## ASK THE PROS

## **GPz INJECTION SELECTION**

I am a proud owner of a 1983 GPz1100, equipped with DFI (digital fuel injection). I have installed a Vance & Hines four-into-one header. My plugs show I am running a lean fuel mixture now. I would like to install four individual velocity stacks. My question is, How or what can I do to richen my fuel mixture?

Farrell Lawrence Bainbridge, GA

Changing the fuel delivery characteristics of electronic fuel injection is not thought of as an easy do-it-yourself project, but there are enough hot-rod-minded GPz1100 owners out there to generate a substantial market for a bolt-on device that can provide mixture adjustability.

Gary LaPlante, of Kawasaki Motors, turned us on to a company called Motorcycle Performance Specialties which markets a bolt-on, plug-in mixture control unit designed to let the owner dial his mixture to taste. We spoke to Dan Rudd of MPS, Box 1935, Casselberry, FL 32707.

"Our mixture control unit alters the input signals to the DFI computer on the GPz1100—it essentially fools the computer into delivering more fuel than it otherwise would under the same atmospheric conditions. The unit only richens the mixture; it would be easy to make it lean the mix as well, but I can't think of a situation where you'd want a mixture leaner than stock. The unit is calibrated to provide the stock mixture level with the dial set to the zero mark; there is a range from one to nine, and a GPz1100 with an unrestrictive set of aftermarket pipes needs the mixture set between one-half and one.

"The unit plugs into the system between the DFI computer and the stock temperature sensor. In effect, the mixture control unit alters the electrical signal from the sensor, fooling the computer into thinking it's colder than it really is. Installation is no big problem. All it takes is 10 minutes and a screwdriver.

"By the way, the stock Kawasaki injector throats are very clean and free of airflow obstructions. I think they can flow as much air as the 33mm Mikuni Smoothbores-and that's saying something. If you leave everything else stock, the mixture really doesn't need to be richened. or at least not very much. But if you're going to put a pipe on and either cut up the airbox or remove it altogether, you're going to need to richen it up a bit. For instance, a Kerker KR-equipped GPz is okay with the stock mixture as long as you use the quiet street baffle, but the minute the freer-flowing race baffle goes on, the engine just refuses to run well at all. Bolt on the mixture unit, though, and dial the mixture until you get it right-it's a lot easier than pulling four carburetors and replacing the main jets, the pilot jets and either shimming or replacing the needles or needle iets of four carburetors. Fuel injection has the potential for making engine tuning a remarkably easy process, and our mixture control unit can turn that potential into reality.'

The MPS mixture control unit sells for \$59.95, comes with a five-year free-replacement warranty and fits neatly under the left side cover, according to MPS.

## **TOP SPEED VS. TOP GEAR**

I'd like to ask a question about my '81 CB900 Custom. It seems to be running almost perfectly but will not go beyond 7200 rpm in fifth gear, high range. I would like to know if that's normal for the custom and what the approximate speeds are for my bike.

John D. Russell Altha, FL

Your problem with the CB900C is not-a problem at all according to Tom Hicks, utility infielder at American Honda's Product Research Department.

"On many Hondas and other manufacturers' touring and cruising-oriented machines," Hicks said, "the designers deliberately gear the bike very tall in top gear for decreased wear, noise and fuel consumption on the highway. Your CB900C, with its unique two-speed transfer case between the transmission and the drive shaft, is not intended to hit redline in fifth gear, high range-that would be a top speed of about 145 mph, and the engine is simply not powerful enough to push the bike through the air that fast. In fact, the bike will probably go faster in fourth gear, high range than in fifth gear, because the engine will be pulling much closer to its power peak when it gets to top speed.'

Also, we at Motorcyclist found a problem with the CB900C we tested in the May '80 issue that may be a concern with your bike. There's a black plastic flap, held on with a single screw, that hangs about three-quarters of an inch in front of the airbox's intake horn. The flap is there to prevent gloves or any other debris

