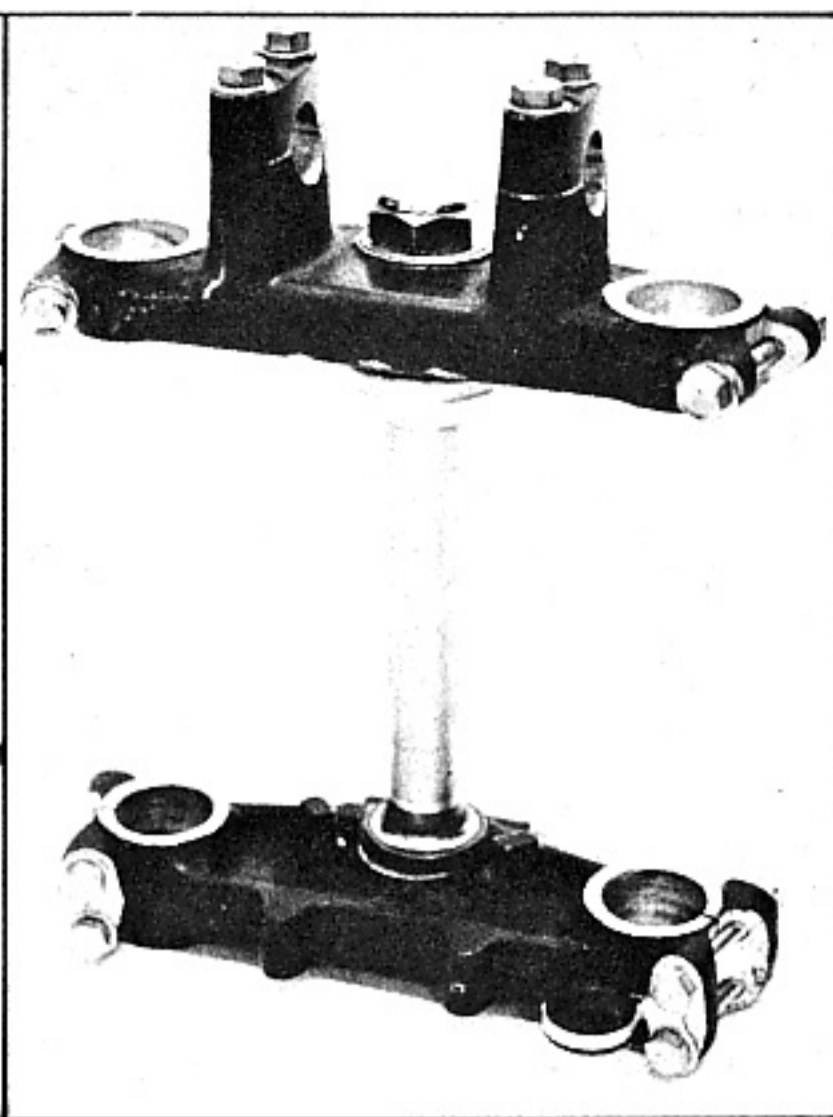


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ly difficult circumstances. A rather thorough examination of the piston reveals that the surface which rides on the cylinder walls has been heavily etched and obviously has a high silicone content. Other than that it looks like any other conventional two ring two-stroke piston. It's fairly light in



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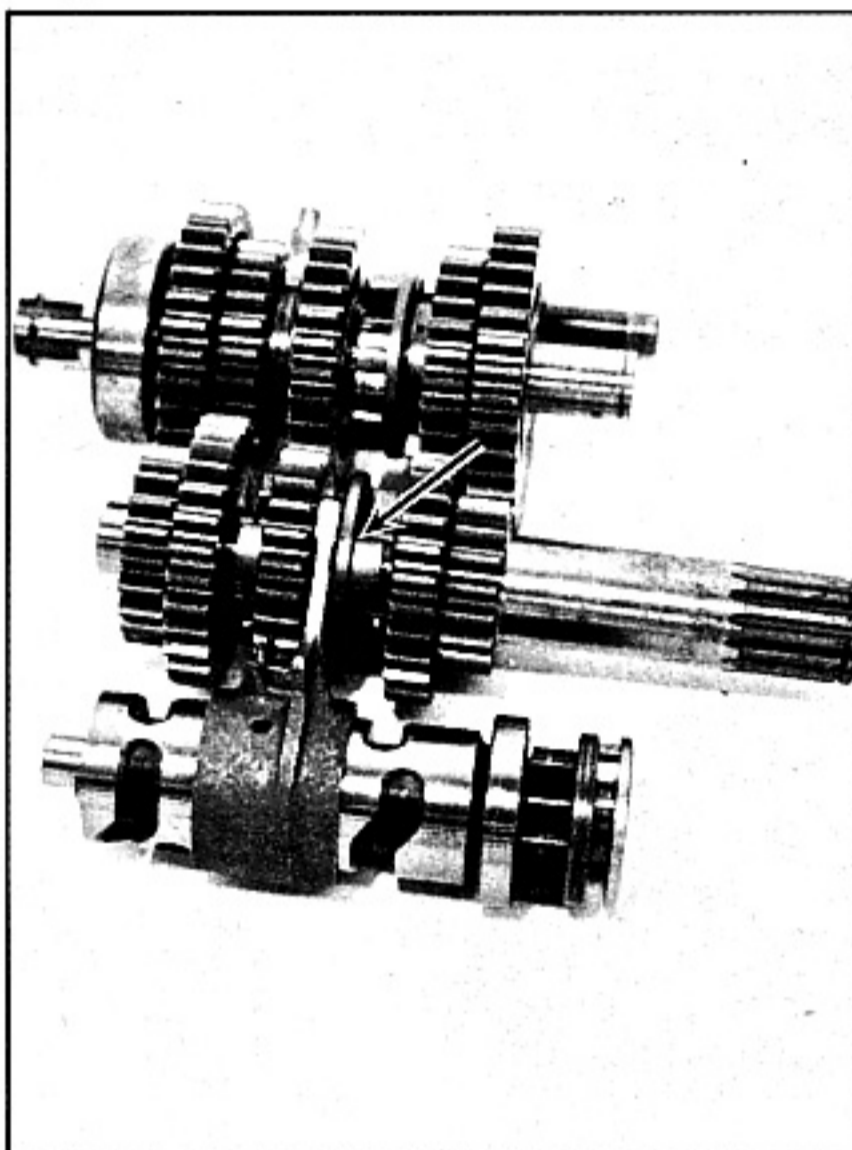
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6
To supply the sparks the new CR250 utilizes a fairly conventional single cylinder magneto. It does the job.

7
The all alloy triple clamp assembly is light but husky. Notice the double pinch bolts in the bottom tree. This is a good idea.

8
The standard five-speed close ratio gearbox is strong and smooth. The dogs are undercut (arrow) to provide more positive engagement and prevent slipping out of gear.

9
We found the seven friction plate clutch assembly more than adequate for the intended usage. The flutes in the friction plate are cut at a tangent rather than perpendicular.



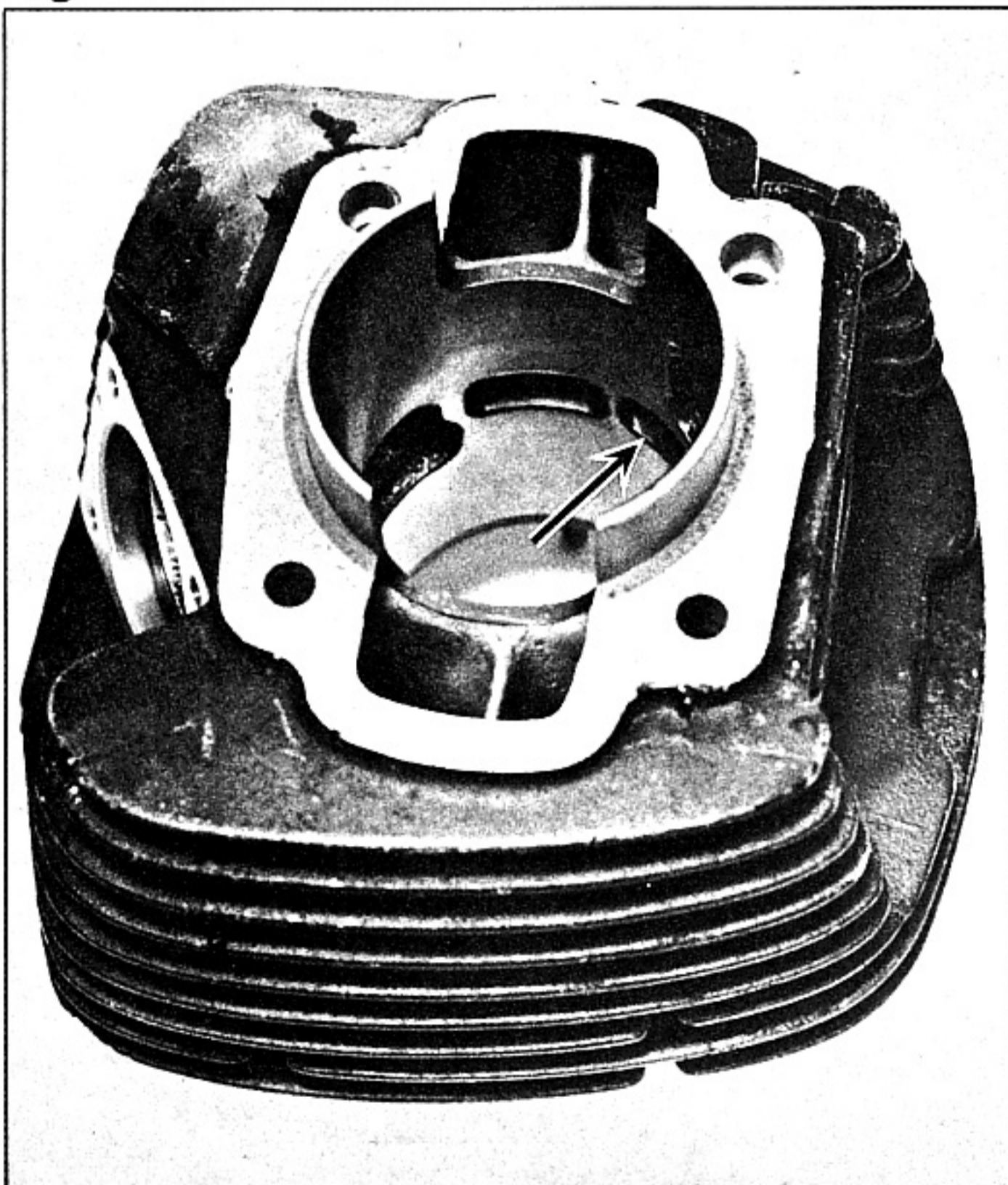
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The rather large transfer ports are shaped to provide a smooth and easy path for the incoming charges. The boost ports (arrow) wrap around well toward the rear of the cylinder.

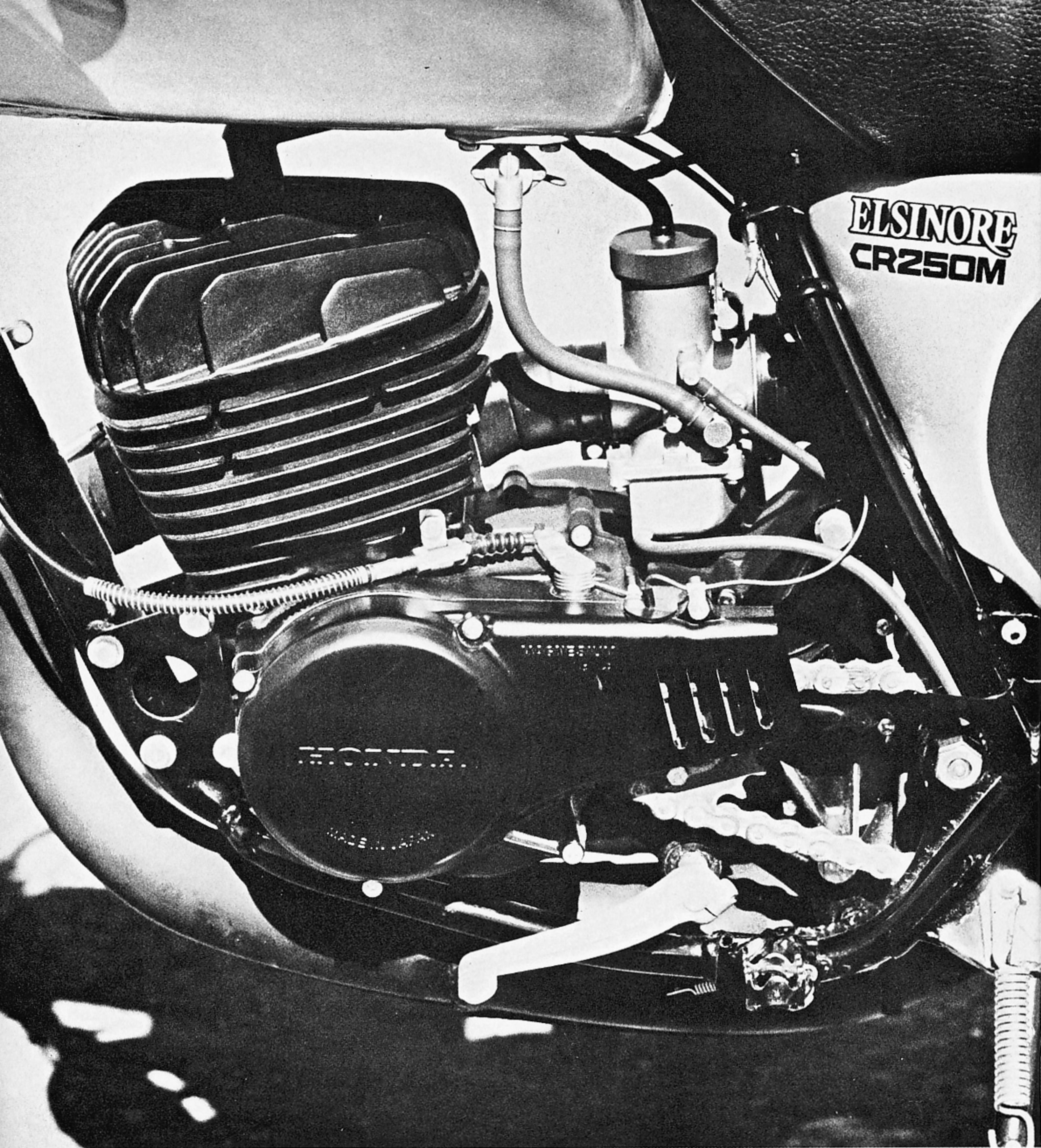
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Although the go-cart boys have been doing it for years Honda is the first motorcycle manufacturer to put eyebrows in the exhaust port. This certainly helps the blow down and gets the exhaust gases out a lot faster.



10



11



weight and the etching provides thousands of tiny pockets for oil retention. This is particularly important on the skirt of a two-cycle piston, which in most cases is fairly short. Prolonged rough usage has proved that this particular type of piston design certainly has merit.

The two narrow chrome plated rings are quite malleable and resist break-

age so common to over revving the engine. When originally assembled both rings have a very thin coating of teflon. This is to prevent any scoring of the cylinder in the short period of time required for engine break-in. The teflon coating wears off the rings and is dispatched out the exhaust port.

Getting into the expansion chamber we find nothing unusual or excit-

ing, but performance indicates plenty of attention was devoted to it.

Much the same can be said about the actual port timing figures themselves. The figures would disappoint many performance enthusiasts. Exhaust opens 89 degrees after top dead center and 29 degrees later the transfers and boost ports open (118 degrees after top dead center). The in-

take itself (both large and small ports) cracks open at 83 degrees before top dead center. The rather interesting thing here is that these are virtually the same port timing specifications that Suzuki used several years ago with their road racing effort. So it certainly seems that Honda has been doing their homework.

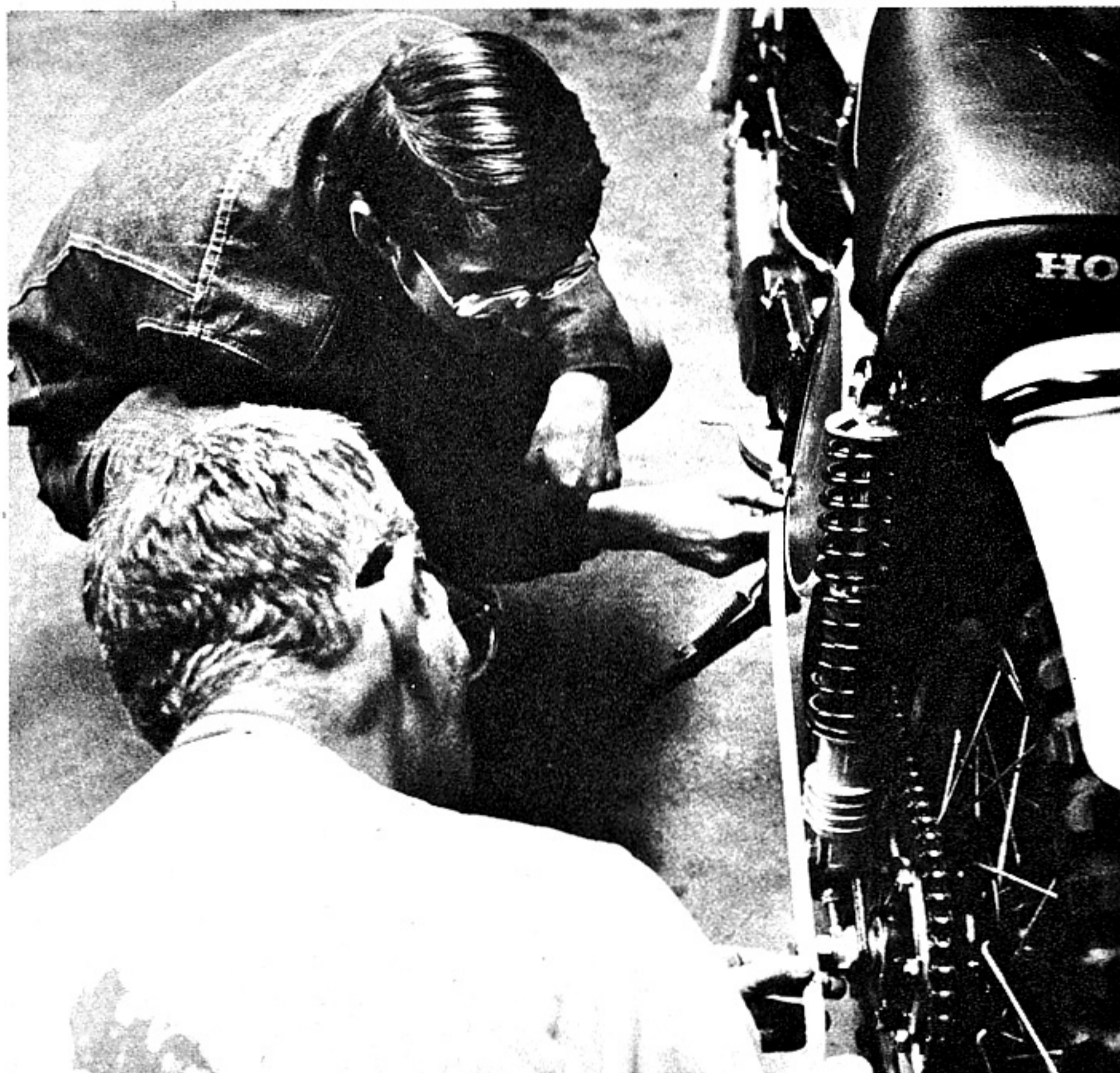
The port timing specifications, the two intake passages the expansion chamber and that outstanding new carburetor each contribute in their own way. We are quite convinced that a good measure (if not all) of the success of this new 250 racer is a result of all of the pieces working well together. The same thing can be said of the size and shape of the transfers and intake ports.

Without realizing it the purchaser of a new CR250M will benefit greatly from experience gained by outboard and go-cart racers. Many of the same principles used in some of today's most winning combinations are found in the Honda engine. The rather high compression pressure (as much as some 350's) certainly boosts the low and mid range torque so that it is easier to ride when the going gets rough.

Another outstanding feature of the Elsinore is its braking performance. Honda made sure that they lived up to their well earned reputation regarding braking performance with this one. It is quite easy to get the Elsinore moving faster than is perhaps prudent for the type of terrain in which it is located. A less than expert rider may find himself moving along far faster than he imagined because of the acceleration and the smooth confidence inspiring chassis performance. In speed situations top flight binders such as those found on the CR250 can avert disaster and they certainly are an asset on the race course.

Both front and rear brakes are cable operated. The rear brake is not the floating type preferred by many off-road competitors. However, the cable brake seems no less effective. It stopped well, had good feel and did not cause the rear to hop. Honda told us they tested rear floaters and decided that their cable approach was better. The front brake is more similar to a road brake than those generally encountered on dirt machines. It's a two finger model and too much pressure will instantly cause the front wheel to lock. On the first hard corner with the Elsinore the new rider may find himself ready to release the brakes and pitch it into the corner, except for one small snag. He has stopped short of the corner. It really is possible to delay braking to that proverbial "last second."

Honda makes a claim for their CR-250 that is not commonly heard, or at



least substantiated when claimed. That involves one kick starting. Until we acquired the knack it took us two or three kicks to fire it up. Once we did get the procedure down pat though it really did only take only one kick, even with a cold engine. We found (as had been suggested by Honda) that it was best to prop the bike on the side stand (it is built to take this) and stand on the bike with the left foot on the peg while the right foot delivers one giant kick. The choke was necessary with a cold engine.

Honda seems to have overlooked nothing in their attempt to take command of the 250cc motocross class. Every part of the machine is made from the lightest, strongest and most practical material available. The achievement of their goal of building the lightest production bike in its class was satisfied with the liberal use of aluminum alloy for pieces that would generally be made from heavier (and cheaper) but not necessarily stronger metals. Items such as the triple clamp and crown that hold the front fork tubes as well as the hand and foot levers are made from impact forged aluminum. The material and the process used to shape it give these items both strength and durability while saving considerable weight.

Instead of selecting fiberglass (which can shatter) or steel (which is heavy) they chose to build the slim 1.8 gallon gas tank from aluminum. The gas cap is plastic and is the screw

on type rather than a flip top. A breather hose is fitted to the cap.

We should mention the front and rear brake hubs and rims. Aluminum brake hubs aren't unique. Many manufacturers fit these hubs to their motorcycles but Honda has gone one step further. Honda has machined all the excess material away from the hub. It doesn't appear that this weight saving calls for the sacrifice of any reliability.

All of this weight watching has paid off. Honda accurately claims that the dry weight of the Elsinore is 214 pounds. When we returned our test mount they had just received two units that tipped the scales at 212 pounds. What we have here is a 250 that is lighter than some 125's, and just twenty pounds above the FIM minimum for 1973.

When we first threw a leg over the 250 the seat felt very firm and our position seemed higher than necessary. After a day on the bike the seat padding got softer and we were able to sit in the bike instead of on top of it. The footpegs are serrated and spring loaded. Their positioning, as well as the height and width of the handlebars allowed us to be equally comfortable either standing on the pegs or sitting on the saddle. We were really impressed with how easy it was for the rider to shift from a seated to a standing position without having to push up off the handlebars. This is a real asset for rough riding. The pegs

have been shortened to prevent them from digging into the ground during motocross thrashing or catching underbrush while riding desert or cross country. Although the pegs appear short even the big booters won't have any trouble keeping their feet on the pegs.

Nothing protrudes from the engine or frame to get in the rider's way. The exhaust pipe is routed below the engine and well out of the way. An AMA approved racing silencer is securely bolted to the pipe. Desert riders will probably go looking for an accessory item to protect the pipe. The kick starter lever is tucked in very close to the frame and is impossible to touch in any normal riding position. The only time that we had trouble with the kick starter was when the engine kicked back. If the foot slips off the starter it can give a nasty blow to the back of the leg.

Another one of those little touches that point out the all out effort put into the bike is the selection of hand-grips—none of those fat fluted ones for the Elsinore. They went with lean functional items similar to the popular English made Doherty grips. Rubber covers are also fitted to protect both the clutch and front brake cables from dust and mud.

We have no doubts that the first thing that will wear out on the Elsinore will be the rider. Not because it is a fatiguing bike to ride, far from it in the usual sense of the term, but just because it seems so durable. The speeds possible to attain with it over really rough terrain obviously make physical demands on the rider that bikes traveling at a slower speed don't. The flexibility of the Elsinore should also make it a fine cross-country or desert racer because of its power range and high speed handling attributes. And it's a bike that experienced cow trailers who like to go fast should really enjoy.

After riding the bike we have no reservations whatever of calling it not only the best racing effort seen to date from the Japan but also the first real stocker from the Orient that could compete on even terms with the best Europe has to offer. Several weeks after our initial testing we ventured forth on a second outing. We went out with a couple of very capable European units, a 250 CZ and a 400 Maico. They weren't brand new and fresh like the Honda but we felt that they would offer a valid basis of comparison.

On the fast fireroads we could note no difference. The CR250's acceleration was excellent. The Elsinore easily took the CZ, which was admittedly well campaigned and a bit war weary. We feel it would take a fresh one, too. It held its own with the 400 Maico. The front was so light it was easier to



go over rather than around things.

In the rough bumpy areas the Honda was less effort to ride, it was much less tiring. When riding flat out over smoother terrain the fatigue factor was similar for all three bikes. The Elsinore is obviously much more a motocrosser than a desert mount, just as Honda says—it is still impressive out among the cactus. We felt it was more work to ride the big Maico in the desert but in the slower, tight stuff the two shorter wheelbased Europeans seemed to have an edge. We are quite sure that those riders across the nation that can really fly over a desert (or cross-country) course would consider the Honda with favor.

On the motocross course the CR250 had the edge. It was the easiest to corner because the throttle did all the work. The acceleration was all anyone could ask for and it was less tiring over the bumpy sections. It just flew up the hills (Honda told us they whizzed it up to the top of Saddleback's Matterhorn without breathing hard).

Finally Japan has managed to get the right combination together and produce a really fine handling, super quick off-road motorcycle. Honda has made available to the public an off-road production bike that is capable of winning races right out of the box. Honda told us that their works racer

keeps on winding up past nine grand, but they feel that up to 7500 (red line) rpm the stocker might actually have a slight edge on a short course because of slightly better low end pulling power. That's certainly a first for Japan—a production bike that will stay anywhere near (up to its red line) the factory racing unit.

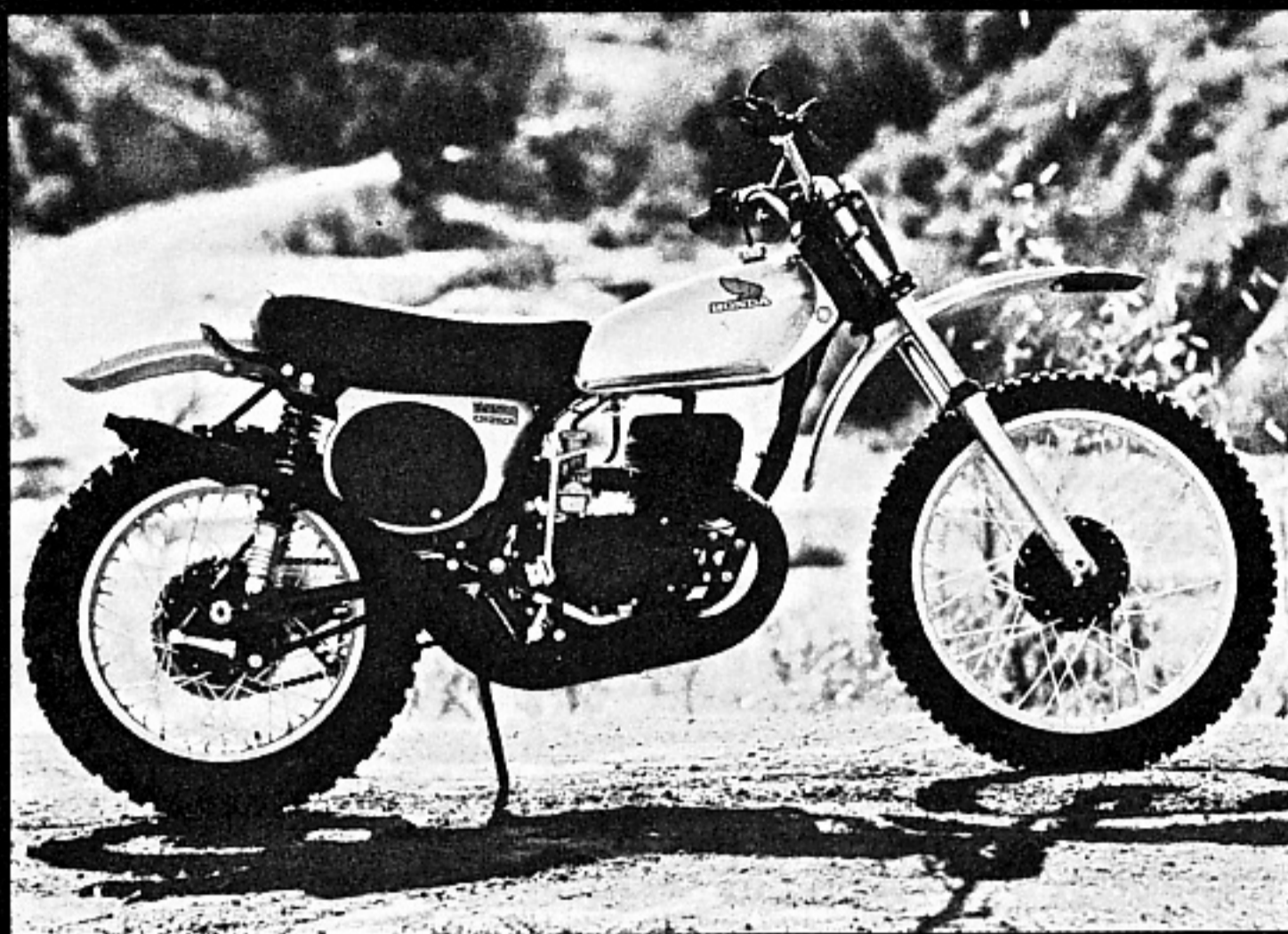
Honda has long stressed reliability as an integral part of their product and the CR250 was subjected to the same criteria. At the same time Japan did not ignore the requests of American Honda's testing and development division regarding power and handling. The Elsinore appears to be the best of both worlds. American Honda reports that Japan gave them everything, absolutely everything, they requested. And they have continued to do so as a few minor bugs have appeared during testing by American Honda and the motorcycle publications. Evidently when Honda decides to go racing they really want to do it right. That's why the CR racing prefix appears for the first time in a decade on a Honda product.

Of course the Elsinore is just now being exposed to the proving grounds of competition. Honda assumes an inscrutable pose when questioned about any plan to campaign the international motocross circuit with a full factory effort this year. Actually the real test will be in the hands of privateers. These are the people who must live with the bike day in and day out. In the end it is their success or failure that determines the reception of the product, more so than the accomplishments of the elite few capable of riding the international circuit.

Our guess is that the average buyer will have a ball with this new Honda. We feel that the competitor capable of winning can win on a box stock unit. All we would do with it is get the main jetting down and go racing. There's really nothing to fool around with. The entire staff feels that the bike is certainly a significant step forward in the field of two-stroke motocross technology.

One can only speculate on just how many people will get off of their present mounts (particularly those partial to the European product) to buy a Honda. We suspect six thousand will. Back in the early sixties when Honda was beginning their ascendancy to their current position as number one seller their advertising slogan was, "You meet the nicest people on a Honda." Perhaps a year from now, when the dust has settled from a season of motocross competition that slogan will be resurrected with a bit of a variation. How about something like, "You meet the fastest people on a Honda."

Bob Braverman/Walt Fulton, Jr.



HONDA CR250M ELSINORE

Engine type	single cylinder, two-stroke
Bore and stroke	70x64.4mm
Displacement	248cc
Compression ratio	7.2:1
Engine red lines @	7500 rpm
Ignition	magneto
Starting system	kick, with primary kickstarting
Carburetion	34mm Keihin
Lubrication	pre-mix
Type of transmission	constant mesh 5-speed
Clutch	wet multi-plate
Internal gear ratios	(1) 2.05, (2) 1.57, (3) 1.25, (4) 1.04, (5) .862
Final ratio	9.55
Countershaft sprocket	14
Rear wheel sprocket	47
Actual top speed	66 mph
Length	84.3 in.
Seat height	32.7 in.
Wheelbase	57.1 in.
Ground clearance	7.5 in.
Listed dry weight	214 lbs.
Actual weight, full tank of gas	229 lbs.
Front tire size	3.00x21 in.
Front brake type	internal expanding
Front brake size	5.6 in.
Rear tire size	4.00x18 in.
Rear brake type	internal expanding
Rear brake size	5.6 in.
Air filtration	washable foam
Fuel tank capacity	1.8 gal.
Gear box capacity	1 qt.
Front suspension	telescopic double damping
Rear suspension	adjustable spring over shock
Frame type	semi-double cradle
Exhaust system	AMA approved silencer/ expansion chamber
Color	silver and green
Retail price, Los Angeles	\$1145.00
DISTRIBUTOR	
American Honda	
100 W. Alondra Blvd.	
Gardena, California	