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Contents

General Information

Axalta® (formerly DuPont®) single-stage Imron Elite EA (also called Elite SS) or two-stage (base coat and clear coat) Imron Elite EB (also called Elite BC) high-solids polyurethane enamel is currently applied on the vehicle cab at the factory.

Black standard urethane or Imron Elite EA is used on the vehicle chassis. The chassis includes the frame, hubs, running gear, and any components attached to the frame. Aluminum fuel tanks are not painted.

To meet the air quality regulations imposed by the EPA and local jurisdictions, these products contain lower levels of volatile organic compounds (VOCs) than earlier types (916Y, Centari®, and Imron), and are formulated free of lead and chrome.

The procedures in this section are for use with Axalta products. Unless otherwise noted, all products are manufactured by Axalta. Obtain approval from a Freightliner Regional Office for use of topcoats produced by other manufacturers.

Color-Matching

The recommended aftermarket paints for color-matching factory-applied paint are as follows:

- Use Imron 5000 or Elite EA for cabs that were factory-painted single-stage Elite EA.
- Use Imron 6000 or Elite EB for cabs that were factory-painted two-stage Elite EB.
- Use Imron 5000 or Elite EA for the chassis.

To ensure proper gloss, durability, and color-matching of the enamel, use only single-stage Imron 5000 or Elite EA on panels that were previously painted with Imron 5000, and use only Imron 6000 on panels painted with Elite EB.

To determine the correct paint number for color-matching any original finish on a vehicle, refer to the paint specification on the vehicle specification decal. Refer to the driver's manual for the location of this decal.

General Guidelines

This subject provides instructions for preparing large panels or the entire cab for topcoating with Axalta® products. For spot repairs or touch-ups, see **Subject 120**.

Before topcoating, the surface must be thoroughly cleaned and sanded. Any bare areas must also be conditioned and primed.

1. Preparation materials specified for one type of surface should not be used for any other type of surface.
2. Limit intermediate coatings, such as primers, to the brand and type specified by the finish-coat manufacturer.

NOTICE

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

Preparation for Prime Coat

Use the cleaners and conditioners specified in each step to prepare the surface for priming. See **Specifications, 400** for a summary of the products used in this procedure.

⚠ WARNING

Do not use solvent-based cleaners on large areas of plastic or fiberglass, such as the hood or air fairing. Wiping down these large areas may cause a buildup of static electricity. The resulting spark could cause a flash fire, which could result in personal injury or property damage.

Cab and Hood Preparation

1. Wash the entire vehicle with a mild detergent, and dry.
2. Wipe all surfaces to be painted with a clean cloth soaked with solvent or cleaner. Remove all traces of wax, polish, grease, and silicones.
    - Metal—use Axalta Prep-Sol 3919 S.
    - Plastic—use Axalta Plastic Prep 2319 S.
    - Fiberglass—use Axalta Prep-N-Solv.

    2.1 Work on small areas at a time, wetting the surface liberally.

    2.2 Quickly wipe the surface with a clean cloth before the solvent or cleaner has a chance to dry. Change cloths frequently.
3. Feather the edge of all repaired areas, chipped surfaces, and scratches.

    3.1 Cut down the edges of broken spots with 220 sandpaper.

    3.2 Feather the edges by hand, using a sanding block with 400 sandpaper.
4. Sand the entire area to be painted. Using a sanding block and 400 sandpaper, remove the gloss to improve adhesion of the primer.
5. Using a clean cloth soaked with cleaner, remove any sanding dust.
    - On metal surfaces, use Axalta First Klean 3900S, Axalta Final Klean 3901S, or Axalta 3939 S Lacquer and Enamel Cleaner. Do not use these cleaners on plastic or fiberglass substrates.
    - On plastic or fiberglass substrates, use Axalta Low VOC Final Klean 3909S.
6. Treat bare metal and rusted areas.
    - Aluminum—use Axalta 225 S aluminum cleaner.
    - Steel—use Axalta 5717 S metal conditioner.

    6.1 Mix one part of the cleaner with two parts of water in a plastic bucket.

    6.2 Apply the cleaner with a cloth or sponge. If corrosion is present, work the surface with a stiff plastic brush or 3M Scotch-Brite® pad. Do not use any pads containing iron.

    6.3 While the metal is still wet, wipe thoroughly with a clean, dry cloth. Allow the surface to dry before applying a conversion coating.
7. Apply a conversion coating to all bare metal.

Prime Coat Application

- Aluminum—use Axalta 226 S aluminum conversion coating.
- Steel—use Axalta 5718 S metal conversion coating.
- Zinc casings or galvanized surfaces (iron or steel)—use Axalta 5718 S metal conversion coating.

7.1 Pour the conversion coating into a plastic container (do not dilute). Using a 3M Scotch-Brite or similar non-iron abrasive pad, apply the conversion coating to the metal surface. Work only as much area as can be coated and rinsed before the solution dries.

7.2 Leave the coating on the surface for two to five minutes. Then, rinse off the solution with cold water, or mop with a sponge or cloth rinsed frequently in clean water.

If the metal surface dries before rinsing, reapply the conversion coating, then repeat the previous substep.

7.3 Wipe the surface dry with a clean cloth, or air dry.

8. Mask all areas that are not to be painted.

Air Fairing Kit Preparation

Before installing a new air fairing, prepare the surface for topcoating.

1. Wash the air fairing with a mild detergent. Dry with a clean, absorbent, lint-free cloth or paper towels.
2. Using a clean cloth soaked with Axalta Prep-N-Solv, wipe the entire surface to remove any trace of grease or oil.
3. Scuff-sand the air fairing with 320 grit sandpaper.
4. Wipe the air fairing with a clean cloth soaked in Axalta Low VOC Final Klean 3909S, or a solution of one part water and one part isopropyl alcohol. Allow 10 to 15 minutes for the air fairing to dry.
5. Mask all areas that are not to be painted.

Prime Coat

Prime all bare and feathered areas before topcoating. The specified primers can be used on any surface.

1. Clean all cracks and surfaces with dry compressed air.
2. Using a tack cloth, wipe all surfaces to be painted.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying primer, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

3. Prime all bare metal and feathered areas with Axalta Corlar® 825P28300 epoxy primer.

3.1 Stir Corlar 825P28300 primer thoroughly.

3.2 Mix three parts Corlar 825P28300 primer with one part Axalta FGP32767 activator.

3.3 Spray one full wet coat to give a dry film thickness of 0.7 to 1.0 mil (0.018 to 0.025 mm).

3.4 Clean equipment immediately after use with Axalta 3602 S lacquer thinner.

3.5 Air dry 2 hours or force dry 20 minutes.

4. Use a dual-action powered sander or hand sand with 240 grit or finer sandpaper. Feather the edge into the surrounding area.
5. Dry the surface. Using a clean cloth soaked with cleaner, remove any sanding dust.
   - On metal surfaces, use Axalta First Klean 3900S, Axalta Final Klean 3901S, or Axalta 3939 S Lacquer and Enamel Cleaner. Do not use these cleaners on plastic or fiberglass substrates.
   - On plastic or fiberglass substrates, use Axalta Low VOC Final Klean 3909S.

General Guidelines

This subject provides instructions for applying a topcoat of Axalta® enamel to full panels, or the entire cab. For spot repairs or touch-ups, see **Subject 120**.

NOTICE

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

Do not mix additives with the finish coats unless they are specified by the finish-coat manufacturer. See **Specifications, 400** for a summary of the products used in this procedure.

Do not apply if the paint temperature is less than 70°F (21°C). Use warm water or paint heaters to heat the paint to an optimum temperature of 85 to 95°F (29 to 35°C). The material, substrate, or ambient temperature should be above 50°F (10°C) and below 110°F (43°C).

Before applying any topcoat:

1. Prepare the surface for topcoating. See **Subject 100** for instructions.
2. Clean all cracks and surfaces with dry compressed air.
3. Using a tack cloth, wipe all surfaces to be painted.

Imron Elite EA Topcoating

Imron Elite EA (also called Elite SS) is a single-stage, low VOC, high-solids polyurethane enamel. It provides a durable, high-gloss surface with good chemical resistance. It requires the addition of an activator.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Mixing

1. Stir the Imron Elite EA enamel thoroughly.
2. Mix three parts Imron Elite EA enamel with one part of Axalta 193 S or 194 S activator. No further reduction is necessary for application.

NOTE: The pot life of the mixture is about 2 to 4 hours at 70°F (21°C), unless an accelerator is added.

3. If faster curing time is desired, add Axalta 389 S fast-dry accelerator. Add up to 2 ounces (60 mL) to 1 gallon (3.8 L) of mixed material.
4. Mix thoroughly and strain.

NOTE: The viscosity of the mixture is about 10 to 19 seconds in a no. 3 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

Application

1. Set the air pressure at the spray gun to 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
2. Apply the topcoating.
   - 2.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 2.2 Using a cross-coat technique, spray one medium-wet coat in a north-to-south direction.
   - 2.3 Allow 5 to 10 minutes drying time between each application. Do not sand.
   - 2.4 Apply a second medium-wet coat in an east-to-west direction.
   - 2.5 A third medium-wet coat may be needed for good coverage of some colors.
3. To air dry, allow 2 to 4 hours with accelerator 389 S, and 6 to 8 hours without the accelerator.

   To force dry, wait 15 minutes following the application of the final coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).
4. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.

Topcoat Application

5. Clean the equipment immediately after use with Axalta 3602 S lacquer thinner or 8685 S reducer.

Recoating or Decorating

Two-toning, striping, or lettering may be applied in 4 to 6 hours if Axalta 389 S accelerator is used. Wait 10 to 12 hours, if no accelerator is used.

Decals may be applied in 12 to 16 hours, if 389 S accelerator is used. Wait 24 hours if no accelerator is used.

For topcoats cured over 72 hours, scuff-sand with 400-grit sandpaper and wipe with a clean tack cloth before recoating, striping, lettering, or applying decals.

Imron Elite EB Topcoating

Imron Elite EB (also called Elite BC) is a two-stage, high-solids polyurethane enamel. It provides good cover with one cross-coat of the base color followed by one coat of Imron Elite EB clear coat. Both the base color and clear coat require the addition of an activator.

Mixing

1. Stir the Imron Elite EB base color thoroughly.
2. Mix three parts Imron Elite EB base color with one part Axalta 193 S or 194 S activator. No further reduction is necessary for application.

NOTE: The pot life of the mixture is about 2 to 4 hours at 70°F (21°C), unless an accelerator is added.

3. If faster curing time is desired, add Axalta 389 S fast-dry accelerator. Add up to 2 ounces (60 mL) to 1 gallon (3.8 L) of mixed material.
4. Mix thoroughly and strain.

NOTE: The viscosity of the mixture is about 10 to 19 seconds in a no. 3 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

Application

1. Set the air pressure at the spray gun to 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
2. Apply the topcoating.
   - 2.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 2.2 Apply one cross-coat of the Imron Elite EB base color.
   - 2.3 Flash 10 minutes minimum. Do not sand.
   - 2.4 Purge the equipment with Axalta 3602 S lacquer thinner, or 8685 S reducer.
3. Apply clearcoat.
   - 3.1 Mix three parts Axalta 8840 S clear, with one part Axalta 193 S or 194 S activator.
   - 3.2 Apply one coat of the activated Axalta 8840 S clear. Some colors may require additional cross-coats.
4. To air dry, allow 2 to 4 hours if Axalta 389 S accelerator is used, and 6 to 8 hours if no accelerator is used.

   To force dry, wait 15 minutes following the application of the clear coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).
5. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.
6. Clean the equipment immediately after use, with Axalta 3602 S lacquer thinner or 8685 S reducer.

Recoating or Decorating

Two-toning, striping, and lettering may be applied in 4 to 6 hours, if Axalta 389 S accelerator is used. Wait 10 to 12 hours, if no accelerator is used.

Decals may be applied in 12 to 16 hours, if 389 S accelerator is used. Wait 24 hours, if no accelerator is used.

General Guidelines

This subject provides instructions for making spot repairs or touch-ups with Axalta® enamels. Buffing may correct minor imperfections; more serious repairs require surface preparation before a topcoating can be applied. For striping, lettering, or decal application after the repair is complete, see **Subject 110**.

1. Specific types of surfaces to be painted, require specific types of preparation materials. Do not use preparation materials specified for a given type of surface on another surface, for which it is not specified.

   See **Specifications, 400** for a summary of the materials used in this section.

2. Use only the intermediate coatings, such as primers, of the brand and type specified by the finish-coat manufacturer.
3. Do not mix additives with the finish coats unless they are specified by the finish-coat manufacturer.
4. Do not apply if the paint temperature is less than 70°F (21°C). Use warm water or paint heaters to heat the paint to an optimum temperature of 85 to 95°F (29 to 35°C). The material, substrate or ambient temperature should be above 50°F (10°C) and below 110°F (43°C).

NOTICE

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

Buffing Minor Imperfections

1. Clean the area carefully with a mild detergent, then rinse.
2. Remove imperfections using ultra-fine or micro-fine sandpaper (1500- or 2000-grit) and water. Rinse the area with clean water, then dry.
3. Buff the area.

   3.1 Use a clean foam pad at low speed (about 1600 rpm) with one of the following products:

   - Axalta 1500 S
   - Meguiar's No. 2 Fine-Cut Cleaner
   - 3M Finesse-it II 05928

   3.2 Using medium pressure, buff slowly in an overlapping pattern until the imperfection has been eliminated. Repeat as necessary.

   3.3 Rinse the area with clean water, then dry.

4. Polish the area.

   4.1 Apply one of the following products with a clean pad (3M Waffle Pad):

   - Axalta 3000 S
   - Meguiar's No. 9 Swirl Remover
   - 3M Perfect-it 05996

   4.2 Using medium pressure, work small areas using an even, overlapping pattern until the gloss is restored. As the polish dries and the gloss appears, ease the pressure on the polishing pad. Repeat as necessary.

Preparing for Topcoating

1. Wash the entire panel with mild detergent, containing no lanolin or additives. Before the solution dries, rinse with fresh water. Dry with a clean, lint-free cloth.
2. Cover areas around the repair area to prevent damage to surrounding objects from solvent overspray or drips.

⚠ WARNING

Solvents are flammable. Keep the container closed. Use only with adequate ventilation. Keep solvents away from heat, sparks, and open flame. Breathing the vapor can cause headache, nausea, impaired reaction time, and impaired coordination.

3. Clean the area to be repaired with Axalta 3939 S solvent and quickly wipe the surface with a clean, lint-free cloth before the solvent dries. Remove all traces of wax, polish, grease, and silicones.
4. Sand or grind all dents and scratches.

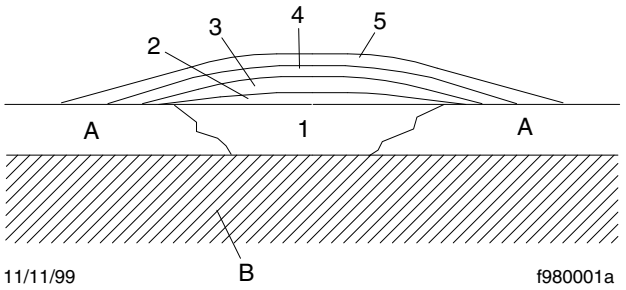
Spot Repair

5. Wet sand the area being repaired with 320-grit or finer sandpaper, or a 3M Scotch-Brite® or similar non-iron abrasive pad. Feather the edge.
6. Remove the sanding dust. Use the same solvent and wipe-on, wipe-off method used earlier to clean the area.
7. Mask all areas that will not be painted.
8. Clean all cracks and surfaces with dry compressed air.
9. Using a tack cloth, wipe all surfaces to be painted.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

10. Prime all bare metal and feathered areas with Axalta primer. See **Fig. 1**.
    - Steel and aluminum—use Corlar 825P28300 epoxy primer.
    - Fiberglass—use Corlar 825P28300 epoxy primer.



NOTE: Scale exaggerated for clarity. The number of layers depends on the specific application.

A. Existing Paint
B. Panel Material (substrate)

1. Primer
2. First Color Topcoat
3. Second Color Topcoat
4. Third Color Topcoat
5. Clear Coat

Fig. 1, Spot Repair Cross-Section

10.1 Stir primer thoroughly.

10.2 Mix three parts Corlar epoxy primer with one part Axalta FGP32767 activator. Stir thoroughly.

10.3 Set the air pressure at the spray gun to 45 psi (310 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.

10.4 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.

10.5 Spray one wet coat to give a dry film thickness of 0.7 to 1.0 mil (18 to 25 m).

10.6 Clean the equipment immediately after use with Axalta 3602 S lacquer thinner.

10.7 Air dry 2 to 4 hours or force dry 20 minutes at 140 to 180°F (60 to 82°C).

11. Wet sand the primer with 400-grit or finer sandpaper. Feather the edge into the surrounding area.
12. If the original paint was Imron Elite EB (also called Elite BC) hand-rub the area around the spot repair with a medium grade compound to ensure a seamless finish.
13. Remove the sanding dust. Use the same solvent and wipe-on, wipe-off method used earlier to clean the area.
14. Wipe the repair area with a tack cloth.
15. If the finish is old, apply one coat of Axalta 222 S adhesion promoter over the entire repair area.

15.1 Set the air pressure to 35 psi (241 kPa) at the spray gun.

15.2 Flash for 5 to 10 minutes at 70°F (21°C) before topcoating.

Topcoating a Spot Repair

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Imron Elite EB Topcoating

1. Mix the Elite EB polyurethane enamel.
   - 1.1 Stir the Elite EB base color thoroughly.
   - 1.2 Mix three parts Elite EB base color with one part Axalta 193 S or 194 S activator. No further reduction is necessary for application.
   - 1.3 Mix thoroughly and strain.

Note: The viscosity of the mixture is about 10 to 19 seconds in a no. 3 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

2. Set the air pressure at the spray gun at 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
3. Apply the topcoating.
   - 3.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 3.2 Apply one cross-coat of the Elite EB base color over the primed area. No flash time is required before applying a clear coat.
   - 3.3 Purge the equipment with Axalta 3602 S lacquer thinner or 8685 S reducer.
   - 3.4 Mix three parts Axalta 8840 S clear with one part Axalta 194 S activator.

   NOTE: For best results, apply the clear coat over the entire panel. If a blend of the repair area is attempted, apply the clear coat only over the repair area, overspraying the edge slightly.

   - 3.5 Apply one coat of the activated Axalta 8840 S clear.
4. Purge the equipment with Axalta 3602 S lacquer thinner or 8685 S reducer.
5. Blend the 8840 S clear into the surrounding topcoat.
   - 5.1 Set the air pressure to 25 psi (172 kPa) at the spray gun.
   - 5.2 Apply one coat of 3401 S blending clear over the repair area, only to the overspray edge.
   - 5.3 Flash 2 minutes. Repeat if necessary.
6. To air dry, allow 2 to 4 hours if Axalta 389 S accelerator is used, and 6 to 8 hours if no accelerator is used.

   To force dry, wait 15 minutes following the application of the final coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).
7. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.
8. Clean the equipment immediately after use, with Axalta 3602 S lacquer thinner or 8685 S reducer.

Imron Elite EA Topcoating

1. Mix the Elite EA polyurethane enamel.
   - 1.1 Stir the Elite EA enamel thoroughly.
   - 1.2 Mix three parts Elite EA base color with one part Axalta 193 S or 194 S activator. No further reduction is necessary for application.
   - 1.3 Mix thoroughly and strain.

   Note: The viscosity of the mixture is about 10 to 19 seconds in a no. 3 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.
2. Set the air pressure at the spray gun at 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
3. For metallic topcoats only, apply one coat of Axalta 3880 S urethane clear.
   - 3.1 Apply a medium-wet coat of the 3401 S over the entire repair area, and well beyond where the color will be applied.
   - 3.2 Flash 3 minutes before applying the Elite EA topcoat.
4. Apply the solid color or metallic topcoating.
   - 4.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 4.2 Spray one medium-wet coat over the primed area.
   - 4.3 Flash 5 to 10 minutes.

Spot Repair

4.4 Apply a second medium-wet coat. Extend the spray area slightly to taper the edge and avoid a visible ring.

4.5 A third medium-wet coat may be needed for good coverage of some colors. Allow each coat to flash before applying the next coat.

NOTE: A mist coat of five parts of color to three parts of 8022 S is recommended when applying metallics. Hold the gun about 18 inches (45 cm) from the surface.

5. Blend the repair area into the OEM finish.

   5.1 Lower the air pressure to 15 to 20 psi (103 to 138 kPa) at the spray gun.

   5.2 Empty the spray cup and refill it with Axalta 8022 S reducer or a blend of 8022 S and 8093 S.

   5.3 Carefully blend the edge of the repair with even coats to melt in the overspray.

   5.4 Spray one or two medium coats of the reducer over the entire area.

   5.5 If a haze appears around the edge after the reducer has dried, lightly rub the edge with Axalta 1500 S one-step polish.

6. To air dry, allow 2 to 4 hours if Axalta 389 S accelerator is used, and 6 to 8 hours if no accelerator is used.

   To force dry, wait 15 minutes following the application of the final coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).

7. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.

8. Clean the equipment immediately after use with Axalta 3602 S lacquer thinner or 8685 S reducer.

Specifications

Axalta Surface Preparation Materials				
Step	**Aluminum**	**Steel**	**Plastic**	**Fiberglass**
Wash and dry	Mild detergent, such as dish washing detergent			
Wipe with cleaner	Prep-Sol 3919 S		Plastic Prep 2319 S	Prep-N-Solv
Sand and feather	220 grit, then 400 grit			320 grit
Remove sanding dust	3939 S lacquer and enamel cleaner			Mix: - 1 part water - 1 part isopropyl alcohol
Treat bare metal	225 S aluminum cleaner	5717 S metal conditioner	—	—
Apply conversion coating to bare metal	226 S aluminum conversion coating	5718 S metal conversion coating	—	—
Apply sealer primer	Mix: - 3 parts Corlar 825P28300 primer with 1 part Axalta FGP32767 activator			

Table 1, Axalta Surface Preparation Materials

Axalta Topcoating Materials	
Step	**Topcoating Materials**
Mix enamel	Mix: - 3 parts Imron Elite with 1 part 193 S or 194 S activator
Add accelerator (optional)	389 S or VGP28269 accelerator (up to 2 oz/gal of activated enamel)
Pressure at gun	60 psi (414 kPa)
Equipment cleanup	3939 S lacquer and enamel cleaner or 8685 S reducer

Table 2, Axalta Topcoating Materials

Axalta Repair Materials	
Step	**Spot Repair Materials**
Cleaning	3939 S lacquer and enamel cleaner
Sanding	320 grit or finer
Sealer primer	Mix: - 3 parts Corlar 825P28300 primer with 1 part Axalta FGP32767 activator
Adhesion promoter	222 S adhesion promoter
Topcoat	Mix: - 3 parts Imron Elite with 1 part 193 S or 194 S activator
Topcoat viscosity	9–20 sec (#3 Zahn cup)
Accelerator (optional)	389 S accelerator or VGP28269
Blending clear	1 coat 3401 S blending clear

Specifications

Axalta Repair Materials	
Step	**Spot Repair Materials**
Equipment cleanup	3939 S lacquer and enamel cleaner or 8685 S reducer

Table 3, Axalta Repair Materials

Contents

General Description

PPG Delfleet Evolution® FBCH base-coat and F3906 clear-coat paint is used on the vehicle cab. To meet the federal air quality regulations imposed by the EPA and local jurisdictions, these products contain low amounts of solvent and are formulated to be free of lead and chrome.

The procedures in this section are for use with PPG products. Unless otherwise noted, all products are manufactured by PPG. Obtain approval from Daimler Trucks North America (DTNA) for use of topcoats produced by other manufacturers.

Color Matching

PPG Delfleet Evolution® high solids polyurethane is the recommended aftermarket PPG paint. For repairs, use PPG Delfleet Evolution FDGH paint for color-matching the chassis and PPG Delfleet Evolution FBCH base coat with F3906 clearcoat paint for color-matching the cab.

To determine the correct paint number for color-matching of any original finish on a vehicle, refer to the paint specification on the vehicle specification decal. Refer to the vehicle operator's manual for the location of this decal.

General Guidelines

1. Preparation materials specified for one type of surface should not be used for any other type of surface.
2. Limit intermediate coatings, such as sealers, to the brand and type specified by the finish coat manufacturer.
3. Do not mix additives with the finish coats, unless the finish coat manufacturer specifies them.

IMPORTANT: Only experienced, qualified persons, using proper equipment, should attempt repainting and touch-up painting.

Preparation for Topcoating

1. Wash and dry the entire surface to be painted.
2. Using a clean cloth soaked with PPG CFX436 Wax and Grease Remover, remove all traces of wax, polish, grease, and silicones, as follows:
   - 2.1 Work on small areas at a time, wetting the surface liberally.
   - 2.2 Change cloths frequently.
   - 2.3 Wipe off the surface with a clean cloth before the PPG CFX436 Wax and Grease Remover has a chance to dry.
3. Feather-edge all repaired areas, chipped surfaces, and scratches, as follows:
   - 3.1 Cut down the edges of broken spots with 220-grit sandpaper.
   - 3.2 Feather the edges by hand, using a sanding block with 400-grit sandpaper.
4. Sand the entire area to be repainted. Use a sanding block and 400-grit sandpaper to remove the gloss and to improve adhesion of the primer.
5. Using a clean cloth soaked with PPG CFX436 Wax and Grease Remover, remove any sanding dust from the area to be painted. Remove all traces of wax, polish, grease, dust, and silicones, as follows:
   - 5.1 Work on small areas at a time, wetting the surface liberally.
   - 5.2 Change cloths frequently.
   - 5.3 Wipe off the surface with a clean cloth before the PPG CFX436 Wax and Grease Remover has a chance to dry.
6. Treat bare metal and corroded areas. For aluminum, use PPG DX533 Aluminum Cleaner; for all other metals, use PPG DX579 Metal Cleaner.
   - 6.1 For aluminum, mix one part of PPG DX533 Aluminum Cleaner with three parts of water in a plastic bucket.

     For all other metals, mix one part of the PPG DX579 Metal Cleaner with two parts of water in a plastic bucket.
   - 6.2 All corroded areas must be abraded until the area is free of rust or corrosion. Use 80-grit followed by 220-grit sandpaper to abrade the area.
   - 6.3 Spray cleaner on the surface and allow it to react for 2 to 3 minutes.
   - 6.4 Rinse off the cleaner with fresh water and dry thoroughly with a clean, lint-free, dry cloth.

IMPORTANT: Carbon steel must be primed immediately after abrading and cleaning. Aluminum must be primed within 4 to 8 hours of abrading and cleaning.

7. With paper and tape, mask all areas that are not to be painted, then prime immediately.

Air Fairing Kit Preparation

Before installing a new air fairing, prepare the surface for topcoating.

1. Wash the air fairing with a mild detergent. Dry with a clean, absorbent, lint-free cloth or paper towels.
2. Using a clean cloth soaked with CFX436, wipe the entire surface to remove any trace of grease or oil.
3. Scuff-sand the air fairing with 320 grit sandpaper.
4. Wipe the air fairing with a clean cloth soaked in CFX436 or a solution of one part water and one part isopropyl alcohol. Allow 10 to 15 minutes for the air fairing to dry.
5. Mask all areas that are not to be painted.

Prime Coat Application

Primers for the Cab

PPG has several compatible primers to use when repainting or repairing. The recommended primers are:

- F3993/F3995/F3997 — Chrome- and lead-free epoxy primers in gray, buff, and black with excellent corrosion resistance.
- F3970/F3970WH/F3970BK — Chrome-free polyurethane 2.1 VOC primers in gray, white, and black with excellent adhesion and corrosion resistance properties.
- F4921 — A 2.1 VOC chrome- and lead-free epoxy primer with excellent adhesion and corrosion resistance properties.
- F4935/F4936/F4937 — 2.1 chrome- and lead-free, corrosion resistant, sandable primers in white, gray, and black with excellent adhesion and filling properties. These may be topcoated directly as a sealer primer or with additional film build, sanded as a surface primer.

F3993/F3995/F3997 Primers

NOTE: Refer to PPG Product Information Bulletin DFT-057 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

1. Stir the F3993 primer thoroughly. Then, mix three parts of F3993 with one part F3996 and one-half part F33XX reducer.
2. Stir thoroughly and allow a 30-minute induction time to obtain maximum performance.
3. Apply two light-to-medium wet coats to achieve a 1.0 mil minimum to 2.0 mil maximum dry film thickness (DFT).
4. Allow 15 minutes flash time between coats.
5. Allow a drying time of 1 hour at 70°F (21°C) before topcoating.

NOTE: After three days, F3993 primer must be sanded before additional primer or topcoat can be applied.

6. Clean all cracks and surfaces with dry compressed air.
7. Using a tack cloth, wipe all surfaces to be painted.

F3970/F3970WH/F3970BK Primers

NOTE: Refer to PPG Product Information Bulletin DFT-052 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

NOTE: This mixture has a volatile organic compounds (VOC) of 2.1 lb/gal.

1. Stir the F3970 primer thoroughly.
2. Mix three parts of F3970 with one part of F3971.
3. Add 6 fluid ounces (177 mL) of F3400 or F3405 per ready-to-spray (RTS) gallon (3.8 L).
4. Add 10% F3385/F3390/F3395 reducer if desired.
5. Apply one to three coats.
6. Allow 10 to 15 minutes flash time between coats.
7. Allow a drying time of 60 minutes at 70°F (21°C) before topcoating.

NOTE: After two days, F3970 must be sanded before additional primer or topcoat can be applied.

8. Clean all cracks and surfaces with dry compressed air.
9. Using a tack cloth, wipe all surfaces to be painted.

F4921 Primer

NOTE: Refer to PPG Product Information Bulletin DFT-071 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

1. Stir the F4921 primer thoroughly. Then, mix three parts of F4921 with one part of F4922 and one part of F3385 or F3390 reducer.
2. Apply one to two coats.
3. Allow 10 to 15 minutes flash time between coats.
4. Allow a drying time of 30 minutes at 70°F (21°C) before topcoating.

NOTE: After four days, F4921 must be sanded before additional primer or topcoat can be applied.

5. Clean all cracks and surfaces with dry compressed air.
6. Using a tack cloth, wipe all surfaces to be painted.

F4935/F4936/F4937 Primer

NOTE: Refer to PPG Product Information Bulletin DFT-070 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

1. Stir the F4936 primer thoroughly. Then, mix one part of F4936 with one part F4938 and mix thoroughly.
2. As a sandable surface primer, apply three to five wet coats to achieve a 3.3 mil minimum to 8.0 mil maximum DFT.
3. Allow 10 to 15 minutes flash time between coats.

NOTE: A minimum of 1.4 mil DFT after sanding must be maintained to ensure proper adhesion and corrosion protection.

4. Allow a drying time of 60 minutes at 70°F (21°C) before topcoating.

   Or, if sanding before topcoating, allow a drying time of 5 to 8 hours, then DA sand with 320- to 360-grit sandpaper, followed with a finish DA sanding using 1500-grit or finer paper.

NOTE: After four days, F4936 must be sanded before additional primer or topcoat can be applied.

5. Clean all cracks and surfaces with dry compressed air.
6. Using a tack cloth, wipe all surfaces to be painted.

Delfleet Evolution® FDGH Single-Stage High Solids Polyurethane

NOTE: Refer to PPG Product Information Bulletin DFT-002 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Mixing

1. Stir Delfleet Evolution® FDGH Single-Stage polyurethane enamel thoroughly.
2. Mix three parts Delfleet Evolution® FDGH with one part F3260 hardener and six ounces F34XX reducer per ready-to-spray (RTS) gallons (44 mL per liter). An optional 10 percent of F33XX reducer may be added. The pot life is 4 to 5 hours at 70°F (21°C). See **Table 1**.

PPG Additives and Reducers		
Speed Rating	**F34XX Additives**	**F33XX Reducers**
Fast Dry	F3400	F3320
Medium Dry	F3405	F3330
Slow Dry	F3410	F3340
Extra Slow Dry	—	F3350

Table 1, PPG Additives and Reducers

3. Mix thoroughly and strain.

NOTE: The viscosity of the mixture is about 25 to 35 seconds in a no. 2 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

Spraying

1. For High Velocity, Low Pressure (HVLP) systems, the air pressure at the cap should be set at 10 psi (69 kPa) with a fluid tip of 1.3 to 1.5 mm. For conventional spray guns, set the air pressure to 45 to 60 psi (310 to 414 kPa) with a fluid tip of 1.3 to 1.5 mm. For pressure pots, set the fluid delivery at 8 to 12 ounces (236 to 354 mL) per minute with a fluid tip of 1.0 to 1.4 mm.
2. Apply one cross coat or two coats, or until hiding is achieved. Flash time between coats is 15 to 20 minutes at 70°F (21°C).
3. Air dry time to sand is three hours at 70°F (21°C). Force dry time to sand is 40 minutes at 140°F (60°C). For dry times when using additives, see **Table 2** for air dry times and **Table 3** for force dry times.

Delfleet Evolution® FBCH High Solids Polyurethane Basecoat

NOTE: Refer to PPG Product Information Bulletin DFT-001 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Air Dry Time to Sand - at 70°F (21°C) With F3260	
Using F3440	1 to 2 hours
Using F3441	2.5 to 3.5 hours
Using F3442	5 to 7 hours

Table 2, Air Dry Time to Sand - at 70°F (21°C) With F3260

Force Dry Time to Sand - at 140°F (60°C) With F3260	
Using F3440	30 minutes
Using F3441	30 to 45 minutes
Using F3442	1 hour

Table 3, Force Dry Time to Sand - at 140°F (60°C) With F3260

Mixing

1. Stir the Delfleet Evolution Basecoat FBCH polyurethane enamel thoroughly.

Topcoat Application

2. Mix three parts of FBCH basecoat color with one part F3260 hardener to one part of F344X basecoat dry additive. Potlife is dependent on the converter chosen. See **Table 4**.

Pot Life With F3260	
Using F3440	30 to 90 minutes
Using F3441	1.5 to 2 hours
Using F3442	6 to 8 hours

Table 4, Pot Life With F3260

3. Mix thoroughly and strain.
4. The viscosity of the mixture is 18 to 24 seconds in a no. 2 Zahn cup, depending on the color.

Spraying

1. For High Velocity, Low Pressure (HVLP) systems, the air pressure at the cap should be set at 10 psi (69 kPa) with a fluid tip of 1.3 to 1.5 mm. For conventional spray guns, set the air pressure to 45 to 60 psi (310 to 414 kPa) with a fluid tip of 1.3 to 1.5 mm. For pressure pots, set the fluid delivery at 8 to 12 ounces (236 to 354 mL) per minute with a fluid tip of 1.0 to 1.4 mm.
2. Apply one or two coats of FBCH basecoat color over the primed area until hiding is achieved. Allow 5 to 10 minutes between coats.
3. Allow 30 minutes flash time prior to applying clearcoat.
4. If clearcoat is not applied within 24 hours when using F3440, FBCH basecoat color must be sanded and recoated (48 hours with F3441 and 72 hours with F3442).

Delfleet Evolution® F3906 High Build Clearcoat

NOTE: Refer to PPG Product Information Bulletin DFT-065 for additional information.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Mixing

1. Mix three parts of Delfleet Evolution F3906 clearcoat with one part of F3240 or F3260 hardener to one-half part F33XX reducer to 2 ounces accelerator per RTS gallon (16 mL per liter). Pot life is 2.5 to 3.5 hours at 70°F (21°C) and 50 percent relative humidity. See **Table 5**.

F33XX Thinner Selection	
Speed Rating	**F33XX Reducers**
Fast	F3320
Medium	F3330
Slow	F3340
Extra Slow	F3350

Table 5, F33XX Thinner Selection

2. Mix thoroughly and strain.
3. The viscosity of the mixture is 32 seconds in a no. 2 Zahn cup.

Spraying

1. For HVLP systems, the air pressure at the cap should be set at 10 psi (69 kPa) with a fluid tip of 1.2 to 1.5 mm. For conventional spray guns, set the air pressure to 45 to 60 psi (310 to 414 kPa) with a fluid tip of 1.2 to 1.6 mm. For pressure pots, set the fluid delivery at 8 to 12 ounces (236 to 354 mL) per minute with a fluid tip of 1.0 to 1.4 mm.
2. Apply two coats. Flash time between coats is 5 to 10 minutes to reach 2.0 mils minimum dry film thickness.
3. Dry time is 6 to 8 hours if air dried. Force dry time is 30 minutes at 140°F (60°C).
4. Buffing may begin 16 hours to overnight cure if the unit is air dried, or immediately after cool off, if force dried.

NOTE: If polishing is required, use F3240. Polish within 24 hours.

Buffing

Refer to PPG Product Information Bulletin PD768 for polishing and compounding.

General Guidelines

These are instructions for making spot repairs or touch-ups with PPG Delfleet® Evolution urethane topcoat single stage or basecoat/clearcoat.

Buffing may correct minor imperfections; more serious repairs require surface preparation before a topcoating can be applied.

1. Preparation materials specified for one type of surface should not be used for any other type of surface.
2. Limit intermediate coatings, such as primers, to the brand and type specified by the paint manufacturer.
3. Do not use any products or additives that are not specifically recommended by the paint manufacturer in published literature.
4. Substrate and ambient temperature should be above 65°F (18°C) for optimum performance.

Buffing Minor Imperfections

1. Clean the area carefully with a mild detergent, then rinse.
2. Remove imperfections using ultra-fine or micro-fine sandpaper (1500- or 2000-grit) and water.
3. Rinse the area with clean water, then dry.
4. Buff the area, using a clean foam pad at low speed (about 1600 rpm). Using medium pressure, buff slowly in an overlapping pattern until the imperfection has been eliminated. Repeat as necessary.

   Use one of the following products:

   - Meguiar's No. 2 Fine-Cut Cleaner
   - 3M Finesse-it II 05928
5. Rinse the area with clean water, then dry.
6. Polish the area with a clean pad, such as a 3M Waffle Pad. Using medium pressure, work small areas using an even, overlapping pattern until the gloss is restored. As the polish dries and the gloss appears, ease the pressure on the polishing pad. Repeat as necessary.

   Use one of the following products:

   - Meguiar's No. 9 Swirl Remover
   - 3M Perfect-It 05996

Preparing for Topcoating

1. Wash the entire panel in mild detergent, containing no lanolin or additives. Before the solution dries, rinse with fresh water. Dry with a clean, lint-free cloth.
2. Cover areas around the repair area to prevent damage to surrounding objects from solvent overspray or drips.

⚠ WARNING

Solvents are flammable. Keep the container closed. Use only with adequate ventilation. Keep solvents away from heat, sparks, and open flame. Breathing the vapor can cause headache, nausea, impaired reaction time, and impaired coordination.

3. Clean the area to be repaired with PPG CFX435LV/CFX436/CFX437 Substrate Cleaner. Choose the product depending on local regulations and degree of contamination. Quickly wipe the surface with a clean, lint-free cloth before the substrate cleaner dries.

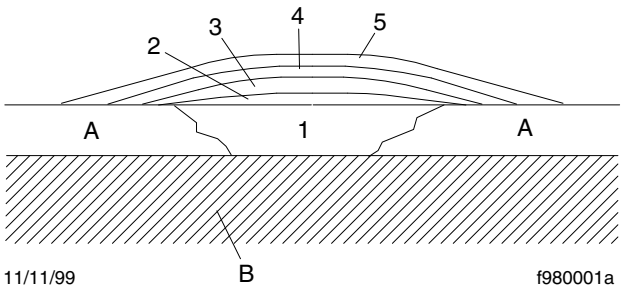
   Remove all traces of substrate contamination such as wax, polish, grease, diesel exhaust residue, and silicones. Do not allow substrate cleaners to air dry on the repair area.
4. Sand or grind all dents and scratches.
5. DA sand the area being repaired with 320- or 400-grit, or finer sandpaper, or a 3M Scotch-Brite® pad. Feather the edge.
6. Remove sanding dust using the method detailed in step 3 above.
7. Mask all areas not to be painted.
8. Clean all cracks and surfaces with dry compressed air.
9. Use a tack cloth to wipe all surfaces to be painted.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint

products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

10. Prime all bare metal and feathered areas with PPG primer. Use F3995 primer for fiberglass, steel, and aluminum. See **Fig. 1**.



NOTE: The number of paint layers depends on the specific use.

A. Existing Paint
B. Panel Material (Substrate)

1. Primer
2. First Color Topcoat
3. Second Color Topcoat
4. Third Color Topcoat
5. Clearcoat

Fig. 1, Spot Repair Cross Section, Scale Exaggerated for Clarity

10.1 Stir or shake primer thoroughly.

10.2 Mix three parts F3995 epoxy primer with one part F3996 activator and one-half part F–series reducer.

10.3 Set the air pressure at the spray gun to 55 psi (379 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (350 to 470 ml) per minute.

10.4 Spray one wet coat to yield a minimum dry film thickness of 0.7 mils (18m).

10.5 Clean equipment immediately after use with PPG Gun Cleaning Solvent.

10.6 Air dry 1 hour or force dry 20 minutes at 120 to 130°F (49 to 54°C).

11. If the original paint was a basecoat/clearcoat, hand rub the area around the spot repair with a medium grade compound to ensure a seamless finish. Use Scotch–Brite® 7448 or 2000-grit wet or dry sandpaper.

12. Remove the sanding dust. Use the same cleaner and wipe on, wipe off method used earlier to clean the area.

13. Wipe the repair area with a tack cloth.

Topcoating a Spot Repair

Delfleet® Evolution Single Stage Topcoating

1. Mix the Delfleet® Evolution Single Stage (FDGH) polyurethane enamel.

1.1 Stir the Delfleet® Evolution Single Stage (FDGH) polyurethane enamel thoroughly.

1.2 Mix three parts Delfleet® Evolution color (FDGH) with one part F3260 activator to 6 ounces additive F34XX per ready-to-spray (RTS) gallon (44 ml per liter), to an optional 10 percent F33XX reducer. The pot life is 4 to 5 hours at 70°F (21°C). See **Table 1**.

PPG Additives and Reducers		
Speed Rating	**F34XX Additives**	**F33XX Reducers**
Fast Dry	F3400	F3320
Medium Dry	F3405	F3330
Slow Dry	F3410	F3340
Extra Slow Dry	—	F3350

Table 1, PPG Additives and Reducers

1.3 Mix thoroughly and strain.

NOTE: the viscosity of the mixture should be at 25 to 35 seconds in a no. 2 Zahn cup. Check the designated shelf life if using a product from a previously opened container.

2. For High Velocity, Low Pressure (HVLP) systems, the air pressure at the cap should be set at 10 psi (69 kPa) with a fluid tip of 1.3 to 1.5 mm. For conventional spray guns, set the air pressure to 45 to 60 psi (310 to 414 kPa) with a fluid tip of 1.3 to 1.5 mm. For pressure pots, set the fluid delivery at 8 to 12 ounces (236 to 354 mL) per minute with a fluid tip of 1.0 to 1.4 mm.

3. Apply the solid or metallic color topcoat.

3.1 Spray one medium-wet coat over the primed area.

3.2 Flash 15 to 20 minutes.

3.3 Apply a second medium-wet coat. Extend the spray area slightly to taper the edge and avoid a visible ring.

4. FDGH dry film thickness must be a minimum of 1.5 mils.
5. To air dry, allow overnight cure at 70°F (21°C) minimum.
6. To force dry, flash 5 to 10 minutes, then cure 40 minutes at 140°F (60°C) metal temperature.
7. If taping, allow 3 hours at 68°F (20°C). To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied.
8. If decals are to be applied, let the paint cure at 70°F (21°C) for 3 days prior to putting them on.
9. Clean the equipment immediately after use with PPG Gun Cleaning Solvent.

Delfleet Evolution Basecoat/ Clearcoat Topcoating

1. **Option 1:** Mix the Delfleet Evolution Basecoat (FBCH) polyurethane enamel.

1.1 Stir/shake the Delfleet Evolution Basecoat (FBCH) thoroughly.

1.2 Mix three parts FBCH basecoat color with one part F3260 hardener to one part F3440 basecoat dry additive. Pot life is 30 to 90 minutes at 70°F (21°C) and 50 percent relative humidity.

1.3 Mix thoroughly and strain.

1.4 The viscosity of the mixture is 18 to 24 seconds in a no. 2 Zahn cup, depending on the color.

2. **Option 2:** Mix the Delfleet Evolution Basecoat-Fast (FBCS) polyurethane enamel.

2.1 Stir or shake the Delfleet Evolution Basecoat-Fast (FBCS) color thoroughly.

2.2 Mix three parts FBCS basecoat color with one part F3260. Ten percent F33XX Reducer is optional for this application. Pot life is 1 hour at 70°F (21°C) and 50 percent relative humidity.

2.3 Mix thoroughly and strain.

2.4 The viscosity of the mixture is 20 to 30 seconds in a no. 2 Zahn cup, depending on the color.

3. For High Velocity, Low Pressure (HVLP) systems, the air pressure at the cap should be set at 10 psi (69 kPa) with a fluid tip of 1.3 to 1.5 mm. For conventional spray guns, set the air pressure to 45 to 60 psi (310 to 414 kPa) with a fluid tip of 1.3 to 1.5 mm. For pressure pots, set the fluid delivery at 8 to 12 ounces (236 to 354 mL) per minute with a fluid tip of 1.0 to 1.4 mm.
4. Apply the basecoat (FBCH or FBCS): Apply one or two coats of FBCH or FBCS basecoat color over the primed area until full hiding is achieved. Allow 5 to 10 minutes between coats.
5. If blending the repair area into the OEM finish, see instructions at the end of the topcoat instructions.
6. Allow 30 minutes flash time prior to applying clearcoat.
7. Clearcoats must be applied within the time shown in **Table 2** or the basecoat color must be sanded and recoated first.

Clearcoat Application Time	
Basecoat	**Time (hours)**
FBCS	8
FBCH with F3440	24

Table 2, Clearcoat Application Time

8. Mix the Delfleet Evolution High Build Clearcoat.

8.1 Mix three parts Delfleet Evolution Clearcoat F3905 with one part F3240 activator to one-half part reducer (F33XX) to 2 ounces accelerator per RTS gallon (16 ml per liter). Pot life is 1 hour to 1.5 hours at 70°F (21°C) and 50 percent relative humidity. See **Table 3**.

F33XX Thinner Selection	
Speed Rating	**F33XX Reducers**
Fast	F3320

F33XX Thinner Selection	
Speed Rating	**F33XX Reducers**
Medium	F3330
Slow	F3340
Extra Slow	F3350

Table 3, F33XX Thinner Selection

8.2 Mix thoroughly and strain.

8.3 The viscosity of the mixture is 32 seconds in a no. 2 Zahn cup.

9. Set the clearcoat air pressure at 10 psi (69 kPa) at the cap for HVLP guns with a fluid tip of 1.2 to 1.5 mm. For conventional spray guns, set the air pressure at 45 to 60 psi (310 to 414 kPa) with a fluid tip of 1.2 to 1.6 mm. For pressure pots, set the fluid delivery at 8 to 12 ounces (236 to 354 mL) per minute using a 1.0 to 1.4 mm fluid tip.
10. Apply 2 coats of F3905 clearcoat with a 5 to 10 minute flash time between coats to reach 2.0 mils minimum dry film thickness.

NOTE: For best results, apply the clearcoat over the entire panel.

11. Follow the steps below to blend the clearcoat:

11.1 Apply one coat of the activated Delfleet Evolution F3905 Clearcoat.

11.2 Mix one part CFX240 to one part ready-to-spray F3905 clearcoat and apply this mixture to the blend edge. Additional CFX240 may be added if a second coat to extend the blend edge is necessary or desired.

11.3 Moving the gun from the outside in, mist a light coat onto the edge of the repair to melt in the dry overspray.

11.4 To air dry, allow overnight cure at 65°F (18°C).

11.5 If taping, allow 6 hours at 68°F (20°C). To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied.

11.6 To force dry, flash off up to 5 minutes, then dry for 40 minutes at 150°F (66°C).

11.7 If sanding or polishing are desired, allow the finish to sit 16 hours if air dried, and 4 to 8 hours after bake cool-down before polishing.

11.8 Clean the equipment immediately after use with PPG Gun Cleaning Solvent.

Solid Color Blends in FBCH/FBCS/FDGH

1. Prepare the repair area as outlined above.
2. Spray color to full hiding in two or three coats, allowing specified flash time between coats.
3. Once hiding is achieved, pour out the remaining RTS color from the gun.
4. Add several ounces of CFX240 to the gun that still contains residual RTS color and lightly blend the outside edge.

NOTE: It is very important to add CFX240 to the gun that still contains some residual RTS color. This keeps the outside edge from breaking or de-wetting.

5. For FBCH or FBCS repair jobs, apply clearcoat following a 30 minute flash time, or a similar force-dry.

Blending Metallic Colors in FDGH and Blending Metallic/Pearl Colors in FBCH/FBCS

NOTE: Spot repairs in high-solid colors often show a dark ring or halo around their edges. Spraying a wet bed helps prevent the ring or halo when repairing high-solid colors.

On very light colors, it may be necessary to spray the wet bed completely to the edge of the panel but not over the repair area, to prevent the halo effect.

1. Follow the steps outlined above to prepare the area for applying the wet bed.
2. Prior to applying the wet bed, the area that is to receive the wet bed should be scuffed with a gray scuff pad and cleaned with an appropriate substrate cleaner.
3. Mix F3905. Reduce the RTS F3905 1:1 by volume with CFX240 and spray a wet bed on the outside of the spot.

3.1 Spray one medium-wet coat to establish the wet bed. Keep the wet bed 4 to 6 inches (10 to 15 cm) outside the repair spot.

3.2 Apply the color system mixed as detailed in previous headings, but do not add CFX240 in this step. Spray from the repair spot into the wet bed, while the wet bed is still wet.

NOTE: Do not apply CFX240 to the edge of the color in this application. Doing so causes a halo effect.

3.3 For basecoat repairs, allow the color to become tack-free before applying the final overall color. The overall clearcoat (F3905) is not reduced with CFX240. CFX240 can be used to melt in the edges of the clearcoat, once this step is complete.

Specifications

PPG Surface Preparation Materials				
Step	**Aluminum**	**Steel**	**Plastic**	**Fiberglass**
Wash and dry	Mild detergent, such as dish washing detergent			
Wipe with cleaner	CFX436			
Sand and feather	220 grit, followed by 320 grit, then 400 grit			
Remove sanding dust	CFX436			
Treat bare metal	DX533	DX579	—	—
Apply conversion to bare metal	DX501 or DX503	DX520	—	—
Apply sealer primer	Mix: 3 parts F3993 primer with 1 part F3996 hardener and one-half part F33XX reducer			

Table 1, PPG Surface Preparation Materials

PPG Topcoating Materials	
Step	**Topcoating Materials**
Mix enamel	Mix: 3 parts Delfleet Evolution color (FDGH) with 1 part F3260 hardener; an optional 10 percent of F33XX reducer may be added
Add accelerator	6 oz additive F34XX per RTS gallons (44 ml per liter); accelerator is required
Pressure at gun	50–60 psi (345–414 kPa)
Equipment cleanup	PG MS100

Table 2, PPG Topcoating Materials

PPG Repair Materials	
Step	**Spot Repair Materials**
Cleaning	CFX436
Sanding	320 grit or finer
Sealer primer	Mix: 3 parts F3993 primer with 1 part F3996 hardener and one-half part F33XX reducer
Topcoat	Mix: 3 parts Delfleet Evolution color (FDGH) with 1 part F3260 hardener; an optional 10 percent of F33XX reducer may be added
Topcoat viscosity	10–20 sec (#3 Zahn cup)
Add accelerator	6 oz additive F34XX per RTS gallons (44 ml per liter); accelerator is required
Blending clear	CFX840
Equipment cleanup	PG MS100

Table 3, PPG Repair Materials

Contents

General Information

Sherwin-Williams® single-stage Genesis (GC), Genesis M, or two-stage (base coat and clear coat) Genesis G4 high-solids polyurethane enamel, is used for refinishing the vehicle cab.

Black standard urethane or Genesis GC or G2 is used on the vehicle chassis. The chassis includes the frame, hubs, running gear, and any components attached to the frame. Aluminum fuel tanks are not painted.

To meet the air quality regulations imposed by the EPA and local jurisdictions, these products contain lower levels of volatile organic compounds (VOCs) than earlier types, and are formulated free of lead and chrome.

The procedures in this section are for use with Sherwin-Williams products. Unless otherwise noted, all products are manufactured by Sherwin-Williams. Obtain approval from a Freightliner Regional Office for use of topcoats produced by other manufacturers.

Color-Matching

To determine the correct paint number for color-matching any original finish on a vehicle, refer to the paint specification on the vehicle specification decal. Refer to the driver's manual for the location of this decal. Cross reference that number on Formula Express 2.0 on the Sherwin-Williams Automotive website (**www.sherwin-automotive.com)**.

General Guidelines

This subject provides instructions for preparing large panels or the entire cab for topcoating with Sherwin-Williams® products. For spot repairs or touch-ups, see **Subject 120**.

Before topcoating, the surface must be thoroughly cleaned and sanded. Any bare areas must also be conditioned and primed.

1. Preparation materials specified for one type of surface should not be used for any other type of surface.
2. Limit intermediate coatings, such as primers, to the brand and type specified by the finish-coat manufacturer.

NOTICE

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

Preparation for Prime Coat

Use the cleaners and conditioners specified in each step to prepare the surface for priming. See **Specifications, 400** for a summary of the products used in this procedure.

⚠ WARNING

Do not use solvent-based cleaners on large areas of plastic or fiberglass, such as the hood or air fairing. Wiping down these large areas may cause a buildup of static electricity. The resulting spark could cause a flash fire, which could result in personal injury or property damage.

Cab and Hood Preparation

1. Wash the entire vehicle with a mild detergent, and dry.
2. Wipe all surfaces to be painted with a clean cloth soaked with solvent or cleaner. Remove all traces of wax, polish, grease, and silicones.
   - Metal—use Sherwin-Williams R7K156 Cleaner.
   - Plastic—use Sherwin-Williams SC159 Cleaner.
   - Fiberglass—use Sherwin-Williams SC159 Cleaner.

   2.1 Work on small areas at a time, wetting the surface liberally.

   2.2 Quickly wipe the surface with a clean cloth before the solvent or cleaner has a chance to dry. Change cloths frequently.
3. Feather the edge of all repaired areas, chipped surfaces, and scratches.

   3.1 Cut down the edges of broken spots with 220 sandpaper.

   3.2 Feather the edges by hand, using a sanding block with 400 sandpaper.
4. Sand the entire area to be painted. Using a sanding block and 400 sandpaper, remove the gloss to improve adhesion of the primer.
5. Using a clean cloth soaked with cleaner, remove any sanding dust.
   - On metal surfaces, use Sherwin-Williams R7K156 Cleaner, Sherwin-Williams R7K158, or Sherwin-Williams W4K157. Do not use these cleaners on plastic or fiberglass substrates.
   - On plastic or fiberglass substrates, use Sherwin-Williams SC159 Cleaner or Sherwin-Williams SC155.
6. Treat bare metal and rusted areas.
   - Aluminum—use W4K263 DUAL-ETCH.
   - Steel—use W4K288 MET-L-ETCH.

   6.1 Mix one part of the cleaner with two parts of water in a plastic bucket.

   6.2 Apply the cleaner with a cloth or sponge. If corrosion is present, work the surface with a stiff plastic brush or 3M Scotch-Brite® pad. Do not use any pads containing iron.

   6.3 While the metal is still wet, wipe thoroughly with a clean, dry cloth. Allow the surface to dry before applying Sherwin-Williams E2A960, E2A819, or E2A933 primer.
7. Mask all areas that are not to be painted.

Prime Coat Application

Air Fairing Kit Preparation

Before installing a new air fairing, prepare the surface for topcoating.

1. Wash the air fairing with a mild detergent. Dry with a clean, absorbent, lint-free cloth or paper towels.
2. Using a clean cloth soaked with Sherwin-Williams SC159 Cleaner, wipe the entire surface to remove any trace of grease or oil.
3. Scuff-sand the air fairing with 320 grit sandpaper.
4. Wipe the air fairing with a clean cloth soaked in Sherwin-Williams SC159 Cleaner. Allow 10 to 15 minutes for the air fairing to dry.
5. Mask all areas that are not to be painted.

Prime Coat

Prime all bare and feathered areas before topcoating. The specified primers can be used on any surface.

1. Clean all cracks and surfaces with dry compressed air.
2. Using a tack cloth, wipe all surfaces to be painted.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying primer, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

3. Prime all bare metal and feathered areas with Genesis E2A960 epoxy primer.
   - 3.1 Stir Genesis E2A960 primer thoroughly.
   - 3.2 Mix four parts Genesis E2A960 primer with one part Sherwin-Williams V6V965 activator.
   - 3.3 Reduce five parts of this mixture with one part Sherwin-Williams R7K7210 reducer. Stir thoroughly.
   - 3.4 Spray one full wet coat to give a dry film thickness of 1.2 to 2.0 mil (0.030 to 0.050 mm).
   - 3.5 Clean equipment immediately after use with Sherwin-Williams R7K7210 reducer.
   - 3.6 Air dry 1 hour or force dry 20 minutes.
4. Use a dual-action powered sander or hand sand with 240 grit or finer sandpaper. Feather the edge into the surrounding area.
5. Dry the surface. Using a clean cloth soaked with cleaner, remove any sanding dust.
   - On metal surfaces, use SHER-WILL-CLEAN® R7K156 or ULTRA CLEAN™ R7K158. Do not use these cleaners on plastic or fiberglass substrates.
   - On plastic or fiberglass substrates, use Sherwin-Williams SC155 Aqua-Prep or Sherwin-Williams SC159 Plastic Surface Cleaner.

General Guidelines

This subject provides instructions for applying a topcoat of Sherwin-Williams® Genesis enamel to full panels, or the entire cab. For spot repairs or touch-ups, see **Subject 120**.

NOTICE

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

Do not mix additives with the finish coats unless they are specified by the finish-coat manufacturer. See **Specifications, 400** for a summary of the products used in this procedure.

Do not apply if the paint temperature is less than 70°F (21°C). Use warm water or paint heaters to heat the paint to an optimum temperature of 85 to 95°F (29 to 35°C). The material, substrate, or ambient temperature should be above 50°F (10°C) and below 110°F (43°C).

Before applying any topcoat:

1. Prepare the surface for topcoating. See **Subject 100** for instructions.
2. Clean all cracks and surfaces with dry compressed air.
3. Using a tack cloth, wipe all surfaces to be painted.

Genesis GC Topcoating

Genesis GC is a single-stage, low VOC, high-solids acrylic polyurethane enamel. It provides a durable, high-gloss surface with good chemical resistance. It requires the addition of a hardener.

Mixing

1. Stir the Genesis GC enamel thoroughly.
2. Mix three parts Genesis GC enamel with one part of GH1091 hardener. Up to 0.5 part reduction of GR1070 or GR1073 may be used if desired for application.

   NOTE: The pot life of the mixture is about 2 hours at 70°F (21°C), unless an accelerator is added.
3. If faster curing time is desired, add GA1097 accelerator. Add up to 3 ounces (89 mL) to 1 gallon (3.8 L) of mixed material.
4. Mix thoroughly and strain.

NOTE: The viscosity of the mixture is about 18 to 24 seconds in a no. 2 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

Application

1. Set the air pressure at the spray gun to 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
2. Apply the topcoating.
   - 2.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 2.2 Using a cross-coat technique, spray one medium-wet coat in a north-to-south direction.
   - 2.3 Allow 5 to 10 minutes drying time between each application. Do not sand.
   - 2.4 Apply a second medium-wet coat in an east-to-west direction.
   - 2.5 A third medium-wet coat may be needed for good coverage of some colors.
3. To air dry, allow 2 to 3 hours with accelerator GA1097, and 6 to 8 hours without the accelerator.

   To force dry, wait 15 minutes following the application of the final coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).
4. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.
5. Clean the equipment immediately after use with Sherwin-Williams R7K721 reducer.

Topcoat Application

Recoating or Decorating

Two-toning, striping, or lettering may be applied in 2 to 4 hours if GA1097 accelerator is used. Wait 10 to 12 hours if no accelerator is used.

Decals may be applied in 4 to 16 hours, if GA1097 accelerator is used. Wait 24 hours if no accelerator is used.

For topcoats cured over 72 hours, scuff-sand with 400-grit sandpaper and wipe with a clean tack cloth before recoating, striping, lettering, or applying decals.

Genesis G4 Topcoating

Genesis G4 is a two-stage, high-solids urethane coating. It provides good cover with one cross-coat of the base color followed by one coat of Sherwin-Williams CC950 clear coat. Both the base color and clear coat require the addition of a hardener.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Mixing

1. Stir the Genesis G4 base color thoroughly.
2. Mix four parts Genesis G4 base color with one part Sherwin-Williams UH904 and one part GR1088. No further reduction is necessary for application.

NOTE: The pot life of the mixture is about 2 to 4 hours at 70°F (21°C), unless an accelerator is added.

3. Add 3 ounces (89 mL) of GA1098 accelerator to 1 gallon (3.8 L) of mixed material.
4. Mix thoroughly and strain.

NOTE: The viscosity of the mixture is about 18 to 24 seconds in a no. 2 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

Application

1. Set the air pressure at the spray gun to 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
2. Apply the topcoating.
   - 2.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 2.2 Apply one cross-coat of the Genesis G4 base color.
   - 2.3 Flash 10 minutes minimum. Do not sand.
   - 2.4 Purge the equipment with Sherwin-Williams R7K7210 reducer.
3. Apply clearcoat.
   - 3.1 Mix three parts Sherwin-Williams CC950 clear, with one part Sherwin-Williams UH904 hardener and 10% US solvent (1-6).
   - 3.2 Apply one coat of the Sherwin-Williams CC950 clear.
4. To air dry, allow 2 to 3 hours if Sherwin-Williams GA1097 accelerator is used, and 6 to 8 hours if no accelerator is used.

   To force dry, wait 15 minutes following the application of the clear coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).
5. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.
6. Clean the equipment immediately after use, with Sherwin-Williams R7K7210 reducer.

Recoating or Decorating

Two-toning, striping, and lettering may be applied in 4 to 6 hours, if Sherwin-Williams GA1097 accelerator is used. Wait 10 to 12 hours if no accelerator is used.

Decals may be applied in 4 to 8 hours, if GA1097 accelerator is used. Wait 24 hours if no accelerator is used.

General Guidelines

This subject provides instructions for making spot repairs or touch-ups with Sherwin-Williams® coatings. Buffing may correct minor imperfections; more serious repairs require surface preparation before a topcoating can be applied. For striping, lettering, or decal application after the repair is complete, see **Subject 110**.

1. Specific types of surfaces to be painted, require specific types of preparation materials. Do not use preparation materials specified for a given type of surface on another surface, for which it is not specified.

   See **Specifications, 400** for a summary of the materials used in this section.
2. Use only the intermediate coatings, such as primers, of the brand and type specified by the finish-coat manufacturer.
3. Do not mix additives with the finish coats unless they are specified by the finish-coat manufacturer.
4. Do not apply if the paint temperature is less than 60°F (16°C). The material, substrate or ambient temperature should be above 50°F (10°C) and below 110°F (43°C).

NOTICE

Only experienced, qualified persons using proper equipment should attempt repainting or touch-up painting. Incorrect application of chemicals or paint could damage the surface or impair the finish.

Buffing Minor Imperfections

1. Clean the area carefully with a mild detergent, then rinse.
2. Remove imperfections using ultra-fine or micro-fine sandpaper (1500- or 2000-grit) and water. Rinse the area with clean water, then dry.
3. Buff the area.
   - 3.1 Use a clean foam pad at low speed (about 1600 rpm) with one of the following products:
     - Meguiar's No. 2 Fine-Cut Cleaner
     - 3M Finesse-it II 05928
   - 3.2 Using medium pressure, buff slowly in an overlapping pattern until the imperfection has been eliminated. Repeat as necessary.
   - 3.3 Rinse the area with clean water, then dry.
4. Polish the area.
   - 4.1 Apply one of the following products with a clean pad (3M Waffle Pad):
     - Meguiar's No. 9 Swirl Remover
     - 3M Perfect-it 05996
   - 4.2 Using medium pressure, work small areas using an even, overlapping pattern until the gloss is restored. As the polish dries and the gloss appears, ease the pressure on the polishing pad. Repeat as necessary.

Preparing for Topcoating

1. Wash the entire panel with mild detergent, containing no lanolin or additives. Before the solution dries, rinse with fresh water. Dry with a clean, lint-free cloth.
2. Cover areas around the repair area to prevent damage to surrounding objects from solvent overspray or drips.

⚠ WARNING

Solvents are flammable. Keep the container closed. Use only with adequate ventilation. Keep solvents away from heat, sparks, and open flame. Breathing the vapor can cause headache, nausea, impaired reaction time, and impaired coordination.

3. Clean the area to be repaired with Sherwin-Williams R7K7210 solvent and quickly wipe the surface with a clean, lint-free cloth before the solvent dries. Remove all traces of wax, polish, grease, and silicones.
4. Sand or grind all dents and scratches.
5. Wet sand the area being repaired with 320-grit or finer sandpaper, or a 3M Scotch-Brite® or similar non-iron abrasive pad. Feather the edge.

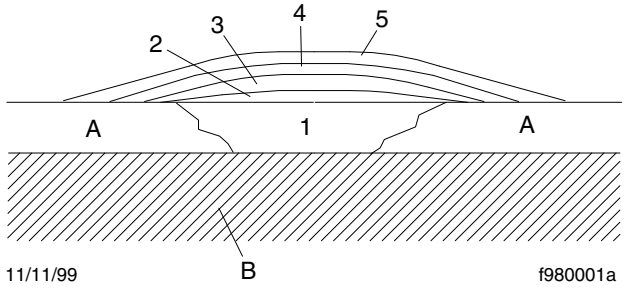
Spot Repair

6. Remove the sanding dust. Use the same solvent and wipe-on, wipe-off method used earlier to clean the area.
7. Mask all areas that will not be painted.
8. Clean all cracks and surfaces with dry compressed air.
9. Using a tack cloth, wipe all surfaces to be painted.

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

10. Prime all bare metal and feathered areas with Sherwin-Williams primer. See **Fig. 1**.
    - Steel and aluminum—use Genesis E2A960 epoxy primer.
    - Fiberglass—use Genesis E2A960 epoxy primer.



NOTE: Scale exaggerated for clarity. The number of layers depends on the specific application.

A. Existing Paint
B. Panel Material (substrate)

1. Primer
2. First Color Topcoat
3. Second Color Topcoat
4. Third Color Topcoat
5. Clear Coat

Fig. 1, Spot Repair Cross-Section

10.1 Stir Genesis E2A960 primer thoroughly.

10.2 Mix four parts Genesis E2A960 primer with one part Sherwin-Williams V6V965 activator. Stir thoroughly.

10.3 Reduce five parts of this mixture with one part Sherwin-Williams R7K7210 reducer. Stir thoroughly.

10.4 Set the air pressure at the spray gun to 45 psi (310 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.

10.5 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.

10.6 Spray one wet coat to give a dry film thickness of 1.2 to 2.0 mil (0.030 to 0.050 mm).

10.7 Clean the equipment immediately after use with Sherwin-Williams R7K7210 reducer.

10.8 Air dry 2 to 4 hours or force dry 20 minutes at 140 to 180°F (60 to 82°C).

11. Wet sand the primer with 400-grit or finer sandpaper. Feather the edge into the surrounding area.
12. Remove the sanding dust. Use the same solvent and wipe-on, wipe-off method used earlier to clean the area.
13. Wipe the repair area with a tack cloth.

Topcoating a Spot Repair

⚠ WARNING

Wear a positive-pressure, supplied-air, vapor and particulate respirator, approved by NIOSH or MSHA (TC-19C) when mixing or spraying paint products, and until the work area has been exhausted of all vapor and spray mist. Breathing paint fumes can cause serious personal injury.

Genesis G4 Topcoating

1. Stir the Genesis G4 base color thoroughly.
2. Mix four parts Genesis G4 base color with one part Sherwin-Williams UH904 and one part Sherwin-Williams GR1088.

NOTE: The pot life of the mixture is about 2 hours at 70°F (21°C), unless an accelerator is added.

3. If faster curing time is desired, add Sherwin-Williams GA1098 accelerator. Add 3 ounces (89 mL) to 1 gallon (3.8 L) of mixed material.
4. Mix thoroughly and strain.

Note: The viscosity of the mixture is about 18 to 24 seconds in a no. 2 Zahn cup, depending on the color. Adding reducer could affect the color match on some metallics.

5. Set the air pressure at the spray gun at 60 to 65 psi (414 to 448 kPa). For pressure feed systems, set the fluid delivery at 12 to 16 ounces (354 to 473 mL) per minute.
6. Apply the topcoating.
   - 6.1 Hold the spray gun about 10 to 12 inches (25 to 30 cm) from the surface.
   - 6.2 Apply one cross-coat of the Genesis G4 base color over the primed area.
   - 6.3 Flash 10 minutes minimum. Do not sand.
   - 6.4 Purge the equipment with Sherwin-Williams R7K7210 reducer.
   - 6.5 Mix three parts Sherwin-Williams CC950 clear, with one part UH904 hardener and 10% US solvent (1-6).

   NOTE: For best results, apply the clear coat over the entire panel. If a blend of the repair area is attempted, apply the clear coat only over the repair area, overspraying the edge slightly.

   - 6.6 Apply one coat of the activated Sherwin-Williams CC950 clear.
7. To air dry, allow 2 to 3 hours if Sherwin-Williams GA1097 accelerator is used, and 6 to 8 hours if no accelerator is used.

   To force dry, wait 15 minutes following the application of the final coat, then dry for 30 minutes at 140 to 180°F (60 to 82°C).
8. To prevent tape marking, remove all masking tape and paper immediately after the final coat is applied. Avoid contacting the freshly painted surface with masking paper.
9. Clean the equipment immediately after use, with Sherwin-Williams R7K7210 reducer.

Specifications

Sherwin-Williams Surface Preparation Materials				
Step	**Aluminum**	**Steel**	**Plastic**	**Fiberglass**
Wash and dry	Mild detergent, such as dish washing detergent			
Wipe with cleaner	SHER-WILL CLEAN® R7K156 or ULTRA CLEAN™ R7K158		Sherwin-Williams SC155 Aqua-Prep or Sherwin-Williams SC159 Plastic Surface Cleaner	
Sand and feather	220 grit, then 400 grit			320 grit
Remove sanding dust	SHER-WILL CLEAN R7K156 or ULTRA CLEAN R7K158		Sherwin-Williams SC155 Aqua-Prep or Sherwin-Williams SC159 Plastic Surface Cleaner	
Treat bare metal	W4K263 DUAL-ETCH	W4K288 MET-L-ETCH	—	—
Apply sealer primer	Mix: 3 parts E2A960 primer with 1 part V6V921 hardener; reduce 4 parts of mixture with 1 part R7K7210 reducer			

Table 1, Sherwin-Williams Surface Preparation Materials

Sherwin-Williams Topcoating Materials	
Step	**Topcoating Materials**
Mix enamel	Mix: 3 parts Genesis GC with 1 part GH1091 hardener
Add accelerator	GA1097 accelerator (up to 3 oz/gal of activated enamel)
Pressure at gun	60 psi (414 kPa)
Equipment cleanup	R7K7210 reducer

Table 2, Sherwin-Williams Topcoating Materials

Sherwin-Williams Repair Materials	
Step	**Spot Repair Materials**
Cleaning	R7K7210 reducer
Sanding	320 grit or finer
Sealer primer	Mix: 3 parts E2A960 primer with 1 part V6V921; reduce 4 parts of mixture with 1 part R7K7219 reducer
Adhesion promoter	UPO7228
Topcoat	Mix: 4 parts Genesis G4 with 1 part UH904 and 1 part GR1088
Topcoat viscosity	18–24 sec (#2 Zahn cup)
Accelerator	GA1098 accelerator
Equipment cleanup	R7K7210 reducer

Table 3, Sherwin-Williams Repair Materials

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