Surface Preperation

Sand surfaces to 320 grit, always with the grain. If you use too fine of a grit you may experience adhesion problems. Dampen a cloth with water and wipe down all surfaces. This will swell/raise the grain. Wait approximately 10-20 minutes for the surface to dry and sand with 320 again. By sanding once the grain has been raised you lower the risk of grain patterns showing through once the finish has been levelled. Once all sanding is complete wipe down the surface with Naptha or Mineral Spirits to ensure it's clean and free of all oils from handling.

Grain Filling

If you are finishing closed grain woods (Maple, Alder, Basswood, etc) you can skip this step. For open grain woods (Mahogany, Ash/Swamp Ash) you will likely want to grain fill (note - there are some finishers who apply lacquer over top of unfilled open grain bodies. It can be a great look, as it produces a very aged/vintage looking finish, though very deliberate).

Our Oil Based Grain Fillers come in three colors: Natural, Mahogany Red and Dark Walnut. Natural is essentially just a neutral wood color filler while the other two have been tinted with dark red and brown dyes. When applied to bare wood the color will be absorbed into the wood at the same time as the grain is being filled. If you want to do not want to dye your surface and only want to fill the grain with your selected color, apply a coat of Clear lacquer or Sanding Sealer first. This will protect the surface from being colored.

If using Oil Based Grain Filler make sure it has been stirred as it separates fairly quickly (days, weeks). Though it should be the consistency of paste, some people prefer to work with it when's it's been thinned. Slowly stir in small amounts of Mineral Spirits until you've reached a consistency you want to work with.

Paste filler can be applied with a disposable paint brush, however many like to massage it into the grain with the fingers, wearing latex gloves. This shouldn't take much effort however you want to make sure the filler is worked into all the pores. After about 10-15 minutes you should be able to notice the solvents flashing off and the excess top filler will lose it's shine and turn dull in appearance. At this point you will need to squeegee the majority of the excess filler off. An old credit card can work well, scraping across the grain. Another effective method is to use a Stanley razor and carefully shave off the excess. Once the majority has been removed find a heavy cloth or coarse rag and gently buff the last of the filler film from the surface of the piece. Be careful not to apply to much pressure as you don't want to pull the filler out that's just been worked into the pores/grain.

This should be left to dry as least overnight. Once dry, sand gently with 400 grit just enough to reprep the surface for the next step. Again, you want to be extremely careful not to remove what's just been filled. A second application of filler can be applied by repeating the previous steps if necessary.

Sealer / Primer Coats

Sanding Sealer is a great way to prep a piece for the color coats. The solids content of Sanding Sealer is often double that of clear lacquer which allows for a fast build that can then be levelled. It also has an ingredient which eases sanding.

Use a tack cloth prior to spraying to ensure you have a clean surface. Apply up to 3 coats of Sanding Sealer in a day, with at least an hour between each coat. A single aerosol can should deliver 3-4 full coats for a standard guitar. Allow the piece to dry overnight.

Wet sand with 400 grit or dry sand with 400 grit free cut sandpaper to ensure surface is level. When wet sanding, it's recommended to use Mineral Spirits or Naptha in order to avoid swelling the wood which can occur when using water (an area of exposed wood such as cavities or holes drilled will inevitably soak up liquid).

Any surfaces that have been sprayed so far will likely be shiny in appearance. As you sand you will see the shine become matte, with small shiny pits. The purpose of level sanding is to eliminate any "pits" which are small divots in your top coat. You will want to continue to sand until all the pits are gone, which means you've sanded your surface level. Wipe the surface clean with a rag lightly dampened with Mineral Spirits or Naptha, allow it to dry for a couple hours and then you're ready for your next step.

A Primer can be used in place of Sanding Sealer or in addition to. It is recommended to use a White Primer when applying one of our Metallic finishes. Primer in tandem with Sanding Sealer allows for an extra layer of protection in creating a perfectly level surface. Metallic finishes specifically are likely to show any blemishes or inconsistencies on the surface area. Oxford Supply White Primer is a high-build formula, similar to our Sanding Sealer, allowing the finisher to build a solid base quickly and then sand level.

The rules of application are similar to Sanding Sealer, up to 3 coats per day, 60 minutes between each, dry overnight. If applied correctly the Primer coats often dry very smooth. You may be tempted to apply your color on top of the Primer as is, however it should at least be scuff sanded first. If not further levelling needs to take place, use 400 grit sandpaper and lightly scuff sand all surfaces. This aids in the application of the following color coats, providing a surface for the following lacquer coats to easily adhere to.

Color Coats

<u>Solid Colors</u> - Solid color finishing is quite straight forward. Spray approx 12 inches from your surfaces. You should often see full coverage in 2-3 coats. Remember to lightly swipe all surfaces with a tack cloth right before spraying, it's an easy way to prevent dust and debris from remaining on the surface that you've already invested so much time into preparing. Rules are again the same, up to 3 coats per day, 1 hour between each. Allow to dry overnight

<u>Semi-Transparent Colors</u> - The more coats applied, the more opaque the finish will be. Try backing your can off to about 18 inches from your piece to give you a wider range of spray which will allow you more control, gradually building up to your desired tone/depth. For finishes such as Butterscotch Blonde or TV Yellow, some people like to let a lot of grain show through which can be achieved in 1-2 light coats, while others want full opacity or almost full opacity which will occur after 3-4 coats.

Transparent Colors - Traditional burst colors or tints such as Heritage Cherry Red, Vintage Amber, Tobacco Brown will technically always remain transparent. However, the more coats that are applied the darker/deeper the finish. As with Semi-Transparent colors, you will likely want to back your spray away to about 18 inches from the surface. If sprayed too close it's easy to apply too much lacquer in an area and have it appear darker than the surrounding surface. Lightly apply these colors, gradually building up to the tone/depth you're after. Many light coats will offer much more control than fewer heavy coats.

<u>Metallics</u> - As stated previously Metallic's should be applied over a White Primed surface. Apply several lighter coats from about 14-16 inches from the surface. You should obtain full coverage in about 3 coats. If applied too wet, the metallic flakes will float and pool in the wet lacquer. If this occurs, allow to dry for an hour and follow up with 1 or 2 very light top coats - this will usually even out the appearance. Since these coats are sprayed lightly, you can apply up to 4 in a day if needed with 30-60 minutes between each. Metallic coats should not be sanded.

<u>Clear Coats</u>

Once the color coats have been applied they should be allowed to dry at least overnight. If they sprayed out nicely and there's no debris or dust in the top coat you can now begin with your clear coats. Clear Coats can be a key in creating the depth many finishes are renowned for and they also serve as protection - specifically when wet sanding and buffing the finish to its final shine. 6-9 Coats of clear lacquer are recommended to achieve a vintage, thin finish. 10-15 Coats are recommended for a factory-quality, high gloss finish. This may seem like a lot but a key thing to remember is that a certain amount of the finish is removed when wet sanding and buffing.

The schedule for clear coats is the same as previous steps, no more than 4 coats a day, 60 minutes apart. Sand only as need. It is often best to apply the first few Clear Coats on the lighter side.

Dry Time and Storage

Many finishes are fairly safe to handle after 24 hours, however they will still be very soft. Be careful and make sure the piece is hanging via a handle/arm and not resting on the floor/up against anything. Though some finishers have refined their methods and begin final sanding/buffing after a few days, it's recommended to wait 2 weeks. The finish will have gassed off substantially in this time and will have dried hard enough to polish up to a high shine.

An easy (albeit primitive) method to see if your finish is hard enough to be sanded and buffed is to find an area on the surface that will be hidden (under the pickguard) and press your thumbnail - if it easily leaves a mark it is too soft and needs more time.

Store the piece in a cool, dry place. Airflow helps dry time in a big way. If you store the piece in a small box where fresh air cannot easily pass through it will likely take longer too dry since the little amount of air present will be rich with the off gassing agents. Any easy way to help this along is to put a small fan in the room.

Wet Sanding and Buffing

Once you've decided that your piece has dried for an appropriate amount of time it's time to move on to final sanding and polishing. We recommend using Mineral Spirits or Naptha when wet sanding as they are less likely to swell the grain of the wood.

We recommend to start with 400 grit or 600 grit on around a small object to act as a block and slowly, carefully work your way through the different grits up to 2000. Pay extra attention to the corners and sides of the piece as lacquer does not build as quickly here and it can be extremely easy to sand through. It's not uncommon for people to stop sanding within 1/4" of the edge and just proceed with buffing compound in an attempt to play it safe in these areas.

Wipe and check your surface in the light often. As you make your way up the wet sanding grits your surface will appear less and less matte.

Once you've completed wet sanding at 2000 grit it's time for final buffing/polishing. Apply a small amount of Medium Compound to a soft cotton cloth or foam pad and polish the surfaces in small circular motions until you've buffed the area clean of polish. The surface should start to shine up very quickly in this step.

Follow up with a new cloth or foam pad using Fine Compound and the same techniques as above. This should remove final micro-scratches and swirl marks. If polishing is complete and there are still abrasions present, slowly work your way back down into the finer grits until they are removed. Sometimes just going over the areas again with Medium Compound once or twice will remove the finer scratches.

Aerosol Spray Tips

Our cans were specifically sourced for their wider stem size to allow for greater flow while spraying. You'll notice side by side our tips have a larger stem than many others.

All of our aerosols come with two tips:

- WHITE FAN TIP - Produces a white vertical fan pattern which mimics a spray gun, atomizing the lacquer at a very fine level. This tip is preferred for most applications for its consistent output, easy of use, and quick coverage. Recommended for spraying Sealer, Primer, Clear Coats and solid colors.

- RED CONE TIP - Delivers a more focused, traditional, circular aerosol patern. Very useful for spraying hard to reach areas like cutaways. Also allows for more control in spraying paterns such as sunbursts or headstock faces.

If you use an aftermarket tip make sure it has a stem size of 3.5mm. Test on scrap before spraying your instrument

Can I brush your lacquers on?

All of our lacquers are intended to be sprayed on.

Something landed in my lacquer - what now?

If your lacquer is still wet - LEAVE IT. It's difficult, but it's much easier to remove once the finish has dried even a few hours. If possible allow the finish to dry overnight and gently sand with 800 grit only the immediate area where the debris is, until it's removed. If it's something like a hair or a small insect you may be able to lift it out with tweezers.

If you try to remove it while the lacquer is still wet or soft there is a good chance of actually pushing it further into the finish since the lower layers are likely soft as well.