Full repair is needed when one or both covers are detached, the spine is loose or detached, and either joint is badly damaged such as an end sheet ripped at the joint.

A. Cleaning
   1. Check the date of publication. If pre 1850 set aside for rare evaluation. Also set aside anything else that might be considered rare, according to the following criteria: age, artifactual characteristics, condition, and bibliographical, research, or market value. (see Policy on Transfer of General Collection Material to Special Collections)
   2. Check for brittle paper by creasing corner forward, then back. If corner comes off, book should be considered for reformatting.
   3. If post 1850 and paper is not brittle, cut off loose boards with a knife and trim back excess or loose materials from board edges with scissors.
   4. Peel any loose material off the spine of the text block. Scrape with knife blade, if necessary, to remove excess paper and dried glue.
   5. If the book is a quarter leather binding, the leather should be removed from both covers to allow for better adhesion of the buckram.
   6. Trim paper tatters from shoulder of text block.
   7. Tip on any loose pages, (end sheets, title page, etc.) with PVA

B. Setting up
   1. Gather materials:
      a. Linen - 2 pieces, each the height of the text block.
      b. Liner - width of the spine of the text block and slightly longer than the height of the book.
      c. Inlay - same width as liner and height of boards. Attach security strip to the inlay.
      d. Buckram - width adequate to provide sufficient overlap onto both front and back boards. Height of covers plus approximately 2 cm at top and bottom for turn-in.
   2. Line books up separately down the bench keeping boards and supplies with each book.
   3. Liner and inlay should be the exact width of the spine of the text block, trim both together to this width if they are not.

C. Preparation of the text block
   1. Lay scrap paper along the shoulder of the text block and apply a very thin line of PVA to the shoulder. (This can also be done with a small fine-tipped glue bottle) Attach the linen to the shoulder. Press down with bone folder. Repeat process on back.
   2. Drill holes (or use an awl) through shoulder about ½ cm in from edge of shoulder and at an angle to come out on spine about ½ cm down. Drill 5 holes, repeat for back.
   3. Using linen thread, overcast to hold linen in place. Anchor with a repeat stitch at beginning, holding 2 cm of thread end until after second stitch is made. Continue on the back shoulder and end with a repeat stitch to anchor. Cut thread leaving 2 cm tail.
   4. Apply an even coat of PVA to the spine of the text block and attach the dampened liner (dampened with a damp sponge) even with the edge of the spine. Be sure to tuck thread tails under liner before firmly rubbing liner down with bone folder.
   5. Trim ends of liner even with the ends of the text block. Wipe off any excess glue.
D. Making the case

1. Place buckram right-side-down on scrap paper and apply an even coat of PVA.
2. Center inlay both vertically and horizontally onto glued buckram. Press firmly.
3. Place each board about 1 1/2 thicknesses of board away from edge of the inlay. Place text block on back board. Be sure to line it up with the end sheet on back board. Wrap buckram and front board into a closed book position. If the front board doesn't completely cover the text block, open and move the boards slightly further away from the inlay. Be sure that both boards are moved equally. If front board comes too far over the text block, move boards in slightly.
4. When cover fits properly, open and remove text block. Fold down top of buckram over inlay, then fold bottom over inlay and press both down firmly with bone folder to crease buckram and form head and tail caps.
5. Replace text block and close book. Wipe off any excess glue along edge of buckram with cloth or rag.
6. Using bone folder, work the joints well into the shoulder on both front and back.
7. Set the joints by tipping bone folder down over top and bottom of joint.
8. Stack books fore edge to back edge and allow to dry.
9. Lay books in a line with the cover of one book open and supported by the text block of the adjacent book.
10. Gently pull linen back to the sewing being careful not to pull it off. (This helps the linen lay flat and smooth.)
11. After being sure that both case and text block are right side up and aligned properly, place scrap paper under linen. Apply PVA evenly. Remove paper and smooth linen up onto front board. Wipe off any excess glue and rub down with bone folder. Pay particular attention to be sure the linen is formed into the joint so as not to wrinkle when cover is closed. Repeat down the line with front cover linens. Leave covers open and allow to dry until the glued linen does not feel cold or damp to the touch.
12. Flip books over and repeat with the back of book.

E. Titles on spines

1. If the old spine is still legible and intact, trim evenly with paper cutter.
2. Remove excess paper or cardboard from back of old spine. Separate with knife blade if necessary or scrape.
3. Apply PVA to old spine, place on new spine and remove any excess glue with a cloth or rag.
4. Place clean scrap paper over spine and rub down with bone folder.
5. If the old spine is illegible or too badly damaged to use, a suitable computer program can be used to create new titles and call numbers for finished books. Cut to fit. Apply as above.

Completion

1. If corners of the boards are tattered or frayed, apply PVA and smooth down with fingers to consolidate the board and buckram covering.
2. Stamp inside of back cover with CONSERVATION date stamp and your initials.
4. Return to shelves.