

Thank you for choosing a Matthews product

We hope that this manual will be one of the reasons for your continued confidence in Matthews marking products. Therefore any suggestions which can lead to the increased quality of our instruction manuals will be gratefully received.

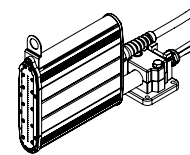
Please send any suggestions to this address:

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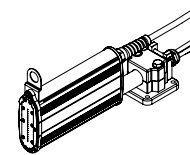
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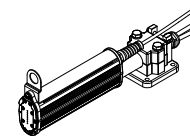
8000+ MINI 32v
8000+ MIDI 32v
8000+ MAXI 32v



8000+ MINI 16v
8000+ MIDI 16v
8000+ MAXI 16v



8000+ MINI 7v
8000+ MIDI 7v
8000+ MAXI 7v



8000+
Print Heads

User Guide

Version: 1 Issue: 1

User Guide

Version: 1 Issue: 1
05-2012

Print Heads - 8000+ Range

Manual's part number: 795 713.01

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Introduction

About this manual

This manual gives user information which is particular to print heads in the Jet•A•Mark 8000+ range. These are:

- 8000+ MINI 7v
- 8000+ MINI 16v
- 8000+ MINI 32v
- 8000+ MIDI 7v
- 8000+ MIDI 16v
- 8000+ MIDI 32v
- 8000+ MAXI 7v
- 8000+ MAXI 16v
- 8000+ MAXI 32v

This manual does not cover information related to other products, such as how to connect a print head to a specific control unit. For this and more information related to other products, please see the documentation received with those products.

The 8000 MINI 7v IP65 v3 print head is covered in the Special Print Heads documentation. Please contact your dealer for more information.

Installation information, etc. for these print heads is covered in the Technical Manual received with your print head.

History

The following table shows which User Guide should be used with which print head.

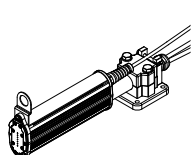
| Print Head model | Print Head serial number | Manual version number ^a | Update Information |
|-----------------------|---|------------------------------------|--------------------|
| All 8000+ print heads | 32v - 3900 and above 16v - 5250 and above 7v - 1700 and above | V1 I1 | First release |

(a) Shown on the Contents page.

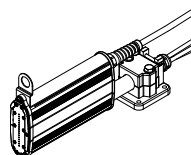
Overview

Description

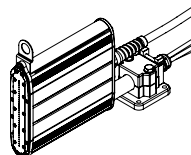
The Jet•A•Mark 8000+ range comprises of the MINI, MIDI and MAXI print head types. Each type has different printing characteristics with respect to print resolution (drop size) where MINI print heads are used for high resolution printing and produce, therefore, small drops, MAXI heads print at a low resolution using large drops and MIDI heads have printing characteristics falling in the middle of the two.



8000+ MINI 7v
8000+ MIDI 7v
8000+ MAXI 7v



8000+ MINI 16v
8000+ MIDI 16v
8000+ MAXI 16v



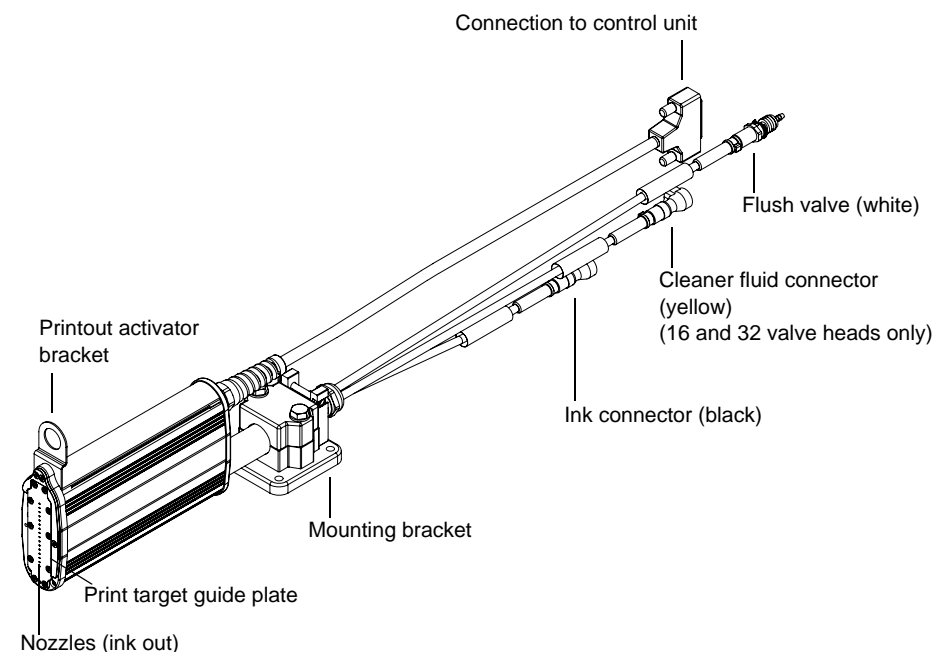
8000+ MINI 32v
8000+ MIDI 32v
8000+ MAXI 32v

Each print head type is available in three models: a 7 valve print head, a 16 valve print head and a 32 valve print head, one for each maximum print height.

Please see the Technical Manual for print head comparison charts.

External Parts

The parts shown below are for an 8000+, 16 valve print head. The parts for the 7 and 32 valve print heads, in the 8000+ range, are the same unless otherwise stated.



Print Head Compatibility

The 8000+ print heads are fully compatible with all control units used for 8000 print heads. An 8000+ print head can be used to replace an existing 8000 print head that is in operation. There is no need to make any changes in the control unit and its settings.

Pigmented Inks



Failure to correctly use pigmented inks, as described below, can cause permanent damage and void the print head's warranty.

All maintenance information contained in this manual is only applicable when using non-pigmented inks.

If an 8000+ print head is to be used with pigmented inks a Matthews CISU (Circulating ink Supply Unit) must also be used. The operation and maintenance information provided in the CISU's Operator manual must be adhered to.

Maintenance



Ink under pressure - Use protective goggles and rubber gloves when handling ink



Never clean the print head nozzles with factory (pressurised) air.

To ensure problem free operation it is a good idea to look over your ink jet printer system as often as possible.

Get into the habit of asking yourself the following questions:

- Does the printout look ok?
- Is there enough ink/cleaner fluid?
- Do the print head nozzles need cleaning/flushing?
- Do the cables and tubing look ok?

Use only Matthews' inks and cleaner fluids.

Daily

Always keep the print head clean. Periodically clean the nozzles with a brush dipped in cleaner fluid. Let the print head dry by itself, or use a lint free cloth to dry it.

Preparing for a Print Stop

Print heads must be correctly maintained when preparing for a print stop, as described below.

If pigmented inks are used with a 8000+ print head special maintenance procedures must be followed. See "Pigmented Inks" on page 4.

Less than Two Weeks

If a print head is to be out of use for less than two weeks, no preparation is required. The print head can be left idle with ink in it.

More than Two Weeks

- 1) Turn the ink supply unit OFF.
- 2) Carefully unscrew and remove the ink pick-up from the ink bottle/container.
- 3) Put the ink pick-up into a cleaner bottle/container and secure it.
Note: The cleaner will become slightly discoloured from ink on the pick-up.
- 4) Turn the ink supply unit ON.
- 5) Using a waste container, press and hold the print head's flush valve (refer to "External Parts" on page 3) until cleaner fluid can be seen entering the waste container.
- 6) Select the flush function from the control unit, and flush the print head nozzles with cleaner.



The control unit may have a Long Flush function. If so this will speed up this process.

- 7) Clean the nozzles with a brush dipped in cleaner fluid.
- 8) Turn the ink supply unit OFF.

After a Stop of Two Weeks or More

- 1) Clean the nozzles with a brush dipped in cleaner fluid and allow them to dry, or use a lint free cloth to dry them.
- 2) Make sure that the print head is correctly connected to the ink supply unit and that the ink pick-up is secured on to the ink bottle/container.
- 3) Turn the ink supply unit ON.
- 4) Use the print head's two-way flush valve to flush the print head with ink. Stop when ink can be observed exiting the flush valve. See "External Parts" on page 3.
- 5) Use the flush function in the control unit to flush the print head's nozzles with ink. (Refer to the control units' manual for further information regarding the use of the flush function).



The control unit may have a Long Flush function. If so this will speed up this process.

Ink Filter changes

Ink filters must be replaced periodically. The filters prevent damage to the print head. They filter dirt/particles that contaminate the ink. The filters must be changed as provided below.

- FPS Basic/Advanced - after 300 litres (80 US gallons) of ink have been used or 6 months.

- HP-ISU - after 30 litres (8 US gallons) of ink have been used or 6 months.

Please refer to and read the ink supply unit's manual for further information before changing filters.

Preparing for shipping

- 1) Turn the ink supply unit OFF.
- 2) Carefully unscrew and remove the ink pick-up from the ink bottle/container.
- 3) Put the ink pick-up into a cleaner bottle/container and secure it.
- 4) Turn the ink supply unit ON.
- 5) Using a waste container, press and hold the print head's flush valve (refer to "External Parts" on page 3) until cleaner fluid can be seen entering the waste container.
- 6) Select the flush function from the control unit, and flush the print head's nozzles with cleaner.



The control unit may have a Long Flush function. If so this will speed up this process.

- 7) Clean the nozzles with a brush dipped in cleaner fluid.
- 8) Turn the ink supply unit OFF.
- 9) Carefully unscrew the ink pick-up, to purge the system air pressure.
- 10) Disconnect the print head's tubing, using the quick release connectors (refer to "External Parts" on page 3).

- 11) Disconnect the print head's cable.
- 12) If the print head is being sent in for repair, please attach a note stating which ink type is used with the print head.

Appendices

Problem Solving

If this troubleshooting guide does not help in solving your problem, please contact your dealer for assistance.

See www.matthewsmarking.com to find a distributor in your country.

| Fault | Possible cause | Remedy |
|--|---|---|
| No printout and no clicking sound heard from head during printout. | No message selected for printout. | Select a message at control unit. |
| | Selected message empty. | Check message contents at control unit. |
| | Control unit not switched on | Switch control unit on. |
| | Print head cable not connected. | Connect cable. |
| No printout or poor printout quality but clicking sound heard from head during printout. | Ink tube not connected. | Connect ink tube. |
| | Low ink pressure. <i>Normal ink pressure:</i> <ul style="list-style-type: none">• Special inks 0,8 - 1,0 bar.• Normal inks 0,4 - 0,8 bar. | Check ink pressure at ink supply unit. |
| | Low Dot Size setting. | Check printer (message) settings. |
| | Ink tube blocked. | Unblock ink tube. |

(Sheet 1 of 2)

| Fault | Possible cause | Remedy |
|-------|-------------------------------|--|
| | Ink filter blocked. | If applicable, replace the ink filter between the ink supply unit and print head. Refer to the ink supply unit's manual for further information. |
| | Print head nozzles blocked | Brush nozzle with cleaner fluid. Flush head with cleaner. |
| | Too long since last printout. | Print more often (perhaps between print targets). |

(Sheet 2 of 2)

General Information

Read and adhere to the following Warnings and Cautions.

Security Notices

- **Warning** - Refer to the appropriate “Material Safety Data Sheets” for information on the fluids used with your Jet-A-Mark product. These documents state whether or not the fluid is flammable and what action to take if the fluid comes into contact with eyes or skin.
- **Warning** - Ink under pressure. Use protective goggles and rubber gloves when handling ink.
- **Caution** - Use only the correct Matthews inks and cleaners. Failure to do so will damage the unit and void the warranty.
- **Caution** - Running the print head/s without fluid will cause damage. Therefore, check regularly for kinks or other stoppages in the lines.

User Notes

[illegible][illegible]

