

T.I.P. #26

Vehicle Surfaces with Complex Channels

Scope:

Arlon recommends this application technique as the most effective method for installing film graphics over vehicles with complex channeled indentations.

Objective:

To install the film with the least possible tension created at the corners of all complex channel installations.

Materials:

Calon® Series 6000 or Series 2100 HP EF
Application Film or Paper
Heat Gun
Hard Plastic Squeegee
Felt Wrapped Squeegee
Rivet Brush
Puncturing Pin
Graphics

Method: These steps should be followed in the order they are presented.

1. *Registration*

- Layout all registration marks with release liner attached and place masking tape targets at all important registration marks.
- Remove upper segment of release liner, roughly align the registration and attach upper edge of graphic -firmly but not permanently to vehicle.
- Remove all release liner in a smooth motion. *Be sure discarded release liner does not interfere with the footing around the vehicle as it can pose a slip-hazard when left underfoot.*
- Line up the lower registration marks and attach, again, temporarily.
- Return to the upper edge and snap up graphics for final alignment, reattach.



2. Placement of Film on the Flat Segment of Vehicle

- Move to the top center of graphic and begin squeegee strokes from center to nearest edge in the normal manner. Install entire graphic over the flat and level surfaces first.
- Once this step is complete remove all masking paper or film. Be careful not to stretch or tear the film bridging over the channels.

3. Channel Placement

- Begin heating film area over channels until film softens.
- Using a finger wrapped with soft cotton cloth, a soft cotton glove or a squeegee wrapped with felt, begin to attach film to channel walls while continuing to heat. Begin this segment at areas that will not be stretched, such as the inside of corners (various amounts of heat will be needed to allow stretching over corners and radii). Continuing along the upper edges of all channels on both sides and working from the inside of the corners outward, attach film in overlapping strokes until a uniform line has been established halfway down the vertical sections.
- Now working on the horizontal surfaces, again using heat to soften the graphic, attach the film to the center of the horizontal channel surface. As before, begin at the center of the curve and work to the outer edges with uniform sweeps of a finger or soft squeegee.
- Continue using heat to soften and reshape the remaining film on the last half of the vertical walls and horizontal floors of the channel until all film is attached. Regardless of the ambient conditions this application requires the use of a heat gun or propane torch to achieve temperatures above 250° F (120° C) in order to reduce film memory. It is heat, which allows film to remain in place once having been stretched.

Diagram 1: Vehicles with Complex Channels

