Instructions

PIPETMAX ALIGNMENT UTILITY

This document describes how to use the PIPETMAX Alignment Utility, including how to install the alignment head.

The PIPETMAX Alignment Utility is installed as part of the TRILUTION® micro Software installation or via the PIPETMAX Package Updater.

Run the **PIPETMAX Alignment Utility** to ensure proper alignment. It is only necessary when setting up the instrument for the first time, or if instructed to do so by your local Gilson representative.

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Run PIPETMAX Alignment Utility

Start Alignment Utility

1. Click the **Start** button and then select:
   (All apps) > **Gilson Applications** > **PIPETMAX Alignment Utility**.

   The utility starts and then searches for a connected PIPETMAX. If PIPETMAX is not connected, a message appears:
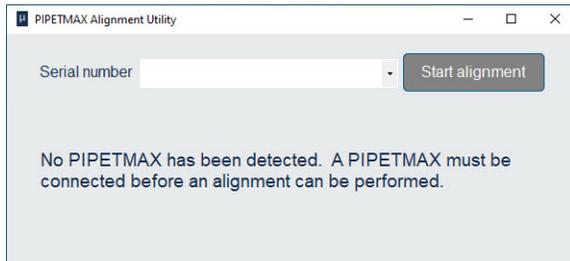
   Connect PIPETMAX. The utility will automatically scan to search for a connected PIPETMAX and then will display the serial number when one is connected.

2. Select **Start Alignment.** A message box appears:
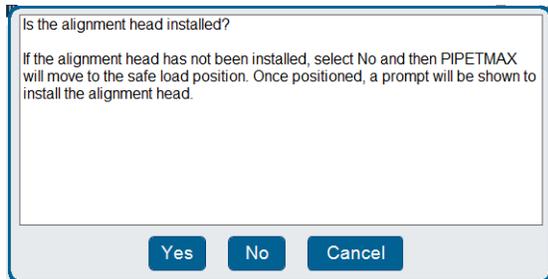
   If the alignment head is installed, the alignment cable is connected, the clips are positioned correctly, and the rotating cover or fume hood door is closed, select **Yes** and then proceed to **Align PIPETMAX** on page 5.

   If the alignment head is not installed, select **No** and then proceed to **Install Alignment Head** on page 3.

   If the alignment cable is not connected and/or the clips are not positioned properly, select **No** and then go to **Connect Alignment Cable and Align Clips** on page 4.

Install Alignment Head

Remove Left Pipette Head

Remove the left pipette head by removing the thumb nuts securing it to the upper pipette head assembly.
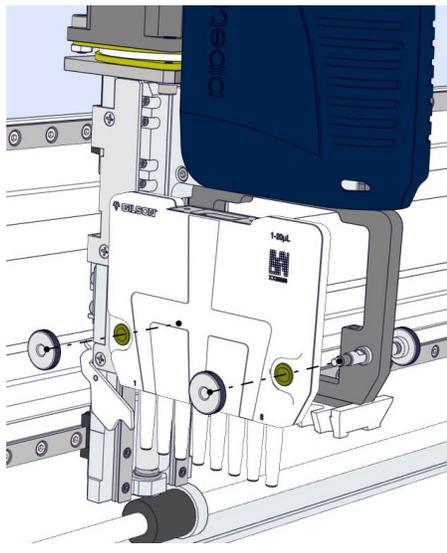
Figure 1
Pipette Head Removal

Install Alignment Head

Install the alignment head on the left side of the upper pipette head assembly using the thumb nuts. Ensure proper alignment of the pipette head against the upper pipette head assembly before tightening the thumb nuts.
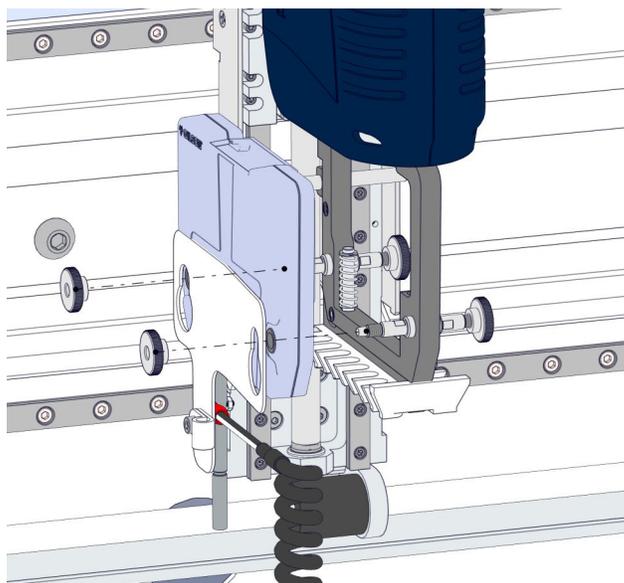
**Figure 2**
Alignment Head Installation

Connect Alignment Cable and Align Clips

NOTICE	If the alignment head is installed, but the cabling is not connected and the alignment starts, it may damage the alignment head.

1. If your PIPETMAX does not have a rotating cover and uses the external safety interlock sensor, disconnect the BOTTOM terminal block connector from the input/output ports on the rear panel.

2. Pass the end of the alignment cable with pre-wired connector through the access hole at the back of PIPETMAX.

3. The connector is labeled **BOTTOM** because it connects to the bottom set of input/output ports on the rear panel of PIPETMAX. Make the connection.

**from alignment head
to BOTTOM input/output port**

Figure 3
Alignment Cable Connection

4. The clips to secure the tip racks on the tray can interfere with the alignment. Ensure that the clips (⌐) are positioned as shown in the diagram below, and that the thumbscrews have been tightened.
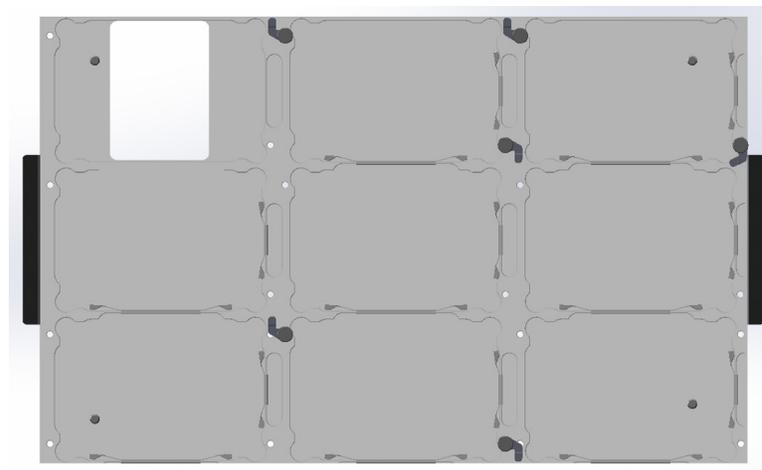

Figure 4
Proper Clip Position During Alignment

5. Close the rotating cover or the fume hood door.

6. Select **OK** to start running the alignment.
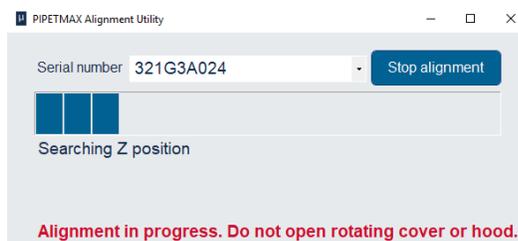
Align PIPETMAX

Wait approximately 6 minutes while the alignment runs.

> **NOTE**   If the rotating cover or fume hood door is opened while running, the alignment is canceled.

A notification appears when the alignment is complete. Remove the alignment head.

Stop Alignment

To stop the alignment while it is running and before it is finished, select Stop Alignment. The alignment will stop when it finishes its current action and revert back to the original offset values.

Emergency Stop

To stop PIPETMAX immediately, press the red STOP button on the front of PIPETMAX.

Remove Alignment Head

Remove the alignment head by disconnecting the terminal block connector from the rear panel, and then removing the thumb nuts securing it to the upper pipette head assembly. Cover the hole on the rear panel from the exterior using the black plug supplied in the accessory package.

Figure 5
Alignment Head Removal

black plug

Figure 6
Black Plug in Access Hole on Rear Panel

Reconnect External Safety Interlock Sensor

If your PIPETMAX does not have a rotating cover, it requires an external safety interlock. The external safety interlock was disconnected prior to running the alignment. Reconnect the BOTTOM terminal block connector to the input/output ports on the rear panel.
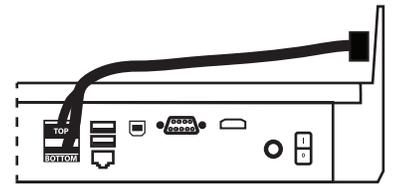

from external safety interlock sensor to input/output ports

Figure 7
External Safety Interlock Sensor Connections

Troubleshooting

If you see the following message, remove and reinstall the removable tray and then rerun the PIPETMAX Alignment Utility.
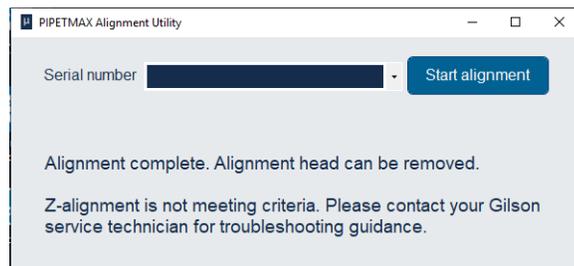
If you encounter any trouble or have concerns while running the alignment, please do not hesitate to contact your local Gilson representative. Specific contact information can be found at www.gilson.com/contactus.