



# Color Improvement Guide

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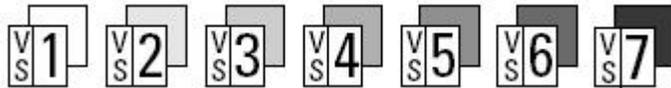
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## Hiding & Coverage

You cannot match a basecoat color until you have achieved adequate hiding. ValueShade® is the patented Axalta system that improves topcoat coverage and color match - especially when applying transparent OEM glamour colors.

For easy reference, every ChromaSystem™ topcoat color is coded with a ValueShade® number. When you apply an undercoat using the correct ValueShade®, you get faster topcoat hiding with fewer coats, better color matches and significantly increased productivity.

ValueShade® numbers refer to varying shades of gray.



ValueShade is available with sealers, primer-sealers and primer-fillers.

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## Mixing & Tinting

### Mixing

If a color mix is off at all, it will affect the color tremendously. It is essential to follow mixing procedures.

### Agitation

On the mixing machine, agitate the paint twice a day (first thing and halfway through the day). This will ensure the proper tint strength. Shake unopened tints before installing mixing lid.

### At the scale

Calibrate the scale once a day and keep it in a pristine area. If your results vary, please check for outside influences such as wind or vibrations (from equipment). Thoroughly shake the mixed color immediately after mixing for 5 minutes or as recommended.

### Tinting

If you must tint, the following tips will help you achieve a proper match:

- Tint to the obvious first (color, lightness/darkness, saturation).
- Check all viewing angles. View in natural light.
- Be cautious with high-strength tints.
- Try not to use "kill" colors.
- It is sometimes easier to leave a tint out completely and add it back slowly as needed. For example, if a color is too red, remix leaving out the predominant red.
- Always match color in natural or color-corrected light.

- Never tint all the color, to avoid overtinting.
- Spray test panels when doing cut-in work.
- Enlist a second pair of eyes.
- Tint to a blendable match. Be careful not to overtint.

Refer to the color tinting chart to see how specific tints will move a color.

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## Flop

There's one more phenomenon you should look out for when you're comparing an original finish to a refinish color, and that is flop. Flop is a change in the value, hue or chroma of a car finish when it is viewed from different angles. For example, viewed head-on, a car color may be a good match with your test panel. But when you move 45 to 60 degrees to the left or right, the color changes. Usually, one or both of the side views is lighter or darker (value change), but any one of the three attributes of color (hue, chroma, value) may change due to flop.

Flop variations occur with metallic and pearl colors. Solid colors do not exhibit flop. To understand why, think of the aluminum flakes in metallic and pearl paints as tiny mirrors. When light shines on a mirror's surface, it is reflected. The angle of the light reflected affects the brightness of the color. This brightness diminishes rapidly as you move away from this angle, depending on the pigmentation of the paint.

Metallic paints with nontransparent pigments have larger particles. These particles have more surface area to reflect light. For this reason, nontransparent pigments scatter some of the brightness to other viewing angles, and the brightness of the paint does not decrease rapidly when you change viewing angles. These colors are described as having low flop.

Metallic paints with transparent pigments absorb light, reducing the amount of light reflected outward. So, if you view these pigments directly from the angle where the light is reflecting outward from the finish, you'll see the highest level of brightness for that color. When viewed from any other angle, the brightness decreases rapidly. These colors are described as having high flop.

While high-flop colors are attractive, you need to take special care to match the degree of flop in the area you are refinishing with the rest of the finish.

### Tips to Control Flop

- Wetter spray technique.
- Use the slowest basemaker possible for the shop.
- Fine aluminum brightens head-on and side-tone.
- Coarse aluminum brightens head on, darkens side-tone.

A flop control agent added to basecoat absorbs light, limits flop and controls flake orientation.

In the United States:  
**1.855.6.AXALTA**  
**axalta.us**

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**1.800.668.6945**  
**axalta.ca**

