

COLUMN REPLACEMENT PROCEDURE:

CABINET MOUNT AND FREE STANDING SOLVENT SYSTEMS



This procedure will help with the removal of the old columns, the installation of the new columns, and the preparations for purging.

Tools and supplies needed for this procedure.

- * (1) Pairs of Vice Grips
- * (1) 9/16" Wrench
- * (1) Adjustable Wrench
- * (1) Lab Jack
- * (1) Flat Blade Screwdriver
- * (1) Torpedo Level
- * (1) Rubber Mallet
- * (1) Swagelok Cap (part # SS-400-C)
- * (1) Lab Jack and ¼" thick plate

Figure 1



Always wear goggles, nitrile gloves, and a lab coat when working with the solvent system

1. Close both the argon and solvent valves on the top of the keg. (Figure 2)

Figure 2



2. Close the valves on the top and bottom of both columns. (Figure 3)

Figure 3



3. Close the valve on the argon manifold (Figure 4)

Figure 4



4. Using the 9/16" wrench and the adjustable, disconnect the solvent hose from the bottom of the back column. Place the Swagelok cap into the nut on the end of the hose to prevent solvent from dripping. (Figure 5)

Figure 5



5. Again using the 9/16" wrench and the adjustable wrench, remove the column interconnect tubing (Figure 6) from the top of the back column and the bottom of the front column.

Figure 6



6. Remove the solvent line (Figure 7) that runs from the top of the front column to the final filter on the valve plate. The tubing will often get stuck inside the valve. A light tap on the tubing should loosen it.

Figure 7



7. Place the ¼' plate on the jack and position it below the back column. Raise the jack until it and the plate make contact with the valves on the bottom of the two columns.
8. Using the vice grips, compress the two portions of the clamp (Figure 8) that holds the columns in position. This should relieve the pressure on the nut, allowing you to remove it by hand. Do the same for the other clamp. It helps if you have a partner that can hold the columns while you remove the last clamp.

Figure 8



9. Carefully remove the columns. It may be easier to lift them up and over the tubing and valve plate. They will be somewhat heavy. Each column weights approximately 13 pounds.
10. Screw a nut onto the bottom valve of both columns.
11. Adjust the jack so that it is at a height of 3 ¼". Place the ¼" plate on top of the jack and position where you want the columns to go.
12. Having your partner assist you, place the two columns on top of the jack with the back column sitting on top of the ¼" plate. While your partner holds the columns in place, put the two pieces of the clamp into position. Put in the bolt and nut. Using the vice grips, compress the two pieces of the clamp until you can tighten the nut by hand
13. Reattach the two pieces of tubing you removed earlier. When tightening the tubing nuts onto the valves, be sure to use the adjustable wrench to prevent the valve from spinning. You do not need to connect the tubing to the top of the final filter at this time. Disconnecting at that spot is a part of the column purging process. **The Swagelock fittings should not be overtightened or damage may occur. Tighten so that they are finger tight then use wrenches to tighten additional ¼ turn.**
14. Reattach the solvent hose to the bottom of the back column. Again, use the adjustable wrench to prevent the valve from spinning as you tighten the nut.

To view this process in a video visit our website.

<https://pureprocesstechnology.com/videos/>