Practical Book Repair for Circulating Collections
October 3, 2019

Resources for Making Archival Boxes

*How to Make a Custom Box* A video tutorial from the Sustainable Heritage Network


*How to Make a Non-Adhesive Phase Box* written tutorial from West Dean College

*Boxes for the protection of books: their design and construction* A scanned and online version of the Library of Congress publication. There are many, many options in this 202 page publication. [https://catalog.hathitrust.org/Record/003131174](https://catalog.hathitrust.org/Record/003131174)

Resources for Repair Techniques


DRY CLEANING

This You Tube video shows the basic technique for dry cleaning, the demo shows paper, but this technique works for cloth or leather as well [http://bit.ly/2oKLwKj](http://bit.ly/2oKLwKj)

Supplies needed: soft brush, smoke off sponge, or soft white cosmetic sponge- the triangular ones are very good at getting into the gutter of books.

TIP IN

This is a nice video on how to repair typical damage to an adhesive bound book. This technique would also work on a loose page from a sewn book or pamphlet. [https://www.youtube.com/watch?v=xvTK8tUCcmA](https://www.youtube.com/watch?v=xvTK8tUCcmA)

Supplies needed: glue brush, glue (poly vinyl acetate preferred), Olfa or X-acto knife, cutting mat, ruler, weight, waste paper
HEAT SET MEND

This is a short YouTube video made by the Smithsonian Archives showing the application on a variety of tears in an old map. There is no audio. http://bit.ly/2oCxNFE

Supplies needed: heat set tissue (Filmoplast R), tacking iron (you can go pricey—Sealector or Hangar 9 model, or bargain—mini quilting iron from JoAnn Fabric) temperature needs to go to 170 degrees, scissors, silicone release paper, waste paper, bone folder, something to insulate the surface of your bench
TAPE REMOVAL

There are two different vintages of pressure sensitive tape on this title page. The yellow tape shows adhesive residue that is highly oxidized, cross-linked and has sunk into the paper. The carrier can be popped off with a spatula. Removal of the adhesive residue will require solvents and should not be attempted without the benefit of a fume extraction system. If you need to re-mend once the carrier is lifted away, use heat set tissue which should be able to bond on top of the yellowed adhesive residue.

The clear tape in the lower fore edge corner of the title page is much younger and the pressure sensitive adhesive is still soft. The carrier can be lifted with a heated spatula like the one in the picture. The spatula is held against a tacking iron until it is warm and then the spatula is slipped under the edge of the carrier, lifting it from the surface of the paper. As the carrier is freed it can be clipped away with scissors. Re-heat the spatula on the tacking iron and slip it back under the carrier to lift. Repeat this step as often as needed until the carrier is lifted completely. The spatula should slip easily under the carrier, without skinning the paper. The hotter the spatula, the easier it will be to slip between the carrier and the adhesive residue. Once the carrier is completely removed, the soft/tacky adhesive residue can be lifted with a crepe eraser, dabbing at it until the residue sticks to the eraser instead of the paper. You may have to rub with firm pressure, and it isn’t always easy if the paper is brittle, but you can do it! The original tear can then be mended with heat set tissue.

If there is glassine tape, the adhesive is water soluble and the tape can be lifted after soaking the tape with a poultice of methyl cellulose or a barely damp blotter or paper towel. Adhesive residue can be brushed away with a damp brush.

Supplies needed: tacking iron, micro spatula, scissors, crepe eraser, blotter or paper towels, brush, methyl cellulose.
SPINE LAP

The boards on this book (above) are securely attached but the thin cloth on the covers has split along the spine. The structure of the book is basically sound, and the needed fix is mostly cosmetic. Often, people will make a re-back mend, where they remove the original spine cloth, add new cloth over the spine of the text block and wrap flaps onto the inside of the boards. However, there is a much lower impact way to go- the SPINE LAP. There are two ways to do this repair, both are effective, it just depends on the condition of the book.

Spine Lap One: Take a piece of medium weight Japanese tissue (machine made is fine) that is the length of the spine and about a half inch in width. Fold the tissue in half lengthwise to make a hinge. Glue (use PVA) one flap of the hinge to the spine of the book with the folded edge aligned with the shoulder of the text block. (See image to the left) Allow to dry. Cut a strip of Mylar about an inch longer than the spine on either end and slightly wider than the tissue hinge, place it against the spine of the book. This will keep the tissue hinge from gluing to itself and will be popped free once the hinge is dry.
Spine Lap Two: Apply glue to the second half of the hinge placing waste paper behind the tissue to keep the glue from getting on the spine of the book. (See image to the right) Remove the waste paper and allow the hinge to fall into place along the spine of the text block. Smooth the original spine cloth into place with a bone folder, making sure that any excess glue is wiped away. Wrap the book in an ACE bandage or a piece of non-stick fabric (Remay, Holytex or non-fusible interfacing) and allow to dry. Once everything is dry, remove the wrapping that held the spine in place, and pop the piece of Mylar or polyethylene free and slide it out. The book spine cloth should be in place, but still move freely when the book is opened.

Spine Lap Second Method

Sometimes the board is mostly secure, but could benefit from the support of a tissue mend, or the shoulder of the book really rounded. In this case, you are starting with the same loose spine as before, but then you lift the cloth over the board with a micro spatula and one half of the tissue hinge is adhered to the board while the other is adhered under the original spine.

Lift about a half inch of cloth, along the full length of the board, and make sure you lift the corner free, splitting where it wraps around the board.
Take a piece of medium weight Japanese tissue that is the length of the spine and about a half inch in width. Fold in half lengthwise to make a hinge. Glue (use PVA) one flap of the hinge under the cloth on the board (I prefer to apply glue to the board, and then slip the hinge in place). Allow the hinge to dry under weight.

Once the the first hinge is secure, cut a piece of Mylar that is slightly longer than the spine of the book and slightly narrower in width. (See image to left.) Place the Mylar on the spine, so that the glued tissue doesn’t stick to the spine of the text block. Apply glue to the second half of the hinge placing waste paper behind the tissue to keep the glue from getting on the spine of the book. (See image to right.) Remove the waste paper and allow the hinge to fall into place along the spine of the text block. Smooth the original spine cloth into place with a bone folder, making sure that any excess glue is wiped away. Wrap the book in an ACE bandage or a piece of non-stick fabric (Remay, Holytex or non-fusible interfacing) and allow to dry. Once everything is dry, remove the wrapping that held the spine in place, and pop the piece of Mylar or polyethylene free and slide it out. The book spine cloth should be in place, but still move freely when the book is opened.

Supplies needed: micro spatula, medium weight Japanese tissue, PVA, brush, bone folder, waste paper, Mylar or polyethylene strips (you can make your own by cutting up Ziploc bags which are made of polyethylene), an ACE bandage or non-stick fabric such as non-fusible interfacing (from a fabric store)