

(This procedure is applicable to all pressure sensitive decals.)

### **GENERAL CONDITIONS**

All decals can be removed but care must be given to the application surface to prevent damage.

The application of mild heat will soften the adhesive to aid in decal removal. Most plastic substrates are heat sensitive so the application of high heat can permanently distort a plastic surface or cause dulling of the surface gloss. Use care when applying heat to a decal on glass. Excessive heat could initiate cracking and shattering of the glass

Temperature is a factor in decal removal. Cold temperatures cause film to become brittle and fracture when stressed. Substrate and decal temperature should be at least 60° F to facilitate decal removal.

Chemicals can aid in the removal of decals and adhesives. These products are usually available through your sign supply or media distributor (Rapid Remover, Vinyl Off, etc.). Thoroughly test on the specific application before use. Review and understand all environmental and safety recommendations before using chemical removal aids.

The angle of pull off may influence the amount of adhesive remaining on the substrate. Removable adhesive decals usually remove cleanly at a low angle pull off of the film, less than 90° from the application substrate. Higher bond adhesives usually remove easier when pulling the film off at a pull off angle greater than 90°. This involves pulling the decal back on itself. In all cases try different angles and determine the most suitable for the specific removal.

### **PROCEDURE**

If you are concerned with marring the surface of your substrate there are many tools that are safer to use. Plastic razor blades or thin plastic tools like the “Li'l Chizler” are easier on surfaces. The key is just to get a corner of the graphic film started. Begin to pull the graphic from the substrate. If the graphic is large, considerable effort may be required. If the graphic has been on a substantial amount of time, you may run into tearing or shearing off of the vinyl. In these cases you may need to control your speed and also use heat so that the product won't tear into tiny pieces. Large decals may be removed in section by using a knife or razor blade to nick the decal film and initiate tearing of the film into smaller sections. Heating the graphic while removing will also aid in removing large decals. If the decal cannot be sectioned, heat or chemical removal aids may be required. If removing from a vehicle, leaving it in the sun for a while can also aid in removal by warming the film and adhesive.

In the best case scenario your film will probably still leave behind some adhesive residue. This is very commonplace and there are products specifically made to attack the chemical bonds of the adhesive and allow it to be wiped off more easily. Products such as Rapid Remover or a citrus based cleaner will aid in this removal process. Other products such as Vinyl Off are intended to be sprayed directly on the graphics. It will penetrate the vinyl surface and down to the adhesive, allowing it to soften and break down.

In the end it is best to understand the removability characteristics of the films being used. Films vary in durability and removability and General Formulations publishes all of our removability specifications in our Media Selection Guide. This will help you set proper expectations for clean removal. For any questions regarding these procedures please contact a distributor near you or call General Formulations Customer Service and we can assist you. You can call us 800-253-3664 or find us online at [www.generalformulations.com](http://www.generalformulations.com).