



CYCLE ROAD TEST:

Harley-Davidson 1200cc Super Glide

The members of the Harley-Davidson styling
team have savaged the venerable Electra-Glide like tigers
at a goat and herewith present to you the Super Glide, Sonnet on Extravagance. Vital question:
is the American motorcyclist ready to ride around on someone
else's expression of personal, radical taste?

Gone are the floorboards, relics from the Flood; gone are the ponderous front forks, the incredible fenders, the saddlebags, the radio, the windshield, the Neat Pleat Buddy Seat, hinged and plungered; gone is the electric starter, gone its mammoth battery. The members of the Harley-Davidson styling team, in response to the genius of Dick Hirschberg, the impact of the Chopper Phenomenon, and the success of "Easy Rider," have savaged the venerable Electra-Glide like tigers at a goat and herewith present to you the . . . Super Glide, Sonnet on Extravagance.

Where did it come from? When was it born? According to William G. Davidson, H-D's styling chief, some auricle in his heart was excited by pictures of a non-produced 74 that appeared briefly in the Fifties. It had a performance, not a touring, look, and William G. was smitten.

Add the influence of the California bobjobs; not full choppers as such, but lightened, leaned-down bikes that were recognizable as 74s (the Hirschberg approach). And then, in 1968, surfaced the harbinger of today's Super Glide, designed and built by a number of different H-D departments under Davidson's supervision. "They (meaning the people who have the final say in these matters) liked it, but they wouldn't definitely build it," he said last summer. They didn't.

"As a company, we're leery of the chopper image and any kind of extremism. With that bike, we were also worried that it would draw sales away from the Sportster and the existing 74.

"In June of 1969 we had Frank Magid and Associates run a survey for us, and the survey showed that the Super Glide wasn't too radical, nor was it too close to our oth-NOVEMBER 1970

er big bikes."

The next step was a plant. Pictures of the prototype were sent to Bob Greene, Hot Rod's motorcycle editor, for inclusion in the 1969 edition of Greene's "Motorcycle Sport Book," and there it blossomed forth under a smokescreen of copy intended to suggest that the bike was a private custom, not a factory machine. "We wanted to judge public response and create a little excitement," Davidson said. Greene wasn't nearly cute enough. A lot of Harley-Davidson dealers spotted it for what it was, and inquiries poured in. A nerve had been struck: all signs pointed to immediate and overwhelming public acceptance, and the bike stormed into production, little different in appearance from the prototype. Except for the paint job.

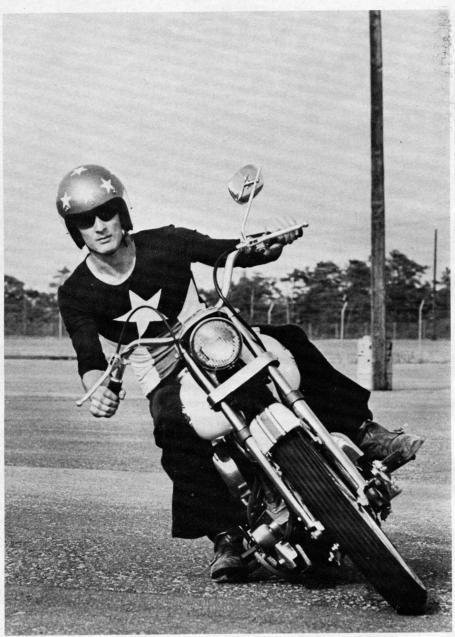
"The red, white, and blue thing just sort of floated into the picture," Davidson said of the "Sparkling America" option. True enough. Spawned by Middle America's reaction to pressures against U.S. involvement in Vietnam, visible patriotism (in the form of red, white and blue anything) showed up on police sleeves and Hardhats' hard hats and automobile fenders and lapels. It also showed up on the gas tank of Peter Fonda's chopper and on the back of Peter Fonda; a different interpretation of what it meant, no doubt, but there nonetheless. (A shard of irony: the people who will likely purchase a Super Glide done up in the Sparkling America motif are the same people who hated "Easy Rider.")

Visually, the Super Glide has a lot going for and against it. Stock, Ceriani-type Sportster front forks, among the cleanest in all of motorcycling, have been grafted to the front of the standard Glide frame, complete with Sportster brake assembly, Sportster wheel, Sportster headlight, and Sportster fender. The effect is startling. Because the forks are slightly longer, and a lot leaner, than the wide-set Giant Redwoods they replace, air-space exists between the engine and the fender-wheel assembly, and the bike's front end has an air of rakish delicacy that sets it apart from the bulbousness of the twin gas tanks and the massiveness of the 1200cc engine.

The fiberglass seat/rear fender assembly will be the source of considerable debate. Carried from just aft of the tanks to well behind the rear tire, the seat/fender (complete with a second full inner-fender) cascades low down the spine of the bike and competes with the huge rear tire and equally sizable muffler. In keeping with the tanks and front fender, it is white with red and blue accents, all horizontal, flowing, and superbly rendered. It can be argued that such a lengthy expanse has to be broken up, and broken up it is: by the Frenched-in taillight, by the stripes and accents, and by the three-tiered seat. Certainly it is unsubtle. Possibly it is overdone.

No doubt about the tanks-they are gross, designed with a heavy hand, intrusive, and they detract from the very impressive mien of the engine. They are slightly smaller than current Glide fuel tanks (capacity: 3.5 gallons), but they are too wide, too bottom-heavy, and what flair they may have is interrupted by the large, centrally-mounted instrument cluster. Too, they are mounted in such a way that parts of the rocker-boxes are hidden. Compared to the beautiful simplicity of the front end, the tanks recall the busyness of the Fifties and the oppressive stylistic dullness of the standard Electra-Glide. It may well have been the aim of the designers to

Styling aside, if the bike were to make it, it would have to perform with a vengeance. Accelerate, it does; corner, it does; stop, it absolutely does not.



assert the connection between the Super Glide and the good ol' 74; if so, one would wish the assertion had been made with a rapier instead of a bludgeon.

In its totality, the Super Glide is an enormous visual improvement on the 74 series. Yet for the most part it remains in the first stage of mechanical beauty—beauty added on, rather than designed in. At the turn of the century, when this country discovered itself looking at its machinery as well as the work its machinery was producing, its first reaction was to snatch up the paint can. The result was machinery festooned and vivified with pinstripes, murals, and color. The remnants of this artistic awareness and thrust live on in locomotive museums, steam tractor museums, and

in restored airplanes and automobiles.

Later, the design of the machines themselves came to be regarded as beautiful, and the necessity for paint diminished.

The Super Glide demonstrates to a degree that H-D, too, believes in the concept of unadorned, functional mechanical beauty. The exhaust pipes, air cleaner cover, rocker boxes, forks, and timing cover, for example, are allowed to stand on their own merit; all are well-designed, clean, and attractive. But the impact made by the tank and seat/fender is overpowering, and intrudes on the beauty of the bike's mechanical elements with such intensity as to cause them to be visually ignored. Still, the Super Glide's appearance attracts attention—lots of it—and that is at least as important as it

might seem; more to the point, it demonstrates an attempt on Harley-Davidson's part to get into the middle of things with the 74 and a willingness to let it compete with the motorcycles that are shaping the sport, taking a gamble in the process.

And the Super Glide is a gamble, especially in the sense that its styling is so far out front, so uncompromisingly committed, and so . . . personal. Face it-the bike looks like a custom, and a custom, by definition, is the result of a given owner's subjecting a given machine to a given set of styling criteria: his own. For that very reason, production motorcycles in the past have not made strong visual statements; the bikes that have succeeded, the bikes that have left deep tracks across the midsection of motorcycling (Triumph 650, Honda 305, recently the Kawasaki 500), have done so on the strength of passable attractiveness, performance, and price. A styling rule-of-thumb: walk the middle road. You may not turn anyone on with styling, but you won't turn anyone off; thus you start even with every other motorcycle manufacturer, no balls, no strikes, no gambles.

Into all of which bumps and grinds the Super Glide, willing to take its chances with a picky and unpredictable public, spewing statements right and left. Vital question: will the American motorcyclist, used to individualizing tapioca styling if he feels like it, accept the mark of someone else's individuality; ride around on someone else's interpretation of radical taste? Therein is the gamble H-D is willing to take, and an admirable and brave one indeed.

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The 74 engine, unaltered in the transformation from Electra-Glide to Super Glide, continues to be one of the great power-plants in history, churning out more than 65 ft-lbs of torque and God knows how much horsepower from 1207 cc. A brand new 1½-inch Bendix carburetor (with float bowl and accelerator pump) replaces last year's troublesome and complex Tillotson; it breathes through the traditional Y-manifold into a pair of lightweight aluminum cylinderheads. A single camshaft, whose outer end times ignition, transmits valve openings and closings through motorcycling's only hydraulic lifters.

Torque is produced by displacement, compression ratio, and breathing efficien-

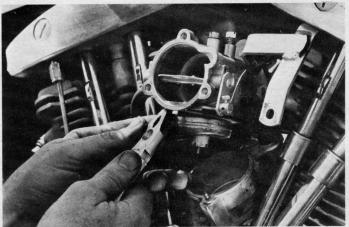
cy; bore/stroke ratios and flywheel mass have nothing to do with it. The flywheels in the Super Glide, though, are massive, and can store huge quantities of torque before transmitting it smoothly through a spring-dampened compensating sprocket and duplex chain, to what has to be the best clutch ever invented. The demands any motorcycle makes on its clutch are relative to engine speed, total weight, gear ratios, and available torque. The demands the Super Glide makes on its clutch are barbaric, especially in a drag racing situation: a lot of torque comes at it from one end, and a lot of resistance from the other. The result is heat, and heat kills clutches when it becomes excessive. How much to kill the Super Glide clutch? More than could be generated by over 25 back-toback, full-throttle shots down the drag strip, some made using second gear off the line. At the end of the day, the clutch demanded no re-adjustment, refused to drag, and refused to slip. Which came as no real surprise: the big H-D clutch assembly has long been the favorite of those who build double-engined, high-gear-only drag machines. What is surprising is the light pull on the clutch lever needed to disengage itit asks for little more effort than many

The Super Glide's performance on the strip was frankly astonishing, aided more than somewhat by the diminution in its weight. The removal of the electric starter, both heavy, deeply-valenced fenders, the heavy tanks, the automobile-sized battery, and the inclusion of the Sportster front end and the fiberglass seat/fender have pared overall weight from 690 lbs (the weight of a standard Electra-Glide without the King of the Highway Group) to 565 lbs, wet. Thus relieved, the Super Glide bellowed through the quarter in 13.90 seconds at 96.25 mph. In third gear. Assuming that 96 is about as fast as it could go in third, and assuming that it could pull maximum rpms (5750) in fourth, then the Super Glide has, with a 24 T mainshaft sprocket, a top speed of better than 117 mph. It can go faster than that. The engine delivers peak horsepower at about 5400 rpm and maximum torque at about 3200; with taller gearing, the Super Glide should be able to flog along at 125 or better.

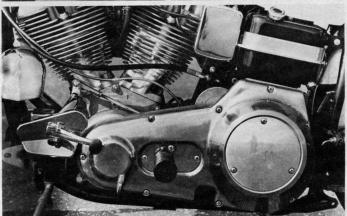
lightweight trail machines.

The bike was extremely easy to ride straight on the strip, and extremely tough to ride crisply. The first-to-second shift was a bitch, complicated by the necessary heft of the transmission parts and the slop in the shifter linkage. Due to the position NOVEMBER 1970

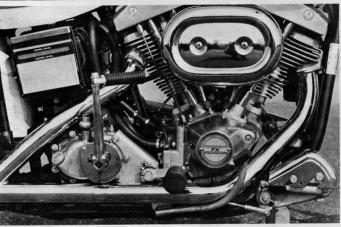
PHOTOGRAPHY: JOHN SENZER



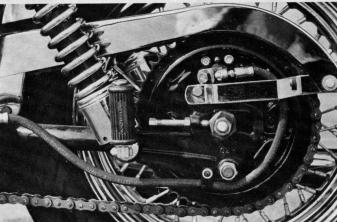
New 15/8" Bendix carburetor, accelerator-pump and floatbowl-equipped, performed well after float stabilizer spring was removed.



Drag strip performance was hindered by highly complex and slightly awkward shifter linkage. Clutch action is the best in motorcycling.



Electric starting was not missed—two or three kicks did it every time. Points reside behind small cover on the engine's timing case.



Rear brake was marginal. Either the coefficient of friction was inadequate, or master cylinder piston was too large, or slave cylinder piston was too small.

Everybody who sees the Super Glide likes it. Either it makes them laugh, or dazzles them with its great, heaving engine, or blinds them with the nerveless audacity of its paint job.

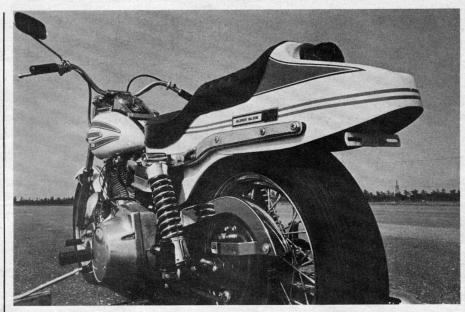


and the size of the clutch, and the desired location of the footpegs, the shifter mechanism is a bell-crank apparatus connected to the transmission's racheting assembly by a long metal rod. Speed-shifts were impossible; button-shifts (leave the throttle wideopen; pre-load the shifter; fan the kill-button, and pray) were chancy and inconsistent. The second-to-third shift was little easier to effect. Had this not been a problem, the bike could easily have run mid-to-low thirteens at approximately 100 mph, acceleration figures just an eye-wink away from the most intense of the Superbikes.

For the first time, the 74 frame has been tested-and found not wanting. Before, no one really knew; the cement-footed ponderousness of the bike made hard cornering an impossibility. Nor did it seem fair to evaluate the 74 on the same grounds as other bikes, because it was more a twowheeled car than a motorcycle-ascertaining its nimbleness was always irrelevant. But the Super Glide is a motorcycle, and it handles quite nicely. The 30 degrees of steering head inclination, coupled with a moderate amount of trail, give it a heavy feel at low speeds, but not so heavy that it's a bother. And the bike leans around corners, instead of simply steering, and it leans pretty far-far enough to scrape the bottom off the right footpeg and ground the sidestand. The Sportster forks, loaded more heavily than they were on any Sportster, do not flex, and they do an adequate (though noisy, and leaky) job of absorbing any bump you are likely to encounter. As usual, the adjustable rear shocks are canted forward-to make room, on the Electra-Glide, for saddlebags-and they are likewise up to the task.

There's no reason, really, why the bike shouldn't handle. The heavy feel of the front end at low speeds is compensated to some degree by the extremely low center of gravity; while the bike is awfully long (wheelbase: 62¾ inches), the frame, with a thicket of forged gussets and cross-braces, and a mammoth swingarm pivot, is immune to flexure. Relative to a smaller bike, the Super Glide is somewhat imprecise around fast, bumpy turns; relative to an Electra-Glide, it is nimble as a cat. For most riders, the Super Glide can go around corners faster than they'll want to ride it.

Here's one reason why: if you go around a corner fast you may have to stop fast, and the Super Glide absolutely cannot do it. Its brakes are an abomination, unworthy of either Harley-Davidson or the Super Glide. The bike flies. The bike handles. The bike will not stop. After the first run NOVEMBER 1970



at the drag strip any resemblance to adequate braking faded like an echo, and it just wasn't fair. Why? Harley-Davidson had a chance, with this bike, to meet the rest of the superbikes face-to-face and come away smiling. Certainly H-D has the technical wherewithal to design and build an effective set of brakes; certainly the Super Glide, with a weight of 565 lbs and a top speed of nearly 120 mph and a price of approximately \$2200, deserves—demands good brakes. Would an effective brake have weakened the visual appeal of the Sportster forks? Maybe. And if that be the reason why a good front brake were excluded, then critical function has been sacrificed for appearance, and that makes it even worse. Of course the Sportster brake is part of the whole package; of course the archetypal chopper has no front brake at all; of course development of a new brake would have cost money. But look: the Super Glide lists for a solid \$700 more than a Honda 750; the Sportster needs a better front brake anyway, and so does the 74; so H-D could have killed three birds with one stone, done the riding public a great service, and become competitive with the imports in a very crucial area. They didn't.

The rear brake is marginal-to-satisfactory. H-D decided long ago that any kind of mechanical apparatus linking the forward-mounted lever with the brake itself was out of the question due to the distances involved. Hydraulics provided the answer: the master cylinder, appended to the frame, lurking behind a totally unnecessary chrome cover, and operated by a Goldberg linkage demanding no less than two complete bellcrank assemblies, transmits pressure through fluid to a slave

cylinder in the rear wheel brake drum. Either the coefficient of friction between the brake linings and the drum is inadequate; or the master cylinder piston is too large; or the slave cylinder piston is too small. At any rate, in order to lock the rear wheel when the brake is hot, the rider's full weight must be brought to bear on the pedal, which means the rider has to stand up and heave. Awkward—especially in a situation that's about to get unpleasant.

H-D's approach to this entire brake situation is irrational. It isn't that vital—really—to have high-performance brakes on the low-performance Electra-Glide (although it would be nice). But if H-D wants to bring the Super-Glide into the superbike fold they will have to play by the rules, one of which concerns braking efficiency. To build a superbike that won't stop is just as nonsensical as building one that won't accelerate or one that won't corner.

But superbikes, in fulfilling certain criteria, are exempt in several areas. Evidently Harley-Davidson feels seating comfort is irrelevant. Despite its length, the effectiveness of its suspension and the reasonable quality of its vibration dampening, the Super Glide is uncomfortable to ride over long distances. Rubber bushings do not effectively insulate the rider's hands from vibration, vibration pulses up through a very hard seat to anesthetize the rider's rear, and the left footpeg, attached to a very massive primary cover, shakes like a palsied chicken at an indicated 60 mph; the only way to keep your foot in place is to wedge your heel against the clutch bulge.

It was impossible to determine for whom the seating position was laid out. The Sportster handlebars, Ionic and clean,

In keeping with the tanks and front fender, the fiberglass rear section is white with red and blue stripes and accents, all horizontal, flowing, and superbly rendered.

are carried too far forward for anyone of normal reach, the rider positioning step in the seat is too far back, and the footpegs again, are too far forward. What do you do? You hunch, and it gets to you after a while. Passenger seating, on the other hand, is the best around. There's plenty of room back there, and the passenger pegs are perfectly situated.

What does the bike do for you? How do you feel when you ride it? You feel like a damn king is how you feel; everybody is looking at you, admiring the waves of bravado that flood off the exterior of the Super Glide, digging the bongo-beat rhythm

of the engine. The Super Glide is turned out for a parade; subtlety never makes it in a parade, and subtlety dares not exist on the Super Glide. Everybody likes it; everybody has to like it, for one reason or another. Either it makes them laugh; or turns them green with envy; or dazzles them with its great heaving engine, or the gallant, nerveless audacity of its paint job. The Super Glide faces you brazenly: it is what it is—massive bolts attaching massive appurtenances to a massive frame and a seat configuration that stretches over the horizon, the whole issue propelled along by an enthusiastic engine neither having

nor wanting any excuses.

It is terribly self-conscious, terribly extreme; it leaves itself no outs, brooks no compromises. It starts easily (the electric starter was not missed), runs well, doesn't leak oil, will not break, and handles more than adequately.

Visually, like it or not, the Super Glide is a dazzler, and H-D's commitment is a dazzling commitment. With the exception of the sickening failure of the brakes, the Super Glide is everything mechanically that it promises visually to be; and it will succeed in this country like no machine H-D has ever made or dreamed of making. •



60 **RPM x 100** 110 100 Standing 1/4-Mile 90 80 70 60 50 40 30 20 SECONDS 15 25

HARLEY-DAVIDSON 1200 SUPER GLIDE

Price, estimated	FOB Milwaukee, POE \$2200
Tire, front	
rear	5.10 in. x 16 in.
Brake, front	
rear	
Brake swept area	81.64 sq. in.
Specific brake loading	
	at test weight
Engine type	OHV 45° V-twin
	3.437 in. x 3.969 in.
Piston displacement	
Compression ratio	8:1
Carburetion	(1) 42mm Bendix
Air filtration	Bronze mesh
Ignition	Battery-coil
	approx. 65 @ 5400
Fuel capacity	3.5 gal.
Oil capacity	8 pints
Lighting	12v, 120 watts
Battery	12v, 6 ah
Gear ratios, overall	(1) 10.74 (2) 6.50
	(3) 4.39 (4) 3.57
Wheelbase	62.75 in.
	5.12 in., with rider
	. 565 lbs., with ½-tank of gas
	730 lbs., with rider
	Speedometer, reset odometer
	6.8 seconds
	13.90 seconds, 96.25 mph
	117 mph