ICP #1 Gas Change: CF₄ – SF₆ – CF₄

SYSTEM MUST BE LEFT CONFIGURED FOR CF₄!!

Switching CF₄ to SF₆

1. On the Gas Switch Box, flip the CF₄/SF₆ switch to the center VALVES CLOSED position.
2. Using the soft key pad press the TEST key.
3. Using the keyboard; press F6 [TEST], F3 [SECURITY], and then F5 [DEGAS].
4. Set DEGASSING TM SET for 5:00.
5. Set CF₄ gas to YES (2), and all other gases to NO (1).
6. Press F4 [REGISTER], and then press the green START soft key button.
7. The DEGASSING TM GET field will count up to 5:00, this evacuates the line and MFC of CF₄.
8. Once the degas is finished, press F5 [RETURN] to get to the main menu.
9. Press F8 [MACH PARAM] and then F2 [FULL SCALE]. Verify that E-CH is displayed in the upper left corner of the screen. If it is not, press F1 until it is.
10. Change CF₄ to SF₆ and then scroll to the right and change the gas correction factor (C.F. column) to 0.26.
11. Press F4 [REGISTER] and then press F5 [RETURN] to get to the main menu.
12. On the Gas Switch Box flip the CF₄/SF₆ switch to SF₆.
13. Press F6 [TEST], F2 [TEST], F1 [ETCH TEST], and then F2 [SELECTION].
14. Scroll to recipe # 151 CH C LNP.
15. Press F2 [SELECT] and F4 [REGISTER].
16. Press the green START soft key button, then F5 [RETURN], and F3 [MONITOR].
17. Once the recipe is finished, press F5 [RETURN] to get to the main menu and then press the AUTO soft key. You can now run your processes with SF₆.

Switching SF₆ back to CF₄

1. On the Gas Switch Box, flip the CF₄/SF₆ switch to the center VALVES CLOSED position.
2. Using the soft key pad press the TEST key.
3. Using the keyboard; press F6 [TEST], F3 [SECURITY], and then F5 [DEGAS].
4. Set DEGASSING TM SET for 5:00.
5. Set SF₆ gas to YES (2), and all other gases to NO (1).
6. Press F4 [REGISTER], and then press the green START soft key button.
7. The DEGASSING TM GET field will count up to 5:00, this evacuates the line and MFC of SF₆.
8. Once the degas is finished, press F5 [RETURN] to get to the main menu.
9. Press F8 [MACH PARAM] and then F2 [FULL SCALE]. Verify that E-CH is displayed in the upper left corner of the screen. If it is not, press F1 until it is.
10. Change SF₆ to CF₄ and then scroll to the right and change the gas correction factor (C.F. column) to 0.42.
11. Press F4 [REGISTER] and then press F5 [RETURN] to get to the main menu.
12. On the Gas Switch Box flip the CF₄/SF₆ switch to CF₄.
13. Press F6 [TEST], F2 [TEST], F1 [ETCH TEST], and then F2 [SELECTION].
14. Scroll to recipe # 151 CH C LNP.
15. Press F2 [SELECT] and F4 [REGISTER].
16. Press the green START soft key button, then F5 [RETURN], and F3 [MONITOR].
17. Once the recipe is finished, press F5 [RETURN] to get to the main menu and then press the AUTO soft key. You can now run your processes with CF₄.