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**THUMPER**

**TWINS:**

**HONDA**

**XR250/500**

**PIPE FIX:**

**HUSKY 250**

**PE175**





# DIRT BIKE

JULY 1980

VOLUME 10, NO. 7



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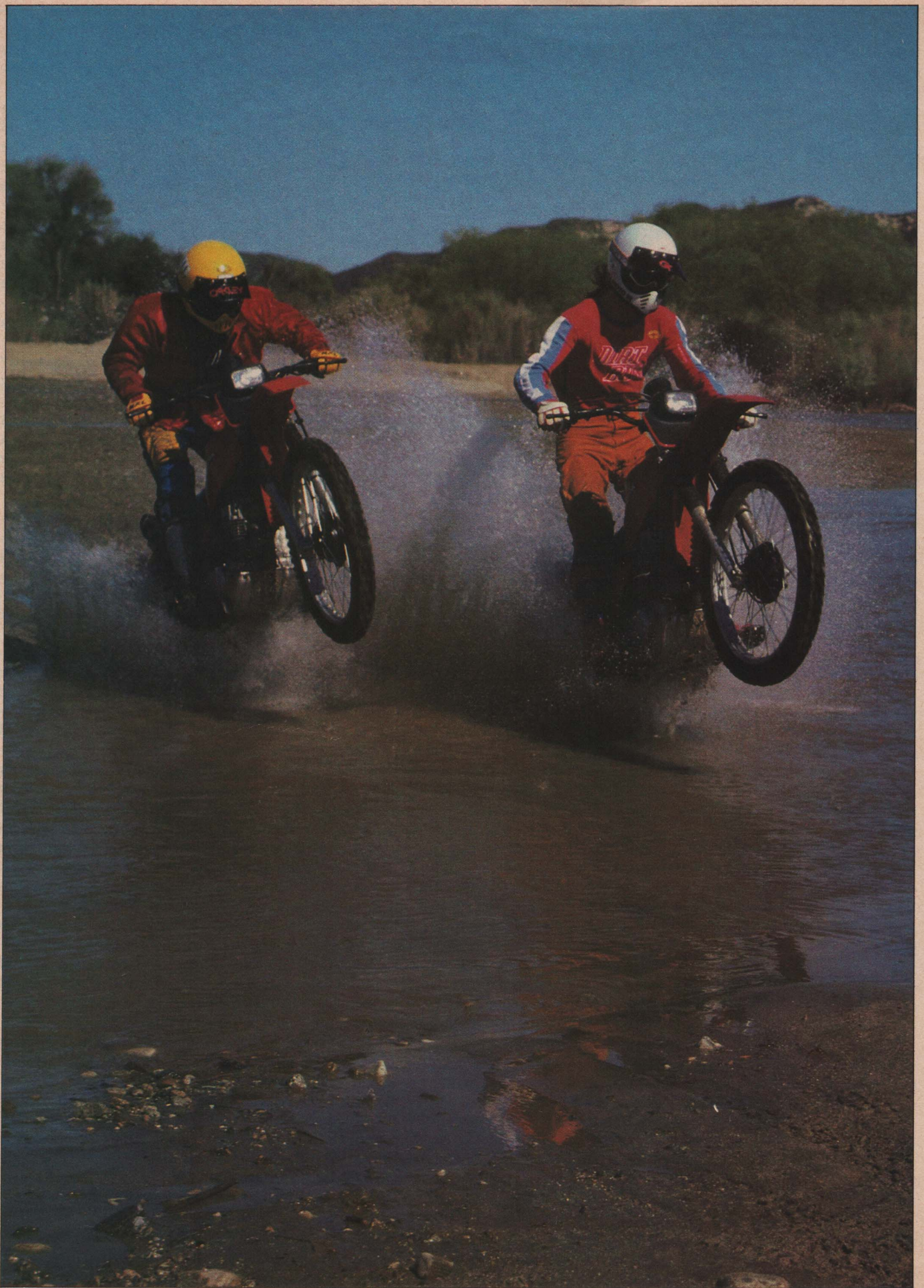
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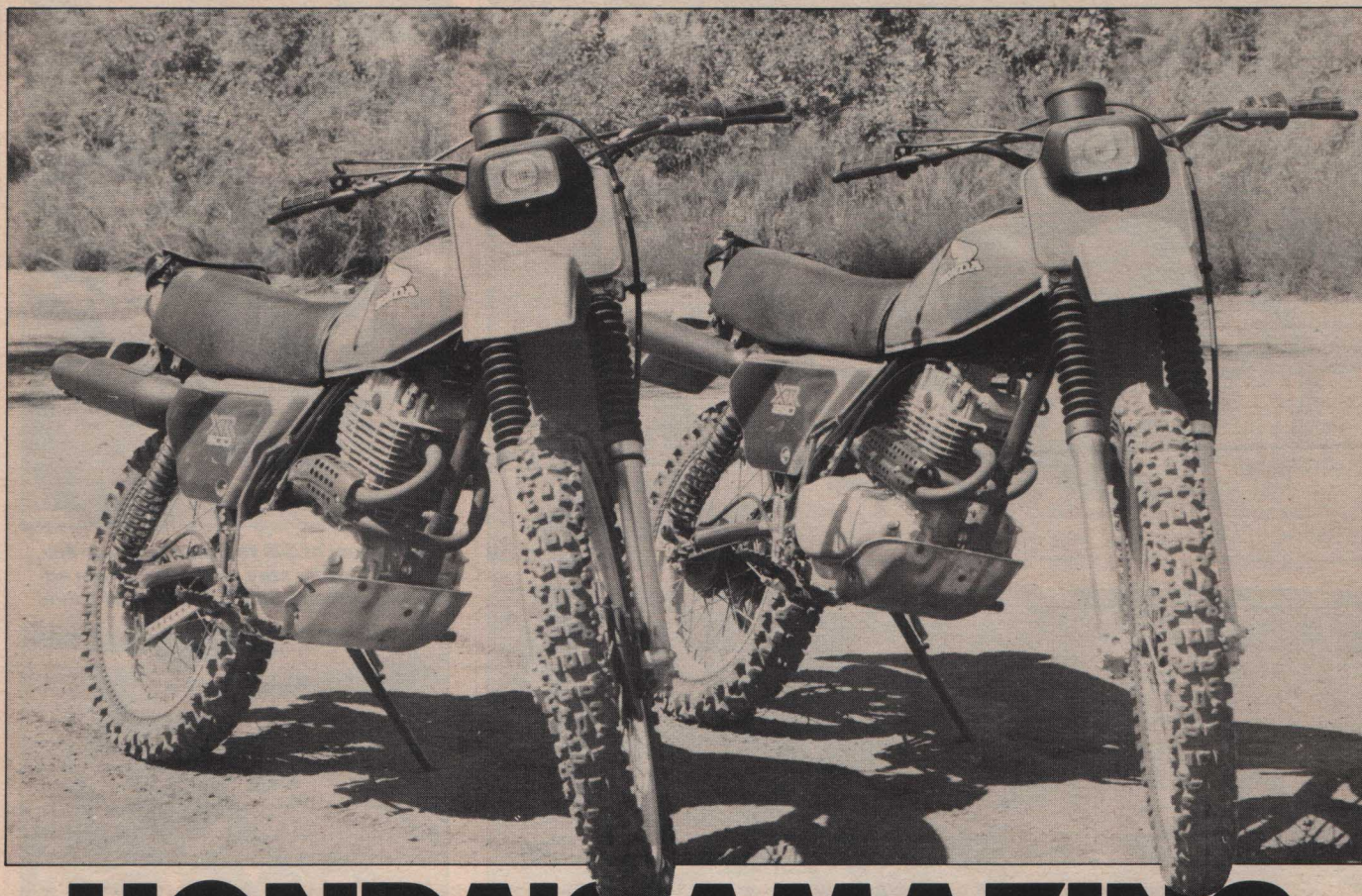
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# HONDA XR250/XR500



## HONDA'S AMAZING FOUR-STROKE TWINS

*No, Not Twin-Cylinder. Just a Pair of  
Totally Different Look-Alikes.*

**By the Dirt Bike Staff**

Honda is a strange company, but they run true to form in some ways, much like the proverbial death and taxes cliché. One thing you *can* count on from the Big H, is that when they come out with a new and highly successful model, during the next few years that particular model will see very few (if any) changes.

The XR500 and the 250 come to mind right about now. When the two bikes were introduced last year, they were both considered breakthroughs. The 500 was especially well-received by four-stroke lovers. It was very fast, and even though on the heavy side, handled in a reasonable fashion.

The XR250 just didn't catch on as

well as the 500. Had the bike been introduced without the XR500 and the nimble XR185, it probably would have been considered the hot setup. But, the 500 dominated the interest of the performance people and the 185 caught the attention of those primarily interested in handling.

Using the premise we've just laid out, it should mean that the XR500 will be basically unchanged for 1980 and that the XR250 will get all of the attention. And, following this through to its logical process, the XR500 will get only minor details next year, too, then receive massive changes when all of the interest dies off. Which it will, if Honda waits until the competition

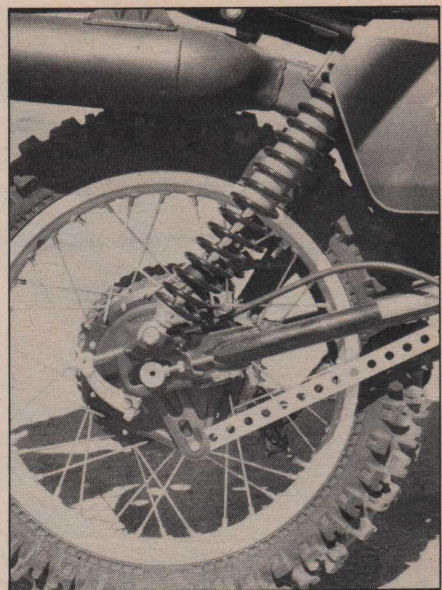
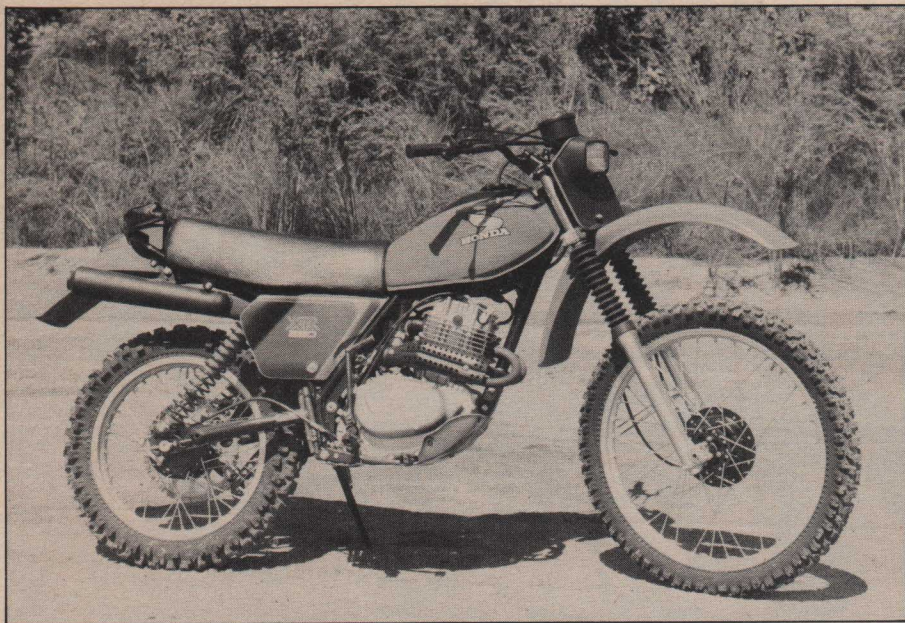
passes up the 500. Our guesswork about the habits of Honda has proved correct, as the 500 we received for a test is virtually unchanged from the 1979 effort and the 250 is a radically improved and heavily updated machine.

Let's give you a quick refresher on the 500 first before we examine the 250. While it's mostly unchanged, there are some details worth mentioning.

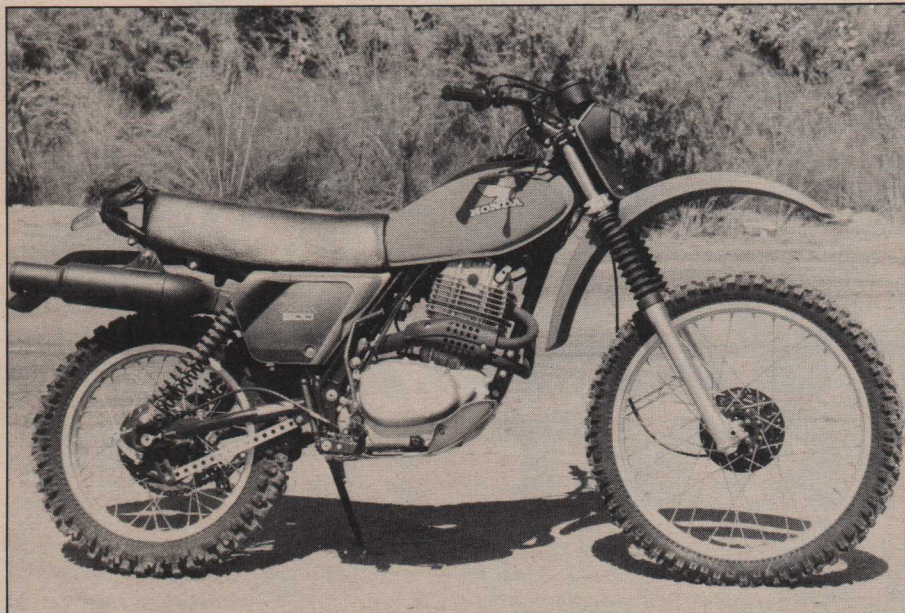
### **XR500**

The XR500 was crowned the new king almost before it wound up on the showroom floors in '79. The XR's competitors, the TT500 and the DR370, had their fine points, but handling wasn't on the list, and it just so happened that Honda had everything un-





*Rear wheel of 500 features a quick-disconnect brake stay arm, new chain adjusting system, and 7.8 inches of travel.*



*XR250 rear end has all the same numbers as the 500, but the backing plate is anchored by a boss on the swingarm, rather than the torque arm of the latter.*

der control in that department. Well, nearly under control.

The '79 XR, and for that matter the '80, was/is the best working Open class four-stroke on the market. The power is all that any sane man needs, and there is plenty more available through the use of many different horsepower kits available. Handling and suspension are both very good, considering the weight of the XR. For some applications, suspension travel is a little shorter than optimum, but once, again, more travel is available at both ends with the careful addition of a few dollars.

Even that nearly 300-pound weight figure could be taken care of, considering that most every aftermarket piece for the bike weighs much less than the stock part. Just changing the pipe and

the tank could result in as much as a 15-pound savings.

All that aside, there's no question that the XR is the fastest of the growing pack. On level ground the 500 will literally bring tears to your eyes—just hold the throttle wide-open and keep shifting. There's no flat spot, no lack of power throughout the rev range; nothing but rapid forward motion.

Once the ground starts getting hilly, you become more aware of the 500's torque, rather than its revving ability. Point it in an "up" direction and short-shift, and the 500 will chug over anything. The only time our testers had trouble was when the XR was allowed to rev out. At high rpm uphill or in the rough, the bike tends to get a little squirrely as the rear wheel starts hopping around. Shift up and the problem

goes away, at least for the moment. We've ridden a few XRs with good shocks aboard and it makes all the difference in the world.

Surprisingly, the XR is reasonably nimble in the tight stuff, and we had no trouble pushing it through the trees and rocks of Gorman and Texas Canyon. Just as long as the bike is working in its torque range and a reasonable amount of forward motion is maintained, the XR will thump through the worst.

The only time you may experience a little trouble is when you try to slow down. No, the brakes aren't bad. Actually, they're very good, and don't seem to be adversely affected by water. The trouble comes from inertia, a direct byproduct of the XR's weight: A 290-pound motorcycle, once in mo-



tion, is much more difficult to stop than something 50 or 60 pounds less. This was only a problem with our testers during the first couple of rides, and once we got used to the bike, we started braking earlier than we would on a different machine.

The major changes for 1980 include a lighter exhaust system and a redesigned swingarm. The new pipe features a detachable muffler for maximum power on the racetrack, if that's what you're into, but please don't pull the guts out for a normal trip in the woods. The 500's exhaust note is already moderately loud, and without the muffler, it's deafening.

The swingarm has been strengthened up somewhat, and the chain adjusters have been changed to simplify rear wheel maintenance. With the new system, the adjusters stay on the arm when the axle is pulled, rather than fall on the ground.

### XR250

Out of the whole XR clan, the sleeper of the bunch has to be the 250. The 500 is known for its raw power, the 200 for its lightness and handling, and the 250 seems to be caught in the plain middle, with no outstanding traits to make it another sensation. The sad part is that the 250 seems to have been badly slighted by everyone and his brother for being no more than average, when actually we may have the best 250 four-stroke ever made, right here.

Granted, "250 four-stroke" isn't a very crowded class these days, but take a look at the XR250's competition: The KLX250 has a better chassis and suspension, but it's quite a bit taller and has half as much power. The TT250 is the class newcomer, and even though it boasts of a more sophisticated (yet softer) suspension, it too falls short of the Honda's horsepower to a noticeable degree. And while we're on the subject, a stock DR370 will have trouble keeping up with a carefully broken-in XR250. Power isn't any problem, but the XR250 just has a difficult time being spectacularly in the shadow of its more spectacular brothers.

That's it. It just doesn't do anything spectacularly. It's not a lightweight, but it's not overly heavy, either. The handling is good, but not great. Ditto for the suspension; and the motor doesn't seem to make a whole bunch of power until the bike has at least 300 miles on it.

Which is something we might as well mention for all of the XRs and XLs: Up to a certain point, the more

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## MARTY TRIPES HANGS UP HIS BIKE

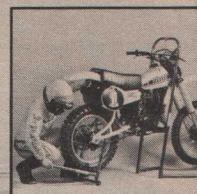
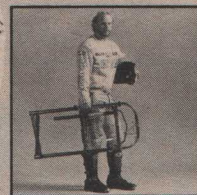
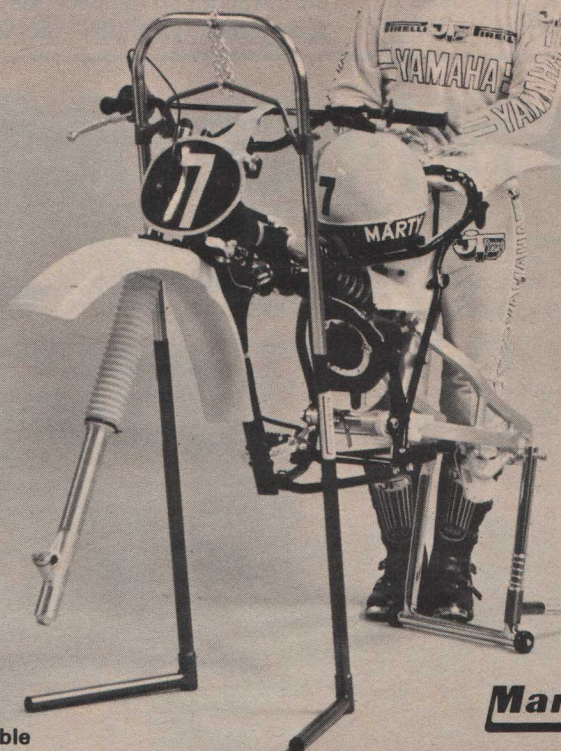
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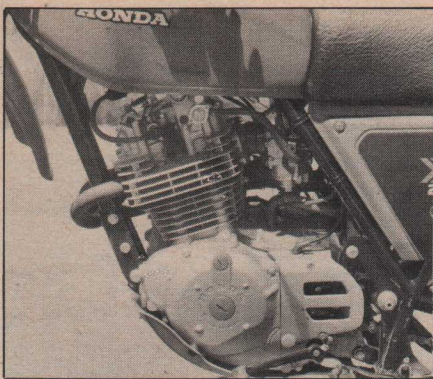
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*The XR250 got the most attention in the motor department this year, with a high-compression piston and a lighter flywheel.*

they're ridden, the faster they get. It seems to take forever for the four-stroke Hondas to break in, and the motor doesn't make any really good power until everything loosens up a bit. We found a difference of almost 10 mph in top end between a new XL500 and one with 300 miles on the clock, and a comparable increase in acceleration.

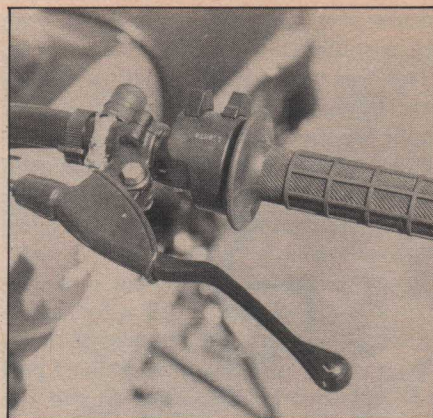
But, we digress. For 1980, the XR250 has received a new high-compression piston and a lighter flywheel, and is noticeably quicker than last year's effort. The bike has plenty of torque for



*Both front ends are identical, with 23-inch wheels and 8.8 inches of travel.*

moderate hillclimbing, but the XR's strong point is its ability to rev. The motor will wind right up to valve float, and seems to make power all the way up—one thing the competition is having trouble doing.

Our 250 had a hard life. Its job was usually running behind the XR500 and trying to keep up, but very often the smaller of the two surprised us, and in a tricky section while the other rider was fighting the 500's violent power pulses, the 250 would buzz right by. Let a smooth straight section come up, and—almost gleefully—the 500 would



*The new levers feel great, work fine, and look good too.*

roar right on past, usually on the rear wheel.

Which brings us to a curious trait of the 250. Both the 200 and the 500 are natural-born wheelie-ers, while the 250 had to be worked hard to get the front end up. The torque curve starts working high up in the rev range, and the only time the front end gets light is during a power shift from first to second, giving the bike a totally different feel from last year's model. This has little or no effect on normal riding, though, and we suspect that the front end will get lighter as the motor gets a

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little looser.

Chassis and suspension specs are the same between the 500 and the 250, but due to the lighter weight of the smaller model there is a marked difference in handling manners. The 250 will be happier in quick-turning tight stuff, and is no problem to cut and thrust between the trees.

#### Bits and Pieces

Both of the XRs share a few new parts for 1980. Gone is the choke cable and handlebar-mounted knob, replaced by a simple lever on the left side of the carb. In this case, we've traded off the convenience of the top-mounted choke for one less maintenance item, which always helps.

Also new are the reverse ball levers and CR-type brackets which can be removed without pulling the left grip or throttle. The levers themselves are a work of art, and should last a long time.

The age-old on/off ignition switch has been replaced by the more conventional CR-type kill button. Just when we finally got used to the switch, too.

The rear loop-mounted tool bags are mostly empty this year, with the usual bag of tools being replaced by one handy all-in-one tool. For chain-adjusting and normal trail-side maintenance



**Tool bag is just as big as last year, but only has one tool from the factory.**

it'll work just fine, but if you figure you might have to make some emergency repairs some day, you'd better pack along a few more wrenches.

Both bikes still use a 23-inch front wheel and claw action tires front and rear. The tires aren't the best, but work find for casual trail riding. They will wear out quickly, however.

We've heard a few complaints about clutch slipping on the 500. It seems that the bike produces more horsepower than the clutch was made to handle. If you go easy on the gas, you might never notice it, but if you plan on any heavy competition, you'd better

plan on popping for an aftermarket clutch hop-up. Especially if you modify the motor for more power.

The corners of the seats have been rounded off, and the whole shape has been changed slightly for "a better riding position and effectively lower seat height," according to Honda. According to the spec sheets, the bikes have the same seat height as last year. Maybe it's just supposed to "feel" lower.

Both XRs are very comfortable to sit on and ride, with a good layout of all the body rests and controls. Honda has to get a "10" in this department.

A USDA-approved spark arrestor is standard equipment on each bike. You know who the USDA is. They're the same people who approve the meat we buy in the grocery store.

#### After The Smoke Clears

There now. A few changes here and there, but the XR250 and 500 are pretty much the same bikes as last year. In the tradition of Honda Motor Company, it just doesn't make sense to make sweeping changes if the basic product still does the job; and all things considered, they do the job very well.

And there are still two different ways to go with the XRs. If you want to build

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### HONDA XR250 Specifications

NAME AND MODEL	Honda XR250
ENGINE TYPE	Four-valve, four-stroke single
BORE AND STROKE	.74x57.8mm
DISPLACEMENT	249cc
HORSEPOWER (CLAIMED BY FACTORY)	N/A
CARBURETION	.30.5mm Keihin
RECOMMENDED GASOLINE	Min. 96 RON
FUEL TANK CAPACITY	2.6 gallons
FUEL TANK MATERIAL	Steel

LUBRICATION	Wet sump
OIL CAPACITY	2.1 quarts
AIR FILTRATION	Oiled foam
CLUTCH TYPE	Wet, multi-disc
TRANSMISSION	Five-speed
GEARBOX RATIOS:	
1	2.800
2	1.850
3	1.375
4	1.111
5	0.900
GEARING, FRONT/REAR	13/53
IGNITION	CDI
PRIMARY KICK SYSTEM?	Yes
RECOMMENDED SPARK PLUG	ND X24ES-U
SILENCER/SPARK ARRESTOR/QUALITY	Yes/yes/very quiet
EXHAUST SYSTEM	Up-pipe, right side
FRAME, TYPE	Diamond-type
WHEELBASE	1400mm (55.1 inches)
GROUND CLEARANCE	280mm (11.0 inches)
SEAT HEIGHT AT TANK	880mm (34.6 inches)
STEERING HEAD ANGLE	28.5 degrees
TRAIL	138mm (5.4 inches)
WEIGHT WITH ONE GALLON GAS	265 pounds
RIM MATERIAL	Aluminum alloy

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ATTENTION TO DETAIL	97
EFFECTIVENESS, STONE STOCK	91

### HONDA XR500 Specifications

NAME AND MODEL	Honda XR500
ENGINE TYPE	Four-valve, four-stroke single
BORE AND STROKE	89x80mm
DISPLACEMENT	497cc
HORSEPOWER (CLAIMED BY FACTORY)	N/A
CARBURETION	.34mm Keihin
RECOMMENDED GASOLINE	Min. 96 RON
FUEL TANK CAPACITY	2.6 gallons
LUBRICATION	Wet sump
OIL CAPACITY	2.1 quarts
AIR FILTRATION	Oiled foam
CLUTCH TYPE	Wet, multi-disc
TRANSMISSION	Five-speed
GEARBOX RATIOS:	
1	2.462
2	1.647
3	1.250
4	1.000
5	0.840
GEARING, FRONT/REAR	14/48
IGNITION	CDI
PRIMARY KICK SYSTEM?	Yes
RECOMMENDED SPARK PLUG	ND X24ES-U
SILENCER/SPARK ARRESTOR/QUALITY	Yes/yes/quiet
EXHAUST SYSTEM	Up-pipe, through frame, right side
FRAME, TYPE	Diamond-type
WHEELBASE	1400mm (55.1 inches)
GROUND CLEARANCE	280mm (11.0 inches)
SEAT HEIGHT AT TANK	880mm (34.6 inches)
STEERING HEAD ANGLE	28.5 degrees
TRAIL	138mm (5.4 inches)
WEIGHT WITH ONE GALLON GAS	283 pounds
RIM MATERIAL	Aluminum alloy
TIRE SIZES:	
FRONT	3.00x23 Bridgestone
REAR	4.60x18 Bridgestone
SUSPENSION:	
FRONT, TYPE AND TRAVEL	Telescopic forks, 8.8 inches
REAR, TYPE AND TRAVEL	Gas-charged shocks, 7.8 inches
INTENDED USE, MFR.	Off-road
COUNTRY OF ORIGIN	Japan
PRICE, APPROX.	\$1898
PARTS PRICES, HIGH-WEAR ITEMS:	
PISTON ASSEMBLY, COMPLETE	\$42.86
RINGS ONLY	\$17.40
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