

# Color Tinting and Blending Considerations for Vehicles Equipped with ADAS Technology

Automotive paint can have both direct and indirect impacts on Advanced Driver Assistance Systems (ADAS), depending on its properties and how it interacts with the various components of these systems. Vehicle manufacturers have identified specific colors which may negatively impact radar performance when applied during refinish operations. When requested by the manufacturer, AkzoNobel redevelops formulas for these colors which then undergo testing to ensure their compatibility with the technology before receiving approval.

Selecting and applying the recommended refinish paint products, as well as understanding repair processes and restrictions on color formulas for mixing and application, should be taken into consideration by every repairer. It is the repairer's responsibility to ensure that sensors retain their functionality and integrity by using the correct repair methods.

Always strictly follow the OEM procedures provided for radar equipped vehicles as well as any specific instructions or color formulas provided by the paint manufacturer. Repair methods differ from OEM to OEM and may even vary between models from the same manufacturer.

This Technical Service Bulletin (TSB) provides general information regarding color tinting and blending when performing repairs that include interaction with a radar transmission zone.

## Color Formula Considerations

- When identified, the radar transparent color formula must be used when painting in radar zones
- Radar transparent color formulas must be mixed accurately and without deviation
- Radar transparent color formulas must not be manually tinted, adjusted, or digitally optimized
- Not every OEM requires radar transparent formulas – always refer to the OEM repair manuals

## Color Blending Considerations

OEM restrictions for radar transparent color formulas and application may require a change in refinishing operations which have often been considered standard. Understanding these OEM procedures and limitations will allow for informed planning when documenting the appropriate actions required for the repair.

- Blending the basecoat color within the radar zone is not allowed. Within the radar transmission area, the refinish layers must be smooth and uniform.
- When utilizing an approved radar transparent formula, consider these points:
  - ✓ Always create sprayout panels to understand if there is a color issue before painting the vehicle
  - ✓ Use spray gun application technique (pressure, distance, orientation) to control the color
  - ✓ Blending panels adjacent to the radar transmission zone may be necessary when using the currently available radar transparent formulas

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