

**Corrections to text (current printing):** (JBH 10/29/01)

p. 77 Table 3.2. The enthalpies of formation for  $C_8H_{18}$  are for n-octane. For isooctane they are  $-224.1$  and  $-259.3$  MJ/kmol for gas and liquid  $C_8H_{18}$ , respectively.

p. 89: Middle of page:  $x_{CO_2}$ ,  $x_{CO}$  and  $x_{O_2}$  should be  $\tilde{x}_{CO_2}$ ,  $\tilde{x}_{CO}$ , and  $\tilde{x}_{O_2}$ .

p. 122: Figure 4-10 is a repeat of Fig. 4-3 due to an editing error, though Fig. 4-10 is correctly labeled “burned mixture properties.” A correct Fig. 4-10 is attached. It is only slightly different: e.g., at 1000 K the burned mixture  $u_s$  for  $\phi = 1.2$  is 4% lower than the unburned mixture value, and  $h_s$  is 1% lower than the unburned mixture value. These differences scale, approximately, with  $\phi$ .

p. 151 Underneath Eq (4.65) insert:

K is given by Eq. (4.63)

p. 152: Line 5.  $C_m H_n O_r$  should be  $C_n H_m O_r$ .

p.188 In Eq. (5.66c),  $m$  is omitted. It should read:

$$S_{3b} - S_2 = mc_v \ln\left(\frac{T_{3a}}{T_2}\right) + mc_p \ln\left(\frac{T_{3b}}{T_{3a}}\right) = mc_v \ln \alpha + mc_p \ln \beta$$

p. 306: Equation (7.18): The sign at the beginning of the second line of the equation (a minus sign) should be a plus sign.

p. 388: Equation (9.27). The sign in front of the third term in the square bracket should be  $-$ , not  $+$ :

$$\text{i.e., } \left[ \frac{T'}{T_w} + \frac{T}{T_w(\gamma-1)} - \frac{1}{bT_w} \ln\left(\frac{\gamma-1}{\gamma'-1}\right) \right]$$

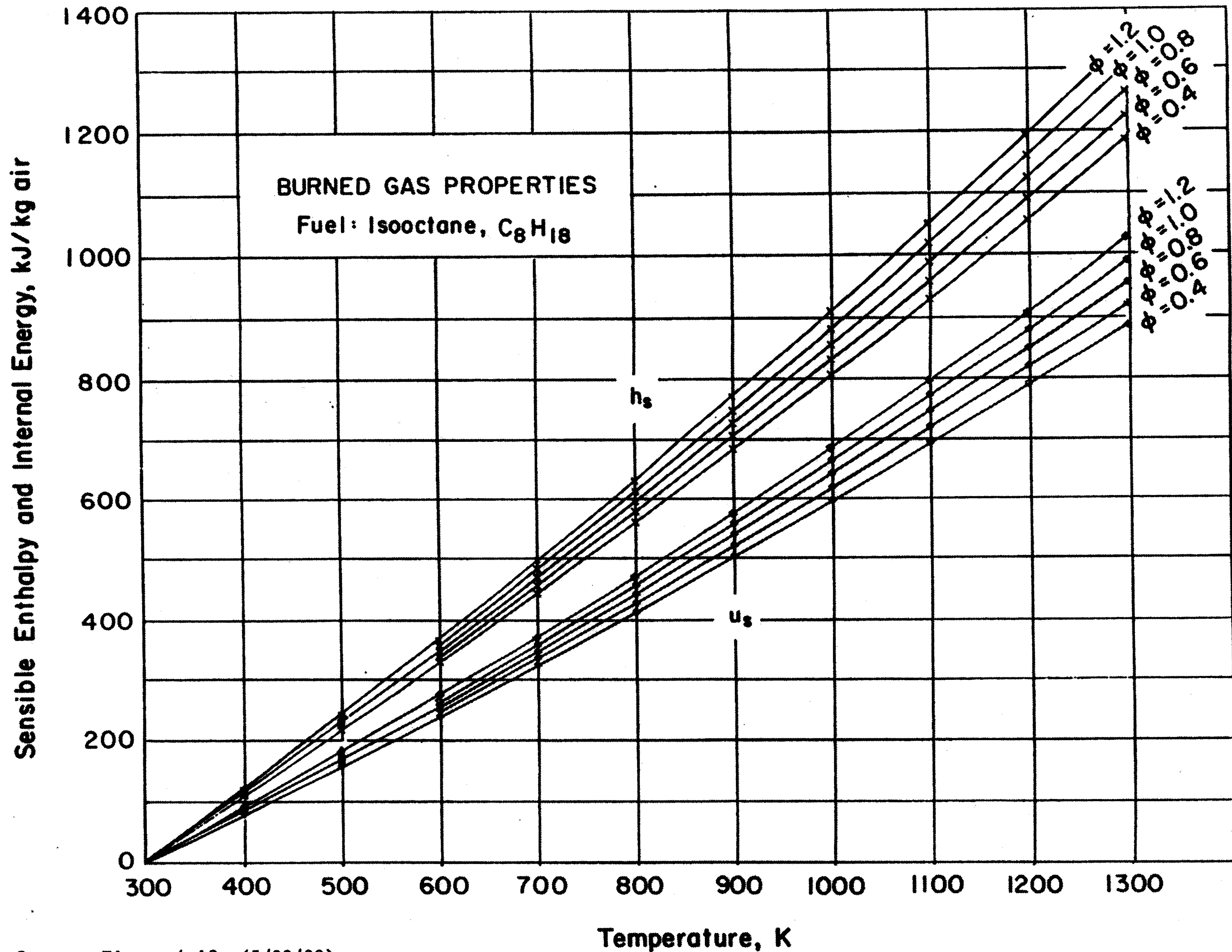
p. 553: Equation (10.37). There should be a  $+$  sign between the two round brackets within the square bracket., i.e.,

$$\tau_{id}(CA) = (0.36 + 0.22\bar{S}_p) \exp \left[ E_A \left( \frac{1}{\tilde{R}T} - \frac{1}{17,190} \right) + \left( \frac{21.2}{p-12.4} \right)^{0.63} \right]$$

p. 620: The reference for Fig. 11-33 should be Yu, R.C., Wong, V.W., and Shahed, S.M., “Sources of Hydrocarbon Emissions from Direct Injection Diesel Engines,” SAE paper 800048, SAE Trans., vol. 89, 1980. (This is a new reference; make it reference 87 and add it to p. 667.)

p. 679: In the inserted graph in Figure 12-5, the scale for thermal conductivity  $k_g$  is not correct. The values should be multiplied by  $5 \times 10^5$ : e.g., the peak value of  $10 \times 10^{-8} = 10^{-7}$  W/m.K should be  $10^{-7} \times (5 \times 10^5) = 5 \times 10^{-2}$  W/m.K.

p. 880 In Fig. 15-45, the units for pressure (middle left) should be kPa and not MPa.



Correct Figure 4-10 (5/30/00)