

Improved Collector Electrode Installation on SRI GCs November 2010

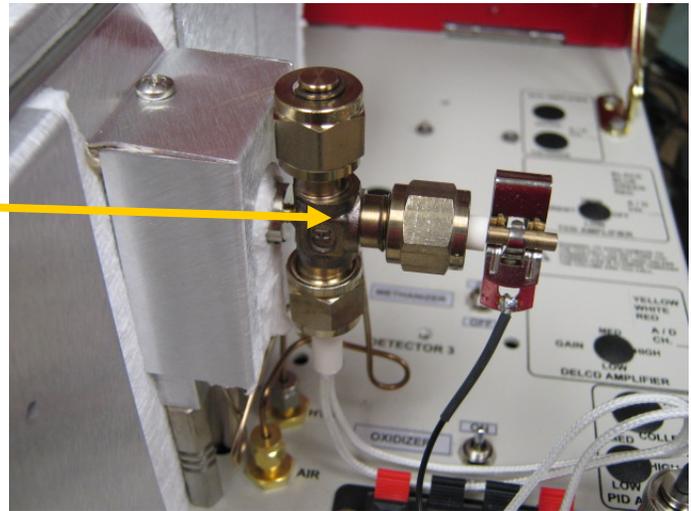
Beginning December 2010 all SRI FID detectors are equipped with an improved collector electrode. Detectors manufactured after December 2010 have a “stop” machined into the detector body to positively locate the collector relative to the FID jet. The new collector needs to be manually positioned in earlier detector bodies without the “stop”.

The photo at right shows the FID detector body next to the new style collector and old style collector.

The new style collector electrode (8670-0154) is insulated with a ceramic tube, whereas the old style is insulated with a vespel (polyimide) ferrule. The vespel ferrule could become soft or deteriorate at high temperatures.

The superior high temperature ceramic insulator used on the new style exhibits less noise and drift especially when the detector body is very hot (>300C). While both collector electrode styles incorporate a vespel ferrule, the new style does not rely on the vespel ferrule to provide electrical insulation, instead the insulation comes from the alumina ceramic.

To position the collector in the FID body, remove the cap from the detector.



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FID detector bodies manufactured before December 2010 do not have a positive “stop”, so the collector electrode must be manually positioned in the correct location.

The photo at right shows the collector electrode too close to the jet. This will make the flame hard to light and reduce sensitivity.

Look down the hole in the FID body from above as you position the collector and then tighten the vespel ferrule with a 9/16” wrench to secure the collector in the correct position..

The correct position is where the metal tube part of the collector electrode is even with the edge of the hole you look down when you remove the cap and look down the hole

