



sVBTB-02 Technical Bulletin

LIQUIDMETAL™ DMD1770 Fine *LiquidMetal* pigment used in the repair process of Mercedes-Benz 047 Alubeam.

The following process outlining the repair of Mercedes-Benz 047 Alubeam paint scheme has been approved by PPG. When repairing Mercedes-Benz vehicles finished in this paint scheme you should contact your PPG representative for full documentation on the approved product systems and processes. This repair process can be used with any of PPG's Premium Solvent Basecoat Systems (DELTRON NXT). **This Specific repair process is necessary to meet appearance, performance, and VOC regulatory requirements.**



DESCRIPTION:

- Mercedes-Benz Alubeam 047 is a special effect silver color which gives the paint a “Liquid Metal” appearance.
- The OEM process utilizes a unique 4 coat system made up of a black base, followed by a sanded clearcoat, to which the Super Fine Liquid Metal pigment is applied and then overcoated by another clearcoat layer. See the following illustration:

Final Clearcoat Layer
Super Fine Liquid Metal Pigment Layer
Sanded Clearcoat
Black Basecoat
OEM Substrate / Primer

- The repair outlined in this document duplicates the OEM process as closely as possible utilizing products similar to those used at the factory.

PREPARATION OF THE SUBSTRATE:

- Any damaged body work of the vehicle should be repaired using the PPG and Mercedes-Benz approved repair process for the substrate being worked on (Aluminum, Steel, Plastic, etc.). Finish the repair in a G7 shaded sealer

PREPARATION OF THE COLOR CHECK PANEL:

- Prior to applying any color on the vehicle, a color check panel should be produced utilizing the same application methods as would be employed in the actual refinish repair. This “color check” panel is required on every car being repaired due to the wide variation of color from one area of the car to the next and from car to car.
- The G7 color check panel should be prepared as follows:
 - Mix and apply Mercedes-Benz color code 040 (PPG Code 95084) basecoat to the entire color check panel insuring full coverage. Allow suitable flash times between coats. Allow the basecoat to dry the correct amount of time based on spray facilities before applying clearcoat.
 - Mix and apply clearcoat to the entire color check panel. Two coats should be applied so that enough film build is present to allow for sanding. The use of the following premium clearcoats are recommended.
 - *Deltron* DCU2021 Urethane Clear
 - Once the clearcoat is fully dried;
 - Remove any orange peel or texture with 1200 dry.
 - Then further refine the surface with P1000 Trizact™ wet to minimize any final scratches.
 - Mix the Mercedes-Benz 047 (PPG Code 930381) basecoat color. Formulas in *Deltron* NXT are available on the PAINTMANAGER® program software. Once mixed, the basecoat color is ready to spray. **No additional reducer is required.**
 - Apply 2 to 3 coats of the mixed DMD1770 Fine *LiquidMetal* basecoat to the color check panel allowing appropriate flash times between coats. Apply this basecoat layer as you normally would.
 - Allow a minimum of 20 minutes dry time at 70°F (21°C) before the final clearcoat is applied.
 - Mix and apply clearcoat to the entire panel. The use of the following Mercedes-Benz approved premium clearcoats are recommended:
 - *Deltron* DC4125 CERAMICLEAR® Clearcoat
 - Apply the first coat of clear as a light coat. Avoid overwetting as movement of the Liquid Metal material may occur resulting in blotchiness.
 - Allow the first coat of clear to flash 10 -15 minutes
 - Apply a second full coat of clear.

CHECK THE COLOR:

- Use the completed color check panel to evaluate the color on the car.
- If the color achieved on the color check panel is considered to be “blendable” to the car proceed to the section “GROUND COAT COLOR AND CLEAR APPLICATION”.
- If tinting of the color is necessary, tint utilizing toners within the original formula and prepare an additional color check panel and re-check. Continue in this fashion until a blendable match is achieved.

GROUNDCOAT COLOR AND CLEAR APPLICATION:

- Mix and apply Mercedes-Benz color code 040 (PPG Code 95084) over the G7 sealed area. Blend out additional coats as needed to eliminate any “hard edge” of color.
- Mix and apply clearcoat to the entire repaired panel. Blending of this clearcoat layer is not recommended. Apply clear “edge to edge”.
 - Apply 2 to 3 coats so that enough film build is present to allow for sanding. The use of the following premium clearcoats is recommended:
 - *Deltron* DCU2021 Urethane Clear
 - Once the clearcoat has fully dried;
 - Remove any orange peel or texture with 1200 dry.
 - Then further refine the surface with 1000 Trizact wet to minimize any final scratches.
 - In areas that extend beyond the 040 groundcoat color where the topcoat color will be applied and blended sand those areas with 3000 grit Trizact pad.

BASECOAT 047 COLOR APPLICATION:

- Mix the Mercedes-Benz 047 (PPG Code 930381) basecoat color. Formulas in *Deltron* NXT are available on the *PaintManager* program software. Once mixed, the basecoat color is ready to spray.
No additional reducer is required.
 - Apply 2 to 3 coats of the mixed DMD1770 Fine *LiquidMetal* basecoat to the repair following normal blending recommendations.
 - Allow a minimum of 20 minutes dry time at 70°F before the final clearcoat is applied.

FINAL CLEARCOAT APPLICATION:

- Mix and apply clearcoat to the entire repair area. The use of the following premium clearcoats are recommended:
 - *Deltron* DC4125 *CeramiClear* Clearcoat
- Apply the first coat of clear as a light coat. Avoid over wetting as movement of the DMD1770 Fine *LiquidMetal* paint material may occur resulting in blotchiness.
 - Allow the first coat of clear to flash 10 -15 minutes.
- Apply a second full coat.
- A third full coat may be applied if necessary.
- Bake at 140°F (metal temperature) for 20 minutes.
- If necessary and to achieve the smoothest possible final finish, sand with P1200 or finer (dry) and then re-apply the Scratch Resistant Clearcoat.



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