QIAcube® Tip Adapter Ring Replacement

This document describes how to replace the QIAcube tip adapter ring. The tip adapter ring only needs to be replaced if the QIAcube has failed the tightness test. Please note that the following products are required for this procedure:

- QIAcube Tip Adapter Ring Tool (cat. no. 9018388)
- QIAcube Tip Adapter Ring Replacement Kit (cat. no. 9018389)
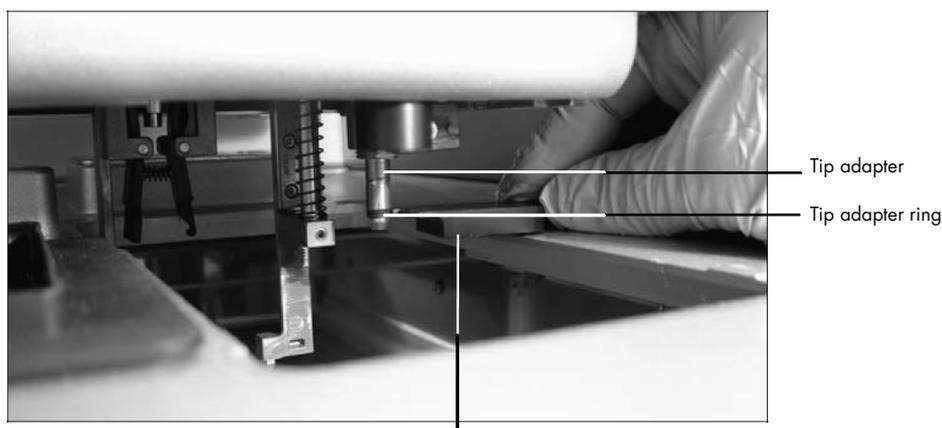- Set, O-rings (10), QIAC (cat. no. 9018472)

Removing the old tip adapter ring

1. To gain access to the tip adapter:
    - Remove the waste drawer and the labware tray and close the QIAcube door.
    - Press **Tools** in the **Main** menu.
    - Select **Maintenance** by pressing the arrows (▲ or ▼) to scroll through the list until it is highlighted, and then press **Select**.
    - Select the protocol **Cleaning position** by pressing the arrows (▲ or ▼) to scroll through the list until it is highlighted, and then press **Start**.

   The robotic arm will move forwards and downwards, enabling the tip adapter to be accessed through the opening for the waste drawer. Open the QIAcube door when the robotic arm has stopped moving.
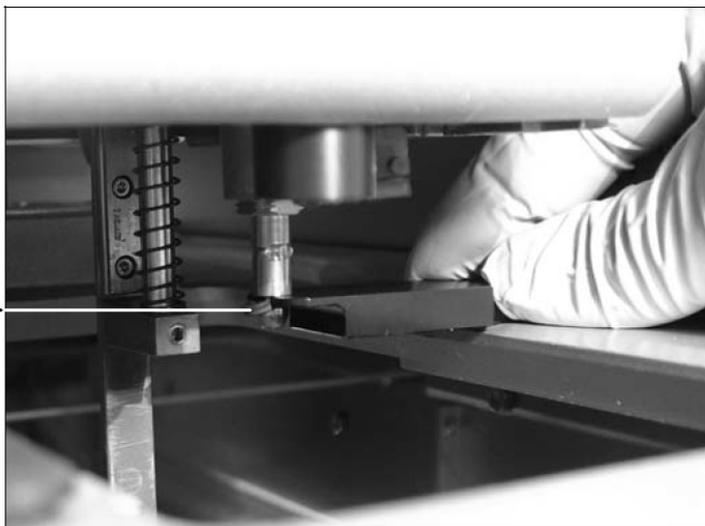
2. Using your right hand, place the QIAcube Tip Adapter Ring Tool on the QIAcube worktable to the right of the opening for the waste drawer (see picture below).

Tip adapter
Tip adapter ring

QIAcube Tip Adapter Ring Tool

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3. Push the Tip Adapter Ring Tool against the tip adapter ring until the ring is displaced out of its groove. Use your left hand to steady the robotic arm.

Tip adapter ring is pushed out of its groove

4. Place your left hand into the opening of the waste drawer and, using your thumb and index finger, carefully slide the tip adapter ring down off the tip adapter.

Use the thumb and index finger to slide the tip adapter ring down off the tip adapter

The tool continues to push the tip adapter ring out of its groove

Installing a new tip adapter ring

1. Place the new tip adapter ring onto the end of the steel shaft at the other end of the QIAcube Tip Adapter Ring Tool.
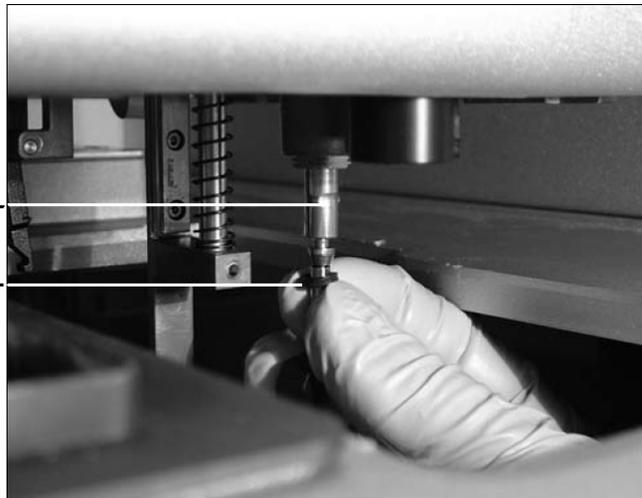

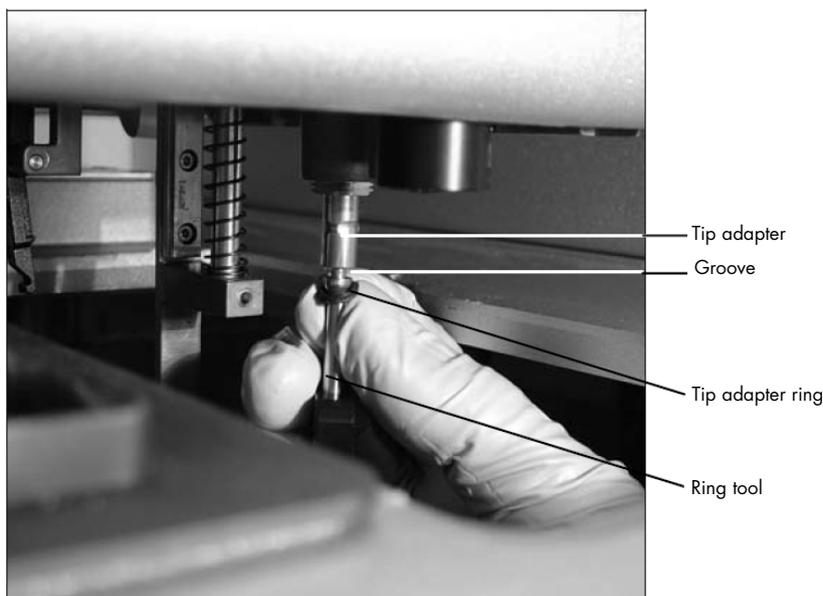Tip adapter ring on steel shaft of ring tool

2. Using either your left or right hand, place the ring tool up through the opening for the waste drawer so that the end of the steel shaft is centered in the opening of the tip adapter.

Tip adapter

Tip adapter ring on end of ring tool

3. Using the thumb and index finger of the hand that is holding the Tip Adapter Ring Tool, carefully slide the tip adapter ring up onto the tip adapter and into the groove.

4. Make sure that the tip adapter ring is centered in the groove. Check that the ring can be gently rotated and is not twisted. Close the QIAcube door.

5. Press **Cancel** and then confirm twice with **OK**.

   The QIAcube will initialize, and the robotic arm will move back to its home position.

6. Replace the labware tray and the waste drawer.

7. Run the protocol to test the tightness of the pipetting system:
   - Press **Tools** in the **Main** menu.
   - Select **Maintenance** by pressing the arrows (▲ or ▼) to scroll through the list until it is highlighted, and then press **Select**.
   - Select the protocol "Tightness test" by pressing the arrows (▲ or ▼) to scroll through the list until it is highlighted, select 1000 µl tips or 1000 µl wide-bore tips, and then press **Start**. Follow the description shown on the display.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at **www.qiagen.com** or can be requested from QIAGEN Technical Services or your local distributor.