

iConnect™ Column Lock Installation Note

Complete the following steps to install the iConnect™ Column Lock.

Note Wear clean, lint- and powder-free gloves when you handle the column and injector ferrule.



CAUTION The iConnect Column Lock has a maximum operating temperature of 350 °C. Do not use the iConnect Column Lock with an oven, inlet, or detector set to temperatures exceeding 350 °C.

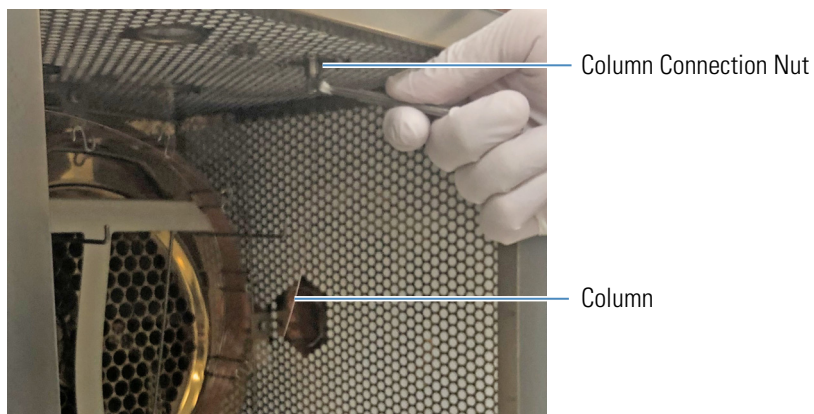
❖ To install in the iConnect Column Lock

1. Put the GC in standby condition.
2. Cool the oven and injector to 40 °C or less.

Note Press the **Maintenance** button to cool down the GC automatically.

3. Turn the carrier gas off, and wait for the carrier pressure to go to zero.
4. Remove the standard bottom column connection retaining nut from the injector or detector body.

Figure 1. Removing the Retaining Nut



5. Use a 1/2 in. offset wrench to remove the retaining nut. See [Figure 2](#).

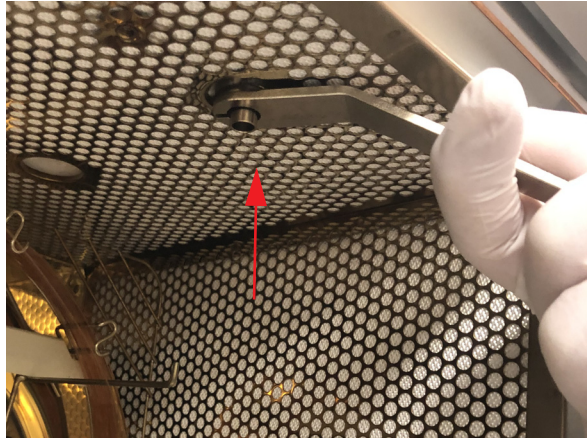


CAUTION Save the bottom parts of the injector or detector in a safe place because they will be reused when you restore the original configuration.

Figure 2. 1/2 in. Offset Wrench



Figure 3. Removing the Retaining Nut with an Offset Wrench



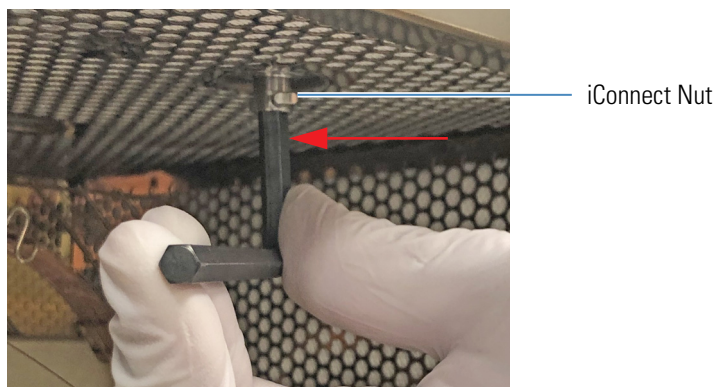
- When installing an iConnect on a SSL inlet, replace the base seal with a new one.



WARNING Always use the provided washer with the iConnect Nut (packed together with the SSL base seal). You must also use this washer when using the iConnect with a detector base.

6. Finger tighten the iConnect nut.
7. Tighten the iConnect nut with a clean 6 mm Allen wrench.

Figure 4. 6 mm Allen Wrench Tightening the iConnect Nut



8. Wipe about 100 mm (4 in.) of the column with a tissue soaked in methanol.
9. Slide the column through the iConnect Column Lock. Pinch the spring at the base of the iConnect to allow the column to slide through. See [Figure 5](#) and [Figure 6](#).

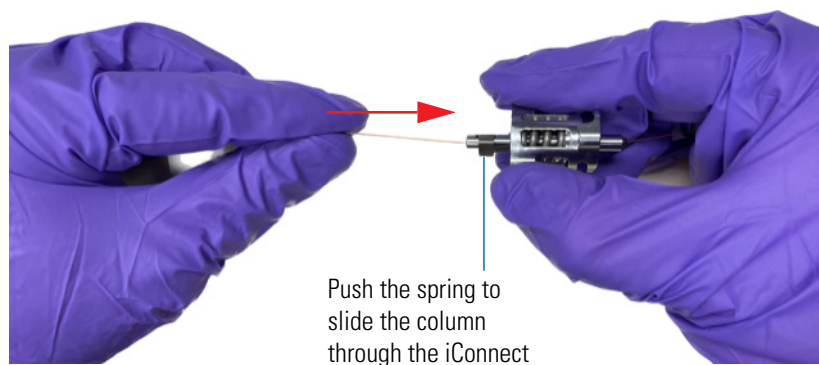


CAUTION When you push the spring to slide the column through the iConnect, keep the spring pushed. If the spring is in contact with the column while sliding the column, it might score the protective coating, and affect the seal to the ferrule or cause the column to break later.

Figure 5. Spring Location



Figure 6. Inserting the Column into the iConnect Column Lock



10. Insert the column through the iConnect nut and ferrule (open end up).
11. Set the column length according to the injector or detector type. See [Table 1](#) and [Table 2](#). for column insertion depths.

Note Detector and injector insertion depths are measured from the top of the ferrule. See [Figure 7](#) for an example of the SSL and SSLBKF insertion depths.

It is recommended to insert the column a few extra mm and then trim to the correct depth.

Table 1. Column Insertion Depth for SSL, SSLBKF, and GSV Injectors

Injector	Column Insertion Depth
SSL	5 mm (splitless)
	10 mm (split)
SSLBKF	5 mm (splitless)
	10 mm (split)
GSV	23 mm

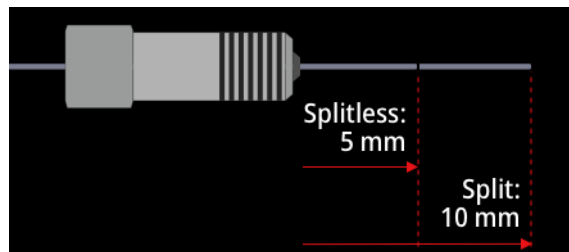
Table 2. Column Insertion Depth for ECD, FID, FPD, NPD, and TCD Detectors

Detector	Column Insertion Depth
ECD	23 mm
FID	36 mm
FPD	125 mm

Table 2. Column Insertion Depth for ECD, FID, FPD, NPD, and TCD Detectors

Detector	Column Insertion Depth
NPD	32 mm
TCD	10 mm

Figure 7. SSL and SSLBKF Column Depths



CAUTION Use the type of Graphite/Vespel® ferrules provided in the connector outfits. Ensure ferrules are the appropriate size for the type of capillary column in use.

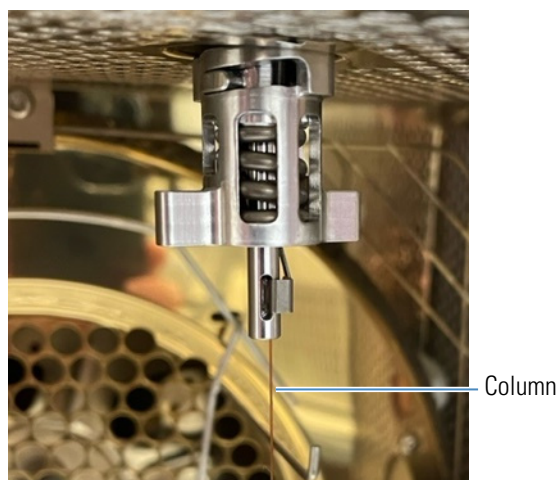
Note For typical 0.1 to 0.25 mm inner diameter columns with a 0.36 mm outer diameter, ferrule packages are required with P/N 290VA191 to seal correctly. These ferrules have a hole size of 0.37 mm and a label with “r2” after Pk 10.

12. Turn the iConnect Column Lock a quarter turn until it stops. See [Figure 8](#).

Figure 8. Connecting the iConnect Column Lock to the iConnect Nut

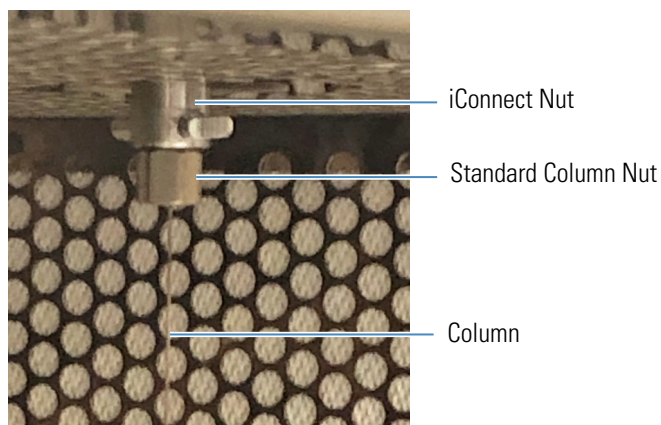


Figure 9. iConnect Column Lock Installed



Note The standard column nut can also be connected to the iConnect nut as well. See [Figure 10](#).

Figure 10. Standard Column Nut Connected to the iConnect Nut



Note For information about column conditioning and performing a leak check, refer to the *Replacing a Column* section of Chapter 2, *Performing Routine Maintenance*, in the *TRACE 1600/1610 Hardware Manual*.