

Cycle

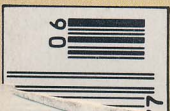
**Honda's New
500 Roadster**

**Multi-Million-Dollar
Daytona Spendathon**

JUNE 1982 • \$1.25

Kawasaki GPz750 **Purebred Sports Bike Supreme**

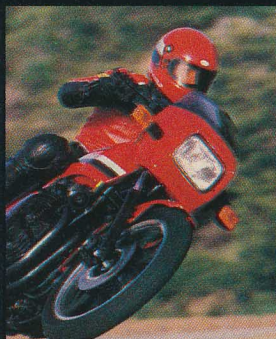
Giant Comparison
Enduro-Bike Winners & Losers



620144 BAC 18040093 741C APR83
M E BLACK
1804 OAK DR
EDMOND
OK 73034
06



pg. 58



pg. 30

This Month's Cover: See here. Zápudb, we said to the AD, we want this GPz750 to pop off the cover. No problem, he replied, we'll put this jump-out square-lens on Robin Riggs' card-board camera, and it'll be dramatic. It was. So is the bike: best 750 sports bike in red or any other color. The test begins on page 30.

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Road Tests

- 30 Kawasaki GPz750R-1
Just when you thought the UJM super sport might be passé. . .
- 46 Honda FT500 Ascot
Electric-start single-cylinder street bike: Electro-thump?
- 58 Enduro-Bike Comparison: Can-Am 175 Qualifier, Kawasaki KDX175A-3, Yamaha IT175J, Honda XR200R, Suzuki PE175Z
Some we liked, some we didn't, and we tell all.

Special Features

- 103 Daytona '82: The 200-Mile Techno-Battle
When factories want to win, the word is spend. By Kevin Cameron
- 111 The Honda Blast
Here's the Superbike Race: count the Hondas. By Kevin Cameron
- 114 Formula Two: The 100-Mile Dash
You can change the rules, but TZ250s still rule, baby.
- 116 Battle Of The Twins: The Past As Present, And Vice Versa
Think of it as modern vintage privateer racing.

Technical

- 109 Superbikes: One-Liter High Tide
How Superbikes became Factory-Racing-Super. By Kevin Cameron

Competition

- 85 Daytona Supercross: Shultz Encore
He did it easier than you can say Honda.

Departments

- 8 Editorial / *Let Us Pump / Phil Schilling*
- 10 Letters / *Captain Arrowhead*
- 15 Pipeline / *The Hesketh Owner / Jim Greening*
- 20 Bits / *Motorcycle Gunships / Ken Lee*
- 22 Checkers / & Etc. / *Mark Homchick*
- 24 TDC / *Wheel Sense / Kevin Cameron*
- 28 The Duct Tapes / *Where Am I? / Ed Hertfelder*
- 42 Road Test Index
- 76 Newsline / *Deals*





HONDA FT500 ASCOT

Big thumpers are not only alive, they're better than ever, thanks to the introduction of the FT500. Its electric starting brings the big single into the modern era.

● QUIRKINESS IS DIFFICULT TO DEFINE. LITERALLY, IT MEANS PECULIAR or idiosyncratic. If you're highly individualistic, you probably think of quirky in a positive way—unique. If you're part of the mainstream, you sense another connotation—it just means weird.

In either case, you probably subordinate unusual design or styling to function. At least, we believe that's the way it should be, and we have reason to suspect the majority of motorcyclists share that opinion. Basis for our viewpoint is that Yamaha has retreated from the 500cc single-cylinder roadster market; Yamaha's one-of-a-kind (during the years it was produced) SR500 was indeed quirky, but it didn't exactly take the motorcycling world by storm.

Why? Mainly because it was at a functional disadvantage compared with its lightweight-class and price-level rivals, the 400–450cc twins. Specifically, it vibrated more than the counterbalanced twins, and it lacked electric starting.

You can talk all day long about the desirability of unique motorcycles and about your being one of those enthusiasts devoted to mechanical simplicity; if the unique and mechanically simple machine that you're obliged to buy is a sub-par performer or lacks any significant amenity, it's a fair bet that you'll maintain your affection from a distance.

Honda has filled the void Yamaha created—and is likely to pull in some of the enthusiasts who were attracted to the SR as a concept but disillusioned by the reality of the product. Honda has introduced the Ascot, a 500cc single-cylinder roadster that uses the basic XR/XL powerplant developed for the '79 model year. This engine has up-to-date technological features, in-



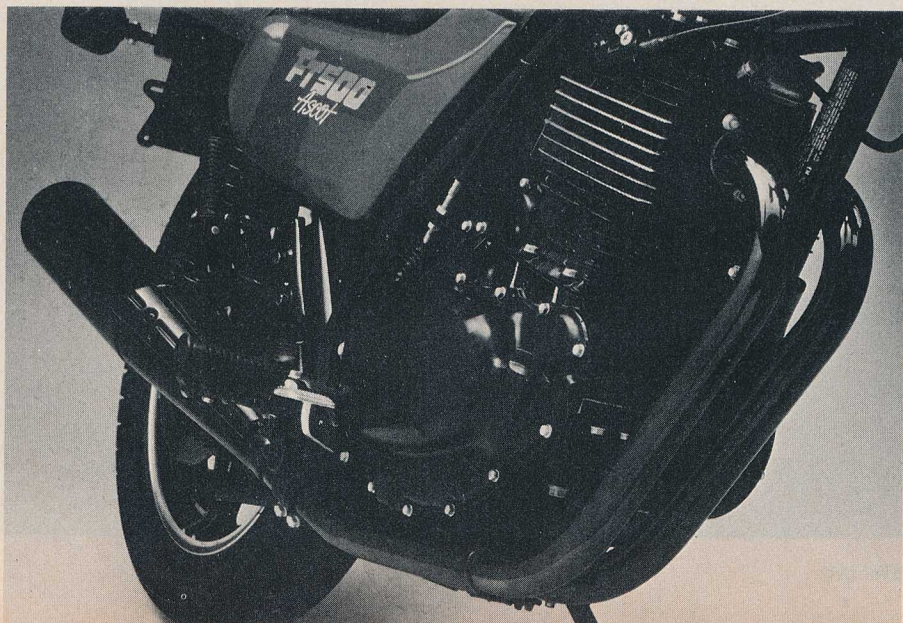
HONDA FT500 ASCOT

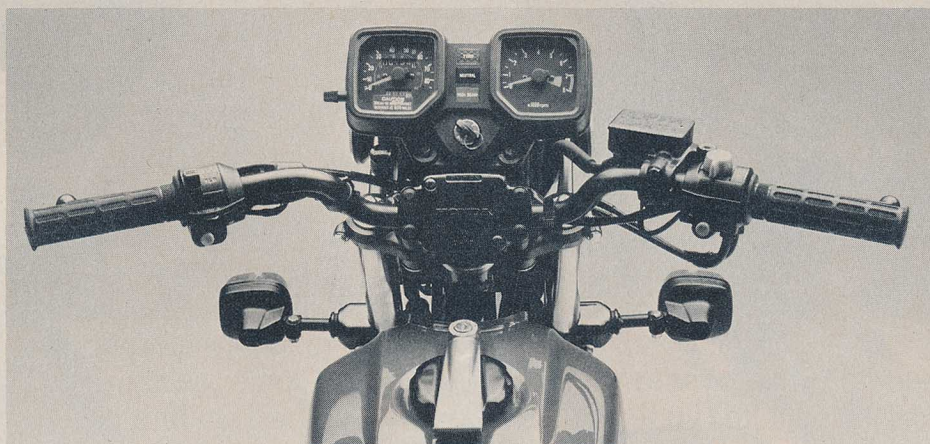
cluding a four-valve head and engine counterbalancers. More important, Honda fitted the street-going FT with electric starting and did away with the kick-start lever altogether. By taking this logical step, Honda has produced a bike which will appeal to "purists" for its straightforward design, and compete with other 400–500cc bikes in several categories of function.

There are in fact and theory several good reasons for producing a single—reasons which have nothing to do with fashion and everything to do with performance and practicality. As a rule of thumb, it's possible to make a single lighter than a twin; in fact, Honda has given validity to the rule—the FT at 378 pounds weighs somewhat less than the 400–450cc twins, which weigh anywhere from 390 to 410 pounds, and significantly less than the occasional 500cc twin on the market; the Honda CX, for example, weighs 486 pounds, and the Yamaha Vision weighs 468. Singles are also generally narrower than twins,

The FT's primary virtues—light weight and nimble handling—make it a ball to run down country roads.

which allows the manufacturer to produce a bike with more ground clearance. In terms of maintenance, a single has one fewer carb and four fewer valves (given the same four-valve cylinder head design) to adjust.





Those purists who insist that big singles ought to be classic works of simplicity should not be disappointed by the addition of electric starting. Gone is the kick starter's idler gears, pinion, ratchet mechanism and springs, shaft and kick lever. In this respect the FT has been mechanically and functionally simplified. In any case, if you've ever stalled a high-compression single at mid-intersection during rush hour, you'll appreciate the lack of time-consuming starting drills and the presence of push-button starting.

Simplicity advocates should also appreciate the efficiency of design of Honda's counterbalancing system. Naturally, it requires extra parts and slightly more weight, but Honda's designers have kept both to a minimum. The forward balancer

rides on its own shaft. The second, rearward balancer rides on the existing transmission mainshaft—a feature Honda has patented. In all, the balancing system consists of the forward shaft and balancer, the rearward weight, the chain connecting the two balancers, and a few bearings. That's as simple a system as any factory has yet designed for a big single machine.

One look at the instrumentation reinforces the belief that this motorcycle is at the short end of the mechanical-complexity spectrum. Absent are superfluous—for the sporting purist—information centers; you'll find no fuel gauge, voltmeter, gear position indicator, stand-down indicator, or liquid-crystal monitoring panel with flashing graphic displays.

Instead, you'll find only pertinent data required for riding: plainly readable gauges and indicator lights, a dash-mounted choke lever and easy-working controls and switches.

The 498cc engine resembles Honda's XL and XR powerplants in overall appearance; however, it has significant differences. Premier among these, of course, is electric starting. The primary gears remain identical to the XR/XL's cogs; the second through fifth transmission gears have been strengthened. The clutch uses the same number of plates, but the friction-plate thickness has been increased by 0.4mm to 1.6mm. This year all three of Honda's half-liter singles feature a self-adjusting cam-chain tensioner which requires no routine maintenance.

HONDA FT500 ASCOT

The FT also employs engine cases distinct from the XR/XL's. The main crankcase has a bolt-on sump with a cap covering the oil filter element; oil capacity is increased to 2.4 liters, a bump of 0.4 liter. Only the right-side engine cover is an XR/XL casting; the all-new left-side cases accommodate the electric starter.

The starter motor, located behind the cylinder, drives through six reduction gears, for an overall reduction ratio of 29.7:1. A ring gear surrounding the crankshaft-mounted alternator rotor is engaged by a sliding pinion which has a one-way clutch. This clutch freewheels when the engine outspeeds the pinion, thus disengaging the reduction gears and starter motor and preventing the starter from over-revving.

The Honda uses an unusual start-gear actuating system. During starting, a solenoid, which acts through a locking cam, positively holds the pinion gear and its one-way clutch engaged. The solenoid remains energized—and the pinion engaged—as long as the starter button is

depressed. Without this feature, the pinion gear would be tricked into disengaging every time the piston gained speed after the compression stroke, even if the engine didn't start.

After cold starting the FT, you can immediately ride it away smoothly with only minor choking. The FT pulls from idle, and has a distinct power surge above 3000 rpm.

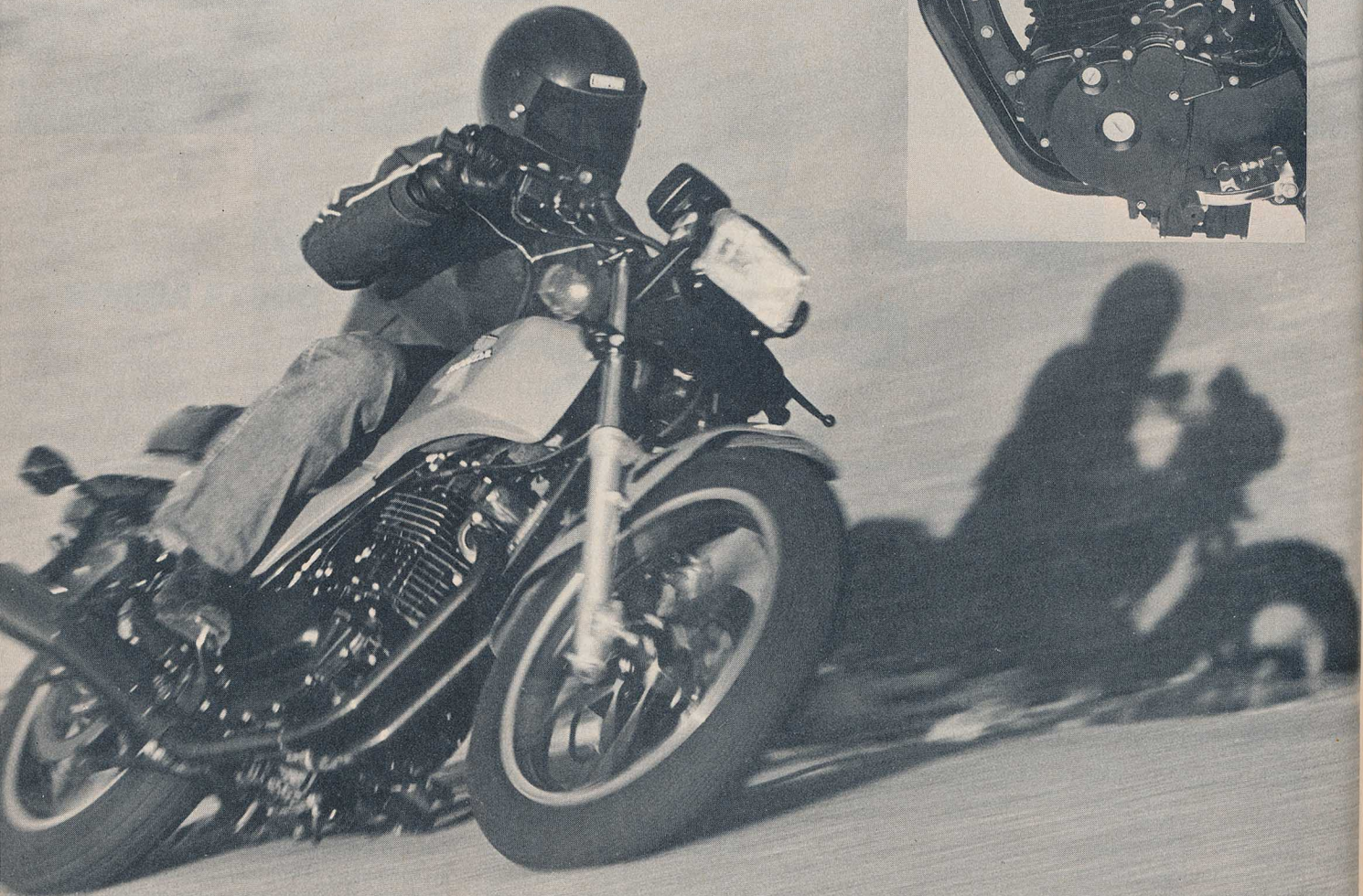
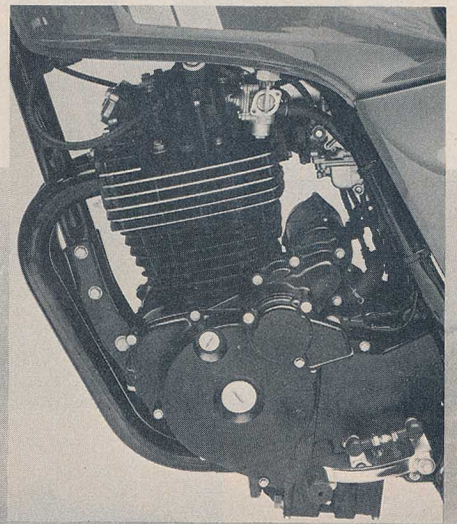
Even though the FT has a good strong charge in the mid-range, it's no Superbike, as its quarter-mile times indicate. The FT's peak power is actually shy of the typical 400cc twin; the slowest 400 we tested in our January econo-twin shootout, the Kawasaki KZ440 LTD, beats the FT in the quarter by a half-sec-

Single-cylinder engines by nature are very narrow, which allowed Honda to endow the FT with exceptional cornering clearance.

ond and over eight miles per hour.

Compared with its most obvious rival, the Yamaha SR500G, the FT is down by 0.20 second and 3.23 mph. The reason for the deficit can be found in the dyno charts. The FT and the SR torque and horsepower curves intersect at 5000 rpm, above which the SR shows a clear advantage: one full horsepower throughout the 1500-rpm range in which the engine works during drag-strip acceleration. That's not much, but it accounts for the small difference in ET and speed. Below 5000 rpm, the FT pumps out more torque and more horsepower than the SR, which explains why the FT is so easy to ride along twisty roads and around town. In these conditions you're likely to run the bike in the mid-range, and that's where the Honda excels.

Because the FT has a 35mm carburetor, three millimeters larger than the XL's,



HONDA FT500 ASCOT

one might mistakenly assume that the roadster has more power than the XL. Our dyno indicated the opposite—almost two horsepower down at 6500 rpm. The reasons for the deficit can't be found in the cylinder head; it's virtually a carbon copy of the XL's (differing only by including a tachometer drive). Valves are identical: 35mm intake and 30mm exhaust, and both pairs of valves lift 8.5mm. Camshaft timing has the same late-opening intake and early-closing exhaust as the XL, producing only 10 degrees of overlap. What, then, accounts for the variance? Part of it is the FT's constant-vacuum carb: it has an internal butterfly valve, which the XL doesn't have; this somewhat restricts the venturi. In addition, the FT has an exhaust system different from the XL-series'. Standard deviations between machinery account for the rest of the power difference.

On the open road the FT performs well. It has power to cruise easily at 55 mph and pass a line of cars with a quick downshift. Up to 5000 rpm the big single is quite smooth; some vibration is noticeable—but barely. Above 5000, despite

the counterbalancers, engine vibration is apparent, particularly through the gas tank and seat. Honda's and Suzuki's 450s are smoother for fast-lane cruising (65 miles per hour and above). Cruising at 55 mph with the FT equates to running at 4200 rpm; keep it to the legal limit or thereabouts and you'll be pleased with the single.

In contrast to the FT's overall engine performance, almost nothing mars its handling. The steering geometry (29 degrees of rake and 4.7 inches of trail) suggests that its steering response should be slow. Steering is, in fact, light and responsive, without the twitchiness of some sporting 550s. You can snap the FT from side to side easily, and it takes decreasing-radius and off-camber turns better than heavier, slower-steering machines do. Thanks to its narrow width, the 500 has tons of cornering clearance and can be leaned steeply without grounding

The FT is the first thumper to compete with 400-500cc twins on a performance and feature basis—thanks to its electric starting and counterbalancers.

the undercarriage. If you really push the FT, the footpeg ends touch first and then the stands, but touchdown is both light and predictable.

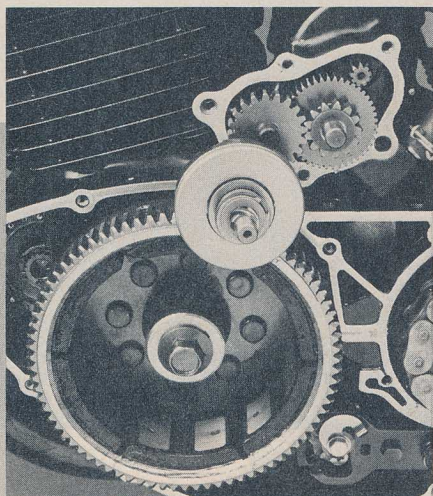
The only niggling complaint we have regarding the handling concerns the limp damping of the rear shock absorbers. The gas-charged shocks have five spring preload adjustments; they provide a useful range for differing rider weights. At any preload, however, contacting firm bumps in corners causes a slight rear-end wallow.

At the front, the 37mm air-charged fork has great road compliance. The tubes ride on Honda's dual Syntallic bushings, and the ride height can be set by adjusting pressure between a recommended six to 12 psi. We found the heavier setting suitable for all-around riding; it gives a taut and controlled highway ride.

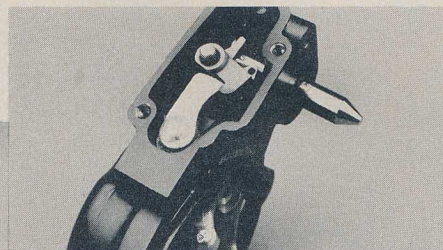
The fork incorporates an integral brace. Most single-disc front brakes pull toward the side on which the disc is mounted. Even the best can twitch slightly as the brake is first clamped on. The FT, however, exhibits no such tendency; the brace, it seems, works well.

(Continued on page 76)

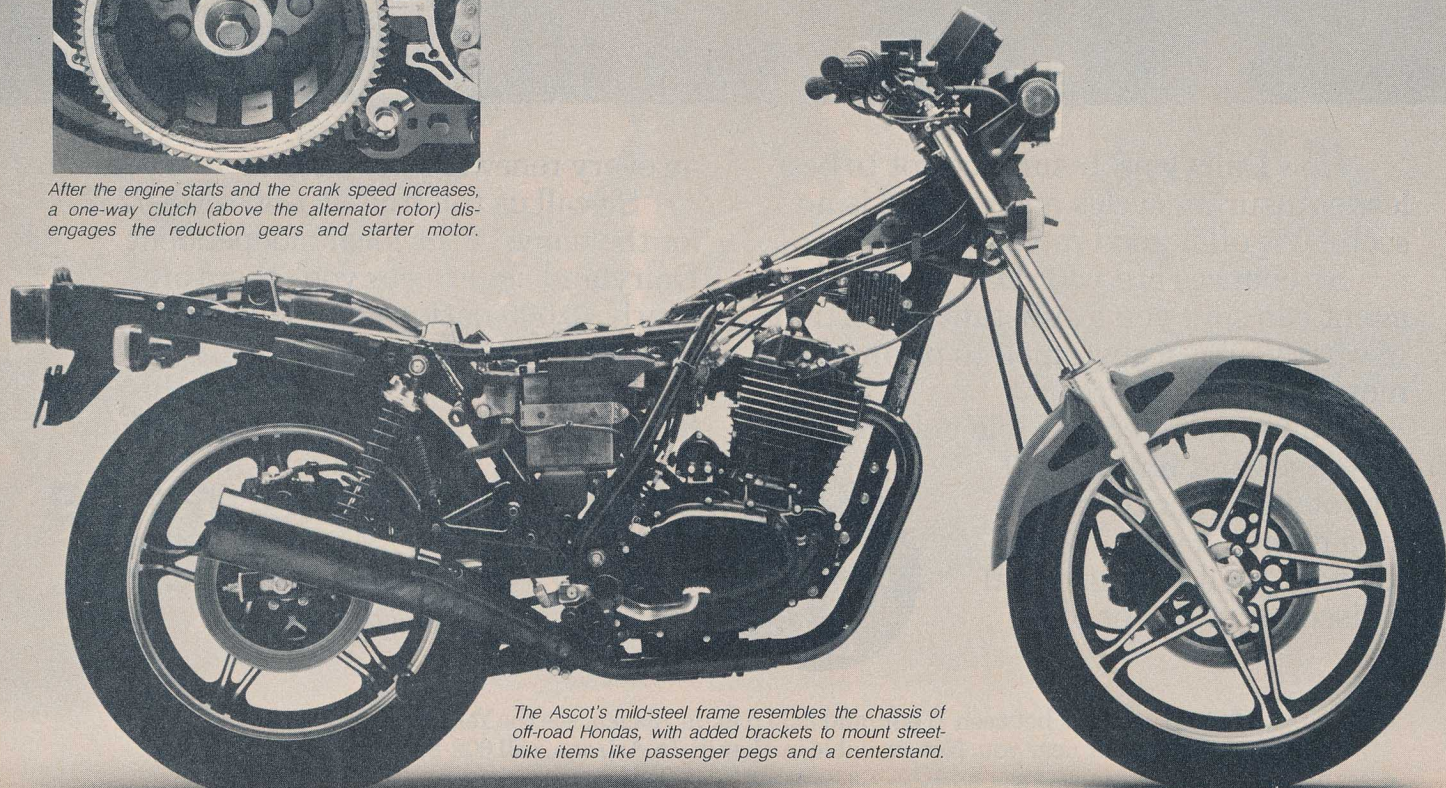
(Specifications, page 54)



After the engine starts and the crank speed increases, a one-way clutch (above the alternator rotor) disengages the reduction gears and starter motor.



During starting, a solenoid-activated locking lever (shown locked) engages the one-way clutch and pinion gear, which then drives a crank-mounted alternator rotor.



The Ascot's mild-steel frame resembles the chassis of off-road Hondas, with added brackets to mount street-bike items like passenger pegs and a centerstand.

Cycle **TEST SPECIFICATIONS**

Make and model Honda FT500 Ascot
 Price, suggested retail (as of 3/25/82) \$2198

PERFORMANCE

Standing start ¼ mile 15.02 sec. @ 81.59 mph
 Engine rpm @ 60 mph, top gear 4377
 Average fuel consumption rate 47.9 mpg (20.4 km/l)
 Cruising range, main/reserve 139/24 mi. (224/39 km)
 Load capacity (GVWR less curb weight) ... 347 lbs. (157 kg)
 Maximum speed in gears @ engine redline (1) 33
 (2) 49 (3) 64 (4) 81 (5) 96

ENGINE

Type Four-stroke, single-cylinder; air-cooled with one chain-driven overhead camshaft; four valves
 Bore and stroke 89.0 x 80.0mm (3.50 x 3.15 in.)
 Piston displacement 498cc (30.4 cu. in.)
 Compression ratio 8.6:1
 Carburetion (1) Keihin 35mm constant-vacuum with accelerator pump
 Exhaust system Two-into-one
 Ignition Battery-powered, inductive, magnetically triggered
 Air filtration Paper element, disposable
 Oil filtration Paper element, disposable
 Oil capacity 2.5 qts. (2.4 l)
 Bhp @ rpm 27.43 @ 6500
 Torque @ rpm 27.48 @ 4000

TRANSMISSION

Type Five-speed, constant-mesh, wet-clutch
 Primary drive Straight-cut spur gear; 29/69 sprockets; 2.38:1
 Final drive #530 chain, 15/42 sprockets; 2.80:1
 Gear ratios (transmission) (1) 32/13, 2.46
 (2) 28/17, 1.65 (3) 25/20, 1.25
 (4) 23/23, 1.00 (5) 21/25, 0.84
 Gear ratios (overall) (1) 16.40 (2) 10.99 (3) 8.33
 (4) 6.66 (5) 5.60

CHASSIS

Type Single-downtube, semi-cradle frame; box-section steel swing arm
 Suspension, front Leading-axle, air-assisted fork with 37mm tubes and 6.0 in. (152mm) of travel
 rear (2) gas-charged shock absorbers adjustable for spring preload, producing 3.3 in. (84mm) of travel
 Wheelbase 56.5 in. (1435mm)
 Rake/trail 29.0°/4.7 in. (119mm)
 Brake, front Hydraulic, single-disc with dual-piston caliper
 rear Hydraulic, single-disc with dual-piston caliper
 Wheel, front Cast, 2.15 x 19
 rear Cast, 2.50 x 18
 Tire, front 350 S 19 Yokohama Y994
 rear 425 S 18 Yokohama Y993
 Seat height 31.2 in. (792mm)

Ground clearance 6.5 in. (165mm)
 Fuel capacity 2.9/0.5 gal. (11.0/2.0 l)
 Curb weight, full tank 378.0 lbs. (171.5 kg)
 Test weight 538.0 lbs (244.0 kg)

ELECTRICAL

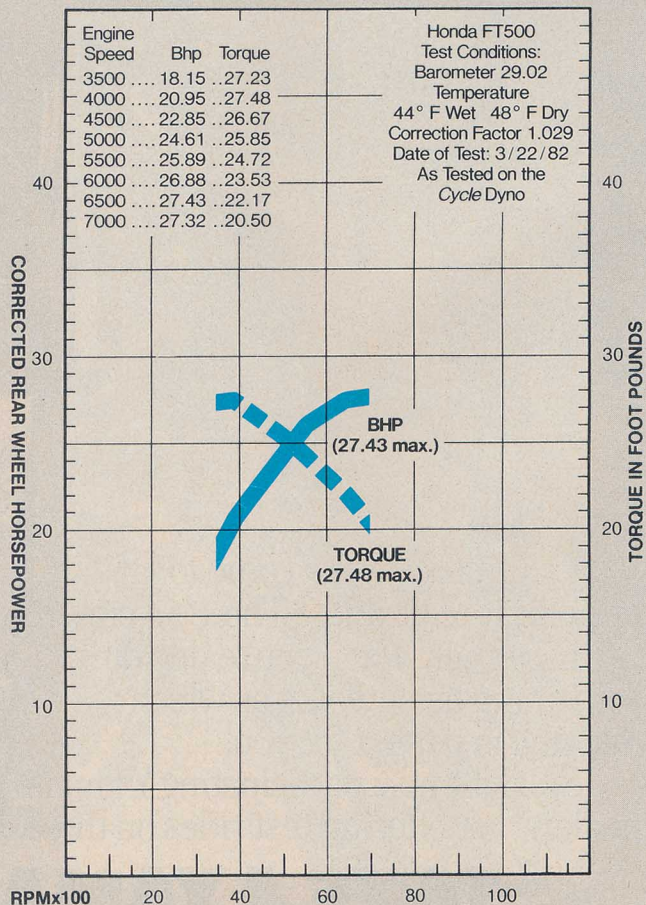
Power source AC alternator, 170 watts
 Charge control Solid-state voltage regulator
 Headlight beams, high/low 55/60 watts
 Tail/stoplights 8/27 watts
 Battery 12V 14AH

INSTRUMENTS

Includes .. Speedometer, odometer, tripmeter, tachometer with 7000-rpm redline. Indicators for high beam, neutral and turn signals.
 Speedometer error, 30 mph indicated, actual .. 29.97 mph
 60 mph indicated, actual .. 61.26 mph

CUSTOMER SERVICE CONTACT

American Honda Motor Company
 100 W. Alondra Boulevard
 Gardena, CA 90247
 (213) 321-8680



Deals

Sound Invasion

Cycle Sound, the well-known name in motorcycle stereo systems, now offers its new Invader frame-mount fairing. Specifically designed for bikes of 600cc or larger, the Invader has flush-mounted running and turn-indicator lights, a rec-

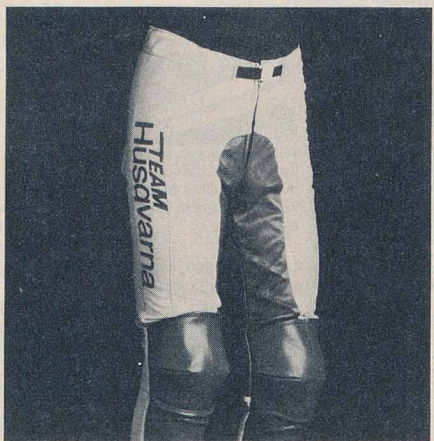


tangular headlamp and twin lockable storage compartments. It's available in black, white or metallic silver, with mounting hardware. The Cycle Sound stereo equipment is also available as an option. From Hoese Corporation, P.O. Box 41, Bulverde TX 78163.

CIRCLE NO. 1 ON READER SERVICE PAGE

Husky Pants

King Richard Burleson and Bill Grossi contributed their ideas to the design of Husqvarna's new racing pants. The pants are manufactured in Sweden and feature lightweight, flame-retardant

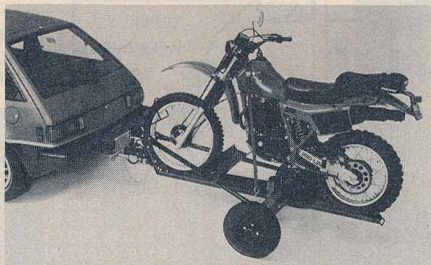


nylon with goat skin at the knee, crotch and seat areas, and elastic panels in the legs and waist. Durable plastic knee and shin guards, hip pads and an adjustable belt are also included. Available from your Husqvarna dealer.

CIRCLE NO. 2 ON READER SERVICE PAGE

Be Followed

Who says you can't take it with you? You can, with this 135-pound trailer. Called Tuff N' Lite, this trailer has a 725-pound rating that allows you to haul your big bike with your ankle-level car. Tongue height can be adjusted to keep the load

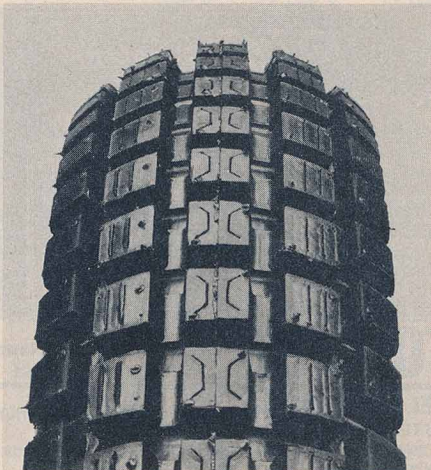


both low and level. Special Bearing Buddy wheel-bearing protectors help improve bearing life. Tuff N' Lite was designed so that a bike can be loaded or unloaded without power by one person. Unique Functional Products, 135 Sunshine Lane, San Marcos CA 92069.

CIRCLE NO. 3 ON READER SERVICE PAGE

Trials Tire

Swallow introduces the MT341 tire for Trials competition and dirt-road riding. The self-cleaning, deep-cut tread provides maximum forward grip without sideslip on loose, muddy and rutted surfaces. Swallow claims the MT341 is *the*



choice for precise steering and hard acceleration. For further information on these or any other Swallow Products, contact Swallow Motorcycle Tire & Tubes, 20435 Susana Road, Long Beach CA 90810.

CIRCLE NO. 4 ON READER SERVICE PAGE

Honda FT500 *Continued from page 52*

Both front and rear brakes provide powerful braking with good feedback under normal stopping conditions. Repeated hard braking from high speeds causes some fade; the positive feeling diminishes as the lever moves closer to the grip. During our testing, this fading appeared only under the most adverse braking conditions.

Honda's dual-piston calipers clamp only a narrow area around the discs' perimeters, increasing the area available for the giant holes in the disc rotors; the look suggests that the FT's styling was inspired by Class-C flat trackers. The discs mount to cast aluminum wheels rather than Comstars.

The seating position presents a combination of good and bad. Good first: the seat's hump stops the rider from sliding rearward during hard riding in the twisties; it provides a pocket of comfort which also lends to a feeling of complete control. On the down side, the seating position can be a bane to long-range comfort. Riders shorter than five-eight will probably find the seat-to-handlebar relationship quite accommodating; taller riders may feel cramped, not being able to slide back easily over the seat's hump, especially after an hour or two. Nearly all our testers liked the handlebar shape and footpeg position, although a couple of taller testers would have preferred the pegs more rearward.

Thanks to fine mid-range power, minimal vibration at cruising speeds and a comfortable riding position, the FT owner needn't feel timid about taking medium-length rides. In fact, the FT's range on a tank of gas encourages a full day's trip or an overnight spin. We typically covered 150 to 160 highway miles on the main fuel supply. One trip at moderate speeds netted a high of 54.9 mpg; our lowest was 43.0. The smallish, 3.4-gallon gas tank has little space for a large tank bag, but you can mount soft luggage.

The FT's real strength comes from its performance as a sport bike. The snappy but steady handling, its light weight, wide powerband, click-stop shifting and fine brakes make the Honda a superb tool to carve through twisty roads. You can easily and quickly fine tune your speed to every nuance of the road.

But, at last, we also have with the FT a big single that is competitive with its class and price rivals in other areas too. With the exception of sheer power output, this half-liter single offers all the function of a 400 or 500 twin—and more. It's lighter, more responsive and more agile than practically any bike in its class, and it offers all the amenities from a front disc brake to electric starting. With a little more engine smoothness high in the powerband, more peak power and better rear shocks, the FT could well be the best half-liter sporting machine for its price. ●