Title:	**Service Bulletin – Proper Repair of Frame Rail Corrosion**		
Number:	**SB_624**	**Release Date:**	**12/11/2023**
Revision Number:	**1**	**Revision Date:**	**Not Applicable**
Chassis Type:	**All Custom Chassis Frame Rails with Galvanized or E-Coat Corrosion Prevention**		
Component Description:	**Frame Rail**		

Subject:

Proper Repair of Frame Rail Corrosion

Purpose/Background:

To consolidate the ASY Galvanized and E-Coat Frame Rail Repair Procedures into a combined communication to provide proper instructions for repairing frame rails that have corroded due to wear/chipping over time, road salt/brine, humidity, and improper cleaning after use.

Description/Procedure:

Galvanized Repair Procedure (PSD-0259)

Paints containing zinc dust with a concentration of 92% or above dried film (ZRC Galvilite recommended and used in procedure).

Materials

- ZRC Galvilite
- Sikkens M600 Solvent Degreaser

ZRC Galvilite Benefits

- 95% zinc in the dry film using only Type III “ultra-pure” ASTM-D-520 zinc (lead & cadmium free)
- Recognized under the Component Program of UL as equivalent to hot dip galvanizing
- Meets and exceeds Fed. Spec. DOD-P-21035A, MIL-P-26915A and ASTM Des. A-780
- Passes 3,000 hours salt spray testing without failure (ASTM Des. B117)
- Passes 9-year subtropical testing
- Low VOC approved in all 50 states
- ISO 9001 registration assures the highest quality consistently

Mixing

ZRC Galvilite must be thoroughly stirred until pure zinc content is completely dispersed. Initial mixing can be done with a paint shaker.

Procedure

1. Remove loose galvanized coating.
    a. If there is any pitting involved, needle scaling may be required.
    b. Sand repair areas to a featheredge finish.
2. Remove grease, oil, and/or light oxides with Sikkens M600 solvent degreaser.
3. Apply ZRC Galvilite with a brush without thinning, to achieve a thickness of 2.0 mils. (One medium to heavy coat will achieve the proper film build).
4. Replace the cover on the can to avoid the product from hardening.

5. Allow coating to dry until dry to touch, in 20-30 minutes. Times may vary depending on thickness applied, substrate temperature, and ambient temperature.

E-Coat Repair Procedure (PSD-0240)

Materials

- Wax and grease removing solvent
- Bonderite Auto Prep Wipe
- Sikkens LV260 Primer Epoxy
- Sikkens LV260 Hardener
- Sikkens LV262 Multi-Substrate Primer Epoxy
- Sikkens LV262 Epoxy Hardener G2
- Sikkens LV650 Topcoat Low Gloss Black (Pierce #99)

Procedure

1. If there is any pitting involved, needle scaling may be required.
2. Solvent wipe surface to be coated with a wax and degreasing solvent. Reference PSD-0084 (*See Appendix A*).
3. Wipe bare metal areas to be coated with a Bonderite Auto Prep Wipe.
4. Sikkens LV260 Primer Epoxy or LV262 Multi-Substrate Primer Epoxy must be used to coat the bare metal areas.
    a. Sikkens LV260 Primer Epoxy uses 3 parts to 1-part LV262 Epoxy Hardener
    b. Sikkens LV262 Multi-Substrate Primer Epoxy uses 3 parts LV262 Multi-Substrate Primer Epoxy to 1-part LV262 Epoxy Hardener G2
5. Mix appropriate amount of epoxy primer for the size of the repair.
6. For all non-critical aesthetic areas, the epoxy primer may be applied with a paint brush.
7. To apply the epoxy primers with spray application equipment, reference PSD-0205 (*See Appendix B*) for LV260 Primer Epoxy or PSD-0286 (*See Appendix C*) for LV262 Multi-Substrate Primer Epoxy.
8. Apply 1-2 coats of epoxy primer to achieve full coverage.
9. Allow epoxy primer to flash off until it is dry to the touch.
10. The area that the epoxy primer was applied to, will need to be coated with Sikkens LV650 Topcoat Low Gloss Black (Pierce #99).
11. Mix appropriate amount of LV650 Topcoat Low Gloss Black for the size of the repair.
    a. Sikkens LV650 Topcoat Low Gloss Black uses 6.5 parts LV650 Topcoat Low Gloss Black to 1-part LV650 Hardener
12. To apply the LV650 Topcoat Low Gloss Black with spray application equipment, reference PSD-0217 (*See Appendix D*).
13. Allow LV650 Low Gloss Black to dry for 3 hours if ambient temperature is 70°F if assembly of the part is required. Adding heat to the area will decrease the cure time.

Appendix A - Solvent Wipe Procedure (PSD-0084)

Purpose

Solvent cleaning procedure for the removal of waxes, oils, silicones, and other organic contaminates prior to seal priming and top coating.

Materials

- Wax and grease removing solvent
- Disposable rags
- Rubber gloves
- Breathing respirator
- Safety glasses

Safety

- Follow all precautions described in the Material Safety Data Sheets for the solvent product.
- Keep the solvent and rags away from heat, sparks and open flames.
- Use with adequate ventilation. Do not breathe vapors.
- Wear a respirator if using in an area that is not well ventilated.
- Avoid contact with eyes, skin and clothing.
- Wear rubber gloves during the entire solvent cleaning and rag disposal activities.
- Wash skin thoroughly after handling.

Cleaning Procedures

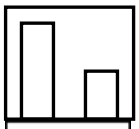
- Wet a clean rag with a wax and grease removing solvent.
- Make sure to pour solvent out of container or spray from an approved pressurized bottle.
- With a clean towel, wipe off the surface before it has time to evaporate.
- Replace towels regularly.
- Repeat above steps as needed to remove all surface contaminates.

Appendix B - LV260 Primer Epoxy (PSD-0205)

Description

LV260 Primer Epoxy is a two-component, high solids, low VOC, HAPs free epoxy primer. LV260 Primer Epoxy is a fast-drying primer with excellent corrosion protection over multiple substrates. LV260 Primer Epoxy is a versatile product that can be applied in a couple of methods:

- As a wet on wet, non-sanded primer-sealer
- As a primer-surfacer that can be sanded for extra smoothness prior to top coating
- High build primer
- Primer sealer over sanded aluminum



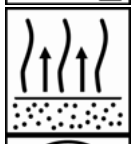
High Build Primer	Medium Build Primer
3 LV260 Primer Epoxy	Up to 1 part of Exempt Reducer
1 LV260 Hardener	may be added as needed to thin

Use Sikkens Measure Stick #9

Spray gun set-up:	Fluid delivery:
0.8 – 1.1 mm	12 – 16 oz/min
36 – 44psi	Check gun manufacturer specification

Non-sanded primer sealer
Apply 1 medium flowing coat

Primer surfacer
Apply 2 medium flowing coats



Between coats	Before topcoat
5 minutes at 70°F (21°C)	30 minutes at 70°F (21°C)

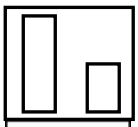
	Dry to Touch	Dry to Handle
LV260 Hardener	70°F (21°C)	30 min 1hr 40min

Use suitable respiratory protection
Akzo Nobel Car Refinishes recommends the use of a fresh air supply respirator
Refer to the product Safety Data Sheet (SDS) for complete safety information

Appendix C - LV262 Multi-Substrate Primer Epoxy (PSD-0286)

Description

A two-component, high solids, heavy-metal free epoxy primer. Utilizing state-of-the-art corrosion inhibitive pigments, it provides excellent corrosion resistance for various grades of aluminum and steel.



Mixing – High Build
3 Parts LV262 Multi-Substrate Primer Epoxy
1 Part LV262 Epoxy Hardener G2

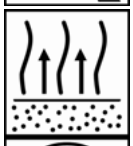
Medium Build
10% LV260 Reducer
may be added to “A” volume

Use Sikkens Measure Stick #9

Spray gun set-up:
1.0 – 1.4 mm
Air Pressure - Check gun manufacturer specification

Fluid delivery:
10 – 14 oz/min

Application @ 60 – 95° F
Apply 1 – 2 single wet coats



Flash Between coats @ 70° F
5 – 10 minutes

Flash to Recoat
25 – 30 minutes

	Dry to Touch	Dry to Handle
Air Drying @ 70° F	30 – 35 minutes	3 – 4 Hours

Use suitable respiratory protection
Akzo Nobel Car Refinishes recommends the use of a fresh air supply respirator
Refer to the product Safety Data Sheet (SDS) for complete safety information

Pot Life When Mixed

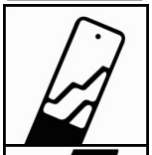
- Pot life will be influenced by mixing ratio and temperature
- 3-6 hours @ 70° F

Appendix D - LV650 Topcoat Low Gloss Black (PSD-0217)

Description

LV650 Topcoat Low Gloss Black is a state of the art, high performance, two-component, high solids, polyurethane, single stage coating. LV650 Topcoat Low Gloss Black has a gloss range of 30 – 40 at 60° angle.

6.5 LV650 Topcoat Low Gloss Black
1 LV650 Hardener

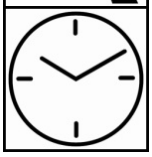


For accurate mixing, use the centimeter ruler on the side of any Sikkens measuring stick.

Spray gun set-up

Tip size	1.2 mm – 1.4 mm Pressure Feed
	1.8 mm – 2.0 mm Siphon or Gravity
Fluid Rate	14 – 20oz/min
Air pressure	Check gun manufacturer specification

Apply two (2) single flowing coats or one cross coat



Object Temp	Drying	Unaccelerated
70°F	Dust Free	1 Hour
	Tack Free	1.5 Hours
	Dry to handle	3 Hours
140°F	Dust Free	15 Minutes
	Tack Free	30 Minutes
	Dry to handle	1 Hour

Use suitable respiratory protection
Akzo Nobel recommends the use of a fresh air supply respirator
Refer to the product Safety Data Sheet (SDS) for complete safety information

Additives

1 oz. of SuperTop per raw quart of A-component may be added to speed up cure time.

Recoatability

Recoatable with itself after full drying cycle. Sanding becomes necessary after 24 hours.

Product Characteristics

- WPG 9.08 lbs/gallon
- Volume Solids (RTS) 47%
- Pot Life (unaccelerated) 2 hrs @ 70°F
- Gloss 30 40 at 60°

Product Storage and Shelf Life

Store products unopened and used products with closed lids. Store products between 70°F-95°F. Optimal storage temperature is 77°F. Avoid extreme temperature fluctuation when storing.

- LV650 Low Gloss Black 2 years
- LV650 Hardener 1 year
- SuperTop 6 months

If any additional support is needed, please open a technical support incident on Pierceparts.com.