Carbon Paint Process

FOR PROFESSIONAL USE ONLY

Description

This bulletin describes the optimum repair system for carbon substrates.

Surface Preparation (Non-visible Carbon)

The surface first must be cleaned with warm water and pH neutral cleaner.

Note: *For "**New parts**", pre-bake for 30 minutes @ 60°C and completely cool down*

Degrease as per TDS recommendation using M200 and M700 Anti Static Silicone Remover

Always use 2 cloths, the surface has to be cleaned with the selected surface cleaner using a clean cloth. Immediately thereafter, the surface has to be wiped dry thoroughly with another clean high quality absorbent degreasing cloth.

Abrade the substrate as recommended by machine using P320 grit.

Caution: *Take extra care NOT to sand through the resin. Exposing any of the carbon fiber filaments will cause irreversible damage to the substrate.*

Abrade by hand with Scotch Brite Red in difficult to reach areas

Blow off with compressed air and check for pinholes!

- o **In case pinholes are found, wipe in MM444 matting paste with a lint free cloth, making sure to work the paste into the pinholes.
- o Allow to dry for 15-20 minutes until powdery.
- o Gently sand off the MM444 residue, taking care to leave the filler in the pinholes.
- o Then blow off dust with compressed air.

Degrease as per TDS recommendation using M700 Anti Static Silicone Remover

Allow a minimum of 15 minutes at 20°C prior to next steps

Primer

Apply Colorbuild Plus Sanding version and cure as per TDS recommendation

Note: To improve the overall system and minimise the weave profile, first apply Primer Surfacer EP Sanding version as per TDS recommendation, fully cure, abrade, then follow with Colorbuild Plus Sanding version as per TDS recommendation

Carbon Paint Process

FOR PROFESSIONAL USE ONLY

Use suitable respiratory protection
Akzo Nobel Car Refinishes recommends the use of a fresh air supply respirator.

Read complete TDS for detailed product information

Final sanding step: P500

Degrease as per TDS recommendation using M700 Anti Static Silicone Remover

Final clean with M200 as per TDS recommendation when applying Autowave MM 2.0

Basecoat

Apply Sikkens basecoat as per TDS recommendation.

Clearcoat

Apply Sikkens clearcoat as per TDS recommendation

Optional:
In case of a matt finish use the Mix and Matt swatch to determine the gloss level

Apply Autoclear Mix & Matt as per TDS recommendation in the required gloss level

Carbon Paint Process

FOR PROFESSIONAL USE ONLY

Surface Preparation (Visible Carbon)

The surface first must be cleaned with warm water and pH neutral cleaner.

Note: *For "**New parts"**, pre-bake for 30 minutes @ 60°C and completely cool down*

Degrease as per TDS recommendation using M200 and M700 Anti Static Silicone Remover

Always use 2 cloths, the surface has to be cleaned with the selected surface cleaner using a clean cloth. Immediately thereafter, the surface has to be wiped dry thoroughly with another clean high quality absorbent degreasing cloth.

Abrade the substrate as recommended by machine using P400.

Caution: *Take extra care NOT to sand through the resin. Exposing any of the carbon fiber filaments will cause irreversible damage to the substrate.*

Abrade by hand with Scotch Brite Red in difficult to reach areas

Degrease using M700 Anti Static Silicone Remover as per TDS recommendation.

Allow a minimum of 15 minutes at 20°C prior to next steps

Primer

Apply Autoclear Rapid as per TDS recommendation.

* Clearcoat is used as a primer, because of visible carbon.

Note: It may be necessary to manually fill small pinholes with clearcoat using a brush.

After the stated flash off time dry for 45 minutes at 60°C.

Abrade the clear "primer" using P800-P1000 grit.

- Take care not to sand through!
- Abrade with Scotch Brite Grey in difficult to reach areas.

Note: P400-P600 may be used initially, if excessive peel is to be removed

Carbon Paint Process

FOR PROFESSIONAL USE ONLY

Clean the complete panel carefully as the surface is still sensitive; *avoid using solvent borne silicon removers. Waterborne Cleaner M200 is preferred, optional clear demineralized water can be used as well.*

Clearcoat

Apply Sikkens clearcoat as per TDS recommendation

Optional:
In case of a matt finish use the Mix and Matt swatch to determine the gloss level

Apply Autoclear Mix & Matt as per TDS recommendation in the required gloss level

Tips:

New carbon fiber parts: Always take into consideration the quality of the carbon fiber. This may vary and will impact the severity of the defects such as small pinholes, to the yellowing of the clearcoat on clear “visible” carbon fiber parts.
When ordering new parts, pre-primed (Non-Visible) and clear-primed (Visible) is the best option.

Sanding: Depending on the panel size, surface area and the quality of the substrate to be refinished, sanding may require a slightly different approach when preparing the substrate. It is extremely important NOT to rub through the resin exposing the carbon fiber filaments.

Always refer to the manufactures recommendations and refinish procedures when available.

Carbon Paint Process

FOR PROFESSIONAL USE ONLY

AkzoNobel Car Refinishes Australia Pty Ltd
Address: 269 Williamstown Road, Port Melbourne, VICTORIA, 3207
Tel: +61 3 9644 1711