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Minor Paint Finish Repair

The first thing a new vehicle owner sees when he or she takes delivery of a new vehicle is the paint finish. Therefore, making the vehicle look good is very important. However, customer feedback has pointed out that many new vehicles are delivered with scratches and swirl marks. This is especially true with dark-colored vehicles.

CORRECTIVE ACTION

Repair the paint finish using the tools, supplies, and procedures recommended for the type of damage (scratches, swirl marks, etc.) and for the color of the paint.

WARRANTY CLAIM INFORMATION

None: information only.

RECOMMENDED TOOLS AND SUPPLIES

To repair the paint finish, you should use these tools and supplies:

Tools and Safety Equipment

- Mil gauge (film thickness gauge)
- Variable speed electric polisher
- Dual-action orbital polisher (electric or pneumatic)
- Eye protection (face shield or safety goggles)

Supplies

- 9" Foam polishing pads (do not use wool type)
- Clean, 100% cotton terry cloth towels or soft flannel cloth
- Wet/dry sandpaper (1500 – 2000 grit)
- Soft sanding pad
- 50/50 Solution of isopropyl alcohol and water
- Waxes and Rubbing Compounds

Although there may be others, one supplier distributing its products in Latin America is listed below. Contact them for your paint repair supply needs, choose one, and then use the system of only that one manufacturer. If you need to know how to use the products, ask the manufacturer for training.

3M Automotive Trades Division

22100 Telegraph Road
P.O. Box 358
Southfield, MI 48037-0358
Fax Number: 612-737-4197

REPAIR PROCEDURE

The following procedures may not apply to all conditions or colors. Use the procedure that best suits the condition and color of the vehicle you're repairing.

Repairing and Polishing the Painted Surface

The goal of a minor paint repair is to correct the damage to the upper layer of the painted surface. This is done by removing a thin layer of paint (no more than 0.5 mil) and then restoring the luster by polishing the repaired surface. A quick way to determine the depth of a scratch in the paint is to run your fingernail across the scratch. If your fingernail catches on the scratch, the area will need to be wet sanded and polished.

When doing scratch or swirl mark repairs, use only quality products from one manufacturer. Each manufacturer has its own set of paint repair products that have matching materials. Mixing materials from different manufacturers, or using inexpensive products, compromises the repair quality.

An electric polisher with an adjustable rpm control set between 1,500 and 1,800 rpm is best for polishing. When using a polisher, faster is not better. Too much polisher speed and too much applied force can cause swirl marks or may even burn the paint.

Removing Swirl Marks

Most swirl marks can be removed by using a foam polishing pad and polishing material. Use the polisher at 1,500 to 1,800 rpm with a small amount of polishing material on the pad. Always begin with the finest polishing material. If necessary, progress to the next coarser material only when the fine materials are ineffective.

When polishing, work in small sections (approximately 24" x 24"). Avoid running the polishing pad over edges of a body panel or body lines where the paint is more susceptible to burning through. Let the cleaner do the work. **Do not apply too much force!** Forcing the polishing pad could cause deep cuts into the paint and might damage the surface so badly that it would need to be repainted.

Polishing Dark Colors

This additional procedure, after the polishing process described above, is important to reduce any chance of swirl marks, which show more on dark colors. When polishing is completed, use the same type of foam polishing pad on a random orbital polisher. Apply the finest polishing material to a 24" x 24" work area. Start the polisher, and make three to four passes over the work area. Remove the glaze residue with a cotton terry cloth or soft flannel cloth.

Wet Sanding

This process is used to repair scratches and acid rain damage deeper than 0.2 mil. The object is to remove as little paint material as possible. When wet sanding, stop frequently and dry the work area. This will allow you to see if the wet sanding has removed the damage.

Start by soaking a 1500 or 2000 grit wet/dry sanding paper in water for 15 minutes. Wrap the **soaked** wet/dry sanding paper around a **soft** sanding pad. Lightly sand in one direction across (90 degrees) the scratched surface to highlight the surface damage. Flush the area with clean water. To remove any sanding scratches left by the wet sanding process, use a foam polishing pad and a polishing material. Refer to *Removing Swirl Marks*.

Final Inspection

When the polishing process is done, the paint surface may look perfect, but residue can hide very fine scratches that will become apparent after a few washings. This is especially true for darker colors.

Start the final inspection by spraying a 50/50 solution of isopropyl alcohol and water on the work area and then wiping it dry.

NOTE: Avoid spraying the solution on any unpainted plastic parts such as taillights, turn signal lenses, reflectors, etc. The solution can cause cracking.

Inspect the repaired area, and repeat the polishing process if necessary. Finish the inspection by waxing the completed vehicle with a high-quality wax. Use the wax recommended by the paint repair supplies manufacturer you have chosen.

Preventive Maintenance

Avoiding scratches and dents while the vehicle is in your dealership inventory requires some preventive maintenance. To help reduce the occurrence of scratches and dents, follow these recommendations:

- Park vehicles far enough apart to prevent door dents and dings.
- Leave the exterior shipping protection on the vehicle until it is ready to be sold.
- Implement and use an inventory age control system.
- Use deionized water to reduce water spotting.
- Wash the vehicles with deionized water, soap, and a wash mitt at least once a week.

NOTE: Using a wash mitt will remove any residual dirt from the paint surface. If a wash mitt is not used, the residual dirt on the painted surface will scratch the paint when the surface is dried with a chamois or towel.
- Use a clean chamois or terry cloth towel to dry the vehicles.