

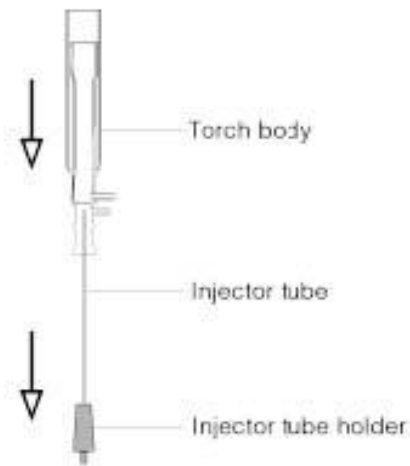
## Instructions for the Demountable Torch with Alumina or Quartz Injector Tubes

### Installation

Refer to the following diagram when assembling the demountable torch.

#### NOTE

The demountable torch for the Liberty 150 AX Turbo has an extended torch body.



- 1 Wet the inside of the plastic injector tube holder with water or a dilute metal-free detergent solution (for example, Triton X100). Carefully insert the injector tube into the injector tube holder, twisting if necessary.

#### CAUTION

Alumina and quartz are brittle. If excessive force is applied to an injector tube it will break. Always handle the injector tube with care.

- 2 Insert the injector tube (now mounted in its holder) into the torch body.
- 3 Press the injector tube holder firmly into the torch base. The tip of the injector tube should be approximately 3 mm (5 mm for the Liberty 150 AX Turbo) below the top of the central tube of the torch body. If it is not, remove the holder and injector tube from the torch body and adjust the position of the tube in the holder accordingly. Return the injector tube and holder to the torch body.

#### NOTE

A very light smear of vacuum grease between the plastic injector tube holder and the torch base will ensure a gas-tight seal.



## Maintenance

Clean the injector tubes on a regular basis to ensure good analytical performance. Cleaning with strong acid mixtures of HCl and HNO<sub>3</sub> (20–50%) is recommended. To remove persistent compounds from the injector tube, carefully clean the tube with a ‘pipe cleaner’ dipped in the acid mixture. Finally, rinse with distilled water.

## Applications of the Demountable Torch

The demountable torch is recommended for the analysis of:

- Solutions containing high dissolved solids. The larger internal diameter of the demountable torch injector tube (1.8 mm compared to 1.4 mm of the standard one-piece torch) reduces salt build-up at the tip of the injector tube. Some matrix effects, such as the effect of high phosphate levels, can also be minimized.
- Solutions containing free hydrofluoric acid (HF) and fusion samples. The alumina injector tube is suggested for use with these types of samples since they will attack the quartz injector tube.

## Ordering Information

Item	Part Number
Complete demountable torch kit, comprising torch body, alumina injector tube and injector tube holder with o-ring.	
▪ Liberty 110/150/220	9910056800
▪ Liberty 150 AX Turbo	9910084700
Component parts individually available for the demountable torch are:	
Demountable torch body	
▪ Liberty 110/150/220	2010072900
▪ Liberty 150 AX Turbo	2010083400
Alumina injector tube	2410067590
Quartz injector tubes (pkt 3)	9910057000
Small bore quartz injector tubes (pkt 3)	2010077500
Demountable torch injector tube holder with o-ring	9910057300

For further information about Agilent and our products, contact your local Agilent representative.

This information is subject to change without notice.



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