

Materials List

Below is a list of materials used to restore the Glen Echo Park Dentzel carousel. Manufacturers are mentioned if their products are uniquely suitable.

Protective wear and equipment

- Tyvek coveralls
- Latex or vinyl gloves, hair net, booties
- Glasses or eye protection
- Survivaire protective respirator with filters approved for lead
- HEPA vacuum cleaner approved for lead

Removing paint

- Hairdryer or heat gun that can be set as low as 200 degrees F
- X-Acto knife with #10 or #22 blade
- Denatured alcohol
- Mineral spirits
- Dimethylformamide (DMF) (Note: highly toxic)
- Methylene chloride paint remover

Repairing pieces

- West System 105 epoxy resin, 206 epoxy hardener, 306 epoxy pump dispenser, 406 colloidal silica, 410 Microlight fairing filler
- Old paint brushes
- X-Acto knife with #10 or #22 blade
- Masking tape
- Dixie cups
- Sanding sticks by Woodcraft, #220 grit sandpaper
- Rasps, chisels, files, mallets
- Contour gauge
- Woodcarver's calipers by Woodcraft
- Bandsaw, coping saw
- Basswood or poplar blocks of wood
- Electric drill
- Rubber strips cut from inner tubes, clamps

Sealing the original paint

- Acryloid B-72 or Paraloid B-72 in xylene
- B-I-N white pigmented shellac by Zinsser

Preparing the surface for repainting

- Oil-based primer by Sherwin Williams
- #100 to #220 grit sandpaper
- Polyfilla cellulose filler by LePage of Canada
- Palette knife
- Dixie cups

Preparing the rounding boards for repainting

- Tri-sodium phosphate (TSP)

Toothbrushes and 2-inch natural bristle brushes
 X-Acto knife with #10 or #22 blade
 Paint scrapers in various sizes
 Baby wipes
 Paper towels and rags

Leafing

Sheets of aluminum and 23-carat gold leaf
 Fast Dry Gold Size 4008 (oil-based) by One Shot or varnish
 Colour Shaper brushes by Forsline and Starr for pressing leaf into the surface
 Soft paint brushes for brushing away excess leaf
 Polyester fleece cloth for burnishing leaf
 Gilder's tips, gilder's pad, and gilder's knife

Glazing leaf

Transparent artist oil paints
 Paint brushes, stipple brushes

Applying bronze and gold powders

Cres-Lite bronze powders by the Crescent Bronze Powder Company
 23-carat gold powder for the jesters
 Fast Dry Gold Size 4008 (oil-based) by One Shot
 Black oil paint for base coat beneath bronze powders
 Dark brown oil paint for base coat beneath gold powders
 Polyester fleece cloth and rubber band for applying powders
 Orange shellac (3 LB cut) for sealing bronze powders

Painting

Brushes: 2-inch brushes, stipple brushes, soft brushes, fan brushes
 Alkyd enamel low luster base coat
 Artist oil paints for painting animal bodies, band organ facade and rounding boards
 Artist acrylic paints for inpainting panels
 Oil-based sign painter's paints by One Shot for painting saddles, straps, and other tack on animals
 Liquin medium for oil paints by Windsor-Newton
 Dixie cups

Creating and transferring designs

Tracing paper or acetate, pen
 Graphite transfer paper, stylus

Pin striping

Oil-based sign painter's paints by One Shot
 Lining brush

Varnishing

Behlen Water White Restoration Varnish for varnishing animals
 Soluvar Picture Varnish (Acryloid B-67 in mineral spirits) by Liquitex for varnishing drum panels, the band organ facade, ceiling panels, and rounding boards