

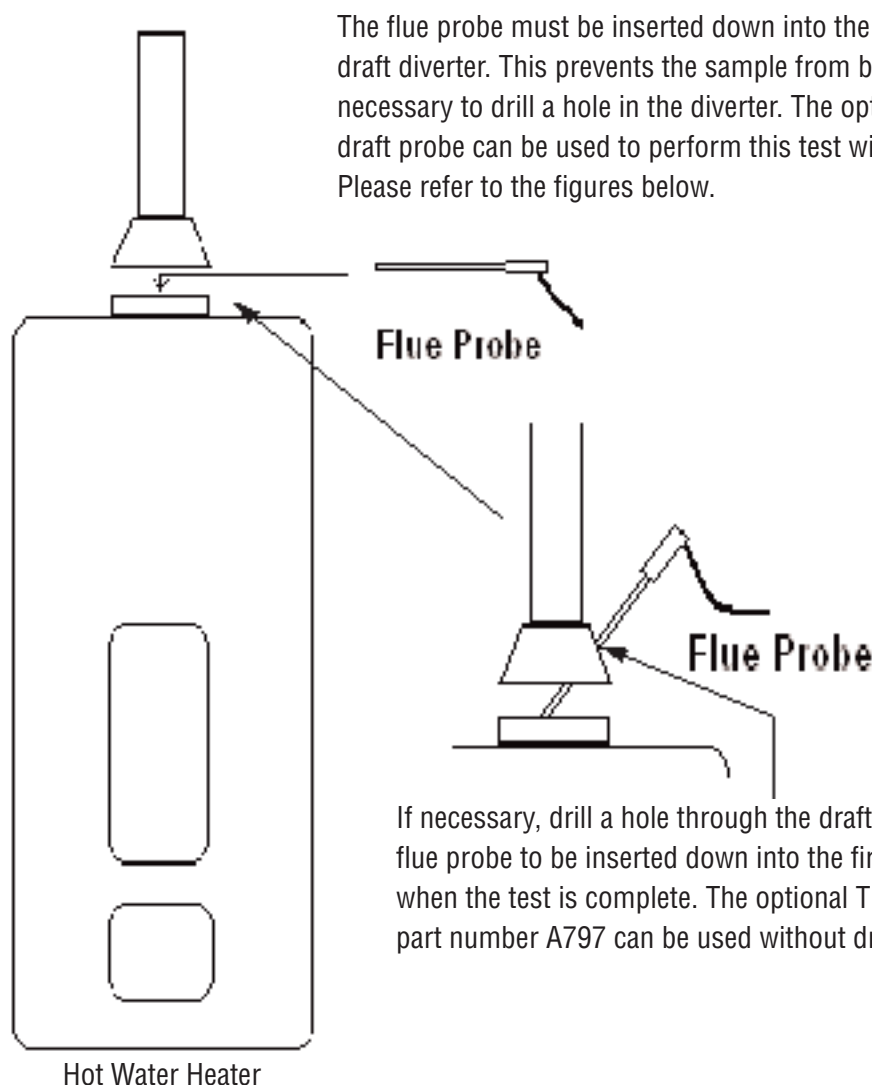


TPI Analyzers & Testing Water Heaters and Appliances

TPI analyzers are equipped with carbon monoxide (CO) sensors that incorporate an on-board NO/NO_x filter. This filter prevents higher than normal CO readings caused by cross sensitivity to NO/NO_x, which is a byproduct of combustion.

When a gas appliance or hot water heater is operating properly, little or no CO can be produced. Older CO analyzers, and those equipped with sensors that do not have an on-board filter, will incorrectly read high because of the "NO_x bump" or cross sensitivity to the NO/NO_x present in the sample. The NO/NO_x cross sensitivity can increase the displayed reading by as much as 30ppm or more.

When testing a water heater or other draft hood type of appliance it is important to get the flue probe down into the fire tube because the opening between the appliance and hood can dilute the sample enough to make it undetectable. See the figures below.



The flue probe must be inserted down into the fire tube under the draft diverter. This prevents the sample from being diluted. It may be necessary to drill a hole in the diverter. The optional A797 flexible draft probe can be used to perform this test without drilling a hole. Please refer to the figures below.

If necessary, drill a hole through the draft diverter to enable the flue probe to be inserted down into the fire tube. Cover the hole when the test is complete. The optional TPI flexible draft probe part number A797 can be used without drilling a hole.