

Cleaning and Maintenance of Vehicle Wraps

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1.0 Overview

Producing quality vehicle wraps and ensuring the wrap stands the test of time. An applied vehicle wrap is often overlooked in terms of care and maintenance, which is why providing written care instructions to the vehicle owner is so important. **Infrequent, lack of, or incorrect maintenance can lead to the vehicle graphics degrading prematurely and not lasting the expected duration.**

Important Note: If the graphics have reached the end of their intended service life or you notice any decline in the appearance, loss of gloss, discoloration or degradation of the film, contact the company that installed the graphics for assessment immediately.

It is very common to use isopropyl alcohol (IPA) to wipe off the surface of the overlamine film to remove surface contaminants to provide a clean surface. However, when using DOL 6460 clear polyurethane laminate this must be done as a very quick wipe or two with no pressured rubbing or ongoing contact with the film. Do not allow the IPA to sit on the surface and be absorbed into the laminate; otherwise, the IPA will be absorbed into the film. This can result in softening of the film and reduced adhesion in the affected area. It is highly recommended that all cleaning liquids, strong solvents and IPA be properly tested to ensure compatibility with the film.

2.0 Key points for maintaining vehicle wraps

- Upon completion of the vehicle wrap it is standard procedure to wipe down the wrap to remove any fingerprints, streaks, or other surface contaminants. Isopropyl alcohol is generally used for this step. It is recommended that in addition to the isopropyl wipe that a waterless cleaner or spray wax also be applied at this time. This step will provide a protective layer and make it difficult for dirt, bird droppings, tree sap and other contaminants from damaging the wrap.
- During the winter months it is important to allow the newly wrapped vehicle to dwell at room temperature for at least 24 hours before being moved back out into the cold environment.
- Regular cleaning of the wrap is required to maintain the overall appearance of the wrap as well as help prolong the life of the wrap. Below is a list of recommendations for cleaning.

2.1 Clean the vehicle every 2 weeks

- PVC films behave similar to automotive paint if left in constant contact with dirt, grime and contaminants, it will eventually degrade, especially if left un-clean, exposed to UV light and/or heat.
- It is recommended that vehicle graphics should be cleaned on a regular basis or whenever it appears dirty. Ideally, a vehicle wrap should be cleaned every 2 weeks. *This ensures that optimal visual appearance is maintained for the life of the wrap.*

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2.2 Spot Cleaning & Difficult Stains –

- Spot cleaning of surface contaminants like bugs, bird droppings, tree sap and tar is required immediately after it appears, as it can stain and damage the PVC film. This is also true of gasoline and other fuels.
- Spot cleaning with Isopropyl Alcohol and a clean non-abrasive rag.
- Moisten a clean non-abrasive rag with a cleaner *such as Isopropyl Alcohol or Croftgate Surface Cleaner* and wipe down the affected area. *For very difficult stains use Croftgate's Heavy Duty Surface Cleaner.* After cleaning, use clean water to rinse area thoroughly.

2.3 Always test first

- It is crucial to remember that chemicals can damage a wrap or even paint.
- Always test these solvents in an inconspicuous area prior to cleaning the wrap.
- Always rinse the surface with clean water following the use of any cleaning agent.
- Chemicals should be free from abrasive components.
- pH balance of the chemicals should be between 5 and 9.
- Do not use any aromatic solvents such as acetone, M.E.K., toluene, paint thinner or lacquer thinner

2.4 Environmental Factors

- Park the vehicle in shade, garage, or under cover whenever possible.
- At high elevations such as mountain areas, the UV damage is increased versus exposure at sea level. Because the air is thinner and there is less UV filtering, damage increases significantly.
- In congested urban or industrial areas, increased smog, pollutants and particulates in the atmosphere will cause reduced durability on the horizontal areas of the wrap. The horizontal areas trap the chemicals on the surface of the material and the increased UV exposure results in shorter durability.
- Vinyl films are not designed to be permanently submerged in water, fresh or salt. *It is recommended that water craft graphics are cleaned with fresh water after each use.*

2.4.1 Removal of Difficult Air Pollutants or Debris from Vinyl Graphics

- On occasion environmental pollutants or dirt may cause water mark stains that do not remove using standard detergents and water. Seasonal air pollutants vary per geographical area and vinyl graphics can be exposed to air pollutants caused by industrial areas as well. It has been found that the Spartan Graffiti Remover SAC™ listed below works well to remove water spots caused by the air pollutants that mix with seasonal dew. Read & follow manufactures recommended usage instructions before using. Use a clean soft rag to wipe solution off and repeat if necessary to remove stains.
 - Spartan Chemical Co. Inc, Biorenewable Graffiti Remover
110 Spartan Dr., Maumee, OH. 43537
www.spartanchemical.com

2.5 Removing Fingerprints

The matte and satin products may show fingerprints, however they can be cleaned by saturating a clean, lint free towel with a 2:1 mixture of Isopropyl Alcohol and water or straight rubbing alcohol, and then wipe the film dry.

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3.0 Methods of washing vehicle wraps

3.1 Hand Wash

- When hand washing, the first step is to pre-rinse the vehicle with clean water, thus avoiding scratching the surface.
- Gently wash with a mild soapy water solution and a sponge, start at the top of the vehicle and work down. Avoid abrading the film surface with unnecessary scrubbing.
- Rinse the wrap thoroughly with clean water when finished.
- Allow the wrap to dry naturally or to avoid water spotting immediately use a silicone squeegee to remove water and then finish drying with a Chamois, micro-fiber towel or soft non-abrasive towel.
- NOTE:
 - Be careful to not lift the film edges.
 - Detergent should be free from abrasive components, strong solvents and alcohols.
 - Detergents should have a pH balance between 5 and 9. Always test the detergent in an inconspicuous spot on the vehicle wrap before using.

3.2 Waterless Wash / Spray Wax

- A great option as long as the vehicle isn't too dirty. These products can help maintain the gloss level and performance of the film. If the vehicle is not overly dirty, this is the preferred method. **See chart in section 4 for recommended products.**
 - NOTE: Before using any new product on any wrap, be sure to test them in an inconspicuous area of the wrapped vehicle before using on the entire wrap.
- Using a spray wax to care for the Wrap Film is great for protecting the vinyl wrap from being damaged by environmental pollutants or seasonal airborne pollutants.
 - NOTE: Make sure the wax used does not contain petroleum distillates or abrasive components. Always test the wax in an inconspicuous area prior to waxing the whole wrap. Any wax residue can be removed with all-purpose cleaner.

3.3 Automatic Car Wash

- A brushless automatic car wash with just spray is acceptable.
- The automated brush wash is not recommended as the brushes may scratch the vinyl surface, catch and lift the edges of the vinyl wrap, reduce the gloss finish and/or create a failure point.
- Skip the wax options at the car wash to avoid wax that contains petroleum distillates which can damage the wrap.
- Let the wrap dry naturally or dab dry with micro-fiber towel.

3.4 Power Washer

- The use of a pressure or power washer should only be used when all other cleaning methods have been used or tested and did not properly work.
 - NOTE: Pressure washing could have negative effects on the vehicle wrap including but not limited to edge-lifting and face degradation.
 - Keep water pressure below 1200 psi (8- bars or 84 kg/cm²)
 - Keep water temperature below 180°F (80°C)
 - Keep the nozzle at least 12 inches away from the edges

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- Keep the nozzle perpendicular to the graphic. This will avoid lifting edges of the wrap.
- Use a nozzle with a 40° angle wide spray pattern

4.0 Recommended Cleaners & Methods for Film Restoration

Avery Dennison has found that the following products / methods work well. Reference the bottle and see if they are meant to be a waterless wash, wax or waterless wash/wax combination:

Film / Finish Type	Product or Method
Gloss Vinyl	<ul style="list-style-type: none"> • Turtle Wax Ice • Croftgate Wrap Care • Croftgate Wrap Care After Care JP • Whoosh Tint & Vinyl Cleaner • Four Star Ultimate Spray Wax Plus <p>NOTE: Other products may be suitable. Make sure any product used does NOT contain Petroleum Distillates.</p>
Matte, Satin or Textured Vinyl	<ul style="list-style-type: none"> • Warm water/gentle soap mixture washed with non-abrasive cloth • 50/50 isopropyl alcohol/water mixture, wipe with non-abrasive cloth • Simple Green • Croftgate Wrap Care • Croftgate Wrap Care After Care JP <p>NOTE: Other products may be suitable. Make sure any product used does NOT contain Petroleum Distillates.</p>
Matte White Carbon Fiber White	<ul style="list-style-type: none"> • Warm water/gentle soap mixture washed with non-abrasive cloth • 50/50 isopropyl alcohol/water mixture, wipe with non-abrasive cloth • Spray All Purpose Cleaner on a non-abrasive cloth. Remove residue with isopropyl alcohol • For Matte White vinyl, continue with household bleach applied to a non-abrasive cloth. Remove bleach residue with isopropyl/water mixture.
Chrome	<ul style="list-style-type: none"> • The Supreme Wrap Chrome Film requires extra care. When cleaning these films be careful not to scrub as this may leave scratch marks. Wipe the chrome film clean with a soft chamois or microfiber cloth to avoid scratches. Do not use brushes. Try to wipe in one direction since swirling motions may leave marks on the surface. Cleaning products must be grit free to avoid scratching. Use of the cleaning products listed above for gloss vinyl will assist in cleaning and providing a protective finish to the chrome film. • Turtle Wax Ice • Croftgate Wrap Care • Croftgate Wrap Care After Care JP • Whoosh Tint & Vinyl Cleaner • Four Star Ultimate Spray Wax Plus
Cleaners	<ul style="list-style-type: none"> • Croftgate Surface Prep • Croftgate Heavy Duty Cleaner • Simple Green • Krud Kutter <p>Remember after using any cleaner to follow with a clean water rinse.</p>

Reference this YouTube [Video from Croftgate](#) for a demonstration of the Wrap Care products.

NOTE: The recommendations and cleaners in this bulletin are intended as a source of information and are given without a guarantee and do not constitute a warranty. Purchasers should independently test cleaning agents and methods, prior to use, to determine their suitability. For additional questions call the Avery Dennison AnswerLine at 800-282-8379.

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