

Applied Biosystems™ 3500/3500xL Genetic Analyzers

Maintenance Checklist

This Maintenance calendar provides you with a monthly or daily view of tasks scheduled for your instrument. When a task is due to be performed, it will show up in the Dashboard view under Calendar Reminders. For detailed information on each of the maintenance steps below, please refer to the [Applied Biosystems™ 3500/3500xL Genetic Analyzer with 3500 Series Data Collection Software 3.1 User Guide \(Cat. No. 4405186, 4405187\)](#).

Daily Tasks

- Click Refresh on the Dashboard and check the consumable and array status.
- Visually inspect the fluid levels in the anode and cathode buffer containers and make sure they are up to the fill line.
- Ensure that the Cathode Buffer Container (CBC) septa are properly seated on the container.
- Make sure that the plate assemblies are properly assembled. The holes in the plate retainer must align with the holes in the septa to avoid damaging the capillary tips. The sides of the plate retainer must sit flush with the sides of the plate base to avoid an error message on the system.
- Ensure that the plate assemblies and the cathode buffer container are properly positioned on the plate deck. They should sit securely on the deck.
- Ensure that the array locking lever on the capillary array is secured.
- Check for bubbles in the pump block and channels. If bubbles are present, remove using the Remove Bubble Wizard.
- Check the loading-end header and make sure that the capillary tips are not crushed or damaged and do not have dry polymer (white crystals) on the tip.
- Ensure that the pump block is in the pushed back position.
- Clean the instrument surfaces.
- Check for leaks and dried residue around the buffer-pin valve, check valve and array locking lever. Polymer leaks may appear as clear and viscous or, if the polymer has dried out, as a white, flaky residue. If you are uncertain if there is a leak, use a dry, lint-free cloth (e.g., Kimwipes™ tissue) and press it near the fitting. If there is a fresh leak, the cloth will become wet or you will see residue fall from the leak source.

Weekly Tasks

- Use a lab wipe to clean the anode buffer container valve pin assembly on the polymer delivery pump.
- Run the Wash Pump and Channels wizard.
- Check the storage conditions of the used arrays to ensure that the array tip is covered in the reservoir.
- Restart the computer and instrument.

Monthly Tasks

- Run install check.
- Flush the pump trap.
- Empty the oven condensation reservoir.
- Replace cathode buffer container septa.
- Clean the Autosampler and drip tray.
- Check disk space.
- If Security, Audit, and E-sig are enabled, archive and purge audit records.
- Defragment the hard drive.

As-Needed Tasks

- Change the tray.
- Remove dried polymer from the capillary tips with a lint-free tissue moistened with deionized water.
- Archive and purge library objects.