

Color Tinting and Color Blending Recommendations and Best Practices

When completing a collision repair, productivity and quality reflect primary industry goals. In many cases, a warranty is extended to the vehicle owner to provide confidence that the repair has been completed utilizing the proper methods and materials which will provide a long-lasting repair. A key component of success is to balance efficiency and quality. Without the proper balance of these, the customer will likely not be satisfied with the repair.

AkzoNobel provides products and repair methods enabling collision repair shops to complete repairs which are efficient and long-lasting. The methods described in our Technical Data Sheets (TDS) allow for repair facilities to deliver quality repairs in a minimum of time, including reliable methods for the blending of paint for repairs.

Basecoat Blending

Blending of color into an adjacent panel is recognized as the productive and economical process for achieving an invisible color repair. This method is described in our TDS and instructed at our training centers as the standard process for achieving a seamless transition from the repair area. Although rare, maintaining the color blend within just the repaired panel is sometimes possible. If color blending within the repair panel is sensible, it would be the preferred method for both economy and efficiency.

Color Tinting

The accuracy of the OEM standard color is dependent on how well a vehicle manufacturer maintains tolerance to their original color specification. This variation fluctuates greatly across the global vehicle manufacturing industry and color variants often appear due to differing paint suppliers and manufacturing locations. Developing formulas for these documented variants is a continual support function of AkzoNobel. Additional manufacturer color variation is commonly attributed to inconsistent color-film thickness during vehicle production. Differing levels of opacity in the color coat can contribute to visual inconsistencies in the original vehicle finish and may require solutions that include several components such as tinting, color blending, and modified spray application techniques.

Tinting of the color formula may also be necessary due to the appearance of a manufacturer variant that has yet to be documented. Additionally, tinting is often required due to environmental weathering. It is not unusual for this weathering to affect areas of the vehicle differently, depending on variables such as long-term parking orientation and panel angle to the sun. Vehicle manufacturers' increased use of special effect pigments and dyes often amplify the susceptibility to weathering. Moreover, prior refinish work, including related adjacent panel blend areas, may also require tinting as a consequence of the previous repair.

It is important to recognize that tinting a color typically does not eliminate the need for blending to achieve an invisible repair. Application variables exist which may cause discrepancies in appearance, even when using the most accurate color formulas. When taking these factors into account, achieving an undetectable color transition may necessitate a combination of tinting, color blending, and modified spray application techniques.

Clearcoat Blending

AkzoNobel recommends the application of a clearcoat over the entire panel being repaired even if color has been blended to achieve a suitable color match. Where warranty qualification is desired, removal of all trim from the repair panel and a complete panel application of clearcoat is required. Also note that clearcoat blending or the use of incomplete panel refinishing is not an AkzoNobel warrantied procedure. This includes back taping or back masking of body or styling lines. Finally, be aware that most vehicle manufacturers do not recognize clearcoat solvent blending as an accepted method for the execution of OEM warranty repairs.

Detailed information on the application of AkzoNobel basecoats, clearcoats and other products can be found on the web at – <http://my.anaac.net/>