TouchUpDirect Instructions for Applying Waterborne and Urethane Paints w/ TUD Spray.

Familiarize yourself with these instructions before you start. *The successful application of professional and manufacturer-quality paints requires specific techniques and timing*; as noted in these instructions; and which can guide you to a desirable result with TouchUpDirect (TUD) products. These instructions are what to do, not a minimum or approximation. If you do more or less than instructed, it may cause your touch up job to run afoul of intended results.

Use the included test card to practice with your paint. This is not a suggestion. Your experience with the test card will give you a feel for the paint, the applicator, how it applies, how the paint works, how the coating will look, how much paint to use and, of course, if it’s the right color.

1. Test your technique.
2. Make sure the color is the right one (Don’t laugh. There’s always someone who will put white paint on a black car and wonder when it’ll change color.)
3. *Including the clearcoat*, use applications of your selected paint combination to the test card or a “spray-out” sheet to understand how many coats are necessary to achieve the finish you expect. Refer to these instructions for the techniques required to do so.

Rules for Paint.

1. The optimum drying temperature range is between 65 and 75-degrees Fahrenheit. Temperatures outside of this range will affect drying times.
2. In higher-humidity or lower-temperature settings, drying times will slow.
3. Never do any of these paint processes in direct sunlight or on surfaces that have been sitting in direct sunlight. Also, don’t do this in the rain. Of course, you knew this already.
4. When applying a new/additional layer of paint to an existing layer, the new paint will act as a solvent and can distort/mottle/remove the layer you’ve already applied. Work gently!
5. Do not allow more than 24 hours of drying time to pass after the final coating of primer (prior to basecoat/color) or basecoat (prior to clearcoat), or the dried coating will not properly accept the new layer, ie: color over primer, or clear over basecoat. It’s a chemical thing: freshly dried paint’s surface is porous, but as it cures (hardening), that porousness goes away. If circumstances require you to wait more than 24 hours, apply another light coat of the extant paint, letting it dry the required time before the next paint.

Phase 1: Preparation.

1. Clean the area to be painted with soap and water. *This is critical with aerosol paint.*
2. Use TUD’s Wax & Grease Remover Wipe at this time.
3. Dry the area to be painted thoroughly. If you’re working in an area that is hard to dry, use a hairdryer held 12-16 inches from the paint’s surface to ensure dryness.
4. Fine sandpaper can be used to prepare the area to be painted (though you can perform touch up without sanding). Use 1000-grit sandpaper (available from TUD) to smooth the zone within which you’ll be working. Limit pressure and sanding beyond this area to avoid “redamage”.
   For heavy damage, such as a scrape from asphalt/cement/parking block, start with 500-grit (for auto paint, 500 is coarse). You can use up to 1000-grit if you want to proceed slowly (and which you’ll need to clean up abrasions from the 500-grit anyway). If the surface is still not smoothed to your satisfaction, rework it – gently – with finer paper.
5. Following the use of sandpaper, repeat steps 1-3.
Using TUD Spray and Aerosol Applicator

When a “section” of bodywork needs to be painted, TUD Spray is ideal. Aerosol paint works for panels and whole parts, while the jar and pen are for touch up and details. Spraying paint requires technique; practicing with the test card or a spray-out/piece of cardboard helps.

1. Spray-painting is best done on days without wind, or in a wind-sheltered area.
2. Shake water-based aerosol LIGHTLY before using. Shake urethane-based aerosol WELL. Re-shake both regularly while applying.
3. Use the test card or spray-out (a foot-by-foot piece of cardboard will suffice) to familiarize yourself with the spray pattern before beginning your attack.
4. The aerosol spray tip rotates, switching the spray fan from vertical to horizontal. If you don’t understand the reason for doing this, don’t do this.
5. Aerosol paints are best applied in light coats. Light coats help paint lay down smoothly and consistently, improve even coverage, reduce runs, drip less, and dry more evenly.
6. Hold can 6-8 inches from application surface while spraying (test card is six inches long).
7. Apply paint in even coats back and forth, spraying from right to left, then left to right.
8. Start each pass 1-2 inches before the section being painted to establish consistent edges.
9. Never initiate spray directly on the repair/repaint area.
10. Leave 1-2 inches overlap on each spraying pass (back and fourth, fourth and back). This will help avoid zebra-stripe paint jobs.
11. Paint needs to be a certain “dry” before you can put tape on it to change colors. This “flash-time” for TUD Spray is 5-15 minutes. If you don’t know what this is, don’t do this.
12. Dry times for aerosol: allow the surface to “dry to the touch” between coats. This can mean waiting up to 30 minutes to apply an additional coat.

After Painting:

13. After completing painting, hold the aerosol can upside-down and depress the spray nozzle in two or three quick bursts to clear the spray tip.
14. Store the can upright with its cap on in a cool, dry place, such as your wine cellar.

Phase 2: Primer.

Primer is necessary if the original base material (substrate) – metal/fiberglass/carbon-fiber/whatever – is exposed. Skip this and proceed to Phase 3 if you are not doing a primer coat.

If you bought TUD’s primer, follow these steps. If you’re using other brands or products that did not come from TUD, or you’re painting on bare metal/substrate without primer, you may encounter problems with your final finish and we cannot ensure the final quality of your paint job. Remember to follow the rules, and don’t cross the streams.

1. Apply primer over the entire area you are planning to paint, making sure all exposed substrate is coated.
2. 2-3 light coats of primer should cover the area properly; additional light coats are okay.
3. Allow 15-30 minutes between coats for drying time.

Phase 3: Basecoat/Color Application.

1. Apply the basecoat paint in even, consistent coats. Plan to do 2-3 light coats on the area.
2. Be careful not to apply too much paint to the surface being worked: multiple light coats are always preferable to one excessive coat. You can always apply another thin coat.
3. Keep your work within the surface to be painted. Do not overlap on to existing paint you don’t plan to rework.

4. You may be replacing paint that’s been removed, but paint is not filler. If a gouge or hole in the surface you are painting is of conspicuous depth, you’ll want to fill it in – see “Notes” below.

5. Before applying additional coats, allow 15-30 minutes between coats for paint to dry.

6. Waterborne paint is dry when it has reached an even, matte finish and is no longer glossy.

7. In colder climates, you may use a hair dryer to speed drying. Hold the dryer 12-16 inches from the area for a minute at a time.

**Tricoat Colors:** Tricoats require the same steps as above: it’s the addition of a second color coat over the first. After the basecoat/color is applied, you will apply an additional 2-4 coats of the midcoat prior to applying the clearcoat. TUD will identify if your finish is a tricoat.

**Notes About Filling a Scratch or Gouge:** As we mentioned, touch up paint is not a filler. If you have a gouge/hole in the paint of conspicuous depth, it’ll need some filling. TUD will be releasing a product for this exact purpose in the summer of 2017 – stay tuned.

**Notes About Color:** TUD’s waterborne paint will not appear to be the exact color until the clearcoat is applied and it is completely dry. All modern paint systems require a clearcoat to achieve the correct hue and desired finish, whether glossy or matte.

**Phase 4: Clearcoat.**

TUD’s formulation of clear likes to be applied a little heavier than the basecoat/color, up to 50% more per pass. This applies to both urethane and waterborne products. Such variation between coats and coatings is typical of the paint industry.

When applying a clearcoat, the clear will look clean and glossy when it goes on (if you’re doing it right). Practice the clearcoat on your test card or spray-out, and take note whether the surface you’ll be painting is sloping or vertical (and how likely that surface is to spur drips or runs).

1. After the basecoat has dried, it’s time to apply the clearcoat. The basecoat/color should be ready for clearcoat in less than an hour – at least 15-30 minutes.
2. Apply a heavy, even coat. Remember to apply a layer that’s heavier than you did with the color – up to 50% more per pass – *but not so much that the paint drips or runs*.
3. Let that coat dry for 15-30 minutes.
4. Apply a second heavy, even coat and inspect the painted area: make sure the clearcoat has thorough, even coverage and is drying clear and glossy.
5. If necessary, apply one more coat of clear.
6. Allow 15-30 minutes of drying time between clearcoat applications, but do not let more than 24 hours pass between applications.

**Phase 5: After Painting.**

Once the clearcoat has dried for at least 48 hours, the painted area is ready for polish or wax. At this time, you can also wet-sand if you have imperfections in the clearcoat. After wet-sanding, polishing compound will restore the gloss. Do not wet-sand if you didn’t apply a clearcoat.
If you seek the best possible paint repair, wet-sanding and polishing are recommended. The necessary materials for wet-sanding can be ordered with your paint from TUD, as can polishing materials. Use the 2000-grit sandpaper available from TUD for wet-sanding. The company’s polishing compound is one of the best, made in Southern California. It’s a formula used by modern body shop professionals.

Don’t be scared away from detailing practices like wet-sanding and the use of polishing compounds. There is A LOT of information online, some of it very advanced, but the basic techniques are simple and can be performed by an Average Joe with an average garage.

**Contact Us?**
If you have any questions or feedback for us, please don’t hesitate to reach out to Help@TouchUpDirect.com.