

STRIPPER "QUICK"



OPERATOR AND SERVICE MANUAL

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UNI EN ISO 9001:2000 approved Quality System



Manufacturer's Liability

Operating instructions may contain a declaration by which the Manufacturer, the Assembler, the Installer, and the Importer are liable of the instrument safety, reliability, and performance only if:

- all assembling operations, extensions , setup, changes, and repairs are performed by authorized personnel;
- the electrical system of the room involved meets the relevant requirements;
- the instrument is used according to the given operating instructions.

When using electric devices, the basic safety rules to reduce fire risk, shock hazard and injuries are to be followed. Please read and keep all instructions contained in the present Manual

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The content of the present manual can be modified without notice.

The documentation herein contained has been collected and verified with the utmost care.

Nevertheless MOELCA cannot be liable for its incorrect use. The same is true for any person or company involved in the creation and production of the present manual.

WARRANTY

All units are produced and checked with the utmost care by the manufacturer. However, should a unit show a malfunction MOELCA gives each Stripper QUICK a warranty period of twelve months from date of sale. Warranty is valid only if the user complies with the following rules:



Defective Stripper QUICK must be sent to MOELCA or to the nearest Authorized Service Facility in the original packaging only.
Damages to units sent without original packaging **will not be covered by warranty.**



The purchase invoice should be included, along with a detailed description of the defect.



Damages resulting from operating errors, misuse, manipulation, carelessness, or any intervention unauthorized by MOELCA are not subject to warranty. MOELCA can grant a perfect operation only if Stripper QUICK is used with the original power supplier specifically designed for this instrument.



Warranty does not include the rechargeable batteries and the necessary labour for their replacement because they are considered consumable parts.

For further information concerning warranty please contact MOELCA.

SYMBOLS AND CONVENTIONS

The below list contains the symbols used in the present document.



Indicates an error condition.



Attention.

REVISIONS

Revision Log

Version	Date	Author	Description
1.0	13 Oct 2004	I. Milani	Original Version

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1 Introduction

Stripper QUICK is a little, ergonomic, compact, and heavy-duty device designed for stripping of hemocompound bags tubes.

Stripper QUICK's main features are the following:

- It is a portable device, easily moved by the handle it is provided with. It can be used anywhere since it is supplied by rechargeable batteries without need of uncomfortable power cables.
- Thanks to its self-slide system, it is not necessary to guide tubes manually during stripping.
- It is extremely handy and can be easily positioned at the end of each single activity.
- Stripper QUICK is automatically started when the starting handle is closed, without selecting any function or pressing any additional switch.
- It is safe thanks to the front protection cap it is provided with.
- It can strip bag-tubes of any diameter.
- Batteries are quickly recharged.


GENERAL DESCRIPTION

INSTALLATION

2 Installation

2.1 Unpacking Stripper QUICK

Remove Stripper QUICK from its original package and check that it is not damaged.

 **In case you find any defect, please do not use the instrument!**


Each Stripper QUICK is provided with:

- Plastic case. When not in use, Stripper QUICK should always be kept in it.
- Power supplier for batteries recharge.
- Operator and Service Manual.

2.2 Stripper QUICK location

Although Stripper QUICK is a heavy duty and versatile instrument, some simple precautions should always be taken.


- Never place it on little tables or other unstable supports.
- Chose a place protected from the damp, possibly away from direct sunlight and heat sources.

 **Do not place Stripper QUICK on radiators. Do not expose it to direct sunlight for a long time: higher temperatures than 50° C cause damages! Batteries explosion hazard!**

2.3 Before Using Stripper QUICK.

The very first step is batteries recharge.

As shown in the below figure, put the recharge plug into the proper socket in the upper part of the instrument, near the handle. Connect the recharge power supplier to power supply. When batteries are completely exhausted the recharge takes about 5 hours.

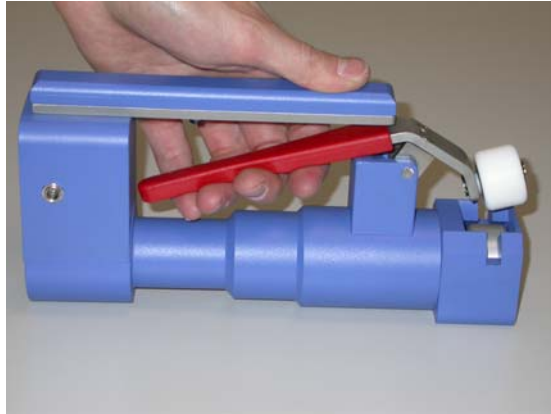
 **Pay attention to the power supplier mains AC voltage!**
Protect the power supplier from water! Always connect the batteries recharger first to Stripper QUICK and then to mains !



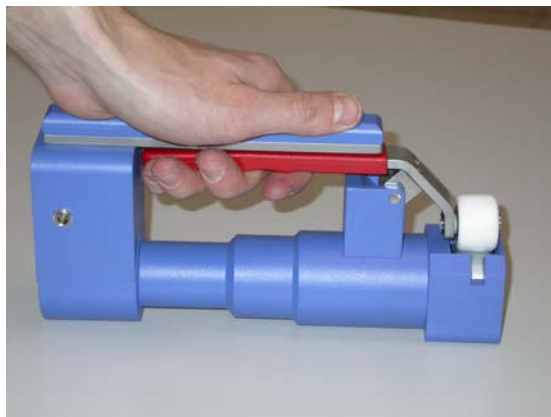
INSTALLATION

2.4 Stripper QUICK Operation Test

To check the correct operation of the instrument, hold Stripper QUICK as shown in the below figure.



Then press the upper handle as in the photograph. The lower roller (visible only from above) will start turning quickly and with uniform motion.



The instrument is now ready to be used.

3 Getting familiar with Stripper Quick.

3.1 Use of Battery Charger



Batteries overheat when they are used for a long time. Let them cool down before recharging!


From time to time it is necessary to exhaust batteries completely before recharging them. This allows to obtain the maximum battery capacity.


Do not recharge batteries after each use.

In case of long idle periods, recharge the batteries only when the instrument has to be used.

If Stripper QUICK is not used for a long period, it takes about 5 recharge and exhaust cycles before it reaches its full performance again.

If battery operation lasts shorter and shorter it means that batteries are used up and must be replaced.

 **Once the recharge is complete (maximum 5 hours), disconnect the battery charger from mains!**


 **Batteries (inside the instrument) can be replaced by qualified personnel only.**

Keep batteries in a dry place, protected from intense cold.

Do not throw batteries away with household waste, nor in fire or water.

Cover the contacts of the removed battery. In case of short-circuit there is fire and explosion hazard!

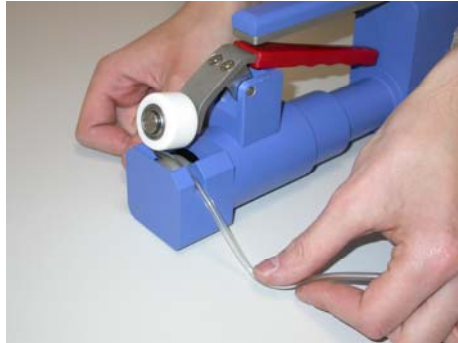
Always comply with law regulations concerning environmental protection.

 **Batteries and battery charger are compatible. For recharge operation use the original battery charger only. Batteries and battery charger will be damaged if a combination of different battery-cells are used!**

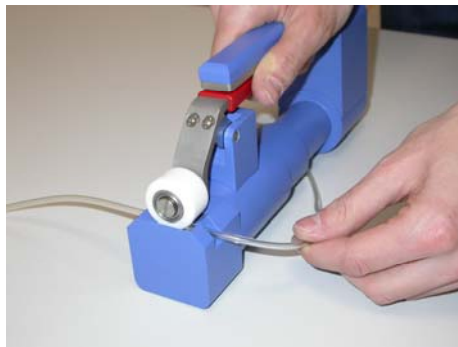
GETTING FAMILIAR WITH STRIPPER QUICK

3.2 How to use Stripper QUICK.

Put the initial end of the tube to be stripped (opposite the bag) in the two slides of the front protection cap, as illustrated in the photograph.



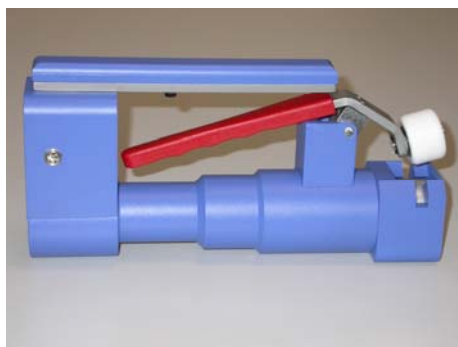
Press the upper handle with strength, while holding the lower handle with the fingers of the same hand.



When stripping is finished, release the upper handle.

3.3 How to position Stripper QUICK during Pause or when at the End of the Job.

Stripper QUICK is provided with a front protection cap (that avoids contact with the lower traction roller) having a flat lower part. This feature allows to position the instrument so that the grip is easier.



TROUBLESHOOTING

4 Troubleshooting

4.1 Problems and Possible Solutions



STRIPPER QUICK DOES NOT WORK, THE LOWER TRACTION ROLLER IS STILL:

Cause: Batteries are very low or battery charger does not charge properly.
The switch under the handle is defective.

Solution: Connect the battery charger and after 5 minutes check the operation (keeping the battery charger connected). If the instrument works, go on completing the recharge.
Please contact MOELCA Technical Service.



Batteries must be removed from the instrument before any electric service!



STRIPPING IS NOT SATISFACTORY

Cause: The tube of the hemo-components bag is very hard.

Solution: Press the handle stronger. It is also possible to perform stripping putting the Stripper QUICK on a bench and pressing the upper handle with strength.



DURING STRIPPING ONE OF THE TUBES OF HEMOCOMPONENTS BAG HAS BROKEN AND THE LIQUID CONTENT HAS SEEPED THROUGH THE FRONT PROTECTION CAP

Cause: Defective tube of hemo-components bag or bad tube positioning.

Solution: Remove the protection cap as described in Section 5 "Maintenance" and clean according to the current regulations for skin and face protection in order to avoid possible contamination. Cleaning should be done with a wad just damp with water or alcohol.



During cleaning the battery charger must be disconnected.



Never perform cleaning by immersion, even partial. Never put the Stripper QUICK head under a water stream!



Do not use acetone, trichloroethylene, etc. If bleach or disinfectant are used, clean the treated parts with water immediately after!

TROUBLESHOOTING

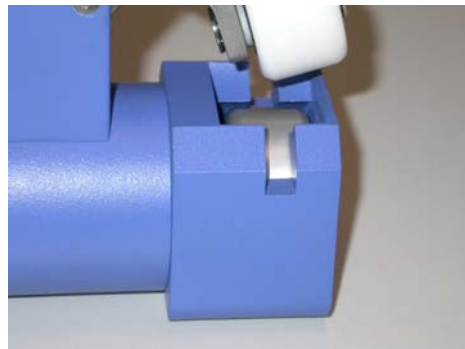
5 Maintenance

Stripper QUICK requires few and simple maintenance operations.

5.1 Cleaning of Protection Front Cap


Stripper QUICK is provided with a safe front cap protecting the traction roller. When internal cleaning is necessary (because of the breaking of a tube or for scheduled clearance a suitable Allen wrench is needed to unscrew the cap retaining screws and the traction roller retaining screws (two opposite screws).

 **During re-assembly remember to position the hollow part upwards, as shown below.**




5.2 Cleaning of Stripper QUICK

To clean the Stripper QUICK's body use a cloth just damp with water or alcohol.

 Do not wet or dampen the start switch under the handle and the battery supply socket!

 Never clean any part of the instrument by total or partial immersion!

Never put the instrument under a water stream!

 Do not use acetone, trichloroethylene, etc. If bleach or disinfectant are used, clean the treated parts with water immediately after!

MAINTENANCE

TEST REPORT

6 Test Sheet

Serial Number:	Date:
Tester Name:	Signature:

- 1 Check that all internal and external components are correctly positioned and free from aesthetic/mechanical defects. Check quality of weldings. ☐
- 2 Check that the external body does not have scratches or aesthetic imperfections. ☐
- 3 Check that the hollow for lower traction roller cap is correctly positioned upwards. ☐
- 4 Check that the return spring are correctly positioned. ☐
- 5 Check that the switch under the handle and the jack socket are properly fixed, so that components do not twist. ☐
6. Using a digital amperometer, check the motor absorption keeping the battery charger plugged in :

Without load (should be less than 1,9 A) _____

With load (should be less than 2,0 A) _____
7. Recharge batteries with the battery charger supplied. After 5 hours recharge, disconnect the battery charger and close the upper handle for 75 minutes uninterruptedly. After this time, Stripper QUICK should still be able to strip without any effort of the motor. ☐
8. After recharging Stripper QUICK with the battery charger, perform some stripping tests with tube for hemo components bags (at least 10 tests). Ensure that all tests are performed correctly, without straining the motor and without too much noise. ☐
- 9 Put Stripper Quick in the case supplied, along with the battery charger and one copy of the Operator and Service Manual.
Sign the present test sheet and put original copy inside the case. ☐

TEST REPORT

ELECTRICAL DIAGRAM

7 Spare Parts List

How to read the Parts List:

Pos.: Indicates part position number in the photograph.
Code: Indicates part code number.
Quantity: Indicates quantity used.
Description: Indicates part description.
Material: Material used for part manufacturing.

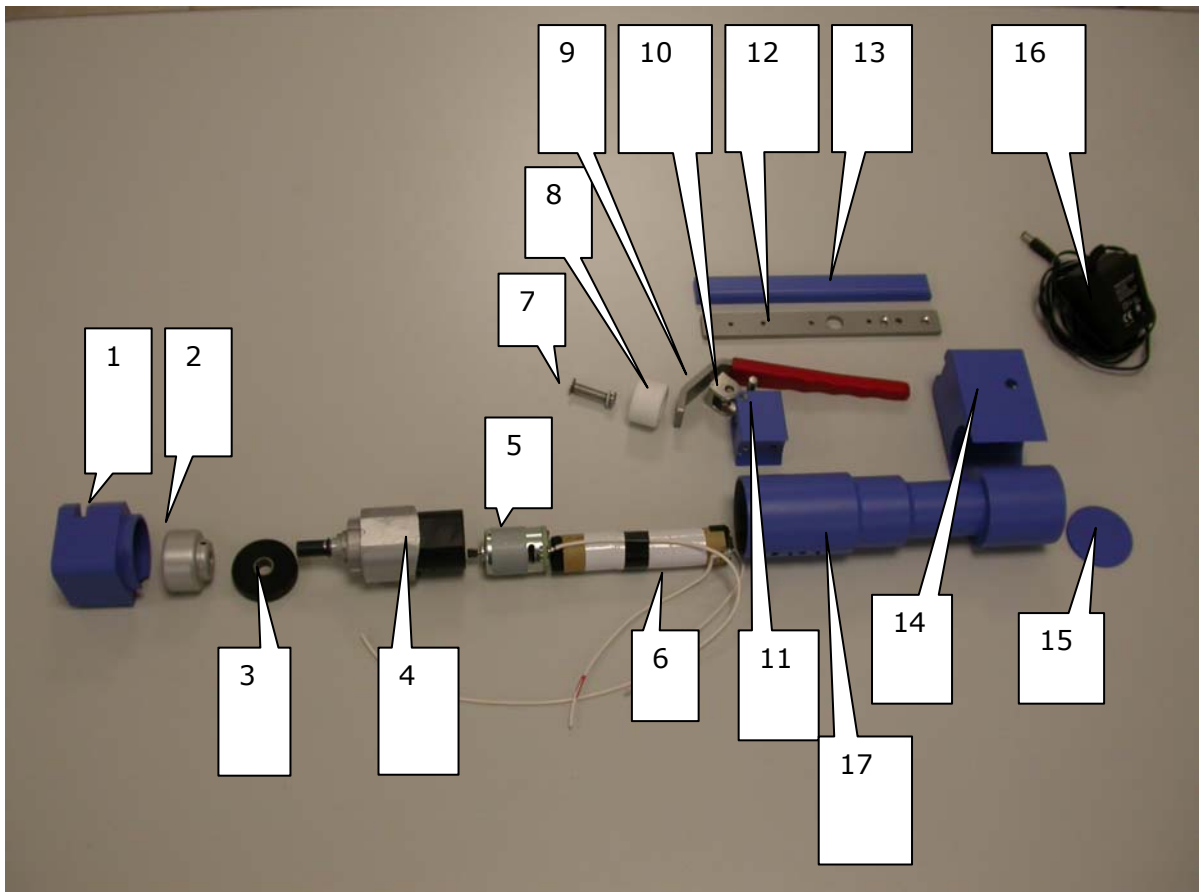
Example:

<u>Pos.:</u>	<u>Code:</u>	<u>Description:</u>	<u>Material</u>
7	STR07	Framework	PVC

Diagram illustrating the structure of the Parts List with callouts:

- Pos.:** N° identifying the part in the figure Seen from Above
- Description:** Part description
- Material:** Material used for part manufacturing

7.1 Overall View

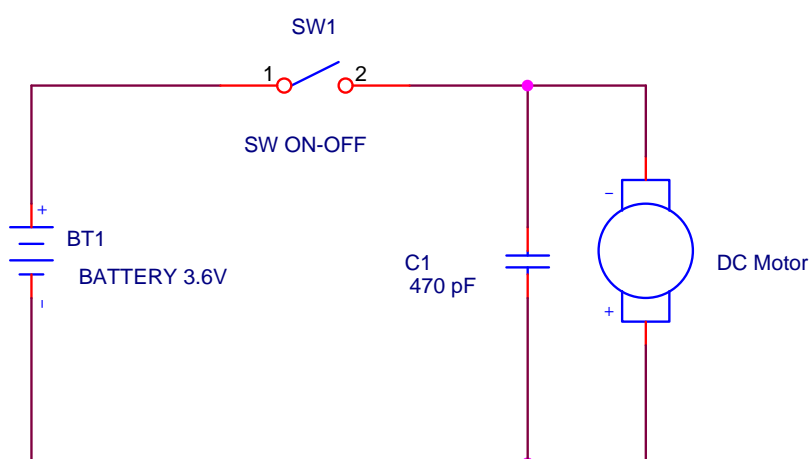


CARATTERISTICHE TECNICHE

7 Stripper QUICK Part list

Pos.	Code	Description	Material
1	STR01	Tube drive	PVC
2	STR02	Traction Roller	Alluminium
3	STR03	Drive with bush	PVC
4	STR04	Reducer	-----
5	STR05	Engine	-----
6	STR06	Batteries	-----
7	STR07	Roller closure screw	Inox
8	STR08	Teflon Roller	Teflon
9	STR09	Lower handle complete	Inox
10	STR10	Handle Support Complete	Inox
11	STR11	Base for Handle support	Alluminium
12	STR12	Upper Handle with Switch	Inox
13	STR13	Cover for Upper Handle	PVC
14	STR14	Handle fixing box with jack connector	PVC
15	STR15	Rear Cover	PVC
16	STR16	Battery Charger	-----
17	STR17	Framework	PVC

8 Electrical Diagram



MOELCA		
Title		
Schema Elettrico Quick Stripper		
Size A	Document Number Strip_SE_001	Rev 1.0
Date:	Saturday, February 14, 2004	Sheet 1 of 1

ELECTRICAL DIAGRAM

TECHNICAL FEATURES

9 Technical Features

- PVC body.
- Instrument not suitable for use in environment containing anesthetic inflammable mixture with oxygen or nitrous oxide.
- **Class 1 Instrument.** This instrument is uniquely designed for stripping of hemo components bags tube. Therefore it must be used in medical environment, transfusion department. Any different use will be considered unsuitable.
- **Attention:** The instrument is operated by internal batteries and the power supplier must be used as battery charger only.
- Environmental operation and stocking requirements: Temperature between 5 and 45 °C.
Operation and storage humidity: Less than 80 % without condensation.
- Battery charger features: Prim.: 230V 50-60 Hz. Sec.: 3,6V / 600 mA.
Do not use battery chargers other than the original.
Verify that the data plate label reads:
"Stripper QUICK Power Supplier"
Internal battery recharge procedure: See section 3.1 of the present Manual.
Current absorption during operation min. 1,9 A / max 2,1 A
Nominal operation tension, Battery voltage: 3,6V =
Batteries number and type: No. 3 Nichel Cadmium batteries 1,2V 600 mA (see note*)
Maximum Stripper Quick continuous Operation time with charged batteries (engine operating uninterruptedly): 1 hour and 30 minutes
Maximum performable strippings (with charged batteries) before next recharge: 1000/1500 according to mechanical consistency of the tube to be stripped
Suggested instrument idle time during Stripper QUICK use: There are no contraindications to uninterrupted use
- Recharge time 5 hours
- Rounds per minutes without load: 140 - 170 rounds/min.
- Noise: max 70 dB idling / max 85 dB working.

TECHNICAL FEATURES

- Vibrations: Vibrations on the hand-arm element are twice lower than 2,5 m/s.
- Maximum couple moment: 3,4 – 3,9 Nm.
- Dimensions: 50 mm wide, 240 mm deep, Max 140 mm high
- Stripper QUICK weight: 1090 g.
- Case dimensions: 320 mm wide, 250 mm deep, 75 mm high.
- Overall package and instrument weight: 1840 g.
- Shipping and storing temperature: Temperature between -10°C and 50°C. Relative humidity 20% to 90% without condensation.
- Reference regulations: The product meets the requirements of Directive 93/42/ECC "Medical Devices". The following harmonized regulations are observed in particular:
EN 60601 –1 "Electromedical instruments Part 1. General safety rules".
EN 60601-1-2 "Electromedical instruments Part 1. General safety rules".
Collateral rule: Electromagnetic compatibility, requirements and tests.

(*) Nichel Cadmium batteries must be replaced with original similar batteries.
Batteries should always be kept for recycling or ecological waste disposal.
Defective and exhausted batteries should be recycled according to CEE regulation 91/157.
Non-working recyclable batteries can be directly delivered (in Italia) to: *Ecoelit, Corso Sempione 15/A 20145 MILANO*

Ecological measures:

Once the device has reached the end of its life-time, instrument, accessories, and package should be sent to a suitable plant for ecological treatment.

--- Subject to change without notice---