Rust is a product of the oxidation of metals. Because water acts as a catalyst to this oxidation, exposure to moisture is the most prevalent cause of rusting. High humidity in a grooming shop, moisture from aerosols that are not cleaned from the blade, and improper blade storage are examples of ways a groomer’s clipper blades can be exposed to moisture.

The presence of rust does not necessarily render a blade useless. Depending on the degree of rusting, the blade in question may simply require the proper cleaning and better care.

The type of rust on a blade can be categorized into two forms: surface rust and imbedded rust. Surface rust is, as its name implies, rust that 'sits' on the surface of the metal. The color of this rust is typically brown, and it is easily cleaned with a mild soap or solvent and wiped away with a rag or steel wool. Imbedded rust, however, requires a bit more work to remove, as it erodes the surface of the metal and imbeds itself in the subsurface of the metal, causing "pits." While this bright orange rust is more difficult to remove, it can, in most cases, be done.
To begin removing rust from a clipper blade, disassemble the blade. If the spring, socket, or screws are excessively rusty, it is better to discard them and replace the blade.

Once the blade is taken apart, use a drywall sanding sponge to sand away the rust. These sponges can be purchased from hardware stores and are available in different grades. The fine grade and medium grade sponges will satisfy most needs, but course grade sponges are available if needed.

Sanding a clipper blade with a sanding sponge will leave very small buff marks on the metal of the blade. Since most silver blades are composed of the same metal throughout, however, this will not create a new place for rust to begin nor should it affect the blade’s performance.

Most surface rust can be easily removed with a fine grade sponge and minimal pressure. Imbedded rust, however, typically requires more pressure to remove everything as it extends below the surface of the metal.

The comb of the blade is fairly easy to sand because it is mostly flat on each side. The cutter is the most difficult piece to sand. Use different corners of the sanding sponge to reach above the teeth as well as inside and above the groove of the blade guide. It is particularly important to remove all rust from the groove of the blade guide. If rust is allowed to remain there, the blade will squeak and/or cut poorly as the cutter will hesitate as it moves back and forth along the rust.

Getting the rust from between the teeth is also difficult. Use a hard bristled brush with bristles small enough to pass between the teeth and pull the brush along the teeth towards their tips. This will remove most, but not all, of the rust. Use an old toothbrush or detail brush from the auto parts store.

After sanding imbedded rust, black ‘scars’ will remain on the blade. These marks will not hinder the blade’s performance, nor will they increase the blade’s susceptibility to rusting in the future.

Once the comb and cutter have been thoroughly sanded so that only the black ‘scars’ remain, the blade should be washed. Brush the blade while it is submerged in blade dip, being sure to clean everywhere. Dry with a rag.

Typically, any black ‘scars’ that remain on the blade can be removed by a sharpener. If, however, they are severe enough, a ‘pit’ will remain in the metal. A ‘pit’ in the cutting surface weakens the metal slightly, but the blade typically still retains plenty of cutting ability.