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Miscellaneous Building Tips

TIP 1: Painting Metal

You may want to superdetail your loco before painting.

We suggest that you do not paint your loco until it is thoroughly track tested as disassembly and handling generally ruins a paint job. Take your locomotive apart so that the various parts may be painted without getting paint on moving parts. Valve gear, side rods, bearings, pony truck, etc. will not operate properly if paint gets into the joints of moving parts. Parts to be painted should be degreased with a solvent like paint thinner and pickled in acetic acid solution (vinegar) or oxalic acid solution (5%) for a few minutes before applying paint.

DO NOT USE THIS VINEGAR FOR COOKING OR EATING.

Rinse with clean water. Do not handle the surfaces to

be painted. CAUTION: Do not immerse wheels, underframe or cover plate in acid solution or cleaners. Brush cleaner and acid solutions on metal frames of lead and trailing trucks and on underframe surfaces to be painted (NOT ON WHEELS, AXLES OR BEARING SLOTS). Drivers are pre-blackened and can be touched up, after removing flash, without using cleaner or acid. I recommend a glossy paint be used (PRR locos were painted Brunswick Green). Apply a smooth, uniform coat of good grade model railroad paint. I like to spray paint my models. Work carefully to avoid piling up paint around small details. Painting exposed surfaces of main frame will add to final appearance of model, but be careful not to get paint in any bearings.

TIP 2: Hex Head Wrench (Cheap and Easy)

Go to your hardware store and buy Socket Head Cap Screws or Set Screws in many different sizes. They have the hex shape machined in the head and will work for tightening hex head screws.

TIP 3: Soldering Tips Wear Eye Protection

First be sure overwhing is a

First be sure everything is clean.

Put flux on both parts. Hold together and place solder iron at joint. The solder will flow to the hot area. Solder should not form a ball. This indicates the area was not hot enough. To tin your soldering iron so that solder will stick to it. When cold clean the tip with a file. Put a little flux on tip. Turn on iron and apply solder to the tip as soon as it gets hot. If this does not work. Clean the tip while hot and dip tip in a drop of flux (while hot) and immediately put solder on tip.

TIP 4: Cleaning A File When the Grooves Fill

When filing parts, the grooves in a file will fill with the metal you are filing.

This metal can be removed quickly by using a small piece of thin steel (1/16 to 1/8" thick) and sliding the steel on the file in the direction of the grooves. The chips that remain can be removed by sliding a sharp knife in each groove. This may take awhile to clean each groove. I do this only as a last resort. To keep most of the chips from sticking while you file, apply a thin oil to the file before filing.

TIP 5: Drilling Small Holes

To drill metal with small drills it is best to use powered tools. Dremel tool or a small drill press. Hand drilling with a pin vise will work but is much slower. You must drill straight. Drills do not bend they break. Use a lubricant on the drill. Cutting oil is best, but you can use a bar of lvory Soap. Put the lube on the drill before starting. I recommend peck drilling. (Drill about 1 or 2 times the diameter of the drill and remove the drill from the hole. Clean off the chips. Lube the drill and repeat.) Take your time. It is very important to clean the chips from the flutes of the drill. When the flutes fill with chips the drill will break. The smaller the drill the more you need to peck drill.

TIP 6: Tapping a Drilled Hole First be sure your hole is the proper size. 00-90 Taps #60 0-80 Taps #55 2-56 Tap #49 4-40 Tap #43 These drill sizes are one size larger than the charts. We feel they work very well for steel, brass and zinc. You must tap straight. Taps do not bend they break. Use a lubricant on the tap. Cutting oil is best but you can use a bar of Ivory Soap. Put the lube on the tap before starting. Turn in tap to get it started (1 or 2 turns). Back off 1/2 turn. This breaks the chips that form when tapping. Repeat above. As the hole gets deeper you will have to back off the tap more often. If you are tapping a very deep hole you will have to back off the tap after as little as 1/2 turn