

February 2023

To all Customers

Quality Assurance Department
Analytical & Measuring Instruments Division
Shimadzu Corporation

Inspection of the SIL-40 Series Autosampler for Liquid Chromatographs

We would like to offer our warmest thanks for your continued patronage, and best wishes for your continued success.

We wish to perform a free-of-charge inspection on the SIL-40 series autosampler for the Shimadzu liquid chromatograph being used. The purpose and details are explained below.

1. Purpose of the Inspection

To cool samples in the SIL-40 series autosampler for Shimadzu liquid chromatographs, all the air in the compartment is cooled. Therefore a mechanism to prevent condensation due to lowering of the temperature on the outside of compartment is adopted by providing thermal insulation material and a sub-heater for heating on the outside of compartment.

As the number of instruments in use for a long period of time have increased. Condensation has occurred at the gap between the thermal insulation material on the outside of the compartment in some instruments. There have been cases reported where this has resulted in failure of the printed circuit board. To prevent similar failures in the future, we are performing inspections to determine whether or not there is leakage of condensation around the printed circuit board, and implementing a countermeasure to protect the board.

2. Applicable Products

We plan to target the following products, that will be manufactured up until May 2023.

- SIL-40C (P/N: 228-65101-46, 228-65101-58)
- SIL-40C XR (P/N: 228-65103-46, 228-65103-58)
- SIL-40C XR CL (P/N: 228-65103-55)
- SIL-40C XS (P/N: 228-65119-46, 228-65119-58)
- SIL-40C XSi (P/N: 228-65129-46, 228-65129-58)
- SIL-40C X3 (P/N: 228-65120-46, 228-65120-58)
- SIL-40C X3 CL (P/N: 228-65120-55)

Note: For instruments outside the above manufacturing period range, we may perform inspection during an opportunity such as periodic inspection, etc.

Even for instruments manufactured in the above period, the following work details may have been performed during manufacture.

3 Work Details

The inspection method is as follows.

- Remove the temperature control unit at the back of the instrument.
- Remove the electrical board unit, and install a tray for collecting condensation water above it.
- If it is found that water has adhered to the electrical board unit, the board will be replaced with a new board.
- The electrical board unit with the tray attached and the temperature control unit will be replaced in its original position.
- The firmware will be updated to Ver. 1.16 or later. The output of the sub-heater will be increased, to reduce condensation on the outside of the compartment.

The analysis performance will not be affected by any of these actions, so the performance will not be checked.

4. Work Cost

The cost of the work and of the parts described above will all be managed by Shimadzu.

If, during the inspection, any general failure or aging deterioration other than the condensation water on the printed circuit board is found, we will report it to the customer and repair it at the customer's request for a fee.

We continue to work to provide products, services, and information to satisfy our customers, so we ask for your continued patronage of our products.