Spot Repairs with Autobase® Plus
Three Step Process

FOR PROFESSIONAL USE ONLY

Definition
A three step pearl color consists of 3 layers.
1st step – the foundation color (solid color).
2nd step – the Autobase Plus mica color (a very transparent pearl effect).
3rd step – the clearcoat (to provide gloss and protection).

Description
The term spot repair is understood to include all repairs to damaged areas resulting in the repaired area blending invisibly into the still intact existing finish. As a result, the car refinisher is not compelled to spray large panels in the case of minor damage. The spot repair technique also enables minor differences in color and effect between the original car finish and the repair to be made invisible.

Preparation

Clean all areas: first degrease with M600 Surface Cleaner. In areas where VOC emission regulations apply, use recommended compliant Sikkens Surface Cleaner.

In the above drawings, area “A” is the area under repair. Shape it and build up the area using the appropriate products. After the products have dried, sand the area under repair “A” as well as the adjacent area “B”. When spot repairs are made, wet sanding by hand is preferred.

Sand areas “A” and “B” with waterproof #P600 to #P800 grit paper wet. Thoroughly scuff areas “C” and “D” (whole panel) with a grey scuff pad, Sikkens Blend-Prep and water, or alternately prepare areas “C” and “D” with a good quality DA sander using a 3M interface pad and #P1000 grit sanding disk.

If blending of the clearcoat is inevitable (sail panels), apply some Sikkens Blend-Prep on a damp sponge, and scuff until gloss is removed, or alternately prepare (sail panels) by lightly scuffing with a 3M Clear Blend Prep Pad #07745 (gold). Thoroughly clean areas with a compliant Sikkens Surface Cleaner.
## Spot Repairs with Autobase® Plus
### Three Step Process

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### Application of Autobase Plus (the foundation color)

**To comply with National Rule VOC levels:**

<table>
<thead>
<tr>
<th>100:10</th>
<th>Autobase Plus (foundation)</th>
<th>Sikkens Standard Hardener or Sikkens XP Hardener</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Add 10% hardener.</td>
<td></td>
</tr>
</tbody>
</table>

Use the Sikkens Measuring Stick #14 (Blue)

After adding hardener, stir the mixture and continue to mix as follows:

<table>
<thead>
<tr>
<th>100:50</th>
<th>Autobase Plus (foundation)</th>
<th>Autobase Plus Reducer</th>
</tr>
</thead>
</table>

Use the Sikkens Measuring Stick #1 (Black)

- **HVLP Siphon**
  - 0.071”–0.087” (1.8–2.2 mm)
- **HVLP Gravity**
  - 0.051”–0.059” (1.3–1.5 mm)
- Max 10 psi (max 0.8 bar)

**Application Method:** Spray single coats of Autobase Plus in area "A", extending slightly beyond previous coats until opacity is achieved.

3–5 minutes at 70°F (20°C)

Flash 3–5 minutes and tack between each coat.

**Use suitable respiratory protection**

Contains acrylic resin and other ingredients. When mixed, also contains isocyanates.

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Read complete TDS for detailed product information.
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Blending the foundation color

Prior to applying the fade out coats, add to the ready to spray color 100 parts by volume reduced Autobase Plus Pearl Color using the 1 to 1 mixture of Autobase Plus Solid Color with Autobase Plus Pearl Color. This will make the foundation color transparent, facilitating a more uniform blend with the foundation color.

100:100
Autobase Plus foundation color, ready to spray.
Autobase Plus pearl color, ready to spray

1-2x1
HVLP Siphon
0.071”–0.087” (1.8–2.2 mm)
HVLP Gravity
0.051”–0.059” (1.3–1.5 mm)
Max 10 psi (max 0.8 bar)

With this transparent foundation color, spray 1 to 2 thin coats. Extending beyond the repair area, gradually fading out into area “C”. Allow for flash-off between coats.

Optional fadeout:

100:50
Autobase Plus Mix
Autobase Plus Blending Additive

For final blending, add to this mix, 50 parts by volume Autobase Plus Blending Additive.

1x1
Spray a final fade out coat only in area “C”.

Application continued:

15-20 minutes at 70°F (20°C)
Allow the foundation color to dry for 15–20 minutes before applying the pearl coat color.

Apply Autobase Plus Pearl color.

Note: It is very important that this foundation color is as invisible as possible before proceeding with the Autobase Plus pearl coat color.
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### Application of Autobase Plus (pearl color)

<table>
<thead>
<tr>
<th>100:50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autobase Plus Pearl Color</td>
</tr>
<tr>
<td>Autobase Plus Reducer Medium</td>
</tr>
</tbody>
</table>

Use the Sikkens Measuring Stick #1 (Black)

3–4x1
HVLP Siphon
0.071”–0.087” (1.8–2.2 mm)
HVLP Gravity
0.051”–0.059” (1.3–1.5 mm)
Max 10 psi (max 0.8 bar)

**Application Method:** Spray 3–4 even, thin coats of pearl. Alternate the spraying area with each coat.

Start application well within foundation color, then wider, then within foundation color, wider, etc. The last coats should extend well from the foundation color, fading into area "D".

2-3 minutes at 70°F (20°C)

**Note:** Do not spray a drop coat.

15-20 minutes at 70°F (20°C)

Apply clear coat

**Note:** Do not add extra reducer to the Autobase Plus Pearl Color. Fade out as described above. After each application, remove dry overspray with a tack rag.
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Application of Autobase Plus three-step metallic colors

As the application of 3-step metallic colors is very similar to that of a 3-step pearl color spot repair, we will not repeat every aspect of the process but will highlight the major differences of the process.

After adding hardener, mix the metallic foundation color 100 parts by volume to 50 parts by volume of Autobase Plus Reducer.

Blending the foundation color:

Apply single coats in area A until opacity is achieved. Extend each coat slightly beyond the previous one. (Do not make any attempt at fade-out yet.)

100:100
Autobase Plus foundation color, Ready to Spray
Autobase Plus mid-coat color, Ready to Spray

Mixing Ratio: Reduce the mid-coat color 100 parts color to 50 parts Autobase Plus Reducer. Add this ready-to-spray mid-coat color to the ready-to-spray foundation color at a ratio of one to one.

2x1

Application Method: With this “tinted” transparent foundation color, spray 2 medium coats. Extend beyond the first coats of foundation color, gradually fading out into area C.

15–20 minutes at 70°F (20°C)

Allow this tinted foundation color to dry to 15-20 minutes before applying the (red) mid-coat color.

Application of Autobase Plus (mid coat):

3-4x1

Mix the mid-coat color 100:50 and apply 3–4 medium wet coats, allowing a flash-off time of 5–10 minutes between coats. Do not overlap in the same areas.

Apply Autocoat III or Autoclear III

Allow the Autobase Plus mid-coat color to flash/dry for 15-20 minutes before applying clearcoat.
Alternate process using Autobase Plus Blending Additive as a clear foundation

It is also possible, prior to repairing Autobase Plus (three-stage process), to spray 1 single coat of Autobase Plus Blending Additive. Flash off for 3–5 minutes, and then follow directions on “Spot Repairs with Autobase Plus—Three Stage Process”.

Using Autobase Plus Blending Additive, as a clear foundation coat for fade-out areas will result in an easier blend as far as color, flip tone and effect are concerned.

Application of clearcoat:

Autobase Plus is sufficiently dry to clearcoat after 15-20 minutes at 70°F (20°C).

Tack the entire repair area and clearcoat with Autoclear III Autoclear HS + or Autoclear Vision HS.

Note: Refer to Autoclear III, Autoclear HS + or Autoclear Vision HS technical data sheets.

Example, Autoclear III:

100:50:30

Autoclear III

Sikkens Standard Hardener

Sikkens Production Activator

Use the Sikkens Measuring Stick #1 (Black)

2–3x1

HVLP Siphon

0.071”–0.087” (1.8–2.2 mm)

HVLP Gravity

0.051”–0.059” (1.3–1.5 mm)

Max 10 psi (max 0.8 bar)

Application Method: Spray 2 to 3 single coats of Autoclear III, the last coat over entire panel. Allow 5 minutes flash time after each coat. Limit the application of coats right next to an adjacent panel.

5 minutes at 70°F (20°C)

7 hours at 70°F (20°C)

20 minutes at 140°F (60°C)

Use suitable respiratory protection

Contains acrylic resins. When mixed, Autoclear III also contains isocyanates.

Read complete TDS for detailed product information
Blending of clearcoat:

Akzo Nobel Coatings/Sikkens strongly recommends the application of clear coat over the whole panel that is thoroughly prepared. Clear coating of entire panel is required for lifetime warranty.

There are, however, instances where this is not practical. Such as repairs on older vehicles where economics would dictate that a warranty is not required. In these instances, it may be acceptable to blend the clearcoat into a small area such as a rocker panel or sail panel, vertical areas only. This procedure is not warranted or OE approved.

For Autoclear III: Procedures listed below should also be used for Autoclear HS+. Refer to your local VOC regulations for “Specialty Coating” compliance.

100:50
Autoclear III, ready to spray
Reducer SRA 7.0

Application Method: When blending of the clear is inevitable. After the last coat of clear is sprayed, add 50 parts by volume of Reducer SRA 7.0.

Use the Sikkens Measuring Stick #1 (Black)

1x1
HVLP Siphon
0.071”–0.087” (1.8–2.2 mm)
HVLP Gravity
0.051”–0.059” (1.3–1.5 mm)
Max 10 psi (max 0.8 bar)

Hard line the last coat of clear into the prepared area (sail panel), keeping a sharp blend line.

Reducer SRA 7.0 Ready to Spray
Use pure Reducer SRA 7.0 to dissolve overspray edge.

2x1
HVLP 10 psi (max 0.8 bar)
Conventional. 20–30 psi
(1.3–2.0 bar)

Spray 1 thin coat. Flash for 15 seconds. Apply final thin coat.

After treatment

After the repair is completely dry, the fade out area (if any) may be polished with an ultra-fine polishing compound and waxed. (Please see Dry-To-Polish time of the products used.)
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Note: Refer to the following Technical Data Sheets for more information:
- Autobase Plus Blending Additive
- Autobase Plus Solid, Metallic and Pearl Colors
- Autoclear III
- Autoclear HS +
- Autoclear Vision HS

Safety aspects

Ready to Spray VOC:
- Autobase Plus 100:50 6.5 lb/gal 780 g/liter
- Autobase Plus with 10% hardener, then 100 :50 with Autobase Plus Reducers: 6.3 – 6.4 lb/gal. 756 - 768 g/liter

Notice: Do not handle until the Material Safety Data Sheets have been read and understood. Regulations require that all employees be trained on Material Safety Data Sheets for all chemicals with which they come in contact. The manufacturer recommends the use of an air-supplied respirator when exposed to vapors or spray mist.

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Tel: 770-662-8464

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IMPORTANT NOTE: The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user’s responsibility to verify that this data sheet is current prior to using the product.

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