

GF 333 AUTOMARK DRIFT PW

General Formulations (GF) would like to extend to you our appreciation for choosing GF 333 AutoMark™ DRIFT™ PW 3.0 mil polymeric gloss white conformable print media with a grey repositionable solvent adhesive on a slideable air-egress liner. The "DRIFT™" technology allows the installer to easily float or drift the media over top of an OEM painted surface. The installer can then position and reposition the media until they are ready to engage the PSA film. GF 333 is designed to accept a variety of solvent, latex and UV curable inks common to wide format digital printing systems. The grey repositionable adhesive offers excellent opacity and exceptional repositionability and slideability.

GF 333 AutoMark™ DRIFT™ PW is a 3.0 mil polymeric gloss white print media is specifically engineered for use in partial vehicle wrap, fleet, decal applications and general signage. Surface characteristics include:

- Flat and slight curves (Not warranted for applications over rivets)

VEHICLE TYPES:

- 1. Vans
- 2. Trucks/Box trucks
- 3. Sedans
- 4. Fleet / Semi-trucks and trailers
- 5. General Signage

MEDIA PREPARATION PRIOR TO APPLICATION

- **1)** Did you choose the **GF 333 AUTOMARK™ DRIFT™ PW** 3.0 mil gloss white polymeric print media of General Formulations digital media line for your vehicle decal and wrap application?
- 2) Is the media within proper shelf life and has it been stored in a reasonably controlled environment (ideal is 2-year shelf life at 70°F @ 50% relative humidity)?
- **3)** Has the media been allowed to air dry unrolled at 60° 80°F (15° 26°C) @ 50% relative humidity for 48 hrs. prior to applying overlaminate? Please note: Inadequate drying can accelerate vinyl adhesive degradation and impede optimum performance.
- 4) The following GF laminates are engineered to cover and protect GF 333 AUTOMARK™ DRIFT™ PW *
 - 231 UV Gloss Clear 2.4 mil
 - 240 UV Matte Clear 2.4 mil
 - 247 UV Gloss Clear 3.0 mil
 - 248 UV Matte Clear 3.0 mil
 - 242 UV Gloss Clear Cast 2.0 mil
- * The use of any type of overprint clear varnish or coating other than the recommended approved UV clear laminate reduces the media warranty.

PRE-APPLICATION CHECKLIST:

Prior to application, please use the following list to assist in a successful vehicle wrap.

- 1) The ideal location for an installation is indoors in a climate controlled environment. If this is not possible, do your best to protect the surface from changes in temperature, moisture, wind and dust as these will affect the integrity and success of the application.
- **2)** Prior to application, remove all trim that may interfere with the wrapping process. This would include: license fixtures, antennas, nameplates, lighting fixtures, etc.
- **3)** Identify possible points of failure, which may include: poor paint jobs, clear coat chipping, rust, dents, nicks, scratches, seams, silicon seals, and rubber window gaskets. The adhesive is designed to adhere to the painted OEM vehicle surface, it doesn't stick to silicone, rubber etc. The material must be trimmed around these areas and make sure the surfaces around these areas are free of silicone or oils ect. Failure to do so can impede optimum adhesive bond thus affecting the overall performance.
- **4)** Ensure that the vehicle has been kept indoors and the surface has been cleaned with IPA (Isopropyl Alcohol, 70% concentration minimum) prior to application. Allow to air dry. The use of towels or rags may contaminate the cleaned surface. Pay special attention to edges, seams, around moldings and gaskets and where objects were removed. Use compressed air (with filter) or a heat gun to ensure areas where water can collect are completely dry.
- **5)** The vehicle and environment temperature should be above 60°F (15°C) prior to application. The vehicle needs to sit inside overnight (24 hours) post wrap when wrap would be exposed to lower temps. Please note: the new wrap needs a minimal of 24 hr. time period at 60°F (15°C) or higher for the adhesive system to fully wet out. Not following these normal post or pre wrap practices could result in a failure and could nullify warranty.
- **6)** Always ensure the finished graphic lines up with the vehicle before application. Dry fitting graphics is recommended before application to ensure any problems that can cause issues are addressed.

TOOL KIT:

The standard tools needed for vehicle wrap application are:

- A temperature adjustable industrial heat gun or a commercial propane torch with quick release trigger. (Be sure NOT to overheat vehicle surface as well as the graphic)
- No-touch infrared temperature gauge
- Quality hard and soft flexible application squeegee. Consider friction sleeve or "Wet Edge" type.
- Sharp knife with breakaway replacement blades.
- Tape measure, positioning tape or magnets (Quality masking tape). Note many vehicles do not have "steel" panels impeding the use of magnets.
- Air release tool or straight pin. DOT NOT use a knife to release any entrapped air.
- Wrap gloves
- Additional person to help if possible.

APPLICATION:

NOTE* the following instructions are recommendations only and are not meant to override your current installation method or style.

- **1)** Application begins at the back of the vehicle for vertical panels and from the bottom up for horizontal panels. This allows for all overlaps to face the back or the bottom which prevents wind and rain from causing a premature failure. Seams should have a 1/4 to 1/2 inch (0.64 1.3 cm) overlap.
- 2) Use firm pressure on the squeegee to apply the media to the surface, starting at the high points in the middle and working out toward the edges.
- **3)** For very shallow channels, wherever possible, lay the media through the channel rather than bridging and stretching the media. Any vinyl film (cast or calendered) can exhibit shrinking or tenting when overstretched or overheated. Relief cutting deep channels is recommended to eliminate film popping. Also known as "The Cut & Drop Technique." Please see GF 333 AutoMark DRIFT application video at the **General Formulations YouTube Channel**.
- **4)** In some instances, it is not possible to negotiate complex curves. In such cases, relief cutting is recommended. Be sure not to overstretch the vinyl and overlaminate combination. Overstretching may result in memory failure of the GF Film. It is important to state this again, it is recommended to relief cut the film in these areas to relieve tension.
- **5)** Heat may be needed along leading edges. 160° to 200°F (71° 93°C). Sometimes using a wrap glove or soft microfiber cloth instead of a squeegee is recommended. Since the film cools quickly, it is important to work in small areas and continue to heat the film as your work moves along. Finally, after the film has been applied, you will need to eliminate or erase the stresses created in these application area, you must heat the film to a higher temperature, between 220° and 250°F (104° and 126°C). Move the heat source slowly making sure the vinyl is not being burned. Now that the film has been applied, you are also heating the body of the vehicle and it takes more heat to achieve the final temperature requirement. Note that some vehicles have painted plastic body parts and take less heat. Do not overheat these areas causing permanent damage. Using infrared heat gauge is strongly recommended to make sure this very important step is done correctly to ensure a successful wrap. Skipping this step or not properly taking the time may result in failure.
- **6)** Edges, seams and trim should be cut and resqueegeed to ensure good adhesion. It is a very good idea to also use high heat along these areas to speed up the adhesive build (this is to overcome the repositionable adhesive we built into the film for ease of application) and ensure a good application. Do not wrap films around 180° turns, as this will most likely result in failure. Do not wrap films under the edges of the car or into areas that are prone to not be cleaned well.
- 7) For over rivets, digital media with an overlaminate may tent and is not considered a reason for failure. To apply, use the same technique as the curves described above, apply the film over the flat areas, bridging the rivet head. Using an air release tool or pin, (Do NOT use a knife blade as this will result in a cut propagation issue), poke multiple holes around the rivet head to release the air, then using heat and a rivet brush or squeegee to work the film down around the head. Finally, apply high heat to release any tension stresses and to ensure a quicker adhesive bond. The only proven way to eliminate tenting around rivets with an overlaminated film is to cut completely around the rivet head after application.

- **8)** The General Formulations **AUTOMARK™ DRIFT™ PW** wrap vinyl employs a slideable Air-Free liner technology that allows the vinyl to be moved around the surface to ensure proper placement before applying pressure to the vinyl. The air egress liner allows for the vinyl to be applied without trapping air and making it easy to allow the air to be eliminated by air flowing in all directions. This will minimize the need to pop bubbles. However, it is still possible to get an occasional bubble due to the adhesive having very small channels, which will wet out during the squeegee process. Should a bubble appear when heating, use an air release tool or pin to prick the bubble. DO NOT use a knife as this starts a tear, which can result in a failure.
- **9)** After all the film has been applied, go back and apply heat to the graphic at a temperature of 220° 250°F (104° 126°C) in the areas where the vinyl has been stressed over slight curves or over edges to ensure a good bond. This include all leading edges.

TIPS AND TRICKS FOR SUCCESSFUL APPLICATIONS:

- **1)** Know your surface and its limitations. Do Not apply graphics over rubber moldings, gaskets, rust, poor paint, plastic mirrors or any type of Moldings-Badges.
- 2) Provide a controlled environment and a clean vehicle surface.
- 3) Always use a sharp knife for trimming (snap-off or replace blades frequently).
- 4) Use an air release tool, not a knife, to relieve air bubbles.
- **5)** Heated media applied to cold metal will cool quickly. Apply enough heat to do the job correctly and work in small areas.
- 6) Use heat to soften the film prior to negotiating slight curves if needed.
- **7)** Use heat to relax the film after it has been stressed. This also allows the adhesive to build adhesive bond quickly.
- 8) Seams and edges are common failure points. Be sure that edges are clean and dry. Cut all seams and then heat and re-burnish all edges to ensure a good bond.
- **9)** All printed material MUST be given a minimum 48-72 hrs. at 70°F (21°C) air exposure to flash off any residual ink solvents before using the approved General Formulations UV clear overlaminate. Failure to do so will trap residual solvents altering the performance of this product increasing the potential for premature film and adhesive degradation.

APPLICATION AND INSPECTION REPORT:

Pre-Application Examination

All vehicles should be inspected prior to application to identify any possible compromised areas. Any areas that may cause adhesion problems or that may be damaged by graphics removal should be noted on the following schematics, and the examination report signed by both the applicator and Vehicle owner. Noting paint damage areas as suspect and will not be covered by the General Formulations warranty or guarantee, express or implied. NOTE: It is the graphic printer's responsibility to ensure that the listed signatures are obtained.

Misrepresentation of the worthiness of the Vehicles paint surface on the Pre-Application Examination form voids the limited warranty. Inspect the vehicle and locate any potentially troublesome areas on the vehicle, these areas have a high probability of paint damage upon removal of the graphics.
Locate and mark schematic where there is chipped paint, rust spots, dents, etc. (NOTE: General Formulations will need photos from the installer to show these defects.)
Locate and mark schematic where portions of the vehicle that have been repainted. (NOTE: General Formulations will need photos from the installer to show these defects.)
Using the schematic as a guide, check paint anchorage of the indicated areas. * Use 610 at a 1" width. Apply firm pressure to the tape and pull off quickly at a 180° angle. If no clear coat or paint is pulled from this test, the area should be satisfactory for application. See next page for needed warranty information.
Warranty Information Sheet
Description of Job:
Printer:
Name:
Address:
Contact/Phone #:
Purchased Media From (Dealer/Distributor):
Printer and lnk type used:
AUTOMARK™ DRIFT™ PW Installer
Name:
Address:
Contact/Phone #:
Vehicle Owner
Name:
Address:
Contact/Phone #:
Vehicle make and Model:
Vehicle VIN #: Did vehicle page pro inspection test?
Did vehicle pass pre-inspection test? Date of installation:
Films used:
Coverage: circle one (full/partial)
(Attach photos): Attach all photos of Vehicle from pre and post installation inspection. These photos will be

needed for any future warranty claims. Be sure that a photograph of the Vehicle number is included.

Signatures

Printer:

Graphics Installer: Vehicle Owner: Date: / /

Return the warranty information form and all photos to:

General Formulations Inc.

Digital Print Product Manager 309 South Union Sparta, MI 49345

Email: www.generalformulations.info.com

Phone: 800-253-3664

Check List Date: / /

Paint/Surface Quality: Excellent / Good / Fair

Recent Paint: Y / N: Date: Rust or Bondo: R / B

Where:

Signature Installer: Signature customer:

Indicate: 1. Chipped paint 2. Rust spots 3. Dents 4. Scratches etc. on check list that represents the defect.

WARRANTY AND LIMITED REMEDY

General Formulations Inc. warranties the vehicle wrap film to perform as stated in the product bulletin for exterior exposure resistance given all the steps are followed therein. Possible partial adhesive transfer does not constitute product failure and General Formulations will not be liable for residual adhesive residue. General Formulations Inc. will not assume any liability for paint or clear coat failure due to faulty application, poor body, paint and clear coat condition due to age or environmental damage or the failure to follow the steps provided. In addition, any damage caused by "Fallout" (a dull rust-colored surface condition caused by fossil fuel and turning acidic when mixing with water vapor) is a result of environmental factors uncontrolled and unrelated to General Formulations manufacturing processes and is not considered a product defect. Therefore, General Formulations Inc. retains the right to deny credit based on any or all of these factors.