

TESTING THE HARLEY DEE FX & FXE FOR '75

*HOW TO BUILD YOUR EGO WHILE
GETTING A GREAT SET OF THIGHS*

by the Editors of BIG BIKE Magazine



Tradition.

Is Harley-Davidson.

The word "biker," to most people, brings an immediate image to mind — a large-muscled type, crewcut under this 50-mission-crush-captain's-hat, steaming majestically down the road astride a 1200cc vertical twin Hog.

Harley's been around a lot of years — since 1901, to be exact.

Unlike some early manufacturers, and unlike almost all of today's cycle builders, Harley-Davidson has always had a fine feel for tradition. Their bikes, internally and externally, change slowly and little-by-little over the years.

The 1975 FXE Super Glide would be familiar, in almost all respects, to the rider of a 1935 VL flathead. Electric start, sure. Alternator-equipped, all right. Semi-sophisticated carburetion — to a degree.

But it would still be familiar, with its Big Vee design, its non-unit construction, and a fair percentage of the internal parts almost the same as the ones on his 40-year-old machine.

Time, tradition and Harley moves slowly.

But things do change.

A lot of the changes have come about since AMF's acquisition of Harley in 1966. Some of the changes are good, some bad.

Harley had traditionally ignored the chopper builder, even though a fairly high percentage of Hogs ended up as custom bikes. AMF's response was to create the Super

Glide, an essentially chopper-styled stock machine.

Harley electrics were always good — with the exception of the three- and the later two-brush generators. Expensive, and very prone to burn out. AMF replaced the generator with an alternator.

A Harley isn't hard to start — but it requires leverage and some poundage to push through. AMF pushed the electric starter hard, to the point that in 1974, even the stripped Super Glide was offered with a button (40 pounds heavier, counting starter motor, larger battery and such, and \$200 more expensive).

Harleys have never been famous for fine handling. AMF has slowly but systematically improved the handling characteristics of their machines. Front forks are now Japanese-built, at first by the firm which builds Kawasaki's forks, and now by Honda's subcontractor. Rear shocks have been built with more resistance in them, and the springs have had increased poundage.

Harley was the first stock motorcycle to be equipped with both front and rear disc brakes, to replace the old, barely adequate binders.

So the tradition changes.

1975.

Two brand-new Super Glides gleam in the parking lot. One an electric-start FXE, the other a more traditional kick-go model.

They were approached with a certain amount of trepidation. First, because they were test

bikes. Evidently, at one time in the past, some magazine or magazines hadn't bothered to break in a new Harley (or Harleys) properly. The first result was obviously a seized machine — Harleys need careful breaking in to be thoroughly bulletproof.

The second result was the factory setting up all their test bikes very, very loosely. No way could they be seized. Plus, before being shipped to the West Coast, they were thoroughly flogged by factory riders. That produced unseizable machines — but machines that vibrated like they had 50,000 miles on them.

Again, tradition has changed.

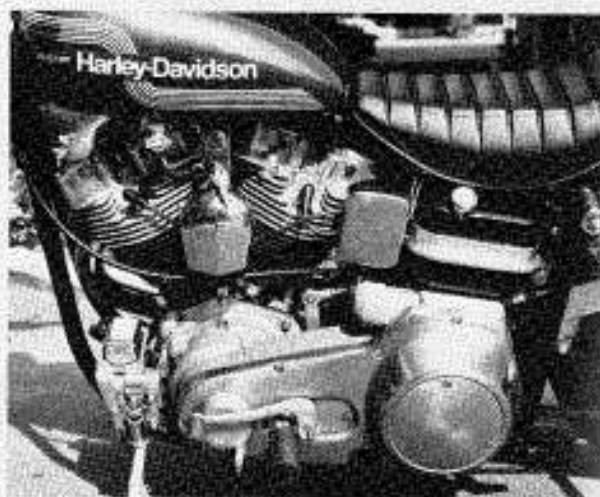
These machines were shipped to Harley-Davidson of Westminster, California, and carefully broken in. Then the jugs were taken off, cylinders bored. New rings went in, and the bikes were carefully detailed out before being assigned to us.

Again, a little bit of tradition:

Harley has always been based in Milwaukee, Wisconsin. Close to steel, close to raw American materials, close to the heartland of America.

But in recent years, that has caused a great deal of problems. First was a continuing major difference between the factory and the various labor unions to which the employees belong. The factory felt that the unions were making unreasonable demands.

The second problem wasn't even talked about — and was a lot uglier. Assembly-line sabotage.



With the new-last-year change in the shifter mechanism, the Super Glide now shifts normally, rather than the previous backwards pattern.

Harley, evidently, has always assumed that their workers have full and complete pride in their work. So there wasn't that much need for exacting final quality-control inspection.

This was fine, when bikes were essentially hand-assembled.

But on an assembly line, it's impossible to be a human being, let alone a human being who's proud of what he does — even aware of what he does.

With few inspectors, it became obvious for one (or a dozen) disgruntled employees to "forget" to install a piston. Or to leave an engine sprocket nut finger-tight.

A midwestern dealer tells the story about receiving a crated bike. As they uncrated the machine, a note fell out: "I get paid \$4 an hour to (deleted) things up. How much do you get paid to find and fix what I did?"

On that particular machine, it took some looking. Eventually a 9/16-inch open end wrench was found stuffed into the bottom of the transmission.

A few years of this, and Harley announced plans to open a new factory, in York, Pennsylvania. All frames, forks and final assembly would be handled there. But assembly of engines and transmissions remains in the beer-fed city.

That tradition, and its new

version, caused the caution. Both bikes were carefully inspected. The kicker seemed to have had a little more careful detailing than the FXE. But both machines looked to be in excellent shape. Both started easily. Normal starting procedure on the kicker was to open the gas, turn the choke on, kick twice, turn the key on and start the bike.

The FXE required turning gas on, turning key on, pulling choke halfway, opening throttle a little, and punching the starter. It churned into life instantly.

The bikes were assigned riders, and went their different ways. Entirely different.

The test rider assigned to the kickstart Super Glide was relatively unfamiliar with Harleys. So he had to go through a period of what can only be called "hawg-shock" — when the reality of what a Harley is like conflicts with what everyone has always heard.

This rider, being more than somewhat into the fine art of street squirrelling, cafe racers and production machines, had always assumed that H-Ds don't handle.

The surprise was quite great — of course the 1200cc wouldn't whip through corners like an RD350 or a Ducati. But the bike, ridden properly, would easily lean to the limits of the tires — at

which point almost everything on the bike was grounding and throwing sparks.

There is, of course, a secret to pushing Harleys. Some bikes can be leaned into a curve, the power rolled off, and acceleration reapplied halfway through.

Cornering technique for a 74 is more like that used on American cars. You set yourself up entering the curve with the proper braking, physically heave the bike into its proper line, and then roll the throttle on. If you panic, or miscalculate, and chop power, the Harley exhibits all the lovely cornering characteristics of a three-legged hippo, with the missing leg on the outer side.

Braking also requires some adjustment for the average rider. However, this tester found that the stock setup is as he prefers brakes. The rear requires more than a fair amount of pressure to shove fluid through the lines to the rear caliper. The front is minimal pressure and maximum effect, progressive and then a sudden lockup.

Starting of the kicker, once the ritual was learned and held to, was easy. The only problem comes with using your weight properly. It's too easy to fling all your weight straight up in the air, and then bash down wildly on the starter. Not much of anything will



The front disc is sensitive up to a sudden and generally unexpected lockup.



Teething problems on the electric start glide — eventually tracked to a non-factory-locked locknut on the clutch.

happen. Proper technique is to poise yourself on the lever, and then boot the thing through firmly, with pressure applied all the way through the stroke.

A large drawback to Harley's current styling was quickly noticed. The muffler sticks back about four inches behind the rear tire. So normal bike parking — pull up, and back the machine until the rear tire hits the curb — didn't work very well. All that happens is a loud graunch from the muffler, as it rams into the curbing.

While the kicker ran on the road merrily, getting an average of 45 mpg, there were troubles with the electric start model.

The ride back from the agency, some 50 miles, vibrated a wire loose from the ignition switch. When the starter was hit the next morning, the bike wound through for a second, then quit. Dead. Troubleshooting the problem didn't do much good — there wasn't a spark anywhere in the system.

The initial problem was thought to be the circuit breakers. Harley, rather than utilizing conventional fusing on their bikes, runs three automatic reset circuit breakers under the seat. This will cut out when there's a problem, and reset when the problem is rectified. Unfortunately, there is no way to

tell, with the sealed unit, whether the unit's blown open because of a wiring problem or current surge from a defective rectifier, failed of its own volition, or what. At least a visibly blown fuse can be easily recognized.

Back to Harley, where the problem was found and fixed.

During the troubleshooting, one problematical area was discovered. The Super Glide features a seat styled like the chopper cobra item.

In previous years, padding on the seat was marginal, at best. Fifty miles would vibrate you through the foam, to the seat base and total discomfort.

The padding has been vastly improved — the seat is now one of the most comfortable stock motorcycle seats around.

The problem now is with the mounting. The seat is bolted to the rear fender for its rear connection. Up front, there are two metal prongs under the seat. These are clipped under a frame crossmember by slightly bending the seat (it's resilient) until the prongs clear the crossmember. Removal is the other way around, and the seat is then swiveled clear of the battery area.

The rear mounting bolt, though, is directly to the fender. So when the seat is swiveled, its tab scratches about an

inch-and-a-half chunk out of the paint on the rear fender.

When the FXE was ready, plans were made for a long-distance comparison run.

The road out led through one of Southern California's canyons. While the kicker was being busily stuffed through curves, the FXE was ridden rather more sedately over the same route.

For one reason, because the FXE vibrated a great deal more than the kickstart bike, and because it had been exhibiting an annoying tendency to not return to idle. The theory was that the points plate was sticking slightly — a not uncommon occurrence on Harleys.

Halfway through the canyon, things got a great deal more sedate on the FXE. Mainly because the clutch went totally inoperative. Engaged, but impossible to disengage. So, in third, the machine was lunked to the end of the canyon.

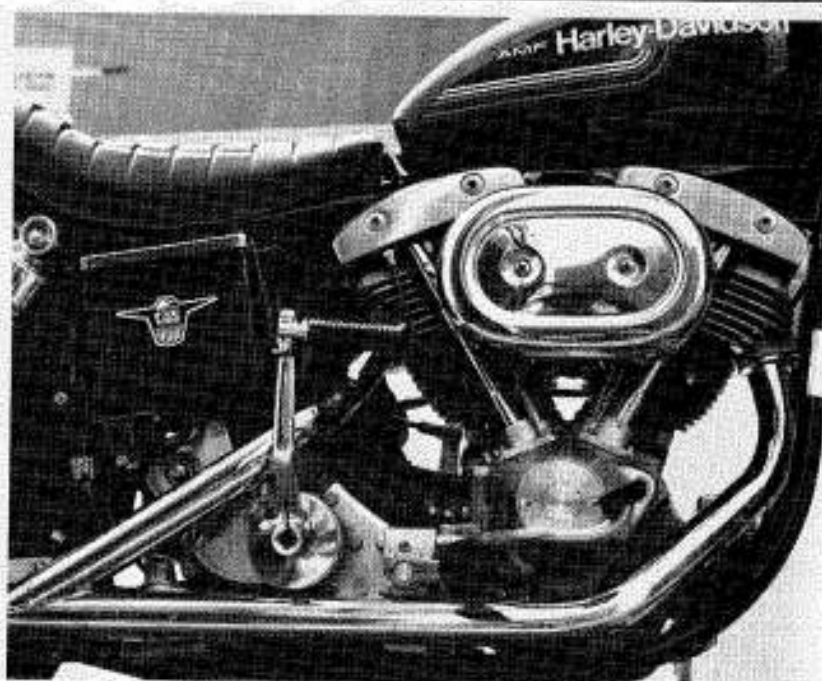
Stop and look at things. Cable clear to the clutch actuating lever — which was sitting all the way forward, against the transmission lid. Both bikes were equipped with Harley's standard-issue tool kit . . . no tools at all.

Push-start in gear, and back over the canyon.

Limp through traffic to Russell's Harley-Davidson.



The single exhaust pipe extends back of the rear tire — backing the bike into a curb produces a lovely graunch.



Non-unit, yes. Unsophisticated, certainly. But still one of the prettiest engines ever built.

Problem explained, and bike pushed back into the service department.

The clutch problem was quickly solved. The internal adjustment locknut hadn't been tightened at the factory. So the adjusting bolt backed off all the way. No tools, no way of adjustment. Total mileage on bike — 498.

The problem with the bike not returning to idle was mentioned. The wrenches checked the carburetor first.

And that was the problem. It looked as if some assembler had put the carb together with an air wrench, set for 200 pounds. The

throttle plate was bent. The air jet was tweaked 30 degrees to the side. And so on and so forth.

The wrenches even thought that the carb body had been bent.

Another problem was with the gas cap — it had gotten top-dented before being picked up. That blocked the vent, so there was an airlock in the fuel system.

Replacement parts cured everything, and it was three hours later.

Meanwhile, the kickstart bike had been running perfectly.

Since this was the second time around for the FXE, a certain amount of distrust had been

generated, and a certain unwillingness to head for deserted parts of the country.

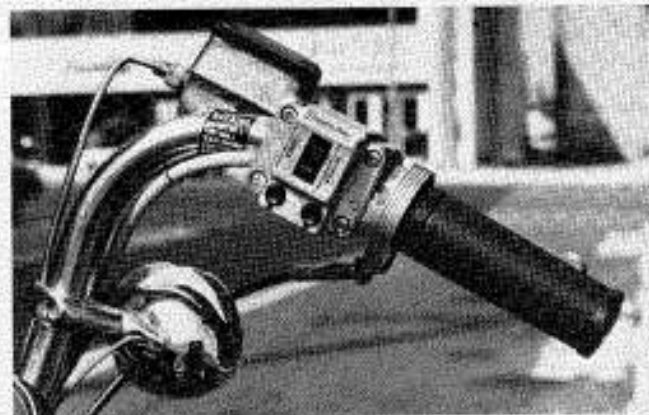
After the carb had been corrected, the bike's vibration lessened considerably. However, it was still present to a fair degree.

Harley firmly believes, evidently, in the 55 mph speed limit. The point of least vibration occurs between 2800-3000 rpm. This, with the tall gearing of the Super Glide, is between 55 and 60. Above that, and the mirror blurs into uselessness and the footpegs start buzzing.

Since the long trip had been cancelled because of cowardice,



A goodie is the Cycle Gard license plate. Yes, Fagin, people really love to steal 'Glides.



It's the little things that can impress you (like the careful labeling on the controls) and not impress you (the crimped hydraulic line off the master cylinder).



Each year, the AMF is getting larger in comparison with the traditional hawk emblem.



Despite brute size and brute weight, the Super Glide will stop you just as quick — or sometimes a little quicker — as you planned.

the remainder of the testing was done in and around town.

The Super Glide, as big and as heavy as it is, is more than acceptable in heavy traffic. It may be big — but the rider sits *in* the bike, rather than on it. The low seat guarantees a cockpit-like feeling of oneness with the machine. Short-legged riders also don't have to tippitoe through stoplights. The drawback is with the conventionally positioned controls for tall riders. Sitting down in the bike, the footpegs bring the leg back slightly, into a somewhat cramped position. For any sort of distance riding, a set of

accessory pegs should be installed in traditional Harley position, forward of the primary cover.

After the two problems on the FXE, both bikes ran perfectly through the remainder of the testing period. One critical area on the Harley is with the carburetor. Properly jetted, the Bendix carb gave a high of 48 mpg. After correction, the carb ran rich, and dropped mileage down to 36 mpg.

And so Harley, and so tradition.

Despite the technocrat's fondness for constant changes, and increasing sophistication, there is nothing wrong with the Big Twin's design and

construction. So the engine has been around for gobs of years — so has the straight four, straight six, V-6 and V-8.

The virtues of simplicity can't be denied — the Harley twin is one of the few bikes being produced that the average backyard mechanic can not only maintain, but perform most of the rebuilding chores on as well.

This certainly can't be said for the OHC or DOHC fours around, or some of the smaller engines with balancers and elaborate innards.

Tradition, after all, comes

Cont'd on page 65

Model & Year ...
1975 Harley-Davidson FX & FXE

SPECIFICATIONS

Price ...
FX \$2975 base; FXE \$3125 base

ENGINE

Engine Type	Four-stroke V-twin OHV
Displacement	1200cc (74 cid)
Bore & Stroke	87.5 x 101mm (3.43 x 3.96 inches)
Claimed BHP Horsepower at RPM	N/A
Claimed Torque at RPM ft./lbs.	N/A
Compression Ratio	8:1
Carburetion	Single Bendix 38mm (1.49 inches)
Ignition	Battery/coil
Electrical System	Generator
Starting System	FX—kick/FXE—kick & elec.
Air Filter	Washable foam element
Recommended Fuel	Premium high octane
Lubrication Method	Dry sump

PERFORMANCE

Weather Conditions	60–65 degrees
Quarter Mile E.T. (avg.)	14.2 seconds
Top Speed (est.)	125 mph
Gas Mileage	40–46 mpg
Touring Range	196 miles
Braking at 40 mph:	
Front Only	17.5 m (58 ft.)
Rear Only	38.40 m (126 ft.)
Both F & R	16.76 m (55 ft.)

CHASSIS

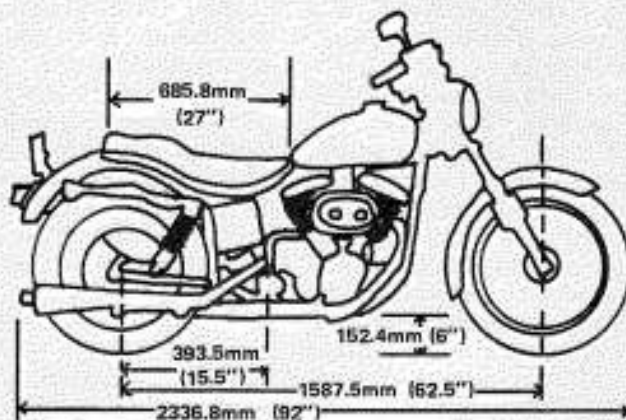
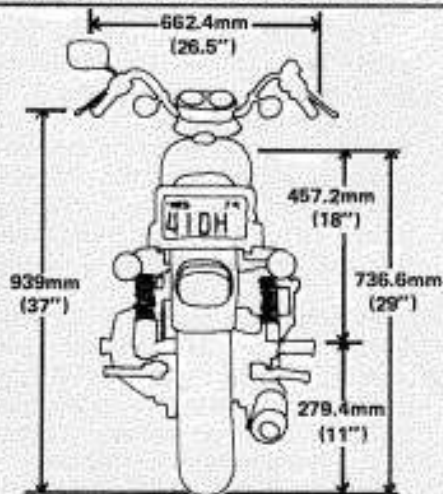
Color	FX—metallic gold/FXE—maroon
Frame	Double downtube/tubular steel
Forks	Oil damped teleforks
Rear Suspension	Twin oil/spring shocks
Front Tire	MM 90 x 19
Rear Tire	500 x 16
Brakes	Hydraulic disc F & R
Curb Weight:	
FX	231.3 kg (510 pounds) dry weight
FXE	251.7 kg (550 pounds) dry weight
Weight Bias	N/A
Steering Head Angle	N/A
Fork Trail	N/A

CAPACITIES

Fuel	13.68 liters (3.6 U.S. gallons)
Engine Oil	1892 cm ³ (four U.S. quarts)
Gearbox Oil	473 cm ³ (one U.S. quart)
Primary Oil	N/A
Forks	177 cm ³ (six fluid ounces) each

DRIVE TRAIN

Clutch	Dry multiplate
Primary Ratio	N/A
Transmission	N/A
Ratio	N/A
Final Drive	N/A
Sprockets	23/51



C.C.D. KICKS INFLATION STARTING WITH



CCD's NEW HARLEY
KICK STARTER PEDAL

THIS HARD
TO FIND PINION
SHAFT



AT NEW
LOW PRICES

GOING ALL THE WAY
WITH THE NEW
FULL SIZE 8½X11
230 PAGE CATALOG
FOR ONLY \$2.00

CUSTOM
CYCLE DELIGHT, INC.
620 East Walnut Ave.
Fullerton, Ca. 92631
PHONE (714) 525-3591

HARLEY TESTS Cont'd from page 25

about for a reason — something has been around long enough to be proven successful. And you don't mess with success.

The problem, now, is with the quality control of the bikes. Obviously merely relocating the Harley plant hasn't cured the problems. Harley needs to either increase the number of inspectors, or re-evaluate their worker training program.

One bike was perfect — a machine which anyone interested in a Harley would be delighted to own.

One bike had problems — problems created at the factory by sloppy and/or incorrect assembly. Problems which would require the dealer, no matter how carefully he prepares the bike, some time to work out. Even then it is doubtful if they'd be located until the bike had been purchased.

There's the catch.

FX: \$2975, plus prep, T&L and freight.

FXE: \$3125, plus prep, T&L and freight.

For that kind of money, the buyer has a right to expect a machine to be as carefully constructed as a factory is capable of. The Harley is not a cheap bike — either in price or in quality of components. There is a definite effort made to provide absolutely the best items on the machine. Too often this is made to naught by assembly line errors.

The Big Twin continues.

Tradition.

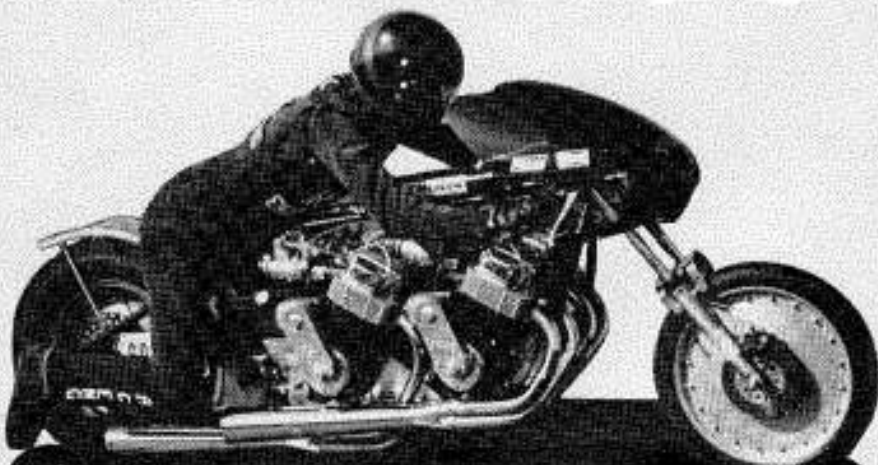
It's still there — the macho image, the lovely churning, freight-train-like noise from the running gear, the low-end torque, the thunder of the exhaust and the huge engine.

But Tradition may not be enough, when enough riders buy machines that require three and four trips back to the dealer with problems. What price Tradition beside a desert road with a super-expensive bike, down because of one employee's attitude or skills?

Tradition.

Harley-Davidson.

There's nothing inherently wrong with either one of them. *jm*



8 SECONDS ON GAS

Using R.C. "SCAVENGER COLLECTOR SYSTEM"

Officially World's Fastest & Quickest Gas-Powered Motorcycle. 8.93 with Top Speed of 157 MPH (AMDR/NHRA Record).

Built by Byron Hines and ridden by Terry Vance, bike saw action in 5 national meets during 1974. They won and took Low Qualifier at all five while breaking their own National Record 3 times! Fully equipped with R.C. components, bike features R.C. "Scavenger Collec-

tor System". The pipes that work for Vance & Hines will also work for you.

Performance equipment for Honda & Kawasaki Four's. Complete custom engines—Single, dual, or triple. Aluminum rods (we make 'em) & complete balancing. Bolt-on accessories (limited on these) & engine performance kits.

WHEN SECOND-BEST IS NOT ENOUGH... LOOK TO R.C. ENGINEERING.

R.C. Engineering

16216 SO. MAIN ST.
GARDENA, CALIFORNIA 90248
(213) 327-6858