

Fully Demountable Torch Installation Instructions (Radial Version)

This instruction sheet covers the installation of the fully demountable torch for radial instruments (Vista-PRO, Vista-MPX and Liberty). The torch requires a special torch clamp, which replaces the standard clamp fitted to the instrument.

A separate instruction sheet covering torch assembly is included with the torch.

Applications

Compared to a standard one-piece torch, the demountable torch offers:

- easier cleaning, and
- the ability to replace individual components.

The optional narrow bore injector makes the fully demountable torch especially well suited for the analysis of volatile organics.

The optional ceramic injector allows use of the torch with samples containing hydrofluoric acid (HF).

Installation

Each kit contains the following parts (see Figure 1):

Item	Description	Quantity
1	Radial torch clamp base	1
2	Radial torch clamp bar	1
3	Long thumbscrew	2
4	Short thumbscrew	2
5	Large flat washer	2
6	Standoff	2
7	M6 screw	2
8	Large spring washer	2
9	Torch alignment tool	1
10	5 mm Allen key (not shown)	1
11	Bracket	1
12	Small flat washer	3
13	Small spring washer	3
14	M4 screw	3
15	3 mm Allen key (not shown)	1



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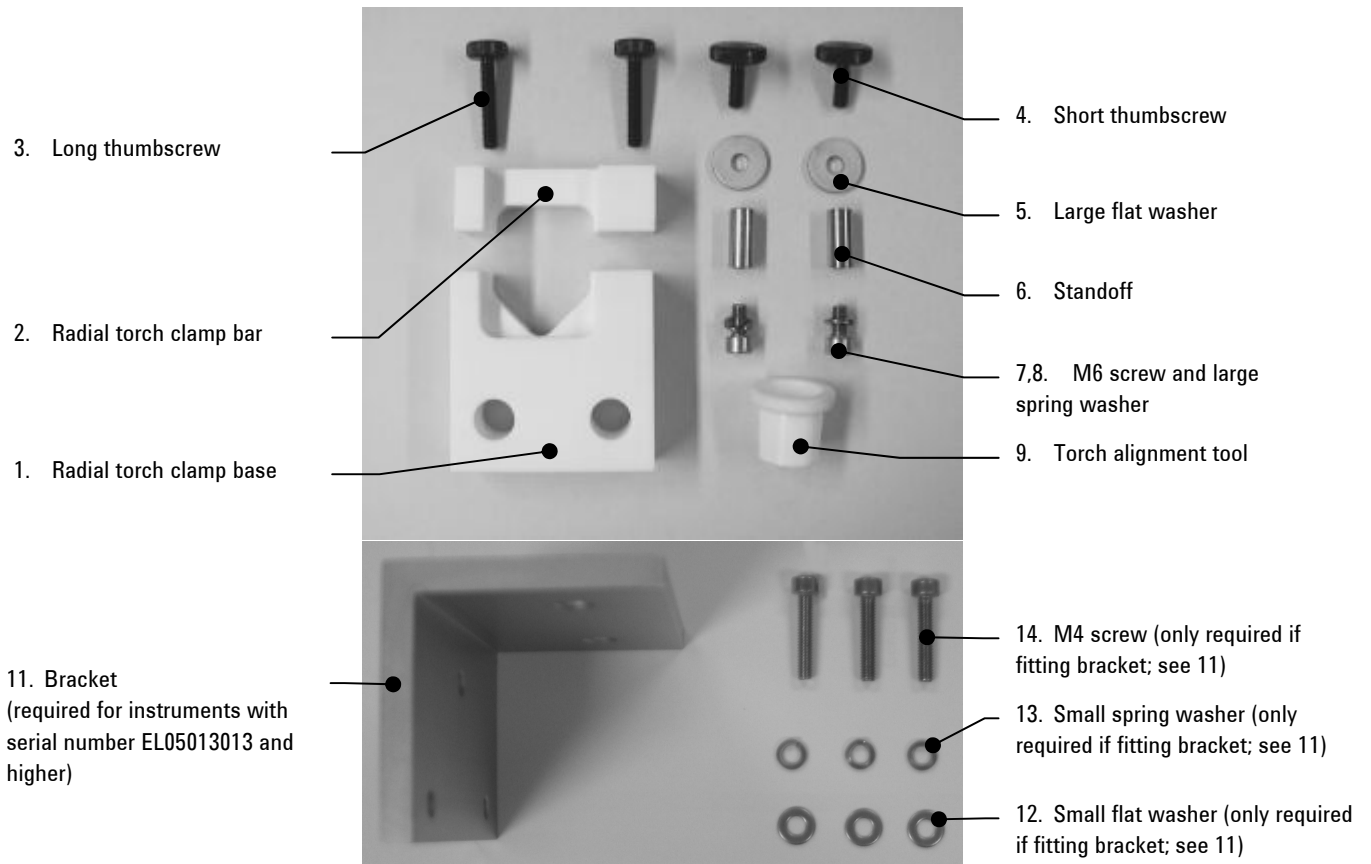


Figure 1. Clamp kit parts



Figure 2. Stand-offs fitted



Figure 3. Torch with alignment tool

To install the torch clamp:

NOTE

For instruments with serial number ELO5013013 and higher only, you will need to replace the torch clamp bracket (Step 3).

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- 1** Assemble the torch, referring to the instructions included with it. Take care when removing and replacing torch tubes.
 - 2** Remove the original snout, bonnet and torch.
 - 3** Serial numbers ELO5013013 and higher:
Replace the torch clamp bracket. To do this, undo the three screws holding the bracket in place, and remove the bracket. Fit the new bracket supplied (item 11 in Figure 1) using the screws (item 14) and washers (items 12 and 13) provided. Tighten the screws with the 3 mm Allen key.
Serial numbers below ELO5013013:
Remove the original torch clamp by removing the two hex-head screws, nuts and washers.
 - 4** Attach the two standoffs (item 6) to the metal bracket using the two M6 screws with the spring washers (items 7 and 8), as shown in Figure 2. Tighten with the 5 mm Allen key provided (item 10).
 - 5** Place the torch clamp base (item 1) over the standoffs, as shown in Figure 3. The square recess should be facing up. Fix in place with the two flat washers (item 5) and the short thumbscrews (item 4), but do not yet tighten them fully.
 - 6** Fit the torch into the clamp and hold in place with the clamp bar (item 2), secured with the long thumbscrews (item 3).
 - 7** The top of the intermediate tube should be about 3 mm below the bottom of the work coil, as with the standard torch. Tighten the long thumbscrews (item 3) to hold the torch firmly in the clamp. Do not over-tighten them.
 - 8** Slide the torch alignment tool (item 9) over the end of the torch. Gently press it down, while moving the torch clamp around until the torch is aligned centrally in the work coil (see Figure 3).
 - 9** Tighten the short thumbscrews (item 4) to fix the clamp firmly in place. Do not over-tighten them.
 - 10** Remove the alignment tool.
 - 11** Replace the bonnet and snout.
 - 12** Attach sample and gas tubing to the torch in the normal manner (see Figure 4).

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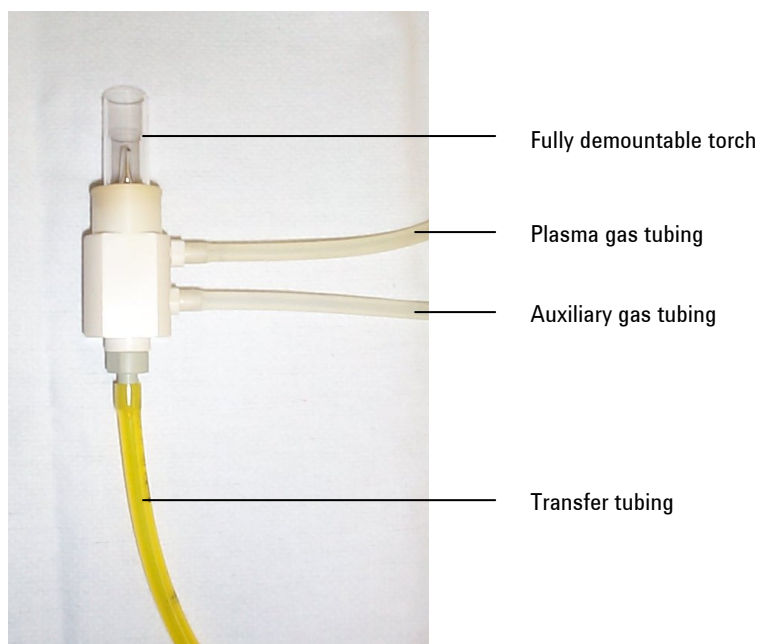


Figure 4. Torch with sample and gas tubing attached

To remove this clamp and replace the standard one, follow the steps in reverse order.

To use the fully demountable torch you will have to change some ignition parameters. You can find these on the Ignition Parameters page in the Instrument/Diagnostics module of the ICP Expert software. The parameters should be as follows:

Stage	Plasma (L/min)	Auxiliary (L/min)	Power (kW)	Time (s)
Purge	22.5	2.25	0.00	15
Delay	22.5	2.25	0.00	5
Ignite	18.0	1.50	2.00	3
Run	15.0	1.50	1.20	3

Ordering Information

For ordering information see the Agilent website at www.agilent.com.

Two kits are available:

Kit

Fully demountable torch kit (including torch clamp) for radial instruments

Torch clamp kit for radial instruments (not including torch)

The torch can also be ordered separately:

Kit

Fully demountable torch for radial ICP-OES

Spare parts for the torch are:

Kit

Spare outer tube (radial)

Spare intermediate tube (radial or axial)

1.5 mm bore injector tube

Optional parts for specialized applications:

Kit

Narrow bore injector (1.0 mm bore) for volatile organics

Ceramic injector for use with samples containing HF

There is a different torch and clamp for axial instruments:

Kit

Fully demountable torch kit (including torch clamp) for axial instruments

Torch clamp kit for axial instruments (not including torch)

Fully demountable torch for axial ICP-OES

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

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This information is subject to change without notice.



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