Decal Application Information

THE MITOGRAPHERS® INCORPORATED

Preparation

APPLICATION TOOLS

1. Squeegee with sleeve (optional)
2. X-ACTO knife, razor blade, or scissors
3. Spray bottle with 1 or 2 drops of DAWN dish washing detergent per 16 oz. of water
4. Paper towels

APPLICATION TEMPERATURE

For best results, the application surface and the surrounding ambient atmosphere should be 50°F (10°C) or above.

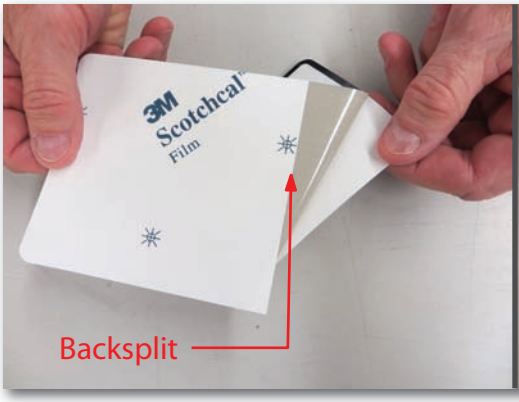
CLEANING

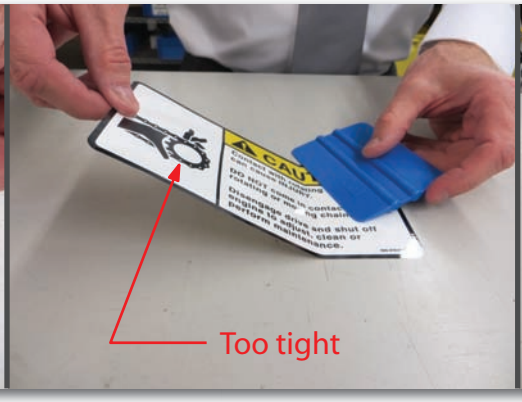
Using the soap and water solution, wet area and wipe dry with paper towel.

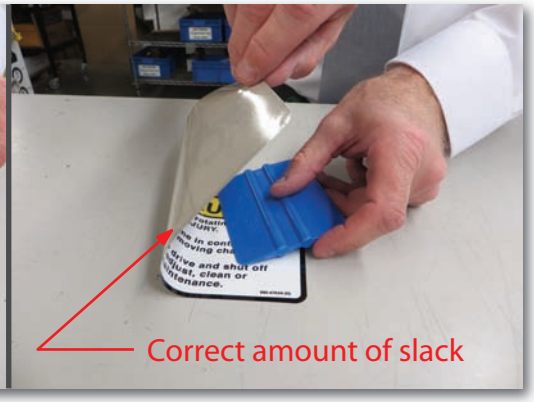
Application Methods

GENERAL RECOMMENDATIONS

1. Take your time--"haste makes waste".
2. Always use the back split when applicable--back splits make alignment and application much easier.
3. Pulling a decal tight while applying may pull it out of alignment. Allow enough slack to smoothly apply decal to the surface.







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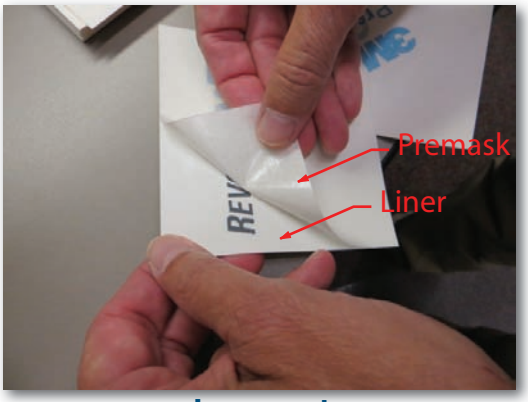
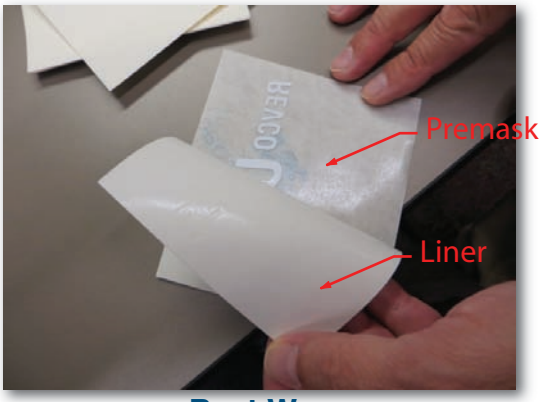
REMOVING THE LINER FROM PRE-SPACED LETTERING

1. If the liner (backing paper) is down against the table surface and one pulls the premask up and away, the vinyl letters have a greater chance of remaining on the liner.
2. If the decal is turned over so the premask is against the table surface and one pulls the liner up and away, the vinyl letters have a greater chance of remaining on the premask.



Incorrect



Best Way

Dry method…used for small emblems and decals up to approximately 12″ x 12″.

1. Clean and dry the application surface.
2. Peel the liner down 1″ from the top and remove with scissors.
3. Align and apply the decal with a squeegee starting at the top and working center outward. Use overlapping strokes by a half a squeegee to prevent bubbles from forming under vinyl.
4. Continue removing the liner and smooth out with the squeegee. If air bubbles form, puncture and smooth out with squeegee.

Wet Method…used for larger signs over 12″ x 12″ or for decals with intricately die cut shapes.

1. Clean and dry the application surface.
2. Place the decal in the desired position.
3. Keep the soap and water solution within reach.
4. With the decal face down, remove the liner slowly.
5. Spray the application surface and the adhesive coated side of the decal with the soap and water solution.
6. Position the decal and then squeegee from top to bottom and center outward with light overlapping strokes.
7. Dry entire area with paper towel and squeegee the decal again with firm strokes working from the center outward toward each edge.
8. Allow the decal 24 hours to set and squeegee once again. Ultimate adhesion will occur 24-48 hours after application.

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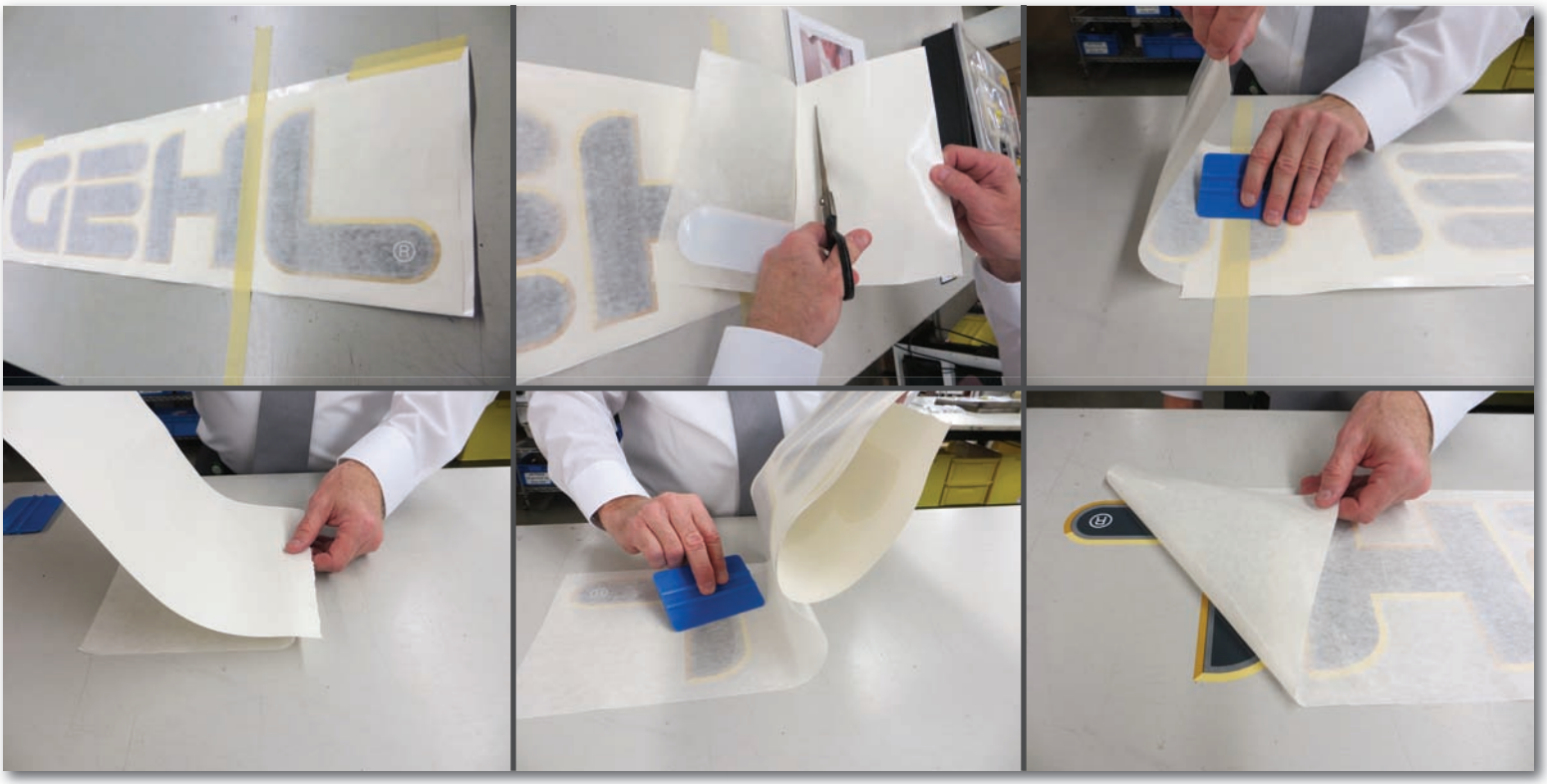
Hinge Method…used for longer decals.

1. Clean and dry the application surface.
2. Tape the decal in the correct position.
3. Add a longer piece of tape across the decal, as shown below, to act as a “hinge”.
4. Peel the liner away to the hinge area and remove with scissors.
5. Apply that portion of the decal with a squeegee starting at the hinge and working outward. Use overlapping strokes by a half a squeegee to prevent bubbles from forming under vinyl.
6. Remove the tape pieces (including the hinge strip) and take hold of the liner.
7. Pull the liner, exposing 8“ to 10” of the graphic.
8. Apply the rest of the decal with the squeegee, removing the liner as you go. If air bubbles form, puncture and smooth out with squeegee.
9. Remove the premask at an angle, keeping it nearly flat against the rest of the decal.



STRIPING...

Follow the same procedure as for the dry method, but pull off the liner a foot or so at a time. Make sure all edges firmly adhere.

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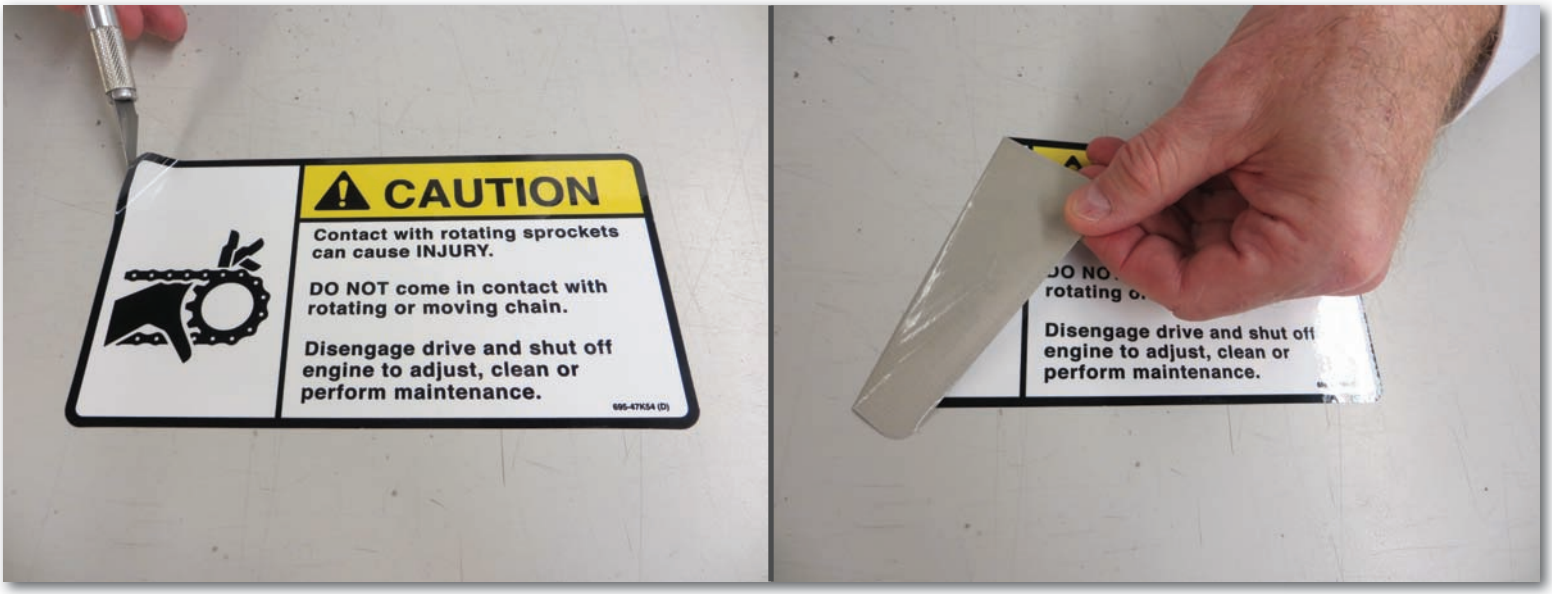
Removing Applied Graphics

STEPS

Gently lift a corner of the decal with a knife or razor blade, take care not to scratch the paint, then slowly peel back the decal. The adhesive residue left on the surface can be removed by picking with the adhesive side of the removed decal. If this is unsuccessful, soak the residue with a mild solvent isopropyl alcohol. (Check with your paint dealer to be sure the solvent does not attack the application surface). Please note: A heat gun may be used to heat and loosen the decal to aid the removal process.



These application guidelines are recommendations for educational benefit only.
The Mitographers Inc. is not liable for any ruined decals or damaged equipment. User discretion is advised.

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Decal Storage Information

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Storage & Re-Certification of Adhesive Products

Material Shelf Life

The **Mitographers, Inc.** identifies all products containing pressure sensitive adhesives with a date of manufacture label. This helps in identifying product that should be consumed within one year from that date. Most adhesive systems have shelf lives that range between 12 to 24 months, using the industry recognized storage standard of 70 degrees f. at 50% humidity. **Mitographers** limits the finished product life to one year because the raw materials used to manufacture the product may be several months old prior to fabrication. Finished products older than one year may suffer from reduced adhesive bond strength due to air and moisture migration between materials. Release liners help to keep contaminates away from the adhesive surface until the time of use. If the shelf life date is exceeded, air and moisture may have begun to migrate under the release liner and allow the volatile component of the adhesive to flash off (dry out). This may significantly reduce the amount of surface area that still has good adhesive characteristics. Once the release liner has been removed and the bond has been made, the air and moisture migration issue becomes extremely slow (many years). Thus, there is no relationship between shelf life and service life. In an ideal world the end user would procure only enough material that can be consumed within the shelf life period. Unfortunately, the real world doesn't always cooperate.

Material Evaluation

If the end user finds themselves with materials that are out of date there are several steps that could be performed to determine if the material is still acceptable or should be scrapped.

The first step should be to physically examine the material that is out of date and determine the following:
1) Has the material been stored under the proper conditions?
2) Is the product still in its original packaging?
3) Is the original packaging film still sealed?
4) Does the paper release liner and premask covering have a uniform appearance?

The ideal condition would be that the answer is “yes” to all of the above questions. If so, proceed to the Testing Section. If the answer is “no” to question 4, scrap the material outright.

Material Testing

Quality Assurance personnel should perform the following tests. Cut or gather several samples from all the affected lots, and apply to a test panel per the appropriate installation instructions for that product. Control samples could also be tested from lots that are within the stated shelf life limits. Allow all test samples to age for 72 hours at normal room temperature after application. This process creates specimens that can be adhesion tested. All out of date lots that show average adhesion or better compared to the control specimens could be considered acceptable for use. Material lots that yield average adhesiveness of less than 90% of the control specimens should be scrapped.

Re-Certification

Acceptable lot materials should be re-certified for use for no more than 6-months from date of test. Inventory control should be adjusted to insure that re-certified materials are consumed first before processing any new materials. (First in, First out) After the six-month re-certification period has passed you could perform the re-certification test process one more time. Materials that pass the second test could be re-certified for use for a maximum of 3-months. After the end of this 3-month period, quality assurance should scrap all remaining out of date materials and ensure that only new materials that are within the original shelf-life limits are used.

If you have any questions regarding any of the issues described above please contact your **Mitographer’s** representative at (800) 221-6486.

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