



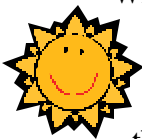
## All That Glitters



Recently I was riding behind several ‘Wings’ and noticed a situation that is easy to overlook when dressing up a bike. Let’s look at the background problem first. The more additional lights that you add to your bike’s original brake light, directional signals, and or running lights circuitry, the greater the voltage drop in the feed wire. This translates to reduced power to the bulbs and less light output from all of lights in that end of the circuit. The problem could be resolved by using a relay to switch the battery voltage, use of low current LED bulbs, or beef up the wiring harness. Since this is not a technical dialogue I will leave those details to be worked out at a maintenance discussion. The point is that in an attempt to be more visible you can cut down the effectiveness of your lights.



The second part the problem is related to chrome. There are various enhancements to the brake lights and directional signals that consist of chrome frames and masks to alter the shape and style of the brake lights. The first issue is that some of these devices cover the lights available square inches of visible surface. This effectively reduces the amount of light seen by the people following you. The second and more dangerous situation is that when the sun is in the sky behind the observer the chrome reflects the sun brilliantly and partially or completely obscures the brake lights.



While dressing up a bike, strictly for show, is a challenge in itself, doing it to a street bike while maintaining safe and legal operating conditions becomes even more difficult. If you really want to be sure of the visibility of your brake lights get 120 feet from the back of your bike at early afternoon and slowly walk towards it the while someone operates the brake. Actually most any hour of the day will work and the test really should be conducted at several different times of the day. Position the bike so that its shadow falls in front of it. Then watch how much of the red light shows through the glare of the chrome. Walk slowly towards the bike and watch the glare come to a peak. You will now have an idea of just how much warning a driver creeping up on you is going to get when you apply the brakes and he is in the hot zone where glare is the nastiest.

There are strict standards that vehicle manufactures must meet or exceed before the brake lights are deemed acceptable according to law. Do not endanger yourself by attempting to give your bike a new and “better” custom design. Use common sense and good engineering practices to insure the overall safety of your ride is not reduced due to “cool” appearance modifications.

Keep the glare down and ride safe,  
Larry & Barbara Franklin  
GWRRA Chapter FL2-R  
Safety Educators