

Editing

■ Deleting a job (or several jobs)



This function is not available to **Operator**-type users .

This function is not available when the printer is in printing state.

1. From the main screen, press  ►  ► .

The list of available jobs is displayed.



If a filter is set, the job list displays only those jobs whose names match the filter setting.

2. Select a job or jobs to be deleted.



If the job currently selected for printing (marked with the ► in the list) is selected for deletion, it is preceded by an additional message.

3. Press  to confirm.

The selected jobs are permanently removed from printer memory.

■ Changing a job name



This function is not available to **Operator**-type users .

This function is not available when the printer is in printing state.

1. From the main screen, press  ►  ► .

The list of available jobs is displayed.



If a filter is set, the job list displays only those jobs whose names match the filter setting.

2. Select the job whose name you wish to change.



If the job currently selected for printing (marked with the ► in the list) is selected for renaming, it is preceded by an additional message.

3. Press  to confirm.

A virtual keyboard is displayed, allowing job name changes to be entered.

4. Enter a new job name.



If the new job name is the same as the name of an existing job in the printer memory, the new job will permanently overwrite the existing job.

5. Press  to confirm.

The job name is changed.

■ Managing jobs



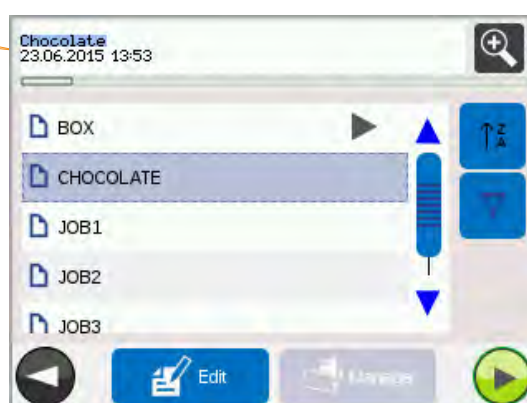
*This function is not available to **Operator**-type users .*

This function is not available when the printer is in printing state.

■ Job manager

The job manager window, which lists available jobs, is displayed by pressing  from the main screen.

Preview
a selected job



The job manager window is also displayed during most job operations, for example:

- When modifying a job name by pressing  ► 
- When deleting one or more jobs by pressing  ► 



If a filter is set, the job list displays only those jobs whose names match the filter setting.

Editing

The following icons are available in the job manager window:

 /  to sort the jobs in the list by name; in ascending or descending order; the icon shows the selected type of sorting

 to filter the jobs in the list; the filter setting is saved and active all the time; to show all the jobs on the list, the filter setting needs to be cleared



The  icon in place of the  indicates that the filter is already set (active).



to preview a selected job; the preview window is described in the "Interface" section



to edit a selected job



to open a menu with additional available job operations, such as creating a job, renaming a job, and deleting a job



to send for printing a selected job; for details, see the section entitled "Operation"

Information/ History

Information/History

■ Printer information

From the main screen, press  on the information bar or  ►  ► .

Printer information is divided into several groups:

-  consumables
-  ink system
-  installed printhead
-  printer status
-  software versions
-  control unit

■ Consumables

From the main screen, press  or  ►  ►  ► .

The information about consumables is divided into two groups (tab sheets):

- consumables state
- consumables in use

■ Consumables state



This function provides the following information about the ink bottle in use:

- bottle status
- ink level
- acceptance date

- deactivation date
- expiration date
- UID

■ Information about consumables in use

State	Information
Color	: -
Solvent type	: -
Color type	: -
Batch number	: -
Item number:	: -
Item reference:	: -



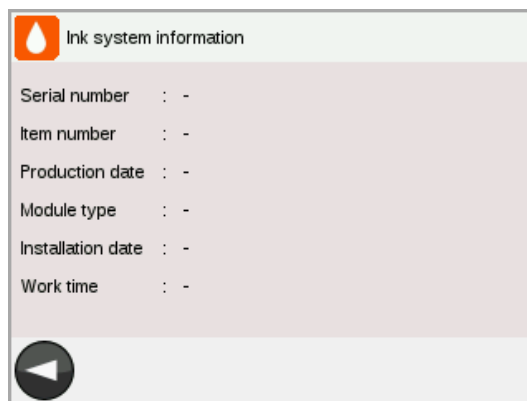
This function provides the following information about the consumables in use:

- ink color
- solvent type
- color type
- batch number
- item number
- item reference

Information/History

■ Ink system information

From the main screen, press  ►  ►  ► .



This function provides the following information about the ink system:

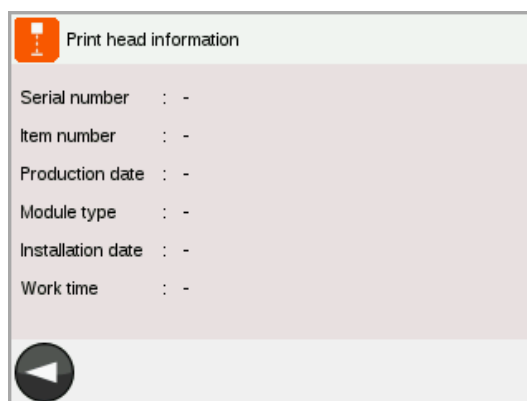
- serial number
- item number
- production date
- module type
- installation date
- work time



After replacing the ink system, the information is refreshed automatically.

▣ Printhead information

From the main screen, press  ►  ►  ► .



This function provides the following information about the printhead that is installed.

- serial number
- item number
- production date
- module type
- installation date
- work time

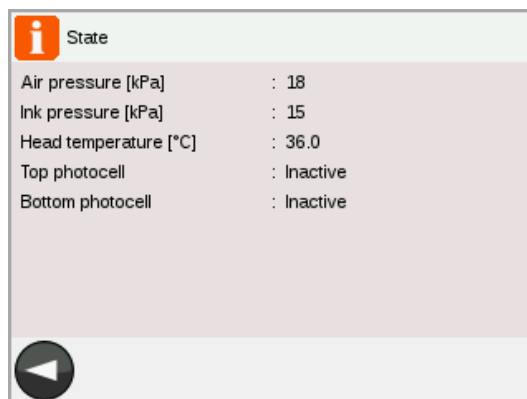


After replacing the printhead, the information is refreshed automatically.

Information/History

■ Printer status

From the main screen, press  ►  ►  ► .

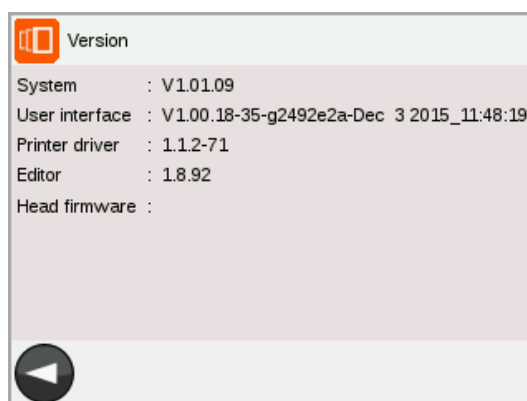


This function provides the following information about the printer:

- air pressure in the ink system [kPa]
- ink pressure in the ink system [kP]
- printhead temperature [°C]
- the state of both photocells built into the printhead

■ Software versions

From the main screen, press  ►  ►  ► .



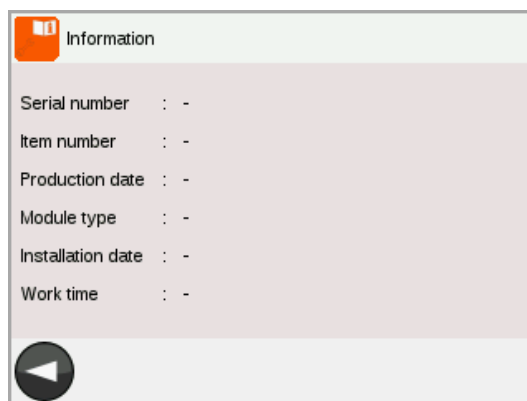
This function provides the following information about the software:

- System version
- User interface version
- Driver version

- Editor version
- Head driver version

▣ Control unit information

From the main screen, press  ►  ►  ► .



This function provides the following information about the control unit:

- serial number
- item number
- production date
- module type
- installation date
- work time



After replacing the control unit, the information is refreshed automatically.

Information/History

■ History

From the main screen, press   .

This function provides historical information about jobs that have been printed and operational messages, such as warnings, faults, and notices.

Statistics

From the main screen, press .

Job name	Printouts

This function provides a list of the jobs printed during the past 60 days. Each entry includes:

- the name of the job that was printed
- the number of prints made

■ Message history

On the main screen press  or , which appear on the information bar when a warning/fault occurs, or press  ►  ► .

Message ID	Accept Date	Occurrence Date	
 I99100	2015.12.04 06:58:45	2015.12.04 06:57:36	  
 I99100	2015.12.03 21:31:49	2015.12.03 21:31:32	
 E99100	2015.12.03 20:40:00	2015.12.03 20:39:55	
			

This function provides a list in chronological order of all warning, fault, and notice messages that have occurred during the previous two months. This message history can be helpful during printer maintenance, troubleshooting, and servicing. Each entry includes:

- type of message: warning , fault , notice 
- a unique message-identifier facilitating diagnostics, such as W99006, that is the same regardless of the interface language
- date of accepting the message
- date of first occurrence of a given message
- number of occurrences of a given message
- message description displayed in the interface language

■ Exporting history

Historical information such as job printing statistics and message occurrences can be saved as an *.exh file on a USB memory device.



For more details about exporting historical information see the section entitled "Importing/exporting data".

Troubleshooting

Troubleshooting

■ Messages

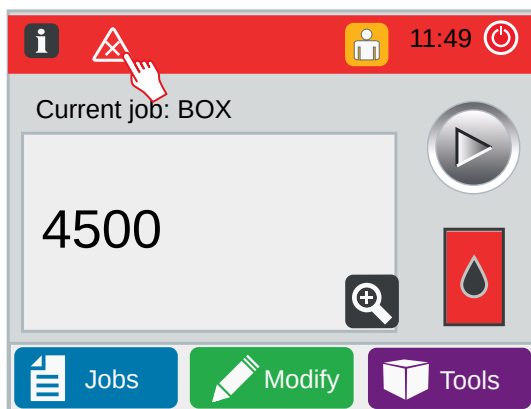
The following types of messages occur on the printer:

- fault messages
- warning messages
- informational messages

All types messages are displayed in the dialog box and saved in message history.

Fault messages:

- A condition occurring during printer operation, such as ink level empty, that causes the information bar to change to red and the  to appear on the information bar; the printer goes into a fault state and printing is not possible.



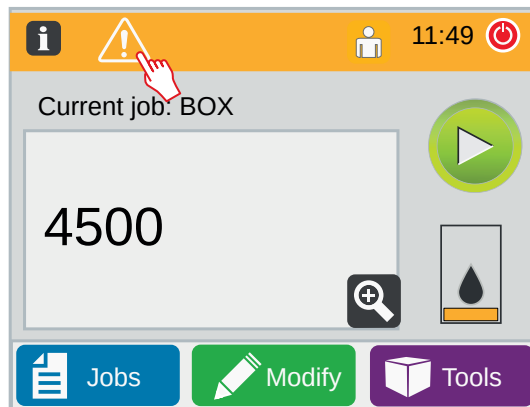
Fault state

Printing is not possible.

Press  to view the fault details.

Warning messages:

- A condition occurring during printer operation, such as ink level low, that causes the information bar to change to orange and the  to appear on the information bar; the printer goes into a warning state and printing can continue.



Warning state

User intervention required.
Printing is possible

Press  to view the warning details.

Fault sounds can be enabled/disabled by pressing:



Warning sounds can be enabled/disabled by pressing:



An external signaler (beacon) can be connected to the printer. For more details about this option refer to the sections entitled "Description" and "External connections".



The printer is capable of stopping the factory conveyor as soon as a fault occurs. For more details see the section entitled "External connections".

Informational messages:

- A condition requiring notification of the user of the ensuing situation. The printer does not change its state. Printing can continue.

Troubleshooting

■ List of messages

The table below provides a list of all printer messages. Each message has a unique identifier with the first character indicating the type of message.

- "F": a fault message
- "W": a warning message
- "I": an informational message

Identifier	Description
Fault messages	
F00000	No Ink Container.
F00001	No ink in ink system. Replace ink container.
F00002	Low air pressure.
F00003	Low Ink pressure.
F00004	Top Photocell fault.
F00005	Bottom Photocell fault
F00006	Photocell fault.
F00007	Unauthorized printhead.
F00008	Unauthorized ink system.
Warning messages	
W1111	Some printouts are skipped and some may be incorrect. Printing speed may be too fast for selected job.
W99023	Ink level low.
Informational messages	
I99000	New ink container #ID
I99001	Ink container #ID accepted.
I99002	Ink container #ID accepted.
I99024	Ink unit empty (no ink). Replace ink container.
I99110	Printer enabled by unlock code. Run hours remaining:
I99111	Activation code successfully accepted.
I99112	Ink type changed. Accept/register the new ink.
I99200	Job loading failed.
I99201	Job file does not exist.
I99202	Incorrect ink container data received from ACM system.
I99203	Incorrect parameter(s). Ink consumable rejected.
I99204	Out of date ink. Consumable rejected.
I99205	Ink for other printhead type. Consumable rejected.
I99206	Incorrect color. Consumable rejected.

Troubleshooting

Identifier	Description
I99207	Incorrect ink type. Consumable rejected.
I99208	Incorrect solvent type. Consumable rejected.
I99209	Ink from another Distributor than before. Consumable rejected.
I99210	Different Pigmentation type. Consumable rejected.
I99211	Ink container has been cancelled.
I99212	Already used on another printer. Consumable rejected.
I99213	Deactivated consumable.
I99214	Deactivated consumable.
I99215	Ink type not changed.
I99216	Unlock code not generated.
I99217	Invalid activation code.
I99218	Exceeded limit of invalid activation codes. Printer will switch off.
I99219	Unavailable option.
I99220	Incorrect option.
I99221	Job width too small. Corrected by the printer.
I99222	Job height too small. Corrected by the printer.
I99223	Job size too large. Corrected by the printer.
I99224	Missing objects.
I99225	Job file corrupted.
I99226	Variable field 'Text File': Cannot open file.
I99227	Variable field 'Text File': Problem opening/accessing file on a given line.
I99228	Truncated font.
I99229	Image file missing.
I99230	Text file missing.
I99231	Font file missing
I99232	Global counter missing.
I99233	Global calendar missing.
I99234	Global shiftcode missing.
I99235	Fields out of printing area.
I99236	Not printable job.
I99237	Registered ink container is still active, unlock code for printer skipped.
I99239	No job opened.

Troubleshooting

■ Message handling

If a fault message occurs:

1. View the fault message in the dialog box.
2. Perform the action(s) indicated in the message.
The printer gets out of the fault state and is ready to print.
3. Press **OK** to acknowledge the message.
4. If the printer was printing before the fault occurred, resume printing.



For more information about the fault you can press  ►  ►  on the main screen at any time or press  on the information bar when the printer is in the fault state.

If a warning message occurs:

1. View the warning message in the dialog box.
2. Perform the action(s) indicated in the message.
The printer gets out of the warning state.
3. Press **OK** to acknowledge the message.



For more information on the warning you can press  ►  ►  on the main screen at any time or press  on the information bar when the printer is in the warning state.

If an informational message occurs:

1. View the informational message in the dialog box.
2. Perform the action(s) indicated in the message.
3. Press **OK** to acknowledge the message.



For more information on the message you can press  ►  ►  on the main screen at any time.

If the above operations failed to remove the reason(s) for the message, keep diagnosing the printer. For more details on how to diagnose faults see further below in this section.



Certain faults, such as impaired print quality, may not be connected with a message. If such a problem occurs, the printer needs to be diagnosed. For more details see further below in this section.

Troubleshooting

■ Diagnostic wizard

■ Preliminary checks

Before attempting to locate a faulty component, preliminary checks are recommended.

- Visual inspection can detect problems such as dirty parts, ink leakage, or a disconnected cable.
- Checking printer information screens provides information about consumables, the ink system, and settings which can help identify the source of the problem.

■ Visual inspection

Components to be checked	Potential problems
Printhead	□ Dirty nozzle plate □ Dirty photocells □ Leak in the printhead
Ink system	□ Leak in the ink system □ No bottle of ink □ Ink bottle is not screwed in completely
Power pack/cabling	□ Damaged/detached cables □ Power cable detached from the electric mains or power pack
Control unit	□ Damaged LCD
Others	□ Objects to be printed on are beyond the reach of the photocells

■ Checking the settings

Check the settings by reviewing the following:

- The contents of the job open to print.
- Printing parameters.
On the main screen press  to gain access to the printing parameters of the job.
- Printer parameters.
Press  ►  to gain access to various groups of settings. For more details see the section entitled "Configuration/Transfer".

- Printer information.

On the main screen press  ►  ►  or  on the information bar to gain access to various groups of information about the printer. For more details see the section entitled "Printer information".

■ Troubleshooting chart

The troubleshooting chart lists malfunctions and one or more corrective actions.

The first task is to perform preliminary checks.

The next task is to identify the malfunction on the list and apply the actions and solutions in the order given.

After correcting the problem, acknowledge any fault or warning message displayed.

Malfunction	Actions and solutions
The display is blank. No LEDs are on.	☐ Check if electric power supply is available. ☐ Check the power cable and whether it is connected or not.
Touch screen is not working.	☐ Contact a Markem-Imaje representative.
Incorrect date and time.	☐ Set the correct date and time in the printer. ☐ Select the correct time zone. ☐ Contact a Markem-Imaje representative.
Printing cannot start.	☐ Open a valid job to print.
A font, image, text file used are not available. Faulty fields are highlighted in red. The job cannot be sent to print.	☐ Import the missing items to the printer. OR ☐ Use a font that is available. OR ☐ Delete the job and create a new job using available fonts, images, and text files.
Global counter, global calendar, or global shiftcode variables used in the job are not available.	☐ Import to the printer the global variable used in the job. OR ☐ Create a valid global variable. OR ☐ Delete the job and create a new job using available global variables.

Troubleshooting

Malfunction	Actions and solutions
Existing job is not shown in the job list.	□ Make sure that no filter is set.
Incorrect job content.	□ Review and correct job content.
Uneven print resolution.	Printing is released by an internal generator. □ Change the source of printing timing.
Prints are too pale or too bold.	□ Set drop parameters.
Some of the nozzles do not print.	Dirty nozzle plate □ Clean the nozzle plate with solvent, and then wipe it with soft cloth. □ Start the purging procedure. □ Start the printing unit tuning procedure. □ Contact a Markem-Imaje representative.
Irregular print distortions or fading.	Air-locked ink system or clogged ink filter. □ Start the purging procedure. □ Contact a Markem-Imaje representative.
Irregular splashes around prints.	□ Reduce the distance between the printhead and objects to be printed on.
Prints are incorrectly positioned on the objects.	□ Review printing parameters.
Empty bottle.	□ Replace the ink bottle with a correct one.
No prints although no fault is signaled.	□ Check the content of the job selected for printing. □ Make sure that the photocells are clean. □ Make sure that objects to be labeled are within photocell reach. □ Check the print release or margins-related printing parameters. □ Make a test print.
Some printouts are skipped.	□ Reduce printing speed.

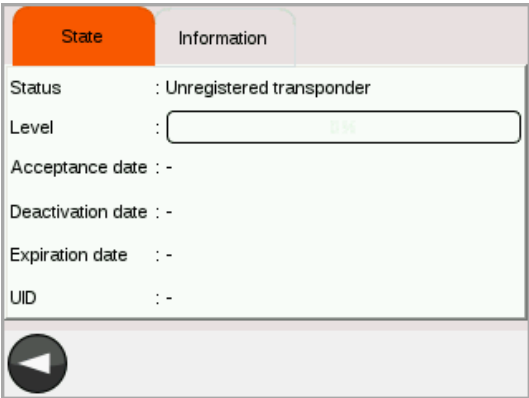
Malfunction	Actions and solutions
Ink bottle or ACM* system faults.	□ Replace the ink bottle with a correct one. □ Follow the procedure for enabling printing after a bottle fault. □ Contact a Markem-Imaje representative.
*ACM : Advanced Consumable Management	

■ Service procedures

■ Enabling printing after a bottle fault

When the color-coded ink indicator  on the main screen is red, an ACM system fault has occurred. Printing is disabled.

Press  to open a screen with details of the fault.



The screenshot shows a screen with two tabs: 'State' (selected) and 'Information'. The 'State' tab displays the following information:

Status	: Unregistered transponder
Level	: 88%
Acceptance date	: -
Deactivation date	: -
Expiration date	: -
UID	: -

At the bottom left of the screen is a circular button with a left-pointing arrow.

For many ACM system faults, the user can correct the problem and resume printing.

For some ACM system faults, such as when the expiration date on the ink bottle has elapsed although the bottle is not emptied, printing can be enabled only by obtaining a temporary activation code. This code allows printing to be temporarily resumed until service support is obtained or the ink bottle is replaced.

Troubleshooting



To obtain a temporary code to activate printing, it is necessary to contact Markem-Imaje representative.

The temporary activation code allows the user to activate printing for a period of:

- 50 hours

1. From the main screen, press  ►  ► .

A one-off Unlock code is generated.

2. Contact your Markem-Imaje representative.

Provide the Unlock code.

The Markem-Imaje representative provides a one-off activation code.

3. Enter the activation code.
4. Press the  **Unlock** button.

Printing is enabled for the defined number of run hours.



If  is pressed or an incorrect activation code is entered three times, the unlock screen is exited and the one-off Unlock code becomes invalid. Pressing  again generates a new Unlock code and you need to contact your Markem-Imaje representative again to obtain a new activation code.

On the main screen, the red ink indicator  is replaced with the clock indicator , which means that the printer is enabled for a defined time.

Press  to see how many hours the printer can still be used before the allotted time elapses. When the allotted time elapses, printing is not possible.

■ Purging the ink system

Tools required:

- gloves
- goggles
- absorbent material or an ink container

The purging operation is used for:

- clearing clogged nozzles
- removing air from the ink system in the printer
- filling the ink system with solvent/purging the printer's ink system (after the solvent bottle has been connected)

The purging procedure should be followed when:

- some dots are missing on first prints made after an idle period
- dot sizes on prints vary

Purging consists in opening of all nozzles and jetting of ink/solvent through the nozzles under pressure.



Before starting the purging function make sure that a piece of absorbent material or a container for collecting ink is placed beneath the nozzle outlet.



Purging cannot start when the printer is in the printing state.

Press and hold the  button. Purging lasts as long as the button is being pressed.

The purging function can also start with the  **Purge** icon while the procedure for tuning the printing unit is being followed.

Troubleshooting

■ Tuning the printing unit



Dirt on the nozzle plate or air trapped in the ink system may impair print quality. Therefore, before tuning the printing unit, it is recommended that the nozzle plate be cleaned and the ink system be purged for a short time. Then make a test print and assess the impact of cleaning and purging on print quality.

Tune the printing unit only when cleaning and purging do not improve print quality.



This function is not available to **Operator**-type users

Tools required:

- gloves
- goggles
- absorbent material or a container for collecting ink
- a #2.5 hex (Allen) key
- a #T6 Torx screwdriver

The procedure for tuning the printing unit should be carried out when:

- the size of dots jetted out of one of the nozzles is different from the size of dots from the other nozzles

Tuning is used to adjust the printer nozzles that print incorrectly.

An example of a print made with the printer whose nozzle No. 13 needs tuning.



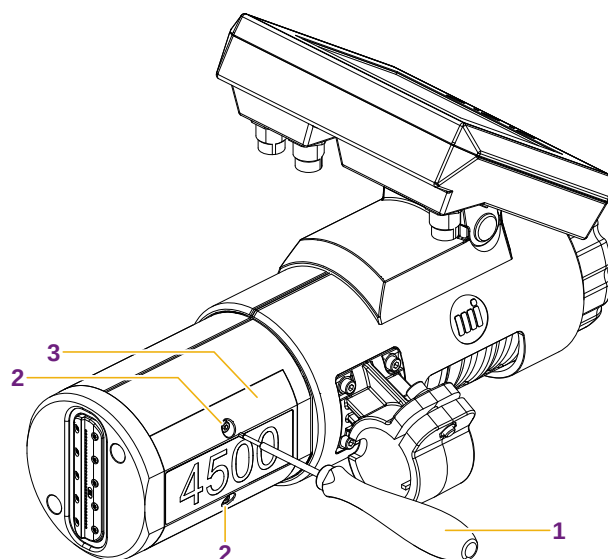
Troubleshooting

Before tuning the printing unit, access to the adjustment screws is needed:

1. Use a #2.5 hex key (1) to loosen the two screws (2) that fasten the blanking plates (3) on each side of the printhead (there are two screws on each side).

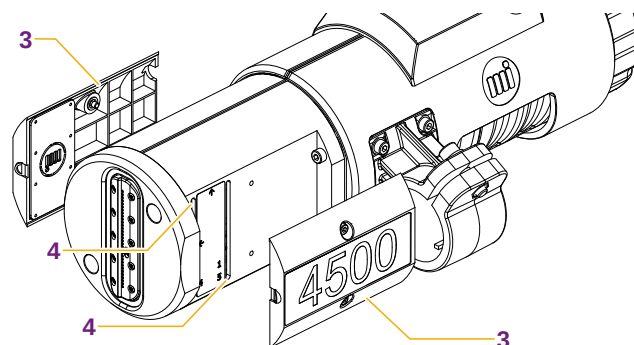


The screws (2) that fasten the blanking plates (3) cannot be removed from these plates completely because they form part of the plate.

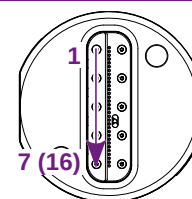


2. Remove the blanking plates (3).

Removal of the blanking plates allows access to the adjustment screw slots (4).



Numbers on the stickers located next to the slots identify which adjustment screw adjusts a given jetting nozzle. The numbers correspond to the values of the **drop number** parameter (1 - 7 or 1 - 16) shown on the tuning screen. Nozzles are numbered successively from the top.

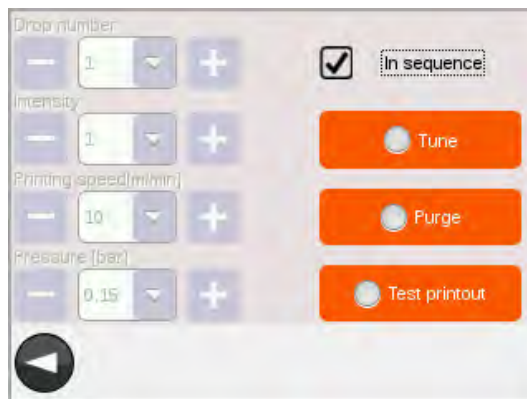


Troubleshooting

3. On the main screen press  ►  ► .



If the printer is printing and you start the tuning procedure, the printing pauses automatically.



The following functions are available while the printing unit is being tuned:

-  **Tune** to enable  / disable  printing with a selected nozzle (**drop number**) and given printing parameter settings (**pressure [bar]**, **intensity**, **printing speed [m/min]** or **[inch/min]**)
-  **Purge** to enable  / disable  purging
-  **Test printout** to enable  / disable  printing of a test print
- **drop number**: to select the number of a nozzle to be tuned; the range of settings (1 - 7 or 1 - 16) depends on the type of printhead installed in the printer; the parameter is active only when the  **Tune** function is enabled



*By means of the **In sequence** parameter you can change the way in which successive nozzles are chosen for tuning if the  and  icons are used. For more details see further below in this section.*

- **pressure [bar]**: to set the ink pressure at which the tuning procedure is performed (0.15 - 0.45); it is recommended that the ink pressure at which the printer normally works be set; the parameter is active only when the  **Tune** function is enabled
- **intensity**: to select the drop size out of several predefined settings (1 - 5); it is recommended that the ink pressure at which the printer normally works be set; the parameter is active only when the  **Tune** function is enabled
- **printing speed [m/min]** or **[inch/min]**: the speed at which ink is jetted by the nozzle currently being tuned (10 - 100 m/min or 394 - 3937 inch/min);