ACCQ*Prep*® HP150
Installation Guide

TELEDYNE ISCO
Everywhereyoulook™

69-5233-800
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Section 1 Safety Warnings

1.1 Overview

This Installation Guide provides:

- Safety information
- Unpacking instructions
- Installation instructions, including connections with Windows and iOS operating systems
- Certification and warranty information

1.2 Safety

Before installing, operating, or maintaining this equipment, it is imperative that all hazards and preventive measures are fully understood. While specific hazards may vary according to location and application, heed the following general warnings:

⚠ WARNING

Liquids associated with this instrument may be classified as carcinogenic, biohazard, flammable, or radioactive. Should these liquids be used, it is highly recommended that this application be accomplished in an isolated environment designed for these types of materials in accordance with federal, state, and local regulatory laws, and in compliance with your company's chemical/hygiene plan in the event of a spill.

⚠ WARNING

Avoid hazardous practices! If you use this instrument in any way not specified in this manual, the protection provided by the instrument may be impaired.

⚠ WARNING

If you are using flammable solvents or chemicals with this system, vapor concentration levels may exceed the maximum exposure levels as recommended by OSHA Guide 1910.1000. To reduce those levels to a safe exposure, Teledyne ISCO recommends that you place the system in a laboratory hood designed for the purpose of ventilation. This hood should be constructed and operated in accordance with federal state and local regulations. In the event of a solvent or chemical spill, your organization should have a plan to deal with these mishaps. In all cases, use good laboratory practices and standard safety procedures.

1.3 Hazard Severity Levels

This manual applies three *Hazard Severity Levels* to the safety alerts. These are described in the sample alerts below.

⚠ CAUTION

Cautions identify a potential hazard which, if not avoided, may result in minor or moderate injury. This category can also warn you of unsafe practices or of conditions that may cause property damage.

⚠ WARNING

Warnings identify a potentially hazardous condition which, if not avoided, could result in death or serious injury.

⚠ DANGER

DANGER – limited to the most extreme situations to identify an imminent hazard which, if not avoided, will result in death or serious injury.

1.4 Hazard Symbols

The equipment and this manual use symbols used to warn of hazards. The symbols are explained in the table below.

Table 1-1 Hazard Symbols

Warnings and Cautions	
	The exclamation point within the triangle is a warning sign alerting you of important instructions in the instrument's technical reference manual.
	The lightning flash and arrowhead within the triangle is a warning sign alerting you of "dangerous voltage" inside the product.
Symboles de sécurité	
	Ce symbole signale l'existence d'instructions importantes relatives au produit dans ce manuel.
	Ce symbole signale la présence d'un danger d'électocution.
Warnungen und Vorsichtshinweise	
	Das Ausrufezeichen in Dreieck ist ein Warnzeichen, das Sie darauf aufmerksam macht, daß wichtige Anleitungen zu diesem Handbuch gehören.
	Der gepfeilte Blitz im Dreieck ist ein Warnzeichen, das Sei vor "gefährlichen Spannungen" im Inneren des Produkts warnt.

Table 1-1 Hazard Symbols	
Advertencias y Precauciones	
	Esta señal le advierte sobre la importancia de las instrucciones del manual que acompañan a este producto.
	Esta señal alerta sobre la presencia de alto voltaje en el interior del producto.

1.5 Safety Components

The power cord is a safety disconnect for the ACCQ*Prep* HP150 (Figure 1-1).

To remove power from the ACCQ*Prep*, remove the power cord by pulling it straight out from the power inlet connector. The circuit breaker is located adjacent to the power inlet connector. If an internal circuit fault occurs, this breaker will trip. It can be reset by pressing the end of the rocker labeled "|". In addition, switching the breaker manually to the "O" position will remove power from the internal operating components.

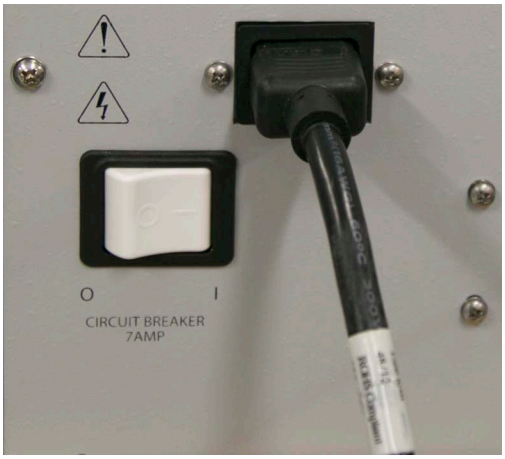

Figure 1-1 Location of power cord for the ACCQPrep

ACCQ*Prep* HP150

Section 2 Installation

2.1 ACCQ*Prep* Installation

The following section will cover the installation and connection of the pump and will review the priming steps.

> ☑ ***Note***
>
> When the system ships, it will ship in two boxes to minimize the weight. One box will contain the unit, and the other box will have the pump and assorted accessories.

Tools Required

- Hex wrench (included with the pump module)
- 1/4" open-end wrench
- Fitting wrench (allows more secure connection of 'finger tighten' fittings) (Wrench is included in the ACCQ*Prep* accessory kit.)

2.2 Setting Up the System

The ACCQ*Prep* chassis—including AutoInjector, Solvent Selector Valve Module, and Column Selector Valve Module, but without the pump assembly—weighs approximately 64 pounds (29 kg). Handles are provided on each side of the instrument to facilitate lifting.

> ⚠ **CAUTION**
>
> A two person lift is recommended to prevent injury.

The pump assembly weighs 25 pounds (11.5 kg), resulting in a final weight of 93 pounds (42.3 kg) with the column cover installed, but not including an optional AutoSampler.

The fraction collector arm is secured to prevent damage during shipping. The arm securing bracket should be removed at this time.

1. Loosen the bracket's two thumbscrews along the sides of the arm (Figure 2-1).

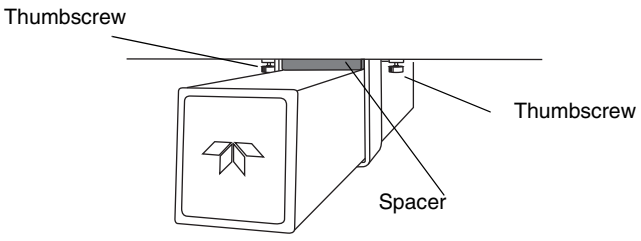

Figure 2-1 Remove arm stowing bracket and spacer

2. Push the arm to the left or right to remove the spacer.
3. Store the bracket and spacer. These parts should be reinstalled if the system must be shipped again.

When you are ready to place the system, be sure it is situated in such a way that the power cord is accessible for disconnection in case of malfunction.

2.2.1 Pump Installation

> ☑ **Note**
>
> Be sure to move the two electrical connections and solvent tubing out of the way before sliding the pump assembly into the pump compartment.

To install the pump:

1. Remove the two pump retaining screws in the pump compartment.
2. Align the pump assembly horizontally with the two notches facing the opening of the pump compartment (Figure 2-2).

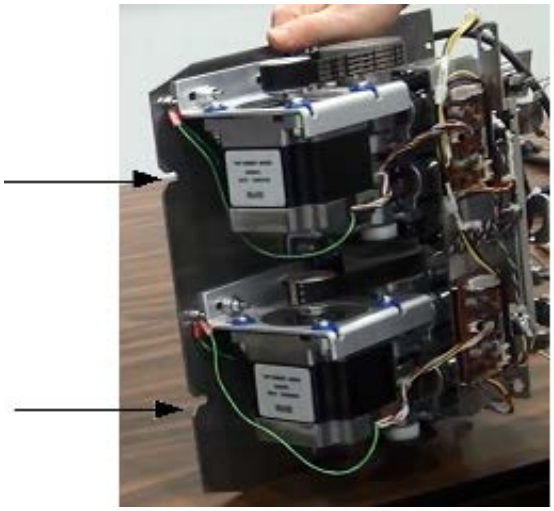

Figure 2-2 Location of notches on the pump sled

3. Slide the pump assembly into the pump compartment. It may require a little force since it is metal on metal sliding together. If the force seems excessive, ensure there is nothing obstructing the pump assembly. Be sure to keep the electrical connections and tubing out of the way so they do not get pushed inside of the compartment (Figure 2-3).

> ☑ **Note**
>
> Be sure to observe the top of the pump assembly as it is being inserted into the system. Make sure no wires from the case or pump assembly are snagging.

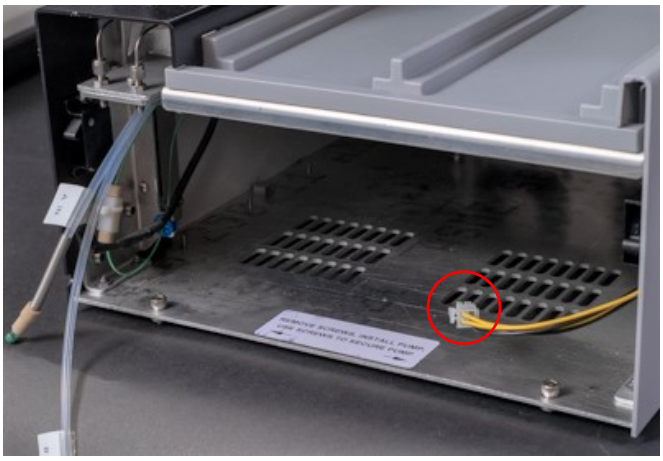

Figure 2-3 Pump compartment with electrical connection shown

4. When the pump assembly is most of the way in the pump compartment, connect the electrical connections on each side of the pump. First, connect the black connection on the left side. Ensure the tab on top of the connector is facing up before pushing it into the mating connector (Figure 2-4).

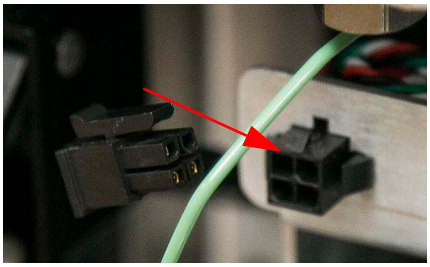

Figure 2-4 Black connection with tab facing up

Then, connect the white connection on the right side. Ensure the tab on top of the connector is facing up before pushing it into the mating connector (Figure 2-5).

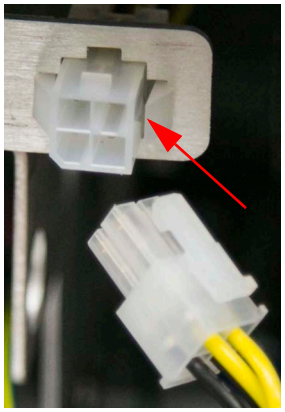

Figure 2-5 White connection with tab facing up

5. Once the electrical connections are complete, push the pump assembly the rest of the way into the pump compartment until the holes in the front of the pump assembly are aligned with the corresponding holes in the case bottom.

> **Note**
> Hold downs at the back of the pump may cause extra resistance for the last 1/2" of travel.

6. To hold the pump in place, use the two hex screws removed previously and the hex wrench to secure the pump assembly (Figure 2-6).

Figure 2-6 Location of threaded holes, in the base of the unit, and the hex wrench

2.2.2 Solvent Line Installation

1. The left two pump heads form the A solvent pump, and the outlets are connected to a tee. The outlet of this tee connects to the left bulkhead union. Tighten with the 1/4" open-end wrench.
2. The right two pump heads form the B solvent pump, and the outlets are connected to a tee. The outlet tee on this side is connected to the pressure transducer in the middle of the assembly. The remaining connector on the pressure transducer must be connected to the right bulkhead union. Tighten this fitting with the 1/4" open-end wrench (Figure 2-7).

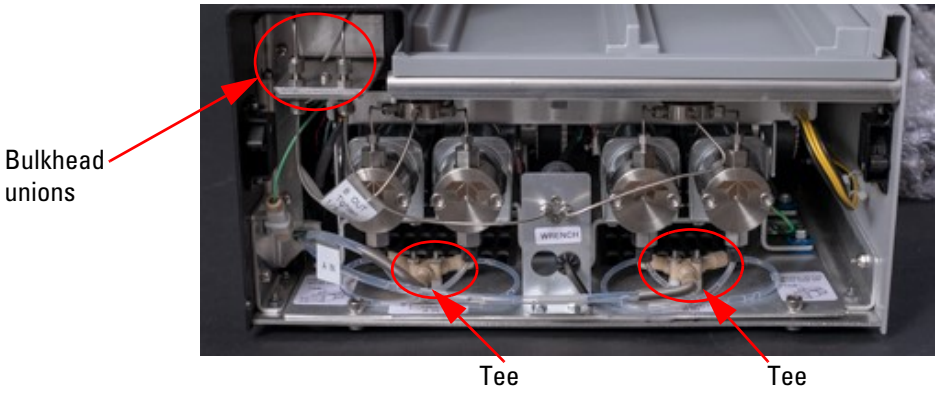

Figure 2-7 Line connections on the pumps

3. Connect the *shorter* FEP inlet solvent line to the left side pump's PEEK tee. Slide the spring down the tube and place the open side of the wrench (included) over the tubing and FEP fitting and make small turns as to not bend the tubing (Figure 2-8). Slide the spring back into place.
4. Connect the *longer* FEP inlet solvent line to the right side pump's PEEK tee. Slide the spring down the tube and place the open side of the wrench (included) over the tubing and FEP fitting and make small turns as to not bend the tubing (Figure 2-8). Slide the spring back into place.

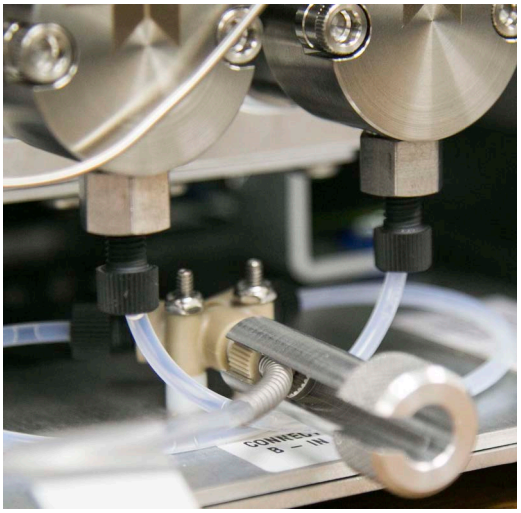

Figure 2-8 Wrench used to tighten the FEP inlet line

5. Once complete, install the faceplate onto the unit by snapping the side mounted connectors into place.

2.2.3 Fluid Line Installation

> **Note**
>
> The solvent lines are installed at the factory and include labels identifying the lines A1, A2, and A3 for the A solvents and line B1, B2, and B3 for the B solvents when using the Solvent Selector Valve Module.

1. Remove the two screws that secure the solvent lines for shipment.
2. Place the solvent lines in the desired containers.
3. Place the waste line from ACCQ*Prep* in an appropriate waste container.

2.2.4 ACCQPrep Equipped with Optional ELSD

Note

Teledyne ISCO recommends >99% pure nitrogen from a source that can deliver 2.5 SLPM at 60 to 70 psi.

Figure 2-9 Location of ELSD gas port (Nitrogen input line circled)

The ACCQ*Prep* ELSD system has several additional connections.

1. Install the ELSD P-trap vent assembly found in the accessory package (PN 3-250004) by placing the short tube into the port on the rear panel, orienting the vent as shown, and tightening the fitting nut finger-tight plus a small amount more with a wrench (Figure 2-10).

Figure 2-10 Back of ACCQprep with optional ELSD

2. ELSD operation requires a carrier gas. To connect the carrier gas to the ACCQ*Prep*:
   - Locate the 1/8 inch O.D. FEP tubing (PN:023-0503-02) from the accessory package.
   - Push one end of the tubing into the nitrogen inlet port (circled in Figure 2-9) on the back of the system. The tubing should be fully seated in the port.
   - Cut the tubing to length and connect the other end to the user-supplied carrier gas. An assortment of 1/8" adaptors are supplied in the accessory kit to complete the connection to your gas source.
3. The P-trap must be filled with fluid to prevent sample loss. To accomplish this, raise the drain tubing attached to the P-trap drain vent assembly above the instrument, and place 10 mL of liquid, such as isopropyl alcohol, into the tube. Make sure the fluid level in the tubing doesn't exceed the level of the instrument case top. If the tubing is raised too fast, fluid may flow out the top of the vent tube causing a spill. Lift it high enough so the fluid enters the P-trap drain (Figure 2-11).

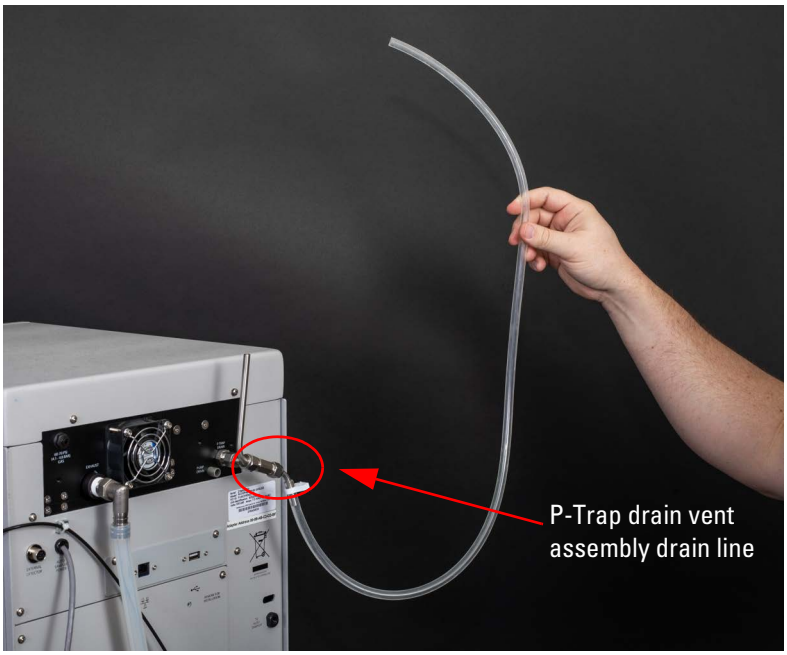

Figure 2-11 Keep liquid level lower than the top of the system

4. Route the end of the P-trap drain tube to a suitable waste fluid collection container. Please be aware that as the tubing is lowered, several mL of isopropyl alcohol will run out of the tubing. This is normal and means that the P-trap is properly filled. Depending on your application, the P-trap fluid may need periodic replenishment to ensure maximum signal strength of the ELSD.

Note

If accessible, the outlet end of the P-trap drain tube may be used to refill the P-trap.

5. Route the attached tubing from the ELSD exhaust port away from the system. This will prevent unnecessary solvent vapor alarms.

Note

The ELSD exhaust will contain fine particles of compound. If using outside of the hood, ensure that the exhaust port tubing is routed to an exhaust handling system that meets your safety and environmental requirements. Do not use tubing smaller than the exhaust tube. If the exhaust is restricted, some of the gas flow could be diverted out the P trap drain resulting in reduced sensitivity and the need to route the P trap drain to an exhaust. In normal operation, the exhaust gas is dry and does not require a waste collection container.

⚠ CAUTION

Discontinue use of the ACCQ*Prep* if liquid is present at the pump drain. Contact Teledyne ISCO technical service for assistance with correcting the leak.

2.2.5 Priming Steps

The system will require priming with the desired solvents. To prime the system:

1. Press the red switch next to the front USB port to the ON position to boot up the system (Figure 2-12).

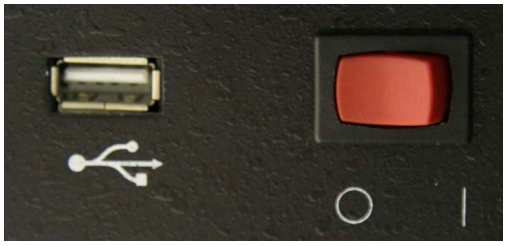

Figure 2-12 Front USB and On switch

2. Turn the prime valve to the PRIME position (Figure 2-13).

Figure 2-13 Turn the valve to the Prime position

- If the solvent select option is not installed, the system will immediately prime both solvent lines.
- If the solvent select option is installed, a dialog box opens when the valve is switched to the PRIME position. The dialog box allows you to select which of the A solvents and B solvents will be primed.
- If you have not already assigned names to the A and B solvents, they can be named at this time using the drop downs. If the name you want isn't listed, it can be added in the CONFIGURATION screen. This action can be completed at a later time.

3. Once priming is complete, a new screen will appear directing you to turn the valve from the PRIME position to the RUN position.

> **Note**
>
> The system will prime both pumps simultaneously. There is no method to prime A and B individually.

2.3 Installing the Injection Port Adapter

Manual sample injection can be performed with the system even when equipped with an AutoInjector or AutoSampler.

If no AutoInjector or AutoSampler is installed, a luer injection port with an on/off valve (209009928) is included in the accessory package. To install, place the fitting into the injection valve and tighten the nut snugly (Figure 2-14).

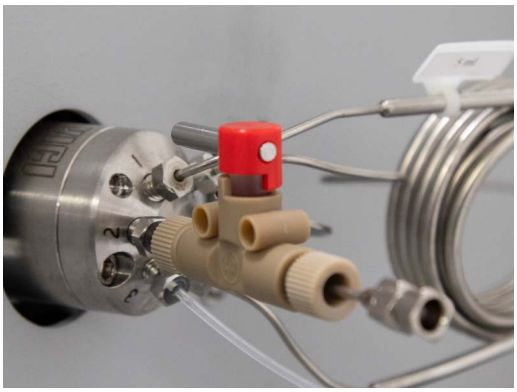

Figure 2-14 ACCQPrep with Manual Injection Luer Port installed

The on/off valve on the Injection Port Adapter ensures that sample or fluid in the sample loop isn't siphoned off to waste when the sample loop is in the sample loading position.

When performing manual injection of a sample and when prompted by the system:

1. Place your syringe containing sample onto the Luer-fitting on the Injection Port Adapter.
2. Open the valve on the injection port adapter to the sample loop. (The valve handle should be parallel to the Injection Port Adapter.)
3. Slowly depress the syringe loading sample into the loop.
4. Remove the syringe and flush 0.5 mL of a wash solvent through the Injection Port Adapter.
5. Close the valve on the injection port adapter to the sample loop. (The valve handle should be perpendicular to the Injection Port Adapter.)
6. Press the SAMPLE LOADED button to begin the separation.

2.4 Installing the Optional AutoSampler

These instructions assume that the AutoSampler was purchased with a new ACCQ*Prep*. In that case, the AutoInjector portion of the AutoSampler is already installed in the ACCQ*Prep*. If not, please refer to installation instructions included with the AutoInjector.

To install the AutoSampler:

1. Carefully unpack the Z-Drive and remove the packing materials from the Y-axis arm (Figure 2-15).

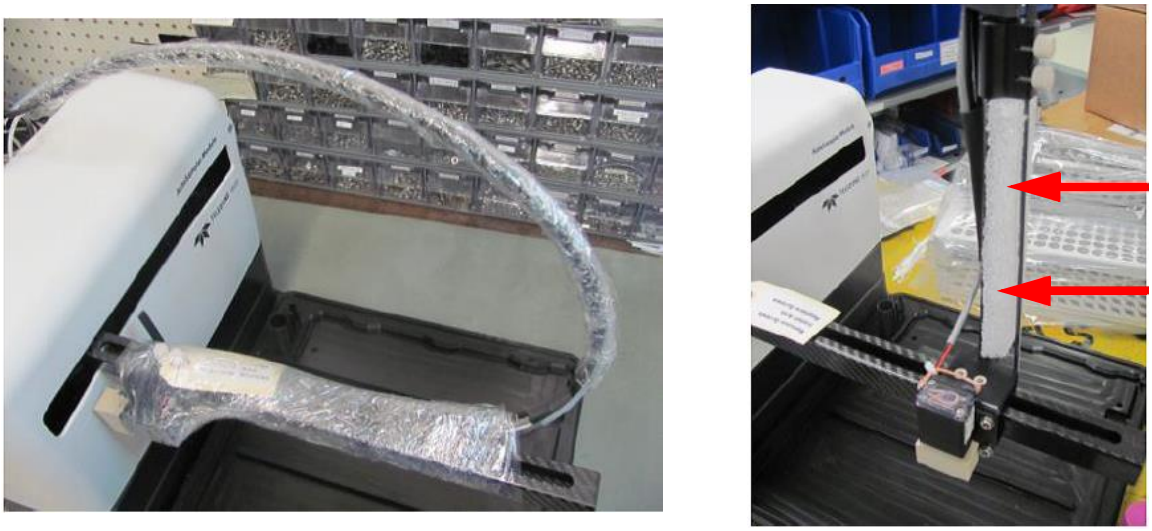

Figure 2-15 AutoSampler Module and Z-Drive

2. Find the Y-axis carriage on the arm of the AutoSampler Module. The Z-Drive will be attached to this carriage (Figure 2-16).

Figure 2-16 Z-Drive mounted on the Y-axis carriage

3. Remove the two screws from the Y axis carriage. Slide the Z-Drive onto the arm until the two holes align with the matching holes in the Y-axis carriage.
4. Using the two plastic thumbscrews, secure the Z-Drive to the carriage and finger tighten (Figure 2-17).

Figure 2-17 Z-Drive secured to the Y-axis carriage

5. Rotate the Z-Drive rotor back and forth to ensure that the Z-Drive moved up and down freely (Figure 2-18).

☑ Note

If the rotor does not move freely, check that the other cables are not interfering with the movement of the green probe cable.

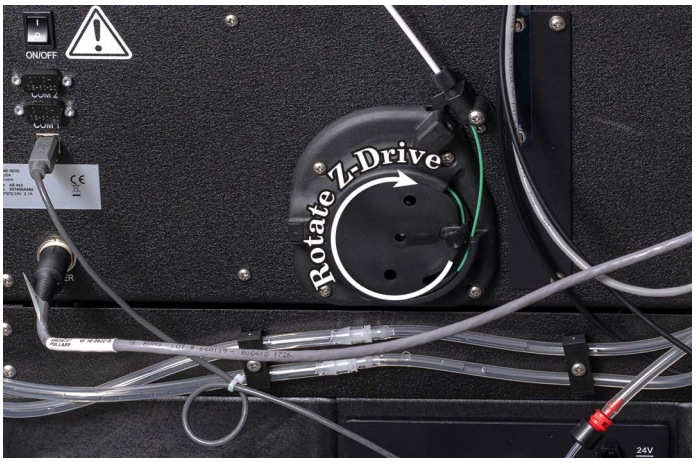

Figure 2-18 Z-Drive rotation

6. Mount the wash well by placing it into the receptacle located on the right-rear portion of the AutoSampler Module bed (Figure 2-19).

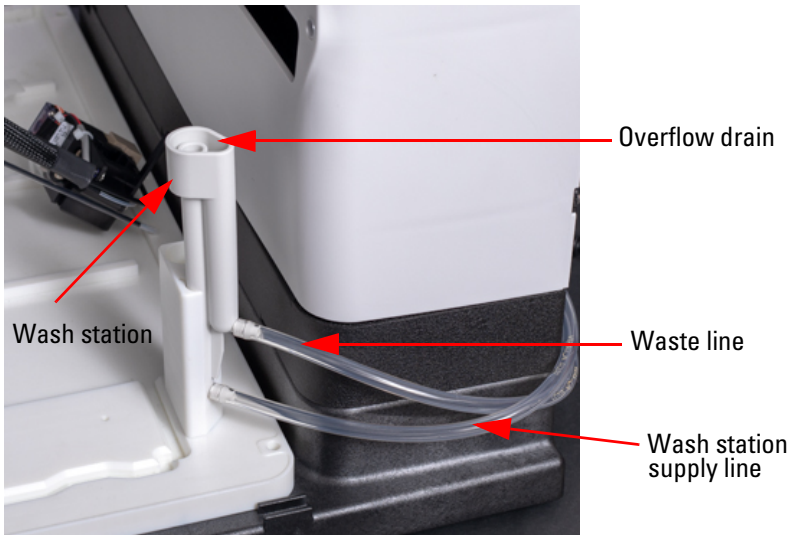

Figure 2-19 AutoSampler Module wash well with tubing attached (top tube is waste to port #2 while the bottom tube is supply port #3)

7. The wash well comes pre-plumbed to the peristaltic pump ports. If disconnected in the future, it is important to connect the wash well waste tube (upper tube on wash well labeled 2) to port "2" of the peristaltic pump and to connect the wash well supply tube (lower tube on wash well labeled 3) to port 3 of the peristaltic pump.
8. Place the AutoSampler Module on the right side of the ACCQ*Prep*.
9. Find the tube labeled "Wash Supply" connected to port "1" of the peristaltic pump on the back of the AutoSampler Module. The free end of the tubing (which has a metal weight) can be placed in the wash solution container or tee'd into a solvent supply line (Figure 2-20).

Note

The wash fluid peristaltic pump uses Pharm-A-Line™ tubing. Please ensure the wash fluid is compatible with this tubing, such as methanol.

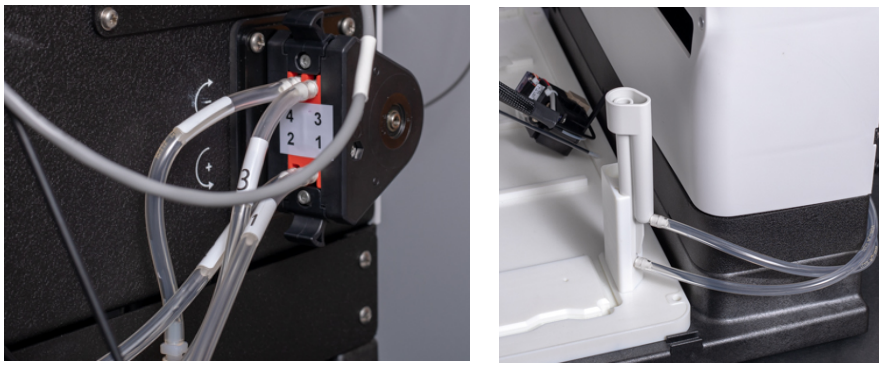

Figure 2-20 AutoSampler Module peristaltic pump with tubing correctly attached

10. Connect the black tube labeled "XX" from the tee on the back of the AutoSampler to the attached 4-port cross on back of the ACCQPrep. (Figure 2-21).

Figure 2-21 AutoSampler waste connection point on ACCQPrep

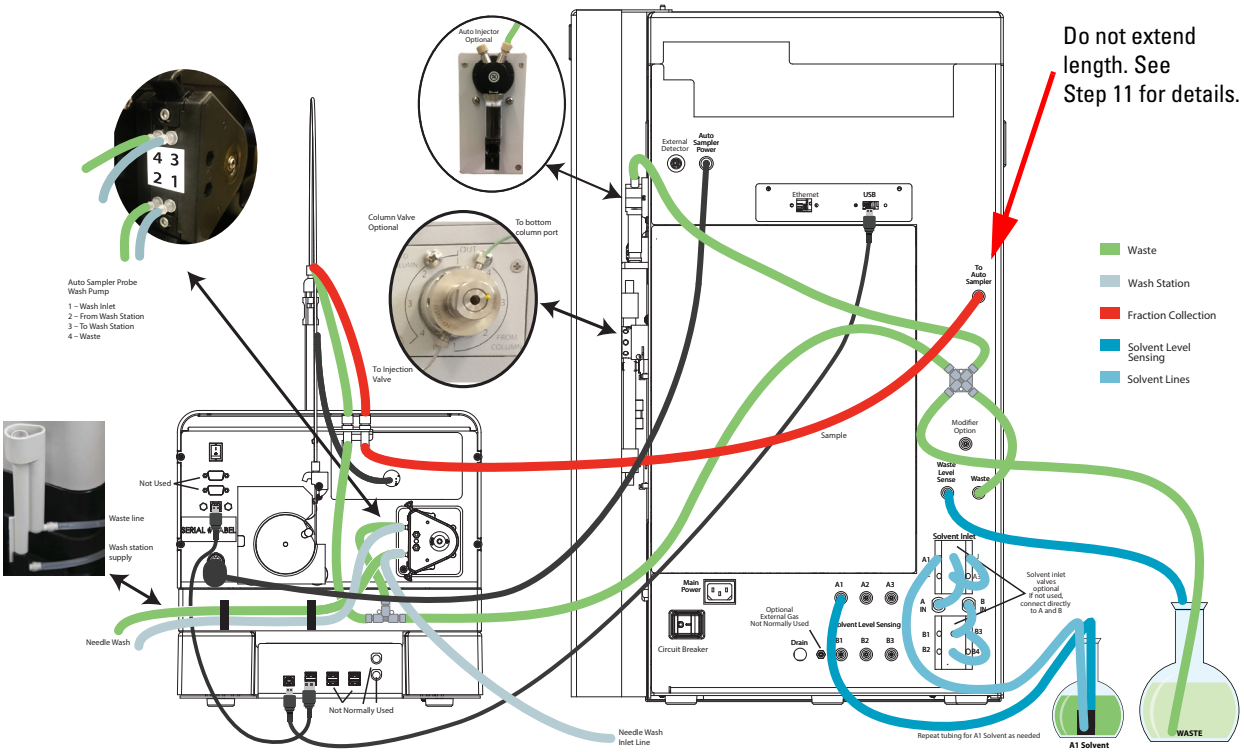

Figure 2-22 Tubing diagram of the AutoSampler connected to the ACCQPrep

11. Connect the AutoSampler tubing labeled “To ACCQPrep” to the connection on the ACCQ*Prep*’s rear panel labeled “To AutoSampler”. The length of this tubing is critical to control the delay volume for fraction collection on the AutoSampler. Use the length of tubing provided with your AutoSampler or with the appropriate Teledyne ISCO tubing replacement kit.

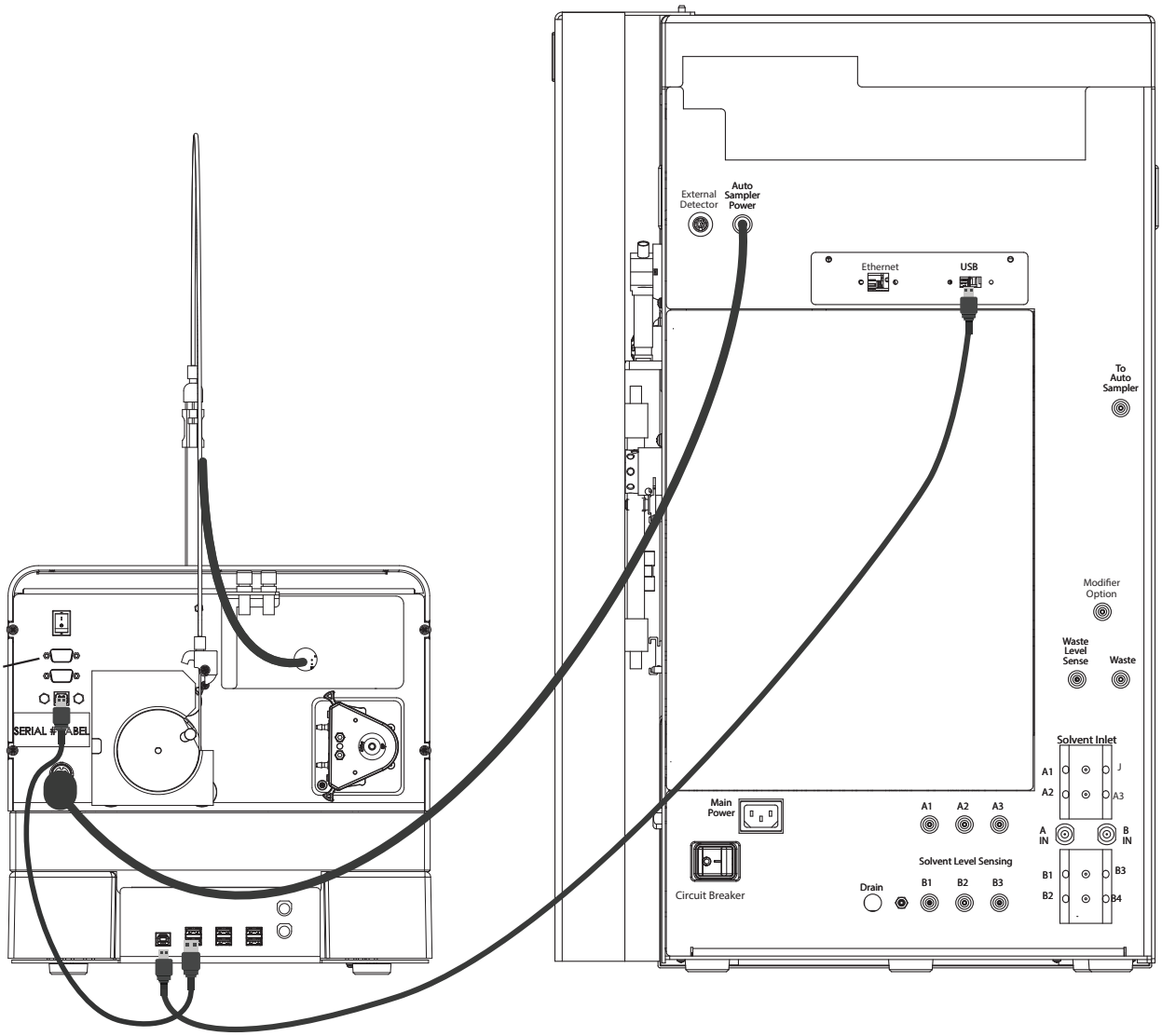

Figure 2-23 Diagram of the AutoSampler and ACCQPrep USB connections

12. Connect the long USB cable (provided) from the USB-A port on the back of the ACCQ*Prep* to the USB-B port on the lower portion of the back panel on the AutoSampler Module (Figure 2-23).
13. The short USB cable connecting the USB-B port on the top portion of the back panel of the Autosampler Module to the USB-A port on the lower portion of the back panel of the

Autosampler Module should already be pre-installed. If not, make the connection as shown in Figure 2-23.

> **Note**
>
> The power supply accompanying the AutoSampler will not be used; instead, the AutoSampler will receive its power supply through the ACCQ*Prep*.

14. Power for the AutoSampler is provided by the ACCQ*Prep*. On the rear panel of the ACCQ*Prep*, the power cord is coiled and retained (Figure 2-24). Remove the retainer and route the power cable to the mating connector on the AutoSampler Module.

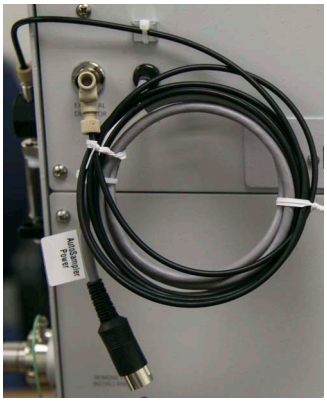

Figure 2-24 Power cable on the ACCQPrep

2.4.1 Establishing the Fluid Connections

To establish the necessary fluid connections:

1. Connect the sample probe fitting to the inlet port #2 of the injection valve on the ACCQ*Prep* (Figure 2-25).

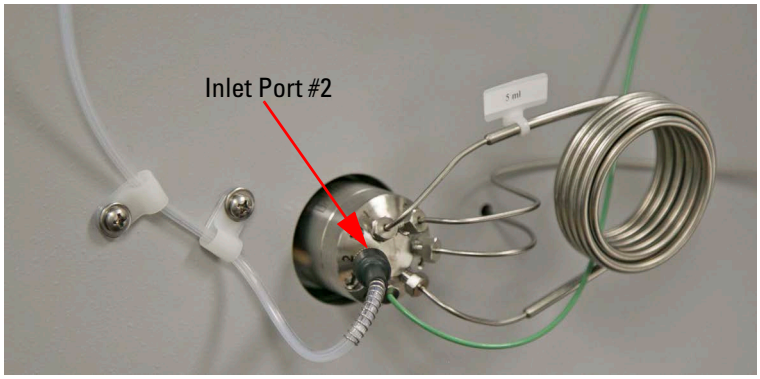

Figure 2-25 Probe fitting connected to inlet port #2

2. Secure the probe tubing to the side of the ACCQ*Prep* by removing the housing screw, fitting the tubing bracket to the screw, and replacing the screw (Figure 2-25).
3. The tubing bracket should be affixed to the ACCQ*Prep* so that the probe tubing threads vertically through the

bracket. This ensures that the probe tubing will not be obstructed by the other end of the probe attachment (Figure 2-26).

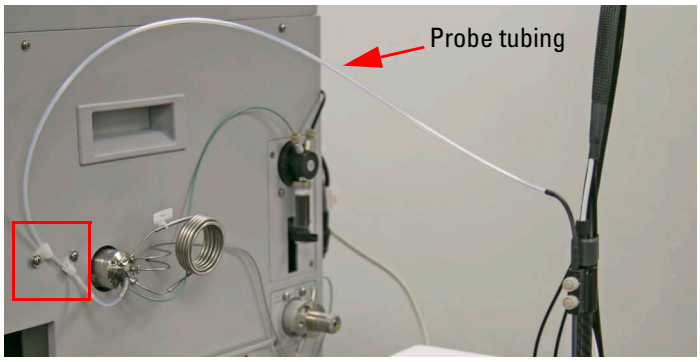

Figure 2-26 Probe tubing affixed to the side of the ACCQPrep

4. Install the included 18 mm test tube in the receptacle at the right rear corner of the AutoSampler platform just to the left of the wash well (Figure 2-27). Fluid in this tube will be used for bracketed solvent injections. In this technique, the injected sample is separated from the chromatographic solvents by a small amount of air and a "bracket" solvent during the sample loading and injection process.

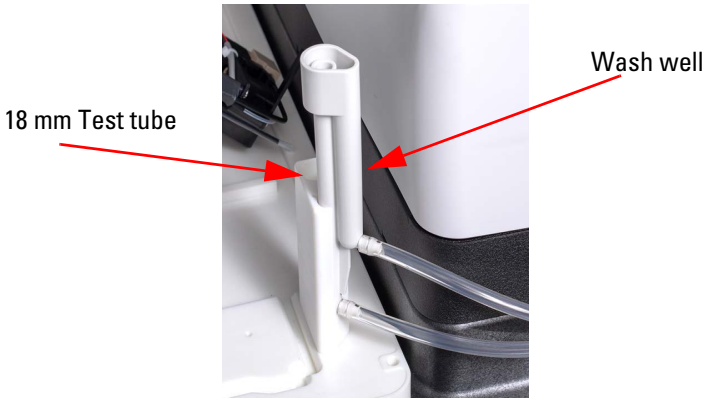

Figure 2-27 Location of the test tube and the wash well on the AutoSampler

To Power on the System

The AutoSampler gets its power from the ACCQ*Prep*.

1. Turn ON the power switch on the AutoSampler (Figure 2-28).

Figure 2-28 On switch for the AutoSampler

2. Turn ON the power to the ACCQ*Prep*. A red light on the AutoSampler will light up, the arm will move to the HOME position, and then the light will turn blue (Figure 2-29).

Figure 2-29 Power switch for the ACCQPrep

Prime AutoSampler Wash Station

1. Ensure the wash station supply line is placed into a suitable solvent (typically the strong chromatographic solvent) and the waste line is routed to a suitable container.
2. Go to TOOLS | AUTOMATION MANUAL CONTROL, and select the START WASH button (Figure 2-30).

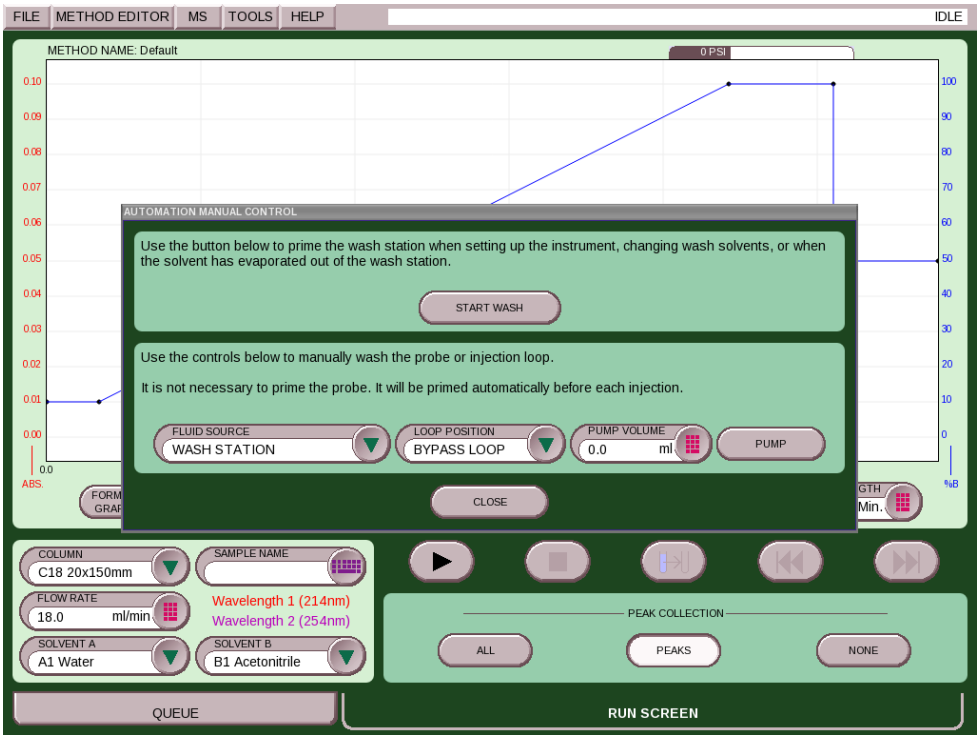

Figure 2-30 Screen of Start Wash button

3. Ensure the wash solvent is pumped into the center portion of the wash station and, when full, the fluid drains into the overflow drain (Figure 2-31).

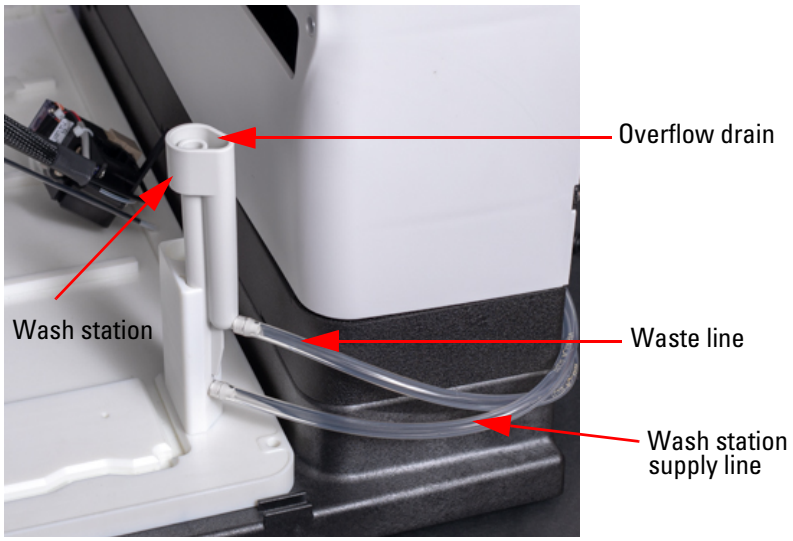

Figure 2-31 Wash station and overflow drain

2.5 Column Installation

The ACCQ*Prep* is compatible with HPLC columns ranging from 4.6 mm up to 50 mm diameter using typical 10-32 HPLC style fittings. Columns with different fittings may be used with adapters available from HPLC fitting manufacturers. Column lengths of up to 250 mm can be mounted to the instrument using the included hardware. The high pressure capability of the ACCQ*Prep* may enable the use of longer columns than typical preparative HPLC systems, but these may be difficult to mount with the included hardware.

Larger diameter columns can also be used on the system at below optimal flow rates and will require the column to be supported outside of the instrument. Column packing materials of 5 or 10 µm work well on the ACCQ*Prep* due to its high pressure capability, but any packing can be used if compatible with the flows and pressures supported by the ACCQ*Prep*.

2.5.1 Column Mounting

The ACCQ*Prep* includes hardware to support 4.6 mm, 10 mm, 20 mm (or 21mm), 30 mm, or 50 mm column diameters. 40 mm columns can be mounted on the system using a “universal” column mount (P/N 60-5234-636, not included) (Figure 2-32).

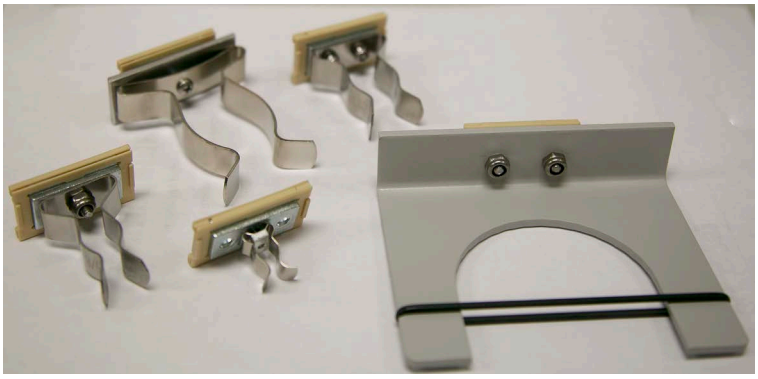

Figure 2-32 Column Mounting Parts

To install a column onto the ACCQ*Prep*:

1. Select the proper sized column mount and simply slip the mount into one of the two column mounting tracks on the side of the ACCQ*Prep* (Figure 2-33).

Figure 2-33 Column track on the ACCQPrep

2. Remove the union connecting the column fluid supply line to the column effluent line.
3. Connect the line from the injection valve to the inlet of the column and connect the remaining tubing to the column outlet (Figure 2-34).

Figure 2-34 Column with inlet and outlet lines connected

> **Note**
>
> Metal tubing and fittings for the column connection are recommended. The high pressure capability of the ACCQ*Prep* could cause a rupture if polymer tubing or fittings are used and a blockage occurs. If you would like to use polymer tubing and fittings, we recommend the column be configured with a lower pressure limit in the PeakTrak® software.

If a guard column is desired, this can be connected between the injection valve and the column inlet. This may require an additional column mount and tubing, which is not included. A kit containing a complete set of column mounts can be obtained (P/N 60-5234-790). In addition, an assortment of tubing lengths and nuts can be obtained (P/N 60-5239-025).

2.5.2 Column Configuration

The ACCQ*Prep* systems's PeakTrak software supports default methods for individual columns. This allows easy selection of default methods with a single button press. This process is described in the *ACCQPrep HP150 Operation Guide*, Section 2.4.1.

2.5.3 Column Select Valve (Optional)

The ACCQ*Prep*'s efficiency can be enhanced by the addition of the Column Select Valve Module (CSV-4). This optional accessory supports up to four columns on the system that can be selected for a separation from a simple drop-down menu. When coupled with the AutoSampler, every programmed sample can utilize the column best suited for each sample. This assumes the that fluids used for each column are miscible and that small amounts are compatible in sequentially used columns.

☑ Note

Mixed reverse phase and normal phase solvents may require manual flushing of the pumping system between separations.

- If the CSV-4 was ordered with the instrument, it will arrive installed in the ACCQ*Prep*.
- If you decide to add this capability at a later time, this can be easily accomplished in minutes by following the instructions included with the valve upgrade (PN 68-5237-102).

Columns are mounted onto the CSV-4 in the same manner as a system without the CSV-4 (Section 2.4.1). The CSV-4 comes with additional column mounts and an assortment of precut tubing and fittings to support the additional columns. When the columns are connected, the inlet and outlet of the columns are connected to the column select valve instead of directly to the injection valve. The columns are identified on the CSV-4 as 1 through 4 and can be assigned a meaningful name in the PeakTrak software (such as "20x150 Hi pH").

If you would like to flush the internal tubing of the ACCQ*Prep* between solvents (such as when changing from a low pH to a high pH), one of the column positions (such as position 4) can be connected with a length of tubing. For ease of use, the column defined for the position could be called "Flush." When changing from a low pH to a high pH solvent, a line can be placed into the AutoSampler queue to use a method with neutral pH solvent to flush the fluid lines. This assumes that the system has the CSV-4 option installed.

2.6 Installation Troubleshooting

ACCQ*Prep* won't turn on using the front panel power switch –

- Ensure the power cord is connected.
- Verify that rear panel circuit breaker is in the "|" position. (The breaker is a white rocker switch on the rear panel near the cord inlet.) Switch breaker to off ("O") and then back on to ensure the circuit breaker is reset.
- Ensure the lab power connection has power.

Error: "Unable to communicate with pump controller module" –

- Check the pump communication connector at the top left corner and the pump power connector at the top right corner of the pump subassembly. Ensure the connectors are oriented so that the locking tab is at the top.

AutoSampler control not visible on the ACCQ*Prep* software – The ACCQ*Prep* only loads the AutoSampler control features if it can detect the presence of the AutoSampler. Check the AutoSampler pilot light (upper right corner of AutoSampler) to determine the next step.

- If the light is off:
  - Verify that the AutoSampler power switch is on ("|"). This is located on the rear panel of the AutoSampler.
  - Check that the AutoSampler power cord connects from the ACCQ*Prep* to the power connection on the rear panel of the AutoSampler.
- If the light is blue, the AutoSampler is functioning but not communicating with the ACCQ*Prep*:
  - Check the USB cable connection from ACCQ*Prep* to the square USB connector along the rear, bottom edge of the AutoSampler (Figure 2-22).
  - Check the USB cable connection from the lower, rear panel of the AutoSampler to the USB connector on the upper left corner of the rear panel (while viewing the AutoSampler from the rear panel.
  - Recycle the power on the ACCQ*Prep*. The PeakTrak software only checks for the presence of the AutoSampler on power up. If the AutoSampler is powered up after the ACCQ*Prep*, the software will not detect the presence of the AutoSampler.
- If the light is red, the AutoSampler is not able to reach the home position:
  - The sampler arm is not able to move to the left rear corner to home. Verify that there is nothing blocking its motion.
  - Inspect the flag on the rear of the probe mechanism to ensure the flag is perpendicular to the rear panel. It must enter into a receptacle to reach the home position. Its mounting screw may be tightened, but too much torque could break the plastic screw.
  - The sample probe is unable to reach the top of its travel. Verify that there is nothing blocking its motion.

Installation Qualification

For ACCQPrep HP150

The following tasks are to be performed upon installation of the Teledyne ISCO ACCQPrep HP150. The following procedures should be performed in accordance with ACCQPrep HP150 Installation Guide (#69-5233-800)

Description of task	Yes	No	Comment
Are there any visible signs of damage to the box?	☐	☐	
Have all items of the order been delivered?	☐	☐	
Unpack the unit	☐	☐	
Are the solvent and waste lines present?	☐	☐	
Are the solvent and waste lines connected?	☐	☐	
Are the correct collection racks present?	☐	☐	
Where is the instrument located? (Building name, Lab #, FC #)	☐	☐	
Position the system	☐	☐	
Remove fraction arm shipping bracket	☐	☐	
Install system pumps	☐	☐	
Install Autosampler (if applicable)	☐	☐	
Is the auto-prime knok fixed securely?	☐	☐	
Connect ELSD gas (optional)	☐	☐	
Install PurIon (optional)	☐	☐	
Connect power cords	☐	☐	

Order number		**Company Name**	
Customer Name		**Customer Signature**	
Date			
Installer Name		**Installer Signature**	
Date			

Operation Qualification

For ACCQPrep HP150

The following tasks are to be performed after the installation of the ACCQPrep HP150 and all accessories:

Description of task	Yes	No	Comment
Does the system power up?	☐	☐	
Does the fraction arm go to the "left rear" position?	☐	☐	
Does the touch screen work?	☐	☐	
Does the RFID identification for racks work?	☐	☐	
Program the correct date and time	☐	☐	
Does the LAN connection work? (if required by customer)	☐	☐	
Does the USB port work for exporting files?	☐	☐	
Configure system settings depending on user preference	☐	☐	
Install system solvents	☐	☐	
Prime the pumps	☐	☐	
Prime the autosampler wash station (if installed)	☐	☐	
Does the autosampler align to test tube 1? Perform the test in automated manual control by pumping 1 mL of solvent mix	☐	☐	
Make up test mix (UTM) and run sample according to Instruction Sheet #69-5233-885, ACCQ Prep Verification Instructions	☐	☐	
Does the UV detection work as expected?	☐	☐	
Does the fraction arm move and collect peaks into test tubes?	☐	☐	
Are UTM results consistent with data **Table 1?**	☐	☐	
Is the 214 nm UV signal of Peak 2 > Peak 1?	☐	☐	
Does the active solvent level sensing activate with low solvent?	☐	☐	
Does the active waste level sensing activate with full waste?	☐	☐	

Order number		**Company Name**	
Customer Name		**Customer Signature**	
Date			
Installer Name		**Installer Signature**	
Date			

Table 1: Expected Results for UTM Verification, Time of Peaks 1 and 2

ACCQPrep HP150	Peak 1 (±0.5 min) Minutes, MeCN	Peak 2 (±0.5 min) Minutes, MeCN	Peak 1 (±0.5 min) Minutes, MeOH	Peak 2 (±0.5 min) Minutes, MeOH
UV/ UV-VIS	2.9	4.5	4.6	6.4
with PurIon	2.9	4.5	4.6	6.5
With ELSD	3.2	4.9	4.9	6.8
With ELSD and PurIon	3.2	4.9	4.9	6.9

DECLARATION OF CONFORMITY

We the manufacturer:

Manufacturer's Name: **Manufacturer's Address:**	Teledyne ISCO 4700 Superior Street, Lincoln, NE 68504 USA

Declare, under our sole responsibility that the following equipment:

Product Model:	**ACCQPrep HP 125** **ACCQPrep HP 150**
Object of Declaration:	Preparative High Performance Liquid Chromatography (Preparative HPLC) System.

Is designed and manufactured in compliance with the following applicable Standards:

Standard	Description
UL 61010-1 Edition 3	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements

A representative sample was evaluated and tested by Nebraska Center for Excellence in Electronics, an A2LA Accredited Laboratory.

I, the undersigned, hereby declare, by sole responsibility of the manufacturer that the design of the equipment specified above conforms to the above Standards, and the fulfilment of essential safety requirements have been demonstrated.

Authorized Signatory

Signature: Samuel Ramey

Name: Sam Ramey

Title: Director of Engineering

Date: 3/3/2023

TELEDYNE ISCO
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Lincoln, NE 68504 USA
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EU DECLARATION OF CONFORMITY

We the manufacturer:

Manufacturer's Name: **Manufacturer's Address:**	Teledyne ISCO 4700 Superior Street, Lincoln, NE 68504 USA

Declare, under our sole responsibility that the following equipment:

Product Model:	**ACCQPrep HP125** **ACCQPrep HP150**
Object of Declaration:	Preparative High Performance Liquid Chromatography (Preparative HPLC) System.

Is designed and manufactured in compliance with the following applicable Directives and Standards:

Directive - Union Legislation	Standard
2014/35/EU – Low Voltage	EN 61010-1:2010/A1:2019
2014/30/EU – EMC	EN 61326-1:2013 EN 55011:2016/A1:2016/A11:2020 EN 61000-3-2:2014 EN 61000-3-3:2013
RoHS 2011/65/EU with amendments	EN IEC 63000:2018

I, the undersigned, hereby declare, by sole responsibility of the manufacturer that the design of the equipment specified above conforms to the above Directives and Standards, and the fulfilment of essential safety requirements and essential requirements set out in the Directives have been demonstrated.

Authorized Signatory

Signature: Samuel Ramey

Name: Sam Ramey

Title: Director of Engineering

Date: 3/3/2023

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UK DECLARATION OF CONFORMITY

We the manufacturer:

Manufacturer's Name: **Manufacturer's Address:**	Teledyne ISCO 4700 Superior Street, Lincoln, NE 68504 USA

Declare, under our sole responsibility that the following equipment:

Product Model:	**ACCQPrep HP125** **ACCQPrep HP150**
Object of Declaration:	Preparative High Performance Liquid Chromatography (Preparative HPLC) System.

Is designed and manufactured in compliance with the following applicable Regulations and Standards:

Statutory Instrument (Regulation)	Standard
UKSI 2016 /1101 Electrical Equipment (Safety)	EN 61010-1:2010/A1:2019
UKSI 2016/1091 EMC	EN 61326-1:2013 EN 55011:2016/A11:2020 EN 61000-3-2:2014 EN 61000-3-3:2013
UKSI 2012/3032 RoHS	EN IEC 63000:2018

I, the undersigned, hereby declare, by sole responsibility of the manufacturer that the design of the equipment specified above conforms to the above Directives and Standards, and the fulfilment of essential safety requirements and essential requirements set out in the Directives have been demonstrated.

Authorized Signatory

Signature: Samuel Ramey

Name: Sam Ramey

Title: Director of Engineering

Date: 3/3/2023

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605232256 Rev C

产品中有毒有害物质或元素的名称及含量

Name and amount of Hazardous Substances or Elements in the product

部件名称 Component Name	有毒有害物质或元素 Hazardous Substances or Elements					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二联苯 (PBDE)
液晶显示 LCD Display	O	O	O	O	O	O
线路板 Circuit boards	O	O	O	O	O	O
接线 Wiring	O	O	O	O	O	O
内部电缆 Internal Cables	O	O	O	O	O	O
主电源线 Line Cord	O	O	O	O	O	O
步进电机 Stepper Motor	O	O	O	O	O	O
氘气灯 Deuterium lamp	O	O	O	O	O	O
阀体 Valve Body	O	O	O	O	O	O

产品中有毒有害物质或元素的名称及含量：Name and amount of Hazardous Substances or Elements in the product

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在ST/ 标准规定的限量要求以下。

O: Represent the concentration of the hazardous substance in this component's any homogeneous pieces is lower than the ST/ standard limitation.

X：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出ST/ 标准规定的限量要求。

(企业可在此处，根据实际情况对上表中打"X" 的技术原因进行进一步说明。)

X: Represent the concentration of the hazardous substance in this component's at least one homogeneous piece is higher than the ST/ standard limitation.

(Manufacturer may give technical reasons to the "X"marks)

环保使用期由经验确定。

The Environmentally Friendly Use Period (EFUP) was determined through experience.

生产日期被编码在系列号码中。前三位数字为生产年(207 代表2007年) 。随后的一个字母代表月份：A 为一月，B为二月，等等。

The date of Manufacture is in code within the serial number. The first three numbers are the year of manufacture with the second digit removed (218 is year 2018) followed by a letter for the month. "A" is January, "B" is February and so on (I is not used).