

Stains and Scratches on Aluminum Poles

Types of Staining:

1. Dirt, grass, or other natural debris that may collect on the pole while it is installed or waiting to be installed.
2. Chemicals, paint, and other markings that may spill onto the pole or be thrown onto the pole. This may be noticed as streaks or marks on the shaft's surface.
3. Water staining that occurs due to water being in contact with the shaft and having no way to evaporate in a timely fashion. Dark spots or streaks will begin to present themselves over time. This is most often seen when wrapped poles are left outside or not unwrapped immediately after delivery. This is typically described as a 'black mark', 'dark colored streak(s)', or 'dark splotches' along the shaft's length or circumference.
4. Scratches from improper handling on the job site or by the transportation company.

Cleaning of Mild Dirt or Debris:

A garden hose, with low to moderate pressure can be used to wash off most dirt and debris that may be on the pole. If it still does not come off of the shaft, the use of a wet cloth should be tried. If necessary, a mild soap or detergent may be used (items such as Go Jo hand cleaner or liquid soaps). We must warn that the cleaning of any surface that is anodized or painted should be done with great care and that it should be tested on a small 'test' area where the finish will not be seen. Direct Buried poles can be tested in the area which will be below ground level. Rinse away any remaining soap to prevent future reactions with the metal.

Cleaning and Removal of Water Stains:

The following are options to try in removing water stains from shafts in the order of least reactive to most reactive. Please follow safety procedures and do not let chemicals come in contact with skin or other body parts. If you do come in contact with the chemical, you must follow the directions on the container or contact a doctor immediately for advice. If chemicals are ingested contact your local poison control hotline immediately. Please dispose of chemicals carefully in correlation with all local and federal guidelines after use.

1. Run a stream of warm or cold water over the stained area using low to moderate pressure from a water hose. Use of a soft cloth may be used to gently rub the affected spot.
2. Mild liquid soaps can be used to aid in removal of the stain. If the pole is painted or anodized, a small spot should be tested first to verify the finish will not be damaged by the product being used.
3. The solution of Lemon oil and Pumice or Pumice Hand Cleaner with soft rags can remove some stains. Attention: For the following options, always test a spot before proceeding due to the chemical nature of these products. They can cause damage to anodized or painted finishes if not used carefully. For Anodized poles, soap and water is typically sufficient to clean any dirt or stains and the following options are not suggested.
4. Household cleaners such as 409, Lysol, or Texize can be applied with a soft cloth and applied in a circular motion. It is best to rub around the shaft, in the same direction as the sanding marks, to prevent scratches or scarring.
5. Naval Jelly, Zepalum Sodium Hydroxide, or Diluted Drano (50/50 concentration with water) can be used and applied in the same manner as #3, making sure to rinse clean when complete.
6. Aluminum Alloy Wheel Cleaner purchased at most retail stores handling automotive supplies. This cleaner should be sprayed directly onto the stained area per the bottle's instructions. A soft cloth should be used to clean the area, in the direction of the sanding marks. In severe cases, the use of a stainless steel wire brush can be used in the direction of the original sanding marks. Depending on the severity of the stain, the process may need to be repeated several times to eliminate the entire stain. If steel bristles are used, rust may set up over time causing the appearance of a stain.

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7. **Ox-Out 536** is a strong chemical cleaner made by Chemclean Corporation, Jamaica, NY, (800) 538-2436 and available through Hapco (*Item No. 79935*). This chemical should be applied directly to stained areas of the pole with soft cloth or sponge, allowed to react and rinsed away with water. The stains will initially whiten from use of this chemical but oxidation of the pole with time will blend in the whitened areas.

Notes to remember:

Aluminum can be exposed to almost any solvent for a short period of time without any adverse effects. If a cleaner contains oil or wax, a dry cloth should be used to help remove.

Heat accelerates chemical reactions. Cleaners may become overactive or may evaporate too quickly in hot temperatures. It may also create streaks leaving an improper finish. Cold temperatures inhibit the chemical process. Try to clean on a mild day in shaded areas.

Spot testing – place solution on unobtrusive portion of the finish (the part below ground or side away from normal view) in the concentration, manner, and time you plan to use on the pole. Rinse clean, let dry, and inspect. Check painted or anodized poles for softening/dissolution of color in grain.

NEVER mix chemicals for your own safety.

Do not let chemicals come in contact with other materials or yourself.

Cleaning and Removal or Other Types of Stains:

In rare instances a chemical or paint can be spilled onto a shaft when at the job site. In this instance, the options given above for water staining should be attempted.

If these do not work, you may also wish to try the following (*using same guidelines as above for your safety*).

These include:

1. Paint Thinner/Remover
2. Sanding the affected areas as described below.

Remember: No chemical treatment or sanding should be tried on any pole with a painted or anodized finish. Only those with a directionally sanded finish should be considered for these options.

Visible Scratches To Directionally Sanded Surfaces:

If scratch marks are present from shipping or from handling on the job site, the following procedures can be used to attempt a repair on the shaft's finish. Again, we would warn that these sanding procedures should not be attempted on anodized or painted shaft assemblies.

1. Use an aluminum oxide sanding belt, 80 grit or higher, such as is used with portable electric belt sanders. These are available through most hardware stores.
2. Take the belt and break at one point along the loop to have one long single piece.
3. Pull the belt back and forth (*similar to a shoe shining motion*) over the stained area of the pole in the same direction as the existing sanding lines on the pole. If care is used in the process, a satin finish equal to the original factory finish can be achieved. See below drawing for motion indicated.

