

Preparing Parts for Painting



The objectives of painting a part are to protect the metal and to provide a beautiful colored surface. No matter how beautiful the paint, if it doesn't stick to the surface, it will not be satisfactory. Excellent paint adhesion to a metal surface depends mainly on two things, the quality and characteristics of the primer used, and how well the surface is cleaned and prepared for painting. Prepare the surface as follows to help the paint have the best adhesion possible.

Steps for Excellent Paint Adhesion on Mar-K parts

The following steps are a general guideline to obtain excellent paint adhesion to your new parts

1. Select the primer product with the best adhesion properties within the paint system you are using. Products such as [PPG "DPLF Epoxy Primer"](#), Sherwin Williams G.B.P. Etching Filler or Etching Primer ([California only](#) or [Rest of the Country](#)), and [DuPont Variprime 615S/625S Self-Etching Primer](#) will provide excellent adhesion to Mar-K metal parts that have been properly prepared for painting.
2. Wipe the part with solvent such as PPG DX330 Wax and Grease Remover, Sherwin Williams R7K156 Solvent Cleaner, or DuPont 3919S Prep-Sol to remove grease and lubricants from the manufacturing process.
3. Scrub all surfaces of the part with mild detergent in hot water. Rinse well and wipe dry with a clean dry cloth.
4. Wipe the part again with solvent as in step 2 above. The surface must be absolutely clean before sanding to prevent the sanding process from spreading the contaminants or imbedding them into the surface.
5. Scuff sand all areas to be painted using progressively finer grit to about 240 grit paper. Do not try to completely remove or sand through the zinc plating, but the complete part must be thoroughly sanded for best paint adhesion. Use a "DA" sander for broad flat areas and hand sanding for areas that can't be reached with the power sander.
6. Wash and rinse away all sanding residue. Use compressed air to blow the rinse water out of all seams and dry the parts with a clean towel. If the rinse water beads up anywhere on the surface, it is not clean and the solvent wipe and water washing steps must be repeated and additional sanding may be required in that area.
7. Wipe with solvent such as PPG DX330, Sherwin Williams R7K158, or DuPont 3901S to remove any traces of contaminants or sanding residue. Wipe the surface dry with a clean cloth. Do not allow the solvent to evaporate dry on the surface. Wet it again if it should evaporate dry.
8. The parts should be ready for prime painting. PPG recommends a final wipe with a clean damp cloth to remove any residue left from evaporation of the solvent. A quick wipe with a tack rag right before priming helps remove any remaining dust.

9. Immediately after cleaning and drying the parts as above, apply the primer according to the manufacturer's instructions for the products you are using. The recommended drying time between coats is especially important.

Some other helpful hints for a successful paint job.

- Be sure to use fresh paint products that are top quality from a reputable manufacturer. Do not try to economize by using inferior or leftover paint materials.
- Select all the products for a paint job from a single manufacturer and do not mix different systems within a brand of paint. Use only products that are intended to be used together.
- Do not use the same air hoses on your paint gun that are also used with air tools such as sanders and air wrenches. Oil in the air tools will find its way into the hose and be a source of contamination for the paint. New hoses contain oils and other contaminants and should be cleaned before use on a paint gun.
- Wear clean latex or nitrile gloves to prevent fingerprint oils from contaminating the surfaces of your cleaned parts.
- Plan to prime the parts immediately after cleaning and sanding to prevent any bare steel areas from developing surface rust or the parts from becoming contaminated again.
- Obtain a technical data sheet for each product being used and read and follow the instructions. The manufacturer's data sheet will provide specific instructions that apply to the product being used. These are available on-line or from your paint supplier.