HIGH BAY LED LIGHTS IN BODY SHOPS

Government programs have been encouraging body shops to install more energy efficient LED light fixtures, as replacements for the traditional fluorescent tube and incandescent bulb lights. These High Bay LED lights are comprised of approximately 175 closely spaced, small individual light diodes, which create 'hot spots' of focused light, which are very intense and bright. These lights differ therefore from the previously used fluorescent lights which emit a more diffused and scattered light, much like natural sunlight.

An unexpected outcome from this program has been the adverse magnification of any surface irregularity, which appears as a little white spec or spot, when refinished vehicles are inspected under these LED lights. Unless the glossy coating surface is perfectly flat and mirror smooth, all surface irregularities (even tiny ones), either in or lying beneath a coating layer, appear as little white specs as shown in the photo image below - **Image 1.**

Unfortunately, these small white specs give the body shop painter the false impression that a surface defect is present in the coating which requires rectification, when in fact it is not a true paint defect at all. This is evident when the same refinished vehicle is viewed outside under natural sunlight; the small white specs effectively disappear.

Axalta has studied this phenomenon and found the use of a simple LED specific grade, plastic cover commonly referred to as a 'diffuser', applied across the LED light face, restores the traditional viewing light condition and eliminates those irrelevant tiny white specs.

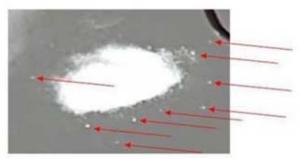


Image 1. Coating surface viewed under a LED light source

Please note that all true paint defects present, such as solvent boil for example, are still visible when the diffuser is used, thus allowing rectification before the vehicle is returned to the owner. However, the visibility of all non-paint defect surface irregularities is eliminated, thereby saving the painter from performing totally unnecessary 'tail chasing' rectification work.

Should you wish to discuss this solution further, please contact your local Axalta representative.

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