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**Guide to Installing the Extended  
Rack EXR-8**

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## Installing the Extended Rack

The EXR-8 Extended Rack is designed for easy installation. Installation consists of three parts: Assembling the Cart (provided), assembling the Extended Rack, and connecting it to the host analytical instrument.

To install the Extended Rack, you must complete the following tasks. Each of these tasks will be discussed in detail later in this guide.

- 1 Assemble the Cart.**
- 2 Mount the head assembly (autosampler) onto the Extended Rack.**
- 3 Mount the z-drive assembly.**
- 4 Connect the autosampler to the Host Computer**
- 5 Align the Extended Rack.**

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**CAUTION**

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**Ensure that AC power is off before proceeding with installation.**

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## Assembling the Cart

The Cart should be assembled using the instructions provided with the Cart. The Cart should have two holes on the top layer (Figure 1).



**Figure 1.** Cart from above.

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## **Mounting the head assembly (autosampler) onto the Extended Rack**

- 1 Place Extended Rack onto the Cart such that the center holes of the Extended Rack are aligned with those on the Cart.**
- 2 Place the standards rack on the rail plate (Figure 2).**



**Figure 2.** Standards rack placed onto the Extended Rack.

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- 3 While holding the standards rack, place the head assembly on the standards rack (Figure 3).**



**Figure 3.** Head assembly placed onto the standards rack.

- 4 Remove the contents from Bag A and locate the hex wrench (Figures 4 and 5).**



**Figure 4.** Contents of Bag A.



**Figure 5.** Hex wrench.

- 5 Place the washers on the screws.**

- 6 Attach the left side of the head assembly to the Extended Rack as shown in Figures 6 and 7.**

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**Figure 6.** Attaching the head assembly (first screw).



**Figure 7.** Attaching the head assembly (second screw).

**7 Attach the right side of the head assembly to the Extended Rack as shown in Figure 8.**



**Figure 8.** Attaching the right side of the head assembly.

**8 Leave the head assembly slightly loose for alignment.**

## Mounting the chain assembly

- 1 **Locate the chain assembly kit (Figure 9) and Bag B.**



**Figure 9.** Chain assembly kit.

- 2 **Attach the chain bracket to the top of the head assembly using the 10-32 screw found in Bag B (Figure 10).**



**Figure 10.** Attaching the chain assembly to the head assembly.

- 3 **Attach the other end of the chain assembly to the right side of the Extended Rack (Figure 11) using the three screws in Bag B.**



**Figure 11.** Attaching the chain assembly to the Extended Rack.

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### **Connecting the head assembly to the Extended Rack**

- 1** From the top of the chain assembly, locate the serial cable labeled 1 and connect to the COM 1 on the head assembly.
- 2** From the top of the chain assembly, locate the serial cable labeled 2 and connect to the COM 2 on the head assembly.
- 3** Plug the power cable into the head assembly.
- 4** From the top of the chain assembly, locate the pump tubing and connect to the rinse pump on the head assembly.
- 5** Replace the rinse output channel of the rinse pump with larger ID pump tubing which has been supplied with the EXR-8 completion kit.
- 6** Cut pump tubes to length allowing for flexibility (Figure 12).
- 7** From the end of the chain assembly, locate the serial cable labeled 2 and plug into the right side of the Extended Rack.

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### 8 Plug the power supply into the Extended Rack.



**Figure 12.** Connecting the pump tubing.

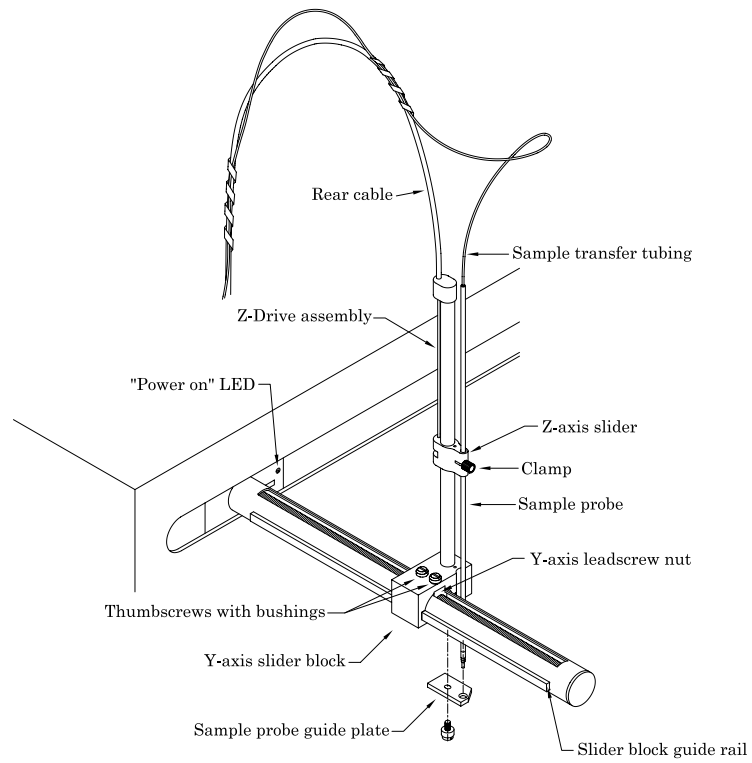
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## Mounting the Z-Drive Assembly

Mounting the z-drive assembly on the autosampler is the first major task. The z-drive assembly must be attached to the autosampler arm to allow movement and function of the sample probe. Figure 13 illustrates the z-drive assembly components.



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**Figure 13.** Z-drive Assembly.

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### Attaching the Z-drive Assembly to the Autosampler Arm

To attach the z-drive assembly to the autosampler arm, complete the following steps, with reference to Figure 13.

- 1 Position the z-drive assembly at the free end of the autosampler arm with the z-drive assembly pointing up.**
- 2 Match the 6-x 3-millimeter grooves in the Y-axis slider block with the guide rails on the autosampler arm, and slide the block along the arm tube until the holes in the block align with the matching holes in the Y-axis lead screw nut.**
- 3 Secure the Y-axis slider block to the Y-axis lead screw nut using the 12-millimeter nylon thumbscrews installed from the top (through the bushings).**

Take care to only finger tighten the nylon thumbscrews.

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### Connecting the Autosampler to the Host Computer

- 1 From the end of the chain assembly, locate the serial cable labeled 1 and connect it to COM 1 of the Host Computer.**
- 2 Turn the autosampler on.**
- 3 Install the Test Software on the Host Computer. (Follow instructions provided with disk.)**
- 4 Run AScript.exe.**

- 5 Select Tools | Hardware Setup.**
- 6 Select EXR-8 and exit the software.**

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## **Aligning the Extended Rack**

- 1 Run AScript.exe.**
- 2 Select File | Open.**
- 3 Select EXR-8 Alignment file.**
- 4 Select Tools | Define Racks.**
- 5 Select EXR-8 and then 60positions.txt.**
- 6 Place racks on tray.**
- 7 Select Cycle Indefinitely.**
- 8 Press the Start button.**
- 9 Verify that the probe hits center tube on all four corners.**
- 10 If it does not, move the head assembly until the probe hits center tube on all four corners. Once it does, tighten the screws on the head assembly.**
- 11 Press the Stop button.**
- 12 Select File | Open, and the file EXR-8 Full Alignment.**
- 13 Press the Start Button.**
- 14 Verify that all the racks are aligned. If not, repeat step 10.**

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**15 Press the Stop button.**