

Corrections to the 11th Printing

(February 27, 2006)

Introduction to Electrodynamics, 3rd ed.

by David Griffiths

(Previous corrections have been fixed in the 11th printing.)

- Page 59, line after Eq. 2.1: change “**permitivity**” to “**permittivity**”.
- Page 75, Problem 2.15, at the end, add: “, for the case $b = 2a$.”
- Page 109, Problem 2.51: italicize “attract” (after “masses”).
- Page 132, Equation 3.39: the first prime should be on the subscript n , not on f ($f_{n'}$).
- Page 156, Problem 3.38: in the equation, q should be Q .
- Page 158, Problem 3.45(a), line 3: change “where” to “(in the notation of Eq. 1.31), where” and remove the comma after the preceding equation.
- Page 159, Problem 3.47: in the second answer there should be a minus sign in front of $\frac{2V_0}{b}$.
- Page 159, Problem 3.48(b): the answer should be $-(\epsilon_0 V_0 / \pi) \ln 2$.
- Page 210, Figure 5.11: tilt the arrow labeled \mathbf{v} up a bit, to make it perpendicular to the arrow labeled \mathbf{F}_{mag} , and extend the vertical arrow labeled \mathbf{u} accordingly.
- Page 211, second paragraph, line 1: change “pushing” to “sliding”.
- Page 286, Table 7.1: remove “Diamond ... 2.7” (and move “Silicon ... 2.4×10^3 ” up a line).
- Page 307, Figure 7.25: the arrow from the center pointing toward the lower right should carry the label a (matching b to the left).
- Page 332, line after (7.60): move “(Fig. 7.47)” to six lines up from the bottom of the page, after “loop”.
- Page 354, last equation: change $\frac{Q}{2\pi\epsilon_0}$ to $\frac{Q}{4\pi\epsilon_0}$.
- Page 360, sentence before Eq. 8.35: change to read: “The z component of the *angular* momentum density was

$$(\mathbf{r} \times \boldsymbol{\rho}_{\text{em}})_z = -\frac{\mu_0 n I Q}{2\pi l},$$

which is *constant*, as it turns out. The radial component integrates to zero, by symmetry; to get the *total* ...”

- Page 371, Figure 9.5(b): the transmitted pulse (on the right) should be the other way up.
- Page 418, Figure 10.1(a): the expression is missing a c ; it should read $-\frac{\mu_0 k c t}{2}$.
- Page 473: move Figure 11.19 up above Problem 11.22.
- Page 511, Problem 12.28(a): change “Prob. 12.2” to “Prob. 12.2(a)”.
- Page 537, footnote 16: the first \mathbf{u}_- should be \mathbf{u}_+ .
- Page 543, Problem 12.55, line 4: $\partial^\mu \equiv \partial x_\mu$ should read $\partial^\mu \equiv \partial/\partial x_\mu$.