

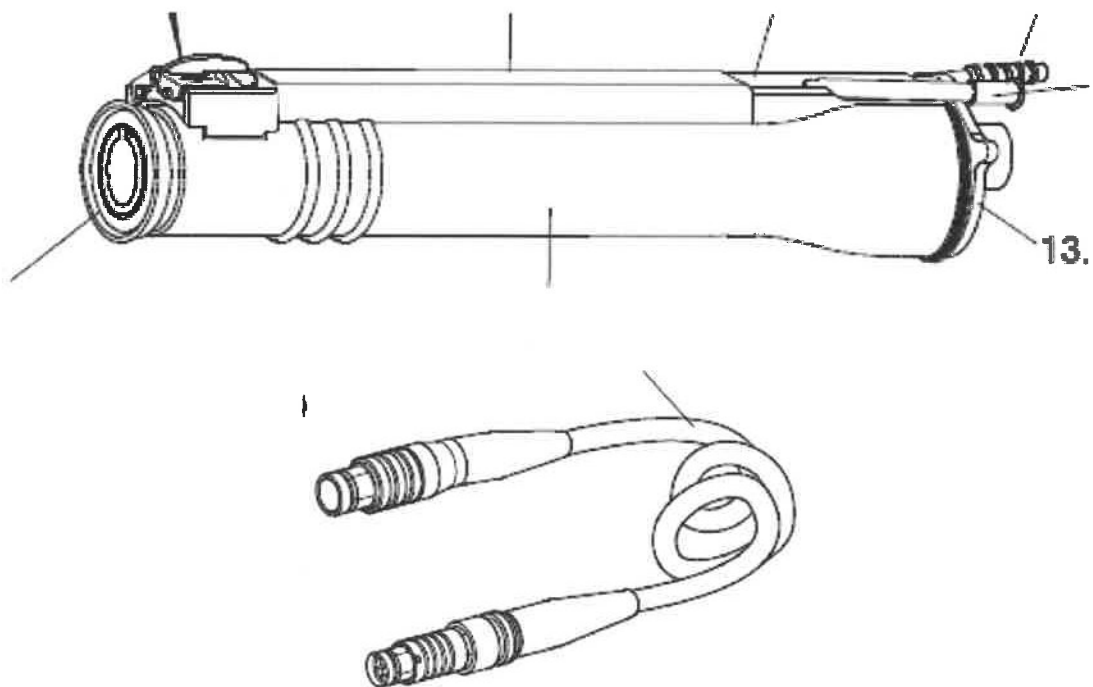
POWER STICK M4

8564.121/8564122

POWER STICK M3 8563.111/.311

With Cable

(separate tray)



7 Reprocessing and maintenance

7.1 Reprocessing of device



WARNING!

Make sure that no humidity enters the device.

Danger of electric shock!

Before reprocessing switch off and disconnect the device from the power supply / mains.

Clean the device regularly with a soft cloth moistened with surface disinfectant or isopropyl alcohol.

Follow the disinfectant manufacturer's instructions!



NOTE!

For a description of the surface cleaning and disinfecting agents for devices and universal device carts / trolleys and utility carts approved by Richard Wolf, please refer to manual GA-J020 "Reprocessing of RICHARD WOLF Heat-stable Instruments".



IMPORTANT!

Make sure that no humidity enters the device. Do not use any cleaning agents, scouring agents or solvents on this device.

7.2 Maintenance Device



IMPORTANT!

In your inquiries or correspondence please always indicate the model and serial number on the identification plate. Further documentation is available from the manufacturer on request.

7.2.1 Maintenance Intervals

To prevent incidents caused by aging and wear, the device and its accessories must be serviced at adequate intervals. Depending on the frequency of use, however at least once a year, an expert must check the device and carry out a safety test.

7.3 Reprocessing of POWER STICK M4 (8564.121/8564.122)

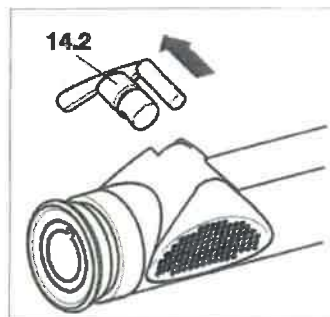
IMPORTANT!

Follow the latest notes and instructions on reprocessing described in manual GA-J 020 "Reprocessing of RICHARD WOLF Heat-Stable Instruments".

7.3.1 Manual reprocessing

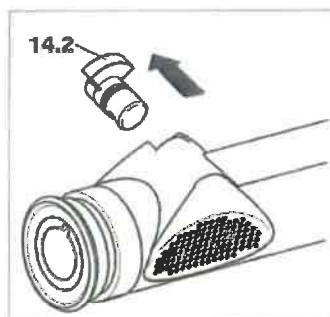
Wet preparation at the point of use:

- ◇ Immediately after use, disconnect the connection cable and remove valve. Immerse all parts separately in an approved enzymatic cleaning solution.
- ‡ This will prevent the drying of soils on the instrument before it can be cleaned.



**Disassembly before cleaning -
POWER STICK M4 with valve:**

- ◇ Push out valve (14.2) laterally, while moving the valve back and forth between "ON" and "OFF".
- ◇ Disconnect the connection cable.

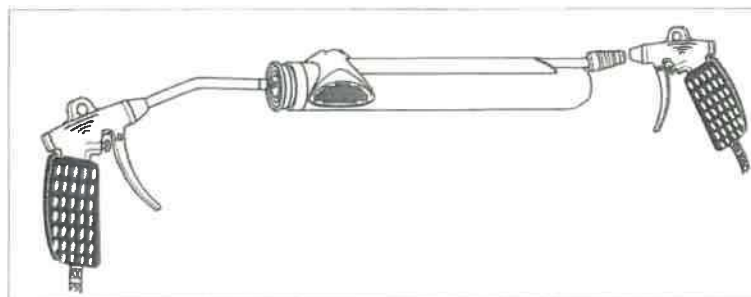


**Disassembly before cleaning -
POWER STICK M4 with sealing insert - open:**

- ◇ Push out the sealing insert, open (14.2), laterally.
- ◇ Disconnect the connection cable.

Manual cleaning:

- ◇ Carefully rinse all parts (POWER STICK, connection cable and valve) first with cold and then warm water under the tap.
- ◇ Immerse all parts in an approved enzymatic cleaning solution. Clean hollow spaces (e.g. channels) with suitable brushes (while the parts are immersed).
- ◇ Rinse out the suction channel with a cleaning gun (see illustration).
- ◇ Clean the inside blade retaining bolt with a cleaning gun (see illustration).
- ◇ Thoroughly rinse, then dry inside and out with a cloth, swab or compressed air.
- ◇ Immerse all parts in an approved disinfectant solution. Follow the disinfectant manufacturer's instructions for use.
- ◇ Thoroughly rinse with demineralized water, then dry inside and out with a cloth, swab, or compressed air.



7.3.2 Machine reprocessing

Machine cleaning:

- ◇ Pre-clean the parts before machine cleaning.
- ◇ Connect the rinsing tube of the washer / disinfecter to the suction connector.

7.3.3 Assembly



NOTE!

Make sure that all parts are dry.

- ◇ After cleaning, reinstall the valve / sealing insert, open, and reconnect the connection cable.
- ◆ Before assembly, lubricate the valve insert sparingly with Instrument oil 200.532. Wipe off any excess oil.

7.3.4 Function check

- ◇ Check the POWER STICK M4 and the valve for proper functioning and damage after each cleaning cycle.
- ◆ Return a damaged POWER STICK M4 to the factory for repair
- ◆ *Do not attempt to do any repairs yourself!*

7.3.5 Sterilization



IMPORTANT!

For sterilization the connection cable must not be connected to the motorized handle. Sterilize the cable separately.

Steam sterilization:

- ◇ Steam-sterilize the POWER STICK M4 and the connection cable in Pre-Vac cycle at 270F with 4 minutes exposure time and 20-30 minutes dry time.
- ◆ For sterilization set the valve to "ON" to allow a free flow of steam.

7.4 Reprocessing of POWER STICK M3 (8563.111/311)

IMPORTANT!

Follow the latest notes and instructions on reprocessing described in manual GA-J 020 "Reprocessing of RICHARD WOLF Heat-Stable Instruments".

IMPORTANT!

During the entire reprocessing procedure the connection cable must remain connected to POWER STICK M3.

The adapter (2303.911) must only be cleaned with surface disinfectant.

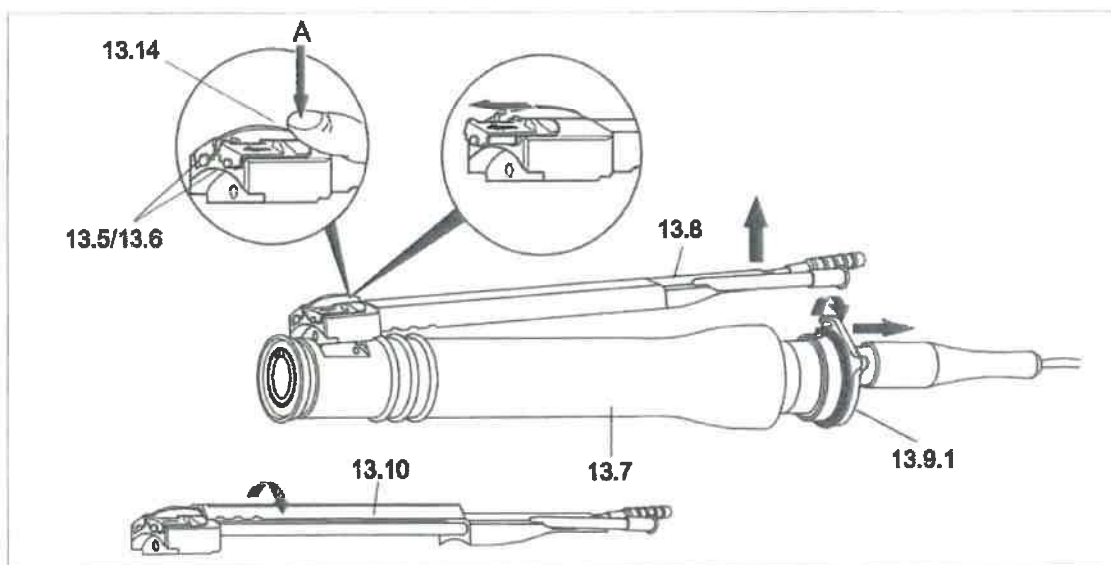
7.4.1 Manual reprocessing

Wet preparation at the point of use:

- ◇ Immediately after use immerse all parts separately in an approved enzymatic cleaning solution. Open the suction / irrigation control valves (the connection cable must remain connected to the drive unit).
- ‡ This will prevent the drying of soils on the instrument before it can be cleaned.

Disassembly before cleaning:

- ◇ Unlock the twist-lock mechanism (13.9.1) of the drive unit (by turning counter-clockwise) and pull drive unit out of handle sleeve (13.7).
- ◇ Lift off the suction/irrigation system (13.8).
- ◇ Remove the suction/irrigation control valve (13.5/13.6).
 - ‡ For this, push down lever (13.14) on the side of cover (A) as far as it will go and pull out suction/irrigation control valve (13.5/13.6) towards the front.
- ◇ For cleaning, remove cover (13.10) from the suction / irrigation system (13.8).
 - ‡ For this, loosen the cover by rotating it clockwise and remove.



Manual cleaning / disinfection:

- ◇ Thoroughly rinse all parts of POWER STICKS M3 first with cold and then with warm water under the tap (The connection cable must remain connected to POWER STICK M3).
- ◇ Immerse all parts of POWER STICKS M3 in an approved enzymatic cleaning solution.
 - ◆ Clean hollow spaces (channels as well as suction and irrigation tubes / holes, see figure) with suitable brushes while the parts are immersed.
- ◇ Rinse out suction / irrigation channel with a cleaning gun.
- ◇ Thoroughly rinse and then dry inside and out with a cloth, swab or compressed air.
- ◇ Immerse all parts in an approved disinfectant solution. Follow the disinfectant manufacturer's instructions for use.
- ◇ Thoroughly rinse with demineralized water and then dry inside and out with a cloth, swab or compressed air.
- ◇ Install the suction / irrigation control valves and push back towards the POWER STICK M3 as far as it will go (valve is closed).



7.4.2 Machine reprocessing

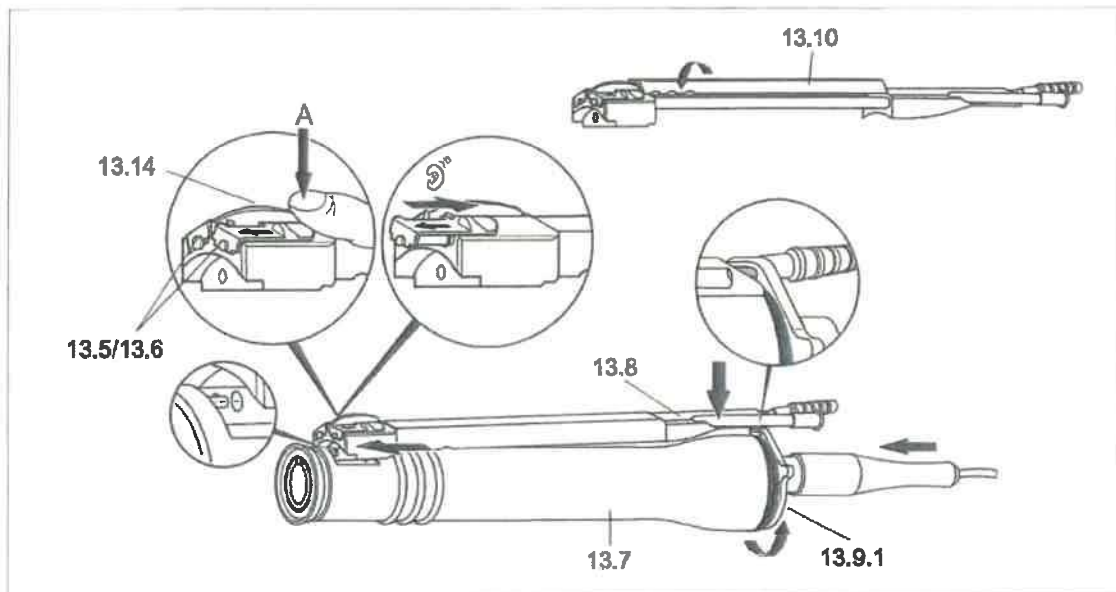
Machine cleaning / disinfection:

- ◇ Pre-clean the parts before machine cleaning.
- ◇ Connect the suction / irrigation connector to the corresponding connections (washer tray).
 - ◆ Remove the suction/irrigation control valves and place in small parts basket.
- ◇ Plug the handle sleeve onto a spray nozzle (of the washer tray).
- ◇ Immerse drive unit with the connection cable connected in the washer basket.

7.4.3 Assembly

After cleaning, all accessory parts must be assembled:

- ◇ Place cover (13.10) onto suction / irrigation system (13.8).
 - ◆ Install cover in a rotary motion in counter-clockwise direction and then push down (the recesses must be on the side of the valves).
- ◇ Lubricate the suction and irrigation valve pistons sparingly with instrument oil 200.532. Wipe off any excess oil.
- ◇ Install the suction/irrigation control valves.
 - ◆ Push down lever (13.14) on the side of cover (A) as far as it will go and push home the suction and irrigation valve plungers (13.5/13.6) until the pin of the lever engages in the groove of the suction and irrigation control valves.
- ◇ Install the suction/irrigation system (13.8).
- ◇ Insert drive unit in handle sleeve (13.7) and lock the twist-lock in the hint portion of the locking mechanism of drive unit (13.9.1) (by turning clockwise).
 - ◆ Ensure that the pin of the suction and irrigation system engages in the groove in the hint portion of the locking mechanism of drive unit (13.9.1).



7.4.4 Function check

- ◇ Check POWER STICK M3 and the suction and irrigation valve plungers for proper functioning and possible damage after each cleaning cycle.
- ◇ Return a damaged POWER STICK to the factory for repair.
 - ◆ *Do not attempt to do any repairs yourself!*

7.4.5 Sterilization

Steam sterilization:

- ◇ Steam-sterilize the POWER STICK M3 in Pre-Vac cycle at 270F with 4 minutes exposure time and 20-30 minutes dry time.
 - ◆ Open the suction and irrigation control valves to allow the steam to flow freely.
 - ◆ The connection cable must remain connected to POWER STICK M3.

7.5 Reprocessing of re-usable irrigation adapter



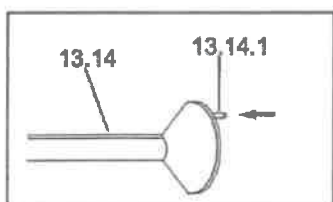
IMPORTANT!

Follow the latest notes and instructions on reprocessing described in manual GA-J 020 "Reprocessing of RICHARD WOLF Heat-Stable Instruments".

7.5.1 Manual reprocessing

Wet preparation at the point of use:

- ◇ Immediately after use immerse the irrigation adapter in an approved enzymatic cleaning solution.
 - ◆ This will prevent the drying of soils on the instrument before it can be cleaned.



Manual cleaning / disinfection:

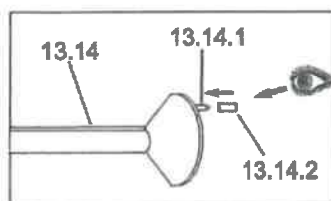
- ◇ Thoroughly rinse/rinse out irrigation adapter (13.14) under the tap.
- ◇ Thoroughly rinse out irrigation tube (13.14.1).
- ◇ Immerse irrigation adapter in an approved enzymatic cleaning solution. Clean hollow spaces (e.g. channels) with suitable brushes (while the parts are immersed).
- ◇ Thoroughly rinse and then dry inside and out with a cloth, swab or compressed air.
- ◇ Immerse all parts in an approved disinfectant solution. Follow the disinfectant manufacturer's instructions for use.
- ◇ Thoroughly rinse with demineralized water and then dry inside and out with a cloth, swab or compressed air.

7.5.2 Machine reprocessing

Machine cleaning / disinfection:

- ◇ Pre-clean all the parts before machine cleaning.
- ◇ Irrigation tube (16.34.1) must be rinsed out manually before machine cleaning.
- ◇ Connect irrigation adapter to the corresponding connectors of the washer/disinfector rack.

7.5.3 Visual check



- ◇ Check irrigation adapter (13.14) for possible damage after every cleaning cycle.
- Check that sealing element (13.14.2) is connected to irrigation tube (13.14.1).

7.5.4 Sterilization

Steam sterilization:

- ◇ Steam-sterilize the re-usable irrigation adapter in Pre-Vac cycle at 270F with 4 minutes exposure time and 20-30 minutes dry time.

7.6 Reprocessing of the re-usable rotary blades, abraders and morcellators



IMPORTANT!

Follow the latest notes and instructions on reprocessing described in manual GA-J 020 "Reprocessing of RICHARD WOLF Heat-Stable Instruments".

7.6.1 Manual reprocessing

Wet preparation at the point of use:

- ◇ Immediately after use, immerse all parts separately in an approved enzymatic cleaning solution.
 - ◆ This will prevent the drying of soils on the instrument before it can be cleaned.

Manual cleaning / disinfection:

- ◇ Thoroughly rinse the blades / abraders with cold water under the tap.
- ◇ Immerse the blades / abraders in an approved enzymatic cleaning solution. Clean hollow spaces (e.g. channels) with suitable brushes (while the parts are immersed).
- ◇ Thoroughly rinse and then dry inside and out with a cloth, swab or compressed air.
- ◇ Immerse the blades/ abraders in an approved disinfectant solution. Follow the disinfectant manufacturer's instructions for use.
- ◇ Thoroughly rinse with demineralized water and then dry inside and out with a cloth, swab or compressed air.

7.6.2 Machine reprocessing

Machine cleaning / disinfection:

- ◇ Pre-clean the parts before machine cleaning.
- ◇ Use plastic parts to connect the outer and inner rotary blades / abraders separately (in disassembled condition) to the corresponding connectors of the washer-disinfector rack. If the rack offers no connections, clean the hollow spaces manually.

7.6.3 Checks

- ◇ After each cleaning cycle check the blades / abraders for damage.

7.6.4 Sterilization

Steam sterilization:

- ◇ Steam-sterilize the blades / abraders in Pre-Vac cycle at 270F with 4 minutes exposure time and 20-30 minutes dry time.

8 Technical description

8.1 Troubleshooting



NOTE!

If you cannot eliminate the faults or errors with the help of this table, please contact the service department or return the device for repair.

◆ *Do not attempt to do any repairs yourself!*

8.1.1 POWER CONTROL

Fault/error	Possible causes	Corrective action
Device without function	Power switch not switched on Power cable not connected Device fuse defective No mains/line voltage (input voltage)	◆ Actuate power switch ◆ Connect power cable ◆ Replace fuse ◆ Check in-house power supply
Power/mains switch is not lit	Fuse defective	◆ Replace fuse
No display on the LCD		◆ Return the device for repair
"No POWER STICK" display blinks	POWER STICK not connected.	◆ Use connection cable to connect POWER STICK to POWER CONTROL
"No footswitch" display blinks	Footswitch not connected	◆ Connect footswitch connection cable to POWER CONTROL

8.1.2 POWER STICK

Fault / error	Possible cause	Corrective action
POWER STICK does not run when footswitch is actuated "ALARM" indicator is lit and alarm is sounded	Wrong connection between footswitch and POWER CONTROL Rotary blade defective Rotary blade clogged	◆ Establish connection ◆ Insert new blade ◆ Clean rotary blade
POWER STICK does not work(without rotary tool) "ALARM" indicator is lit and alarm is sounded	Interruption of cable connection Cable defective (parting of cable) Motor defective or blocked	◆ Fully connect plug to POWER STICK ◆ Fully connect plug to device ◆ Use a new cable ◆ Return POWER STICK for repair
Suction /irrigation valves difficult to move	Excessive friction of seals Seal defective	◆ Sparingly grease valve insert and-seals with endoscope grease ◆ Replace seal