



PPMS Service Note 1070-307

Replacing the Sample Chamber

The following instructions describe how to replace the PPMS sample chamber, which contains the thermometry and sample puck wiring. For this reason, there are calibration files that are uniquely configured for each sample chamber. When replacing the sample chamber, you must replace the calibration files with those included with the sample chamber.

The only tool required for this procedure is a 5/32 hexagonal wrench (Allen Wrench). The shipment should include the sample chamber and a diskette with the calibration files for this chamber.

Replacing the Sample Chamber

1. Remove any option hardware from the top of the sample space. This includes the horizontal rotator, ACMS transport, or any other equipment.
2. Set the system temperature to 300K and allow it to stabilize. Once it has stabilized, disconnect all of the connectors from the top of the probe and turn off the system pump.
3. Remove the four 5/32 bolts from the top of the probe head. These are the four bolts that hold the steel plate onto the gray box. The gray box is the top of the sample chamber.
4. Lift the steel plate off the gray box. Carefully lift the gray box up and out of the dewar so that the chamber does not hit the side of the dewar neck or probe.
5. Remove the o-ring from the old sample chamber. Clean and lubricate the o-ring.
6. Insert the new sample chamber into the dewar/probe and install the o-ring into the new sample chamber.
7. Return the top plate to the top of the sample chamber. Return the four bolts to the top plate and tighten.
8. Turn the system pump on to evacuate the pumping lines, then reconnect the pumping and lemo lines.

At this point you need to load the new configuration files. The sample chamber will include a diskette with the configuration file (FACTORY.cfg) for your system. This file contains the calibration data for your system and for this replacement sample chamber. PPMS Service Note 1070-803 Configuration Download Instructions describes the procedure for installing this new configuration file.