

NanoSpray® III Head and Emitter Tip Assembly

Quick Start Guide

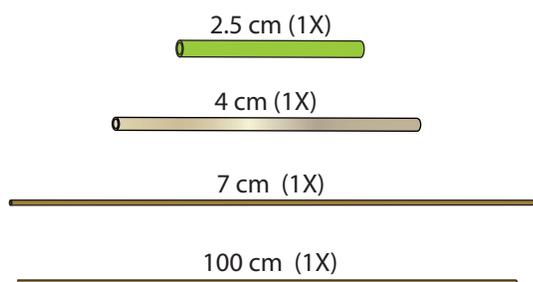
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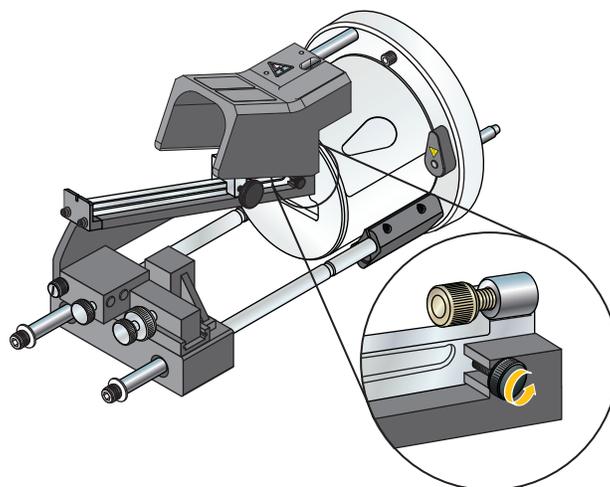
1



Prepare the sleeves and emitter tip:

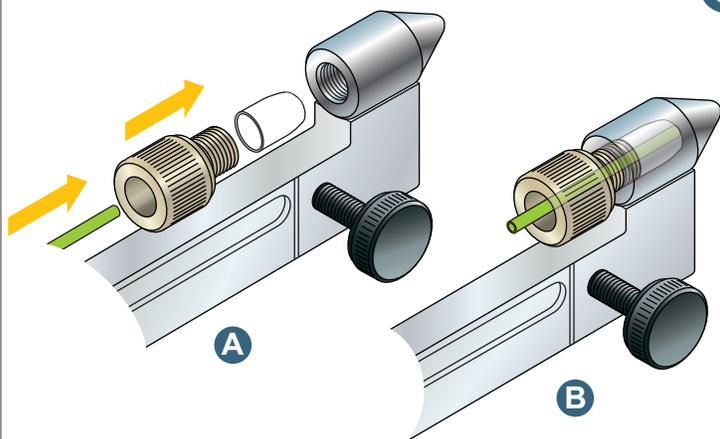
- Cut the green FEP sleeve (1.58 mm o.d., 0.38 mm i.d.) to 2.5 cm.
- Make sure that a tan PEEK sleeve (1/32 inch o.d., 0.015 inch i.d.) is available.
- Make sure that a 7 cm pre-cut emitter tip is available. (If a pre-cut tip is not available, cut an emitter tip to 7 cm.)
- Make sure that a 100 cm length of fused silica tubing (75 µm i.d., 360 µm o.d.), included in the kit, is available.

2



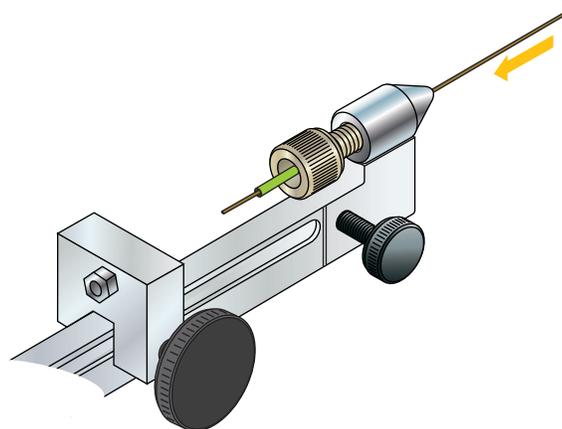
Move the X-Y-Z positioning unit away from the interface, until it touches the end stops. Loosen the rail thumbscrew, remove the rail from the bracket, and then put the rail on the bench.

3



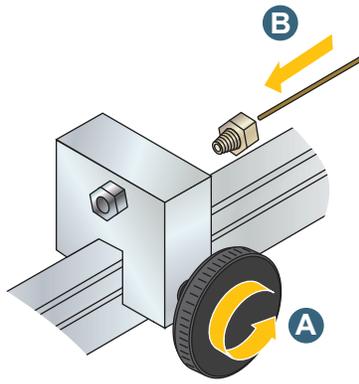
- (A) Insert the 2.5 cm green FEP sleeve into the larger (sprayer) PEEK nut and ferrule until it protrudes 2 mm.
- (B) Insert the assembled fitting into the back of the sprayer head. Do not tighten the fitting.

4



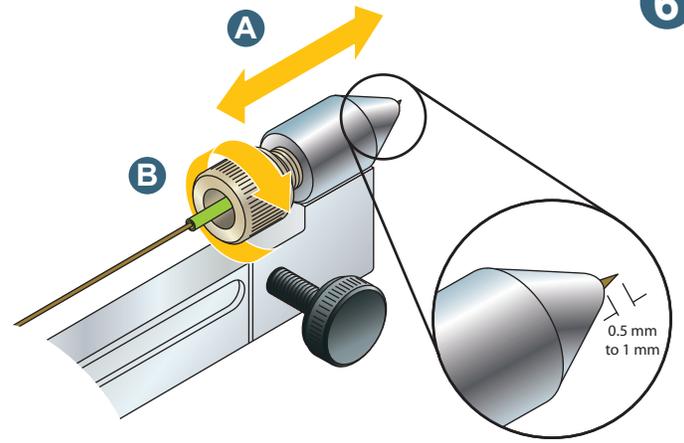
Insert the blunt end of the emitter tip through the sprayer end of the head, the sprayer fitting, and the FEP sleeve. **Note:** Emitter tips are delicate. Be careful not to touch or bump the pointed end of the emitter tip.

5



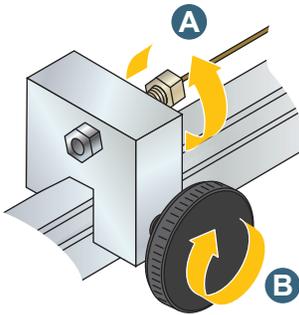
- (A) Loosen the union thumbscrew.
 (B) Insert the emitter tip into the PEEK hex nut and then use the fused silica cutter to trim 1 cm from the emitter tip. Inspect the cut end of the emitter tip to make sure that it is clean. Clean it with a wipe dampened with isopropanol or methanol, if necessary.

6



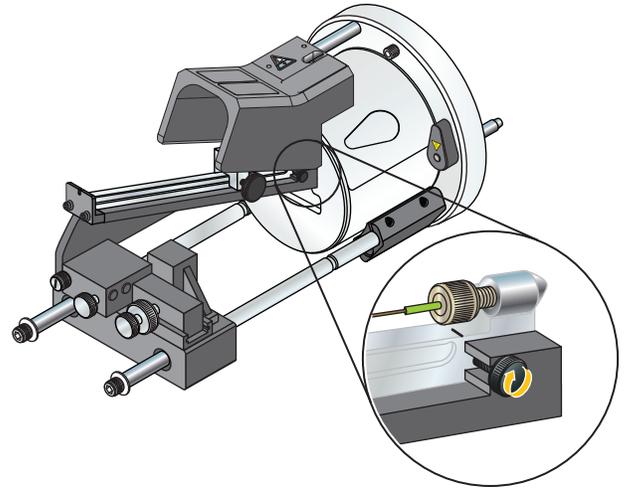
- (A) Adjust the position of the union until the emitter tip protrudes 0.5 mm to 1 mm from the sprayer head.
 (B) Tighten the sprayer fitting.

7



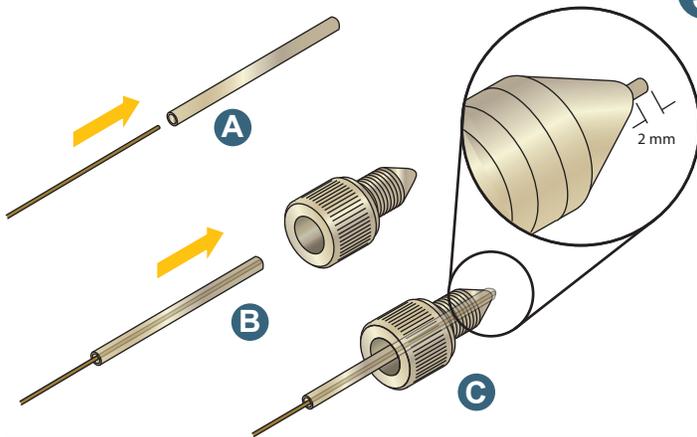
- (A) Make sure that the emitter tip is fully seated in the union and then tighten the PEEK hex nut until it is finger-tight. Only apply light pressure. Be careful not to overtighten the fitting.
 (B) Tighten the union thumbscrew.

8



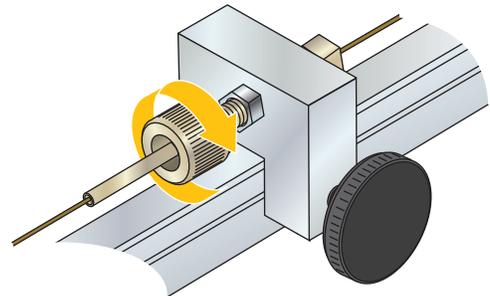
- Insert the rail on the bracket. Make sure that the end of the rail is flush with the bracket, and that the mark on the rail is aligned with the alignment point on the bracket. Tighten the rail thumbscrew.

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- (A) Insert the fused silica tubing coming from the LC system into the tan PEEK sleeve. Cut the tip of the tubing and clean it with a wipe dampened with isopropanol or methanol.
 (B) Insert the sleeve and tubing into the smaller PEEK fitting, included in the kit, until they protrude about 2 mm from the tip of the fitting (C).

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- Insert the fitting into the upstream side of the union. Push the fused silica and PEEK sleeve into the fitting as far as it will go. Hold the tubing and tighten the fitting. The X-Y-Z positioning unit can now be moved back toward the interface.