

MAN, I HATE SPOT PAINTING!

I WANT TO DO A GOOD JOB, BUT SPOT PAINTING ALWAYS MAKES ME A LITTLE NERVOUS!

# SPOT PAINTING EASIER WITH WD CARC

THEN I'VE GOT SOME GOOD NEWS FOR YOU!

WHAT?! WHO SAID THAT?

I DID, I'M SPOT, AND I'M HERE TO TELL YOU ALL ABOUT A NEW AND IMPROVED CARC THAT'S EASIER AND SAFER TO USE.

IT'S CALLED WATER DISPERSIBLE (WD) CARC.

IT CONTAINS WATER AND IS THINNED WITH WATER, MAKING YOUR JOB A WHOLE LOT EASIER THAN IT USED TO BE.

THERE ARE A LOT OF DIFFERENCES BETWEEN WD CARC AND THE OLD SOLVENT-BASED CARC.

AND YOU'LL BE VERY HAPPY WITH MOST OF THEM.

## The Differences

- **Compatibility.** Since WD CARC is fully compatible with all existing CARC primers and topcoats, you can use it to touch up a vehicle that's been painted with solvent-based CARC.
- **Flexibility.** WD CARC is more flexible after application. That means fewer problems with chipping and cracking.
- **Mar resistant.** WD CARC is more durable and doesn't scratch as easily as the old CARC. That means less time spot painting to fix scratches and scrapes.
- **Weather resistant.** WD CARC is much more durable in all weather conditions. In fact, tests have shown that WD CARC can last up to twice as long as the original solvent-based CARC.
- **Color stability.** WD CARC doesn't fade like the old CARC. So when you do have to spot paint, you won't have to worry about the colors not matching.

## Before You Start

THE FIRST QUESTION YOU SHOULD ASK IS, "DOES MY VEHICLE NEED SPOT PAINTING?"

HOW CAN I TELL?

TOUCH-UP PAINTING IS DONE TO PREVENT CORROSION-NOT TO MAKE YOUR EQUIPMENT LOOK BETTER.

IF PAINT IS MARR'D, BUT NOT DEEP ENOUGH TO SEE BARE METAL, YOU DON'T NEED TO PAINT.

ONCE YOU'VE DECIDED THAT SPOT PAINTING IS NECESSARY, TAKE SOME SAFETY PRECAUTIONS.

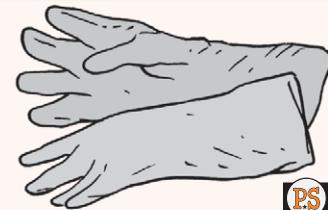
ALTHOUGH WD CARC IS WATER-BASED, THE PERSONAL PROTECTIVE EQUIPMENT REQUIRED FOR SPRAY AND BRUSH APPLICATIONS IS THE SAME AS FOR SOLVENT-BASED CARC.

HERE'S WHAT YOU'LL NEED...

• **Protective clothing.** Wear clothing that covers all of your skin. Coveralls work well. Keep the sleeves rolled completely down. When sanding and grinding, wear coveralls that are disposable or that stay at work to prevent any paint dust contaminants from being carried home.

• **Gloves.** Wear silicone rubber gloves that will keep the paint off your hands. WD CARC does contain some solvents and they can be absorbed through your skin. Just like with any vehicle paint, it's best for your health and safety to eliminate contact with solvents and paint. Besides, WD CARC that dries on your skin won't come off easily. You'll have to scrub with soap and water to remove it.

Rubber gloves protect hands from solvents



PS MORE

- **Face Protection.** Use a face shield or splash goggles to keep paint off your face and out of your eyes, especially when mixing. You'll need the shield or goggles to protect your eyes if you use a power sander or grinder to prepare the surface, too.

- **Respirator.** A respirator—not just a dust mask—is always required when spray painting with WD CARC. When spot painting with a brush or roller, however, you may or may not need a respirator, depending on the conditions and location.

Contact your local occupational safety and health office to perform an air sample evaluation of your work area. If a respirator is required, they'll do a baseline medical evaluation, fit-test you for the proper respirator and train you in its use. Let them know if any sanding or grinding of old paint will be done. A different type of respirator may be required to filter out dust.

- **Hearing Protection.** Normally you will not need hearing protection when you paint. However, you will need earplugs or noise muffs if you use a power sander or grinder to remove old paint and rust. The folks from your local occupational safety and health office can tell you the right hearing protection to use.



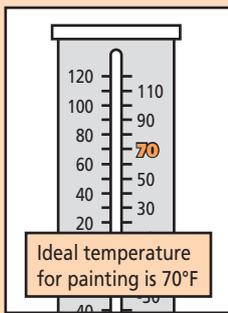
### Plan Your Painting



PLAN AHEAD AND YOU'LL ONLY HAVE TO PAINT YOUR VEHICLE *ONCE!*

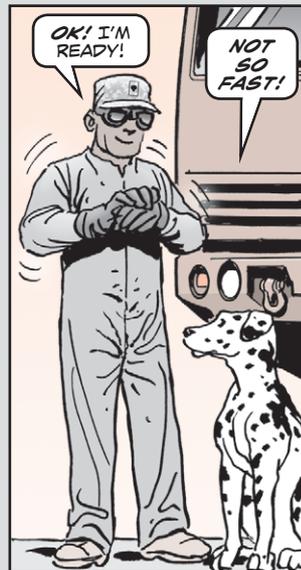
Weather conditions when you paint are important. Painting when temperatures are too hot or too cold greatly affect the cure time. The paint may not dry properly and probably will not last. So paint in the shade, on overcast days, or in the evening hours to avoid direct sunlight.

You'll get the best results when the temperature is between 60°F and 90°F. The ideal temperature is 70°F with a humidity of 45-50 percent. You can paint with WD CARC when the temperature and humidity are more or less than the ideal, but cure time will be affected.

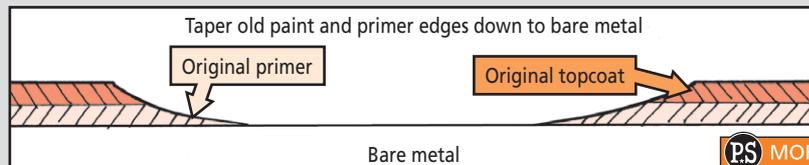


Cure time increases with low temperatures and high humidity. At 70°F, it takes about one week for a complete cure, though the vehicle can be handled in a few hours. Good, proper ventilation will also assist in drying when humidity is high (greater than 70%). Higher temperatures and lower humidity will reduce cure times for WD CARC.

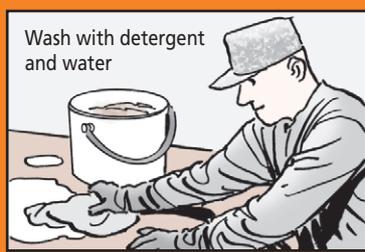
### Surface Preparation



- **Sanding.** If the topcoat is merely scratched, lightly scuff sand the blemished area. Damage that exposes bare metal often involves rust. You must remove all traces of rust by sanding or with an orbital grinder. The surface immediately surrounding the exposed metal should then be sanded, using a feathering-in technique. In other words, the thickness of the coat should be smoothly tapered starting from the center and going from bare metal, to primer, to topcoat. Clean up any dust or paint particles with a wet/dry HEPA vacuum or wet wipes. You should also use a sweeping compound when necessary to suppress dust.



- **Cleaning.** Wash the surface thoroughly with a solution of liquid detergent, NSN 7930-00-282-9699, and water. You must remove all loose sanding debris, grease, oil (including fingerprints), and fuel residue to ensure the WD primer and WD CARC will properly stick to the surface. Rinse completely with clean water and let the area dry. Crevices and seams will take longer to dry, so make sure all moisture is gone before continuing. Be very careful to keep the surface free of dirt, dust, fingerprints and other contaminants after cleaning.



- **Pretreatment.** If the old paint is sound and you don't have to sand to bare metal, you won't need the pretreatment and WD primer steps. Otherwise, immediately coat all bare metal surfaces with a coat of wash primer. The wash primer protects the surface and will help the WD primer bond to it. A sponge gives better control for this application.



### Step-by-Step Touchup

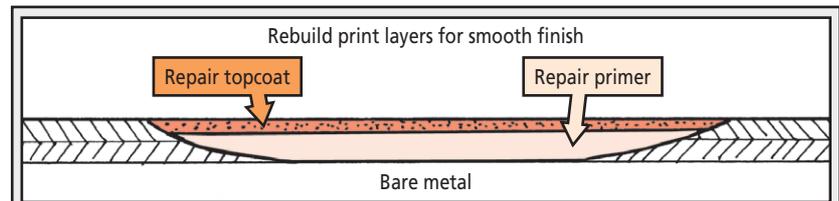
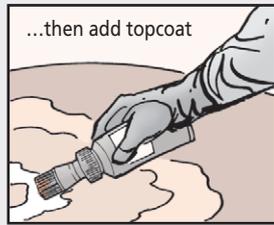
After the pretreatment coating is dry—at least 30 minutes, but no more than 24 hours—brush on a coat of WD primer. The WD primer will dry hard in about five to six hours. High humidity and low temperatures will slow the drying process.



Once the WD primer is dry, it's time to apply the WD CARC topcoat. WD CARC is available in bulk kits of 3 pints, 3 quarts, 3 gallons or 15 gallons. You can also use self-contained touch-up kits for stenciling or spot painting small areas. These kits come in an aerosol spray, a sponge roller applicator and brush-top applicator. Choose the one that best suits your needs.

Thoroughly mix the WD CARC topcoat following the instructions that come with the paint. Be especially careful not to thin the paint with too much water.

Use a paint brush or roller to apply the WD CARC. Apply the paint lightly at the outer edges and heavier as you move to the middle. That rebuilds the paint layers to the original thickness.



Topcoat cure time will depend on temperature and humidity, but at an optimum temperature of 70°F, Type I WD CARC will dry to the touch in approximately 50 minutes, dry hard in four hours, dry through in five hours, and completely cure within seven days. Type II WD CARC will dry to the touch in approximately 60 minutes, dry hard in six hours, dry through in eight hours, and completely cure within seven days.

### Paint Failures

There are a number of reasons why WD CARC may fail soon after application:

- The surface was improperly prepared. There was loose or blistered paint, sanding dust, grease or oil, diesel fuel, or fingerprints on the surface. Or it could be that a non-CARC paint was used previously and not removed.
- No pretreatment or primer was used. The topcoat was applied directly to bare metal.
- The primer did not have time to dry properly before the topcoat was applied.
- The surface was too hot or cold. The paint didn't have a chance to cure properly.

As with most paint failures, the only sure cure is to strip it down to bare metal and start over. It takes a lot longer to do it over, so your best bet is to do it right the first time.

### Paint Removal

There are times when you need to remove WD CARC from a surface that can't be scratched or scored—like hydraulic cylinders, cannon mounts and aircraft surfaces. You can't grind or sandblast without damaging the equipment.

In those cases, use epoxy and polyurethane paint stripper to remove the WD CARC. Make sure you wear protective gear, including rubber gloves and eye goggles.

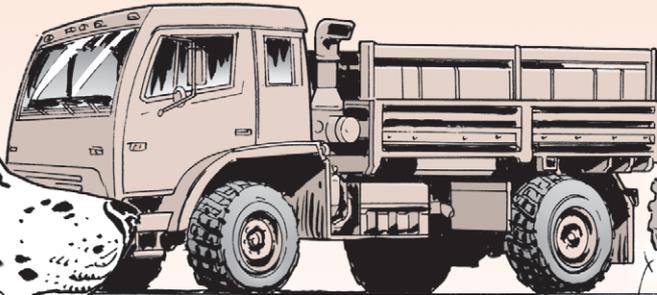
IMPROVED PAINT STRIPPERS FOR REMOVING WD CARC ARE BEING DEVELOPED. UNTIL THEN, USE THE STRIPPER THAT COMES WITH THESE NSNs...

NSN 8010-00-	Qty
142-9273	1 pt
181-7568	1 gal
926-1488	5 gal
926-1489	55 gal

Be careful where you use the stripper, though. It can damage non-metal surfaces such as plastic and rubber.

**Paint NSNs**

NOW THAT YOU'RE UP TO SPEED, USE THESE NSNs TO GET THE WASH PRIMER, WD CARC PRIMER AND WD CARC TOPCOAT YOU NEED...



Wash Primer		
NSN 8030-	Qty	Spec
00-850-7076	1 qt	DOD-P-15328D
00-281-2726	1 gal	DOD-P-15328D
01-015-6104	1 gal	MIL-C-8514C
00-165-8577	5 gal	DOD-P-15328D
00-082-2425	5 gal	MIL-C-8514C

Other wash primers will be available in the near future.

WD Primer			
NSN 8010-01-	Size	Color	Spec MIL-
193-0519	1 1/4 qt	White	P-53030A
193-0520	1 1/4 gal	White	P-53030A
193-0521	5 gal	White	P-53030A
218-0856	1 qt	Light green	PRF-85582C
218-7354	1 gal	Light green	PRF-85582C
193-0516	1 1/4 qt	White	DTL-53022, Type 1
193-0517	1 1/4 gal	White	DTL-53022, Type 1
309-0328*	1 1/4 qt	White	DTL-53022, Type 2
309-0329*	1 1/4 gal	White	DTL-53022, Type 2
368-6249*	4 gal	White	DTL-53022, Type 2
309-0327*	5 gal	White	DTL-53022, Type 2

WD CARC Topcoat, Type I			
Color	Fed Std	Kit Size	NSN 8010-01-
Green	34094	3 pt	492-6637
		3 qt	492-6638
		3 gal	492-6639
		15 gal	492-6640
Brown	30051	3 pt	492-6641
		3 qt	492-6642
		3 gal	492-6643
		15 gal	492-6644**
Tan	33446	3 pt	492-6645
		3 qt	492-6646
		3 gal	492-6648
		15 gal	492-6649
Black	37030	3 pt	492-6650
		3 qt	492-6651
		3 gal	492-6652
		15 gal	492-6654
Black	37038	3 pt	545-1815
		3 qt	545-1817
		3 gal	545-1818
		15 gal	545-1820
Aircraft green	34031	3 pt	492-6655**
		15 gal	492-6658**
Aircraft gray	36300	3 pt	492-6659**
		3 qt	492-6660**
		3 gal	492-6661**
		15 gal	492-6663**

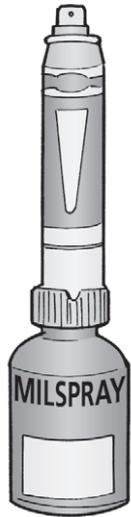
WD CARC Topcoat, Type II			
Color	Fed Std	Kit Size	NSN 8010-01-
Green	34094	3 pt	493-3168
		3 qt	493-3169
		3 gal	493-3170
		15 gal	493-3171**
Brown	30051	3 pt	493-3172
		3 qt	493-3173
		3 gal	493-3174
		15 gal	493-3175
Tan	33446	3 pt	493-3176
		3 qt	493-3177
		3 gal	493-3179
		15 gal	493-3180
Black	37030	3 pt	493-3182
		3 qt	493-3183
		3 gal	493-3190
		15 gal	493-3191
Black	37038	3 pt	545-1944
		3 qt	545-1947
		3 gal	545-1949
		15 gal	545-1955
Aircraft green	34031	3 pt	493-3192
		3 qt	493-3193
		3 gal	493-3194
		15 gal	493-3195**
Aircraft gray	36300	3 pt	493-3196**
		3 qt	493-3197
		3 gal	493-3198
		15 gal	493-3199**

WD CARC Topcoat, Type II (continued)			
Color	Fed Std	Kit Size	NSN 8010-01-
Red	31136	3 pt	545-1823
		3 qt	545-1825
		3 gal	545-1826
		15 gal	545-1835
Yellow	33538	3 pt	545-1836
		3 qt	545-1838
		3 gal	545-1840
		15 gal	545-1841
Olive drab	34088	3 pt	545-1842
		3 qt	545-1843
		3 gal	545-1844
		15 gal	545-1845
Blue	35044	3 pt	545-1938
		3 qt	545-1939
		3 gal	545-1941
		15 gal	545-1942
White	37875	3 pt	545-1956
		3 qt	545-1957
		3 gal	545-1958
		15 gal	545-1959
Sand	33303	3 pt	545-1960
		3 qt	545-1961
		3 gal	545-2016
		15 gal	545-2035

\*Order on a DD Form 1348-6 and put "NSN not on AMDF" in the REMARKS block.

\*\*NSN has an AAC of "V" on AMDF. When stocks are exhausted, order on a DD Form 1348-6 from RIC GSA and put "NSN not on AMDF" in the REMARKS block.





WD CARC Aerosol Spray, Type II (2.37-oz. bottle)			
Color	Fed Std	Qty	NSN 8010-01-
Green	34094	Box of 12	546-7712
Tan	33446	Box of 12	546-7711
Black	37030	Box of 12	546-7713
Brown	30051	Box of 12	546-7709
Sand	33303	Box of 12	547-1917
Yellow	33538	Box of 12	547-1919
Olive drab	34088	Box of 12	547-1920
Gray	36261	Box of 12	547-1921
Gray	36300	Box of 12	547-1922
White	37875	Box of 12	547-1923
Aircraft green	34031	Box of 12	553-5824
Green Brown Black	34094 30051 37030	Box of 12 (4 of each color)	546-8093



WD CARC Brush-Top Applicator, Type II (2.37-oz. bottle)			
Color	Fed Std	Qty	NSN 8010-01-
Green	34094	Box of 12	546-7585
Tan	33446	Box of 12	546-7587
Black	37030	Box of 12	546-7588
Brown	30051	Box of 12	546-7589
Aircraft red	31136	Box of 12	546-7591
Aircraft insignia blue	35044	Box of 12	546-7592
Sand	33303	Box of 12	547-1876
Yellow	33538	Box of 12	547-1878
Olive Drab	34088	Box of 12	547-1880
Gray	36231	Box of 12	547-1882
Gray	36300	Box of 12	547-1884
White	37875	Box of 12	547-1888
Green Brown Black	34094 30051 37030	Box of 12 (4 of each color)	546-7590

**WD CARC Roller-Top Applicator, Type II (2.37-oz. bottle)**

Color	Fed Std	Qty	NSN 8010-01-
Green	34094	Box of 12	546-7593
Tan	33446	Box of 12	546-7594
Black	37030	Box of 12	546-7596
Brown	30051	Box of 12	546-7595
Aircraft red	31136	Box of 12	546-7598
Aircraft insignia blue	35044	Box of 12	546-7599
Aircraft white	37875	Box of 12	546-7699
Aircraft yellow	33538	Box of 12	546-7700
Sand	33303	Box of 12	547-1906
Olive drab	34088	Box of 12	547-1908
Gray	36231	Box of 12	547-1910
Gray	36300	Box of 12	547-1913
Aircraft green	34031	Box of 12	553-5822
Green Brown Black	34094 30051 37030	Box of 12 (4 of each color)	546-7597

