

Aerosol Spray Step-by-Step Instructions



Get professional results with the ScratchesHappen Aerosol Kit. Our detailed instructions make it easy to prep, spray and blend for an invisible repair of larger scrapes.

I. INTRODUCTION

These step-by-step instructions guide you through prep, painting, and polishing. We identify the key details needed for a perfect job. Scan Sections II and III to give yourself an overview of the process and paint, then get started in Section IV to achieve your pro finish.

Which Kit Do You Have? Check which kit you purchased below to confirm what's included in yours. These instructions identify the kit and materials required for each step. If you purchased the Essential or Preferred kit, you may need to provide certain materials to perform a step.

TIP: All our paints are waterborne, and clear coat must always be applied over the color to seal and protect it, and to achieve the color match.

The Complete kit

1. Test card
2. Aerosol base color(s)
3. Aerosol Primer
4. Aerosol Clear Coat
5. Prep wipe
6. Tack cloth
7. Masking tape
8. Sand paper pack
9. Microfiber towel
10. Polishing compound
11. Nitrile gloves



The Preferred kit

1. Test card
2. Aerosol Base color(s)
3. Aerosol Primer
4. Aerosol Clear Coat
5. Prep wipes
6. Nitrile gloves



The Essential kit

1. Test card
2. Aerosol Base color(s)
3. Aerosol Clear Coat
4. Nitrile gloves



What tools will you need?

- Protective equipment
- Good ventilation
- Flashlight or handheld LED light source to inspect the finish
- Watch or timer
- Extra lint free rags and isopropyl alcohol
- Small portable fan or hairdryer
- Washing supplies, including paint thinner
- Bucket of water for wet sanding

II. DIY OVERVIEW

First, what is paint? More than just pigment, paint is an emulsion of solids and liquid that performs according to the chemical principles of its ingredients. Today, automobile paint finishes are chemically complex, multi-component, multi-layered finishes. The final finish is the art and science of all layers working together.

How bad is the damage? First, to determine which process is appropriate for your repair, use a good portable LED light (your phone flashlight is fine) to look closely at the damage. If you see bare metal or plastic, you need primer. For deeper scrapes you may need to wet sand to smooth out the surface.

Creating invisible repairs. Aside from color match, the “invisible-ness” of your repair requires a smooth level final surface so that reflected light does not get distorted. In a spray paint repair, that can happen if you have a “hard” line from the masking tape edge. The solution is to sand or polish the boundary of your spray area, to “feather” it into the surrounding paint.

What is the test card for? The test card is for you to check color match before applying paint to the vehicle. Use the small card provided, or get a larger test card. White foam core works great.

The larger foam core also helps you get a feel for the correct speed and distance of the aerosol can as you spray over the surface. You want to apply a full coat, without runs or sags. The opacity and paint thickness will affect the coverage. This is part of the art of the repair. The color you purchased should match your car’s paint color after clear coat is applied and it has dried.

Test the clear coat for dripping/running. Determine if your surface is horizontal, vertical, or sloping. Some angles can promote dripping or running in the clear coat. Practice the clear coat on the test card and hold the test card right up next to the car (but not touching) near the repair area to determine if the clear coat will run. If it does, practice again with a less heavy layer so that the clear coat does not run. You are aiming for a layer that is heavier than that for base color but not so much that it runs.

Using Aerosol Spray Paint

- Shake the can vigorously for 3 minutes before each use.
- If you can see small bumps on the bottom of the can from the rattles inside denting the can, it’s an indicator that you are shaking the can correctly.
- Use at 65-75 degree F.
- Use at humidity < 50%.
- Always spray a quick nozzle test before starting to spray your vehicle.
- To test for dryness, touch the masking tape at the edge of what you sprayed.
- After use, always invert the can and spray out the paint to clear the nozzle.

III. UNDERSTANDING PAINT

View all knowledgebase articles on how to apply paint here:

<https://help.scratcheshappen.com/help/how-to>

Drying temperature. The optimal drying temperature is 65 to 75 degrees Fahrenheit. Your drying times will be affected by temperatures above or below this range. Low temperature will slow drying times.

Humidity. High humidity will slow drying times, and may cause fisheye if there is too much moisture in the air. Wait for lower humidity. Note: “fisheye” looks like a water drop in the paint.

Sunlight/rain. Avoid working in direct sunlight or working on surfaces that have been sitting in direct sunlight. Likewise, avoid working on rainy days!

Layering paint. Each new layer of paint acts like a solvent on the previous layer, and the new wet paint can slightly deform or even reduce the thickness of the layer you’ve already applied. This just means you want to work gently, especially when using a hair dryer to blow air on the paint. You don’t want to blow air under pressure on the paint; you just want to move more air over the paint. So always keep it a few feet away when drying paint with a blower.

Adhesion between primer + base color + clearcoat. Each of these types of coatings has a nice porous paint surface when freshly dried, but the porousness disappears as the surface hardens. The porousness helps the next coating adhere properly via chemical bonds. So, when you transition from primer to base color or from base color to clear coat, if you wait more than 24 hours, the dried coating will not accept the wet coating correctly. If more than 24 hours does pass, simply apply another light layer of the previous coating, letting it dry less than 24 hours before transitioning to the new coating.

Exact color match. As you are adding coats of paint, the color will not appear to be a color match until it has dried. Waterborne paint can have a slight blue cast to it when wet, which disappears as the solvents evaporate (in about 5 minutes). Then, an exact color match won’t happen until the clear coat is applied and it is completely dry.

Tri-coat colors. Some colors require an additional color during application to achieve the exact color match. This includes many pearl whites and some red colors. For these colors, you will receive two different colors in your kit (identified as a tri-coat color kit): the base color and a mid-coat color. One of the cans will be marked with an **L1** and the other has an **L2** at the end of the paint code.

IMPORTANT: Spray the **L1 color first** (base color) and the **L2 color second** (mid coat).

Waterborne Paint Color Match

- The base color is waterborne paint. The chemistry of this paint is such that when wet, it has a slightly blue-ish cast. Don’t be alarmed. Within a few minutes of drying, the true color will be evident. Wait for the paint to dry, with clear coat applied and dry, before evaluating the color match.

IV. THE REPAIR PROCESS

Part 1: Preparation: Sand and Wash

- 1. Wet sand:** Wet sand the area you are going to spray with 500 grit paper. This scuffing is going to smooth out the surface, and create good adhesion with the primer. If it is a large area like a door or quarter panel, consider using a dual action random orbital sander, but you can always do it by hand. For most repairs that are smaller, you can wet sand by hand.

Pro Tip: Make sure to sand away all rust, chips, and any loose paint. Sand enough to smooth out scrapes, but if they are too deep, use spot putty (#2 below). Lightly scuff the nearest surrounding clear coated paint to improve the adhesion. Feather your more heavily sanded areas into the lightly sanded areas, so they meet smoothly.

- 2. Optional Spot Putty:** If you have deep scratches that sanding can't remove, use a glazing/spot putty like [3M 907 Bondo](#), an easy to use, sandable spot putty to fill them in.

Apply the spot putty using a body filler [spreader tool](#). Apply a uniform layer to fill in the scratches and let it fully dry. Then wet sand (500 grit paper) the spot putty until smooth, contouring your hand to the shape of the panel, and using even pressure so you don't create an uneven surface. Consider using a foam or wood block to wrap the sand paper around for consistency.

- 3. Wash Thoroughly:** Wash the entire area with soap and water; this is an important step to remove any contaminants such as wax, grease, and heavier road grime that will ruin the job. Dawn dish-washing detergent works well. Dry the area thoroughly, and if necessary, use a hair dryer on the high setting to drive any water out of cracks or crevices. Compressed air also works great to drive out water and dry the area.

- 4. Mask the area:** Apply automotive masking tape to create a boundary some distance away from the repair. Consider the area you want to prep to be large enough to cover the repair, and about 10-15% more area as a buffer, to feather the repair into. Always tape and cover door handles, windows, antenna openings and the like. Use tape at the edge, and use plastic or paper beyond to protect all the nearby paint from overspray (especially if you are outside).

Pro Tip: Try to paint to a panel line, a molding transition, a door boundary, or an angled surface, so that the repair finish blends into the rest of the finish invisibly. **Solution:** don't just tape any region around your repair, consider the area you are going to tape carefully, and have it follow a boundary line that helps the repair blend better. This will avoid having a noticeable paint line in the middle of a body panel.

Required for this step: Complete kit

You need to have sandpaper to do this step.

Sand Paper Grit



The sand paper in the kit comes in 500, 1000 and 1500 grit.

Dark grey = 500 (used for sanding primer or spot putty)

Medium grey = 1000 (used for sanding primer or paint between coats)

Light grey = 1500 (used for sanding between coats)

Required for this step: Complete kit

You will need to have tape to do this step.

5. Degrease the area with a prep wipe. This is an important final step to eliminate any remaining grease from your hands or other contaminants, which will show up as fisheyes in the paint finish, and require resanding and repainting.

6. Tack cloth: Wipe down the entire area with a tack cloth to remove dust.

Part 2: Spray A Test Card

Always spray a test card first! Before spraying your vehicle, spray the primer (if you have it), paint and the clear coat onto a test card using correct drying times between coats as described in these instructions. See this [how-to video](#) for proper technique.

Maintain a consistent spray distance of 8 inches because spraying from too far away allows some color pigments to dry in the air and drop out. Pigments that don't land on the painting surface affect the color match.

Allow the clear coat to dry before comparing the test card to your vehicle paint. For your test, use at least two coats each of primer, and 3 coats each of color and clear coat to make sure the depth and coverage is enough to be an accurate test. Thin paint or clear coat won't match properly, even if the color is correct.

If your paint color is a metallic or pearl finish, [see this article](#) for more tips on applying these paints.

Part 3: Spray The Primer

Note: if you don't need to spray primer, skip to Part 4.

1. Nozzle test: Before any spray application, shake the can well for 60 seconds, and then trigger a short test spray to make sure the nozzle is clear and paint is coming out properly, and uniformly (no blobs). Do this on a fresh card so you can see the pattern, aimed away from the vehicle surface, so there is no overspray on your repair from this nozzle test.

2. Spray Technique: Use good spray technique, which involves releasing the nozzle at each end of each stroke, so there is no paint buildup at the end of each stroke when you pause and change direction. For primer and paint, overlap each stroke by 50% to avoid the zebra effect of incomplete coverage. The goal is to avoid runs or sags in the paint. Hold the can 6-8" away from the surface. Don't start the first stroke in the middle of your repair, always start spraying from one side, and always keep the spray can moving at a consistent speed and distance.

3. Spray the primer: Make the very first coat a light dusting to create a good tacky layer. Wait a few minutes, then apply the first of at least two more full medium heavy coats. Use 50% overlapping strokes. Aim such that you don't build up a hard edge at

Required for this step: Complete or Preferred kit

You will need to have prep wipes and a tack cloth to do this step.

Use Personal Protective Equipment

- Dual cartridge respirator
- Eye protection
- Nitrile gloves
- Protective clothing
- Work in a ventilated area

Required for this step: Complete or Preferred kit

You will need to have primer and possibly sand paper to do this step.

your tape lines. This is best accomplished by spraying “in” from the tape edge and spraying less when covering the perimeter of your area. You can use a hair dryer 18 inches away (not too close or too much air pressure can push the paint) using no heat, to speed up the drying time in between coats. Assume 30 minutes of dry time per coat, at normal temperature (65-75F) and humidity (<50%). Check for how dry it is by touching the tape right next to the surface you painted.

- 4. Sand:** Now is the time to feather the edge of the primer you just sprayed into the surrounding paint, so you can't feel a hard edge between primer and the factory finish. The primer transition to any surrounding factory paint should be smooth. Dry sand the primer with 500 – 1000 grit paper lightly to also remove any nibs, dust or small blem that are on the paint. The primer surface should be completely smooth and blem-free before spraying the base color coat.

Pro Tip: The feathered area allows the primer to blend in better in the final result. So don't just sand the very edge of the primer; sand the outer inch or two of the primer region to gradually thin it out and create a smooth interface to the surrounding factory finish.

- 5. Re-coating time:** Do not wait more than 24 hours between the last primer coat and the first paint (color) coat. This has to do with how the last primer coat chemically “accepts” or bonds with the first base color coat. If you wait more than 24 hours, the bond between these coats is weakened.

Part 4: Paint Prep

Note: if you didn't need primer, this is your first base color application. Review Part 2, Spray A Test Card, before proceeding.

If you DID paint primer and you dry sanded it, now blow the area with compressed air, then use the tack cloth to remove any lint or dust.

DO NOT use the prep wipe on this freshly painted primer, or it will remove the primer creating streaks and an uneven surface.

Part 5: Spray The Color Coats

Tri-coat Colors: If your color is a “tri-coat”, it requires two separate applications, the first is the base color and the second is called the mid coat. For tri-coat colors you will have received two cans of paint, one marked with an **L1** and the other marked with an **L2** after the color code. Always spray all of the L1 base color coats first if you have a tricoat. After the L1 base layer coats have fully dried, you will then spray the L2 mid coats.

Summary of Dry Times

All times below assume application temperature is 65-75 degrees F and humidity is below 50%

Between primer coats:
30 minutes

After primer, before painting:
60 minutes – 24 hours

Between base color coats
10-20 minutes

After base color, before clear coat
60 minutes – 24 hours

Between clear coats
30 minutes

After clear coat, before polish
72 hours

After clear coat, before hand wash
72 hours

After clear coat, before machine wash
30 days

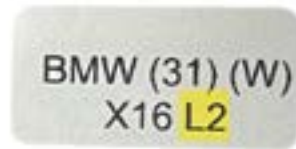
After clear coat, before waxing
30 days

After clear coat, before ceramic coat/film wrap
60 days

See the example tri-coat labels below:



L1 is Base Color



L2 is Mid-Coat

1. **Nozzle test:** Shake the can well for 3 minutes, and then make a test spray on a test card to make sure the nozzle is clear and paint is coming out properly (fully atomized with no blobs or big drops).
2. **Spray the paint:** If you have a tri-coat, use the can with “L1” on the label as shown above. If you don’t have a tri-coat, you will only have one can, so use that one. Apply the first of 3-4 light coats from a distance of 8 inches. Use 50% overlapping strokes. Aim such that you don’t build up a hard edge at your tape lines. This is best accomplished by spraying “in” from the tape edge and spraying less at the perimeter of your area.

Drying: You can use a hair dryer 18 inches away (not too close or too much air pressure can push the paint) using no heat, to speed up the drying time in between coats. Assume 10-20 minutes of dry time per coat, at normal temperature (65-75 degrees F) and humidity (50%). Check for how dry it is by touching the protective paper right next to the surface you painted.

Mistakes during base color: If you make a mistake such as a blob of paint or a nib, run, or sag happens, stop painting and let the coat dry fully (at least 30 minutes). Then DRY sand the imperfections with 1000 – 1500 grit paper, blow with compressed air, and tack cloth again.

Note: DO NOT WET SAND THE BASE COLOR. This is waterborne paint, so if you wet sand it, you can wash off the fresh waterborne basecoat.

Final Coat: Finish the base color application with at least one full medium coat. If your paint color is metallic, see this article for more tips on applying these paints: <https://help.scratcheshappen.com/help/why-does-the-touch-up-paint-look-too-dark>

3. **Tri-coat application:** If you have a tri-coat, you have an extra paint application. Now apply 2 light coats of the mid-coat, which has the **L2** at the end of the color code.
4. **Wait** at least 60 minutes after the last paint coat has been applied before applying clear coat. The paint should be completely dry before applying clear coat.

Do You Have A Tri-coat?



If you have a Tricoat color, you will receive two cans of color. One is marked with an **L1** (layer 1) and the other has an **L2** (layer 2) at the end of the paint code.

IMPORTANT: Spray the **L1** color first (base color) and the **L2** color second (mid-coat).

Part 6: Prep Clear Coat

Note: Clear coat is necessary for the color match; the paint by itself won't match your vehicle's paint. Clear coat is applied just like the base color, however often it is applied with slightly heavier coverage than the base color, and an extra coat can be applied for more protection and gloss.

Prep for spraying clear coat by using a tack cloth to remove any lint or dust. The surface should be completely smooth and blem-free before spraying the mid-coat.

Do NOT use a prep wipe on the base color or it will remove the paint.

Part 7: Spray Clear Coat

- 1. Nozzle test:** Shake the can well for 60 seconds, and then make a test spray to make sure the nozzle is clear and clear coat is coming out properly, and uniformly.
- 2. Spray:** Apply the first of at least two or three medium to full coats of clear. Use 50% overlapping strokes. Aim such that you don't build up a hard edge at your tape lines. This is best accomplished by spraying "in" from the tape edge and spraying less at the perimeter of your area.

Drying: You can use a hair dryer 18 inches away (not too close or too much air pressure can push the paint) using no heat, to speed up the drying time in between coats. Assume 30 minutes of dry time per coat, at normal temperature (65-75 degrees F) and humidity (50%). Check for how dry it is by touching the protective paper right next to the surface you painted.

Part 8: Polish Clear Coat

Note: Wait 72 hours before polishing the clear coat. It needs to fully harden and cure before this step.

- 1. Polish the clear coat** with polish compound and a micro fiber towel to achieve the final gloss.
- 2. You are done!**

Contact Us

If you have any questions or feedback for us, please don't hesitate to reach out to support@scratcheshappen.com.

Required for this step:

Any kit

You will need to have a tack cloth or some sticky tape, and clear coat to do this step.

Storing & Clean Up

- After use, always invert the aerosol can and spray out the paint to clear the nozzle.
- Store the small supplies in a cool dry area that won't freeze.
- Base color and mid-coat paint washes off with warm water and soap.
- Primer and Clear coat wash off with paint thinner.

Required for this step:

Complete kit

You will need to have polish compound and a polish cloth to do this step.