Theory of Machines and Mechanisms, 4th ed.

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Corrigenda

Latest update on 25 February 2014

Page	Correction
39	Line 6. The reference which now reads "Section 3.17," should read "Section 3.20,".
120	Line 19. The date which now reads "1893" should read "1883".
122	Line 2. The reference which now says "(see Chapter 18)", should say "(see Chapter 17)".
150	Figure 3.34. The shading of link 3 in this figure is very dark and masks readability of the dimension to point *D*. The hidden dimension should read "50".
163	Problem 3.42. This problem must also include the additional given dimension "$\theta_{34} = 60°,$ ", probably best inserted immediately after "$R_9 = 550$ mm, ".
165	Figure P3.46. The figure should show a label "*B*" for the center of the pin on link 5.
196	Line 19. The third line of Section 4.9 now has a reference to "Eq. (*c*) of Section 3.9." This should read "Eq. (*e*) of Section 3.9."
236	Problem 4.47; line 4. There is no Fig. P4.47. This line should read "illustrated in the figure. …" Since this problem already refers to Problem 3.8, it will then implicitly refer to Fig. P3.8 on page 158.
270	Figure P5.1. The caption for Fig.P5.1 should include two dimensions as follows: "$X_B = 100,\ Y_B = 25.$"
270	Problem 5.7. The dimension which now reads "$R_{AO_2} = R_{AO_4} = 0.3$ m" should read "$R_{AO_2} = R_{BO_4} = 0.3$ m".
271	Figure P5.7. In the caption for this figure, the dimension which now reads "$R_{AO_2} = R_{AO_4} = 0.3$ m" should read "$R_{AO_2} = R_{BO_4} = 0.3$ m".
322	Line 22. The final equation of Example 6.6 should read as two equations as follows:

$$\cos\phi = \left(\frac{-1.250 \text{ mm/rad}}{54.141 \text{ mm/rad}}\right)\sin 30° + \left(\frac{54.127 \text{ mm/rad}}{54.141 \text{ mm/rad}}\right)\cos 30°; \qquad \phi = 28.68°. \qquad \textit{Ans.}$$

349 Figure 7.21*a*. The point of tangency of the pressure line and the base circle, at the intersection with the radius now shown, should have a bold dot and should be labelled point *A*. In Figure 7.21*b*, the points now labelled *A* and *C* should be labelled *A'* and *C'*, respectively.

357 Example 7.3. The first line of this example contains an improper symbol. It now reads $\varphi = 20°$. It should read $\phi = 20°$.

417 Problem 9.20; line 2. The end of this line should read "(see Fig. 1.12*c*)."

428 Line 10. This line includes a phrase which now reads "about side 3 ($P_{12}P_{12}$)." This phrase should read "about side 3 ($P_{23}P_{31}$)."

432 Lines 3-4. The paragraph starting on the last two lines of this page now reads "The orthocenter of a triangle is defined as …" That sentence should read as follows: "The orthocenter of a triangle is defined as the point of intersection of the lines drawn through the vertices of the triangle and perpendicular to the opposite sides."

449 Footnote. The reference to Fig. 1.19*b* in this footnote should refer to Fig. 1.24*b*.

465 Problem 10.6; line 3. The word which now reads "radio" should read "ratio".

603 Problem 13.4; line 3. The end of this line should refer to "Fig. P13.4*a*".

603 Figure P13.4. The figure caption should include the dimension $R_{DO_4} = 7$ in.

603 Problem 13.5; line 2. The reference to "Fig. P13.4" should read "Fig. P13.4*b*".

606 Problem 13.26, line 2. The reference to "Problem 13.4" should read "Problem 13.5".

647 Equation (14.85). This equation is missing the factor ½; it should read $U_S = \frac{1}{2}k\left(r_S - r_0\right)^2$,

678 Problem 14.7, line 4. The dimension which now reads "R_{DO_2}" should read "R_{DO_4}".

678 Problem 14.7, line 11. The data which now reads "$\alpha_4 = 712$ rad/s^2 cw" should read "$\alpha_4 = 172$ rad/s^2 cw".

680 Problem 14.27, Line 6. The word "contact" should read "contacts".

680 Problem 14.28, line 8. The acceleration which now reads "$\mathbf{A}_{G_2} = -0.35\hat{\mathbf{j}}$ m/s" should have units of "m/s^2".

680 Problem 14.28, line 11. The kinematic coefficient which now reads "$\theta_3'' = -380$ rad/m," should have units of "rad/m^2".

806 Eq. (17.20). The last term in this equation should read "$D \sin \theta$", not "$D \sin \theta'$ ".

880 Problem 13.17, part (*c*). The result which now reads "$\mathbf{F}_{13} = 2\ 250\ \text{lb} \angle 315°$" should read "$\mathbf{F}_{13} = 2\ 250\ \text{lb} \angle 135°$".

881 Problem 14.29, part (*iii*). The answer to this part should read $P = -733.93$ N.