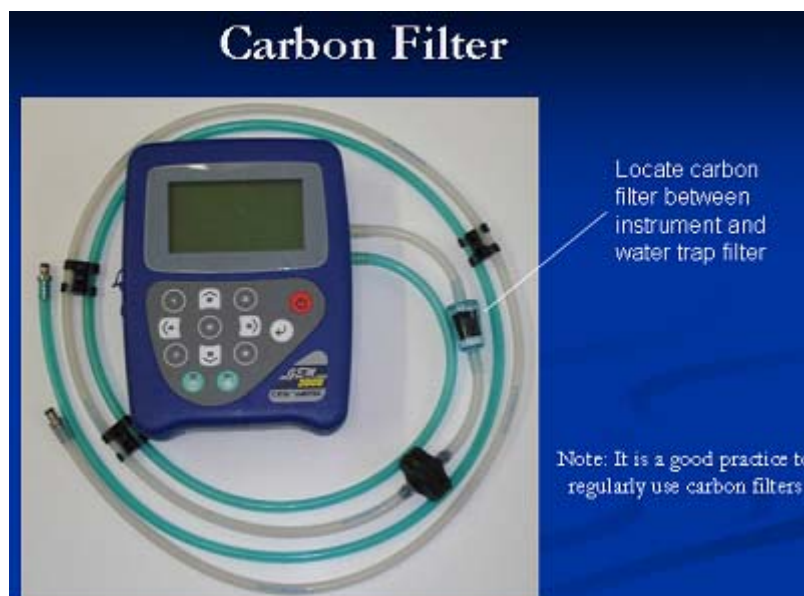
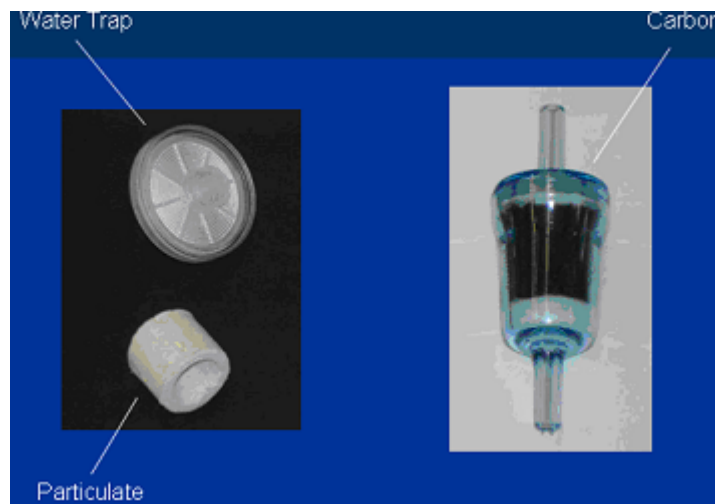


GEM 2000 FILTERS

CARBON FILTERS

There are four filters used with LANDTEC's gas analyzer instruments: three, which are required and one optional external filter that may be purchased as an accessory. Two of the required filters may be changed in the field, and the third is an internal filter that requires factory replacement. The two field changeable filters are the external water trap filter and the particulate filter that is located in the back of the Instrument. These filters should be replaced, in tandem, every hundred hours of use. The external water filter should be replaced more often if high levels of moisture are observed to be condensing in the clear tubing.



An external charcoal filter may also be used in series with the external water filter and should be installed on the instrument side of the external water trap filter. The charcoal filter is used when known or suspected levels of H₂S, hexane, pentane, or other non-methane hydrocarbons exceed one hundred ppm. Presence of these gases can affect the methane channel by indicating artificially high concentrations of methane. The charcoal filter needs to be conditioned with Calibration gas before use.

Condition the charcoal filter before use in the field by using your cal gas. The best way is to put the filter in line when doing the CH₄ calibration although it may take a little longer for the CH₄ to reach the correct % but you will know that the filter has been conditioned because the % reading of the cal gas has stabilized in the calibration screen.

After conditioning the filter and it is being used in the field do not use the carbon filter in the calibration tubing since it may have contaminants [hydrocarbons] from the field readings and you do not want them introduced into your calibration. [You should have a separate clean hose for your calibration].

When using the carbon filter for the first time the direction it is placed in the tubing does not matter but keep it in the same direction always after the first sampling event.

