



INSTRUCTIONS FOR DRY APPLICATION BONNET / BOOT / SIDES

COOPER FLAGS utilizes 3M Graphic films with Comply™ Performance for dry applications

What Is Comply Performance?

Comply performance adds a unique characteristic to the film adhesive that enables faster application with very few air bubbles, whether it is applied by professional or amateur installers. Films with Comply performance have a network of microstructure air channels in the adhesive. These channels allow air to escape laterally beneath the film. An air bubble trapped under the film can be rubbed out easily and usually does not require making an air release hole with an air release tool or pin.

Understanding Levels Of Adhesion

The amount of adhesion attained by films with Comply performance can be categorized in three levels:

Initial bond, **functional bond** and **ultimate bond**. Although these films typically require less application pressure than conventional graphic films, the pressure must be sufficient for the film to bond properly to the application surface.

- **Initial bond** occurs while you are applying the film to the application surface. At this time, there is only enough adhesion to hold the graphic to the application surface. In cooler temperatures, more pressure is needed during application.
- **Functional bond** usually occurs within a few minutes of application at 60°F (16°C) or warmer. At this time, there is enough adhesive strength to allow the removal of premask or to transport a vehicle to which the film is applied. In cooler temperatures, the functional bond takes longer to achieve.
- **Ultimate bond**, which is the maximum adhesive strength the film achieves, can take a few days depending on the substrate and temperature. A hotter environment takes a shorter time and a cooler environment takes a longer time.

APPLICATION TO BE PERFORMED BY A PROFESSIONAL INSTALLER ONLY

Tools and Materials

- Applicator / Squeegee
- Air Release Tool / pin
- Masking Tape
- Razor Blade / Cutting Knives
- Mild detergent
(such as Dawn, containing no lotions, soaps, oils, waxes or enzymes)
- Spray Bottle
- Lint-free clothes
- Can of compressed air (removes dirt and moisture from tight areas)
- Solvent for removing tar, wax, etc. from auto finishes. (found at most auto parts stores)

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Key Application Tips

Unrolling your graphic:

Due to the Comply liner, you may find wrinkles and or pockets when you unroll the graphic. This will be contained to the liner and should not affect the vinyl. This will not be an issue once the liner is removed for installation.

Graphic Construction:

1. The liner: white paper on the back.
2. The graphic: vinyl material.
3. The application tape: paper protecting the face of the vinyl graphic.

Temperature:

Be sure the air, graphic and application surface temperature is at least 60° F (16° C). If you are applying a graphic at or near the minimum application temperature, the adhesive bond will develop more slowly than in higher temperatures.

Application tape:

Always remove it at an angle as close as possible to 180 degrees and immediately re-squeegee the film.

Prepare a Detergent-Water Solution to clean the surface:

Prepare a solution of 1/3 teaspoon (2 ml) of concentrated detergent, containing no lotions, soaps, oils, waxes or enzymes, for each 1-quart (1 liter) of clean, cool water. After mixing the solution, pour some or all of it into a spray bottle.

Clean and Prepare the Surface

Remove all surface dirt with detergent and water prior to step 1. On the Boot, make sure to clean under any rubber seals that the graphic will come in contact with. Be sure to thoroughly clean the gap between the boot and the latch / license plate assembly. Clean all areas where the graphic will be cut and wrapped, doors, bonnet, boot, etc.

Clean the substrate immediately before applying film. Grease and oils prevent the film from adhering properly.

1. Saturate a clean, soft cloth with a solvent.
2. Wipe with a lint-free, clean cloth before the solvent evaporates from the surface. If the cloth becomes dirty, discard it. A dirty towel does not remove dirt.
3. Make sure the substrate is completely dry. If necessary, use a heat gun to dry any retained moisture.
4. Apply the graphic immediately. Dust and contaminants prevent the adhesive from performing as expected.

Application Procedure

Do the installation in the shade or inside. Make sure neither surface or material is hot. This will keep the material from stretching during installation. Ambient air temperature should be between 60 and 90 degrees, Fahrenheit.

Make sure the back of the graphics is clean. Begin by test fitting your graphic in position using masking tape. Once have them in the desired position, mark on the car the exact location of the top and sides of the graphic with masking tape. Do not use a chalk line, china marker or grease pencil, which will contaminate the adhesive and cause edge failure.

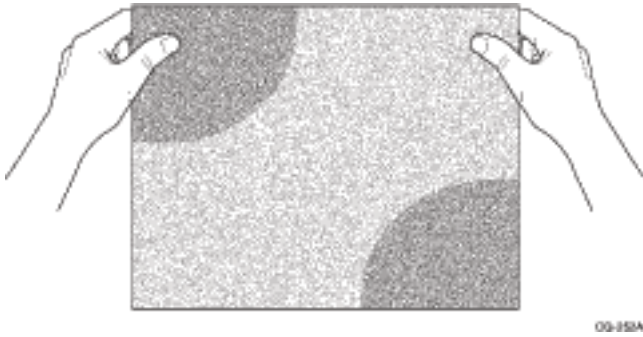
Removing the Adhesive's Liner:

1. Lay the graphic liner side up against a flat, clean surface.
2. Flick a corner of the film with your finger or bend the corner to separate the liner from the adhesive.
3. Remove only as much liner as required for your application method. As you're removing the liner, keep your fingers away from the edge of the adhesive as much as possible. Contamination on the adhesive edges may cause the edges of the film to lift after application. The procedure for removing the liner, whether just a small part of it or the entire liner is to pull it away from the graphic at a 180 degree angle with a smooth continuous motion.

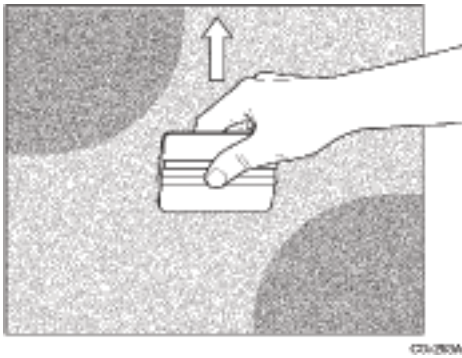
Note: Always remove the liner from the graphic rather than the graphic from the liner. This method helps ensure that the application tape removes any pre-spaced graphics from the liner, and minimizes stretching or wrinkling of the graphic.

Applying Boot and Bonnet Graphics:

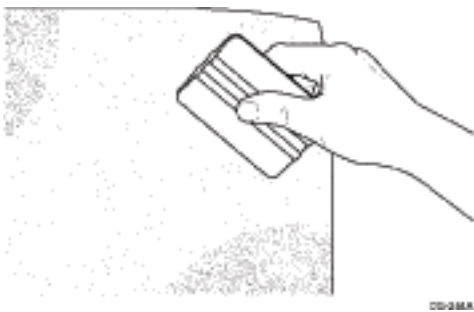
1. Remove the entire liner.
2. Use your thumb to gently tack the top edge of the graphic in place.



3. Squeegee the film using moderately firm, *overlapping* strokes, making sure the applicator is flat with the substrate along the entire length of the stroke. Hold the remaining film away from the surface. Note: Pull the squeegee rather than pushing it. Pushing can stretch the graphic.



3. Pull the film away where you tacked it with your thumb and then squeegee that area; this prevents wrinkles.



Always perform this CRITICAL final step.

Final Squeegeeing is one of the most important factors in **Preventing Premature Graphic Failure** due to edge lifting.

- Wait at least several minutes after the application to allow the adhesion to build to the functional bond level.
- Remove the application tape from the graphic by pulling it back upon itself at a 180-degree angle. It is acceptable to tear the premask into manageable sized pieces.
- Re-squeegee all graphic edges and seams using firm pressure. Use a squeegee with a soft cloth.

Note: Re-squeegeeing the edges before the adhesive has reached the functional bond level can create large bubbles under the graphic or cause wrinkles.

Using a sharp razor blade or X-acto knife, cut the vinyl at all necessary points, top and bottom of bonnet, door seams, etc. Be sure to squeegee these areas after cutting.

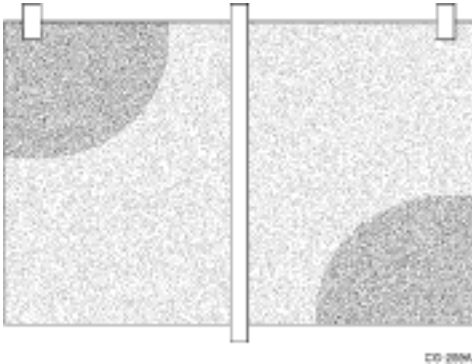
If there are air bubbles in your installed graphic, they can be removed easily. Just apply pressure to the middle of the bubble with your thumb and rub out toward the bubble edges. The air will disperse along the adhesive channels. There is no need to make air release holes unless the air bubble is extremely large. In that case, use an air release tool and remove the air.

Side Stripe Application

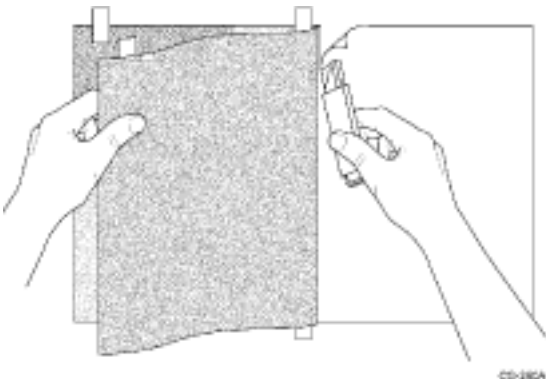
Make sure the back of the graphics is clean. Begin by securing your graphic in position using masking tape. Mark the top edge of the graphic with a piece of tape at either end.

You will be using the center hinge method.

1. A center hinge can be either vertical or horizontal, whichever is the shortest distance.
2. Position the graphic and hold it in place with 1 or 2 inch (2.5 to 5 cm) wide strips of masking tape.
3. Apply two layers of masking tape, 1 or 2 inch (2.5 to 5 cm) wide, through the center of the graphic to make a hinge. The hinge should be perpendicular (at right angles) to the longest distance.

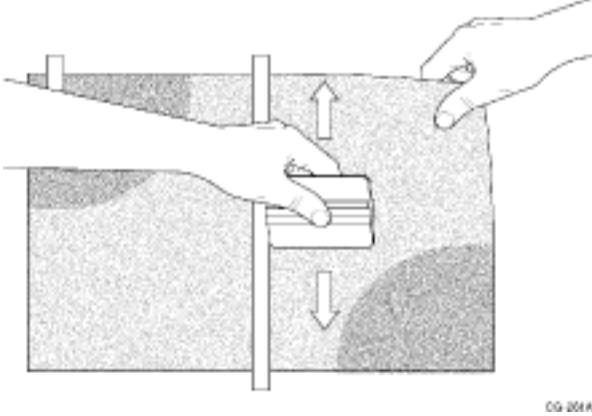


4. Fold half of the graphic back over the hinge. Peel off the liner all the way to the tape hinge. Then cut just the liner along the hinge. Discard the liner.

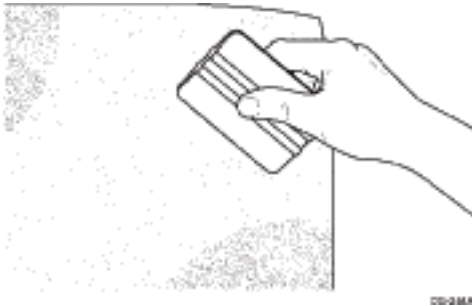


5. Fold the graphic back onto the substrate. Align the top edge of the graphic with the tape. Tack down with light thumb pressure.

6. Squeegee the graphic beginning at the center of the tape hinge and working outward to the closest edge. Squeegee the film using moderately firm, *overlapping* strokes, making sure the applicator is flat with the substrate along the entire length of the stroke.



7. Pull the film away where you tacked it with your thumb and then squeegee that area; this prevents wrinkles.



8. Remove the tape.

9. Apply the other half of the graphic in the same manner.

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- Re-squeegee all graphic edges and seams using firm pressure. Use a squeegee with a soft cloth.

Note: Re-squeegeeing the edges before the adhesive has reached the functional bond level can create large bubbles under the graphic or cause wrinkles.

If there are air bubbles in your installed graphic, they can be removed easily. Just apply pressure to the middle of the bubble with your thumb and rub out toward the bubble edges. The air will disperse along the adhesive channels. There is no need to make air release holes unless the air bubble is extremely large. In that case, use an air release tool and remove the air.

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