



Education in its purest form **68 AIR-SCREW ADJUSTMENT** Don't just count the turns 72 VINTAGE MOTORCYCLE RACING An alternative to doing the doubles 80 SCOTT'S SCOOTER SERVICE TT600 New life for worn-out suspension

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By the Staff of DIRT BIKE

Refinement. This has been Honda's strategy for the CR500 for the last two years. The 1986 500 was brutally fast and had awesome forks, excellent carving manners and almost flawless handling. But the machine was hard to start, stalled too easily, had a fat midsection and flawed rear suspension.

Honda fine-tuned the biggest CR for '87. Cartridge forks, a rear disc, a new piggyback Showa shock, slimmer tank and seat, slightly revised Pro-Link ratio, and motor mods topped the list for the 500. In the motor department, Honda aimed at making the beast easier to start and ride. A fivemillimeter-longer rod, an ignition with less advance at low rpm, a coil with more spark duration, lower compression and a slightly different exhaust pipe aided starting, and horsepower jumped from 57 to 61!

Even with these refinements, the '87 CR500 was hard to start, stalled too easily, was brutally fast and had excellent forks and confused rear suspension. It carved like a crazed chef, but overall handling was hampered by a rear end with too much compression damping in the mid-stroke and too little high-speed rebound damping. Although improved, the '87 CR drew the same complaints the '86 version had drawn. Honda's R&D men were chained to the drawing board once again.

WHAT'S NEW FOR 1988?

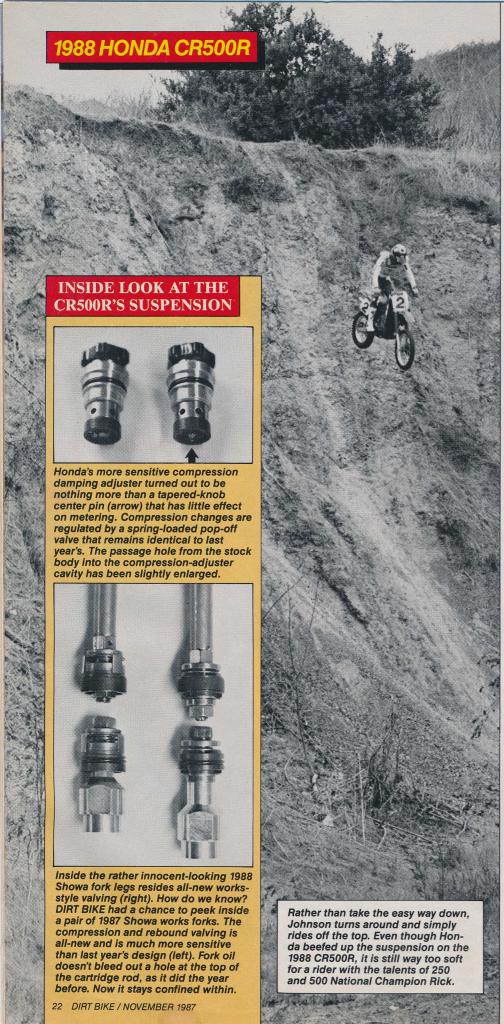
Easing the starting and taming the Tasmanian devil power output were the main goals for the '88 CR500. A heavier crankshaft assembly was added for a smoother hit and less chance of stalling; inertia moment was increased from 88 kg/cm² to 92 kg/cm². Besides the heavier crank, a redesigned kickstarter was the only mod to ease starting.

Other changes include revised fourth- and fifth-gear ratios, a larger-diameter countershaft for increased strength, an FIMapproved countershaft sprocket cover and an unpainted aluminum barrel. The '87 CR had .954 (21/22) and .791 (19/23) fourth and fifth gears, but the '88 has tighter 1.000 (24/24) and .870 (20/23) fourth- and fifthgear ratios. These are the only differences for the new year in the motor department.

Compression and rebound have been increased in the works-type Showa cartridge forks; internals are identical to last year's works bikes. A new damping adjuster is used; it supposedly is compression-adjustable only, but twisting the adjuster also slightly affects rebound. A stiffer spring rate (increased from .375 to .390) and new Teflon-coated bushings top off the fork mods.

Out back, the Showa piggyback shock got revised damping and a stiffer spring in answer to complaints of a twitchy, confused rear end (in '87). Honda improved the compression damping to eliminate initial harshness and bottoming on G-outs. Damping





adjustments are new, as well; each click yields a bigger change than before. Spring rates have been increased from 5.6 to 6.0 kg.

Other changes for the new year include:

- Reshaped seat for narrower seat/tank junction
- Lightweight composite front-brake hose
- Lighter front disc
- Taller handlebars
- Stroke on rear master cylinder reduced from 2.0mm to 1.4mm for more sensitive feel
- Larger holes in rear sprocket for lightness
- Lighter footpeg-bracket construction
- Intake manifold redesigned to eliminate gasket
- Dunlop K490 front tire and K595 rear
- Silver rims
- White numberplates (FIM/AMA standard is yellow for Open bikes)
- Red seat and fork guards
- Blood-red plastic (instead of orange-red)

THEY DID THEIR HOMEWORK, BUT DID THEY GET IT RIGHT?

ENGINE: Starting is a tad better than before, but the kickstarter is placed so high on the motor that only pro basketball players and Jaak Von Velthoven can get any leverage on it without standing on a milk crate. Stall in a moto, and you should plan on losing several places. We had the best luck by nudging it past TDC, returning the lever to the top of the stroke and then giving it a healthy boot. This drill yielded first- or second-kick starts, hot or cold.

Power delivery isn't as violent as last year's, but the '88 CR500 is ultra-fast, and the extra spinning mass makes stalling under braking conditions less of a problem. Power comes on smoothly down low and doesn't rev as violently as in '87. However, fan the clutch, and it hits brutally, anywhere in the powerband. It's like a turbo—cruises until you stand on the throttle, but then hang on tight! Definitely improved over previous efforts.

Shifting and clutch action are typical Honda. You really have to be a bonehead to miss a shift, and the clutch never whimpers under serious abuse. Gear changes are smoother than Jim Holley on a date. If you ever have to work on the clutch, you can do so without removing the right-side engine case.

FRONT SUSPENSION: These forks are fantastic! Action is spot-on for most riders. Top Pros or girthy fast guys might need a stiffer setting. This should be done with oil level, as cranking in the compression adjuster made initial movement too harsh on medium-sized hits. The stock oil breaks down quickly, so replace it after break-in. Headshake over rough ground at low throttle settings is still evident, but it is much less scary than in previous years.

REAR SUSPENSION: Action is improved tenfold. Compression is much better over square-edged holes under throttle—it doesn't kick nearly as much. Spring rates are in the hunt for all but the fastest Pros or heavyweight haulers, who will need a tad more, as well as stiffer, high-speed compression damping. The vast majority of riders

won't have to fiddle with the Showa piggyback shock, other than setting preload and rebound after the boinger breaks in. After two hours of riding, we had to crank in the rebound damping three clicks. Spring rates and damping match the awesome front forks, and handling isn't held back because of rear suspension, as with earlier 500s.

HANDLING: Exceptional cornering is the CR500's trademark; it'll carve the inside



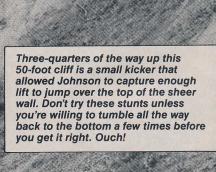
1988 HONDA CR500R

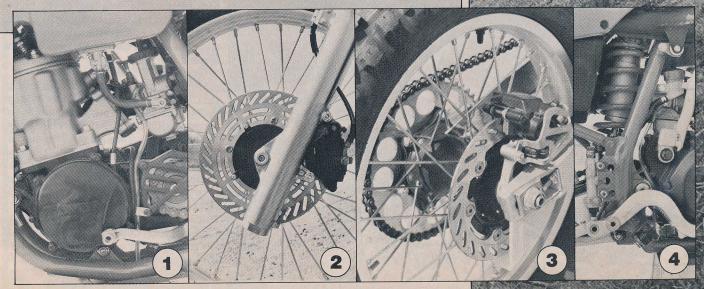
	. Single cylinder, liquid-cooled, two-strok	
Displacemen	t	20
	oke 89mm×79mi	
	38mm Keih	
	pacity 7.5 L (2.0 gals	
Lubrication.		ix
	5-spee	
Gearing, from	t/rear	51
	k arrester Yes/r	
	rance	
	ght, dry 101.5 kg (223.7 lbs	

A CHOUCH	
Tire size and type:	
Front	80/100-21 Dunlop K490
Rear	110/100-18 Dunlop K595
Suspension, type ar	
	owa telescopic, cartridge damping, adj. comp. 305mm (12.0 in.)
Rear	Pro-Link, Showa piggyback, adj. comp./reb., 320mm (12.6 in.)
Country of origin	Japan
Suggested retail pri	ce \$3198

Distributor/Manufacturer:
American Honda Motor Corp.
100 W. Alondra Blvd.
Gardena, CA 90247

1. Externally, the unpainted jug and FIM-mandated countershaft cover are the only changes to the potent mill. Peek inside, and a heavier flywheel, lower fourth and fifth gears, and larger-diameter countershaft are revealed. 2. Weight-saving details, such as the new Swiss-cheese front rotor, are used to offset added weight in the engine, and the machine weighs the same as last year's. More compression damping and Teflon bushings upgrade the cartridge forks. 3. Dunlop tires now come standard on all the CR line. The K595 rear meat has a wider range of usability than the old Bridgestone M22, and it is considered the best hard-pack tire around. Brakes are awesome. 4. Last year the rear shock was the kink in the CR's armor, but more spring and compression damping bring the piggyback Showa up to snuff. Each click on the adjuster yields more change, and action is fantastic.







line better than anything in its class in flat, tight, grooved corners. This year it carves even better, due to the Dunlop K490, which is standard fare on the National circuit. The big Honda will also rail the outside line, but it tends to knife-in on loose berms.

Jumps and mongo whoops don't have the pucker factor this year, due to the balanced suspension package. The rear doesn't skip and kick on compression, as it has in past years. Monster hits and G-outs will bottom out the rear, but the bike doesn't do anything to cause a gray hair. The only trait we can snivel about is that touch of headshake, but such is the price of carving.

BRAKES: Honda's new composite frontbrake hose yields a mushy feel when compared with the old unit, but the front binder still has awesome stopping qualities. We could not feel any difference between the new rear brake setup and the '87 unit; feel and power are great. No complaints here.

ERGONOMICS: Getting up on the tank for corners is much easier with the taller bars, but the 500 still feels too wide in the midsection. Also, the narrower seat allows the rider's right leg to make painful contact with the exhaust pipe. Not good. All controls are first-class and work with minimal effort. The brake pedal has a tab for mounting a cable to the frame for brush control, but mud packs between the pedal and frame. A sponge will keep the area from fouling in muddy conditions.

EASE OF RIDING: Cutting fast laps around an MX course or conquering nature's worst is easier than ever on the '88 CR500. With the improved suspension and flywheel inertia, the rider can concentrate on lines, instead of babying the boingers or brakes. A more controllable power surge also aids confidence and aggression levels for motocross and off-road riding. It's still a beast, but it won't bite you when you least expect it.

MAINTENANCE: Servicing is a dream. The airbox is very good, and you can feel the air filter's edge to assure a good seal. Trick touches, such as a tab on the airbox boot for easier installation, abound all over the red mauler. Every detail is first-class, with the possible exception of the brakepedal pivot. Ours loosens regularly. Be sure to religiously change the tranny oil; the aluminum driven clutch plates quickly contaminate the oil.

LIFE WITH THE BEAST

Honda has finally succeeded in taming the CR500. A balanced suspension package makes it manageable at speed, and the red machine still carves like Norman Bates. Weighting the crank eliminated the chronic stalling of old and allows the rider to grab a handful of throttle without drawing back a nub. And, the big CR is capable of winning an MX or off-road National—box stock.

It's extremely fast, turns and handles as though it is on rails, and is very reliable. If it weren't for a smashed headpipe, burned thighs and awkward starting, the '88 CR500 would be the perfect motorcycle. □