

Errata (Chapter 8)
R. C. Batra, Elements of Continuum Mechanics
AIAA, 2005.

Page 308. Equations (10.32) and (10.33) should be replaced by the following two equations.

Eq. (10.32)

$$-d - \frac{4\mu(R_1)c}{R_1^3} = -p_{inn},$$

$$-d + 4cf(R_2) - \frac{4\mu(R_2)c}{R_2^3} = -p_{out}.$$

Eq. (10.33)

$$c = \frac{p_{out} - p_{inn}}{4 \left[-f(R_2) + \frac{\mu(R_2)}{R_2^3} - \frac{\mu(R_1)}{R_1^3} \right]},$$

$$d = p_{inn} - \frac{\mu(R_1)}{R_1^3} \frac{(p_{out} - p_{inn})}{\left[-f(R_2) + \frac{\mu(R_2)}{R_2^3} - \frac{\mu(R_1)}{R_1^3} \right]}.$$

Page 312. Equations (10.56) and (10.57) should be replaced by the following two equations.

Eq. (10.56)

$$-d - \frac{2\mu(R_1)c}{R_1^2} = -p_{inn},$$

$$-d + 2cf(R_2) - \frac{2\mu(R_2)c}{R_2^2} = -p_{out}.$$

Eq. (10.57)

$$c = \frac{1}{2} \frac{p_{out} - p_{inn}}{-f(R_2) + \frac{\mu(R_2)}{R_2^2} - \frac{\mu(R_1)}{R_1^2}},$$

$$d = p_{inn} - \frac{\mu(R_1)}{R_1^2} \frac{p_{out} - p_{inn}}{-f(R_2) + \frac{\mu(R_2)}{R_2^2} - \frac{\mu(R_1)}{R_1^2}}.$$