

## ***Mounting Guidelines (# 13100046)***

### **Injection Tubing Set – TLII**

## **1. Installing Tubing Connections**

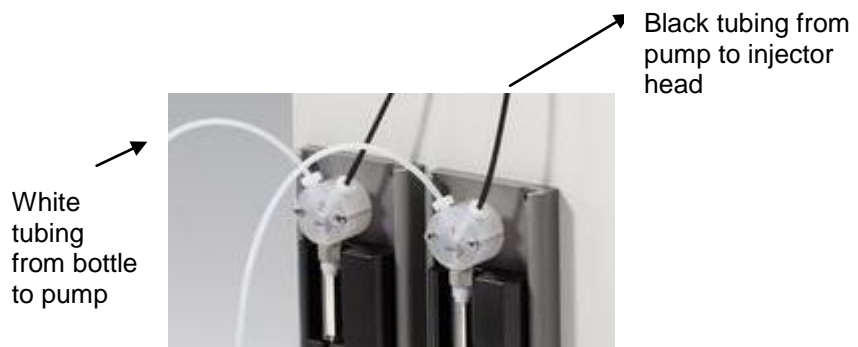
If a tubing connection (at the pump head or injector head) is faulty, or if you want to replace an injector tubing, you have to provide a new tubing connection.

### **1.1 Connections at the Injector Pumps**

- ☐ Drain pump: insert sample tube and run a wash cycle with several shots without having a bottle of liquid connected.
- ☐ **Turn the instrument off and disconnect the power cable from mains.**
- ☐ Unscrew the old tubing's fitting screw at the pump head and put tubing aside.
- ☐ The Injection Tubing Set provides converted injection tubing for the injection line (black) and for the sucking line (white). For black and white tubing: The tubing end with the white fitting screw must be used for connection to the pump head.
- ☐ Insert new tubing with T-piece into the threaded bore hole of the pump head, turn the white fitting crew with it's washer into the threading of the pump head and finger-tighten it. Do not use any tools.



**Fig.1:**  
Tubing  
connections at  
the pump head





The pump thread is made of soft Teflon material. Make sure the screw does not get jammed in the screw thread.

## 1.2 Connection at the Injector Head



Please take extreme care when replacing screw fittings at the injector head, as the measurement chamber opens directly above the detector. Although the sensitive detector system is protected against incident light by a shutter, which is automatically closed when the luminometer is switched off, do not leave the instrument open for a longer time. Always work as quick as possible when removing the tubing connections.

**Please follow the installation steps described below to rule out damage to the detector!**



- ☐ Drain injector system: insert sample tube and run a wash cycle with several shots without having a bottle of liquid connected.
- ☐ Turn the instrument off and disconnect the power cable from mains.
- ☐ Unscrew tubing connections from the pump.
- ☐ To open the connection at the injector head push back the protective rubber of the tubing, untie the black fitting screw at the injector head and put black tubing aside. **For exchange of a tubing connection replace the tubing with the black fitting screw only.** If servicing the injector tip is not required, do not untie or replace the Banjo nut of the injector tip assembly.

**Fig 2:**  
Connections at  
the injector  
head



- ☐ The Injection Tubing Set provides converted black injection tubing for the injection line. Insert the black fitting crew at the tubing's end with it's T-piece into the

Banjo nut of the respective injector tip assembly. Turn fitting screw into the threading and finger-tighten it. Don't use any tools!

- ☐ Then reconnect the tubing to the pumps again.

## 2. Exchange Injector Tips



**Please take extreme care when replacing screw fittings at the injector head**, as the measurement chamber opens directly above the detector. Although the sensitive detector system is protected against incident light by a shutter, which is automatically closed when the luminometer is switched off, do not leave the instrument open for a longer time. Always work as quick as possible when removing the injector tips or parts of the injector tip assembly.

**Please follow the installation steps described below to rule out damage to the detector!**

- ☐ Drain injector system: insert sample tube and run a wash cycle with several shots without having a bottle of liquid connected.
- ☐ **Turn the instrument off and disconnect the power cable from mains.**
- ☐ Unscrew tubing connections from the pump.



### 2.1 Configuration of the Injector Tip Assembly

- ☐ The injector tip assembly consists of three parts:

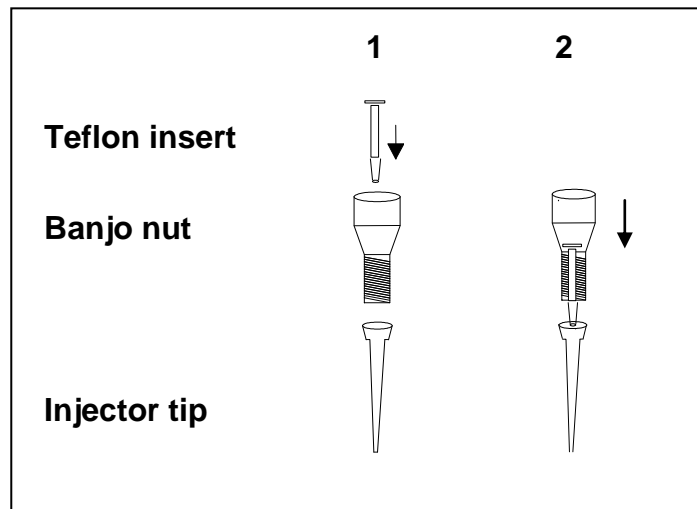
**Injector tip**, located inside the injector head

**Black Banjo nut**

**Teflon insert**, located inside the Banjo nut

The Teflon insert must be pushed into the Banjo nut up to the tapering point. It seals the tubing system towards the tip. The injector tip is located inside the injector head. These parts are fitted into each other, when the Banjo nut with Teflon insert is screwed into the injection head with injector tip inside.

**Fig 3:**  
Configuration of  
the injector tip  
assembly



## 2.2 Replacing Injector Tips

**The injector tips are located inside the injector head.**



- ☐ Push the protective rubber up at it's thicker end.
- ☐ Unscrew the black Banjo nut with the Teflon insert from the injector head. **Do not unscrew the injector head!**
- ☐ Use the widening tool to unscrew and remove the old injector tip, located inside the injector head.
- ☐ Insert a new injector tip into the injector head.
- ☐ Screw Banjo nut with Teflon insert into the injector head (finger-tight – do not use any tools!).
- ☐ Screw the black fitting screw of the black tubing into the Banjo nut and cover it with the protective rubber.