

There's a hole in the American motorcycle market, a blank space where one specific kind of street bike ought to be. We've got Specials of every description, rugged multi-role bikes, touring bikes, cafe racers, commuter bikes, mopeds, noped and hyperbikes. Unless you're one of the small but growing group of people who can't find the machinery that should fill that blank spot, you probably aren't even aware that a void exists. But if you are a member of that disappointed fraternity, you know well enough what isn't there—and it looks just like the

European version of the Yamaha XJ650.

Don't consider that mere hyperbole. If you're one of those frustrated riders, until now your only options have been a few Eurobikes: BMW's, Moto Guzzi's and Ducati's, maybe. But for riders weaned on sophisticated Japanese engine technology, these splendid but aging examples of the genre simply didn't fully satisfy. What we're talking about here is a motorcycle of refinement, of grace at speed; indeed, **built** for speed. A motorcycle to be used with judgment by an educated rider in all conditions.

YAMAHA'S XJ650— NEW DEFINITION OF THE "GT" MACHINE



We should call bikes like this "GT's" for Grand Touring, meant to swallow long stretches of winding roads with both comfort and speed. This is the sort of bike missing from the showrooms of America. Hence the instant allure of the XJ650 Yamaha sells in Europe.

Though it is built on the same chassis as the Made-for-America Maxim I, the Euro-650 fulfills its GT-role with telltale accoutrements sure to warm the hearts of those of you yearning for a Japanese hi-tech BMW. A massive 8-inch halogen headlight dominates the front end, controlled by a switch that not only gives you the option of low- and high-beam but a special dim beam for city riding as well.

There's also a rocker switch that fires up the high-beam whenever you want to alert the four-wheel slugs ahead to your overtaking burn. Meanwhile, the side- and center-stands are shrewdly pivoted and located to provide maximum ground clearance. And to this end, the exhaust plumbing is routed far inboard under the engine, until the pipes curve out near the swingarm and aim rearward like a couple of AA cannons with 30-degree reverse cones. With small touches like the oil cooler mounted on the downtubes, this assembly of visual aids speaks eloquently to the American rider in search of the bike that isn't there.

Still, the linchpin of this bike's appealing GT nature is its riding position. First, the swoopy 5.2-gallon fuel tank arches down into tapered knee knuckles just in front of the plain bench seat. The folding rearset footpegs are located four inches aft of the Maxim's footpeg mountings, near the swingarm where God and generations of British race-bike designers intended them to be. The gearshift linkage, which features a unique design with a remote link in front of the shift shaft, uses rod-ends throughout to minimize slop. The handlebar is nothing short of exquisite, low and with little rise and pull-back to be sure, but with enough drop to ease the burden on wrists.

All together, it is a riding position you can settle into for hundreds of miles. The riding position alone makes you well disposed to this machine even without riding it.

Such bias is unnecessary. The Euro-650 earns your admiration on its own merits. This motorcycle, sharing as it does the key elements of the Maxim I, also shares its strong points, which begin with a lusty, sophisticated engine and a strong,

“... a motorcycle that melds the best of Europe and Japan so subtly that it’s hard to tell where one stops and the other begins ...”



well-designed frame. To turn the Maxim into the Euro-650, Yamaha had to make few changes. The engine, for example, is identical except for a slight increase in the jet sizes of the Hitachi carburetors (typified by the main jet going from a 40 to a 45), a reprofiled inlet cam that produces four degrees more duration and 0.33mm more lift than the Maxim's, and deletion of EPA-pleasing crankcase pressurization. In concert with a less-restrictive exhaust system, the engine is tuned to produce a few more ponies at the high rpm Yamaha expects the Eurorider to use.

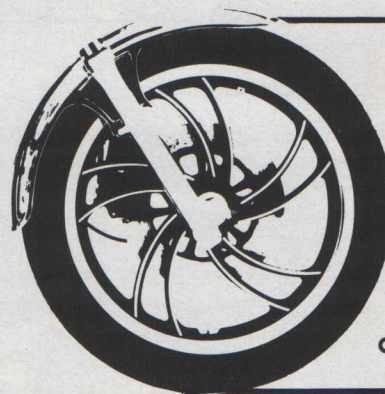
The only alteration to the frame geometry required to turn Boulevard Bomber Maxim into a Euro-GT was a slight steepening of the steering head, changing rake from the Maxim's 29.0 degrees to 27.5 degrees. Likewise, the leading-axle fork has been replaced with a straight-leg unit using softer initial springing, less preload and more rebound damping than the Maxim's. The cast, spiral-spoke front wheel is common to both bikes, but in place of the American 295mm single disc brake, the Euro-650 gets two 267mm discs.

Keeping in mind the European environment this bike was meant for, it's plain to see Yamaha's goal for the suspension: It must cope with large deflections from rough conditions at high speeds, from Autobahn to Belgian blocks. Hence the fork's

compression stroke coupled with better damping. The same thinking lies behind the alterations to the rear shocks, which while retaining nearly the same travel as the Maxim's, provide more preload, slightly heavier initial springing and a lighter second spring rate, not to mention a hefty 20 percent more rebound

grew to 18 inches in diameter (the Maxim has a 16-incher).

More important to the Eurorider, though, is the fact that the subtle but important changes to the Maxim result in a massive gain in the bike's ability to gobble road at any speed, any bank angle, under any conditions. And yet this is only partly due



GUEST TEST

Independent, unbiased road tests from leading motorcycle magazines of the world.

damping than the Maxim and 30 percent more compression damping. These changes all tell of Yamaha's desire to keep the large, unsprung rear mass of the shaft drive under control. And while the back ends of the bikes look the same, the drum brake of the Euro-bike is 20mm larger than the Maxim's. The wheel also

to the tweaked suspension. Most of it derives from the benefits of the riding position, which could be the most significant aspect of the Eurobike.

Because Americans have overwhelmingly voted with their wallets for motorcycles with a full upright riding position, Yamaha configured its U.S. 650 with pullback bars and

This issue's "Guest Test" courtesy of America's "Cycle Guide" magazine.

the low, stepped seat Americans demand. This places the rider smack on the end of his spine, literally holding himself up with the nearly parallel bar-ends. Many people have found this riding position to be painful on long rides, but in that complaint they miss the point: average trip length in this country is, after all, something less than 10 miles by the Motorcycle Industry Council's computation (1977). Thus for the majority of American riders, the Maxim's laid-back style works just fine. But . . .

But it's junk for more than a few minutes. The load on the spine causes pain and the handgrip position reduces precise steering control at high speeds. Furthermore, at high speeds the rider is nearly blown off the bike. What's needed for more serious work, trips in the 50- to 200-mile category, is what the XJ650 Eurobike offers: the Magic Mean between sit-up-and-beg and the cafe crouch.

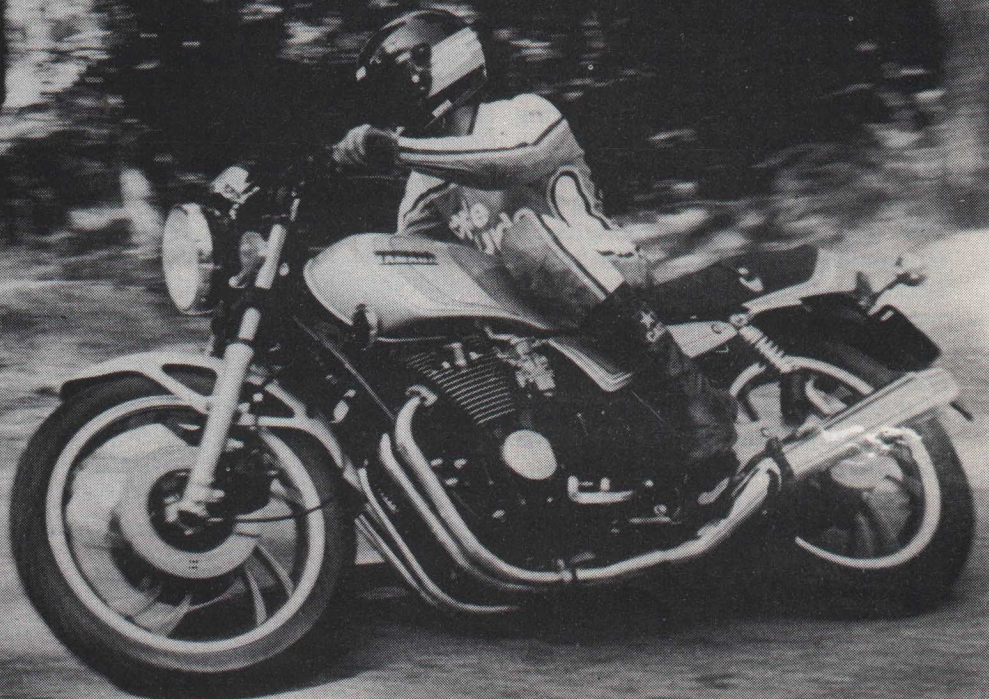
Yamaha's ergonomics engineers, obviously, have watched and measured and listened to a great many Euroriders, because the EuroYamaha feels comfortable instantly. The weight of your body is spread along your buttocks and the inside of your thighs on the seat; your arms slightly



The Yamaha XJ650 is not available in the United States of America, except in the "Maxim I" custom-styled version (see accompanying photograph).

"Cycle Guide" magazine, however, felt that the XJ650 "Eurobike," as they call it, would be of definite interest to U.S. readers so they imported one from Europe for a full road test. The magazine was so enthusiastic about the "Euro-XJ650" that they launched a "write-in" campaign to the magazine so that they could petition Yamaha USA to bring the XJ650 into the States. The edition following the road test contained two pages of letters from riders thirsting for the XJ650 and "Cycle Guide" tells us that the letters printed were "just the tip of the iceberg!"

For we European riders who sometimes feel that America gets more than its fair share of motorcycle goodies, it's nice to know that the grass isn't always greener on the other side!



outstretched; wrists turned down a little to spread the load. Footpegs are located so that you can stand easily at any time—a sure and quick check of an efficient riding position engineered by designers of race bikes. The idea is that if you can't raise your body comfortably, the bike is going to get uncomfortable. Fast.

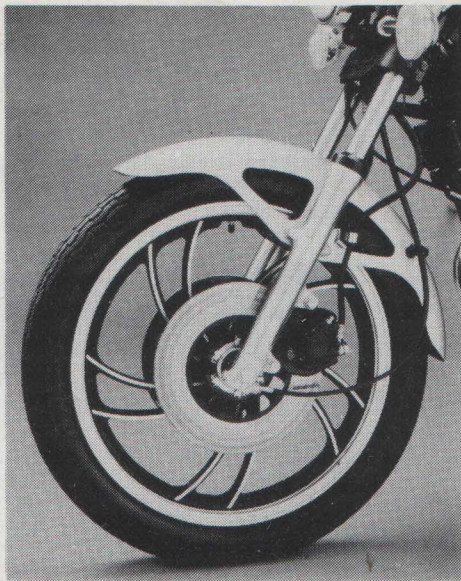
The proof is in the riding. A six-foot rider can hammer this machine for literally eight hours along every kind of road at any speed from freeway-slow to Alpine Berserk and not suffer numb-butt or shatterhand. Wrists never hurt, nor does the base of the spine. Result: Huge lengths of road can be eaten without effort.

That point should be underlined, because it's critical to the GT genre. Unlike a flashbike or cafe racer, this sort of machine should not require the rider to perform gymnastics to wring the best from it. A proper GT riding position mated to a well-designed suspension and willing engine should allow the rider to sit comfortably and flick the bike from max-lean on one side under braking, clip the apex or pass the diesel truck, apply power and flick to max-lean on the other side, all without Superbike-racer athletics. Such a bike is comfortable in action—not just in repose.

That's what the paradigm of the GT bike is, and the XJ650 meets it admirably. The 653cc DOHC four pours out even, controllable power without flat spots. At 6000 rpm it comes alive, and at 8000 provides serious poke, so to pull everything out of it, a lot of two-stroke-style shifting is demanded. Given the fairly smooth-shifting gearbox, this is easy, and so a genuine 110 mph is quickly attainable without crawling under the paint. Unlike the paragons of the GT genre, the BMW's, the Yamaha doesn't pitch under braking or acceleration, nor does it emulate the unfortunate tendency of BMW's to climb up and down on the crown-wheel-and-pinions in the aft gearcase.

And as promised by the visuals of the XJ650, the best riding technique is in the best generic traditions of the GT. You need only find a comfy spot on the seat and apply gentle pressure to the controls to fairly fly on the ground with this bike.

The compliant, controlled suspension and superb ground clearance allow lean angles just this side of a Yamaha TZ750. You must be going literally ten-tenths before either footpeg ticks the ground, and even then the bike tracks steady and true. In-



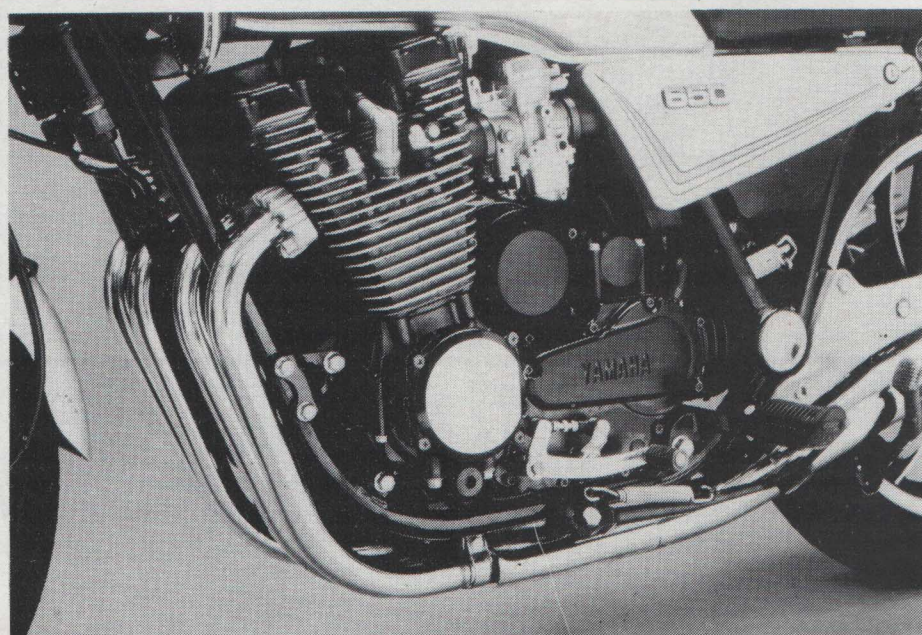
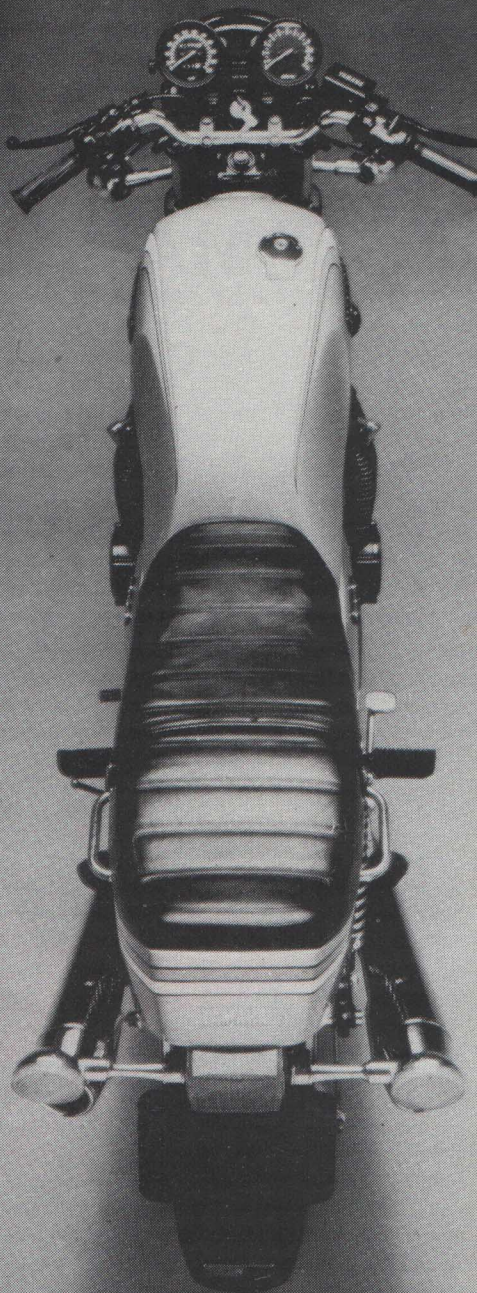
British Bike Journalist David Dewhurst left the UK to join "Cycle Guide" in California. He had no regrets about his move—until he rode the XJ650 . . . !

• I have never regretted leaving England. I soon learned to like baseball and popcorn, and can even enjoy the odd Custom motorcycle. However, one ride on the European XJ650 left me homesick for warm beer, fish and chips, and real motorcycles.

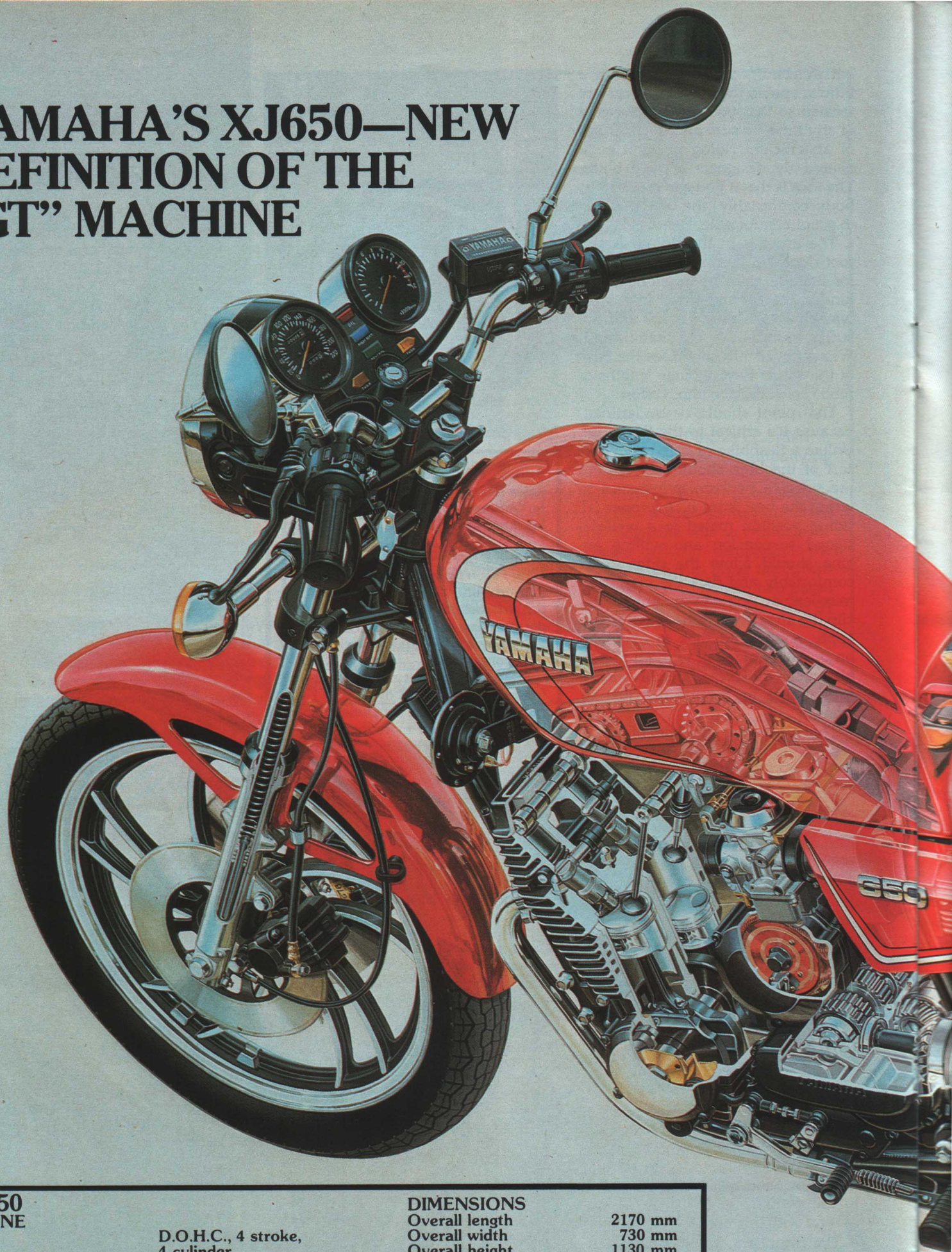
From the moment my 6-foot 2-inch frame draped around the XJ650 I was transported back to a land where motorcycles are used for more than a trip to the supermarket. Because not only was this bike beautiful in my eyes, it also functioned beautifully, long after I passed the supermarket!

The XJ650 is a machine that redefines the term "Grand Touring." Forget about high bars and a fairing. Straight bars and rearsets really can be comfortable on a long trip. The only trouble is I will have to make a trip all the way back to Europe to enjoy it.

—David Dewhurst



YAMAHA'S XJ650—NEW DEFINITION OF THE "GT" MACHINE



XJ650 ENGINE

Type	D.O.H.C., 4 stroke, 4 cylinder
Displacement	653 cc
Bore/stroke	63,0 x 52,4 mm
Compression ratio	9,2 : 1
Max. horsepower	53,8 Kw (73 HP) /9.000
Max. torque	59,2 Nm (6.0 Kg-m) at 7.500
Lubrication system	Wet sump
Starting system	Electric
Gearbox	5 speed

DIMENSIONS

Overall length	2170 mm
Overall width	730 mm
Overall height	1130 mm
Wheelbase	1435 mm
Min. ground clearance	140mm
Weight	206 kg
Fuel tank capacity	19.5 lit
Tyres: Front	3.25-19-4PR
Rear	120/90-18
Brakes: Front	Dual discs
Rear	Drum

continued

deed, the biggest drawback to this kind of performance is your feet; you must draw your toes up on the peg at these angles or you'll grind through your shoe leather in short order, and even then your toes will drag if they protrude through the space between peg and shifter or brake. That, friends, is something for a conventional street bike.

But then this is some kind of street bike. Imagine a motorcycle that melds the best of Europe and Japan so subtly it's hard to tell where one stops and the other begins. Imagine a motorcycle capable of 100 mpg speeds all day while delivering mid-40s mpg. Imagine further that this same motorcycle loses none of its aplomb two-up, simply giving away a bit of ground clearance. You've imagined the XJ650.

The XJ650 stands at the forefront of motorcycle design. Its achievement lies in the way it defies the stereotypes. Unlike the European cliché, the XJ650 is racy, fast and agile without being uncomfortable, cranky and stiff-legged. Unlike the American cliché, the XJ650 is smooth, flexible and plush without being sluggish and clumsy.

Here at last we have the matching of European and American design priorities. The Euro-XJ650 is a great motorcycle for the way it takes American virtues of comfort, adapts them to European standards of agility and turns what should be compromise into greatness. For those riders who yearn for that expression of speed and comfort that the designation "GT" expresses, the Yamaha Euro-650 is the new definition of the genre. □

