TROUBLESHOOTING GUIDE: ENGLISH

Type of Stencil Solution Problem WASHOUT BREAKDOWN (LOSS OF ADHESION DURING DEVELOPING) ALL Contaminated mesh Use Chroma/Brade to abrade new mesh, especially when using film. Degrease properly with Chroma/Clean™ degreaser. ALL Use Chromaline Exposure Calculator to determine proper exposure Inadequate or inconsistent exposure time and light source performance Excessive water pressure and/or washing ALL Decrease water pressure and/or time of washout. Water temperature range too hot ALL 90° to 100° F (32° to 38° C) optimum water temperature. Use Chroma/Brade[™] to abrade new mesh. Degrease properly Improper adhesion of capillary film CAPILLARY FILM with Chroma/Clean[™]. Use wetting agent, such as Chroma/Wet[™]. DIRECT/INDIRECT Transfer emulsion has inadequately After coating with transfer emulsion, allow about 10 minutes to elapse (dwell time) before placing sensitized film screen into dryer sensitized film or in front of a fan. ALL Screen not dry enough for exposure Follow drying directions. Dehumidifier recommended in drying area ALL Pre-exposed or outdated film or emulsion Use yellow or subdued lighting in screen making area; dry screen in total darkness. Check lot number on packaging Poor coating methods EMULSION Check user's guide for coating instructions. Use proper scoop coater DIRECT/INDIRECT

SCUMMING OR HAZE

Incomplete washout and/or under exposure	ALL	Increase exposure and/or washout until foaming stops. Use a wet vac to suck out the water and scum (a major common problem).
Excess moisture in screen making area	ALL	Use dehumidifier to maintain 50 to 70 percent relative humidity.
Poor positive and contact	ALL	Check quality of positive. Check vacuum frame for complete contact in all areas of screen.
Pre-exposure of film or emulsion	ALL	Use yellow or subdued lighting in screen making area; dry screen in total darkness.
Light scatter	ALL	Use dyed or tinted fabric or reduce exposure.

WEAK STENCIL

Underexposure	ALL	Increase exposure time. **Use Chromaline Exposure Calculator to determine proper exposure time. The most common cause of stencil failure and light source performance. Feel squeegee side of stencil during washout. If it feels slimy or you get color on your fingers, screen is underexposed.
Film too thin for mesh count	DIRECT/INDIRECT CAPILLARY FILM	Check user's guide for proper film thickness.
Emulsion coating too thin	EMULSION	Apply additional coats on print side after initial drying; or use higher solids emulsion.
Screen not fully dry during exposure	ALL	Follow drying instructions. Dehumidifier recommended in drying area.
Baggy mesh	ALL	Use tension recommended by mesh manufacturer.
Stencil too thin for mesh	ALL	Check user's guide for film/emulsion recommended for mesh count.

**Always use fresh emulsion and film. Check the lot number and date of manufacturing.



Chromaline Screen Print Products 4832 Grand Ave. • Duluth, Minnesota 55807 • Tel: 218.628.2217 • Fax: 218.628.3245 Web Site: www.chromaline.com • E-mail: sales@chromaline.com

HELP WHEN YOU NEED IT 1-800-328-4261

Problem Type of Stencil Solution WASHOUT DIFFICULT (DURING DEVELOPING)				
Overexposure	ALL	Shorten exposure; run an exposure test.		
Excessive heat used in drying screen	ALL	Do not exceed 110°F (43°C). Chromaline recommends 85° to 95°F (30° to 35°C). A dehumidified drying cabinet is best.		
Pre-exposed or outdated film or emulsion	ALL	Use yellow or subdued lighting in screen making area; dry screen in total darkness. Do not use outdated material.		
Poor positive	ALL	Check density or image quality; emulsion of positive should be in contact with stencil emulsion.		
POOR IMAGE (SAWTOOTH)				
Incorrect exposure	ALL	Use Chromaline Exposure Calculator to determine proper exposure time and light source performance.		
Inconsistent light exposure	ALL	Use point light source with light integrator for best results. Check bulb age.		
Stencil too thin	ALL	Film Users: use thicker film. Emulsion Users: use more coats or thicker emulsion on the print side.		
Incorrect drying of emulsion	EMULSION	When drying, place coated screen in horizontal position, print side down.		
Undercutting	ALL	Use dyed or tinted fabrics. Decrease exposure time.		
Poor positive to screen contact	ALL	Check vacuum frame for complete contact in all areas of screen.		
PINHOLES				
Dust and shop dirt	ALL	Shop cleanliness. Clean artwork, film and vacuum frame glass prior to use. An anti-static brush or cloth is recommended.		
Underexposure	ALL	Use Chromaline Exposure Calculator to determine proper exposure time and light source performance. Feel squeegee side of stencil during wash out. If it feels slimy or you get color on your fingers, screen is underexposed.		
Dirt or grease on mesh	ALL	Degrease mesh properly, using Chroma/Clean™ degreaser.		
Air bubbles in emulsion	EMULSION DIRECT/INDIRECT	Allow emulsion to settle a minimum of two hours after sensitizing; allow additional settling time if emulsion is re-blended.		
Poor positive	ALL	Check photopositive for image quality and cleanliness.		
Film too thin for mesh	CAPILLARY FILM	Check user's guide for correct film thickness and mesh selection.		
Emulsion coating too thin	EMULSION	Apply additional coats on print side after drying; or use higher solids emulsion.		
Powdered sensitizer	EMULSION	Be sure powder is completely dissolved before mixing with emulsion.		
UNDERCUTTING				
Poor contact of positive to screen	ALL	Check vacuum frame for complete contact in all areas of screen.		
Improper exposure	ALL	Use Chromaline Exposure Calculator to determine proper exposure time and light source performance.		
Inconsistent exposure to light	ALL	Use point light source with light integrator for most uniform exposure.		
Light scatter within mesh	ALL	Use dyed or tinted fabrics. Increase exposure time 25 - 100 percent.		
Placement of positive	ALL	Emulsion of positive should be in contact with print side of screen.		