Reconditioning Antique Fixtures

by Walter Jowers

Lighting sets the mood in a house. In fact many would argue that lighting choices for a house affect the occupants' physical and mental well-being.

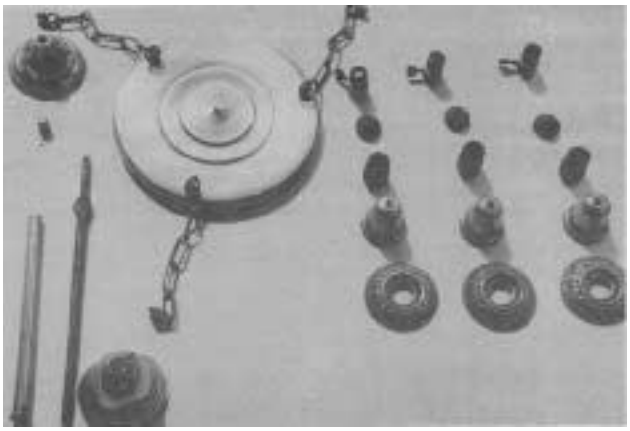
My old-house lighting philosophy is this: If you're putting in a room full of modern accoutrements, say a sleek kitchen or master bath with Jacuzzi—then put in modem lighting. In a modern room, nothing looks more out of place than "repro" Victorian lighting fixtures, especially those ceiling fans! If you're trying to keep the mood of a room close to the original—a bedroom with Arts & Crafts wallpaper, or a living room with a Craftsman-style tile fireplace—use old lights. Learn about the design vocabulary of a period before you decide what lights to use. Craftsman-style lights would look odd in an International-style house; and Frank Lloyd Wright-style lights in a Victorian house would be ridiculous. Here's what I do once I decide to use old lights in the house you're restoring.

It's easy to find old lighting fixtures (I'm talking about early-twentieth-century electric lights, not Victorian gaslights or Colonial chandeliers.) If they're not hanging on the ceiling of an old house, they're often stored in the basement. They can also be bought cheaply at flea markets or antique stores. Even restored ones seldom cost more than $200, which is about equal to an average new ceiling fixture.

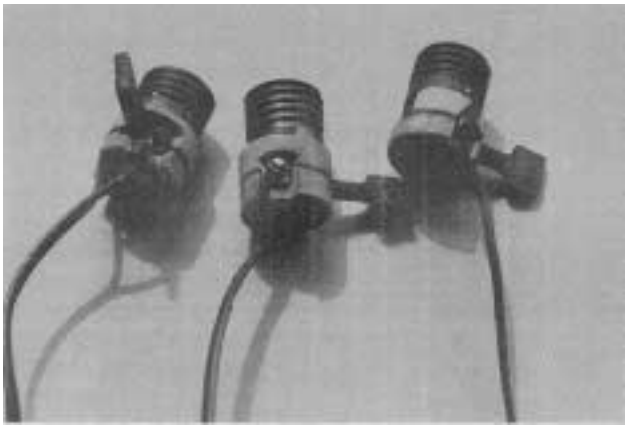
Getting Through the Dirt

The biggest problem with old ceiling fixtures is dirt. Re-wiring them is easy (more on that later). If your client is a do-it-yourselfer, you might just have him clean the parts with a metal cleaner—brass cleaner for brass or chrome cleaner for chrome. Take the fixtures apart (they're pretty much all nuts and nipples), and throw away the old wire. By the time you're ready for installation, he will have them clean. Another alternative is to take them apart, wire the parts together loosely (so you don't lose anything) and take it to an electroplating shop.

Plating shops routinely clean and polish metal before plating, so they don't mind a small cleaning job. They take the wired-together parts and hang them in a vat of hot lye for a few minutes. The results are pretty good.



An old three-light chandelier, disassembled and cleaned. At left from top to bottom is the filial, spine with screw-on connectors, and ceiling pan. Toward the center is the main part of the chandelier, with chains and screw-on mounts for the socket assemblies. At right are three socket assemblies. From top to bottom each has socket, metal socket top, paper insulator, metal body for the socket, decorative ring.



Three sockets for the old light, wired up with new wire.

The trick is to stop the plating guys before they go on to their next step—buffing. This knocks off a lot of detail, and makes the fixtures look sort of melted. Instead, accept the metal parts straight out of the lye, give them a little touch-up with metal cleaner, then rub them with wax or linseed oil to keep them from tarnishing quickly.

Many people spray-lacquer old lighting fixtures to prevent tarnishing. It's a matter of personal taste—but I think spray-lacquered old fixtures look ugly. They're just too shiny. Chrome doesn't need any more shine and old brass looks good with a patina. Furthermore, shiny lights look like reproductions.

On To Re-Wiring

Not many places stock it, but it is still possible to get old-style wire with woven cloth insulation. Carol Cable (Pawtucket, R.I.) makes it, and most electrical supply houses stock Carol Cable products. You can special-order the stuff. However, plain brown lamp cord works fine and blends nicely with the slightly-tarnished lights.

First Check For Shorts

For safety's sake, I want to make it clear that we're working with an unwired light. With the power off, the light was carefully removed from the ceiling, disassembled, and has the old wire removed. Nothing is live.

First, check the sockets for shorts and continuity. I use a volt-ohm meter, but a continuity checker will do. With a volt-ohm meter, set the meter to check for resistance. When you touch the leads to two parts that are continuous, the meter moves to 0 ohms resistance. With a continuity checker, when you touch the leads to two continuous parts, a light comes on.

Make sure one of the lugs on the socket is continuous with the post (in the center of the socket), and the other lug is continuous with the jacket (the threaded part that the light bulb screws into). To make sure there's no short, confirm that the post is not continuous with the jacket and the jacket is not continuous with the post. If the socket is shorted or open, throw it away and replace it with a new one. Typically new sockets fit old lights.

After years of screwing in bulbs, the post sometimes bends too far downward and makes intermittent contact with the bulb. Clean the center post with a pencil eraser and then using a pair of needlenose pliers, bend the post up just a whisker. Then strip about an inch of insulation off the wire and attach a length of wire to the socket. Wires should be neatly screwed down, with no bare wire or wire "whiskers" showing.

Next, pull the paper insulator over the socket. The paper insulator keeps the wires from coming in contact with the metal body of the lighting fixture. If any wires touch the body of the fixture, the whole fixture will become hot. If the old paper crumbled when you took the light apart, use paper from a new socket; or neatly insulate the socket with electrician's tape.

Put the sockets back into their metal bodies and run the wire through any chains or tubing up to the top of the fixture. You can now reassemble the whole fixture, except for the part that mates with the ceiling box.

Tie It All Together

Unzip a couple of inches on each wire at the top of the fixture. On the chandelier pictured, this gave me six strands of wire from three pieces of lamp cord. Strip off about an inch of insulation and twist the wires together in parallel: Twist all the "tracered" ends together (tracers are ribs on lam cord; lines of color on other cords), then twist the non-tracered ends together. One set of wires should be continuous with the posts only, the other set continuous with the jackets *only*. To make sure you did this right and that there are no shorts, hold on of the leads of your voltmeter or continuity checker to one of the twisted groups, and make sure it is continuous with either the center posts or the jackets of all the sockets. Then make sure the other twisted group is continuous with the other side of the circuit.

Now take about a 12-inch length of cord, and unzip a couple of inches at each end. Strip off an inch of insulation, and twist one side of the "pigtail" into one of the twisted group of wires; the other end into the other group. For a first-class job, you should solder each twisted group together, but typical practice is to wire-nut them together and tape over them.

The finished job: a handsome restored solid-brass fixture.

Housing The Fixture

Hanging an old fixture to the ceiling is more art than science. The one shown had standard threaded stock as its "spine," so all I had to do was hang a mounting bracket on the ceiling box and screw the spine in. Some lights might have to be fussed with, maybe even molly-bolted to the ceiling (if your local codes allow that).

Be *sure* the power is off to the box before you hang and wire up the fixture. It is completed by twisting or side of the pigtail to the black wire. Both black and white wires are hot in a typical ceiling box. The common side of the circuit must be left continuous. For an old fixture, without a ground wire, affix a wire (soldering to a clean spot is the best way) on the metal chassis of the fixture. Connect this wire to the grounding lug in the ceiling box.

Note/Disclaimer: Above all else, re-wiring and hanging an old light should be done safely and in compliance with local codes. If you have any doubts, get all the facts before you do the job. ■

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