



# FROG-4000 Changing the Air Scrubber Material



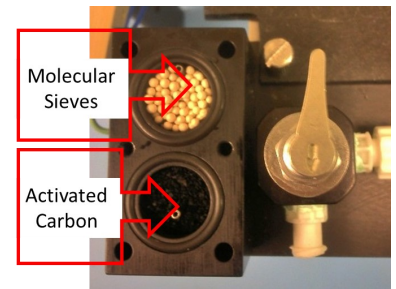
## Defiant recommends that you change your FROG's scrubber material every month.

Very inexpensive and easy to replace.

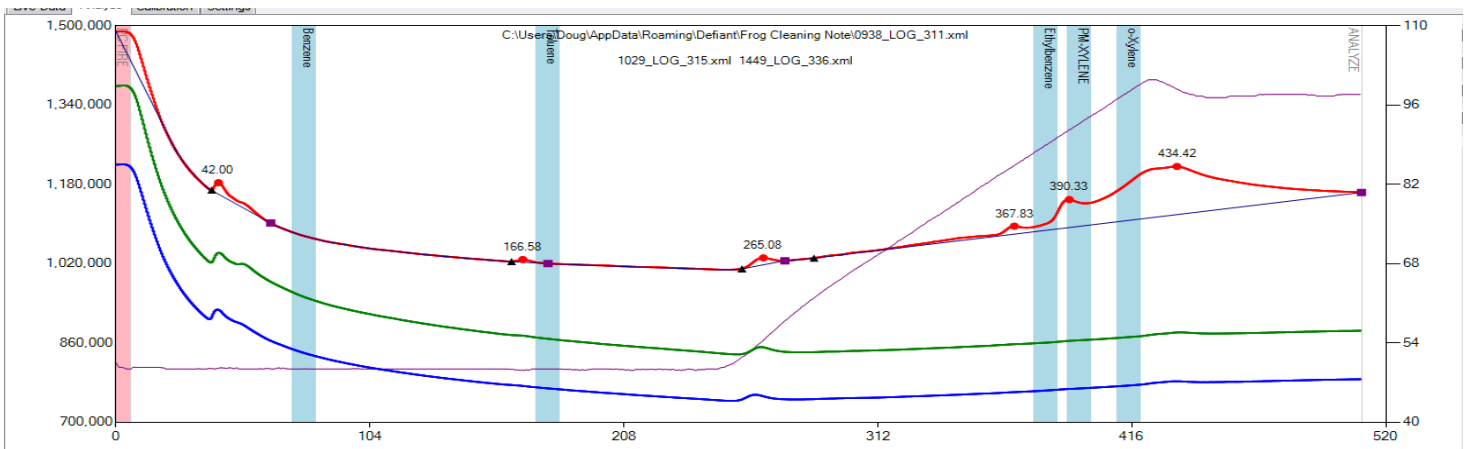
No carrier gas or other specialty gases required.



The FROG scrubs ambient air for the carrier gas.



Defiant recommends that change your FROG's scrubber material monthly to keep the system running smoothly. Unfasten the 4-40 screws located at each corner of the scrubber housing. The scrubber housing should now release from the spare block assembly. Uneaten the two center 4-40 screws to remove the lid. Follow your company's guidelines to dispose the used activated carbon and molecular sieves. The scrubber housing will only fit in one direction. Molecular sieves must be placed in the rear compartment (closest to the FROG's display). New activated carbon must be placed in the forward compartment farthest from the display. Brush away any loose material from the sealing face of the scrubber block. Place the lid on the block and secure in with the two smaller 4-40 screws. Place the scrubber block assembly on the spare block ensuring that each piece of steel tubing is aligned with the mating hole. Secure the scrubber block assembly with the 4 longer 4-40 screws. First fasten opposite corners and then secure the opposite two corners. Now tighten each screw securely. Both molecular sieves and activated carbon can be purchased on our website at [www.defiant-tech.com/](http://www.defiant-tech.com/).



The red trace in the chromatogram above shows signs that the scrubber material needs to be changed. You will notice a few broad peaks at the end of the chromatogram. These are due to compounds bleeding off of the scrubber when it has saturated. After observing this feature we replaced both the molecular sieves and the activated carbon. The green trace and the blue trace are evidence that the scrubber material has been replaced and is working properly.