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Prepared by QA Committee		
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INTRODUCTION

WASPLab[®] is an clinical microbiology instrument system providing automation to the clinical bacteriology laboratory operations. The system allows for a seamless path from the Walk Away Specimen Processor (WASP) to transfer and incubate plates automatically, capturing high-resolution images of the plates and allowing the reading and management of the culture by technologists.

This document describes procedures relating to the operation of the WASPLab[®] system.

SYSTEM OVERVIEW

WASPLab[®] equipment allows the system to perform three main functions; plate incubation, plate acquisition and image recording to automate bacteriology operations. Barcoded plates move throughout the system through a series of conveyors equipped and controlled by sensors to move through the system by pre-programmed software.

For system specifications and installation instructions refer to

WASPLab[®] Components

Loading conveyor belt. The plates to be incubated and processed are deposited on this belt by the WASP[®] equipment robot. The belt is equipped with plate sensors and a pacing system which, to feed them at regular intervals into the imaging station. During use, the belt is protected by a series of transparent guards. There are NO sensors signaling opening of the guards.

Rework Stackers. The plates accumulated after a machine fault are automatically conveyed and stacked in the canisters present on the belt. The operator can then remove the plates from the canisters and decide further necessary operations are needed.

Final unloading conveyor. From reading, the plate is extracted from the incubator and sent to the stacking canisters according to the defined canister configuration.

Imaging box. The imaging box containing a high-resolution digital linear camera with a telocentric optical system to eliminate image distortion is stationed at all incubator inlets. Culture plates are imaged predefined times throughout incubation and can include; upon entry, throughout incubation, upon incubation completion or if warranted, as determined by a

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laboratory technologist monitoring bacterial growth. To facilitate identification, an automatic system provides a background below the plate being examined. Images are sent to a server and for use with the WASPLab Screening, Reading and Picking Application to automate culture plate processing.

Incubator. The incubator consists of an airtight chamber with controlled temperature by a conditioning system. Incubators are either “air atmosphere” or “CO₂ (5%) atmosphere”. The incubator is provided with a Temperature Control Touch Screen.

Inside there is a carousel (or two in double incubators) which contains the plates, each housed independently in order to optimize the air circulation and therefore maintenance of the incubation temperature. A robot arm collects the plates coming from the imaging station, turns them over and places them in the position assigned by the control software.

Single Incubators hold 854 plates while a double incubatory holds 1708.

Electrical cabinets. Contains all the supply and control functions of the various machine parts, apart from the data communication functions which are performed by equipment located in the server racks.

End line carousel. A 10 column carousel to stack the plates unloaded from the incubators. It has been designed to sort the media plate according to the associated results. The quantity of media plate sorted by the system is indicated in the specific column.

Loading carousel. A loading conveyor equipped with a 4 column carousel to stack the plates to be manually loaded in the incubators. It has been designed to allow the manual loading of media plates in WASPLab[®]. The configuration of each column carousel is carried by mean of a touch screen panel

Stop Buttons. Stop buttons are provided to halt different components of the WASPLab[®] system. Stop buttons are provided for regular and emergency use.

Stop buttons are located:

- Endline Carousel
- Each Imaging module
 - Pressing STOP on the LINE will stop entire line, incubators and imaging bodes
 - Pressing STOP on Incubator line will stop that imaging box
- Conveyors: DO NOT use emergency buttons on conveyors

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WASPLab[®] Displays

Panel PC. Each imaging module has a touch screen Panel PC for automated control of the WASPLab[®] system.

All Panel PCs are the same and can be used to restore automation and for alarm visualization:



- At top of each panel there are multiple tabs that can be selected to display information and perform different actions for the line, for each incubator and for the last recorded picture.
 - The status of each component can be seen on the top left

Colour	State	Explanation
●	Power on	<ul style="list-style-type: none"> • Power on button is pressed • Not possible to access inner parts of the system
●	Ready to Restore	<ul style="list-style-type: none"> • System can be restored
●	Restoring	<ul style="list-style-type: none"> • System is performing the restore
●	In cycle	<ul style="list-style-type: none"> • System can be started
●	Stopping	<ul style="list-style-type: none"> • Stop commands are set • System is finishing operation in progress before stop
● Blinking	Ready to Start	<ul style="list-style-type: none"> • The restore is finished and the system can start the cycle
● Blinking	Emergency	<ul style="list-style-type: none"> • Emergency button is pressed • System is not powered

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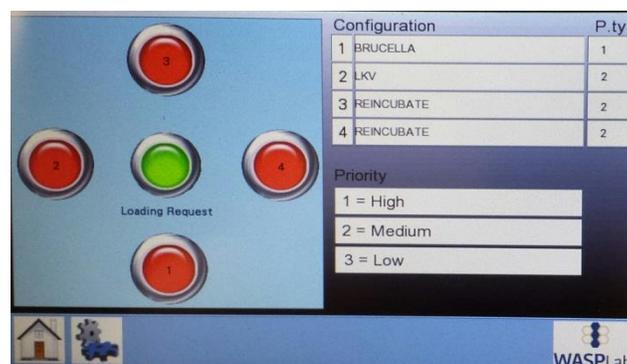
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		<ul style="list-style-type: none"> Possible to access inner parts of the system
 Blinking	Alarm	<ul style="list-style-type: none"> Action by operator is required eg. Plate stuck in manipulator. Alarm mode required to remove plate
 Blinking	Pre-Alarm	<ul style="list-style-type: none"> Action by operator is required eg. Stacker full, must be unloaded

- When an incubator is in Emergency  , the line goes in Pre-Alarm 
- Icons are available to perform the following actions for each component:
 - **RESTORE** button: for the restore of the system, as instance following an emergency status.
 - **START** button: to start the cycle, the machine must always stay in the in cycle status.
 - **STOP** button: to stop the cycle, as instance following an alarm.
- The mid-screen icons allow
 - **Reset alarms:** reset operator resolved issues with active alarms remaining on screen
 - **Mute:** to stop the visual and audible alarm.
- The lower panel at the bottom of the screen gives access to the following information:
 - **Alarms:** contains the list of the alarms Id and messages in progress.
 - **Conditions Needed:** contains the list of the conditions that are not been satisfied during the restore.

Loading Carousel Panel. The Loading Carousel is equipped with touch screen Loading Carousel Panel controlling use of the Carousel.



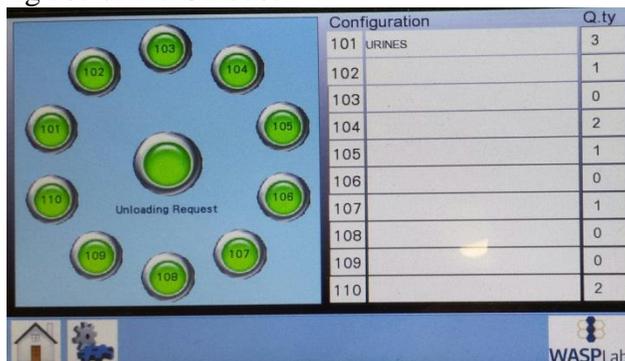
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- The left side of the screen displays a layout of the carousel
 - The center green icon controls the Loading Carousel unit for unloading media
 - The numbered green icons represent the carousel canisters to select for unloading media
- The right side of the screen displays the type of plates to be put into the Loading Carousel and the priority order they are loaded.
 - Canister configuration displays types of plates to be loaded here but types plates can actually be placed in any canister number.
 - High priority plates are loaded before those streaked by the WASP[®]
 - Medium priority plates are loaded with those streaked by the WASP[®].
 - Low priority plates are loaded after those streaked by the WASP[®].

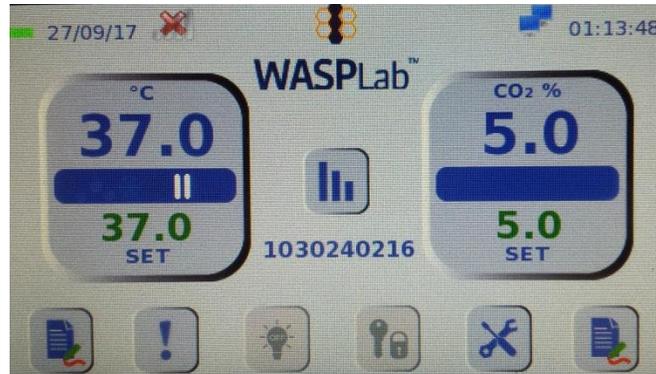
Unloading Carousel Panel. The [End Line Carousel](#) is equipped with a touch screen Unloading Carousel Panel controlling use of the Carousel.



- The left side of the screen displays a layout of the carousel
 - The center green icon controls the End Line carousel unit for unloading media
 - The numbered green icons represent the carousel canisters to select for unloading media
- The right side of the screen displays the types and quantity of plates present in each canister

Incubator Display. Each incubator has its own display unique to the relevant information for the incubatory characteristics (ie. temperature range, CO2 percentage)

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- The incubator displays incubator and CO2 data and alarm information
 - The blue bars may display further icons such as a snowflake when cooling the incubator or a red arrow when CO2 is injected.
 - Alarm details are viewing by selecting the “!” icon
- Graphs for temperature and CO2 values are available through this screen through the paper and pen icon by each temperature and CO2 display
- The wrench and screwdriver “tools” icons houses all other features often used during troubleshooting.

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SAFETY

The WASPLab[®] does not expose persons to unacceptable risks if actions are carried out according to proper protocols.

Alarm signals (visual and acoustic) exist as notification to comply with requirement of the relevant directives. [See Troubleshooting section.](#)

Emergency STOP buttons are provided to halt different WASPLab[®] activities. [See Stop Component instructions](#)

Safety labels are provided on the WASPLab[®] to warn users of potentially dangerous situations. See Safety Labels table below for location of images and description of their meaning.

SAFETY LABELS

HAZARD	LABEL	LOCATION	DESCRIPTION
BIOSAFETY		Incubator bottom, incubator Doors, Inside Imaging Module, Inside Unloading Carousel and Loading Carousel, End of unloading conveyor, on Stackers, on conveyor convers	Indicates an area of the instrument that could have been in con- tact with biohazard materials. Refer to the Safety Manual for cleaning, handling and disposal of biohazards material.
ELECTRICAL HAZARD		On the Service Access Doors, on Server	Indicates an area of the instrument that contains high voltage. Only trained personnel should access and open the service access hatches on the lower side of the machine where high voltage terminals are located.

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ELECTRICAL HAZARD (2)		On the Service Access Doors, on Server	Indicates that even if opening doors is permitted, the electric current is supplied.
ELECTRICAL HAZARD (3)		On the Service Access Doors,	Indicates the requirement of earth connection because of high leakage current.
ELECTRICAL HAZARD (4)		Inside Server doors, inside Electrical Cabinet	Indicates to replace only with fuses of the same type.
ELECTRICAL HAZARD (5)		On the Service Access Doors	Indicates to disconnect power before service activities to avoid shocking.
ELECTRICAL HAZARD (6)		Inside Electrical Cabinet	Indicates to disconnect power before service activities to avoid shocking.
WARNING EARTH		Inside Server doors, inside Electrical Cabinet	Indicates earth connection inside the instrument
MECHANICAL HAZARD – PINCH POINT		On the Service Access Doors with the main switch, on Server	Indicates an area of the instrument where the user can be exposed to pinch risk. When manually moving any part of the Wasplab please beware of possible Pinch points.
FORBIDDEN TO OPEN		End of the conveyors	Indicates service access doors located on the lower side of the instrument; only trained personnel should open this door.

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EMERGENCY BUTTON		Around emergency buttons	Indicates the Emergency buttons.
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OPERATION

Loading of Plates

The first step in the operation of WASPLab[®] is loading the plates onto the system

A. Specimen processed by the WASP[®]

Plates are barcoded by the WASP[®] for traceability through the system. Plates automatically pass through the connected conveyor belt to the WASPLab[®] system and are directed toward the appropriate incubation system. No manual intervention is needed.

B. Specimens manually streaked

Any plates not processed successfully through the WASP[®] must be manually barcoded and manually loaded onto the WASPLab[®] system through the [Loading Carousel](#).

Loading plates through Loading Carousel

- i. Place plates to be loaded **upside down** (agar side down) on a plate stacker.

On the [Loading Carousel Panel](#) Screen;

- ii. Click the center green “Loading Request” icon.
The message “Ok loading” will now appear under the icon
- iii. To rotate the carousel, touch the left or right stacker icons (not upper or lower icons)
- iv. Open the door and physically remove stacker from carousel
- v. Place stacker on top of media, you will hear a click when all plates are loaded
- vi. Replace stacker into carousel, close door.
- vii. Click on the respective loaded stacker icon.
The respective stacker icon will change from red to green indicating plates were loaded.
- viii. Click the center green “Loading Request” icon
A message “Loading Request” will appear under the icon.

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C. Plates to be Re-incubated

Plates removed from the WASPLab[®] system which have not reached their final incubation time must be reloaded into the WASPLab[®] system through [the Loading Carousel](#).

Load plates through Loading Carousel procedure for [Manually Streaked Plates](#).

Once loaded, plates travel through the [Loading Conveyor Belt](#) to the imaging stations.

Plate imaging

Plate imaging is an automated procedure, no user manipulation is required.

- Plates are automatically directed to the first imaging station to be scanned in order to direct the plate to the imaging box at the appropriate incubator as pre-determined by the pre-programmed protocols.
- If a plate requires an image, the plate lid is removed; image is taken and sent to the server.
- The plate will then proceed to be placed in the incubator.
- If an image is not required the plate will automatically proceed to the incubator.

Plate Incubation

Plate incubation is an automated procedure, no user manipulation is required.

- Plate incubation location is determined when scanned at the first imaging station from the scanned barcode.
- Plates are transferred into the appropriate incubator by the loading conveyor system.
- A robot passes the plate from the imaging station through a sealed chamber to prevent air exchange maintaining incubator conditions.
- The location each individual plate is placed in the incubator is determined by WASPLab[®] software to optimize air circulation and avoid contact between plates.

Plates not applicable to incubation within the WASPLab[®] will be directed to the [Rework Stackers](#) for operator intervention. See [Rework Plates](#) section below.

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UNLOAD PLATES for OFFLINE INCUBATION TO CHANGE WASP SETTING

1. WASP should be in STOP STATUS
 2. Touch/Click CLOSE
 3. Switch User – to engineer ; Password engineer
 4. Settings
 5. WASP configuration
 6. Enable WASPLAB (green to RED),
 7. MAIN Window - Reset
 8. Close,
 9. Switch back to user –user; Password : user
 10. Ok, back to MAIN
- To revert back – plates incubated directly to WASP incubator

Follow Steps 1 to 5, Step 6 (RED to Green) then proceed to Steps 7 to 10

Rework Plates

Rework plates are sorted automatically and require user attention.

- All plates submitted to the WASPlab[®] may not be applicable to incubation within the system ie. *Campylobacter* Agar, anaerobic agars, or maybe problematic (duplicate plates).
- These plates will bypass the incubators following the rework conveyor to
 1. Rework Stacker 201: **Emergency stacker** for plates not processed completely from imaging or incubator alarms/troubleshooting
 2. Rework Stacker 202: **No protocol stacker** for Brucella, KV and Campy plates not able to be incubated within the WASPlab[®] system

For Rework Stackers:

- i. Remove rework stacker
- ii. Remove plates
- iii. Replace rework stacker
 - Stacker 201 - Mark plate “Re-inc”, load plates through Loading Carousel procedure for [Manually Streaked Plates](#).
 - Stacker 202 - Incubate plates offline

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3. Rework line 200: **Troubleshooting line** for plates with problems including duplicate plates, plates not inoculated (line through the barcode) etc. most often for discard

For Rework line: Investigate plate and handle as appropriate.

Plate screening & Reading

Screening and reading of the plate follow laboratory protocol. Images captured by the WASPLab[®] can be utilized for these processes facilitated by the WASPLab Screening, Reading and Picking Application.

Plate acquisition

Plate acquisition during incubation or at the end of the incubation is initiated under the command of the operator using the WASPLab Screening, Reading and Picking Application.

Once requested by the WASPLab[®] Application user, plates will automatically be extracted and conveyed through the system by the [Unloading Conveyor belt](#).

A. Plates for Further Workup & Storage

Plates for work up or storage will be sent through the [Unloading Conveyor](#) to the designated stacker in the [End Line Carousel](#).

The Unloading Carousel Panel display information and permits use of the [End Line Carousel](#) stackers.

- **Green icon:** the stacker is ready to be used
- **Red icon:** the stacker is completely full of media plates
- **Red Blinking icon:** the stacker is completely full but the WASPLab[®] needs it to sort a specific plate
- **Yellow:** the stacker has not been inserted in the carousel
- **YELLOW BLINKING:** the stacker has not been inserted in the carousel but the WASPLab[®] needs it to sort a specific plate.

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To remove the plates:

- i. From the Unloading Carousel Panel Display, click the center green “Unloading Request’ icon
The message “Ok unloading” will now appear under the icon
- ii. Click on the stacker icon you would like to unload
The carousel will rotate to move the selected stacker directly in front of the door
- iii. Open the carousel door and physically remove the stacker from stacker from carousel.
(turn and lift)
The icon for the removed stacker will turn yellow
- iv. Remove stacked plates;
Media plate count for the stacker is automatically detected and reset after unloading
- v. Replace stacker.
- vi. Close door and click the center green “Ok unloading” icon to return the system to normal working status.
The center green icon will return to displaying “Unloading Request”.

To reload plates requiring further incubation see [Loading Plates Section C](#).

B. Plates for Discard

Plates to be discarded will follow the [Unloading Conveyor](#) and be automatically discarded directly into the trash.

Stopping and Starting Components

When performing maintenance or troubleshooting the WASPLab[®] system and system components must be accessed (opened), Normal Stop must first be stopped and then Emergency Stop.

A. Stop Component:

Press Normal Stop to stop an operating cycle. The instrument will finish the operation in process before stopping the protocol.

- i. Press STOP on PC Panel to stop running the cycle of the selected unit
 - **CAUTION STOPPING ON LINE TAB.** This will stop THE ENTIRE WASPLAB (line, imaging box, incubator)

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- **Press stop on the respective INCUBATOR** tab to stop only the imaging box associated with that incubator.
- Press “stop conveyor” button to stop the respective conveyor
- ii. Press red EMERGENCY STOP located on the respective component **except on conveyors**, never use emergency stop, only stop conveyor button.
 - Imaging box can now be open.
Box must remain open for minimum 10 seconds (do not close immediately after opening)
 - To open incubator press unlock button on back on incubator

B. Perform Required Action

C. Restart system to Ready status:

- i. Component emergency buttons must be set to release position
- ii. Press component power-up button
- iii. Re-set component unit to ready status by following on screen commands

QUALITY CONTROL

Environmental conditions including room temperature and relative humidity are continuously monitored by the laboratory.

See [Temperature-Sensitive Equipment Monitoring Procedure](#) QEQMI02006.

WASPLab[®] system must be operated within the following environmental conditions:

- Room temperature within +15°C to +32°C
- Relative Humidity within 30% to 60%

MAINTENANCE

The WASPLab[®] system requires the following maintenance be performed to ensure reliable operation.

Daily Maintenance

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NOTE: Before carrying out any cleaning or disinfection maintenance ensure power supply is switched OFF.

Cleaning Conveyor Belts & Stackers

1. Remove power to conveyor belt by selecting the “Stop Conveyor button” (NOT Emergency Stop)



2. Wet a Non-Abrasive cloth with 70% Alcohol and clean
 - Loading conveyor belt and plastic cover
 - Unloading conveyor belt and plastic cover
 - Rework conveyor belt and plastic cover
 Keep conveyors in STOP mode
3. Remove plates from stackers
4. Wet a Non-Abrasive cloth with 70% Alcohol and clean
 - Loading Carousel external and internal surface
 - External and internal surface of each stacker within
 - Unloading Carousel external and internal surface
 - External and internal surface of each stacker within
 - Unloading tube (leading to garbage)
 - Rework Stackers; external and internal surface
5. Startup conveyors

Weekly Maintenance

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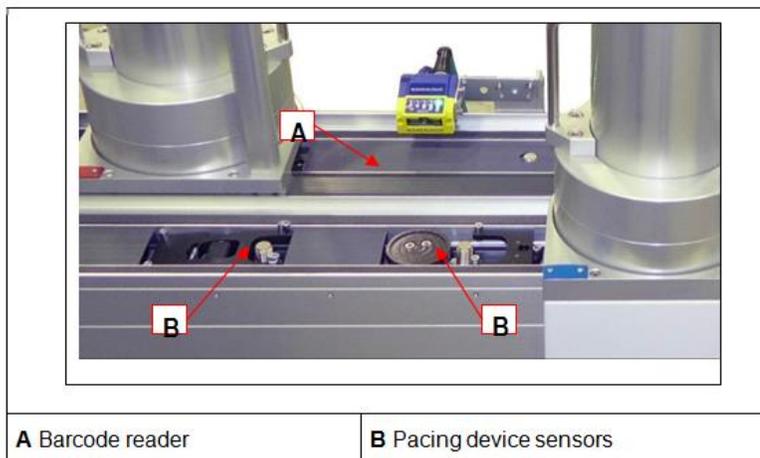
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Cleaning Sensors & Barcode Readers

Note: **DO NOT** use chemical agents to clean sensors

1. Remove power to conveyor belt by selecting the “Stop Conveyor button” (NOT Emergency Stop).
2. Using a Kimwipe clean
 - Barcode readers
 - Pacing Sensors



Cleaning Optical Instruments

Note: Optical components (camera, light source, background support) are very sensitive and require particularly accurate calibration. Never use spray-on products from cleaning to avoid residual product. **Use extreme caution during cleaning.**

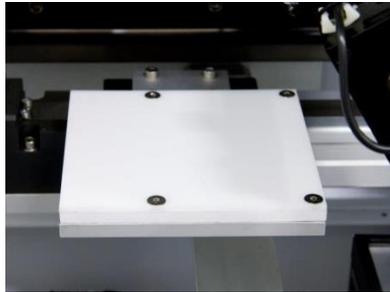
1. Remove power to the Imaging box being cleaned
 - Press STOP for the line on the Panel PC
 - Press Emergency Stop button
 - Press Unlock button to open Imaging box door
2. Remove dust and use 70% isopropyl alcohol wipes to clean any spots on the
 - Imaging Background

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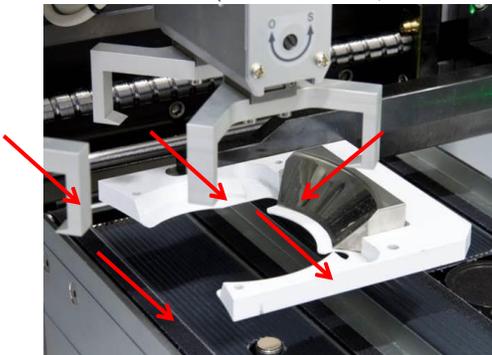
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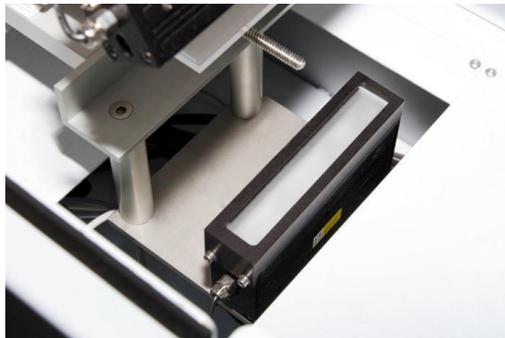
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- Media Plate (four corners, mirror & holes) and Media Plate Grippers



- Lower Illuminator



3. Wet non-abrasive wipes with 70% isopropyl alcohol to clean
 - Imaging Module internal space
 - Imaging Module internal belt

Monthly Maintenance

Screen Cleaning

1. Using a screen specific cleaning product, clean

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- Imaging box control panel screen
- Incubator control panel screen
- Loading carousel screen
- Unloading carousel screen

As Needed

Incubator Cleaning

Note: Periodically cleaning of incubator is recommended.

It is good practice to perform cleaning & disinfection when work cycle is at a standstill and all plates have been removed from the inside.

1. Use an absorbent disposable non-abrasive cloth soaked in detergent with neutral pH to clean incubator
 - Walls
 - Doors
 - Carousel brackets
 - Incubator gripper
 - Manipulator gripper
 - Floors (**Note:** Around safety barrier **clean ONLY with a dry cloth.** Detergent cannot come into contact with optical barrier.)

Lens Cleaning

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Note: The camera lens cleaning must be performed by trained personnel and only after the authorization from COPAN.

1. Use a blower to remove the dust that deposited on the surfaces.
2. Remove the remaining dust using a brush, continuing to blow.
3. Use specific lens cleaning liquid and cloths to clean smudges or marks. Wet a clean cloth with one or two drops of cleaning liquid and clean the whole surface with delicate circular movements.

Disinfection

Periodically and when necessary, components of the WASPLab[®] system require disinfection

1. Carousel Disinfections
 - Contact WASPLab[®] technical support service for this maintenance operation
 - Supporting bracket must be removed from the vertical axis
 - Sterilize carousel using an autoclave
2. System internal walls, doors, floor
 - Soak an absorbant disposable Non-abrasive cloth in disinfectant or use a spray on product to clean components
 - Remove product using a sterile cloth
 - If necessary rinse and dry with an absorbent cloth

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TROUBLESHOOTING

The following are instructions for common troubleshooting encountered.

For complete troubleshooting information refer to.

If you are unable to resolve the problem, call WASPLab[®] technical support as per business card located on the WASPLab[®] system.

There are two types of messages that can be received indicated by visual or acoustic alarm and displayed on the WASPLab[®] [Panel PC](#).

Notes:

- Always begin by following (and not deviating) touch-screen error messages for troubleshooting instructions.
- **Never** attempt to troubleshoot while instrument is in operation.
- Any plates affected will be conveyed to the [Rework Stacker](#) and should be placed into the [Loading Carousel](#) once the system is restored
- **NEVER** remove any other plate than the one affected
- **NEVER** REMOVE A PLATE FROM A SLOT IN THE INCUBATOR
- Ensure all components involved have been restored once complete

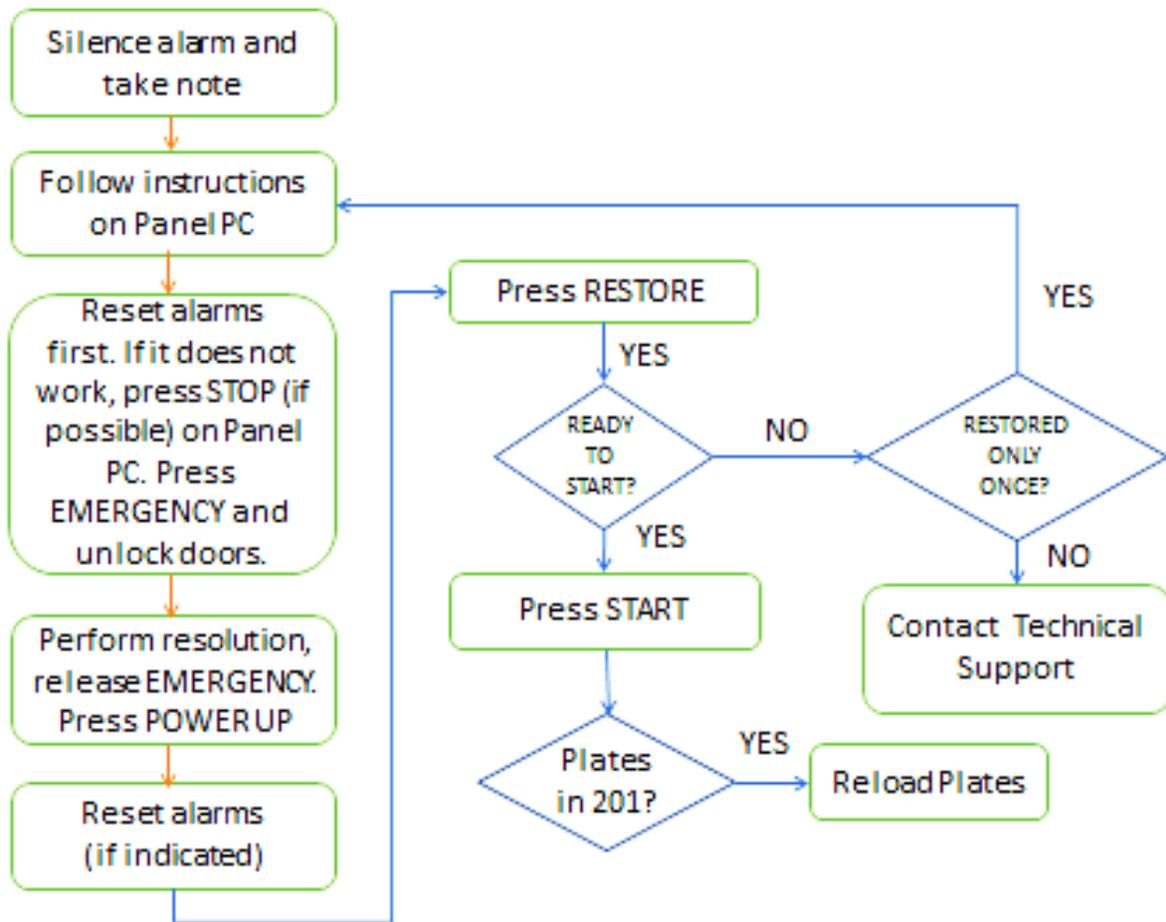
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Alarm Management Process



Refer to WASPLab[®] User Manual **MI_SM_WSPLB** for complete document.

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Alarm Message Corrective Action

ALARM CODE	ZONE	POSSIBLE CAUSE	CORRECTIVE ACTION
9050.0_Line in emergency	Line - Generic	Emergency button has been pressed on the line and the machine is not power supplied.	<ul style="list-style-type: none"> • Check all the emergency buttons on the line, if some button is pressed release them by turning clockwise, so that it pops out. • Then press the power on button located at the end of the line. • From panel PC restore the line and resume the cycle pressing the Start button.
9181.7_WASP 1 unloading conveyor full	Line - WASP 1 unloading conveyor	Conveyor connected to the WASP 1 in full of plates, the WASP cannot deposit any plate on the conveyor.	<ul style="list-style-type: none"> • No actions are required • When the plates in queue will be loaded in WASPLab[®] the WASP[®] will continue to process the samples and deposit new plates on the conveyor.; if the WASP[®] is in alert reduce the alarm from the WASP[®] Alarm menu
9081.1 / 9083.1/ 9085.1/ 9087.1 /9089.1_Plate unloading request but stacker full (Stacker x)	Line - Stacker “x”	The operator request the unloading of a plate from the incubator but the designed stacker is full and plate cannot be stacked.	<ul style="list-style-type: none"> • unload the plates in the reported stacker and re- position the stacker in its housing on the final unloading conveyor. • The plate will be automatically unloaded and stacked in the designed stacker
9101.1_Plate unloading request but stacker full (Stacker x of the rework conveyor)	Line – Rework Stacker x	A plate has to be stacked in the rework stacker but it is not possible because the stacker is full.	<ul style="list-style-type: none"> • Unload the plates in the reported stacker and re- position the stacker in its housing on the rework conveyor. • The plate will be automatically unloaded and stacked in the designed stacker.
9060.6_Plate stuck on the media plate pacer assembly	Line – Incubator Load 1	A plate is stuck on the pacer assembly at the inlet of the incubator 1.	<ul style="list-style-type: none"> • Take note of the alarm code and verify the presence of the plate in the described position. • If the plate is present, remove it and press the “reset alarm” button on the control

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(Loading conveyor 1)			<p>panel. Reload the plate positioning it on the loading conveyor and pressing the start conveyor button.</p> <ul style="list-style-type: none"> • If the problem is not solved, press emergency on the line and restore the cycle. • If the plate is not in the described position check the sensor cleaning, or call the Technical Assistance Support because the sensor is not correctly working.
9060.7_The plate deposited by WASP 1 is not on the conveyor (Loading conveyor 1)	Line - Incubator Load 1	The WASP Tarzan robot fails to deposit the plate on the unloading belt WASP 1 or the sensor at the inlet of the conveyor has not detected the plate presence.	<ul style="list-style-type: none"> • Take note of the alarm, check the plate position. • If the plate is fallen in WASP press the Emergency button on the WASP and recover the plate. • Reset the equipment and load manually the plate on the unloading belt WASP 1. When the plate is correctly positioned, push reset alarm on the control panel. Press the start conveyor button to load the plate in WASPLab. • If the plate is on the sensor but is not detected call the Technical Assistance Support because the sensor is not correctly working.
9060.8_The Plate deposited by WASP 1 has not reached the conveyor full sensor (Loading conveyor 1)	Line - Incubator Load 1	Tarzan lost the plate before the loading in the unloading belt WASP 1 or the sensor has not detected the plate presence.	<ul style="list-style-type: none"> • Take note of the alarm and press the Emergency button on the WASP and recover the plate. • Reset the equipment and load manually the plate on the unloading belt WASP 1. • When the plate is correctly positioned, push reset alarm on the control panel. • If the system does not restart immediately, call the Technical Assistance Support because the sensor is not correctly working. If the plate is not present, call the Technical Assistance Support

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9060.15_ The plate has not reached the media plate pacer assembly (Loading conveyor 1)	Line - Incubator Load 1	The media plate pacer sensor has not detected the plate presence, the plate could be stuck on the conveyor	<ul style="list-style-type: none"> • Check if the plate is stuck on the conveyor and eventually adjust the position and press “reset alarm” on the control panel. • If the plate is on the sensor, check the sensor cleaning, if it is still not working call the Technical Assistance Support.
9160.1 / 9063.15_ Plate still at the overfull sensor of the 1st (2nd) incubator entrance belt	Line - Incubator Load 1	The sensor has not immediately detected the plate presence	<ul style="list-style-type: none"> • After verified the presence of the plate in the described position, push “reset alarm” on the control panel; the plate should be stacked in the reload canister to be eventually manually unload. • If the system does not restart immediately, call the Technical Assistance Support because the sensor is not correctly working. If the problem persists contact the Technical Assistance Support because the sensor is not correctly working.
9061.10_ Plate stuck on the media plate stopper (Loading conveyor 1)	Line – Incubator 1	The sensor has not detected the plate presence	<ul style="list-style-type: none"> • Take note of the alarm and press the red emergency button on the imaging box, open the doors and check if the plate is present. • Close the imaging box doors and release the emergency button by turning it clockwise and press the power on button on the incubator. • Perform RESET and restore the system by the Panel control. The plate should be stacked in the reload canister to be eventually manually un- loaded. • If the problem persists, contact the Technical Assistance Support because the sensor is not correctly working.
9062.3_ Plate stuck on the media plate pacer assembly	Line – Incubator Unload 1	The sensor has not detected the plate presence	<ul style="list-style-type: none"> • Take note of the alarm and press the red emergency button in the end of the line, and check if the plate is present on the sensor.

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(Unloading convey- or 1)			<ul style="list-style-type: none"> • Release the emergency button by turning it clockwise and press the power on button on the line. • Perform RESET and restore the system by the Panel control. • The plate should be stacked in the reload canister to be eventually manually unloaded. • If the problem persists contact the Technical Assistance Support because the sensor is not correctly working.
9161.1_ Unexpected plate on the media plate pacer assembly (Unloading conveyor 1)	Line – Incubator Unload 1	The sensor has not detected the plate presence.	<ul style="list-style-type: none"> • Take note of the alarm and press the red emergency button in the end of the line, and check if the plate is present on the sensor. • Release the emergency button by turning it clockwise and press the power on button on the line. • Perform RESET and restore the system by the Panel control. The plate should be stacked in the reload canister to be eventually manually unloaded. • If the problem persists, contact the Technical Assistance Support because the sensor is not correctly working
9081.0 / 9083.0/ 9085.0 / 9087.0_Plate unloading request but stacker absent (Stacker x)	Line – Stacker x	The canister is not present or bad positioned or the sensor is not detecting the canister presence.	<ul style="list-style-type: none"> • In the case the canister is absent position it correctly. If the canister is present, check if it is correctly positioned. • The machine should restart immediately. • If the machine does not restart, contact the Technical Assistance Support because the sensor is not correctly working.
9163.03: Plate stuck on the conveyor full sensor (Unloading conveyor 2)	Imaging Box / Line	If the plate is not visible on the line, it may be inside the imaging box on the conveyor.	<ul style="list-style-type: none"> • Remove the plate if present. • Press reset alarms to restore the cycle, otherwise press emergency and then restart the cycle

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14454.06: No plate on the media plate lifter, after its descent movement (during loading)	Imaging Box	This error is common after removal of a plate from the plate lifter. Please follow corrective action.	<ul style="list-style-type: none"> • First, press reset alarms. • If that does not work press EMERGENCY. Open the imaging module and if present remove the plate in the barcode reading station. • Manually reload the plates. • Release the EMERGENCY button, give power and press RESET ALARM.
14454.10: Plate not picked up by the external gripper from the media plate carrier (during reset)	Imaging Box		<ul style="list-style-type: none"> • Press Reset Alarms first. • If that does not work and press EMERGENCY. • Open the imaging module and if present remove the plate in the barcode reading station. Manually reload the plates. • Release the EMERGENCY button, give power and press RESET ALARM.

REFERENCE

Copan Italia. Operator Manual WASPLab[®] HPAWLEN REV00 (EX REV: 05) 2017.

