

Hygiena™ Prep Xpress: How to Handle a Power Outage, Collision, or Abort

If a run is stopped unexpectedly, certain steps should be taken as soon as possible to recover any errors and diagnose any problems. This article lists these steps, as well as possible solutions for persistent issues after a run stops unexpectedly.

Solution 1: Return to Safe State

The first priority after a run stops early is returning the Prep Xpress to a safe state. This is especially important if the run stopped while the 2 Independent Channels or 8-Probe Head (Multi-Probe Head, MPH) had tips attached.

1. **Make sure the pipetting tools can move upward without colliding with anything.**

If the channels or 8 MPH cannot be raised safely, follow these steps before proceeding:

1. Power off the Prep Xpress.
2. Make sure you are wearing protective gloves and any other appropriate PPE.
3. Open the door and gently move the channels or 8 MPH by hand until they are in a safe position.
4. Close the door and power on the Prep Xpress.

2. **Eject any tips left on the channels or 8 MPH as soon as possible.** Leaving tips on the channels for a long period of time causes wear on the o-rings. Any liquid remaining in the tips will also be ejected to the tip waste. There are two ways to eject tips:

1. **Park Instrument:** The abort dialog has a button labeled **Park Instrument**, which ejects any tips attached to the pipetting tools and moves the pipetting arm to the right. Always tap **Park Instrument** if there are tips on the channels on abort.
2. **Initialize:** If the run stopped due to a power outage or the abort dialog was closed without parking the arm, tips can be ejected by initializing the Prep Xpress. From the home page, tap the **Settings** button and open the **Instrument** tab. Select **Configuration** and then tap **Initialize**.

3. **Open the door and unload all labware.** Make sure you are wearing protective gloves and any other appropriate PPE.

4. **Check for any spills or drips.** Clean and decontaminate the deck according to your lab's procedures if you see any spills or drips.
5. **If the run aborted due to a collision, calibrate the pipetting tools.** Calibration is recommended following any collision, and it is required if you observe positional inaccuracies in the channels or 8 MPH. On the home page, tap the **Settings** button in the top-right corner.
 1. Open the **Instrument** tab, then select **Calibration**.
 2. Select **Channels** and tap **Run**.

Solution 2: Replace Stop Discs or Pipetting Head

If the Prep Xpress stopped because any of the pipetting tools collided with labware, the Prep Xpress may encounter issues with positional or pipetting accuracy. If these issues are not resolved by calibrating the pipetting tools, the stop discs or the entire pipetting head may need to be replaced.

The Prep Xpress' diagnostics can help determine whether replacing the stop discs or pipetting head will help. Run the following diagnostics and observe the results:

1. **On the home page, tap the Settings button** in the top-right corner.
2. **Navigate to Diagnostics > Devices > Channels.**
3. **Run the following diagnostics to check for issues:**
 - Drip test: Checks for issues with the o-ring(s), such as dripping, by aspirating and briefly holding liquid in the tips. If this diagnostic fails, the stop discs and o-rings may need to be replaced.
 - Tip pickup and re-rack/waste: Checks positional accuracy of the channels or 8 MPH by picking up and ejecting tips. If this diagnostic fails, the stop discs and o-rings may need to be replaced.
 - Pressure test: Checks for any irregularities in the pressure sensors. If this diagnostic fails, the pipetting head or MPH may need to be replaced.
 - CO-RE Paddle check: Checks positional accuracy of the channels by picking up and transporting a plate. If this diagnostic fails, the stop discs and o-rings may need to be replaced.

Solution 3: Collision and Outage Prevention

Collisions and power outages are not part of normal use of the Prep Xpress. Take the following steps to prevent the collisions and outages in the future.

1. **Load only the required labware when running protocols.** The Prep Xpress moves low over the deck to optimize movement, so if unexpected or different labware is loaded, a collision can occur.
2. **Make sure the Prep Xpress' location meets the installation requirements.** An insufficient power supply can cause outages, and an unstable bench can affect positional accuracy. If necessary, provide an uninterruptible power supply (UPS) for the Prep Xpress. Contact [Hygiena Diagnostics Support](#) for help selecting the right UPS for your Prep Xpress' configuration.
3. **If you move the Prep Xpress, make sure to calibrate the pipetting tools.** Shifting or relocating the instrument can affect the positioning of the channels or 8 MPH. Calibrate the pipetting tools after moving the Prep Xpress to prevent any collisions as a result of positional inaccuracy.