## **Late Model Breathers**

A recurring complaint starting to be heard from many riders of post-1977 British motorcycles is increased fuel consumption and increase oil consumption. Often slight increases are simply due to gradual engine wear. However there is an issue particular to late model pre-Hinckley machines that owners should know about.

Starting in the mid-70's various Federal departments wanted new vehicle engines to run cleaner. Part of this mandate was to eliminate oil dripping from breather hoses. Hoses that had formerly been open to the atmosphere now had to go somewhere else. That "somewhere" ended up being the air filter box. The idea was to route the engine vapors back into the combustion chamber where the engine would simply burn them. Great idea. On a new tight engine, the breather is moving oil and water vapors. On an engine with several thousands of miles, the vapors slowly turn to an oil mist. Then over time, the mist slowly turns into oil droplets. The condition is dependent on many factors including maintenance, riding style, ambient temperatures, type of oil used, etc, but is common to all British motorcycles at some point in their life. The issue is that while oil vapors pass on through, the oil droplets start to clog the air filter. This creates an even larger problem of increased fuel usage, sort of like riding around with the choke turned ON. Furthermore, the engine's inability to breathe may force additional oil out of the engine, making a waste of perfectly good engine oil.

Regardless of your feelings for Al Gore, global meltdown, saving the whales, environmental activism, free range chicken, the amount of fiber in your diet, etc, etc, you must admit that an oil soaked air filter which forces an engine to burn extra fuel and has the engine coughing up extra oil for no good reason are not in anyone's best interest.

With that in mind, if you own a Norton built after 1971, a Triumph twin built after 1977, or any 3-cylinder machine, you should inspect the condition of your air filter element and filter box. If your air filter element is oil soaked, then clearly the engine is not running as cleanly as it could or should. After replacing the sodden filter, you should disconnect the breather hose between the primary case and the air filter (Triumph), or between the oil tank and intake box (Norton). In place of this, run a hose from the breather out the rear fender ala a 1960's motorcycle breather. Then plug the air box hole with black silicone sealer (so that this can be reversed in the future, if need be).

Additionally, from 1978 on, Triumph also had breather hoses from the rocker box and another from the frame's oil tank that should also be disconnected from the air box and run to the atmosphere via a longer hose. It's OK to let these 2 smaller hoses end right above the center stand.

Ultimately you'll probably find that to save one drop of oil from spoiling our environment, you were getting 10 MPG less fuel efficiency and coughing up an extra 1/2 quart of engine oil per month. That 1/2 quart realistically represents about 15 years worth of breather mist expulsion. So in my mind at least, you are not "ravaging the Earth" and all its citizens, you are instead actually slowing the rate of oil expulsion.

Hope this helps!

Richard Whatley Rodi British Bikes