



DPI Investigator

August 2012

STOP! Put the wrench down...

Ruptured stainless steel braided supply lines arrive almost daily at DPI. One really ill-conceived design has to do with using the smallest sizes of these lines to supply single-handle kitchen and bath faucets. The lines are factory installed, very prone to rupture, difficult to service, and often unmarked.

We have also seen this with hair salon sink kits. The components are poor quality, generic items without brand markings. Please attempt to document the kit brand and distributor if possible.

Please *do not remove* these lines from the faucet or the fixtures that they originally came with. Many are unmarked and may be unidentifiable if the other components are not included. Send on-site photos, claim history, and all of the components that can be retrieved to obtain the best inspection.



Factory Installed Faucet Supply Lines

DPI Faucet Exemplars



Reminder! When planning a third party or joint destructive test, DPI requires that we have all of the photos and documentation that have been provided to the other parties *in advance* of the inspection.

TECH TERMS

Stress Concentration

On a macromechanical level, the magnification or amplification of large stresses on small areas adjacent to points of abrupt changes (geometrical discontinuity) in the shape of the surface or cross section of a deformed body is known as stress concentration. "Stress concentrators" that lead to stress concentration may be inclusions, openings, cavities, cracks, grooves, incisions, corners, protrusions, sharp edges, or engravings. A change in the diameter of a shaft is one example. Also, various surface irregularities such as notches, scratches, markings, and welded seams are stress concentrators. "Stress raisers" and "stress risers" are details that lead to stress concentration. The terms "stress concentrations," "stress raisers," and "stress risers" are often used interchangeably in many sources.

An example seen daily by DPI is plastic coupling nuts on toilet connectors. The area where the first thread terminates at the inner flange of an acetal plastic coupling nut is almost invariably the point where fractures initiate. Acetal (a.k.a. polyoxymethylene, or POM) is a material known to be notch sensitive.

Tips From The Shipping Dept.

Most shippers charge by volume and weight. One tip for saving a few \$\$\$ is to drain the water from water heaters prior to shipping them to DPI.

Not only is this easier on the bank account, it is much easier for the DPI personnel who handle these items.



Also, please remember to fully seal prepaid mailing envelopes. We have had occasions where only the envelope arrives, and all of the evidence has disappeared during transit.



NEWS from CPSC

U.S. Consumer Product Safety Commission

FOR IMMEDIATE
RELEASE
July 19, 2012
Release #12-230

Burlington Coat Factory Recalls Power Strips Due to Fire Hazard

WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed. It is illegal to resell or attempt to resell a recalled consumer product. **Name of Product:** Lush Life® power strips **Units:** About 6,000 **Importer:** Lush Life, of LaJolla, Calif. **Distributor:** Burlington Coat Factory, of Burlington, N.J. **Hazard:** The power strips have undersized wiring which poses a risk of shock to consumers. In addition, the wiring and plastic strip fail to meet fire resistance safety standards, posing a fire hazard to consumers. **Incidents/Injuries:** None reported. **Description:** This recall involves four designs of power strips. The vibrantly designed power strips come in four prints including, leopard, rose, skull and zebra. Model numbers 12256, 12257, 22563 and 22575 can be found on the six-outlet power strip. **Sold at:** Burlington Coat Factory, The Container Store and other retail stores nationwide from July 2011 through March 2012 for about \$10. **Manufactured in:** China **Remedy:** Consumers should immediately stop using the power strips and return them to the place of purchase for a full refund or store credit. **Consumer Contact:** For additional information, please contact the firm toll-free at (888) 223-2628 between 8:30 a.m. through 6 p.m. ET Monday through Friday, or visit the firm's website at www.burlingtoncoatfactory.com



Power strips are often difficult to identify, especially after being fire damaged. Many failure analysis labs and engineers count on the DPI Research Department with its large collection of exemplars to provide the answers they need.