

Paint Stripping

by Jack Hess

A. Introduction

Paint stripping is NOT a "dip and wipe" operation, it is "soak and scrub." I use 91%-99% alcohol and not brake fluid or oven cleaner as I do not like coming in contact with the latter two. Alcohol works well most of the time and can be reused several times.



Lettering may be ink and not paint and therefore will be difficult to remove. During most of the stripping I have done, the white lettering is the last area to melt off. It traps the paint colors of the body underneath it. I tried to strip an Atlas HO 2-bay covered hopper and all the paint came off except for the black lettering "Illinois Central Gulf." I had to paint over it.

B. Items Needed



Isopropyl Alcohol 91-99%

Quart bottles of 91% or 94% can be found at Walgreens or Wal-Mart. They are inexpensive. For N scale, one quart bottle should be sufficient. Two or three quarts for HO depending on the type of chamber used. For O scale I always keep over a gallon on hand. One gallon or greater quantities of 99% can be purchased from chemical suppliers that sell to the public.

**DO NOT USE ALCOHOL IN ANY AREA THAT HAS
A FLAME OR WHERE A FLAME CAN IGNITE.
KEEP FUMES OUT OF THE HOUSE AND AWAY
FROM OTHERS AND PETS.**



Soaking Chamber and Paper

The paper can be newspaper, butcher, or craft paper. Choose a chamber that will hold the body to be stripped. Shown is a square glass vase and two plastic tubs. It is best if the chamber has its own lid. Also needed, a couple of plastic, wood, or metal risers to keep the parts from setting in the bottom of the chamber in the melted off paint.



Brushes

On the left is a scrub brush, I believe found in the household cleaning section. A toothbrush is too small and the bristles too soft.

The brass brush on the right can be bought at home improvement stores. This brush is used when paint is stubborn, usually after soaking forty-eight hours. There is also a steel version that I have used once or twice.



Dish Soap and Tray

The tray is to carry the stripped body to the sink. Use the dish soap, water and the scrub brush to wash the alcohol off of the parts.



Safety Glasses, Gloves, Plastic Wrap, Razor Knife, Funnel, and Rag,

Safety glasses and gloves are used during the brushing process to keep the alcohol off of you. The plastic wrap is used to seal the chamber when the alcohol is in it. The knife is to remove the remaining paint once the parts are washed. The funnel is used to pour the used alcohol back into the container and the rag to wipe out the chamber.



Something to Strip A Lionel O scale boxcar body

C. Setup



Clean off the work space and cover with several layers of paper.
Put the body into the chamber, sitting on the risers. I am using four pieces of wood.



Fill the chamber up half way. With the sample shown, this was around three quarts. I used alcohol that I used previously, that's why it has a red tint. Cover the chamber with plastic wrap. The fumes will work on the area of the body not submerged.



Put the lid on the chamber and let soak.

D. Scrubbing



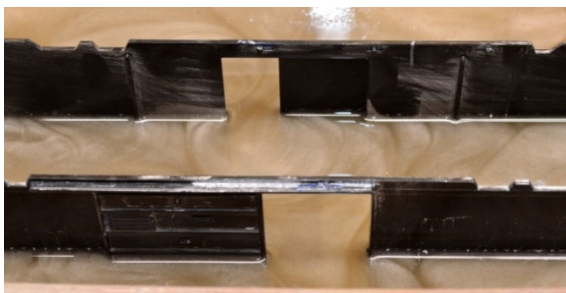
After four hours the body is given the first scrub.



The red arrow shows the yellow and blue lettering melted at the bottom of the body.



The paint comes off easily. The silver is coming off in particles.
The ends require more soaking.



After a thorough scrub, the body is put back into the alcohol
with the roof submerged in order to melt the paint on the ends.

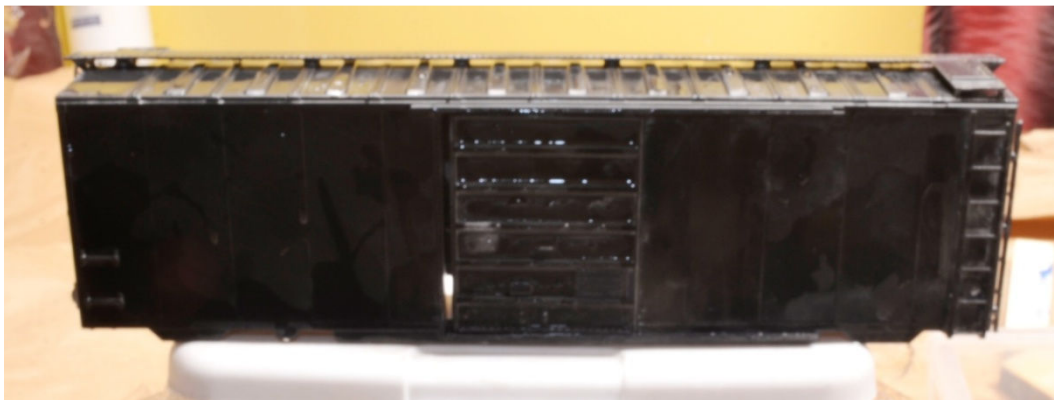


After one hour and forty-five minutes, the body is scrubbed again. This time the paint on the ends comes off without any effort.



The chamber has been sealed and covered. The body will now go to the sink to be scrubbed in dish soap and water.

E. Body Cleanup



The body has been washed and is now air drying.



The remaining silver paint wipes off with the rag. This is a very rare event.



Paint in the corners of the doors and on the board was scratched out with the knife. Body is now ready for painting.

F. Alcohol Cleanup



Let the chamber set for 24 hours so the melted paint will settle to the bottom of the chamber.



Put the funnel in the can and slowly pour in the alcohol. Some of the alcohol might have suspended paint in it. When you are down to the real dirty stuff, stop. A metal one gallon can is the best solution for storage as the spout has a small opening with a metal cap that seals it. Do not use a coffee can with a plastic lid as this will not seal the container.



This is what remains after pouring off most of the clear alcohol.



Pour the rest into a sealable container.



Wipe out the chamber with a rag. Set all of this outside to dry.

G. Issues I Have Encountered

1. Paint is not melting off.
 - Soak longer. It has been a very rare experience for paint to melt off after two hours.
 - Scrub longer and harder. Wet the brush in the alcohol during scrubbing.
 - Use the brass brush or the steel version to scratch the paint. Go easy on plastic.
 - Glossy paint may not come off. Try to get as much off as possible, at least to the point the surface has a matte finish.
 - Use new alcohol. Re-used alcohol will have paint suspended in it and will have been exposed to the air due to soaking and pouring back into the container. When my re-used stock gets low, I pour fresh alcohol into it. When it becomes dirty I pour it into the waste container (Pepsi bottle) and use clean alcohol.
2. Strip the body before filling gaps.
 - This can be after the body is removed from the chassis and details removed, or before, during, or after sectioning.
 - Remove any window material because it will get dirty by the melted paint.
 - Details on the body can be left on but be careful with the scrub brush not to break them. Plastic details do not come off easily and they may break off inside their mounting holes making remounting difficult.

JH