Changing the 16-Pin Bayonet Cartridge

Introduction

The 16-pin bayonet cartridge (reorder number 5065-4413), see Figure 1, contains 16 electrodes. These are configured to fit in to the wells of an analysis chip.

The electrodes make contact with the liquid in the wells when the lid of the Agilent 2100 Bioanalyzer instrument is closed.

The cartridge, which includes the pin set, can be removed if the electrodes become contaminated or damaged.

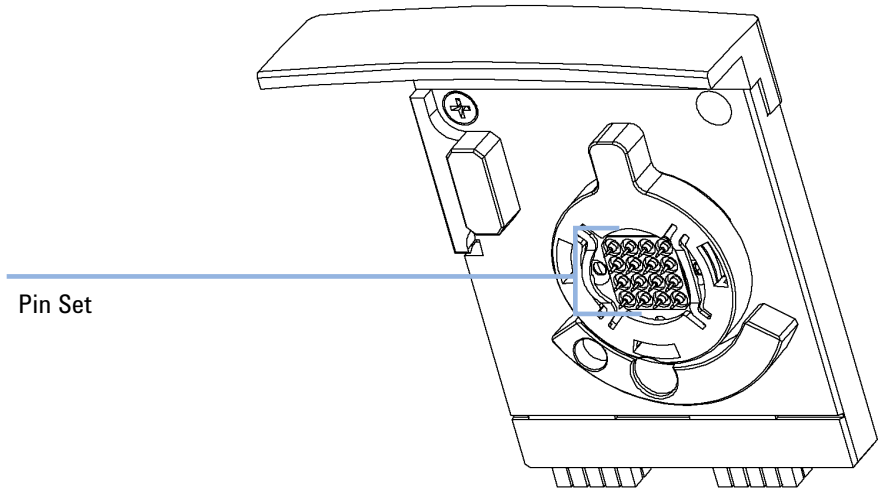

Figure 1 16-Pin Cartridge and Pin Set of Cartridge

Removing the 16-Pin Cartridge

CAUTION

Touching the electrodes

Possible damage to the electrodes and high voltage power supplies

➔ Do not touch the electrodes while the cartridge is in the 2100 Bioanalyzer instrument.

The line switch is located at the rear of the 2100 Bioanalyzer instrument.

1 Turn off line power to the 2100 Bioanalyzer instrument.

2 Open the lid.

3 Pull the metal lever on the inside left of the lid to the vertical position as shown in Figure 2.

When the lever is in the vertical position, the cartridge is released from the lid by about 10 mm.

4 Gently pull the cartridge out of the lid as shown Figure 2.

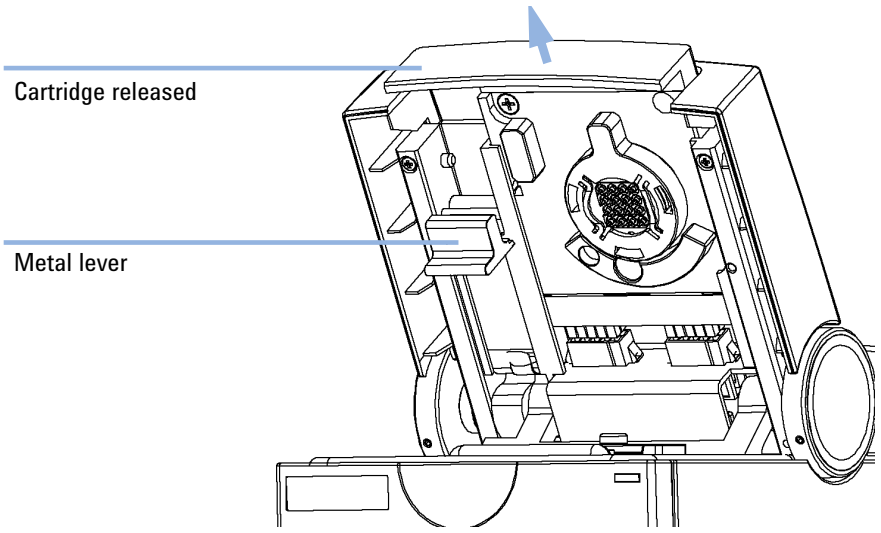

Figure 2 Removing the 16-Pin Cartridge

Removing the Pin Set of the 16-Pin Cartridge

1 Remove the 16-pin cartridge as described above.

2 Open the bayonet socket of the pin set by turning the plastic lever to the left as described in Figure 3.

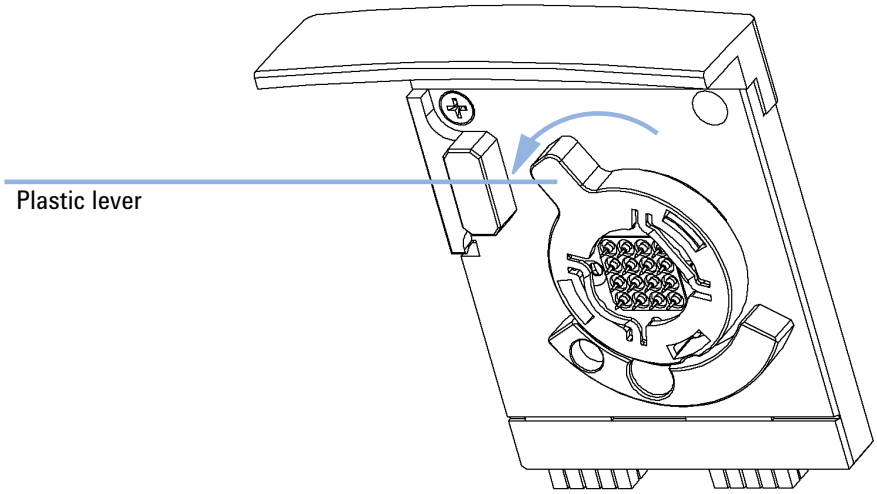

Figure 3 Opening the Bayonet Socket of the Pin Set

3 Remove the cover of the bayonet socket by gently pulling the plastic lever as shown in Figure 4. The pin set may stick to the electrode base. Remove it by carefully pulling it off. See Figure 4.

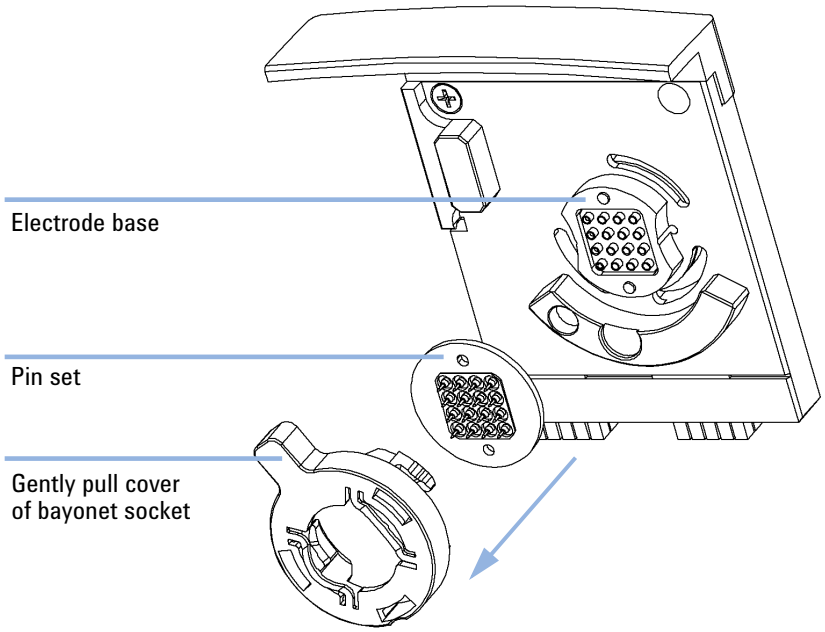

Figure 4 Releasing the Pin Set

NOTE For hints on how to clean the pin set, refer to "Cleaning the Pin Set of the 16-pin Cartridge" on page 8.

Inserting the Pin Set of the 16-Pin Cartridge

CAUTION

Liquids (even small amounts) on the pin set

Possible damage to the high voltage power supply

➔ Make sure that the pin set is completely dry before placing it back into the electrode base.

1 Put the pin set on the cartridge base and the bayonet cover on the pin set (see Figure 5).

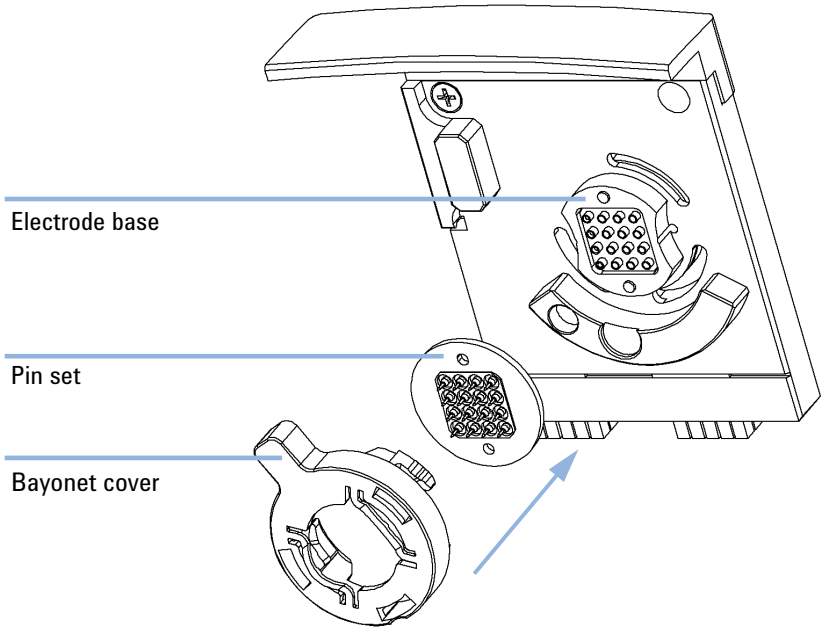

Figure 5 Inserting the Pin Set

2 Lock the pin set to the electrode base by pushing the plastic lever of the bayonet cover to the right as shown in Figure 6.

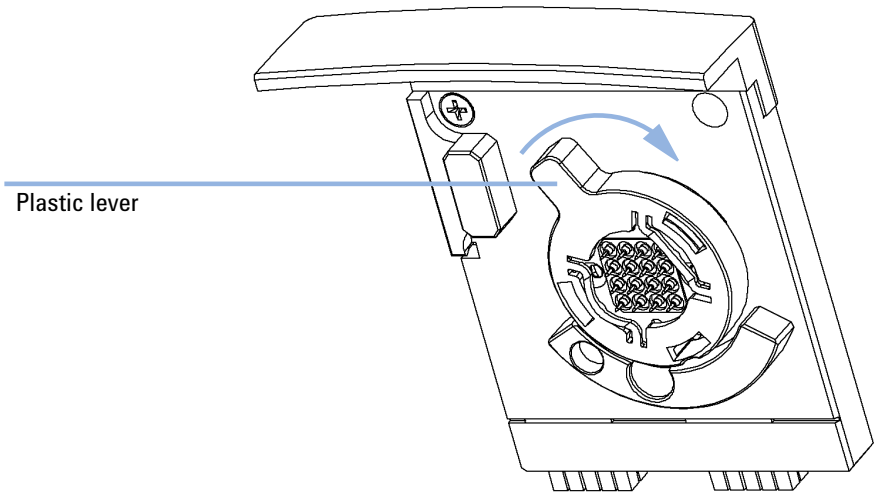

Figure 6 Closing the Socket of the Pin Set

Inserting the 16-Pin Cartridge

CAUTION

Liquids (even small amounts) on the pin set

Possible damage to the high voltage power supply

➔ Make sure the pin set is be completely dry before putting in the 16-pin cartridge.

1 Slide the 16-pin cartridge into the 2100 Bioanalyzer lid as shown in Figure 7.

2 Move the metal lever in the flat (closed) position.

3 Push the metal front of the 16-pin cartridge to ensure a tight connection to the 2100 Bioanalyzer.

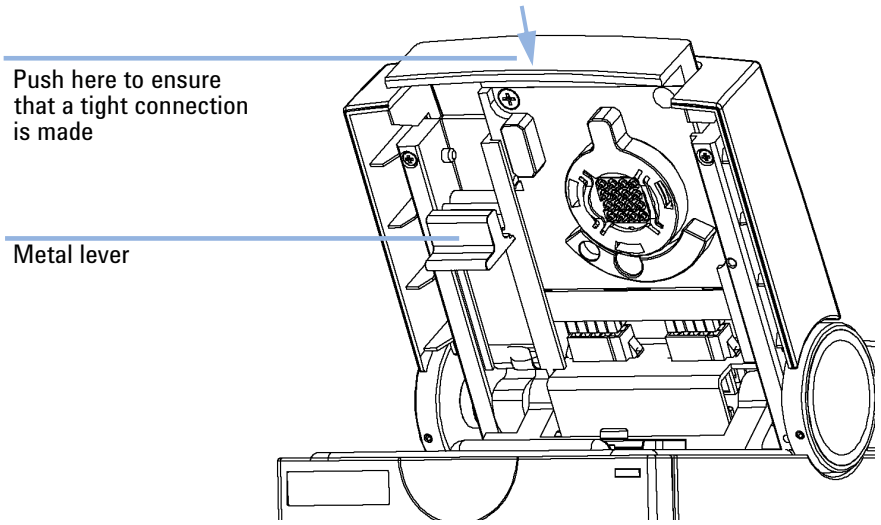

Figure 7 Inserting the 16-Pin Cartridge

Cleaning the Pin Set of the 16-pin Cartridge

After removing the pin set from the 16-pin cartridge you can clean it by using

- de-ionized water, or
- isopropanol, or
- RNAse Zap.

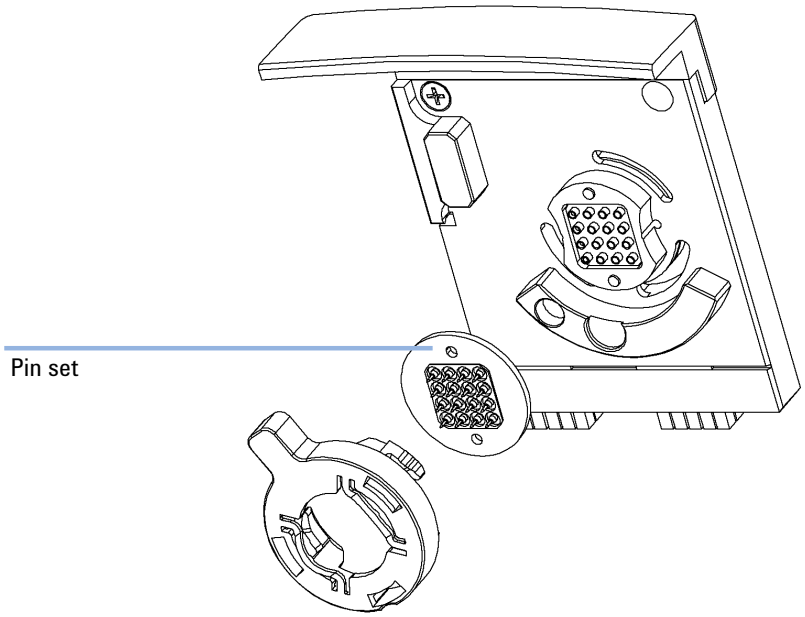

Figure 8 Pin Set

On a regular quarterly basis, or after contamination, gently clean the pin set with a lint-free surgical cotton swab damped in de-ionized water.
In case of highly contaminated or dirty pins you may autoclave the pin set.

NOTE The pins of the pin set should not be bent or misaligned. Both will lead to poor quality results or pre-terminated assay runs.

NOTE For autoclaving the pin set, follow your standard procedures for plastic material.

1 Sonicate the pin set for 10 min.

2 Gently clean the pin set with a soft tooth brush.

CAUTION

Liquids (even small amounts) on the pin set

Possible damage to the high voltage power supply

➔ Make sure the pin set is be completely dry before putting in the 16-pin cartridge.

3 Insert the 16-pin cartridge, see “Inserting the 16-Pin Cartridge” on page 7.

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Hewlett-Packard-Strasse 8
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Germany