# HOW-TO BOOKLET #3027 REMOVING FINISHES



# **TOOL & MATERIAL CHECKLIST**

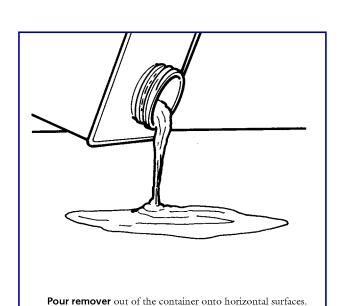
- Chemical Paint/Varnish Remover or Heat Device
- Medium and Fine Grit Closed-Coat Sandpaper
- ☐ Medium Steel Wool ☐ Open Coat Flint Sandpaper
- ☐ Sanding Block ☐ Nylon Bristle Paint Brush
- ☐ Cabinet Pull Scraper ☐ Putty Knife
- Scraper

# Read This Entire How-To Booklet for Specific Tools and Materials Not Noted in the Basics Listed Above.

At least 90% of any refinishing job, whether it's interior or exterior painting, varnish, enamel, stain, antiquing, and so forth, is surface preparation. The finish is only as good as the surface to which it is bonded. Much of this preparation work involves removing old paint and varnish; most do-it-yourselfers don't know how—at least quickly and efficiently.

Stripping off old finish can be done in three ways: with a chemical remover, with heat, with abrasive. Sometimes it takes all three. It always involves lots of muscle power and plenty of patience.

But before you get started on a finish removing project, especially on a piece that you don't really want to refinish, try cleaning the surface. Dirt can hide a perfectly fine finish, and dirt removal is much easier than finish removal with any number of special cleaners sold at home center and building material outlets and specialty paint stores. There may be another question involved: is the piece you have targeted for refinishing worth the effort? You can spend lots of time and lots of money on a piece of wood that will never be right.



Shake the container first, and continue to keep the paint/

varnish remover mixed.

#### COMMERCIAL REMOVAL

If you reside in a fairly large town or city, look in the advertising pages of the telephone book under furniture refinishing. Here you will usually find furniture "strip joints" listed. Strip joints have large vats of chemicals such as methylene chloride into which your furniture piece is "dipped."

In seconds, the powerful chemicals remove all old finish right down to the bare wood. The piece is then removed from the vat and hosed off with water.

The cost of this service is not prohibitive. However, the chemicals are so harsh that a really fine piece of furniture (wood) can be damaged. The treatment can take the "life" out of the wood and it can damage glue joints. If the piece you want cleaned is just so-so, a strip joint can save you lots of hard work and money. If the piece you want cleaned is an antique or a close relative to an antique, it is recommended that you do the finish removal work or call in a professional restorer.

If you are in doubt about the piece and strip joint cleaning, ask the owner of the strip joint for an opinion. Usually, the management will advise you not to use its services if the piece is valuable.

## SHELLAC AND LACQUER

Shellac and lacquer finishes are easy to remove—usually.

To remove shellac, make a pad of 000 steel wool and dip it in denatured alcohol. Shellac is thinned with alcohol. In small areas, go over the surface of the wood, moving the steel wool pad in a circular motion. Have patience. Give the alcohol plenty of time to soften the shellac.

To remove lacquer, follow the very same procedures as for shellac EXCEPT use lacquer thinner instead of alcohol. Lacquer is thinned with lacquer thinner.

CAUTION: Thinners for shellac and lacquer removal are very stinky and can be harmful to your hands. Always have plenty of ventilation when working with these thinners and wear rubber gloves. The thinners also are flammable; be careful.

If the thinners do not work adequately, then try regular paint and varnish remover, applying it with a steel wool pad in a circular motion.

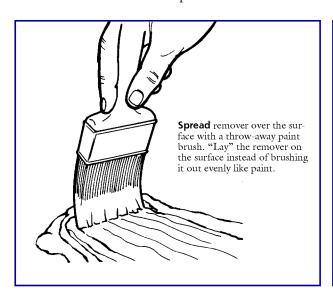
#### **Paint and Varnish**

The product to remove paint and varnish is called paint and varnish remover. There are two types:

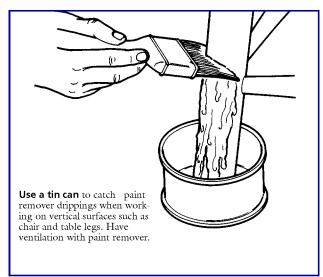
- Liquid paint and varnish remover that has a consistency of a milkshake. It is thick, but liquid.
- Semi-paste paint and varnish remover that has a consistency of lard or butter.

Manufacturers have designed the liquid products for horizontal surfaces and the thicker stuff for vertical surfaces such as chair and table legs.

In this classification, some removers are solvent-based and others are water-based. Some removers are brushed on painted/varnished surfaces and then are scraped off after working. Others are applied and hosed off with water after working. If you buy and use the wash-off removers consider this: water is wood's No. 1 enemy. Be sure you dry off the wood surfaces just as soon as you're through removing the old finish. It is strongly recommended that you **DO NOT USE** water-activated removers on veneered or inlaid wood surfaces. Water can cause the veneer or inlaid pieces to separate or warp. Always use solvent-based removers on veneer and inlays.







#### **USING PAINT & VARNISH REMOVERS**

- Use plenty of remover on the surface of the project and apply it evenly—one way—with a brush. Use a throw-away brush. After paint/varnish removal, the brush is no goodfor any other project. Do not "paint" on the remover. "Lay" it on.
- Give the remover plenty of time to work. At least 20 to 30 minutes.
- Shake the container before you use the contents. The contents must be "mixed." Continue to mix the contents as you apply it. Shaking the can with the lid on is plenty good enough.
- Cover the surface with aluminum cooking foil after the remover has been thickly applied. The foil will help retard evaporation of the chemicals in the remover and give the remover more removal power.

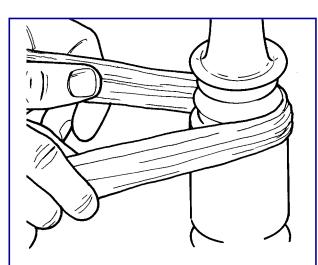
- If the remover you are using is water-based, use steel wool dipped in clear water to remove the remover from the surface of the piece. When the finish is off, rinse the surface clean with water and immediately dry it with soft toweling.
- Do not mix removers. If you are using a solvent -based remover, finish a section with the solvent remover before using the water-based remover. Water- and solvent-based removers often are not compatible; a mess could result.
- A flexible putty knife or scraper works best for removing softened finish from flat surfaces.
- A soft wire brush, steel wool, or an old toothbrush dipped in remover is a good way to remove old finish from carved and irregular surfaces. If the wood has been filled with wood filler, removing the filler and finish from the surface may be very difficult. If so, try using a soft wire brush in a portable electric drill and the remover.

- Polyurethane varnish can be very difficult to remove with regular paint and varnish removers. Try the remover auto paint shops use to remove enamel and lacquer finishes. Most shops will sell you a small bottle of the liquid. However, don't give up too soon on regular remover. Give it plenty of time to work; you may need several coats.
- Paint and varnish remover is toxic and must be used in a well-ventilated room—outdoors if you can. Heed all warnings on the label of the container.
- Do not use paint and varnish remover on an asphalt, rubber tile, or linoleum floor. Any remover spills can damage this floor material immediately.
- Put all paint and varnish remover residue in a metal bucket and put the bucket outside when the project is completed. The residue is flammable; it may even catch fire through spontaneous combustion if heat conditions are just right.

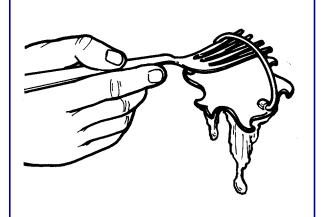
### **ABRASIVE REMOVAL**

Any type of finish can be removed with abrasive (sandpaper, steel wool, pumice, rottenstone, etc.), but the price you pay in muscle power can be costly. Power sanding is the way to go, but whether by power or hand, you must be careful with abrasive: they can cut finish fast and ruin the wood below. Some rules of thumb:

- If the finish is clear, i.e., varnish or shellac or lacquer, use paint remover, alcohol, or lacquer thinner as described above.
- If the finish is paint or enamel, you can use abrasive. If by hand, use the abrasive over a flat sanding block to avoid digging into the wood below the surface. If by power, use only an orbital type sander. Do not use disc or belt sanders; both remove finish too fast. You can quickly go through the finish into the wood below and ruin the wood.

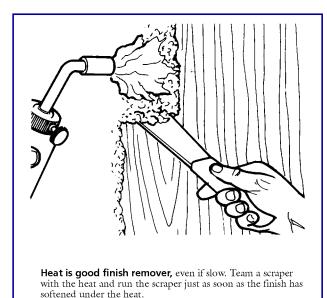


**Roll out steel wool** to make a "rope" for removing finish from turning and grooves. Use the rope shoeshine fashion for best removal results.



**Hardware that can be removed** from furniture pieces can be soaked in a can of paint/varnish remover to clean metal. Use steel wool for polishing.

- For the first abrasive cut on thick finishes, use inexpensive flint open-coat sandpaper. Once the finish is "thin," switch to a finer, closed-coat abrasive such as silicone carbide.
- Steel wool advertised for furniture refinishing has been degreased. You will pay more for it. Regular steel wool has a thin grease coating, necessary in its manufacture. Be sure to wipe readied surfaces with solvent before finishing if you use standard steel wool.
- Most any surface must be sanded lightly after old finish has been removed. Use a fine-grit, closed-coat abrasive on a sanding block.
- Emery paper is used in metal finishing. It is not a wood abrasive.
- Remove all sanding residue before finishing with a vacuum, tack rag, or solvent such as turpentine, mineral spirits, or alcohol. Tack rags, used by pros to remove debris, are available for sale (inexpensive) in Paint Departments.



#### **REMOVAL BY HEAT**

The common devices used to remove paint and varnish are propane torches with a flame spreader attachment, electric scrapers, and heat blowers that resemble hair dryers. All are efficient, but sometimes slow. The big drawback is really fire, and you must use extreme caution—not so much from fire, which you can quickly snuff out (usually), but from scorching. Fire or extreme heat can scorch the wood and removing the scorched spot with abrasive or scrapers can be fruitless.

Heat tends to work best on painted surfaces, rather than varnish, enamel, shellac, lacquer, and so forth. You can, of course, use heat for these finishes; the result may not be too effective.

When working with heat, always have a bucket of water handy for small fires. Fire, strange as it sounds, is not as dangerous as you might think with heat removal equipment. Combustion usually is slow and you can quickly douse any flame with the flat blade of a scraper—or water if the fire gets going.

One don't: Don't remove paint from exterior siding with a propane or blowtorch. The flame can ignite wood and construction paper behind the siding where you don't immediately see it, and burn down the house. To remove exterior paint, try the sandblasting method. It's quick and efficient—and safe. You can rent sandblasting equipment that's professional enough to clean siding right down to the bare wood ready for re-finishing.

#### **REMOVAL BY LYE**

There is absolutely no doubt that Iye will remove old finish. BUT DO NOT EVER, UNDER ANY CIRCUMSTANCE, USE LYE. LYE IS EXTREMELY DANGEROUS. It can remove your skin in a jiffy. It can blind you if you splatter some of it in your eyes. It can burn off your clothing. It can ruin the wood under the finish, and if it is used outdoors, it can kill the grass it is spilled on for years. DO NOT USE LYE.

#### **AMMONIA REMOVAL**

Ammonia is a very poor paint and varnish remover, except for milk paint. Milk paint is found on some antique furniture. You may not want to remove it.

If you decide to use ammonia for some reason, be sure to have lots of ventilation (outside if you can), and wear a face mask and rubber gloves.

The solution should be applied with 00 steel wool padded. Rub in a circular motion.

#### **SCRAPERS**

Scrapers by themselves are slow paint and varnish removers. They must be teamed with a solvent, with, perhaps, the exception of cabinet scrapers. Cabinet scrapers are so sharp that they cut right through the paint to the bare wood. In fact, cabinet scrapers often are used as woodworking planes to remove wood. So be careful when using them to remove old finish. Other scraper products include:

**Putty knives.** Buy flexible bladed ones for finish removal and grind the corners of the blade round so it won't dig into the wood.

**Flat scrapers.** Flexible bladed scrapers are best. Also round the corners to prevent digging.

**Pull scrapers.** These are excellent for removing finish on siding, gutters, casings, and other exterior house components. Don't use them on fine furniture pieces, however, since blades can dig into wood.

**Kitchen food scrapers.** These rubber-like scrapers are absolutely super for flicking softened paint out of corners, carvings, and gimcracks. Nut picks also make a good "scraper" for grooves in wood turnings and other hard-to-get-at spots.