

## **Low Fuel Lamp Operation**

We have recently seen a rise in calls related to information that has previously been made available to Technicians. A search of all Tech Tips, Service Bulletins and a review of Service Manuals should be your first resources prior to calling Tech Services. It is expected that all Technicians will have access to the Service page of h-dnet.com and have reviewed all Tech Tips, Service Bulletins and PHD Videos at least once, as well as being familiar with the Service Contents of h-dnet.com.

### **The following Tech Tip was originally published June 21, 2004.**

....The low fuel lamp should turn on when the fuel level is between .7 and 1.3 gallons. Whenever checking for proper fuel light operation remember that our gauges have a software filter that limits the lamp reaction when ignition is on. This prevents lamp flicker under hard acceleration and braking. Each time a rider turns on the ignition switch the software filter is reset to the current fuel level value.

When diagnosing a fuel lamp issue the float must be positioned while the ignition is off. When the ignition is turned on, proper lamp response can be verified. If the low fuel lamp is illuminated, and the float is raised either manually or by filling the tank while the switch is on, the light will not go out for quite some time. Simply turn the ignition **OFF** then **ON** to reset.

Similarly, if there is enough fuel for the lamp to be extinguished and the float is either lowered manually or the fuel is drained then the lamp will not come on for quite some time. Simply turn the ignition **OFF** then **ON** to reset.

### **Also note that**

Since the fuel gauge and the low fuel lamp share a common sending unit, it is advised when diagnosing the lamp, to verify the accuracy of the fuel sender and gauge, particularly in the range where the lamp operates (approximately 1 gallon). Remember that 80 ounces is equal to 1/8<sup>th</sup> of 5 gallons.

If the sender, gauge and lamp have been verified to perform correctly under the above situations, then the lamp should illuminate when the fuel tank is drained at a rate consistent with the consumption rate of a motorcycle being ridden (very slow, approximately 3-4 ounces per minute).