

Corrigendum to “Apparently the first closed-form solution of vibrating inhomogeneous beam with a tip mass” [J. Sound Vib. 286 (4–5) (2005) 1057–1066]

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The first sentence in the last paragraph of the introduction should be changed to “all the above papers reported exact but not closed-form solutions”.

Eq. (15) should be

$$a_3 = -[5M\omega^2L^3 - 24D(1)]/2[M\omega^2L^3 - 3D(1)]. \quad (15)$$

Eq. (20) should read

$$C_3 = 240b_3 - 60b_4(5M\omega^2L^3 - 24B)/F + \rho A\omega^2L^4(5M\omega^2L^3 - 24B)/2F. \quad (20)$$

Eq. (26) should read

$$2b_3 + b_4(1800\alpha b_4 - 24B)/(360\alpha b_4 - 3B) = 0. \quad (26)$$

Eq. (27) should be replaced by

$$b_0 = [b_3b_4(120\alpha - 5) - b_1b_3 - b_2b_3 - b_3^2 - 4b_4(b_1 + b_2) + b_4^2(300\alpha - 4)]/(b_3 + 4b_4). \quad (27)$$

Eq. (32) should be replaced by

$$20b_4b_3^4 + 100b_3^3b_4^2 + 240b_3^2b_4^3 + 600b_3b_4^4 + 864b_4^5 + b_3^5 + 960\alpha b_3b_4^4 + 2400\alpha b_4^5 = 0. \quad (32)$$

Eq. (34) should be replaced by

$$\alpha = -\frac{(b_3^4 + 16b_3^3b_4 + 36b_3^2b_4^2 + 96b_3b_4^3 + 216b_4^4)(b_3 + 4b_4)}{480b_4^4(2b_3 + 5b_4)}. \quad (34)$$

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