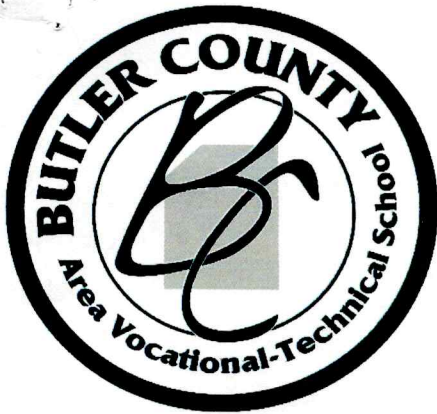




Collision Repair

Flexible Instruction Day

Assignment #1

Learning Standard	1.2.11 read and understand essential content. 2.2.11.E recognize the degree of precision needed in calculating a number and environmental health and safety. 3.6.12 science and technology
Task # & Description	1511 perform masking 1404 identifying various topcoats

CONTACT INFORMATION/ASSISTANCE

Instructor Name: Dave Peters

Instructor E-Mail: petersd@butlertec.us

I will be available by email from 7:40-12, and 12:30-3:10 to answer your questions. Please reach out if you are having difficulty completing your assignments.

INSTRUCTIONS

- ✓ All work is due on the day we return to school. This is counted towards your attendance **and** as a classroom assignment.
- ✓ Read supplied materials
- ✓ Complete the masking assignment and blending quiz

Name: _____

Session: _____

____/____ points

MASKING

Masking is a critical element in refinishing a vehicle. How well masking is done often means the difference between an excellent and a poor paint job (Figure 1). Careful masking provides clean paint edges and prevents a ragged appearance at glass edges, sealing strips, exterior moldings, grille parts, and so on. Careful and precision masking is the mark of a true craftsman. Masking a car requires an understanding of the fundamentals, good judgment, and practice. Before any portion of a car is masked, every part on the car and every surface involved must be washed and cleaned as required.

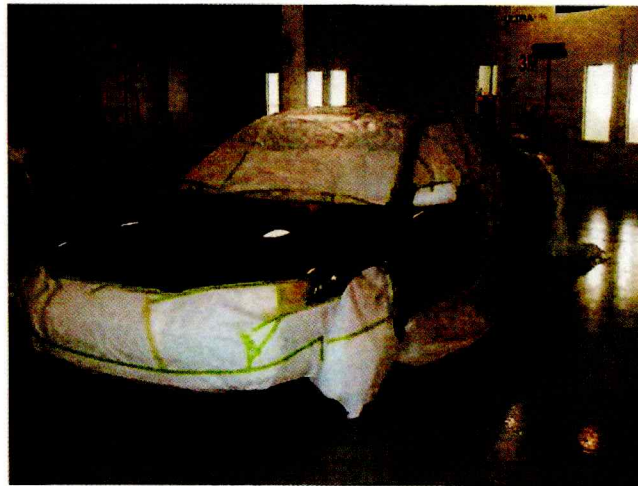


Figure 1 ♦ Vehicle prepared for finishing. (Courtesy of Al Thomas)

Preparation for Masking

Masking versus Removing a Part

Deciding on which parts to remove before painting and which to mask is often an individual choice, which is why there are no set rules for parts removal. However, the collision industry generally suggests most components that are attached to the side of a panel instead of masking them. The general criteria for making the decision are: If a part can be removed in the same time, or less, than the time it would take to mask it, remove it.

- If a part cannot be masked to the shop's required quality, remove it.

Vehicle Cleaning

The vehicle must be cleaned before it is masked. If it is not cleaned properly, the masking material will not adhere properly and may come loose during the painting or priming process. Prior to masking, a vehicle should be washed completely. This includes opening the hood, doors, and deck lid to wash out any dust or debris that may have been produced during the repair process. During the painting process, dust blowing out of a crack because the vehicle was not washed well means that either extensive and detail work or even a complete repainting job will be required if the dirt and dust is severe.

Masking Materials

Masking Costs

Masking accounts for about 15% of the refinishing cost. For the average repair order of \$2,000. The cost of masking a vehicle is \$300. Therefore, a technician who chooses materials wisely can save a considerable amount of money and time.

One of the most expensive materials a technician uses when masking is the masking tape. The size and the type of tape can have significant differences in. For example, a technician is masking a headlight. After outlining the light with masking tape, he or she chooses to fill in that perimeter by using 2-in. tape. The cost of masking rises significantly by using the additional tape. If the technician fill-mask.



with 6-in. paper instead, the cost of masking that headlight will be significantly less.

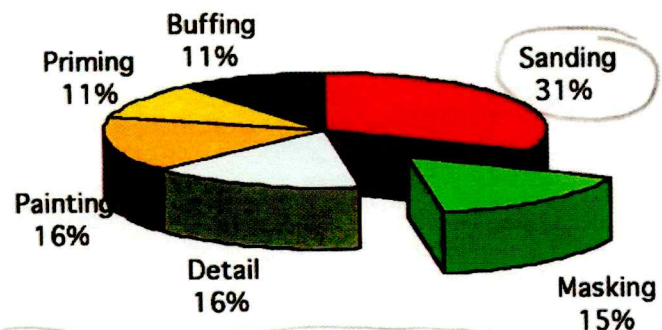


Figure 2 ♦ Cost of refinishing a vehicle. (Courtesy of Al Thomas)

Apply plastic protective sheeting following these steps:

1. Place the plastic overspray sheet dispenser in front of the vehicle. Unroll and cut the plastic to the desired length. The plastic sheeting must be placed on the vehicle so that the markings printed on the sheeting can be read. (The reverse side of the plastic is not paintable and will cause flaking when used.)
2. Center the plastic sheet by aligning the center seam to the vehicle and unfold it.
3. The plastic sheeting should not touch the ground in a down draft paint booth.
4. Trim the plastic to reveal the area to be painted.
5. Using masking tape, mask close to the trimmed edge.
6. After painting is completed, the overspray sheeting can be easily and quickly removed.



3M
Overspray Protective Sheeting
New Paintable

- 30 mil high density polyethylene film
- Clear, durable, tear-resistant
- Provides for improved paint overspray adhesion
- Film unfolds easily yet clings to vehicle, allowing for easy application
- Unique folding pattern of film allows for easy application
- 11 ft. and 14 ft. x 400 ft. sheeting folded to 3 ft. width
- 14 ft. wide film should be used for larger vehicles such as mini-vans, sport sedans and pickup trucks
- 30 ft. x 250 ft. sheeting folded to 3 ft. width is available for vans, SUV and truck use
- All 3 sizes can be dispensed by using the 3M™ Overspray Protective Sheeting Dispenser, 994 66730

Part No.	Description	Size	Weight/Cube
61577	30" x 250' Overspray Protective Sheeting	11 ft. x 400 ft.	1
61578	14" x 400' Overspray Protective Sheeting	14 ft. x 400 ft.	1
61579	11" x 400' Overspray Protective Sheeting	11 ft. x 400 ft.	1
61580	30" x 250' Overspray Protective Sheeting (folded)	3 ft. x 250 ft.	1

► Overspray protective sheeting product

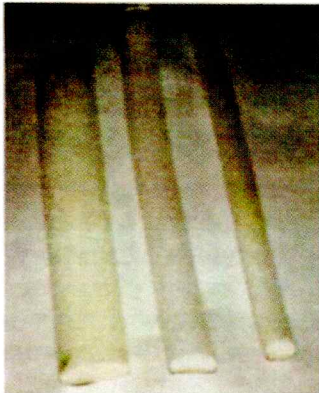


Figure 13 ♦ Overspray protective sheeting. (Courtesy of

Aperture tape

The tape comes in a suitable box. To use it, unroll the tape one layer at a time, and cut it to the length needed for application, following the box label directions or the following procedure:

1. Using a cloth dampened with soapy water and wrung out, wash the surface to be taped. Immediately wipe the surface with a cloth dampened with a general-purpose adhesive cleaner or the equivalent. Wipe dry with a clean cloth.
Pull out the desired length of aperture tape, and cut it with scissors or a sharp blade. Tape may be butt-joined at any time.
3. You must position the tape correctly. It must not be too far in or too far out. Apply the tape to the door jamb, deck lid opening, hood opening, gas filler door, and so on, with a 3/16-in. setback.
- 4 Run your finger in the reverse direction over the tape for tighter adhesion.
5. Close the door, hood, or deck lid, and check the alignment of the tape installation before continuing. If tape realignment is necessary, lift the tape, reposition it as required, and press it in place.
6. Complete all masking operations on the car. 7. To remove the tape, grasp it and pull up and away from the painted surface. Remove the DART tape when removing other vehicle masking.



Reverse Masking

Various methods of reverse masking have been used in the refinish trade since crease-lines became popular in the 1960s. Reverse masking consists of using natural panel crease-lines, where present, for masking purposes to minimize paint repair areas. Reverse masking must run all the way across a panel for this type of masking to be most effective. Use of lines for sectional panel repairs reduces the volume of refinish paint material used, and it cuts down on paint labor because a smaller area is painted.

Follow these steps when reverse masking:

1. Using a 6-in. or wider pre-masked apron of masking paper, position the centerline of the exposed tape attached to the masking paper along the center of the crease-line. Slick down the tape for the length of the crease line as required on the surface to be protected. Use one or more sections of pre masked paper as needed.
2. Reverse the position of the masking paper over the crease line by raising the paper onto the panel to be protected. Secure the paper to the panel.



Back Masking

Back masking should not be confused with reverse masking. In back masking a wide tape (1 ½ inch or 2 inch) is placed behind a door, wheel opening, deck lid, or area that must be protected. Half of the tape is applied to the part, and half is left exposed so masking paper can be applied. This leaves the edge open for refinishing and the back of the product protected from overspray. Back masking can also be used to cover holes, such as door handle holes, from the backside of the panel. This prevents having paint on the area against where you are painting.

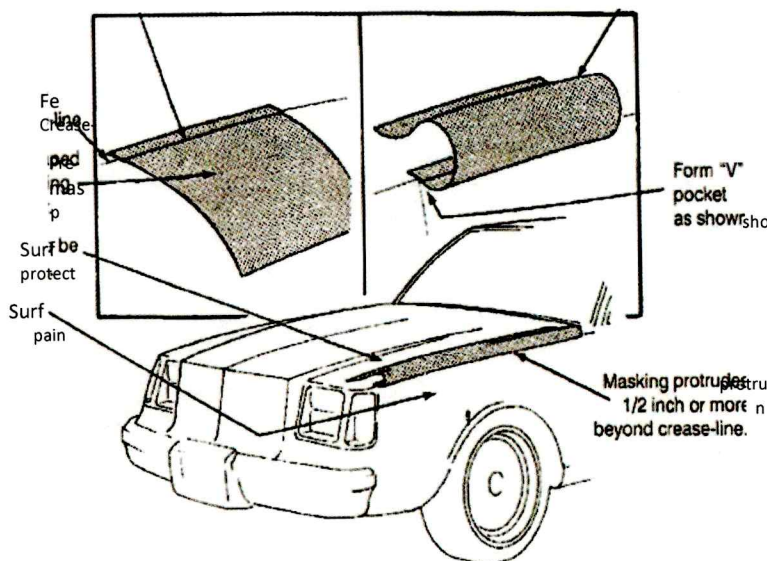




Figure 27 ♦ Door handle back masked following removal.

MASKING VOCABULARY

Substrate: The object or material you are working on.

Cleaner : Material used to clean a substrate.

Masking: Application of paper or other material and tape to cover an object that must be protected from overspray.

Masking Paper: Paper designed to prevent paint from bleeding through.

Masking Tape: A special paper that is coated with adhesive; used to protect body parts or to attach masking paper to the car.

Overspray: An overlap of dry spray particles on areas that were not meant to be painted, or on previously painted areas where they do not melt in.

Tack cloth or Tack rag: A cloth coated with a sticky substance used to remove dirt and lint prior to painting. Used after masking and wiping down a vehicle.

Masking Procedures



Tip These procedures should be reviewed in conjunction with the chapter in Section 6, "Paint Shop Procedures".

1. Clean all panels, parts, gaskets, and chrome. Tape will not stick to wax, dirt, and oxidized paint.
2. Cleaning rubber gaskets with lacquer thinner immediately before taping will help tape to stick.
3. Do not double mask unless absolutely necessary. Double masking wastes time and materials.
4. Masking accuracy is extremely important to final results of refinish work. Tape should never overlap painted areas and unpainted areas should never be exposed.
5. Make sure tape is pressed tightly to the surface allowing no gaps causing rough edges and overspray.
6. When masking, keep in mind the unmasking process. For example, Do not mask around and around on door handles and radio antennas. Mask parallel with the length of the part. Also mask parts with one full length of tape, not short pieces.
7. On areas where back masking is needed, the panel should be buffed and cleaned with a grease and wax remover prior to masking.
8. When masking a vehicle ~~the plastic car bag~~, the plastic car bag should be taped tightly to the car at the bottom of rocker panels and wheel openings to prevent overspray from leaking up inside the plastic car bag.
9. When masking stripes and two tones, always use fine line tape to hold paint build up to a minimum at the edges.

