F2. Heat of Combustion for a Refrigerant Blend. In Equation F-7 relocate the floating minus sign “-” so that it precedes “[2(0.2311) + 3(0.7689)] [–393.51]” as shown in the corrected equation below.

\[
\Delta h_{\text{combustion}} = \sum \Delta h_f(\text{reactants}) - \sum \Delta h_f(\text{products}) = \\
\{\Delta h_f(C_{2x+3y}H_x + 8yF_{5x}) + (x + 5y)\Delta h_f(O_2)\} \\
- \{(2x + 3y)\Delta h_f(CO_2) + (5x)\Delta h_f(HF) \\
+ [(x + 8y - 5x)/2]\Delta h_f(H_2O)\} = \\
- 335.77 + [0.2311 + 5(0.7689)][O] \\
- [2(0.2311) + 3(0.7689)][–393.51] \\
+ [5(0.2311)][–273.30] \\
+ [0.5][0.2311 + 8(0.7689)] \\
- 5(0.2311)[–241.83] \} \\
= 1701.6 \text{ kJ/mol}
\]