



Instructions for Use of the Bed Removal Tool

The unique nature of the UNO™ column design and the Continuous Bed support means that bed adjustment is restricted to a one-time operation when the top of the bed is heavily fouled and normal sanitation methods have been unsuccessful.

1. Remove both top and bottom column black end-caps and both tan bed supports.
2. Remove the distribution screen and frit from the top of the column with the Frit Removal Tool.
3. Fully insert the Bed Removal Tool into the top of the column bed.
4. Rotate the Bed Removal Tool until approximately 4 mm of bed is extracted. Remove the Tool from the glass tube and insure that 4 mm of bed is removed with the tool. If not, repeat Step 3.
5. Once the bed material is removed from the column, insert a new frit and distribution screen.
6. Remove the brown spacers from both of the tan bed supports and insert the bed supports into each end of the glass tube. Push the bed supports into the column until they touch the distribution screen.
7. Insert the glass tube into the clear shield and attach the black end caps. Tighten the caps until they cannot turn anymore. The bed will compress ~4 mm and restore the performance of the column. Note that even if a slight void forms after this operation and with subsequent use, the performance of the column will not be affected.
8. Attach the column to your chromatography system and wash the column with several bed volumes of 1.0 M NaCl or KCl recommended flow rate before re-equilibrating with start buffer.
9. This operation can be performed once only. An economical replacement column consisting only of the glass tube and bed is available.