



Degassing the 'Hornet', Ion Gauge

Your Ion gauge may need to be 'Degassed' once in a while to remove the gas molecules that have collected on the filaments. Read the instructions below to perform this task.

CAUTION: This procedure is not to be performed on a weekly or monthly basis. Excessive degas operations may shorten the life of your ion gauge filaments.

You need to have an operational Vacuum system that is capable of high vac operations.

Within this procedure I will use all caps (MENU) to tell you which button to press and all caps in parenthesis ("SETUP UNIT") will be the display you should see.

Get close to the glove box so that you can reach the front of the ion gauge (IG).

Press MENU
Press DOWN ARROW 1X to select "SETUP UNIT"
Press ENTER
Press DOWN ARROW 2X and select "CLR IG ERROR"
Press ENTER
When you press ENTER you are switched back to the IG main screen.

Your vacuum chamber needs to be in the coarse vacuum range or at atmosphere ($>1E-3$)

To Degas the gauge the unit needs to be in front panel control:

Press MENU
Press DOWN ARROW 1X to select "SETUP UNIT"
Press ENTER
Press UP ARROW 1X to select "IG CNTL"
Press ENTER
Press DOWN ARROW 2X to select "FRONT PANEL"
(Each Arrow press will bring up another choice. There is no menu here.)
Press ENTER
When you press ENTER you are switched back to the IG main screen.

Pump your chamber into high vacuum using the HIVAC control button on the main computer screen. Make sure that the IG is in the gauge reading mode otherwise the program will not get vacuum reads from the convection gauge.

When the Gate Valve opens, proceed with the following instructions.

In the main program on the computer, change from AUTO control to MANUAL control. This will close the Gate Valve. Then Click on the box labeled GATE VALVE. This will re-open the Gate Valve and the IG can be operated independent of the IG status.

Press MENU
Press ENTER to select the "IG ON" choice.



The IG will return to the main display and the IG will turn on in a few seconds.

Now you can start the Degas.

Press MENU
Press UP ARROW once to select "DEGAS ON"
Press ENTER

Wait 2 minutes for the degas operation to complete

Press MENU
Press the DOWN ARROW 1X to select "IG OFF"
Press ENTER

The IG returns to the main menu and the IG is off.

Return the IG to the original settings.

Press MENU
Press DOWN ARROW 3X to select "SETUP UNIT"
Press ENTER
Press UP ARROW 1X to select "IG CNTL"
Press ENTER
Press the DOWN ARROW 1X to select "CG1 CTRL IG"
Press ENTER 2X to return to the main menu.

Your gauge will go back to the main screen and the IG will start reading again.
The first minute or so of readings from your IG will be false as the filaments cool back down to operating conditions.

Don't forget to go back to the main computer and switch the vacuum control program back to "AUTO" from "MANUAL".