Pressure Sensitive Graphics

General Storage and Application Instructions

Combined Instructions

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General Instructions

Storage and Rotation:

Proper stock rotation and the control of storage conditions are extremely important to the performance of pressure sensitive graphics. Stock rotation practices should assure product use within one year from of date of manufacture. Storage areas should be such that the product is protected from negative environmental influences such as dirt, dust, heat and excessive humidity. Therefore, product should be stored in a clean "office type" environment with year-around temperatures maintained between 65 and 80 degrees F. Universal Products recommends that all graphics be stored flat and kept in the original protective packaging until time for product use. Storage practices outside these parameters will lead to an accelerated loss of adhesion properties and may result in poor product performance.

Cleaning Procedures:

One should expect that all application surfaces are contaminated to some degree. Therefore, Universal Products recommends the following progressive cleaning measures in order to assure a clean and residue free application surface:

1. *Tar, heavy road grime, industrial adhesives, etc*. - It may be necessary to use acetone, mineral spirits or other aggressive solvents in order to remove these substances. At no time should aromatic solvents come in contact the graphic as they will significantly reduce product performance.
2. *Oil and grease* - Wipe the entire application surface with a surface cleaner such as Universal Products' TFX Cleaner. Dry the surface with a clean lint-free towel or cloth.
3. *Silicones and dirt* - Wash all application surfaces with a light solution of warm water and liquid Joy dish soap. Rinse the cleaned surface with clear water and dry with a lint-free towel or cloth.
4. *Light films and residue* - Finish the cleaning process by wiping the entire application surface with 70% Isopropyl Alcohol and then buff the surface dry with a clean, lint-free towel. Discard the towel after a single use.

Application Surface Temperature:

Most graphic adhesives are durable acrylic compounds engineered for optimum application performance on surface temperatures between 60F - 90F. Application to surfaces outside this temperature range may lead to long-term performance issues and/or graphic adhesion failure.

Cool temperature concerns -
An increase in film hardness and slower adhesion build rates are typical of cool temperature applications. Application surfaces should be buffed dry following cleaning to assure that all residual moisture/films are removed. The use of a heat gun, or heat lamps, may be required to warm the surface and/or graphic to an effective application temperature. Care is required to minimize any stretching of the graphic material during the application process. Graphic lifting during premask removal is often an indicator of surfaces outside the effective temperature range. Resqueeging the graphic surface following premask removal is imperative to assure successful graphic application in cool temperature environments.

Warm temperature concerns -
An increase in film softness and increased initial adhesion are typical of warm temperature applications. Due to the higher temperatures, care is required to minimize any stretching of the graphic material during the application process. Unintended and premature separation of the graphic from the premask during application and/or repositioning activities is often an indicator of surfaces outside the effective application temperature range.

General Application Procedure for Flat Graphics

In addition to suitable storage practices and effective surface cleaning activities, it is imperative that proper application steps are followed in order to assure successful graphic adhesion and performance. The recommended steps for a one-person application include the following:

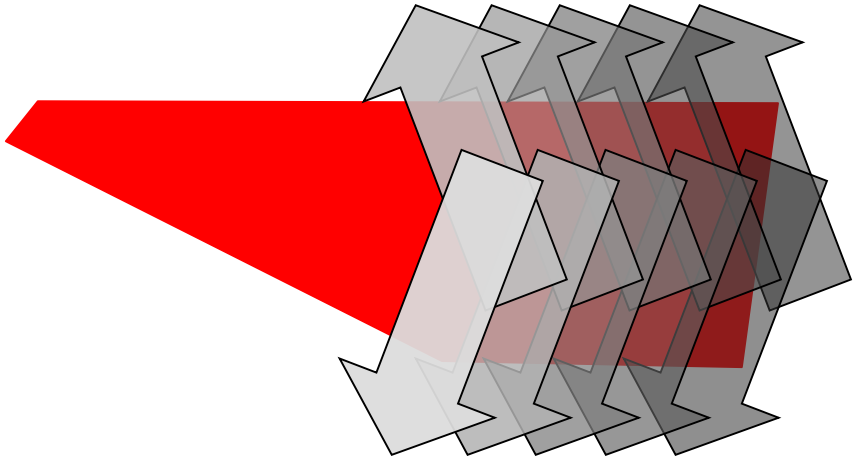
1. Assure that the application surface temperature is between 60F and 90F.
2. Assure that the application surface and the applicator's hands are clean and free of all oils and dirt. Wipe the entire application surface with 70% Isopropyl Alcohol and then buff the surface dry with a clean, lint-free cloth. Dispose of the towel after a single use.
3. Locate the graphic into the proper application position. For large graphics, it may be necessary to establish reference points on the surface or to tape the graphic into the desired position.
4. Once the graphic is properly positioned, run a tape hinge along one edge of the graphic. (Graphics over 48" should be hinged in the center.)
5. Place a tape location indicator along the top edge of the graphic opposite the hinge.
6. Fold the graphic 180º back against the tape hinge and remove the liner paper from the graphic. (Lifting the graphic from the liner may lead to liner release issues.)
7. Hold the graphic slightly above the application surface and reposition the graphic using the tape location indicator. Care should be taken to assure that the graphic is not stretched during the application process.
8. Using a felt squeegee, squeegee the graphic firmly into position on the application surface with firm, overlapping strokes. Beginning at the hinge, work your way down the graphic, taking care not to distort or stretch the premask as you go. This technique will help assure proper graphic alignment, and reduce the possibility of air entrapment. (Repeat the process for the remaining half of center hinged graphics.)
9. Once the graphic is applied, remove the protective premask by slowly pulling it back upon itself at 180°. Pulling the premask at less than 180°, or pulling in a brisk or abrupt manner can result in lifting the graphic edge away from the application surface.
10. Following premask removal, firmly re-squeegee the entire graphic surface to assure proper adhesion along the graphic edges.
11. Care should be taken to assure that graphic edges terminate on flat, not rounded, surfaces. Graphic edges should end no closer than 1/8" from panel edges, joints and corners. All pointed or hand trimmed graphic corners and tips should be rounded to a minimum 1/16" diameter.
12. Visually inspect the completed graphic for proper adhesion, alignment and appearance. Any trapped air bubbles can be removed by puncturing the bubble with a pin and working the air out with your thumb.

CAUTION!!!
It is very important to assure that neither the adhesive side of the graphic nor the application surface is compromised during the application process!

Application Procedure for Domed Badging

In addition to suitable storage practices and effective surface cleaning activities, it is imperative that proper application steps are followed in order to assure successful graphic adhesion and performance. These steps include the following:

1. Assure that the application surface temperature is between 60F and 90F.
2. Assure that the application surface and the applicator's hands are clean and free of all oils and dirt. Wipe the entire application surface with 70% Isopropyl Alcohol and then buff the surface dry with a clean, lint-free cloth. Dispose of the towel after a single use.
3. Locate the domed badge into the proper application position. For larger pre-spaced badges and/or graphics, it may be necessary to tape the domed graphic into place.
4. Run a tape hinge along one edge of the domed graphic.
5. Place a tape location indicator along the top edge of the domed graphic opposite the hinge.
6. Fold the graphic back against the tape hinge and remove the liner paper.
7. Reposition the graphic using the tape location indicator, and hold the graphic slightly above the application surface.
8. Using a felt squeegee, press the graphic firmly into position on the application surface. Be sure to use firm overlapping strokes. Work your way down the graphic, applying one letter at a time while taking care not to distort or stretch the premask between letters. This will assure proper letter alignment, and reduce the possibility of air entrapment. Squeegee from the center of the graphic outward to the edge over the entire length of the emblem.



9. Once the entire domed graphic has been applied, firmly re-squeegee the entire graphic to assure proper adhesion.
10. Once the domed graphic is applied, remove the protective premask by slowly pulling it back upon itself at 180°. Pulling the premask at less than 180° can result in lifting the graphic edge away from the application surface.
11. In order to assure that all edges have been properly adhered to the application surface, go over all badge edges with a soft rubber roller, thumb pressure or other suitable means of applying pressure directly to the graphic edge.
12. Visually inspect the completed graphic for proper adhesion and alignment.
13. Allow the applied emblem to condition for a minimum of 72 hours at 75F prior to subjecting the emblem to a high-pressure power spray.

Application Procedure for ChroMax Badging

In addition to suitable storage practices and effective surface cleaning activities, it is imperative that proper application steps are followed in order to assure successful graphic adhesion and performance. These steps include the following:

1. Assure that the application surface is smooth and flat.
2. Assure that application temperatures for ambient, surface and materials are between 60F and 90F.
3. Clean the entire application surface with 70% IPA and buff dry using a clean, disposable towel.
4. Discard the towel following a single use. Do not re-use the towel.
5. Locate the ChroMax badge into the proper application position.
6. Place tape location indicators along the top edge of the ChroMax graphic if needed.
7. Lay the emblem face-down and remove the liner paper by slowly pulling it away from the adhesive side of the ChroMax badge.
8. Visually reposition the ChroMax using the tape location indicators, and press the badge firmly onto application surface.
9. In order to assure that all edges have been properly adhered to the application surface, go over all edges with a soft rubber roller, thumb pressure, or other suitable means of applying pressure directly to the emblem edge. Failure to properly secure the graphic edges of ChroMax badges can lead to edge curling and adhesion failure.
10. Visually inspect the applied emblem for proper edge adhesion and alignment.
11. Edge contact can be verified by attempting to insert the corner of a “Post-It-Note®” beneath the emblem. Corner penetration greater than 1/8” is an indicator of insufficient application pressure.

CAUTION!!!
It is very important to assure that neither the adhesive side of the graphic nor the application surface are compromised or contaminated during the application process!

Post-Application Graphic Care

Properly applied pressure sensitive graphics require little in the way of maintenance to retain their appearance, and can be treated as one would typically treat a painted surface. There are however, the following considerations:

Washing -

- Pressure sensitive graphics require an extended period of time to reach ultimate adhesion values. It is recommended that pressure sensitive graphics not be commercially washed until ultimate adhesion has been achieved. The recommended wait periods are 1 week during warm summer months (overnight lows at or above 60F) and 3 weeks during the cooler months (overnight lows below 60F).
- Pressure sensitive graphics may be damaged by the brush mechanisms used in many commercial car wash systems. It is recommended that pressure sensitive graphics be spray washed or hand washed.
- High-pressure sprays may cause the edge of the graphic to lift and peel away from the surface. Therefore, high-pressure spray nozzles should always be moved continuously, held at a 90-degree angle to the vehicle surface, and positioned ***at least*** 2-3 feet away from the graphic.
- High pressure sprays with water pressures above 2500psi and/or temperatures above 120F should not be used on pressure sensitive graphic products.
- Your graphics may be hand washed regularly with any commercial soap designed for use on automotive paint, or with most any commercial car wash soap. ***Thoroughly rinse the graphic surface with clear water following washing!***

Cleaning -

- Most road stains may be removed from the graphic by using isopropyl alcohol and/or soap and water.
- Commercial cleaners specifically designed to remove road tar, etc, should always be tested on a small section of the graphic before being used.
- Strong aromatic solvents such as acetone, MEK, toluene or paint thinners ***should not be used*** to clean graphic surfaces as they may destroy the vinyl and adhesive components of the graphic.
- Following the use of any cleaning solution, the graphic should be thoroughly washed and then immediately rinsed with water.

Chemical exposure -

- Do not let chemicals, gasoline or other fuels drip or stay on graphics for any extended length of time.
- If a spill occurs, wipe the surface clean and rinse with water immediately.

Waxing -

- Do not hand apply wax over graphic surfaces, especially if the wax contains petroleum distillates. Wax build-up along the graphic edge can be unsightly, and may lead to premature graphic failure.

CAUTION!!!

Vinyl graphics, and other items such as dashboards and rubber products, will experience a shortened life span when exposed to severe heat and/or continual direct sunlight. Protection of vinyl graphics from prolonged direct exposure to the elements will help insure an extended service life.