

## BOND-PRIME- User Maintenance Guide

This maintenance regime is based on a throughput of 300 slides per week. For a higher throughput, refer to the schedule on page 16, and if necessary, do those tasks marked with an \* more frequently. Please ensure the appropriate PPE is worn when performing maintenance. See BOND-PRIME User Manual for additional information and visual instructions.

### DAILY TASKS

#### Examine Action Queue and Alert Banner\*

- Check the Action Queue for any alerts. Perform tasks required to resolve any alerts

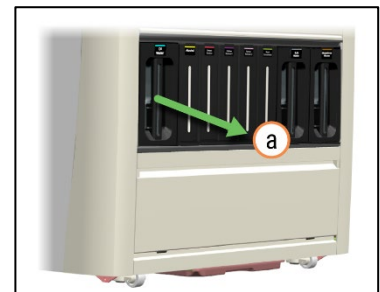
### AS REQUIRED (ensure BOND-PRIME is connected to the BOND Controller)

#### Fill Bulk Reagent Containers

- There will be an Action Queue alert if any bulk containers require refilling. Perform one at a time
- Deionized Water (DI) and Waste Containers can be removed at any time (as they are not locked)
- To access the Alcohol and BOND-PRIME bulk reagent containers (BOND-PRIME Dewax, ER1, ER2, and Wash Solution Concentrate), there must be an active User session, i.e. User must be logged in
- All Bulk Reagent Containers can be safely refilled at any time, and while slide processing is running

#### Refilling DI Water Container

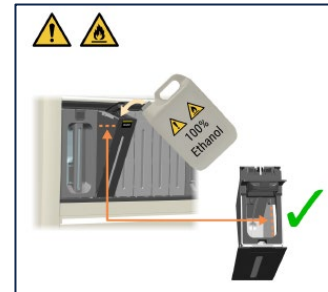
- Remove the DI Water Container by pulling the container out of the processing module. Always support the base of the container with a second hand
- Check that the container is clean. If the container is dirty, dispose of DI Water and clean as per the User Manual
- Refill with DI Water and ensure the screw cap is closed and secure
- Using two hands, insert the container firmly back into the Processing Module. The facias should be flush with the adjacent container



#### Refilling Bulk Alcohol Container Original Design

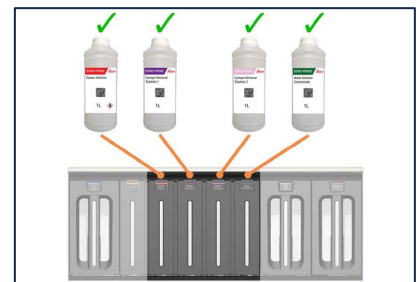
- If there is no active User session, a User must first Log in
- Select the Maintenance menu from the Navigation Bar

- Tap the 'Unlock' button to refill Alcohol
- Open the Alcohol Caddy, open the lid and refill with reagent grade Alcohol, ensuring the reagent level is below the maximum volume indicator line.
- Close the lid firmly
- Close the Alcohol Caddy. The Processing Module will automatically lock the drawer
- Tap the Close button on the touchscreen



### Refilling Bulk Reagent Containers Original Design (BOND-PRIME Dewax Solution, ER1, ER2, and Wash Solution Concentrate)

- Select the BOND-PRIME reagent supply bottle and scan the barcode using the Processing Module Barcode scanner (the scanner can be activated by waving a hand in front of it)
- The Processing Module will unlock the appropriate Bulk Reagent Caddy
- Manually pull open the unlocked reagent caddy
- Refill the bulk container with the selected reagent, ensuring the reagent level is below the maximum volume indicator line
- Close the reagent caddy. The Processing Module will automatically lock the caddy



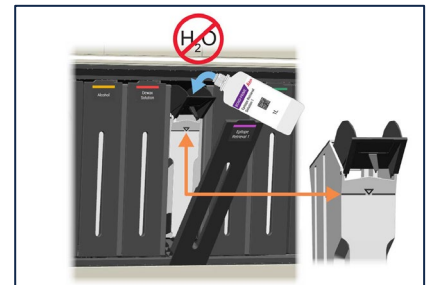
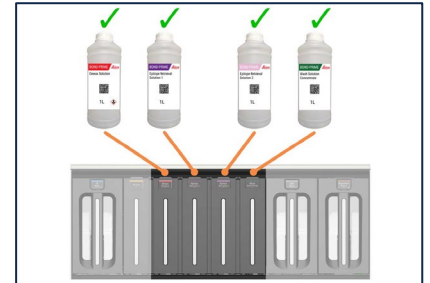
### Refilling Bulk Alcohol Container 2025 updated design

- If there is no active User session, a User must first Log in
- Select the Maintenance menu from the Navigation Bar
- Tap the 'Unlock' button to refill Alcohol
- You will hear a click, and the cover will open automatically
- Open the container lid
- Refill with reagent grade Alcohol, ensuring the reagent level is below the maximum volume indicator line.
- Be careful not to overfill the container (see warning)
- Be careful not to spill any reagent (see warning)
- Close the container lid and push the container cover closed. The Processing Module will automatically lock the cover
- Tap the Close button on the touchscreen



## Refilling Bulk Reagent Containers 2025 updated design (BOND-PRIME Dewax Solution, ER1, ER2, and Wash Solution Concentrate)

- Select the BOND-PRIME reagent supply bottle and scan the barcode using the Processing Module Barcode scanner (the scanner can be activated by waving a hand in front of it)
- The Processing Module will unlock the appropriate Bulk Reagent cover
- You will hear a click, and the cover will open automatically
- Open the container lid
- Refill the bulk container with the selected reagent, ensuring the reagent level is below the maximum volume indicator line
- Be careful not to overfill the container (see warning)
- Be careful not to spill any reagent (see warning)
- Close the container lid and push the container cover closed. The Processing Module will automatically lock the cover



**Warning.** If bulk reagent is spilt, overfilled, or if the lid closes during refill, use a clean, lint-free cloth to absorb the spill.

If the reagent has spread under the containers inside the processing module, clean the affected area:

- Wait for all slides to finish processing and put the processing module into Maintenance mode.
- Remove the containers, one at a time.
- Use a clean, lint-free cloth to absorb spilled reagent.
- Wipe the area of the spill with a lint-free cloth, moistened with 70% alcohol. Allow to air dry.
- Put the container back into the processing module.
- Close cover

Refer to the 6-monthly maintenance instructions in the BOND-PRIME User Manual for details on how to remove and replace the bulk containers from the processing module.

## Empty Waste Containers

- There will be an Action Queue alert if any Waste Containers need to be emptied
- When required, remove the container from the Processing Module by pulling the container out of the processing module
- Ensure to use a two-handed hold when handling the filled container
- Empty waste from the container and dispose of waste in accordance with all procedures and government regulations that apply at the laboratory site
- Using two hands, replace the empty Waste Container back into the Processing Module. The facias should be flush with the adjacent container.

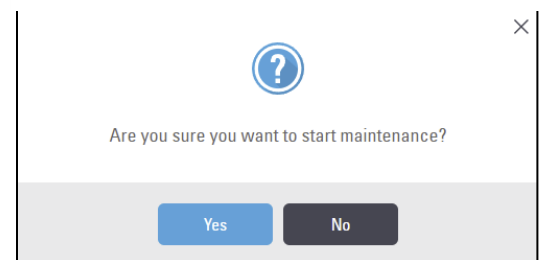
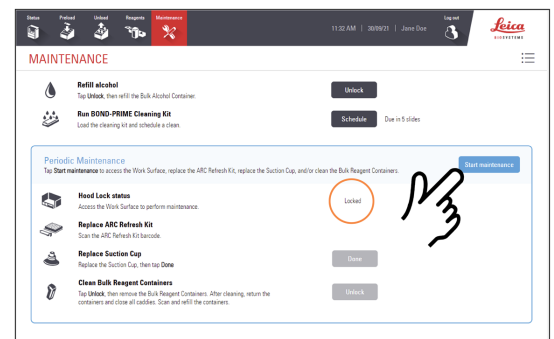
## WEEKLY TASKS

### Ensure there are no slides processing to start the weekly maintenance tasks

- If there is no active User session, a User must first Log in

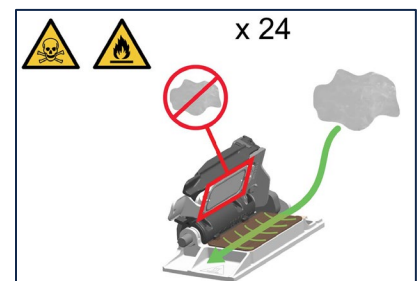
### To access the work surface: Start maintenance

- Select the Maintenance menu from the Navigation Bar
- Tap Start maintenance and tap Yes to confirm
- Wait for the Processing Module to prepare the Work Surface. This will automatically open all ARC modules
- When the Hood is unlocked, the Hood Lock Status on the Maintenance screen changes to Unlocked. Open the Hood and access the Work Surface

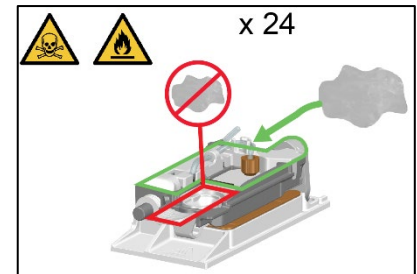


### Wipe internal and external surface of the Active Reagent Control (ARC) Modules

- Wipe down the internal surface of the ARC Module base with a lint-free cloth, moistened with 70% alcohol. Wipe from the rear to the front to remove any particles or residue
- Do not wipe the Covertile, as this may damage the Covertile Seal
- Wipe down the external surface of the ARC Module with a lint-free cloth, moistened with 70% alcohol. Be sure to remove any drips that may be present on the ARC Module cover.



- Do not wipe inside the Covertile well, as this may block the well
- Do not wipe the Covertile hook, as this may dislodge the Covertile
- The Processing Module will automatically close the ARC Modules on return to clinical mode/stop maintenance

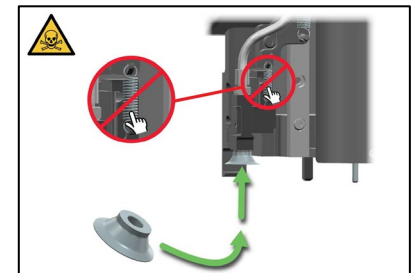
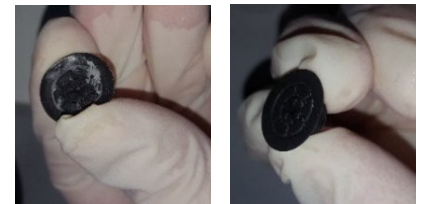


### Wipe the Reagent Platform and Bank Surfaces

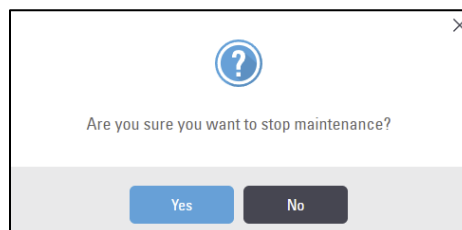
- Use a clean, lint-free cloth, moistened with 70% alcohol solution, to wipe the surface of each lane on the Reagent Platform as well as the top of the two Bank Surfaces

### Clean Suction Cup

- Carefully move the High-Speed Robot forward, over the Reagent Platform and remove the Suction Cup from the slide handling area
- Remove dried wax from the Suction Cup by flexing the Suction Cup
- Wipe with a lint-free cloth, moistened with 70% alcohol. To remove any remaining wax, rinse with 70% alcohol and dry
- Ensure there is no wax remaining in the Suction Cup
- Re-attach the Suction Cup
- Be careful not to touch or dislodge the spring on the Robot Head when reattaching the Suction Cup



Once all tasks are complete, close the Hood, tap Stop maintenance, and tap Yes to confirm stop maintenance



## Monthly

### Ensure there are no slides processing to start the monthly maintenance tasks

#### Restart BOND-PRIME

- Press the standby power button. A pop up window indicates that it is safe to shut down
- Open the Reservoir Cabinet door and turn the power switch off
- Wait 5-10 seconds, then power on the processing module by turning the power switch on
- Close the Reservoir Cabinet door



**Information.** BOND-PRIME will initialize before displaying the Status screen. This process can take 8-10 minutes. If initialization takes longer than this, BOND-PRIME has failed to connect to the BOND Controller.

- Turn off the processing module
- Restart the BOND Controller
- Once the controller has fully powered on, restart BOND-PRIME



## EVERY 2 MONTHS

### Ensure there are no slides processing to start the 2-monthly maintenance tasks

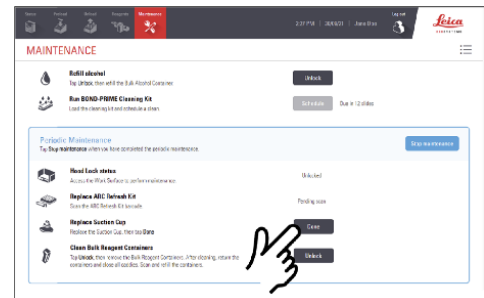
- If there is no active User session, a User must first log in.

### To access the work surface: Start maintenance

- Select the Maintenance menu from the Navigation bar
- Tap Start maintenance and tap Yes to confirm
- Wait for the Processing Module to prepare the Work Surface. This will automatically open all ARC modules
- When the Hood is unlocked, the Hood Lock Status on the Maintenance screen changes to Unlocked. Open the Hood and access the Work Surface

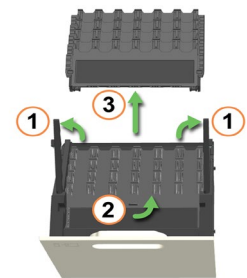
### Replace Suction Cup (Note, this is to be performed every 3400 slides or every 2 months, whichever comes first)

- Carefully move the High-Speed Robot forward, over the Reagent Platform, and remove the Suction Cup from the slide handling area
- Replace with a new Suction Cup
- Close the Hood
- Tap Done for Replace Suction Cup on the Maintenance screen



### Clean Preload and Unload Drawers, Drawer Inserts, Waste Drains and Sumps

- Open the Preload Drawer and pull the locking arms up (1). Use the finger tab on the front fascia to assist in lifting out the drawer (2) Remove the slide drawer insert (3)
- Wipe down Slide Drawer Waste Drain with a clean lint-free cloth, moistened with 70% alcohol solution. Ensure there is no wax remaining in the drawer
- Repeat steps for Unload Drawer
- Wash the Slide Drawer Inserts with warm soapy water. Rinse well with running water and air dry
- Return the Slide Drawer Inserts to the Processing Module\* (Slide Drawer Inserts have slide Preload/Unload Drawer symbol indicators on their labels)

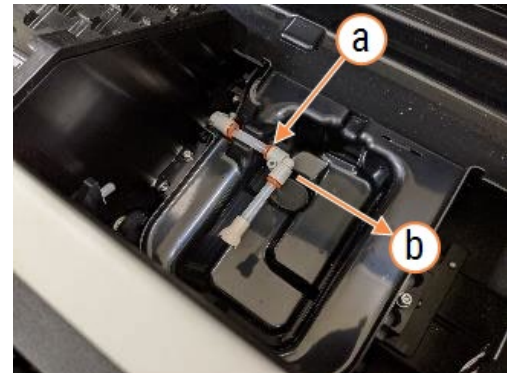


- Close the locking arm after installing the inserts to auto-align the inserts and ensure a good fitment
- Close the drawers

\*If washing multiple inserts, ensure the correct insert is replaced in the correct Processing Module drawer. Inserts and Drawers are labelled with the BOND-PRIME Serial Number

### Replace the Pickup Tube and Filter

- Remove the Pickup Tube and Filter:
  - Press orange sleeve (at the location indicated in the image)
  - Pull out to the right upwards and remove
- Dispose of in hazardous waste according to all procedures and government regulations that apply at the laboratory site
- Replace with a new Pickup Tube and Filter. Ensure that the tube is fully inserted up to the line marked on the tube
- Rotate Unload Drawer Pickup Tube back to original state (ensure it is correctly oriented)



### Clean the Wash/Prime Stations for High-Speed Robot and Wash Robots

- Use a clean lint-free cloth, moistened with 70% alcohol solution, to wipe the top surfaces of the Bulk Probe Prime Station, ARC Module Wash/Prime Stations, and the Wash Robot Wash/Prime Stations

### Clean Sump Tray and external surfaces

- Locate the Sump Tray directly beneath the Processing Module
- Carefully slide the Sump Tray forward, observing for any accumulated waste. If reagent has accumulated, use two hands to remove the Sump Tray from the Processing Module and empty the Sump Tray as required. Treat waste as hazardous and dispose of it in accordance with procedures and government regulations that apply at the laboratory site
- Use a cloth, moistened with 70% alcohol solution, to wipe down the Sump Tray
- Replace the Sump Tray by aligning the edges of the tray with the rails underneath the Processing Module and sliding it into place
- Wipe external surfaces with a duster/cloth and clean the BOND-PRIME Barcode Scanner (for scanning bulk reagents) using a lint-free cloth moistened with DI water

**Once all tasks are complete, close the Hood, tap Stop maintenance, and tap Yes to confirm stop maintenance.**

## EVERY 6 MONTHS (or if the processing module is idle for >14 days)

### Clean Handheld Scanner (BOND Controller)

- Clean the window of the Handheld Scanner (connected to the BOND Controller) using a lint-free cloth moistened with DI Water.

### Ensure there are no slides processing to start the 6 monthly maintenance tasks

### Clean the bulk DI Water Container

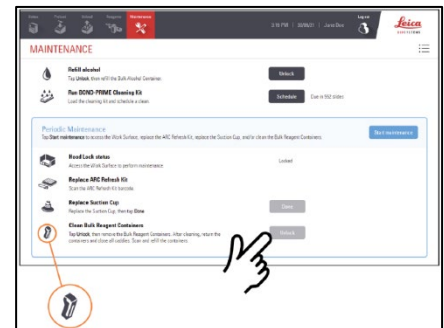
- Remove the container from the Processing Module by pulling the container out of the processing module. Discard reagent
- Wash DI Water container with warm soapy water and rinse well with DI Water
- Refill DI Water Container with DI Water. Return the container to the Processing Module. The facias should be flush with the adjacent container.

### Clean the Alcohol, BOND-PRIME Dewax Solution, ER1, ER2 and Wash Solution Concentrate Bulk Reagent Containers

- If there is no active User session, a User must first log in.

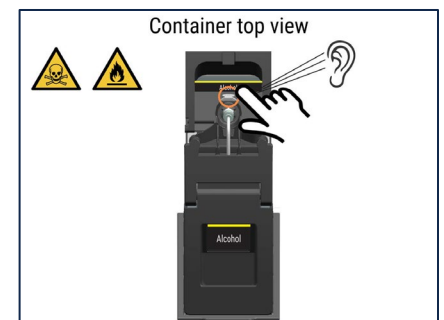
### To access the Bulk Reagent Container Caddies Original Design:

- Select the Maintenance menu from the Navigation bar. Tap Start maintenance and tap Yes to confirm
- Tap Unlock for the Clean Bulk Reagent Containers
- The Reagent Caddies will now be unlocked for 30 sec. Open all caddies to the open position
- To remove a container from its caddy, push the silver release button located at the rear of the connector and pull the container out



### BOND-PRIME Dewax and Alcohol Bulk Reagent Containers Original Design:

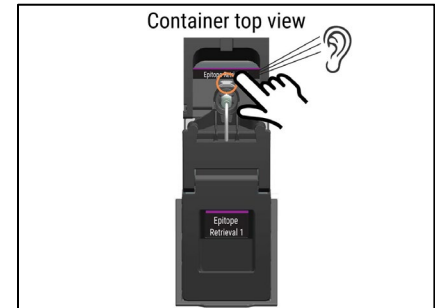
- Empty the container and rinse several times with a small amount of fresh reagent to remove any contaminants. Dispose of waste
- Reinsert each container and close the caddy
- For Dewax Solution, scan the Bulk Reagent barcode to open the Bulk Reagent Caddy. This ensures correct reagent fill and lot tracking
- For Alcohol, tap Unlock on the Maintenance tab to refill alcohol



- Refill bulk container with the selected reagent, ensuring reagent level is below the maximum volume indicator line

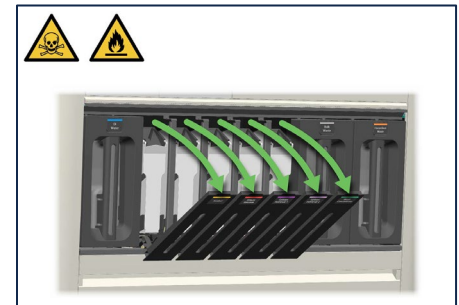
### **BOND-PRIME ER1, ER2, and Wash Solution Concentrate Bulk Reagent Containers Original Design**

- Empty the container and clean using an industrial-strength detergent. Rinse thoroughly with DI Water
- Rinse each container with a small amount of fresh reagent and dispose of waste
- Reinsert each container and close the caddy
- Scan the Bulk Reagent barcode into the Barcode Scanner on the Hood to open the Bulk Reagent Caddy. This ensures correct reagent fill and lot tracking
- Refill bulk container with the selected reagent, ensuring reagent level is below the maximum volume indicator line



### **To access the Bulk Reagent Container Caddies 2025 updated design:**

- Select the Maintenance menu from the Navigation bar. Tap Start maintenance and tap Yes to confirm
- Tap Unlock for the Clean Bulk Reagent Containers
- The Reagent covers will open automatically
- To remove a container, pull it from the processing



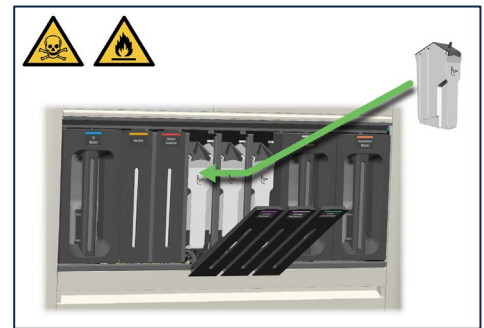
### **BOND-PRIME Dewax and Alcohol Bulk Reagent Containers 2025 update design**

- Remove the lid, and empty the container
- Rinse several times with a small amount of fresh reagent to remove any contaminants.
- Dispose of waste and refit the lid
- Reinsert each container, and push the container into the correct position
- Push the container cover closed
- For Dewax Solution, scan the Bulk Reagent barcode to open the Bulk Reagent cover. This ensures correct reagent fill and lot tracking
- For Alcohol, tap Unlock on the Maintenance tab to refill alcohol

- Refill bulk container with the selected reagent, ensuring reagent level is below the maximum volume indicator line
- Be careful not to overfill the container (see warning)
- Be careful not to spill any reagent (see warning)
- Close the container lid and push the container cover closed. The Processing Module will automatically lock the cover

### **BOND-PRIME ER1, ER2, and Wash Solution Concentrate Bulk Reagent Containers 2025 updates design:**

- Remove the lid, and empty the container
- Clean using an industrial-strength detergent and rinse thoroughly with DI Water
- Rinse each container with a small amount of fresh reagent and dispose of waste
- Refit the lid and reinsert each container. Push the container into the correct position, and close the cover
- Scan the Bulk Reagent barcode into the Barcode Scanner on the Hood to open the Bulk Reagent cover. This ensures correct reagent fill and lot tracking
- Refill bulk container with the selected reagent, ensuring reagent level is below the maximum volume indicator line
- Be careful not to overfill the container (see warning)
- Be careful not to spill any reagent (see warning)
- Close the container lid and push the container cover closed. The Processing Module will automatically lock the cover





**Warning.** If a bulk reagent is spilt, overfilled, or the lid closes during refill, use a clean, lint-free cloth to absorb the spill.

If the reagent has spread under the containers inside the processing module, clean the affected area:

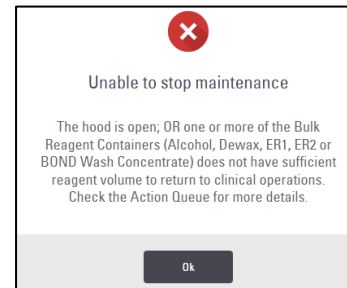
- Unlock the bulk reagent containers and remove them one at a time.
- Use a clean, lint-free cloth to absorb spilled reagent.
- Wipe the area of the spill with a lint-free cloth, moistened with 70% alcohol and allow to air dry.
- Put the container back into the processing module.
- Close the cover.

### Clean the Waste Containers

- Remove the Waste Container from the Processing Module by pulling the container out of the processing module.
- Empty the waste from the container and dispose of it in accordance with procedures and government regulations that apply at the laboratory site.
- Wash the waste bottle with warm soapy water and rinse well with DI Water
- Replace the container into the Processing Module. The facias should be flush with the adjacent container.

**Once all tasks are complete, close the Hood, tap Stop maintenance, and tap Yes to confirm stop maintenance.**

**Note: The processing module will be unable to return to clinical mode/stop maintenance if a Bulk Reagent Container is empty**



## EVERY 8 MONTHS or 7500 slides (whichever comes first)

### BOND-PRIME ARC Refresh Kit - replace Covertiles and Mixing Well Plate

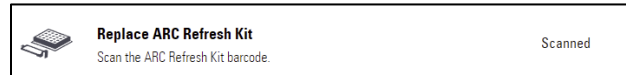
The BOND-PRIME ARC Refresh kit includes 24 Covertiles, and a Mixing Well Plate.

- If there is no active User session, a User must first log in.

### Ensure there are no slides processing to start the 8-monthly maintenance tasks

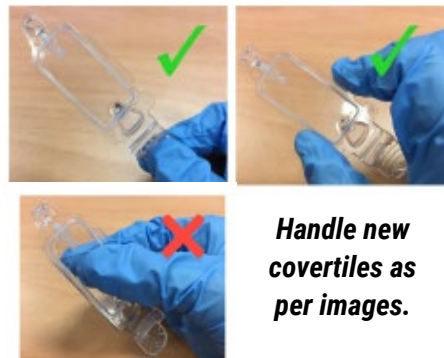
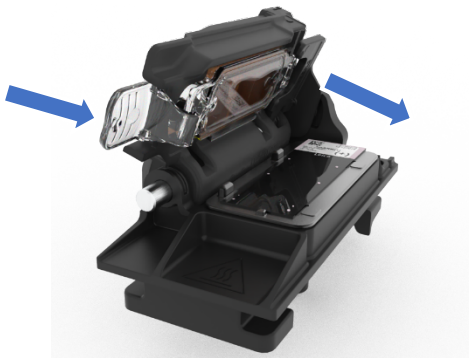
#### To access the work surface: Start maintenance

- Select the Maintenance menu from the Navigation bar
- Tap Start maintenance and tap Yes to confirm
- Wait for the Processing Module to prepare the Work Surface. This will automatically open all ARC modules
- When the Hood is unlocked, the Hood Lock Status on the Maintenance screen changes to Unlocked
- Scan the barcode for the ARC Refresh Kit. This will reset the Covertile and Mixing Well Plate usage count
- Open the Hood and access the Work Surface



### Replace Covertiles

- Remove the old Covertile by holding the Thumbhold and pulling it slightly forward and then towards the right of the ARC Module lid. Then unhook the Covertile Hook from the rear of the ARC Module.



**Handle new covertiles as per images.**

- Dispose of the old Covertile(s) in accordance with all procedures and government regulations that apply at the laboratory site

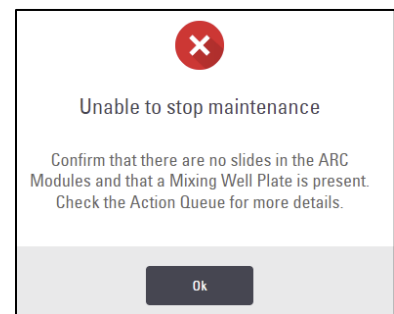
- Replace with new Covertile using the steps noted in reverse order
- The Processing Module will automatically close the ARC Modules on return to clinical mode/stop maintenance.

## Replace Mixing Well Plate

- Remove the Mixing Well Plate and replace with a new one. Ensure the plate is sitting within the holding area correctly. No orientation is necessary.
- Dispose of the old Mixing Well Plate in accordance with all procedures and government regulations that apply at the laboratory site.

**Once all tasks are complete, close the Hood, tap Stop maintenance, and tap Yes to confirm stop maintenance. The processing module will complete Covertile preparation.**

**Note: The Processing Module will be unable to return to clinical mode/stop maintenance if the Mixing Well Plate is not present.**



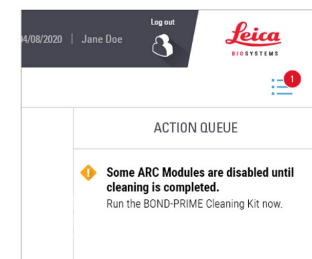
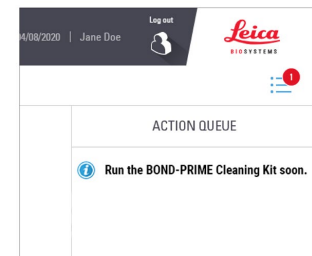
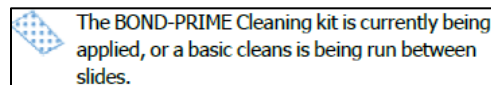
## WHEN PROMPTED

### Notification received in the Action Queue

#### Perform a BOND-PRIME Clean (17-23 uses)

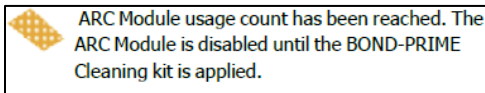
The system provides an information notification in the Action Queue and Alert Banner that a BOND-PRIME Clean is due soon when one ARC Module reaches a usage count of 17. Otherwise, a caution notification is provided when an ARC Module reaches a usage count of 23 and the ARC Module will be disabled until the BOND-PRIME Clean is completed.

When individual ARC Modules are being cleaned, both during the BOND-PRIME Cleaning Kit and in-between slides processing, the Status screen will show hatched blue.



When an individual ARC Modules has reached its 23rd use and becomes disabled, the Status screen will show hatched orange.

Schedule and start the BOND-PRIME Clean at a time suitable to the workflow.



- Prepare the Processing Module
  - a. Register the BOND-PRIME Cleaning Kit on the BOND Controller (if being used for the first time) and load it into the Reagent Platform; the kit will scan automatically. Wait for the kit to display on the Processing Module Reagent screen on the Touchscreen
  - b. Ensure the Preload and Unload Drawers are empty when scheduling the BOND-PRIME Clean
  - c. The cleaning will only start once all slides have completed staining and the ARC Modules are empty
  - d. Top up bulk reagents if they are low and empty the waste containers if required
- Perform the BOND-PRIME Clean
  - a. Select the Maintenance menu from the Navigation Bar
  - b. Tap the Schedule button to run the BOND-PRIME Clean. Users will see a touchscreen dialog if 1 or more of the pre-conditions are NOT met



- A countdown timer will now display when the BOND-PRIME Cleaning Kit run will complete



- New slides can now be added to the Preload Drawer and will be transferred to ARC Modules once the BOND-PRIME Clean has been completed
- Cleaning is complete when the Schedule button becomes active again. It will also indicate when the next BOND-PRIME Clean is due. This is inclusive of the last 24 slides before the ARC modules become disabled, so it is recommended to perform the BOND-PRIME Clean before it reaches 'Due in 24 slides'



- Refrigerate the BOND-PRIME Cleaning Kit when finished

## Cleaning and Maintenance Schedule

Copy this table and use it as a maintenance checklist. \*If it is necessary, do these tasks more frequently.

Month:	Serial Number:				Monthly	2 Monthly	6 Monthly	8 Monthly
	Week 1	Week 2	Week 3	Week 4				
<b>Weekly Tasks</b>								
Wipe internal and external surface of ARC Modules, Reagent Platform and Bank Surfaces*								
Clean Suction Cup*								
Every Month								
Restart BOND-PRIME								
<b>Every 2 Months</b>								
Replace Suction Cup (every 3400 slides or 2 months)								
Clean Preload and Unload Drawer components								
Replace the Pickup Tube and Filter								
Clean the Prime/Wash Stations								
Clean external surfaces and Sump Tray*								
Clean Barcode Scanner (on PM)								
<b>Every 6 Months</b>								
Clean Bulk Containers								
Clean Waste Containers								
Clean Handheld Scanner (Controller)								
<b>Every 8 Months or 7500 slides</b>								
BOND-PRIME ARC Refresh Kit-Covertiles and Mixing Well Plate								
<b>When Prompted</b>								
Perform a BOND-PRIME Clean (17-23 slides)								

## Contact Details

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Local Support

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