

TESTS: Yamaha XV920J Virago vs. XV920RJ, Suzuki RM250Z, Yamaha 550 Seca, IT250



Exclusive Coverage

Kawasaki's KZ750 Turbo

\$1.75

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Fairing Buyer's Guide

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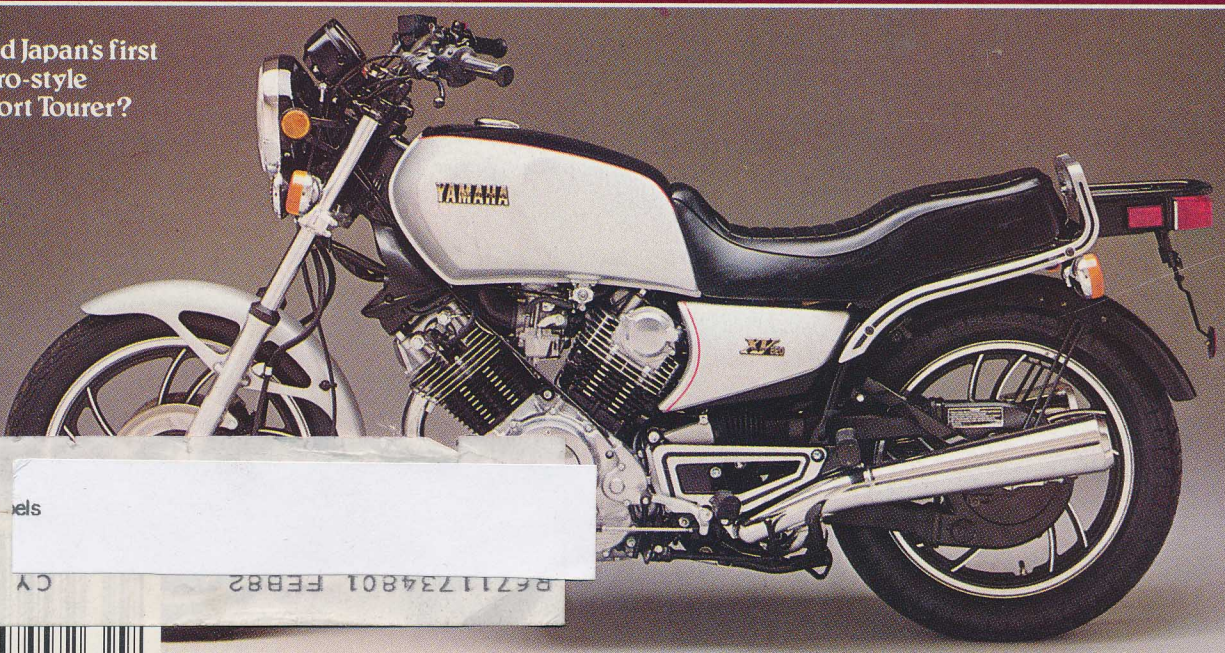
CYCLE GUIDE

STREET CRUISER VS. SPORTBIKE

Who really wins the confrontation between the ultimate American-style Boulevard Bomber



And Japan's first Euro-style Sport Tourer?



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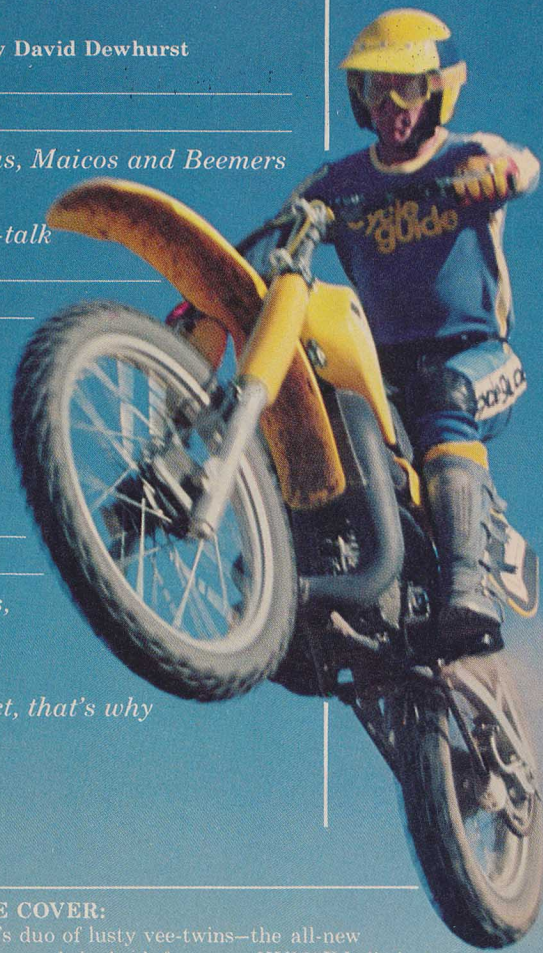
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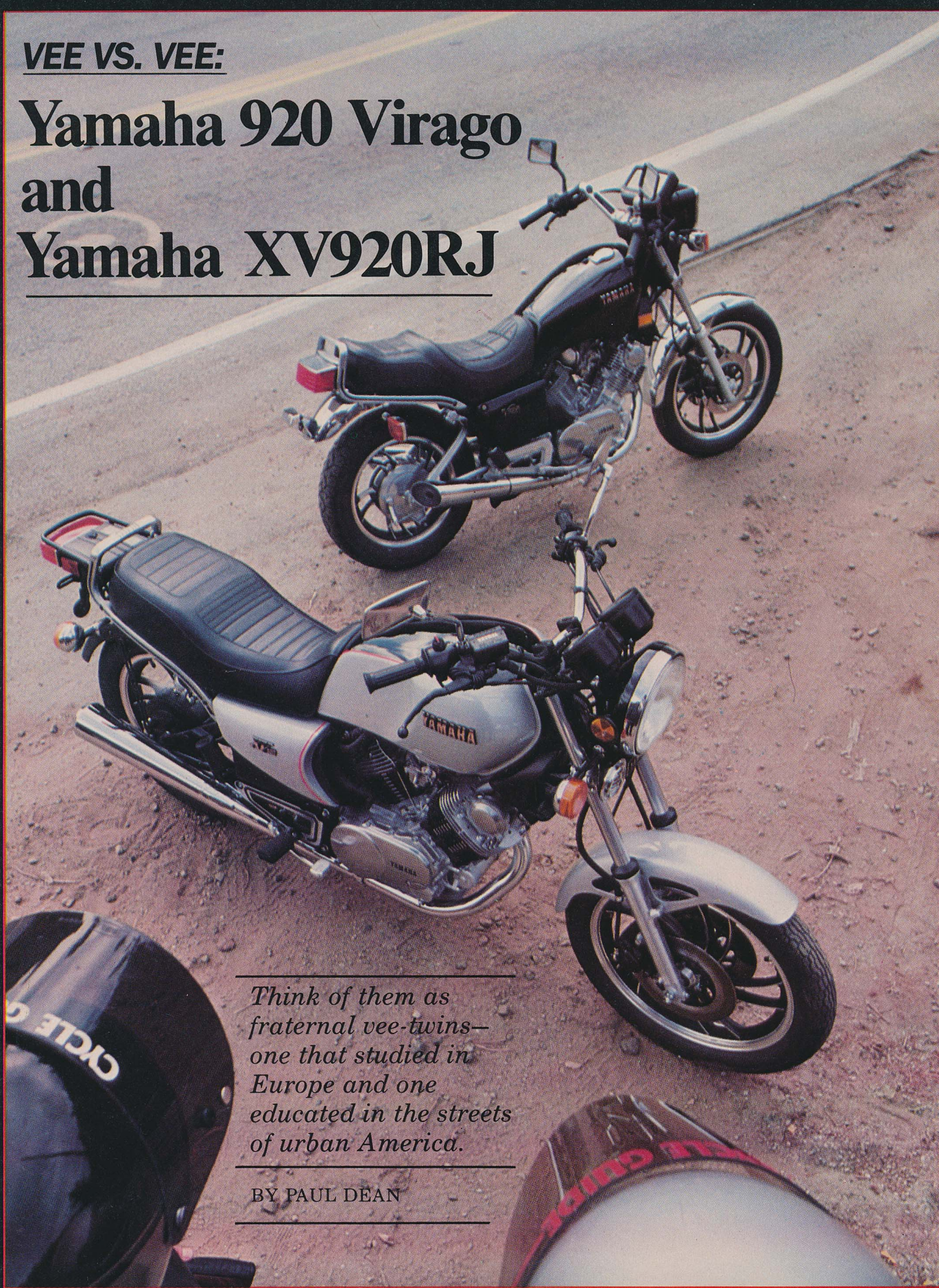
ON THE COVER:

Yamaha's duo of lusty vee-twins—the all-new 920 Virago and the back-for-more XV920RJ—lie in repose before the magic picture box of Chris Eastman.

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VEE VS. VEE:

Yamaha 920 Virago and Yamaha XV920RJ



Think of them as fraternal vee-twins—one that studied in Europe and one educated in the streets of urban America.

BY PAUL DEAN



© 1982 JIM COOK

To hear some people tell it, the bottom line on Yamaha's pair of 920cc vee-twins is that they're lacking in pedigree, mere mongrel reproductions of thoroughbred originals. The XV920RJ, they say, is a close-but-no-cigar attempt to out-Duke a Ducati, and the 920 Virago is simply an Oriental Harley-Davidson minus the shake, rattle and soul.

Those people are wrong, of course, even though there is a certain element of truth in their synopsis. But to portray these two surprisingly versatile Yamahas in such an oversimplified manner is like painting a landscape scene using just one color of paint: you end up only with indistinct images instead of a representative picture of

what's actually there.

Now, it *does* seem fairly obvious that the 920 Virago is aimed at, or at least in the general direction of, the motorcycle-as-lifestyle group, the laid-back, easy-riding boulevard bunch whose vision of The One True Bike is something uniquely American, something low-slung, tough-looking and mean-sounding—something, judging by that description, not too far removed from a Harley-Davidson, if ever removed at all. The XV920RJ, meanwhile, is a more performance-intensive model, a sport-tourer, it would seem, what with its café-style five-gallon gas tank, rearset footpegs, huge halogen headlight and not-so-high/wide handlebar. And its supposed logic-link to

the Ducati is that the only other 900cc tandem vee-twin in the sport-touring field is the one built by the desmodromic-valve folks over in Bologna.

It's understandable, then, how some people have misconstrued Yamaha's 920cc vees as little more than poor copies—or, for that matter, even *good* copies—of exemplary machines in two entirely different categories. But in all fairness, it's just as easy to see how *anyone* could get a bit confused when trying to figure out exactly what kind of animal each of these bikes really is. It appears that Yamaha has tossed a few unexpected elements into the brew when concocting these vee-twin models, and that alchemy has produced two bikes that don't always seem to occupy traditional niches in the moto-marketplace.

Take the 920 Virago, for instance: It's a high-tech showcase, a machine bristling with leading-edge accouterments like LCD digital/analog instrumentation (see CYCOM story, page 42), computerized LCD



PHOTOGRAPHY © 1982 CHRIS EASTMAN

systems-monitoring readouts, six-way-adjustable cast-aluminum handlebars and fork and shock damping that can be adjusted from the seat. But while this equipment is interesting, it isn't part of the accepted formula for the cruiser genre, nor is it what most boulevard bikers profess to either need or want—or appreciate having to pay for.

The XV920RJ's images are in much sharper focus, although that bike has its moments of ambiguity as well. Being performance-oriented, for example, it seems a more logical candidate for the Virago's techno-goodies, but it has been graced with virtually none of them. And its styling is a question mark, too; for, even though the



Two 920 vee-twins cornering in style—one in European Traditional and the other in Early American

Surprisingly, the differences in handling are subtle and few.

front of the bike passes as a sport-tourer, nothing about the bizarre appearance of the rear end supports that image. All that the swingarm-mounted fender and cantilevered taillight/luggage rack/security chain storage compartment seem to do, in fact, is discourage the sale of these European-styled 920s.

It's clear, then, that there is much about these two 920s that is not so clear, that a great deal of what seems obvious about them is anything *but* obvious. And since the solutions to these puzzlements are not ones that can be gleaned from a read through the sales brochures or a perusal of the spec sheets, there was only one way for us to divine The Truth about these bikes once and for all: Ride 'em. Individually and side-by-side. On long hauls and short jaunts. In town and out on the open road. WFO and in cruise mode. So we did. And by the time the dust finally settled and both big vees had gone thunka-thunka for the last time, we had found the answers, including some we hadn't anticipated.

One area that offered up no surprises, though, is the very heart and—protestations of H-D lovers to the contrary—*soul* of these two Yamahas: their engines. Given that they're big-inch vee-twins with their cylinders spread at almost a right angle (75 degrees, actually), they both perform about as we expected—which is to say, very smoothly and not particularly quickly, but with tremendous middle-rpm torque

and that deep, unmistakable exhaust music that only vee-type engines can manufacture.

Because the vee-spread on the 920s is closer to the Ducati's 90 degrees than to the Harley's 45 degrees, that exhaust symphony—and the almost total lack of annoying vibration—is more along the lines of what you'd experience on a Duck. Still, a vee is a vee, and it takes little imagination to hear—but not *feel*—the offbeat throbbing of a Milwaukee twin buried somewhere in the 920's exhaust note. And because the pitch of the uneven exhaust cadence barely changes as the rpm increases, the Yamahas seem long-legged and tall-g geared; but in actuality, they are quite *short*-legged and geared equivalent to most high-revving multi-cylinder literbikes.

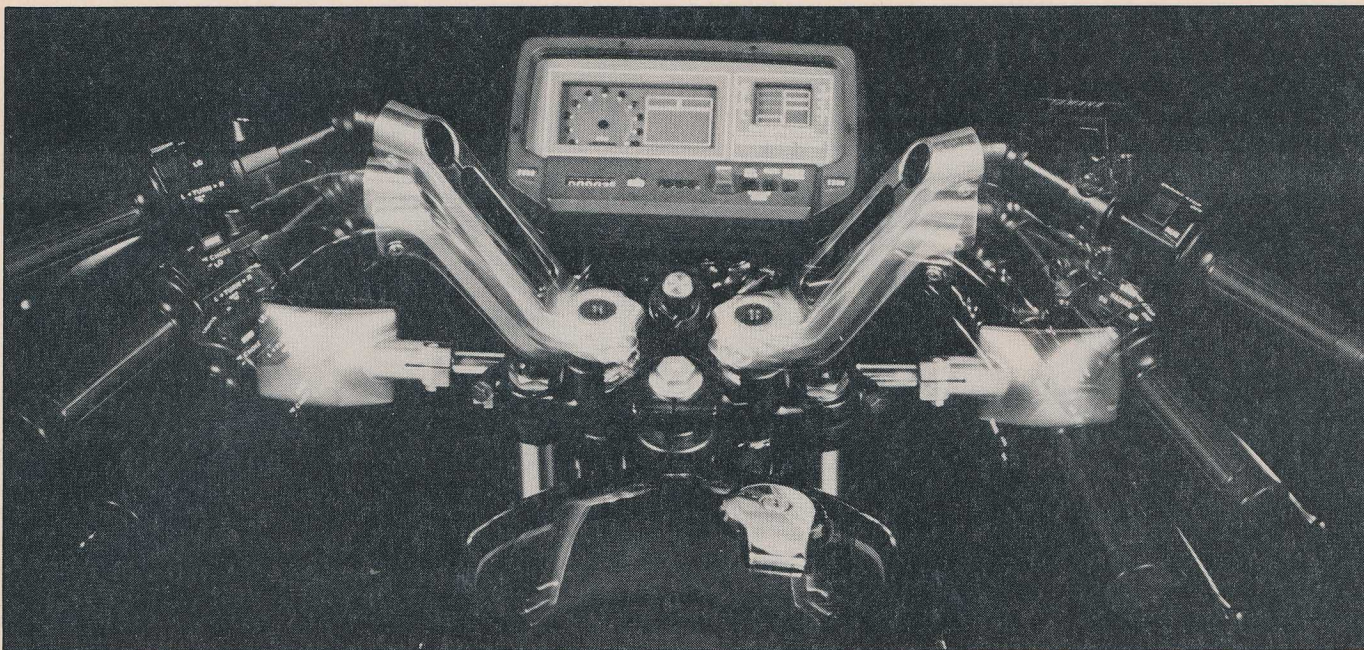
Despite their relatively low gearing, neither Yamaha will knock your socks off with blinding acceleration, although either will show both a Ducati and a Harley the quick way down a dragstrip. Besides, you soon learn to love the massive low- and mid-range torque that's always on tap in great bucketsful. You just dial the throttle open and the bike moves out. It "chugs" away if the revs are low and "drones" away if they're higher; but in either case the rates of acceleration are not much different. In fact, after you get accustomed to the atypically flat power curve, you'll sometimes wonder why Yamaha bothered to put so many gears in the transmission, since

shifting often seems superfluous.

A comparison of quarter-mile times does reveal that the Virago nips through the lights a hair's breadth more quickly than the RJ-model, but that doesn't tell you that in a roll-on, the custom handily outruns the sport. And for two good reasons: The Virago's 16-inch rear tire is four inches smaller in circumference than the RJ's 18-inch, giving the former lower overall gearing; and the Virago's shaft final drive allowed Yamaha to put an exhaust plenum chamber between the two mufflers that boosts the midrange power, whereas only a small-diameter balance pipe could be routed around the chain drive on the RJ. The sport model has longer mufflers that yield a fraction more peak power, though, which explains why the two 920s can have comparable quarter-mile times.

Those exhaust and final-drive dissimilarities are the only differences between the two engines, aside from a couple of cosmetic ones. Otherwise, the motors are identical twins all the way from their one-piece forged cranks and plain-bearing big-ends, up to their single-overhead-cam, two-valve cylinder heads. But technologically, neither offers much that's new or exciting. Yamaha's goal with the 920 engine was to design not the world's most sophisticated vee-twin but a thoroughly modern one by applying contemporary technology to that ages-old concept. So most of the internals are, basically, bog-standard bits that have

Continued



Triple-exposure photograph depicting the Virago's range of handlebar adjustment

Of six possibles, only two seem ergonomically practical.

seen service in various inline motors.

With a few notable exceptions, the 920's driveline is routine fare, too. Both bikes use exactly the same gears and ratios in their conventional five-speed gearboxes, and both have a separate spur-gear-driven jackshaft behind the two usual transmission shafts. Jackshafts are pretty common these days, but what's interesting about this one is that its presence was mandated by the "backward" rotation (clockwise when viewed from the left) of the crankshaft. Yamaha's engineers chose to spin the crank in this direction when they found that doing so allowed the frame to act as a better damper of the engine's vibrations and

power pulsations, thus resulting in a noticeably smoother motorcycle. The jackshaft was required simply to function as a gearbox output shaft that turns in the proper direction to drive the motorcycle forward.

The biggest difference, then, between the shaft-drive gearbox and the chain-drive one is that the former has a spiral-bevel gear on the left end of its jackshaft and the latter has a 16-tooth sprocket. But while the Virago's shaft-drive configuration is completely unremarkable in this era of shaft proliferation, the RJ's final drive is not. It uses a No. 630 chain that is fully enclosed and continuously bathed in a liter of

special lithium grease. The sprockets are encased in separate cast-aluminum housings that are interconnected only by flexible rubber tubes through which the chain passes.

There are significant advantages with this system, not the least of which is that the chain will go up to 5,000 miles between adjustments and, according to Yamaha, at least 30,000 miles before it has to be replaced. Moreover, this chain drive is every bit as clean-running as a shaft drive, not to mention being lighter, cheaper to manufacture, and simpler and less expensive to repair. Enclosed chains make so much sense, in fact, that it's hard to understand why their use is not more widespread.

There's no mystery at all, though, about why there's a chain drive of *any* sort on the Euro-XV and not a shaft: better sportbike handling. Shaft-driven motorcycles, you see, tend to "jack up" on their suspensions while accelerating and "settle down" during deceleration. And these peculiar dynamics have proven less than ideal for all-out sport riding, since they can effect center-of-gravity changes and cornering-clearance reductions at the most inopportune moments. But to our amazement—and Yamaha's engineering credit—we found that any shaft-vs.-chain handling differences between these two bikes were remarkably small and only discernible during the most aggressive cornering.

Explaining these handling similarities was easy once we peeled back the cosmetic differences and sized up the design likenesses. Both bikes use the same pressed-

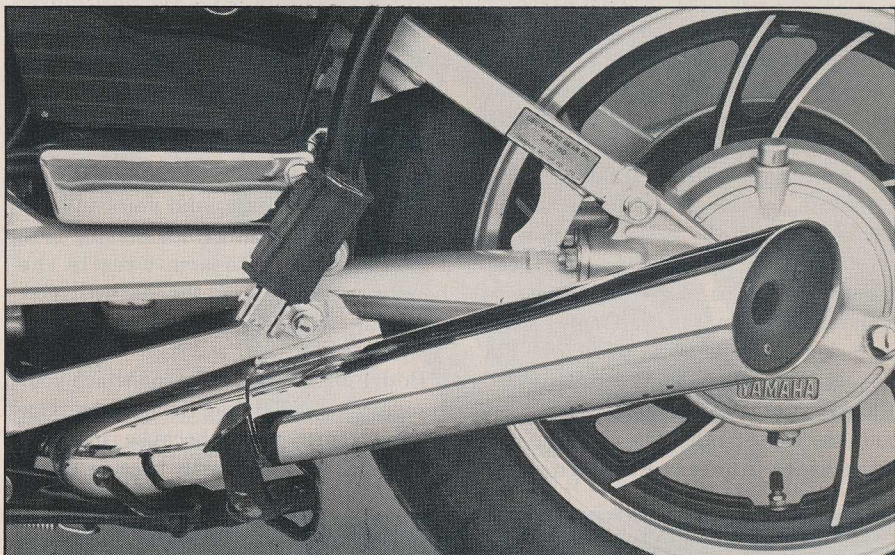
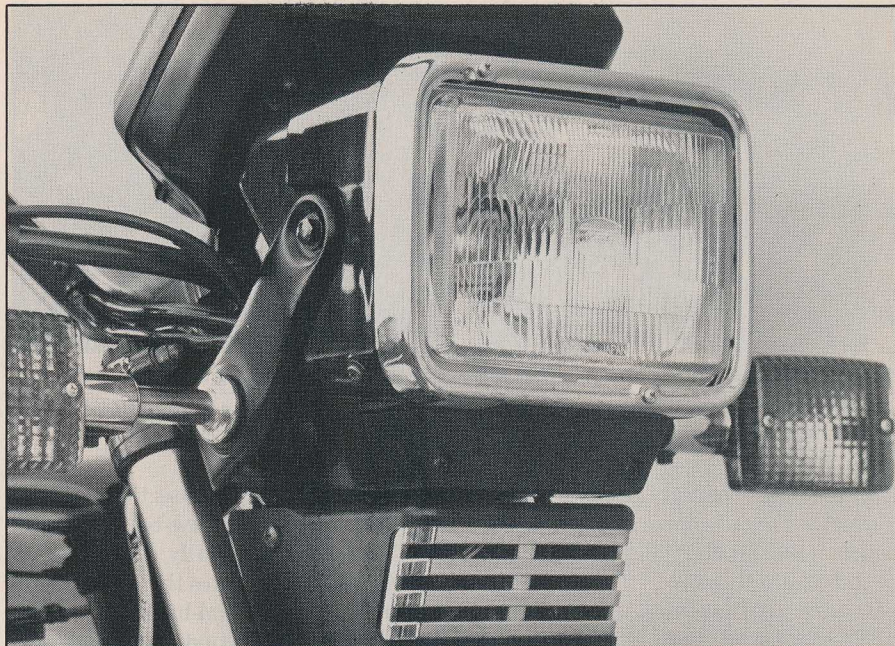


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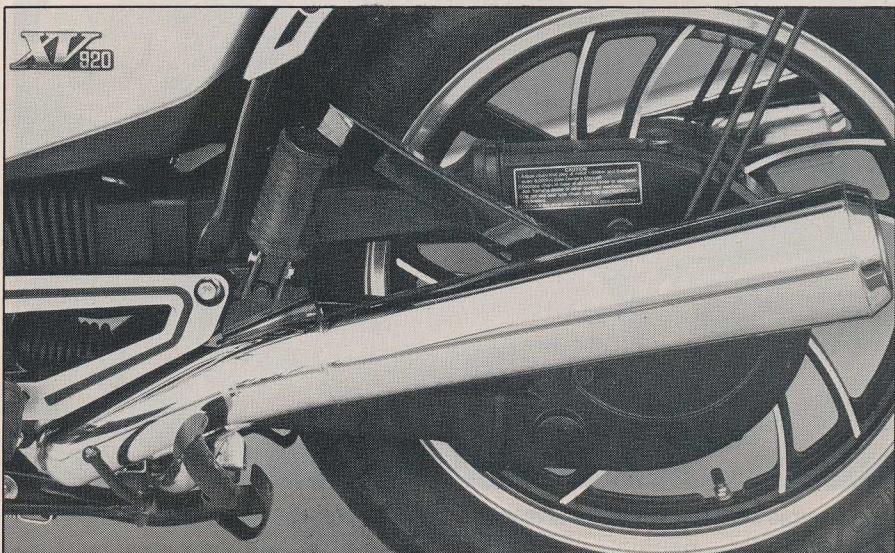
steel backbone-type frame, save for some obvious differences in bracketry and final-drive accommodations. The RJ has a longer swingarm than the Virago that gives it about an inch more wheelbase, but the custom has slightly slower steering geometry—a degree more rake and a quarter-inch more trail. The Virago also uses a different front fork (a leading-axle Kayaba with 36mm stanchions) than the Euro-style 920 (a 37mm inline-axle Showa); but the all-important front-axle-to-steering-head relationship is the same on both 920s. Meaning that, since they also have the exact same air-assisted, damping-adjustable rear shock, the Virago gets its added head angle and trail from the 16-inch rear wheel, which makes the bike sit almost three-quarters of an inch lower in the rear.

It's no wonder, then, that two such outwardly different motorcycles can feel and act so much alike. But what's *really* surprising is that even though the XV920RJ is slightly more adept than the Virago on twisty back roads, it's that way not so much because it has a chain drive, but simply because it has more cornering clearance (due to the taller rear tire) and better sport-riding ergonomics. The handlebar is almost a café-racer bend and the foot controls are located nine inches further rearward than on the Virago's Harleysque forward-mounted pegs. The resultant leaned-forward riding position is more conducive to serious playracing than is the custom's bolt-upright position. You can, admittedly, juggle the Virago's splined handlebar adjustments to achieve six different handgrip

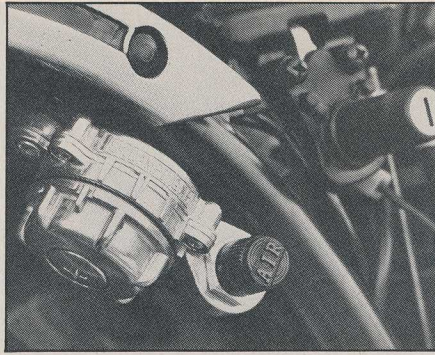


Virago's dissimilarities include shorter swingarm, pipes, tire and gearing

But it's the one that's long on quarter-mile and roll-on acceleration.



PHOTOGRAPHY © 1982 VIC HUBER



Adjustment knobs control Virago's four fork- and six shock-damping settings

But the XV920RJ, a logical candidate for fork adjusters, doesn't have them.

angles and locations, but none of them are any better for canyon-chasing—or, in our opinion, for all-around riding as well—than the standard settings.

Despite all that, the Virago bends around corners with surprising finesse, losing ground to the other 920 only when the chase gets flat serious. And by that time, even the RJ begins to disclose a few weaknesses. It's very stable when banked way over and never wobbles, really, but it does sort of move around a bit when passing over even minor road undulations, like maybe the pressed-steel frame is flexing ever so slightly.

Not to worry, though. Because what makes both of these 920s so enjoyable on a meandering mountain road is not sheer roadracing competence at ten-tenths but the ease with which they can be tossed around at a spirited but more *sane* pace—about, say, *eight*-tenths. The vee engine, by virtue of its inherent narrowness, is

mounted lower in the chassis than a parallel twin or multi could have been, thus giving the 920s an unusually low center of gravity. And that makes them feel much lighter during turn-and-bank maneuvers than their 500-plus pounds would indicate. You can, therefore, execute most moves more quickly and with less effort than on multis of comparable size and weight. You can just yank on the handlebar and the 920 will flop over into a corner almost instantaneously; you can change lines readily once into the turn or flick through a series of S-bends with ease; and you can even bank over into a turn while braking hard without having to arm-wrestle the handlebars, which is not the case with most big, high-center-of-gravity four-cylinder motorcycles.

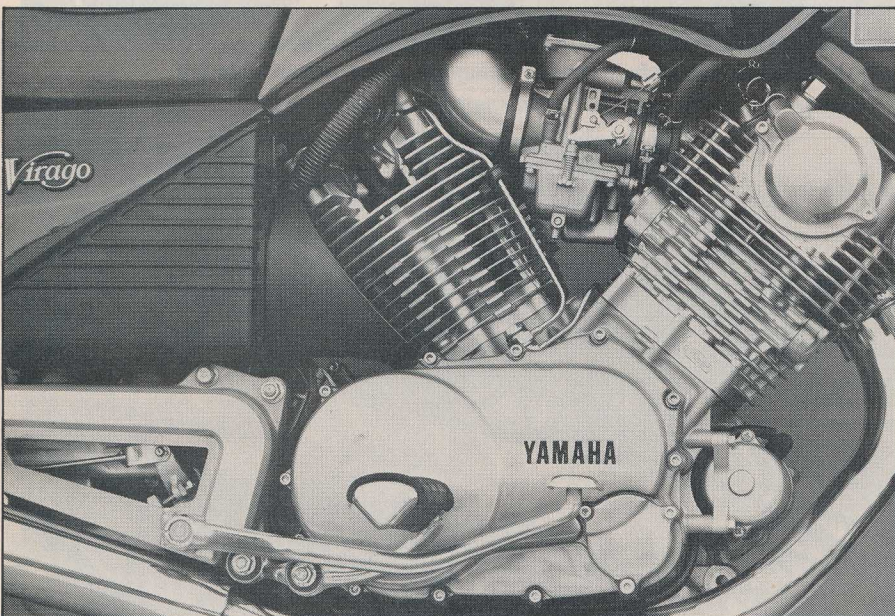
Both 920s, then, are bikes on which your grandmother could drag the undercarriage around a turn—partly because they lean over so willingly and partly because things

drag fairly easily, especially on the lower-slung Virago. When the suspension is adjusted for the best ride (14.7 psi minimum air pressure in the Monoshock, 5.7 psi minimum in the fork)—the feet of the centerstands and the ends of the footpegs on both bikes will touch down when turning in either direction; and you can add the front exhaust pipe to the list on right-handers.

Pumping up the suspension, of course, makes dragging all this hardware a lot more difficult; but by the time you get enough pressure in the fork (about 16 psi) and shock (around 50 psi) to allow serious banking angles, the ride on both bikes will have gone to hell in a very uncomfortable handbasket, and the RJ's fork will have come up short of rebound damping (it has no adjusters atop the fork tubes like the Virago does). You can strike a reasonably happy compromise between comfort and cornering somewhere within those two inflation extremes; but for a motorcycle that boasts narrowness as one of its alleged advantages, the attainable banking angles (especially on the sportier RJ) are a bit disappointing.

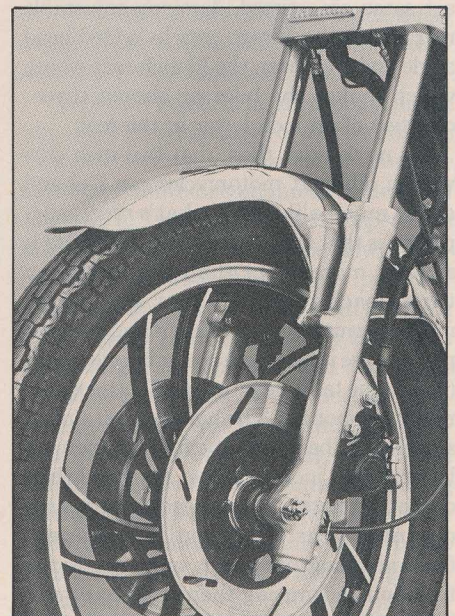
Consequently, neither of these 920s is likely to end up terrorizing the local Ducati contingent out in the twisties; but any Harley rider who messes with a Virago will get his first lesson in just how much a Yamaha vee-twin is *not* like an H-D.

If you're a not a peg-dragger and instead care more about ride quality, you'll be pleased to learn that the front fork on either bike absorbs all manner of road irregularities exceptionally well when the air pressure (and, on the Virago, the fork



Virago's wares include chromed intake tubes, forward footpegs and silver cylinders

You can't have The Right Look without The Right Stuff.



Virago's Kayaba-built leading-axle fork

With slotted discs and damping knobs.

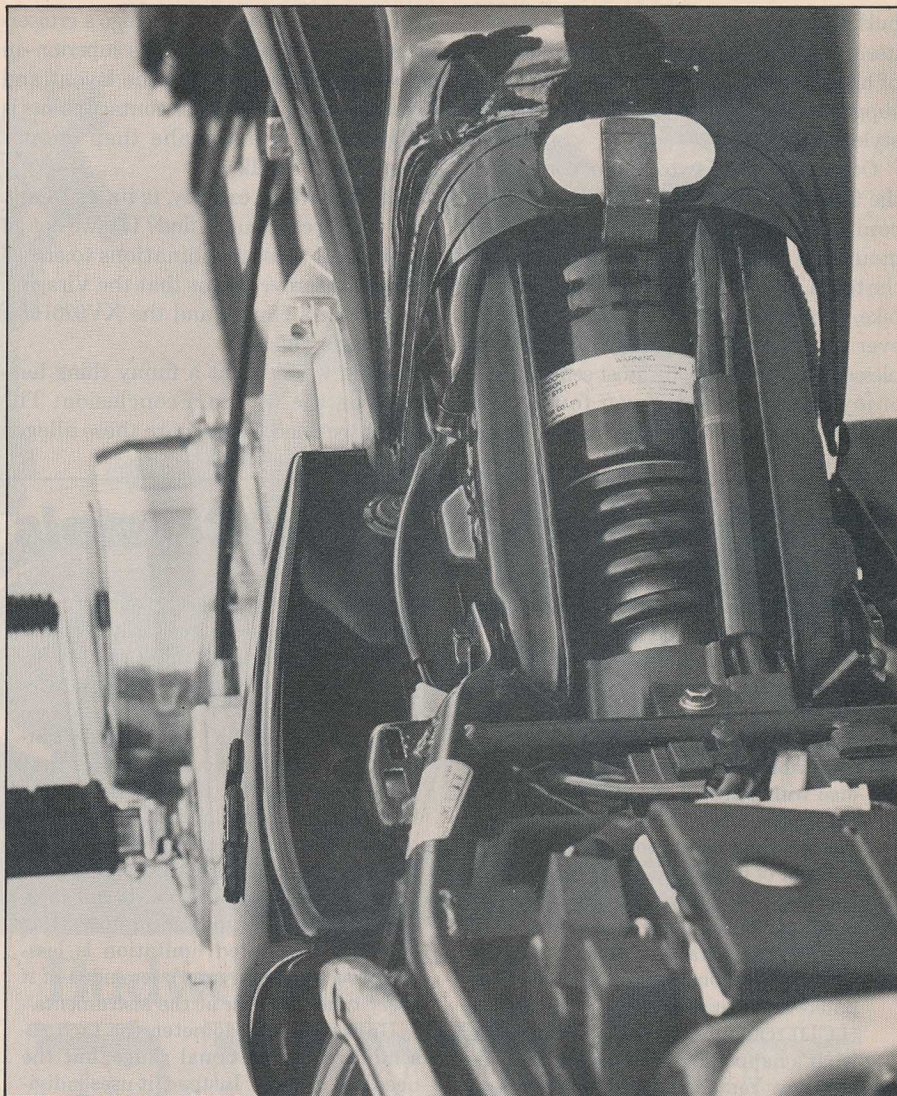
damping) is set at full-soft. And although both forks are virtually free of stiction and respond beautifully to the tiniest ripple at their softest settings, it still takes a king-size bump to cause any bottoming.

Sorting out the Monoshock rear suspension is a little more complicated. The shock bottoms relatively easily when its air pressure and six-position damping regulator both are set at their minimums, but that's where they must be if the ride at the rear is to be even remotely comparable to that at the front. And dialing up the air pressure enough to prevent premature bottoming makes the bikes ride rather harshly at the rear. Both 920s tend to be a little choppy in the rear anyway, even when the Mono is in full-soft mode. Not that the ride in back is *bad*, but it's just not as silky smooth as up front. The Virago is worse in this respect due to its shorter swingarm (effectively making the shock stiffer) and the greater unsprung weight of its shaft-drive hardware and 16-inch rear wheel.

Too, the Virago often just *feels* slightly choppier than the RJ because its operator must sit perfectly upright and with his feet far forward, placing all of his torso weight directly on his buttocks. The sport version's position—a slight forward cant of the torso, with feet tucked back beneath the thighs—distributes the upper-body load between the buttocks, the thighs and the palms of the hands.

Despite that, the 920RJ isn't an appreciably better long-distance mount than the cruiser. The Virago's seat is a much more comfortable perch, and it is only the upright riding position that brings on numb-

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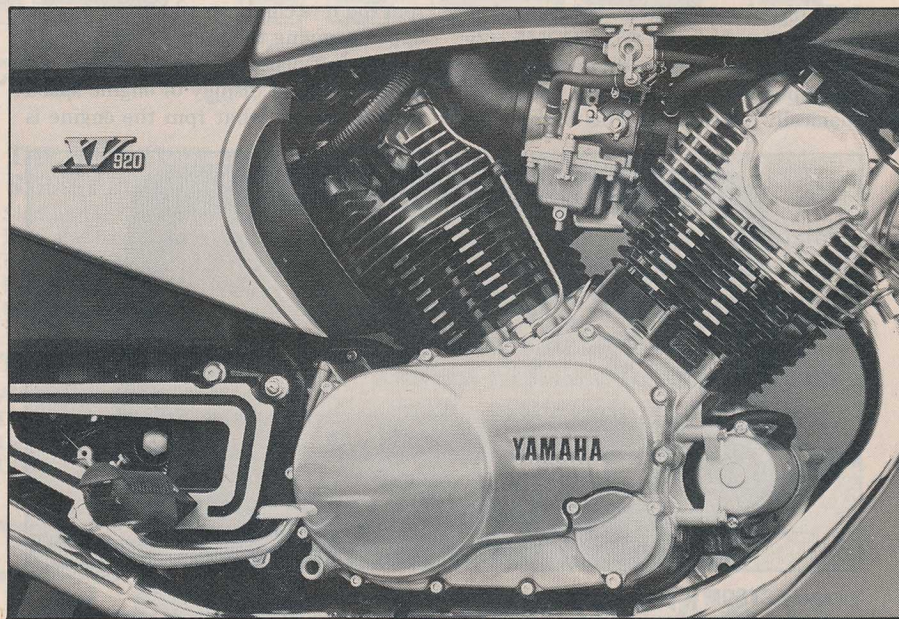
Air-assisted Monoshock unit nestles snugly under low-slung seat and tank

Tidy, but also why the battery has to reside where it can foul the right leg.



XV920RJ's Showa-built inline-axle fork

Plain-wrap suspension for the Sport.



XV920RJ gets black-painted cylinders, rearset pegs and right-side petcock

Different from the Virago visually, but genetically they're one and the same.

butt after an hour or two. But it is the seat itself that gets old on the RJ after a couple of hours. It isn't as effectively padded or supportively shaped as the Virago's bucket-style saddle.

Other than those two areas of complaint, the 920s earn high marks for their overall comfort. The Euro-XV is a delightful mount up until the rider's buns throw in the towel, and it's a far more rational sport-bike, comfortwise, than any Ducati we've ever tossed a leg over. And the Virago is blessed with some of the most sensible and enjoyable ergonomics ever found on a custom-style motorcycle. Harley's new

FXRS Super Glide is the Virago's cruiser-class equal—or maybe even its superior—in ride- and seat-quality, but the layout and operation of all other rider-contact points is far better on the Yamaha than on any other bike of its ilk.

Ah. But what, exactly, *is* its ilk? Isn't that what we set out to find? Did we not go through all these machinations to either prove or disprove claims that the Virago is a poor man's Harley and the XV920RJ a slow man's Ducati?

Indeed we did. But a funny thing happened on the way to a conclusion: The harder we tried to compare these alleged

copies with their originals, the more it became apparent that they, too, are originals, that they're more like *each other* than they are like a Harley or a Ducati or anything else. Oh, sure, there's a certain element of the Virago's character that stirs a few emotions usually reserved for Harley-Davidsons, just as the XV920RJ comes closer to approximating the Ducati experience than any Trans-Pacific motorcycle ever built. But as fanatically revered as Harleys and Ducatis are, they're specialized, narrow-focused motorcycles. And Yamaha's vee-twins are highly *un*specialized, broad-band motorcycles, versatile bikes that do

Continued

CYCOM: Taking Liquid Crystals to the Redline

• Back when Dick Tracy first adjusted the vertical hold on his wristwatch, it would have been hard to predict the fascination that today's consumer has for electronic gadgetry. But the age of micro-chip magic has arrived. And as households everywhere became more and more saturated with personal computers and digital bathroom scales, it became inevitable that motorcycling had to follow suit.

Proof of motorcycling's entrance into the realm of printed circuits and digi-magic can be found perched in front of the 920 Virago's handlebars. It's called CYCOM—a contraction of Cycle Computer—and it uses Liquid Crystal Display (LCD) readouts to tell the Virago rider what's happening with his favorite vee-twin toy. Yamaha started with the same Computerized Monitor System (CMS) it introduced on last year's Seca 750 and took the idea two steps further with an LCD digital speedometer and an analog-type LCD tachometer. So CYCOM's only non-electronic items are the odometer and the tripometer, which are the usual mechanically driven items. This is simply be-

cause an electronic mileage counter could have its reading altered too easily. Number storage with the ignition off would also call for an independent battery for the CYCOM.

Sitting above the odometer on the console are two blank-looking spaces that become the speedo and tach when the ignition is turned on. The digital speedometer is on the right and displays speed either in miles per hour or, with the press of a button, kilometers per hour. It still tops-out at 85 mph, but somehow that federally mandated limitation is less-offensive when you aren't reminded of it every time you look at the instruments.

Unlike the speedometer, the tach resembles a conventional gauge, but the needle is missing. Instead, it uses individual LCD pointers to track the rpm in a way that can best be described as the opening and closing of a fan. For each 250 rpm the revs climb, an additional pointer appears, giving the tach a sunburst appearance at high rpm. Yamaha chose not to use a digital display of engine speed because seeing what rpm the engine is

turning at any given time is secondary to knowing what relationship that level has to redline and how quickly the revs are escalating. A bonus of this system is that by simultaneously punching two side-by-side buttons on the dashboard, the tach's reading is recalibrated for a 0-to-2000-rpm scale that lets you accurately adjust the engine idle.

Also making maintenance easier is CYCOM's CMS console, which "talks" to the rider through eight separate LCDs, telling him if the sidestand is down, if the levels of oil, brake fluid, fuel or battery electrolyte are low, and if the head- and taillight are operational. The LCDs come on with the ignition, flashing one-by-one and then disappearing if nothing is amiss. Only the fuel LCD remains visible, telling the rider, in quarter-tank increments, how much gas he has left. But if any of the levels or functions under CMS's scrutiny aren't right, the corresponding LCD will remain lit, and a flashing red light will attract your attention. But if you're the type (and most of us are) who can be driven crazy by flashing red lights—even on the short trip back to the garage—a button is provided that will, with just one push, make the light burn continuously or turn out the warning light altogether with another push. The affected LCD, however, will remain visible until the problem is corrected. And right next to the warning-cancel button is a self-check button that makes all of the LCDs display, just to relieve your suspicions of problems within the CMS itself.

CYCOM doesn't represent the only case of technology-overseeing-technology, either. Suzuki and Kawasaki both have their own versions of CMS, and more are certain to follow. Yamaha has just taken one of the first steps in taking space-age technology out of the comicbooks and putting it on the road. —Ron Lawson



Virago's CYCOM (Cycle Computer) LCD instrument console

All it doesn't do is tell time.

Yamaha XV920J Virago



SPECIFICATIONS:

IMPORTER: Yamaha Motor Corporation USA
6555 Katella Avenue
Cypress, California 90630

CATEGORY: street

SUGGESTED RETAIL PRICE: \$3899

ENGINE

Type four-stroke tandem vee-twin
Valve arrangement single overhead camshafts
Bore and stroke 92.0mm x 69.2mm
Displacement 920.0cc
Compression ratio 8.3:1
Carburetion two 40mm Hitachi constant-vacuum
Air filter disposable paper element
Lubrication wet sump
Starting system electric only
Ignition transistorized breakerless, dual coils
Charging system 12-volt; alternator, voltage regulator, rectifier

DRIVETRAIN

Primary drive straight-cut gears; 1.660:1 ratio
Clutch wet, multi-plate
Transmission-to-jackshaft straight-cut gears; 1.022:1 ratio
Jackshaft-to-driveshaft spiral-bevel gears; 1.056:1 ratio
Driveshaft-to-rear-wheel spiral-bevel gears; 2.909:1 ratio

Gear	Internal gear ratio	Overall gear ratio	MPH per 1000 RPM
I	2.353	12.251	6.0
II	1.667	8.678	8.4
III	1.286	6.695	10.9
IV	1.033	5.375	13.6
V	0.909	4.734	15.4
VI			

SUSPENSION/WHEEL TRAVEL

Front air-spring, 36mm stanchion tube diameter, 4-way adjustable rebound damping/5.8 in. (147mm)
Rear Monoshock air-spring, 6-way adjustable rebound damping/4.3 in. (109mm)

All weights and measurements are taken with machine unladen and fuel tank empty

BRAKES

Front dual single-action hydraulic calipers, 10.5-in. (268mm) discs
Rear drum, single-leading shoe, rod-operated

TIRES

Front 3.50H19 Bridgestone Mag Mopus L303
Rear 130/90-16 67H Bridgestone Mag Mopus G508

DIMENSIONS AND CAPACITIES

Weight 514 lbs. (233kg)
Weight distribution 45.9% front, 54.1% rear
Gross vehicle weight rating (GVWR) 1060 lbs. (481kg)
Wheelbase 59.8 in. (1519mm)
Seat height 29.3 in. (744mm)
Handlebar width adjustable from 26.0 to 28.8 in. (660 to 732mm)
Footpeg height 12.3 in. (312mm)
Ground clearance 5.3 in. (135mm), at crankcase
Steering head angle 29.5 degrees from vertical
Front wheel trail 5.24 in. (133mm)
Frame pressed steel backbone
Oil capacity 3.8 qt. (3.6l)
Fuel tank steel, 3.6 gal. (13.5l), including 0.5 gal. (2.0l) reserve
Instrumentation LCD digital speedometer, LCD dual-range analog tachometer, odometer, tripmeter resettable to zero, LCD fuel gauge, LCD systems check panel

PERFORMANCE

Fuel consumption 36 to 49 mpg (15 to 21 km/l)
Range, maximum 130 to 176 miles (209 to 284km)
Range, reserve only 18 to 26 miles (29 to 42km)
Speedometer error, 30 mph indicated 30 mph actual
Speedometer error, 55 mph indicated 55 mph actual
Best 1/4-mile acceleration 12.936 sec., 101.58 mph (163 kph)
Top speed (calculated) 108 mph (173 kph)
Stopping distance from 30 mph 32 ft. (10m)
Stopping distance from 60 mph 134 ft. (41m)

WARRANTY: 6 months unlimited mileage

AVAILABLE COLORS: New Yamaha Black or New Ruby Red

nothing spectacularly well but do almost *everything* competently.

So in that sense, neither 920 really *has* an ilk. The Virago arrives dressed for battle in street-fighter's clothing, but the presence of its high-tech trimmings is your first tip-off that this bike is much more than something on which you simply profile up and down the block all evening. It's ready for just about any sort of on-roading, and, best of all, in the process it can get a rider emotionally charged without him ever needing to drag a peg or peg a redline. And just as the Virago is a custom-style bike with an unusually wide range of capabilities, so is the 920RJ a superb, low-effort horizon-

tilter that doesn't compromise its enjoyability otherwise.

It seems, then, that the only thing either of Yamaha's 920s has in common with a Harley or Ducati is that they all use engines that have two cylinders placed in tandem—a vee-twin, they call it. And in that respect, maybe Harleys and Ducatis and 920 Yamahas really *are* brothers beneath the skin. Because there's something very special about each one of those bikes that relentlessly compels you to just get on it and *ride*—somewhere, anywhere.

As far as we can tell, on the 920 Yamaha, that special something is shiny, vee-shaped and goes thunka-thunka. ●

Ride Review

• I don't normally like Custom motorcycles. Their looks do nothing for me, and the low-rider lines usually call for compromises in handling and comfort. For me Customs are bikes to be seen on rather than ridden on. But the 920 Virago isn't quite like that. It's an exception to the Custom rule because it hardly gives away anything in handling, and it's never really uncomfortable.

I could almost live with the bike if it were not for the annoying electronic instruments. Not that I have a universal hate for electronics, as long as they perform better than anything else. On the Virago they are there only to be different, offering disadvantages of slower response in the tachometer/and difficult-to-follow digital speed figures. But maybe that's only typical of a made-to-be-seen-on Custom motorcycle —*David Dewhurst*

• The typical Japanese street cruiser reminds me of a Sumo wrestler disguised as a belly dancer. You can't just stick a ruby in the belly button of a big four-cylinder road-burner and expect to change what it is. The bike will still sound, feel and act the same—the plastic facade merely hinders its intended function.

But the Virago is different. It doesn't pretend to be something it's not. It already is what all customs try to be. The rhythmic pulsations of the big twin assure me that there is nothing synthetic about the bike. It just holds an earthy reality that no amount of restyling can give a transverse four. That the bike isn't as smooth or fast as a four could be doesn't even bother me. There are a lot of Japanese machines with those features, but none have the seductive belly-dancer appeal of the Virago.

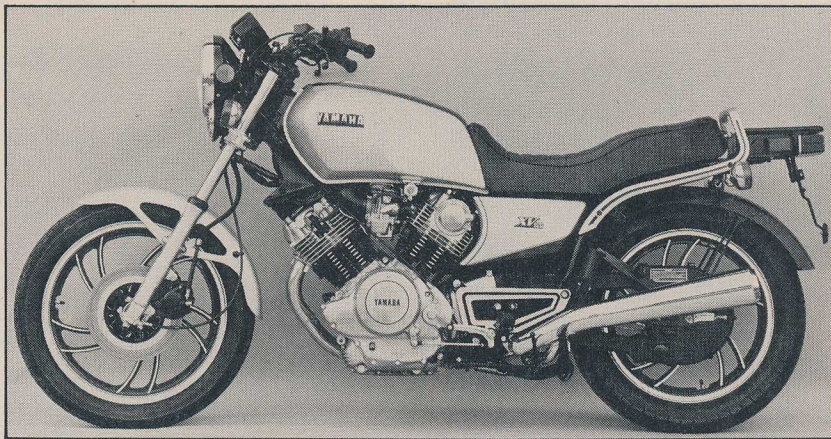
—*Ron Lawson*

• My problem with the 920 Virago isn't necessarily *the* problem; in fact, there might not even be a problem. Nonetheless, when I look at the Virago I see a device built for an undefined mission. It could have been the final, take-no-prisoners assault on the Harley-Davidson entrenchment. But it isn't. Instead, the Virago, seemingly armed with all the requisite materiel to make such an assault a sure victory, also arrives laden with technickery not normally associated with the boulevard genre. For me it muddies the water.

I can't fault the Virago in technical terms, not for its intended use—as I thought I understood it. But it appears to me that the Virago was launched in one direction, then redirected mid-flight to a slightly different target. Sales figures will undoubtedly count the Virago as a hit. I see it as a slightly off-target one.

—*Larry Works*

Yamaha XV920RJ



SPECIFICATIONS:

IMPORTER: Yamaha Motor Corporation USA
6555 Katella Avenue
Cypress, California 90630

CATEGORY: street

SUGGESTED RETAIL PRICE: \$3699

ENGINE

Type four-stroke tandem vee-twin
Valve arrangement single overhead camshafts
Bore and stroke 92.0mm x 69.2mm
Displacement 920.0cc
Compression ratio 8.3:1
Carburetion two 40mm Hitachi constant-vacuum
Air filter disposable paper element
Lubrication wet sump
Starting system electric only
Ignition transistorized breakerless, dual coils
Charging system 12-volt; alternator, voltage regulator, rectifier

DRIVETRAIN

Primary drive straight-cut gears; 1.660:1 ratio
Clutch wet, multi-plate
Transmission-to-jackshaft straight-cut gears; 1.447:1 ratio
Final drive *630 chain (3/4-in. pitch, 3/8-in. width);
2.188:1 (35/16) ratio

Gear	Internal gear ratio	Overall gear ratio	MPH per 1000 RPM
I	2.353	12.363	6.2
II	1.667	8.757	8.7
III	1.286	6.756	11.3
IV	1.033	5.424	14.1
V	0.909	4.777	16.0
VI			

SUSPENSION/WHEEL TRAVEL

Front air-spring, 37mm stanchion tube diameter/
5.5 in. (140mm)
Rear Monoshock air-spring, 6-way adjustable
rebound damping/4.3 in. (109mm)

All weights and measurements are taken with machine unladen and fuel tank empty

BRAKES

Front dual single-action hydraulic callipers,
10.5-in. (268mm) discs
Rear drum, single-leading shoe, rod-operated

TIRES

Front 3.25H19 Yokohama Y-994
Rear 120/90-18 66H Yokohama

DIMENSIONS AND CAPACITIES

Weight 509 lbs. (231kg)
Weight distribution 46.2% front, 53.8% rear
Gross vehicle weight rating (GVWR) 1005 lbs. (456kg)
Wheelbase 60.5 to 61.3 in. (1537 to 1557mm)
Seat height 30.3 in. (770mm)
Handlebar width 29.5 in. (749mm)
Footpeg height 12.8 in. (325mm)
Ground clearance 5.5 in. (140mm), at centerstand
Steering head angle 28.5 degrees from vertical
Front wheel trail 5.0 in. (126mm)
Frame pressed steel backbone
Oil capacity 3.8 qt. (3.6l)
Fuel tank steel, 5.0 gal. (19.0l), including 0.8 gal. (3.0l) reserve
Instrumentation speedometer, odometer, tripmeter
resettable to zero, tachometer

PERFORMANCE

Fuel consumption 37 to 51 mpg (16 to 22 km/l)
Range, maximum 185 to 255 miles (298 to 410km)
Range, reserve only 30 to 41 miles (48 to 66km)
Speedometer error, 30 mph indicated 30 mph actual
Speedometer error, 55 mph indicated 55 mph actual
Best 1/4-mile acceleration 13.099 sec., 100.44 mph (162 kph)
Top speed (calculated) 112 mph (180 kph)
Stopping distance from 30 mph 38 ft. (12m)
Stopping distance from 60 mph 128 ft. (39m)

WARRANTY: 6 months unlimited mileage

AVAILABLE COLOR: Quartz Silver only

Ride Review

• The XV920RJ always feels right when I throw a leg over it. The lean-forward riding position is naturally comfortable, and I feel like the bike and I could hit the road for an endless Sunday ride.

Trouble is, before I get much further than the other side of town, my butt feels like it's already endured an endless ride. A passenger, too, will be thankful for the sight of home because the rear of the seat offers no more support than the front.

If Yamaha had only redesigned its seat with comfort and not just stylish looks in mind, the XV920 really would be an ideal bike for that endless ride. But for now it only feels right for as long as it takes me to throw a leg over the swoopy saddle. Perhaps it just needs an endless ride to an upholsterer. *—David Dewhurst*

• Sport-touring, in my mind at least, is almost a contradiction in terms. The Yamaha XV920RJ is a good example. Riding it through the sport-bike environment of twisting canyons and patched pavement makes me feel out-of-place. Its low-rpm power fails to tickle my adrenal glands the way a quick-revving four can, and working around the bike's bulk convinces me the machine would be more at home Interstateing its way across the country.

But after a few hours of serious highway scorching, the handlebar and seat start sending messages through slowly numbing parts of my body, telling me the big twin isn't made for the long haul either.

And that doesn't leave the XV with much, aside from its sport-touring title, a sturdy, vee-twin idea, and no place to use it. *—Ron Lawson*

• In a showdown between RJ and Virago 920s, my choice is at once simple and complex. Simple, because there's no reservation about it—the RJ wins. Complex, because it requires explanation. In some ways, I like the Virago better. Right out of the box, for example, its seat is more comfortable and it has better roll-on than the RJ.

But the decision in favor of the RJ was made for me by Yamaha's ergonomicists. The RJ's riding position, from the quasi-rearsets to the lowish handlebar, suits me to a vee. And even though the RJ falls second in roll-on oomph, it isn't exactly lacking. In compensation, it offers more ground clearance. All of which convinces me that the Virago is a good finished package, but a quick trip to an upholsterer to repair the RJ's thin, hard saddle will make the Eurovee a better one. *—Larry Works*

COMPARATIVE TEST DATA:

Make & Model	Quarter-mile, sec.-mph	Top speed, mph	Weight, lbs.	Stopping Distance from 60 mph, ft.
Yamaha Virago 920	12.94/101.6	108	514	134
Yamaha XV920RJ	13.10/100.4	112	509	128
BMW R100RS	13.48/98.4	127	492	145
Ducati Dormah	13.41/97.5	118	487	120
H-D FXRS	13.92/93.1	109	594	124
Yamaha Virago 750	13.28/99.8	105	481	132