



$$\begin{aligned} \curvearrowright \sum M_o = 0: & F_D \sin 21^\circ (125) - 1.9(9.81)(130) \\ & - 1.1(9.81)(412) - (3.6 + 0.4)(9.81)(635) = 0 \\ & \underline{F_D = 710 \text{ N}} \end{aligned}$$

$$\rightarrow \sum F_x = 0: O_x - 710 \cos 21^\circ = 0, \quad \underline{O_x = 662 \text{ N}}$$

$$\begin{aligned} \uparrow \sum F_y = 0: & O_y + 710 \sin 21^\circ - (1.9 + 1.1 + 3.6 + 0.4) 9.81 \\ & = 0, \quad \underline{O_y = -185.6 \text{ N}} \end{aligned}$$

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