

Antiquer's Guide

Caring for and the Restoration of Antique Furniture



Ruelle's

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AN ANTIQUERS GUIDE TO RESTORATION, REPAIR
& CARE OF YOUR ANTIQUE FURNITURE

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A. What must be done?

1. Can the piece be cleaned?
2. Can the piece be given minor repairs and a touch up on the finish
3. Are major repairs necessary? If so, stripping and refinishing may be necessary.
4. What degree of sheen is wanted?
5. How much time do I have?
6. How much wear will the piece receive?
7. How much energy do I have and what skills?
8. Does the piece justify the work to restore it?

B. Cleaning

Wipe off old grease, wax and dirt with a cloth wet with turpentine or mineral spirits. Use 4/0 steel wool or hobby pad to clean stubborn areas. After piece is clean, apply Finisher's Formula beeswax polish.

C. How to identify the finish

1. If shellac, it will soften from alcohol.
2. If lacquer, it will not soften from turpentine, but will soften from lacquer thinner.
3. If varnish, it will soften with turpentine.
4. If polyurethane or epoxy base, it is difficult to identify. It will soften with lacquer thinner. Very difficult to remove with stripper, may have to remove by sanding.

Touch Up

1. Touch up a shellac finish with new shellac followed by a coat of wax.
2. Touch up a lacquer finish with spray lacquer followed by polishing with 4/0 steel wool wet with oil.
3. Touch up a varnish finish with new varnish followed by a coat of hard wax. You can varnish over lacquer, but you cannot lacquer over varnish.

D. Repairs

1. Loose joints, rungs and spindles:
 - a. Some joints can be glued in place by injecting glue into the joint. This can be accomplished using hot glues. Clamp and let set overnight.
 - b. Take piece apart, remove old glue, dowel, make new parts, glue with Titebond glue, clamp and set overnight at a temperature above 70 degrees.
2. Loose boards in table top:

Take apart, remove old glue, dowel, glue with a Titebond glue, clamp and hold overnight at a temperature above 70 degrees.
3. Loose veneer:

Iron loose veneer to reactivate glue. Glue with thin instant adhesive and accelerator.

4. **Missing veneers:**
Patch the new pieces of veneer. May have to use two layers of new veneer because new veneers are often much thinner than old veneers. Use contact cement following manufactures directions..
5. **Small dents:**
 - a. Dampen rag with turpentine and let sit on dented area overnight. This may swell the wood fibers.
 - b. Try heating with an electric iron on mild heat and a moist cloth held on surface. The steam which is generated may raise the dented fiber of the wood. If above fails, patch dent with Fawood, let dry, sand smooth, stain and touch up finish.
6. **Broken chair rockers:**
Do not try to repair old rockers. Repairs are always too weak. Make new rocker from hickory, ash or oak wood. New rockers are also available from some woodwork supply companies.
7. **Broken or missing rungs and spindles:**
 - a. Try repairing with Titebond glue. Clamp & hold overnight . Sand smooth, touch up with stain and finish. Make new parts out of old wood when possible.
 - b. To make new parts, chair may have to be partially dismantled to install.
8. **Stripped screw threads in wood holding hinges:**
Drill out old hole, glue in a piece of wood dowel with Titebond glue and let dry overnight. Drill new screw hole.
9. **Missing hardware:**
Purchase new hardware from sources listed in back of manual. May need to dowel and drill holes.
10. **Castors and glides:**
Remove old caster inserts by drilling out with electric drill using a 3/8" drill bit. Plug hold with dowel if necessary, glue and drill to fit new caster inserts. Caster are available from hardware sources listed in back of manual.
11. **Table leaves:**
Make new leaves using solid wood to match table rather than veneering a piece of wood.

12. Drawer glides and runners :
Resurface with new maple wood. Glue on with Titebond glue, clamp and hold overnight. Sand and wax.
13. Warped table tops:
Strip off old finish on both sides. Wash with denatured alcohol. And surfaces. Lay board on grass during a sunny hot day with the curved edges pointing downward.

E. Stripping

Always wear rubber gloves, safety glasses, apron and work in a well ventilated area. Have a source of fresh water handy to wash off spills on skin immediately. Use paint brush to spread remover keeping the piece wet with remover.

Do not smoke. Stripper is flammable regardless of what the can states. After finish is removed, wash article with paint or lacquer thinner to remove wax residue left from the stripping solution.

F. Bleaching (Optional):

Wear rubber gloves, safety glasses, apron and work in a well ventilated area, preferable outdoors. Use one of the following:

1. Clorox
2. Oxalic acid in hot water.
Follow with a neutralizing wash of baking soda in water. Wash off with clean water and let dry.
3. Two-part bleach (can be purchased at most hardware stores)
1st part is ammonia
2nd part is hydrogen peroxide
Follow manufactures directions.

G. Sanding and Smoothing:

Sand wood to at least a final grit of 150. Fine grain wood should go to 180 or 220 grit.

a. Sand papers available:

Garnet paper, always red. Does best job.

Aluminum oxide paper, white or red. Does fair job.

Flint paper, always off-white. NO GOOD, NEVER USE.

b. Foam sanding sponges.

c. Steel wool:

Use coarse #3 for removing old finish.

Use fine 4/0 for smoothing finish or polishing with oil.

d. Abrasive powder:

Rottenstone. Use with oil or water and blackboard eraser.

Tripoli powder. Use with water and blackboard eraser.

H. Staining:

Use clear stains such as Minwax or Kwick Kolor.

Apply with paint brush and wipe off quickly with an old rag or paper towels. Be sure to dispose of rags properly, they are combustible. Let dry. If darker tone is desired, stain the next day following same procedure.

Kwick Kolor stains are formulated much like Minwax but have dryers in them which reduces drying time.

I. Sealing Stain Coat:

This must be done to prevent new lacquer or varnish finish from lifting the stain or allowing it to "bleed through", making the color uneven. Also, if the stain under a varnish finish is not sealed, the varnish will take three to four times as long to dry.

If shellac finish, seal with a thin coat of diluted shellac.

If lacquer finish, seal with a special lacquer sanding sealer which contains zinc stearate.

If varnish finish, seal with a thin coat of diluted shellac.

If penetrating oil or tung oil finish, sealer is not necessary.

If polyurethane finish, follow manufactures instructions on can.

NOTE: The definition of a thin coat of shellac is to take normal shellac, as purchased at a hardware or paint store and mix with an equal part alcohol. This leaves a thin coat of shellac over the stain and the shellac coat dries very rapidly. Do not work it over with a brush; apply once with brush and leave it alone!

J. Applying, Polishing and Wax-coating Finishes

1. Penetrating Oils - Tung Oil, Danish Oil, Watco:

Apply with soft cloth (piece of T-shirt works great) until surface is wet. Wipe excess off with paper towel. Let dry overnight. Buff in between coats with 4/0 steel wool or hobby pad. Dust well between coats. Apply 3-5 coats in same manner.

2. Lacquer:

Should be sprayed on or can use Kwick Kote lacquer with a brush. Avoid rainy days or high humidity. Should spray first with sanding sealer, 2-3 coats. Sand between coats with 180-120 grit garnet paper. Spray 5-6 coats of lacquer. Sand between each coat with 180-220 grit garnet paper. Polish last coat with oil and 4/0 steel wool. Apply light application of wax if desired. Apply wax same as for shellac finish, see below.

3. Linseed oil:

Never use raw linseed oil. It never dries.

4. Varnish:

Seal stain with a very diluted thin coat of white shellac. Use shellac diluted with equal parts alcohol.

Smooth shellac coat lightly with 4/0 steel wool.

Brush and clean surface.

Apply first coat of varnish with a wide brush.

After varnish is on, "tip-off" quickly with the brush held in a vertical position. Let dry 48 hours.

Rub down lightly with 320-400 grit silicon carbide paper wet with plenty of soapy water. Wipe clean with clear water and dry with a soft towel. Let dry.

Apply 2nd and 3rd coat using same technique.

Rub down final coat, using 320-400 grit followed by 600 grit silicon carbide paper wet with soapy water. Wipe clean with clear water and dry with soft towel. Let dry 24-48 hours.

Polish varnish with a blackboard eraser wet with rottenstone and oil. rub with the grain of the wood. Wipe off with a dry, soft towel.

Polish further, if desired, with a blackboard eraser wet with tripoli powder and water.

Apply wax same as for a shellac finish, see below.

5. Polyurethane:

Follow manufacture's instructions exactly. Time of 2nd and 3rd coats is very important. Polish same as for a varnish finish.

6. Shellac & Wax:

Use white or orange shellac as purchased at hardware store. Normally a 3 lb cut (3 lbs of shellac per gallon of alcohol) works best.

Thin the shellac, as purchased, with an equal volume of alcohol.

Apply the thinned shellac quickly and evenly with a wide brush to surface. It will dry quickly. do not apply the shellac during rainy weather or a day with high humidity; it will turn white or cloudy.

Rub down with 4/0 steel wool or hobby pad.

Brush off and clean surface.

Apply 2nd, 3rd and 4th coats using same technique.

Apply a coat of wax, apply thinly with cloth or with fingers. Wait 5 minutes, rub with dry rag to even out wax. Wait 1 hour, polish wax with dry rag. Apply 2nd and 3rd coats of wax using same technique.

K. Silicone Problem (Fish-Eye):

This problem came about after World War II. Silicone was added to waxes to give them a quick, easy shine with very little rubbing. But, when the piece is refinished, the silicone never comes off the wood and causes the new lacquer or varnish finish to "crater" or have "fish-eyes". This is very difficult to correct.

To correct, one must wash the surface with many different chemicals, or use several coats of shellac sealer, and/or sometimes add silicone to the new lacquer or varnish finish. When silicone is added to the finish, the surface finish never sets up real hard. All old brushes and containers must be thrown away because the silicone contaminates everything.

WARNING: Do not use waxes that contain silicone. Most car waxes and many liquid waxes contain silicone. Read the labels. A good paste wax is Goddard's Paste Wax or Butcher's Wax.

L. Rushing and Weaving

Remove Cane or Rush before stripping. Clean holes or groove before stripping. **Best left to professional to re-cane or re-rush.**

M. Adhesives

1. White glue (Borden's or Elmers):
 Ready to use.
 Fair for repairs.
 Slow setting.
 Low resistance to water.
 Will give or flow under pressure.
 Wipe off spills immediately because they will leave white spots later when finish is applied.
2. Yellow glue (Titebond or Carpenters):
 Ready to use.
 Best for general repair.
 Fast setting.
 Fair resistance to water.
 Will give for flow under pressure.
 Wipe off spills immediately. Spills can be removed later with sanding.
3. Plastic resin glue:
 A powder. Must be mixed with water to a thick paste and used immediately.
 Good for general repairs.
 Slow setting.
 Will not flow under pressure.
 Good resistance to water.
4. Franklin Hide Glue:
 Ready to use.
 Good for repairing veneer.
 Slow setting.
 Poor resistance to water.
 Will not flow under pressure.
 Spills are easy to remove later with knife, chisel or sandpaper.
5. Resorcinol glue:
 2-part glue. Must be mixed each time to use.
 Not good for general repair.
 Slow setting.
 Completely resistant to water.
 Will not flow under pressure.
 Spills can be removed later.

6. Hot-melt glue.
Not good for furniture, but used by some commercial manufacturers because it sets fast and is easy to use.
Fast setting.
Good resistance to water.
Will flow under pressure.
Spills are difficult to remove.
7. Epoxy glue:
2-part mix.
Good for plastics, metal and wood.
Good for teakwood and rosewood with a high oil content.
Slow setting.
Will not flow under pressure.
Messy to use, must clean hands with lacquer thinner or wear gloves.
8. Contact cement:
Ready to use but stir well.
Good for veneer and plastic.
Apply two coats to both surfaces before joining together.
Not good for general furniture repair.
9. Super Hot Cyanoacrylate glues:
Ready to use.
Thinner than water.
Will flow under pressure.
Very fast setting.
Hot, will burn skin.
Must use debonder to clean spills.

NOTES: Always stain furniture before gluing to prevent glue stains. always glue or hold glue joints while glue is setting at 70 degrees temperature or higher. Avoid letting supplies of white or yellow glues freeze. Low temperatures will break emulsion and ruin the glue forever.

N. Tricks Of The Trade:

1. When storing cans of used varnish, displace the air in the can or pour into a smaller container that will be full when the lid is put on.
2. If varnish is stored in a mason jar, wrap the mason jar with aluminum foil to keep daylight away from varnish. Daylight will set and ruin the varnish.
3. Always varnish at a temperature around 70 degrees.
4. Try to varnish in a dust-free atmosphere.
5. Do not shellac or spray lacquer on rainy days or days with high humidity.
6. Make tack-rag from cheese cloth wet with turpentine and a little linseed oil.
7. Clean out old glue from all joints before repairing.
8. Always apply glue to both surfaces
9. Always hand sand after power sanding.

10. Wear rubber gloves, apron and safety glasses and have good ventilation when stripping and finishing. Work outdoors when possible. If any stripper spills on skin, wash it off immediately with plenty of water.
11. Use stripper that calls for a solvent wash (paint thinner or turpentine) whenever stripping clear finishes. Use water wash removers on painted and epoxy finishes only. Water raises the grain of wood.
12. The heavier the can of stripper, the stronger the stripper. Methylene chloride is the active removing agent in stripper and is heavier than the other ingredients. The more methylene chloride, the heavier the can.
13. Cut off bristles of a 2" paintbrush in half to use to apply stripper.
14. When varnishing, always "tip-off" with brush held in a vertical position.
15. Clean brushes with several washings in naphtha or paint thinner, wash in soapy water, rinse in clean water. Hang up to dry with the brushes pointing downward.
16. Always patch with a color slightly darker than the surrounding finish. The eye will pick up a lighter color more easily than a darker color.
17. Remove white brush marks on lacquer finishes (from water spills) by rubbing the spot lightly with a rag wet with oil and a little rottenstone. Clean, dry and wax.
18. Keep tools sharp.
19. Submerge all oily rags in water before disposing.
20. Patch with "Famowood" or Stick Shellac. Use end of electric soldering iron to melt the stick shellac over the hole being patched.
21. When assembling chair, assemble the back first, glue and let dry. Assemble the front-leg section separately and let dry. Assemble the two sections together next. Clamp and check alignment before the glue sets.
22. Apply wax with fingers for best job. Otherwise, use wool cloth. Several thin coats are better than one thick coat.
23. Tung oil comes in 3 forms:
 - a. Raw or pure in a paint thinner, contains about 21% solids. Stable. Dries to a satin luster.
 - b. Tungseed oil in a paint thinner, will gel in can, once opened, in 60 days. Dries to a satin luster.
 - c. Polymerized tung oil in paint thinner, contains about 49% solids. Very unstable. Will form solid surface layer in can, once opened, overnight. Dries to a hard, high luster.
24. Vegetable cans make great work containers.
25. Avoid future table top warping by varnishing (or finishing) both sides - top and bottom.
26. When using strippers to remove old finish, always shake to mix up wax which is in the stripper. Most strippers contain about 5% paraffin wax to reduce the rapid evaporation of the methylene chloride chemical which does the work.
After stripping, always wash wood with alcohol or lacquer thinner to remove the wax left on the wood by the stripping solution.

P. Finisher's Products

In 1987, the antique furniture restorers at Ruelle Restorations developed and introduced Finisher's Formula™ a scientific blend of carefully selected oils and pure beeswax for feeding and polishing fine woods and antiques. Finisher's Formula™ is nontoxic and a 100% goof-proof beeswax furniture polish. Finisher's Formula™ works on finished and unfinished fine woods and antiques. Finisher's Formula™ unites natural oils and pure beeswax in a furniture care product you can trust on all your fine furniture and antiques.

Finisher's Formula™ beeswax polish has been used in National Historic homes, museums, universities, and country clubs and by restorers, antique dealers and collectors for many years. Finisher's Formula™ is different from traditional furniture polishes because most, like lemon oil, are a petroleum distillate base and have the tendency to evaporate quickly. That is why when you use lemon oil or other like polishes on your antiques, they look good for a little while, but over time the finish returns to a tired appearance and eventually will break down. Spray polishes contain silicates, which after a while will also destroy finishes.

Finisher's Formula™ has the consistency of a lotion and is very easy to use. There is no hard buffing, just apply and wipe! Beeswax has been used for centuries to preserve finishes and paintings. On antique furniture, beeswax puts a barrier coat to protect and brighten the existing finish. Finisher's Formula™ is an antique furniture care product primarily, but many have used Finisher's Formula™ as their choice of finish on pine, oak, walnut, mahogany and other exotic woods.

Finisher's Formula™ brings your antiques, wood cabinets, leather and fine furniture to life.

See why beeswax has been used for centuries to preserve and protect heirlooms. Finisher's Formula™ is 100% Biodegradable, Non Toxic, Contains No Silicates, and No Petroleum Distillates and is offered in Unscented form only.

In 1997, the restorers at Ruelle Restorations wanted to develop a paste wax to compliment Finisher's Formula™ Polish and Feeder.

It took eight years of rigorous testing and blending to achieve the ultimate all natural, nontoxic beeswax paste. Finisher's Touch™ is a pure beeswax paste with a touch of carnauba wax to enrich fine woods and heirloom furniture.

Just like Finisher's Formula™, this all natural beeswax paste excels on finished or unfinished woods. It works wonderfully on previously waxed or highly polished finishes as well. Finisher's Touch™ contains no solvents or scents. Finisher's Touch™ produces a wonderful beeswax patina over time. The 4 oz jar is highly concentrated and was developed at our antique furniture restoration shop which has over three decades of continuous operation by the Ruelle family.

From your most cherished heirlooms to your finest woods, this is the all natural nontoxic paste wax for you! Combine Finisher's Formula™ and Finisher's Touch™ to achieve a lasting glow on antique furniture and fine woods.

As a culinary wax, Finisher's Touch™ is the premier non-toxic beeswax wood finish for use on all wooden kitchen utensils such as cutting boards, salad bowls, wooden spoons, butcher block tops, wood surfaces, etc. Finisher's Touch™ is an all-natural beeswax formula and the safest wax to use around children, food and wood surfaces that may contact food. This all natural butcher block wax is easy to use, protects wood surfaces against damaging moisture and produces a rich, beautiful beeswax finish. Finisher's Touch™ was selected by Tiffany and Company as the service wax for the Frank Gehry jewelry line which incorporates exotic woods in his creations.



The Combo Pack is the best value! You get one Finisher's Formula™ and one Finisher's Touch™. Combine the ease of using Finisher's Formula™ to nourish your heirlooms and then apply Finisher's Touch™ as a barrier coat for an all-natural beeswax finish.

Both products are 100% non-toxic, Non Flammable and scent free. There are no harmful chemicals, making both products the natural choice for people with chemical sensitivities.

The benefits of the combo pack is you get the ease of applying large surfaces or intricate pieces with Finisher's Formula™ and the added protection of Carnauba wax with Finisher's Touch™

All Products available online at <https://ruelle.com> or store location:

526 S. Broadway, Tyler, TX 75702

Call (903) 595-2176 to place order by phone.