Installing the Tray Arm

Agilent 7673 Automatic Liquid Sampler

Part Numbers 18596-61010, 18596-61005, and 18596-61000

Before you start

Be sure that the part you have is the correct part for your instrument. The following replacement kits can be ordered from Agilent to replace a worn or sticky Z-rod, gripper assembly, or the tray arm assembly:

<table>
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<tr>
<th>Part No.</th>
<th>Replacement Kit</th>
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<tr>
<td>18596-61010</td>
<td>Z-rod for 18596B Replacement Kit</td>
</tr>
<tr>
<td>18596-61005</td>
<td>Gripper Assembly Replacement Kit</td>
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<tr>
<td>18596-61000</td>
<td>Arm Assembly Replacement Kit</td>
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Preparation

You will need three tools: a small flathead screwdriver, a No. 1 point Pozidriv, and a pair of needle-nosed pliers.

Caution

Move the tray arm and gripper carefully. Forcing the arm may cause damage to the belts, gears, and racks.
Caution

Without proper training, this part is very difficult to install. These instructions are designed as reminders for trained service representatives. If you do not feel comfortable installing the part, you can purchase installation from your local Agilent analytical service organization.

1. Turn off the power to the tray and the control module.
2. Disconnect the tray cable from the power supply using the small flathead screwdriver.
3. Remove the tray quadrants.
4. Remove the tray from the tray bracket.
5. Support the tray so that it rests upside down.

Installation

1. Remove the two screws and clamps that hold the tray arm onto the rods of the tray base using a No. 1 point Pozidriv. Access these screws through the drain hole in the bottom of the tray base (see Figure 1).

![Figure 1. Access to screws to remove tray arm](image)
2. Carefully lift the tray base from the arm and disconnect the R-flex circuit from the base.

If you are replacing the arm assembly (kit 18596-61000), reinstall the new arm on the tray base and skip to the section "Checking Your Work." Otherwise continue.

**Caution**

Move the tray arm and gripper carefully. Forcing the arm may cause damage to the belts, gears, and racks.

3. Move the gripper to the top of its travel.

4. Remove the three screws that hold the sides of the arm with a No. 1 point Pozidriv (see Figure 2).

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**Figure 2.** Exploded view of the tray arm (do not disassemble)
5. Loosen the screw that holds the aluminum arm core to the left arm half with a No. 1 point Pozidriv. Access this screw through the hole in the 60 tooth gear (see Figure 2).

6. Separate the arm core from the left arm half and flip over to access the gripper’s Z-Rod.

7. Remove the C-clip at the bottom of the rod with needle-nosed pliers or a small screwdriver.

8. Slide the rod up and remove the second C-clip.

9. At this point, replace the Z-rod or Gripper Assembly.

Checking Your Work

1. Make sure the gripper is connected to the belt and moves up and down smoothly on the Z-rod. Try moving the gripper up and down by moving the gripper and turning the 60 tooth gear. Make sure that the belt and gears move smoothly. Inspect the Z-belt (part no. 1500-0803) and replace if worn.

2. Make sure the hall sensor of the left arm half is connected to the sensor board of the aluminum arm core.
3. Gently move the tray arm back and forth (radial axis). Make sure the R-flex circuit bends back on itself and does not rub against the teeth or racks of the tray arm (see Figure 3).

Figure 3. R-flex cable placement